APPENDIX J.
VMT ASSESSMENT

URBAN SYSTEMS ASSOCIATES, INC.
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CONSULTANTS TO INDUSTRY AND GOVERNMENT

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MEMO

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FROM:	***Justin P. Schlaefli PE TE PTOE***		***TOTAL PAGES: 10***
DATE:	***September 8, 2022***	***TIME: 05:15:23 PM***	***JOB NUMBER: 002219***
SUBJECT:	***Science Village – VMT Assessment – PTS#647676***		

The purpose of this memo is to provide an assessment of Vehicle Miles Traveled (VMT) for the proposed project in accordance with the methodology provided in the City of San Diego Transportation Study Manual (September 29, 2020).

Project Description:

The project site encompasses 4 acres and is currently developed with 138,400 SF of scientific research and development uses. Situated in the northeast portion of the University Community Planning Area, the project is located in an area that is north of Executive Drive, west of Judicial Drive, east of Towne Centre Drive, and south of Eastgate Mall. Access to the project site will be provided through three (3) driveways, providing access to the below-grade parking structure. Two (2) driveways will be located along Towne Centre Drive; one 30 feet-wide two-way driveway referred to as the "northwest driveway", and one 20 feet-wide one-way right-in only driveway referred to as the "southwest driveway". The remaining 25 feet-wide one-way right-out only driveway referred to as the "southeast" driveway will be located along Executive Drive.

Regional access to the project site is provided by several locations that include the junction of Interstate 5 with Genesee Avenue (1.6 miles northwest of the project site), the junction of Interstate 805 with La Jolla Village Drive (0.6 miles southeast of the project site), the junction of Interstate 805 with Nobel Drive (1.2 miles southeast of

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the project site), and the junction of Interstate 5 with La Jolla Village Drive (1.4 miles southwest of the project site).

Local access to the project site is provided through the intersection of Towne Centre Drive and Eastgate Mall (0.2 miles north of the project site) and the intersection of Towne Centre Drive and Executive Drive (fronting the southwest corner of the project site). Primary vehicle access to the project site will occur through two (2) driveways along Towne Centre Drive and one (1) driveway along Executive Drive.

The project site is identified as a site with an industrial land use designation. The site is located in the University Community Planning Area and is zoned with one (1) zone, which consists of a Residential Base RS-1-14 zone. The San Diego Municipal Code (SDMC) defines under §131.0403 residential base zones as zones with the purpose to provide appropriate regulations for the development of single dwelling units but also intended to provide for flexibility in development regulations that allow reasonable use of the property while minimizing adverse impacts to adjacent properties. Residential Base zones are differentiated based on the minimum lot size and based on the location of the premises. An RS-1-14 zone is a zone that is located either in a Planned Urbanized

Community or a Proposition "A" Land and is characterized by a lot of minimum 5,000 square feet. The project includes a rezone that will change the existing Residential Base (RS-1-14) zoning to an Employment Mixed Use (EMX-2) zone, for which the project's scientific research and development land use is permitted.

The Project will entail the demolition of two (2) existing three-story scientific research and development buildings consisting of approximately 138,400 square feet (SF) of gross floor area (GFA) and the demolition of the partially below-grade parking structure for the construction of two (2) new four-story scientific research and development buildings that will be connected by two (2) two-level bridge connectors. These two (2) new buildings will consist of a total building area of 369,878 SF are proposed as scientific research and development uses. Within the proposed uses, accessory/amenity spaces will be built, which will consist of a 7,655 SF market, a 563 SF food

and beverage space, a 23,397 SF fitness center, and a 27,847 SF conference space. The accessory/amenity space will consist of a combination of retail, drinking, and eating areas. The Project will be constructed over a three-story below-grade parking structure.

Discretionary actions associated with the project include a Specific Plan Amendment (SPA) to the Nexus Technology Centre Specific Plan, Planned Development Permit (PDP), a Rezone, and a Community Plan Amendment (CPA). The anticipated Opening Day of the project is estimated to occur during Year 2023.

VMT Assessment:

- **Screening:**

As specified in the City of San Diego's TSM, the requirements to prepare a detailed transportation VMT analysis applies to all land development projects, except for those projects that meet at least one of the screening criteria listed below:

Residential or Commercial Project Located in a VMT Efficient Area: The project is a residential or commercial employment project located in a VMT efficient area (15% or more below the base year average VMT per Capita or VMT per Employee) based on the applicable location-based screening map produced by SANDAG.

Industrial or Agricultural Project Located in a VMT Efficient Area: The project is an industrial employment or agricultural employment project located in VMT efficient area (in an area with average or below-average base year VMT per Employee) based on the applicable location-based screening map produced by SANDAG.

Small Project: The project is a small project defined as generating less than 300 daily unadjusted driveway trips using the City of San Diego trip generation rates/procedures.

Locally Serving Retail/Recreational Project: The project is a locally serving retail/recreational project defined as having 100,000 square feet gross floor area or less and demonstrates through a market area study that the market

capture area for the project is approximately three miles (or less) and serves a population of roughly 25,000 people or less. Locally serving retail is consistent with the definitions of Neighborhood Shopping Center in the San Diego Municipal Code Land Development Code Trip Generation Manual. Locally serving recreation land uses are listed in Appendix B of the TSM, if they meet the square footage and market capture area above. Adding retail/recreation square footage (even if it is 100,000 square feet gross floor area or less) to an existing regional retail shopping area is not screened out.

Locally Serving Public Facility: The project is locally serving public facility defined as a public facility that serves the surrounding community or a public facility that is passive use. The following are considered locally serving public facilities: transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, and government offices. Passive public uses include communication and utility buildings, water sanitation, and waste management.

Affordable Housing: The project has access to transit (located within a reasonable walking distance of ½ mile from the project site) and is wholly or has a portion that meets one of the following criteria: is affordable to persons with a household income equal to or less than 50% of the area median income (as defined by California Health and Safety Code Section 50093), housing for senior citizens [as defined in Section 143.0720(e)], housing for transitional foster youth, disabled veterans, or homeless persons [as identified in 143.0720(f)]. The units shall remain deed-restricted for a period of at least 55 years. The project shall provide no more than the minimum amount of parking per unit, per San Diego Municipal Code Section 143.0744. Only the portion of the project that meets the above criteria is screened out. For example, if the project is 100 units with 10 deed-restricted affordable housing units, transportation VMT analysis would not be necessary for the 10 affordable units but would be necessary for the remaining 90 units (unless they meet one of the other screening criteria). For purposes of

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applying the small project screening criteria, the applicant would only include the trip generation for the non-affordable housing portion of the project (since the affordable housing portion is screened out).

Mixed-Use Project Screening Considerations: The project's individual land uses should be compared to the screening criteria above. It is possible for some of the mixed-use project's land uses to be screened out and some to require further analysis. For purposes of applying the small project screening criteria, the applicant would only include the trip generation for portions of the project that are not screened out based on other screening criteria. For example, if a project includes residential and retail, and the retail component was screened out because it is locally serving; only the trip generation of the residential portion would be used to determine if the project meets the definition of a small project.

Redevelopment Project Screening Considerations: The project is a redevelopment project that demonstrates what the Project's total project VMT is less than the existing land use's total VMT. Exception: If a project replaces affordable housing (either deed-restricted or other types of affordable housing) with a smaller number of moderate-income or high-income residential units, the project is not screened out and must analyze VMT impacts per Table 3 of the TSM.

The screening assessment below evaluates the project with applicable screening criteria elements.

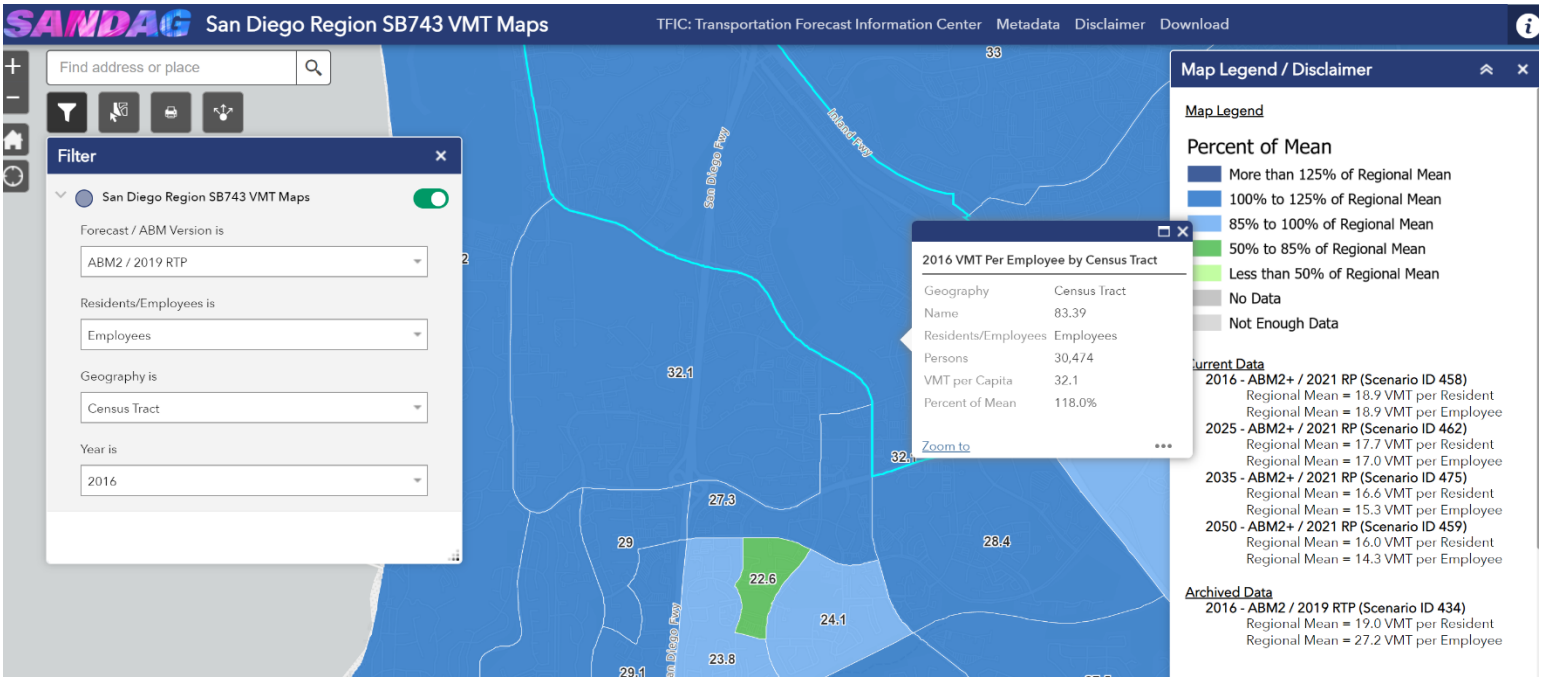
Residential or Commercial Project Located in a VMT Efficient Area: The project is a residential or commercial employment project located in a VMT efficient area (15% or more below the base year average resident VMT per Capita or employee VMT per Employee) based on the applicable location-based screening map produced by SANDAG.

Appendix B of the City of San Diego TSM provides a land-use type categorization for specific land-use designations. The proposed project's land use designation as a corporate headquarters/single tenant office is categorized as a Commercial Employment land-use type.

The project, as a Commercial Employment land use, has been evaluated using the SANDAG current base year screening map (Series 14 ABM2, Year 2016) included in the table and figure below. As shown in the screening map, the regional mean Employee VMT per employee is 27.2 miles per employee. The project is located in Census Tract 83.39 in which the Employee VMT per employee is 32.1; which is 118.0% of the regional average. Therefore, the project is located within an area that is not defined as VMT efficient and would not be screened out of having to perform a VMT analysis.

Regional Mean (*VMT / Employee*)	**Significance Threshold (*VMT / Employee*)**	**Significance Threshold *(% of Regional Mean*)**	**Project VMT Generation (*VMT / Employee*)**	**Project VMT Generation *(% of Regional Mean*)**	**Is this a Significant Impact?**
27.2	23.1	85%	32.1	118.0	**Yes**

A screen capture of the SANDAG SB743 Screening Map is shown below.



- **Significance Determination:**

Since the projects did not meet any of the screening criteria, it must evaluate the VMT produced by the project. The proposed commercial employment project is expected to generate an approximate net increase of 1,778 daily unadjusted driveway trips and therefore, the project's Employee VMT/Employee will be considered the same as the VMT per employee of the census tract it is located within. As stated above, the project is within a census tract with 32.1 Employee VMT/Employee, which is 118.0% of the regional mean. Therefore, based on the adopted VMT significance threshold for a commercial employment project of 15% below the regional mean (Significance Threshold equals 23.1 VMT per Employee), the Science Village project is found to have a significant transportation VMT impact.

- **Mitigation:**

The project is required to comply with the Complete Communities: Mobility Choices ordinance (effective January 8, 2021 outside the Coastal Zone) and will rely upon the Findings and Statement of Overriding Considerations (SOC) from the Complete Communities: Housing Solutions and Mobility Choices Final Program Environmental Impact Report (PEIR) as mitigation to the extent feasible for its significant unmitigated VMT impact.

As shown in Figure 2, the Project site is located within a Transit Priority Area (TPA). The SDMC Ordinance Number O-21274 (*12/9/2020*) provides the development regulations for the Mobility Choices portion of the Complete Communities program. As defined in SDMC Section 143.1103, a site where any of the premises is located either partially or entirely in a Transit Priority Area is defined to be a Mobility Zone 2 area. Since the project is located within a TPA as described above, the Project is defined as an area designated as Mobility Zone 2. SDMC Section 143.1103(b) indicates the requirement for the application of VMT Reduction Measures for all development located within a Mobility Zone 2 in accordance with the *Land Development Manual Appendix T*. The Land Development Manual Appendix T provides a list of VMT Reduction Measures that are split into a series of categories, which include Pedestrian Measures, Bicycle Supportive Measures, Transit Supportive Measures, and Other Measures. Each of the individual measures is given an assigned point value per unit of measure.

For development in Mobility Zone 2, SDMC Section 143.1103(b)(1) identifies the requirement to provide VMT Reduction Measures totaling at least 5 points. Alternatively, SDMC Section 143.1103(b)(5) provides the option for the applicant to pay the Active Transportation In Lieu Fee referenced in SDMC Section 143.1103(c).

The Project will provide measures as required by the ordinance that add up to at least 5 points as identified in the Land Development Manual Appendix T. Pursuant to SDMC section 143.1103(b)(6), the Project will provide more than the minimum parking required in SDMC Chapter 14, Article 2, Division 5, for a Research and Development use and is, therefore, eligible to comply with the Mobility Choices program by providing VMT Reduction Measures in section 143.1103(b)(2) equivalent to at least 5 points. The project will not be required to pay the Active Transportation In-Lieu Fee referenced in Section 143.1103(c) as it is located within Mobility Zone 2. The Project will obtain at least five (5) points through the following measures:

Description of Mobility Choices Measure	**Points Credited towards Compliance**
(S) Provide short-term bicycle parking spaces that are available, at least 10% beyond minimum requirements • Required short-term bicycle parking = 47 spaces • Provided short-term bicycle parking = 60 spaces (20% more than required)	3.0
(S) Provide long-term bicycle parking spaces that are available, at least 10% beyond minimum requirements • Required long-term bicycle parking = 47 spaces • Provided long-term bicycle parking = 61 spaces (20% more than required)	4.0
(S) Provide an on-site bicycle repair station	1.5
(S) Provide on-site multi-modal kiosks (above minimum kiosk requirement to serve a larger site)	2
Total Points for Mobility Choices Compliance	**10.5 points**

Refer to the project site plan for the Project Parking Tabulations that show the planned parking supply of the Project.

As shown above, the Project's proposed VMT reduction measures total to 10.5 points, and a minimum of 5 points is required. Therefore, the Project will be in compliance with the Mobility Choices program regulations as mitigation to the extent feasible by relying upon the Findings and SOCs from the Complete Communities: Housing Solutions and Mobility Choices Final PEIR for its significant VMT impact.

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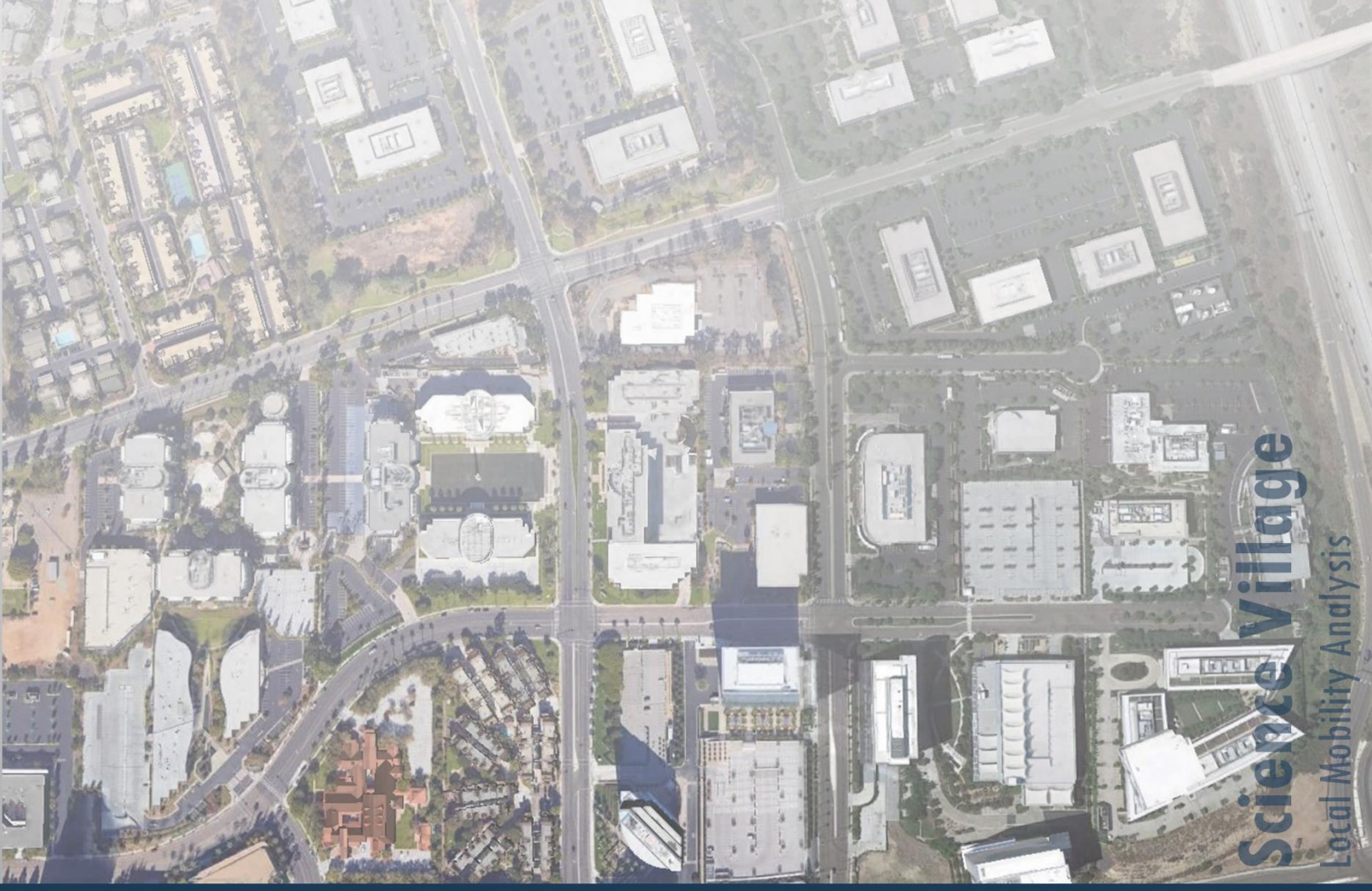

Science Village

Local Mobility Analysis

Prepared For: The City of San Diego and Miller Hull

Project Number: 002219
PTS# 647676
November 8, 2022

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EXECUTIVE SUMMARY

Urban Systems Associates, Inc. (USAI) was retained by Alexandria Real Estate Equities ("Applicant") to prepare the following Local Mobility Analysis (LMA) for the Science Village project ("Project") to evaluate its effects on mobility, access, circulation, and related safety elements in the proximate area of the Project per the City of San Diego ("City") Transportation Study Manual (TSM; dated *9/29/2020*).

The Project is located on a 4-acre site located at 9363, 9373, and 9393 Towne Centre Drive in the University Community Planning Area of the City of San Diego. The project site is bound by 9455 Towne Centre Drive to the north, Towne Centre Drive to the west, Executive Drive to the south, and 4690 and 9380 Judicial Drive to the east. The project site can be accessed through Towne Centre Drive to the west and Executive Drive to the south.

Regional access to the project site is provided by several locations that include the junction of Interstate 5 with Genesee Avenue (1.6 miles northwest of the project site), the junction of Interstate 805 with La Jolla Village Drive (0.6 miles southeast of the project site), the junction of Interstate 805 with Nobel Drive (1.2 miles southeast of the project site), and the junction of Interstate 5 with La Jolla Village Drive (1.4 miles southwest of the project site). Local access to the project site is provided through the intersection of Towne Centre Drive and Eastgate Mall (0.2 miles north of the project site) and the intersection of Towne Centre Drive and Executive Drive (fronting the southwest corner of the project site). Primary vehicle access to the project site will occur through two (2) driveways along Towne Centre Drive and one (1) driveway along Executive Drive.

The Project will entail the demolition of two (2) existing three-story scientific research and development buildings consisting of approximately 138,400 square feet (SF) of gross floor area

(GFA) and the demolition of the partially below-grade parking structure for the construction of two (2) new four-story scientific research and development buildings that will be connected by two (2) two-level bridge connectors. These two (2) new buildings will consist of a total building area of 369,878 SF and are proposed as scientific research and development uses. Within the proposed uses, accessory/amenity spaces will be built, which will consist of a 7,655 SF market, a 563 SF food and beverage space, a 23,397 SF fitness center, and a 27,847 SF conference space. The accessory/amenity space will consist of a combination of retail, drinking, and eating areas. The Project will be constructed over a three-story below-grade parking structure.

Parking for the project will meet the minimum parking requirements contained in the City of San Diego Municipal Code and will be accommodated through below-grade parking spaces within the underground parking structure which will be accessed through three (3) project driveways. The three (3) driveways will provide access and egress to the site, with two (2) driveways located along Towne Centre Drive and one (1) driveway located along Executive Drive. The driveway along Towne Centre Drive closest to the intersection with Executive Drive (referred to as the "southwest driveway" due to its location with regard to the Project site) will be configured as a one-way right-in-only driveway. The driveway along Towne Centre north of the southwest driveway (referred to as the "northwest driveway") will be configured as a two-way right-in/right-out driveway. The driveway along Executive Drive (referred to as the "southeast driveway") will be configured as a one-way right-out driveway. The Project will provide parking facilities that will support 938 parking spaces, which include the following:

- Total Parking = **938 spaces**
    - Standard = 919 spaces
        - Clean Air / Vanpool / EV = 207 spaces
            - Future Electric Vehicle Charging Stations (EVCS) = 141 spaces
            - EVCS = 47 spaces
            - Van ADA EVCS = 2 spaces
            - Standard ADA EVCS = 5 spaces
            - Ambulatory EVCS = 5 spaces
    - ADA = 19 spaces
        - Van = 3 spaces
        - Electric Vehicle Charging Stations = 7 spaces
    - Motorcycle = 19 spaces
    - Bicycle = 121 spaces
        - Short-term = 60 spaces
        - Long-term = 61 spaces

The Project is anticipated to generate approximately 2,959 daily unadjusted driveway trips with 473 (426 In / 47 Out) AM peak hour trips and 414 (41 In / 373 Out) PM peak hour trips. The Project is calculated to generate a net increase of approximately **1,778** average daily trips (ADT) with **252** (227 In / 25 Out) AM peak hour trips and **220** (22 In / 198 Out) PM peak hour trips.

The project's traffic distribution is primarily based on a SANDAG Series 14 Year 2025 Select Zone Forecast that was requested from SANDAG for this project, with slight adjustments described in **Chapter 4.2** of this report.

Traffic count data was obtained from two separate sources. The first source is the University Community Plan Update (CPU) Existing Conditions Summary (*04/2018*), which contains count data predating the beginning of the construction work of both Mid-Coast Trolley Extension and Genesee Avenue / Interstate 5 interchange projects. The count data sourced from the University CPU Existing Conditions Summary (*04/2018*) was collected on Wednesday, May 13th, 2015, Wednesday, and Tuesday, June 16th, 2016, and encompasses facilities analyzed in this LMA. The second set of count data extending from late-2016 to mid-2017 was collected for this project during the Community Plan Amendment initiation review process under PTS#540304. This second set of count data was collected during a time at which potential traffic patterns disruptions associated with the Mid-Coast Trolley project and the Genesee Avenue / Interstate 5 interchange project were commencing. This count data was collected on Thursday, November 17, 2016, Tuesday, May 23rd, 2017, Thursday, May 25th, 2017, and Wednesday, August 9th, 2017 and encompasses all of the analyzed study intersections and other supporting facilities. USAI referenced the second set of count data for study intersections and roadway segments. However, as described in Sections 5.5 and 9.0, and Appendices F and K, additional count data for roadway segments that are not part of the study area but are study intersection legs that were used to develop the Existing Year 2021 baseline and Horizon Year 2050 intersection peak hour volumes. For this additional segment count data, USAI referenced both data sets and supplemented missing count datawith the available SANDAG Series 14 Year 2016 volumes. For the Towne Centre Drive and Towne Centre Driveway intersection where neither count data sets contained available intersection count data, new counts were obtained on Thursday, June 3rd, 2021.

This LMA evaluates the effects on mobility, access, circulation, and related safety elements in the proximate area of the Project based on the criteria identified within the City's TSM. Discretionary actions required by the Project include a Specific Plan Amendment (SPA) to the Nexus Technology Centre Specific Plan, a Planned Development Permit (PDP), a Rezone, and a Community Plan Amendment (CPA).

Consistent with the City's TSM, the Project is analyzing the following five (5) study scenarios:

- Existing
- Near-Term (Opening Day Year 2023) Without Project
- Near-Term (Opening Day Year 2023) With Project
- Horizon Year (Community Buildout Year 2050) Without Project
- Horizon Year (Community Buildout Year 2050) With Project

- **Table A** shows a summary of the analysis of roadway segments for Existing conditions.
- **Table B** shows a summary of the analysis of roadway segments for Near-Term & Near-Term + Project.
- **Table C** shows a summary of the analysis of roadway segments for Horizon Year 2050 & Horizon Year 2050 + Project.
- **Table D** shows a summary of the analysis of intersections for Existing conditions.
- **Table E** shows a summary of the analysis of intersections for Near-Term & Near-Term + Project.

- **Table F** shows a summary of the analysis of intersections for Horizon Year 2050 & Horizon Year 2050 + Project.
- **Table G** shows a comparison of the Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project AM/PM peak hour volumes for all left-turn and right-turn movements at the study signalized intersections.
- **Table H** shows a comparison of the Horizon Year 2050 and Horizon Year 2050 With Project AM/PM peak hour volumes for all left-turn and right-turn movements at the study signalized intersections.
- **Table I** shows a queueing analysis summary of Towne Centre Dr. / Eastgate Mall
- **Table J** shows a queueing analysis summary of Towne Centre Dr. / Executive Dr.
- **Table K** shows a queueing analysis summary of Towne Centre Dr. / Towne Centre Dwy.
- **Table L** shows a queueing analysis summary of Towne Centre Dr. / La Jolla Village Dr.
- **Table M** shows a queueing analysis summary of Judicial Dr. / Executive Dr.
- **Table N** shows a queueing analysis summary of Judicial Dr. / Judicial Dwy.
- **Table O** shows a queueing analysis summary of Judicial Dr. / Golden Haven Dr.
- **Table P** shows a queueing analysis summary of La Jolla Village Dr. / I-805 SB Ramps
- **Table Q** shows a Systemic Safety Analysis for pedestrian users of the study intersections
- **Table R** shows a Systemic Safety Analysis for bicycle users of the study intersections
- **Table S** shows a Systemic Safety Analysis for vehicle users of the study intersections

The LMA concludes that the Project will have effects on mobility, access, circulation, and safety that will require the following actions:

I. As discussed in further detail in **Chapter 11.4.1** of this report, the Project will result in conditions that would warrant a signal timing/modification improvement as required by the City's TSM are met for four (4) of the analyzed intersections:

- **Towne Centre Dr. / Eastgate Mall**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in **Table E**, this intersection is anticipated to operate with a LOS F in the AM and PM peak hours. Additionally, as shown in the peak hour LOS comparison between Horizon Year 2050 and Horizon Year 2050 With Project included in **Table F**, this intersection is anticipated to operate with a LOS F in the AM and PM peak hours. The project will install an upgraded 2070 traffic signal controller (including software update) and Audible Pedestrian Signals as Intelligent Transportation Systems (ITS) improvements.
- **Towne Centre Dr. / Executive Dr.**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in **Table E**, this intersection is anticipated to operate with a LOS F in the PM peak hour. Additionally, as shown in the peak hour LOS comparison between Horizon Year 2050 and Horizon Year 2050 With Project included in **Table F**, this intersection is anticipated to operate with a LOS F in the PM peak hour. The

project will install an upgraded 2070 traffic signal controller (including software update) and Audible Pedestrian Signals as Intelligent Transportation Systems (ITS) improvements.

- **Towne Centre Dr. / La Jolla Village Dr.**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in **Table E**, this intersection is anticipated to operate with a LOS F in the PM peak hour. Additionally, as shown in the peak hour LOS comparison between Horizon Year 2050 and Horizon Year 2050 With Project included in **Table F**, this intersection is anticipated to operate with a LOS F in the PM peak hour. The University of California San Diego (UCSD) Long Range Development Plan (LRDP) Environmental Impact Report (EIR) (*10/*2018) identified this intersection as a location with a significance impact. The proposed mitigation measure consists of the implementation of an Adaptive Traffic Signal Control (ATSC) on the La Jolla Village Drive corridor between Torrey Pines Road and I-805 NB Ramps.
  - The Project proposes to engage in a private agreement with UCSD to contribute a 11.9% fair-share payment towards the installation of this improvement at this intersection.
- **Judicial Dr. / Golden Haven Dr. / Brook Ln.**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in

Table E, this intersection is anticipated to operate with a LOS F in the AM peak hour. The project will install an upgraded 2070 traffic signal controller (including software update) and Audible Pedestrian Signals as Intelligent Transportation Systems (ITS) improvements.

II. As discussed in further detail in **Chapter 11.4.1** of this report, an assessment of the potential need to expand the available turn lanes of the study area signalized intersections was conducted. **Table G** and **Table H** show a comparison of the AM/PM peak hour volumes for all left-turn and right-turn movements at the study signalized intersections for Near-Term (Opening Day Year 2023) and Horizon Year 2050 conditions respectively. As shown in the tables, three (3) turn movements have been identified to exceed the City's TSM thresholds for peak hour volumes in "With" and "Without" Project conditions. These turning movements consist of the following:

- Towne Centre Dr. / Executive Dr.
  - NB-L (*AM peak hour*)
  - WB-L (*PM peak hour*)
- Judicial Dr. / Executive Dr.
  - WB-L (*PM peak hour*)

The Project does not propose the the addition of turn lanes to the intersections listed above. Although the results shown in **Table G** and **Table H** show that the turning movements listed above have an exceedance of the thresholds established in the City's TSM in "Without" Project conditions, these exceedances are not the result of adding Project traffic to these turning movements.

III. As discussed in further detail in **Chapter 11.4.2** of this report and shown in Tables I through O, the Project will not result in conditions that would warrant a turn lane modification/improvement as a result of 95th percentile queueing deficiencies due to the addition of the Project for any study intersection, except for the following location:

- **Towne Centre Dr. / Eastgate Mall**
  - NB-L (*AM & PM Peak Hours*):
    - Since the queues exceeding the threshold established in the City's TSM would be accommodated by the approximately 100 ft of taper length provided by the existing turn lanes, no lengthening is proposed for this turn pocket.

IV. As discussed in further detail in **Chapter 11.0** of this report, a systemic safety review was conducted to determine if any of the study area intersections are located within a safety hotspot as defined under Appendix C of the City of San Diego's Systemic Safety, The Data-Driven Path To Vision Zero (*April 2019*). As shown in **Table Q** (for pedestrian users), **Table R** (for bicycle users), and **Table S** (for vehicle users) the following intersections have been found to satisfy at least one of the hotspot systemic safety intersection footprint criteria along with a requirement to provide the following engineering countermeasures:

- Towne Centre Dr. / Eastgate Mall
  - Backplates with retroreflective borders if asset owner agrees
- Towne Centre Dr. / Executive Dr.
  - Bicycle Loop Detector is existing for NB approach

- Backplates with retroreflective borders if asset owner agrees

- Towne Centre Dr. / Towne Centre Dwy.
  - High visibility crosswalks for North and East quadrants
  - Bicycle Loop Detector is existing for NB and SB approaches
  - Backplates with retroreflective borders if asset owner agrees
- Towne Centre Dr. / La Jolla Village Dr.
  - Backplates with retroreflective borders if asset owner agrees
- Judicial Dr. / Executive Dr.
  - Project does not propose NB through movements that would require bicycle detection
- Judicial Dr. / Judicial Dwy.
  - High visibility crosswalks for North, East, and West quadrants
  - Bicycle Loop Detector is existing for NB and SB approaches
- Judicial Dr. / Golden Haven Dr. / Brook Ln.
  - Bicycle Loop Detector for SB approach. Bicycle detection is existing for NB approach and Project does not propose EB through movements that would require bicycle detection.
  - Backplates with retroreflective borders if asset owner agrees
- La Jolla Village Dr. / Miramar Rd. / I-805 SB Ramps
  - Backplates with retroreflective borders if asset owner agrees

Table A: Existing Roadway Segment LOS Analysis

Road	Segment	Standard	# of Ln.	Roadway Classification	Capacity	Volume	V/C	LOS
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	SD	4	4-MA	40,000	15,274	0.382	B
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	SD	4	4-MA	40,000	15,274	0.382	B
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	SD	4	4-MA	40,000	21,886	0.547	C
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	SD	4	4-MA	40,000	21,886	0.547	C
Judicial Dr.	Executive Dr. - Judicial Dwy.	SD	4	4-MA	40,000	9,028	0.226	A
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	SD	4	4-MA	40,000	9,320	0.233	A
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	SD	4	4-C (w/ TWLTL)	30,000	8,665	0.289	A
Executive Dr.	Project Dwy. "B" - Judicial Dr.	SD	4	4-C (w/ TWLTL)	30,000	8,665	0.289	A

Legend:

LOS = Level of Service

V/C = Volume to Capacity Ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Existing volumes are calculated by applying a yearly growth rate to Pre-Existing count data for each individual street segment, which has been calculated by comparing the street segment volume growth between SANDAG TFIC Series 14 Year 2016 and Year 2025 models.

Table B: Near-Term (Opening Day Year 2023) & Near-Term (Opening Day Year 2023) + Project Roadway Segment LOS Analysis Comparison

Road	Segment	# of Ln.	Capacity	Roadway Classification	Near-Term			Near-Term + Project			ΔV/C	% of Total ADT	Does the Segment have identified improvements in Community Plan?
					LOS	Volume	V/C	LOS	Volume	V/C			
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	4	40,000	4-MA	C	26,133	0.653	C	26,755	0.669	0.016	2.3%	**No**
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	4	40,000	4-MA	C	26,133	0.653	C	26,755	0.669	0.016	2.3%	**No**
Judicial Dr.	Executive Dr. - Judicial Dwy.	4	40,000	4-MA	A	9,712	0.243	A	10,156	0.254	0.011	4.4%	**No**
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	4	40,000	4-MA	A	10,006	0.250	A	10,450	0.261	0.011	4.2%	**No**
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	4	30,000	4-C (w/ TWLTL)	A	9,345	0.312	A	9,950	0.332	0.020	6.1%	**Yes***
Executive Dr.	Project Dwy. "B" - Judicial Dr.	4	30,000	4-C (w/ TWLTL)	A	9,345	0.312	A	9,950	0.332	0.020	6.1%	**Yes***

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Identified improvements in the Community Plans have been referenced from the following sources:

* University Community Plan (7/2019)

Table C: Horizon Year & Horizon Year + Project Roadway Segment LOS Analysis Comparison

Road	Segment	# of Ln.	Capacity	Roadway Classification	Year 2050			Year 2050 + Project			ΔV/C	% of Total ADT	Does the Segment have identified improvements in Community Plan?
					LOS	Volume	V/C	LOS	Volume	V/C			
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	4	40,000	4-MA	C	29,098	0.727	C	29,720	0.743	0.016	2.1%	**No**
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	4	40,000	4-MA	C	29,098	0.727	C	29,720	0.743	0.016	2.1%	**No**
Judicial Dr.	Executive Dr. - Judicial Dwy.	4	40,000	4-MA	A	14,350	0.359	A	14,794	0.370	0.011	3.0%	**No**
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	4	40,000	4-MA	A	14,555	0.364	A	14,999	0.375	0.011	3.0%	**No**
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	4	30,000	4-C (w/ TWLTL)	B	13,377	0.446	B	13,982	0.466	0.020	4.3%	**Yes***
Executive Dr.	Project Dwy. "B" - Judicial Dr.	4	30,000	4-C (w/ TWLTL)	B	13,377	0.446	B	13,982	0.466	0.020	4.3%	**Yes***

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Identified improvements in the Community Plans have been referenced from the following sources:

* University Community Plan (7/2019)

Table D: Existing Intersection LOS Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Towne Centre Drive / Eastgate Mall	Signalized	36.2	D	45.9	D
2	Towne Centre Drive / Project Driveway "A"	Unsignalized	14.1	B	9.3	A
3	Towne Centre Drive / Executive Drive	Signalized	21.6	C	51.2	D
4	Towne Centre Drive / Towne Centre Driveway	Signalized	3.8	A	4.7	A
5	Towne Centre Drive / La Jolla Village Drive	Signalized	35.3	D	64.3	E
6	Executive Drive / Project Driveway "B"	Unsignalized	8.8	A	10.0	A
7	Judicial Drive / Executive Drive	Signalized	47.1	D	41.0	D
8	Judicial Drive / Judicial Driveway	Signalized	8.1	A	8.1	A
9	Judicial Drive / Golden Haven Drive / Brook Lane	Signalized	34.1	C	47.1	D
10	La Jolla Village Drive / I-805 SB Ramps	Signalized	28.2	C	24.3	C

Notes:

LOS = Level of Service

D = Delay (in sec.)

Table E: Near-Term (Opening Day Year 2023) & Near-Term (Opening Day Year 2023) + Project Intersection LOS Analysis Comparison

#	Intersection	Near-Term				Near-Term + Project						Is the intersection within 1/2-mile path of travel of a *Major Transit Stop*?	*Within a 1/2-mile distance of a Major Transit Stop*: Does the Project cause the intersection to degrade to LOS F? / Does the project add traffic to a signal already operating at LOS F?	*Not within a 1/2-mile distance of a Major Transit Stop*: Does the Project cause the intersection to degrade to LOS E or F? / Does the project add traffic to a signal already operating at LOS E or F?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	PM Peak Hour		Δ			
		D	LOS	D	LOS	D	LOS		D	LOS				
1	Towne Centre Drive / Eastgate Mall	84.1	F	116.0	F	86.0	F	1.9	128.6	F	12.6	Yes	Yes	-
2	Towne Centre Drive / Project Driveway "A"	18.7	C	9.8	A	24.0	C	5.3	11.0	B	1.2	Yes	No	-
3	Towne Centre Drive / Executive Drive	40.9	D	109.7	F	76.8	E	35.9	140.7	F	31.0	Yes	Yes	-
4	Towne Centre Drive / Towne Centre Driveway	6.3	A	5.7	A	7.0	A	0.7	6.0	A	0.3	Yes	No	-
5	Towne Centre Drive / La Jolla Village Drive	39.9	D	120.6	F	47.4	D	7.5	122.4	F	1.8	Yes	Yes	-
6	Executive Drive / Project Driveway "B"	8.8	A	10.4	B	9.2	A	0.4	11.2	B	0.8	Yes	No	-
7	Judicial Drive / Executive Drive	47.5	D	41.4	D	75.1	E	27.6	47.2	D	5.8	Yes	No	-
8	Judicial Drive / Judicial Driveway	7.6	A	7.7	A	7.2	A	-0.4	7.5	A	-0.2	No	-	No
9	Judicial Drive / Golden Haven Drive / Brook Lane	39.6	D	49.7	D	46.0	D	6.4	49.8	D	0.1	No	-	No
10	La Jolla Village Drive / I-805 SB Ramps	51.7	D	28.1	C	53.2	D	1.5	28.4	C	0.3	No	-	No

Notes:

LOS = Level of Service

D = Delay (in sec.)

Δ = Change in Delay (in sec.)

Table F: Horizon Year 2050 & Horizon Year 2050 + Project Intersection LOS Analysis Comparison

#	Intersection	Year 2050				Year 2050 + Project						Is the intersection within 1/2-mile path of travel of a *Major Transit Stop*?	*Within a 1/2-mile distance of a Major Transit Stop*: Does the Project cause the intersection to degrade to LOS F? / Does the project add traffic to a signal already operating at LOS F?	*Not within a 1/2-mile distance of a Major Transit Stop*: Does the Project cause the intersection to degrade to LOS E or F? / Does the project add traffic to a signal already operating at LOS E or F?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	PM Peak Hour		Δ			
		D	LOS	D	LOS	D	LOS		D	LOS				
1	Towne Centre Drive / Eastgate Mall	149.6	F	247.6	F	150.1	F	0.5	255.4	F	7.8	Yes	Yes	-
2	Towne Centre Drive / Project Driveway "A"	18.7	C	9.8	A	24.0	C	5.3	11.0	B	1.2	Yes	No	-
3	Towne Centre Drive / Executive Drive	61.1	E	111.7	F	98.6	F	37.5	148.3	F	36.6	Yes	Yes	-
4	Towne Centre Drive / Towne Centre Driveway	6.4	A	6.3	A	7.1	A	0.7	6.7	A	0.4	Yes	No	-
5	Towne Centre Drive / La Jolla Village Drive	51.8	D	126.4	F	53.8	D	2.0	132.6	F	6.2	Yes	Yes	-
6	Executive Drive / Project Driveway "B"	8.9	A	9.8	A	9.3	A	0.4	12.3	B	2.5	Yes	No	-
7	Judicial Drive / Executive Drive	56.2	E	53.2	D	79.4	E	23.2	54.2	D	1.0	Yes	No	-
8	Judicial Drive / Judicial Driveway	7.3	A	7.7	A	7.1	A	-0.2	7.6	A	-0.1	No	-	No
9	Judicial Drive / Golden Haven Drive / Brook Lane	35.6	D	60.4	E	41.2	D	5.6	64.8	E	4.4	No	-	Yes
10	La Jolla Village Drive / I-805 SB Ramps	51.2	D	28.2	C	52.7	D	1.5	29.0	C	0.8	No	-	No

Notes:

LOS = Level of Service

Δ = Change

D= Delay

Table G: Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project Intersection Peak Hour Turning Movement Volume Comparison

#	Intersection	NB Approach								SB Approach								EB Approach								WB Approach							
		Near-Term				Near-Term + Project				Near-Term				Near-Term + Project				Near-Term				Near-Term + Project				Near-Term				Near-Term + Project			
		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn	
		# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)
1	Towne Centre Drive / Eastgate Mall	2	373 / 244	0	229 / 57	2	383 / 323	0	234 / 93	2	49 / 447	0	68 / 476	2	49 / 447	0	68 / 476	2	485 / 74	0	139 / 200	2	485 / 74	0	162 / 202	1	61 / 162	0	468 / 48	1	61 / 162	0	468 / 48
2	Towne Centre Drive / Project Driveway "A"	-	-	0	78 / 7	-	-	0	362 / 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9 / 70	-	-	1	24 / 187
3	Towne Centre Drive / Executive Drive	1	478 / 197	1	437 / 77	1	478 / 197	1	437 / 77	1	15 / 35	0	82 / 153	1	38 / 37	0	82 / 153	1	194 / 53	0	39 / 174	1	221 / 56	0	39 / 174	1	57 / 361	0	40 / 24	1	64 / 418	0	196 / 39
4	Towne Centre Drive / Towne Centre Driveway	-	-	0	63 / 6	-	-	0	63 / 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9 / 88	1	1 / 8	1	9 / 88	1	1 / 8
5	Towne Centre Drive / La Jolla Village Drive	2	137 / 222	2	303 / 627	2	137 / 222	2	303 / 627	2	242 / 1136	1	36 / 167	2	249 / 1189	1	38 / 181	2	343 / 28	1	123 / 192	2	359 / 30	1	123 / 192	2	406 / 522	2	1715 / 357	2	406 / 522	2	1776 / 363
6	Executive Drive / Project Driveway "B"	-	-	-	-	-	-	-	-	-	-	1	6 / 49	-	-	1	16 / 130	-	-	-	-	-	-	-	-	-	-	0	58 / 6	-	-	0	0 / 0
7	Judicial Drive / Executive Drive	1	101 / 64	0	187 / 13	1	158 / 70	0	187 / 13	1	73 / 34	0	29 / 126	1	73 / 34	0	70 / 130	2	192 / 50	1	75 / 167	2	192 / 50	1	81 / 217	0	20 / 189	0	23 / 94	0	20 / 189	0	23 / 94
8	Judicial Drive / Judicial Driveway	1	50 / 34	0	1 / 1	1	50 / 34	0	1 / 1	1	9 / 4	0	5 / 1	1	9 / 4	0	5 / 1	0	0 / 9	0	1 / 8	0	0 / 9	0	1 / 8	0	1 / 1	0	3 / 3	0	1 / 1	0	3 / 3
9	Judicial Drive / Golden Haven Drive / Brook Lane	1	91 / 276	0	31 / 34	1	91 / 276	0	31 / 34	1	51 / 125	0	35 / 294	1	52 / 129	0	37 / 310	1	188 / 108	0	93 / 70	1	206 / 110	0	93 / 70	1	38 / 14	0	22 / 23	1	38 / 14	0	27 / 23
10	La Jolla Village Drive / I-805 SB Ramps	-	-	-	-	-	-	-	-	2	642 / 156	2	1751 / 801	2	642 / 156	2	1783 / 804	-	-	2	512 / 969	-	-	2	515 / 995	-	-	1	503 / 589	-	-	1	503 / 589

Notes:

LOS = Level of Service

D = Delay (in sec.)

Δ = Change in Delay (in sec.)

Legend:

Signalized Intersections

Left-Turn Lane: 0 Lanes ≤ 100 vehicles
1 Lane < 100 ≥ 300 vehicles
2 Lanes < 300 vehicles

Right-Turn Lane: 0 Lanes ≤ 500 vehicles
1 Lane < 500 ≥ 800 vehicles
2 Lanes < 800 vehicles

Table H: Horizon Year 2050 and Horizon Year 2050 With Project Intersection Peak Hour Turning Movement Volume Comparison

#	Intersection	NB Approach								SB Approach								EB Approach								WB Approach							
		Year 2050				Year 2050 + Project				Year 2050				Year 2050 + Project				Year 2050				Year 2050 + Project				Year 2050				Year 2050 + Project			
		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn	
		# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)
1	Towne Centre Drive / Eastgate Mall	2	419 / 244	0	277 / 69	2	429 / 325	0	282 / 105	2	49 / 447	0	68 / 476	2	49 / 447	0	68 / 476	2	485 / 74	0	166 / 240	2	485 / 74	0	189 / 242	1	74 / 194	0	468 / 48	1	74 / 194	0	468 / 48
2	Towne Centre Drive / Project Driveway "A"	-	-	0	78 / 7	-	-	0	362 / 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	9 / 70	-	-	1	24 / 187
3	Towne Centre Drive / Executive Drive	1	679 / 293	1	672 / 119	1	679 / 293	1	672 / 119	1	20 / 35	0	115 / 183	1	43 / 37	0	115 / 183	1	194 / 53	0	48 / 189	1	221 / 56	0	48 / 189	1	69 / 417	0	40 / 24	1	76 / 474	0	196 / 39
4	Towne Centre Drive / Towne Centre Driveway	-	-	0	63 / 6	-	-	0	63 / 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	12 / 117	1	1 / 11	1	12 / 117	1	1 / 11
5	Towne Centre Drive / La Jolla Village Drive	2	140 / 225	2	327 / 678	2	140 / 225	2	327 / 678	2	242 / 1136	1	36 / 174	2	249 / 1189	1	38 / 188	2	448 / 31	1	123 / 192	2	464 / 33	1	123 / 192	2	406 / 522	2	1715 / 375	2	406 / 522	2	1776 / 381
6	Executive Drive / Project Driveway "B"	-	-	-	-	-	-	-	-	-	-	1	6 / 49	-	-	1	16 / 130	-	-	-	-	-	-	-	-	-	-	0	58 / 6	-	-	0	0 / 0
7	Judicial Drive / Executive Drive	1	154 / 99	0	358 / 25	1	211 / 105	0	358 / 25	1	136 / 35	0	34 / 126	1	136 / 35	0	75 / 130	2	245 / 64	1	119 / 264	2	245 / 64	1	125 / 314	0	32 / 299	0	23 / 118	0	32 / 299	0	23 / 118
8	Judicial Drive / Judicial Driveway	1	50 / 34	0	1 / 1	1	50 / 34	0	1 / 1	1	9 / 4	0	5 / 1	1	9 / 4	0	5 / 1	0	0 / 14	0	2 / 12	0	0 / 14	0	2 / 12	0	2 / 2	0	5 / 5	0	2 / 2	0	5 / 5
9	Judicial Drive / Golden Haven Drive / Brook Lane	1	116 / 352	0	41 / 45	1	116 / 352	0	41 / 45	1	67 / 155	0	42 / 354	1	68 / 159	0	44 / 370	1	262 / 164	0	172 / 130	1	280 / 166	0	172 / 130	1	70 / 26	0	22 / 34	1	70 / 26	0	27 / 34
10	La Jolla Village Drive / I-805 SB Ramps	-	-	-	-	-	-	-	-	2	671 / 163	2	1751 / 801	2	671 / 163	2	1783 / 804	-	-	2	512 / 969	-	-	2	515 / 995	-	-	1	543 / 636	-	-	1	543 / 636

Notes:

LOS = Level of Service

D = Delay (in sec.)

Δ = Change in Delay (in sec.)

Legend:

Signalized Intersections

Left-Turn Lane: 0 Lanes ≤ 100 vehicles; 1 Lane < 100 ≥ 300 vehicles; 2 Lanes < 300 vehicles

Right-Turn Lane: 0 Lanes ≤ 500 vehicles; 1 Lane < 500 ≥ 800 vehicles; 2 Lanes < 800 vehicles

Table I: Queueing Analysis of Towne Centre Dr. / Eastgate Mall

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)*	245' + 245' = 490'	157	-333	590	100	601	111	11	532	42	531	41	-1
EB-L (PM)*	245' + 245' = 490'	64	-426	334	-156	344	-146	10	287	-203	304	-186	17
WB-L (AM)*	145'	165	20	169	24	180	35	11	188	43	172	27	-16
WB-L (PM)*	145'	187	42	195	50	181	36	-14	186	41	183	38	-3
SB-L (AM)*	145' + 145' = 290'	52	-238	115	-175	116	-174	1	117	-173	118	-172	1
SB-L (PM)*	145' + 145' = 290'	380	90	418	128	408	118	-10	388	98	380	90	-8
NB-L (AM)	260' + 260' = 520'	412	-108	549	29	491	-29	-58	487	-33	437	-83	-50
NB-L (PM)	260' + 260' = 520'	219	-301	358	-162	517	-3	159	279	-241	639	119	360

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table J: Queueing Analysis of Towne Centre Dr. / Executive Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	110'	133	23	157	47	137	27	-20	144	34	137	27	-7
EB-L (PM)	110'	71	-39	86	-24	83	-27	-3	123	13	111	1	-12
WB-L (AM)	110'	80	-30	83	-27	75	-35	-8	100	-10	110	0	10
WB-L (PM)	110'	147	37	140	30	140	30	0	141	31	142	32	1
SB-L (AM)	230'	35	-195	43	-187	59	-171	16	41	-189	59	-171	18
SB-L (PM)	230'	206	-24	281	51	248	18	-33	218	-12	252	22	34
NB-L (AM)*	240'	280	40	318	78	316	76	-2	302	62	301	61	-1
NB-L (PM)*	240'	194	-46	215	-25	193	-47	-22	304	64	315	75	11
NB-R (AM)*	90'	142	52	143	53	146	56	3	135	45	139	49	4
NB-R (PM)*	90'	59	-31	59	-31	61	-29	2	74	-16	87	-3	13

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table K: Queueing Analysis of Towne Centre Dr. / Towne Centre Dwy.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
WB-L (AM)*	130'	28	-102	29	-101	26	-104	-3	33	-97	33	-97	0
WB-L (PM)*	130'	105	-25	101	-29	103	-27	2	144	14	134	4	-10
WB-R (AM)*	130'	11	-119	10	-120	11	-119	1	13	-117	13	-117	0
WB-R (PM)*	130'	26	-104	24	-106	25	-105	1	28	-102	27	-103	-1

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table L: Queueing Analysis of Towne Centre Dr. / La Jolla Village Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	135' + 135' = 270'	366	96	352	82	344	74	-8	322	52	320	50	-2
EB-L (PM)	135' + 135' = 270'	133	-137	132	-138	157	-113	25	147	-123	166	-104	19
EB-R (AM)*	150'	188	38	206	56	221	71	15	212	62	213	63	1
EB-R (PM)*	150'	240	90	247	97	247	97	0	247	97	246	96	-1
WB-L (AM)*	190' + 190' = 380'	481	101	473	93	473	93	0	463	83	458	78	-5
WB-L (PM)*	190' + 190' = 380'	478	98	454	74	461	81	7	462	82	459	79	-3
WB-R (AM)	170'	228	58	201	31	202	32	1	200	30	200	30	0
WB-R (PM)	170'	42	-128	51	-119	51	-119	0	52	-118	51	-119	-1
SB-L (AM)	335' + 335' = 670'	277	-393	322	-348	298	-372	-24	283	-387	264	-406	-19
SB-L (PM)	335' + 335' = 670'	783	113	720	50	718	48	-2	720	50	720	50	0
SB-R (AM)	160'	40	-120	44	-116	43	-117	-1	38	-122	38	-122	0
SB-R (PM)	160'	139	-21	105	-55	100	-60	-5	107	-53	115	-45	8
NB-L (AM)*	140' + 140' = 280'	256	-24	258	-22	280	0	22	278	-2	294	14	
NB-L (PM)*	140' + 140' = 280'	369	89	373	93	367	87	-6	376	96	378	98	2
NB-R (AM)*	200' + 200' = 400'	199	-201	214	-186	229	-171	15	249	-151	256	-144	7
NB-R (PM)*	200' + 200' = 400'	506	106	499	99	497	97	-2	505	105	501	101	-4

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table M: Queueing Analysis of Judicial Dr. / Executive Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	175' + 175' = 350'	222	-128	211	-139	209	-141	-2	317	-33	326	-24	9
EB-L (PM)	175' + 175' = 350'	107	-243	108	-242	104	-246	-4	131	-219	136	-214	5
EB-R (AM)	155'	93	-62	63	-92	70	-85	7	200	45	198	43	-2
EB-R (PM)	155'	81	-74	79	-76	88	-67	9	116	-39	130	-25	14
SB-L (AM)*	240'	127	-113	134	-106	134	-106	0	193	-47	206	-34	13
SB-L (PM)*	240'	52	-188	136	-104	81	-159	-55	225	-15	228	-12	3
NB-L (AM)	170'	217	47	205	35	217	47	12	220	50	233	63	13
NB-L (PM)	170'	169	-1	243	73	230	60	-13	223	53	222	52	-1

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table N: Queueing Analysis of Judicial Dr. / Judicial Dwy.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
SB-L (AM)*	95'	29	-66	27	-68	28	-67	1	31	-64	28	-67	-3
SB-L (PM)*	95'	17	-78	15	-80	18	-77	3	16	-79	18	-77	2
NB-L (AM)*	85'	54	-31	55	-30	53	-32	-2	47	-38	54	-31	7
NB-L (PM)*	85'	44	-41	46	-39	56	-29	10	60	-25	67	-18	7

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table O: Queueing Analysis of Judicial Dr. / Golden Haven Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	185'	198	13	229	44	253	68	24	238	53	249	64	11
EB-L (PM)	185'	141	-44	132	-53	132	-53	0	226	41	212	27	-14
WB-L (AM)*	70'	63	-7	61	-9	61	-9	0	87	17	88	18	1
WB-L (PM)*	70'	42	-28	46	-24	39	-31	-7	69	-1	78	8	9
SB-L (AM)	190'	75	-115	72	-118	75	-115	3	96	-94	90	-100	-6
SB-L (PM)	190'	119	-71	134	-56	132	-58	-2	230	40	232	42	2
NB-L (AM)*	195'	133	-62	128	-67	123	-72	-5	163	-32	186	-9	23
NB-L (PM)*	195'	229	34	241	46	235	40	-6	273	78	246	51	-27

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table P: Queueing Analysis of La Jolla Village Dr. / I-805 SB Ramps

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	185'	198	13	229	44	253	68	24	238	53	249	64	11
EB-L (PM)	185'	141	-44	132	-53	132	-53	0	226	41	212	27	-14
WB-L (AM)*	70'	63	-7	61	-9	61	-9	0	87	17	88	18	1
WB-L (PM)*	70'	42	-28	46	-24	39	-31	-7	69	-1	78	8	9
SB-L (AM)	190'	75	-115	72	-118	75	-115	3	96	-94	90	-100	-6
SB-L (PM)	190'	119	-71	134	-56	132	-58	-2	230	40	232	42	2
NB-L (AM)*	195'	133	-62	128	-67	123	-72	-5	163	-32	186	-9	23
NB-L (PM)*	195'	229	34	241	46	235	40	-6	273	78	246	51	-27

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

Table Q: Systemic Safety Analysis for Pedestrians

Number	Intersection	Pedestrian Matrix Footprint	Existing Countermeasures	Proposed Engineering Countermeasures
1	Towne Centre Drive / Eastgate Mall	-	-	-
2	Towne Centre Drive / Project Driveway "A"	-	*new intersection (Project Driveway)	-
3	Towne Centre Drive / Executive Drive	-	-	-
4	Towne Centre Drive / Towne Centre Driveway	Footprint #3	Pedestrian Countdown Signals	High Visibility Crosswalks (N & E quadrants)
5	Towne Centre Drive / La Jolla Village Drive	-	-	-
6	Executive Drive / Project Driveway "B"	-	*new intersection (Project Driveway)	-
7	Judicial Drive / Executive Drive	-	-	-
8	Judicial Drive / Judicial Driveway	Footprint #2	Pedestrian Countdown Signals	High Visibility Crosswalks (N, E, & W quadrants)
9	Judicial Drive / Golden Haven Drive / Brook Lane	-	-	-
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps	-	-	-

Table R: Systemic Safety Analysis for Bicycles

Number	Intersection	Bicycle Matrix Footprint	Existing Countermeasures	Proposed Engineering Countermeasures
1	Towne Centre Drive / Eastgate Mall	Footprint #1	-	-
2	Towne Centre Drive / Project Driveway "A"	Footprint #2	*new intersection (Project Driveway)	-
3	Towne Centre Drive / Executive Drive	Footprint #1	Bicycle Loop Detector for NB approach	-
4	Towne Centre Drive / Towne Centre Driveway	Footprint #1	Bicycle Loop Detector for NB & SB approaches	-
5	Towne Centre Drive / La Jolla Village Drive	-	-	-
6	Executive Drive / Project Driveway "B"	Footprint #1	*new intersection (Project Driveway)	-
7	Judicial Drive / Executive Drive	Footprint #2	-	-
8	Judicial Drive / Judicial Driveway	Footprint #1	Bicycle Loop Detector for NB & SB approaches	-
9	Judicial Drive / Golden Haven Drive / Brook Lane	Footprint #1	Bicycle Loop Detector for NB approach	Bicycle Loop Detector for SB approach
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps	-	-	-

Table S: Systemic Safety Analysis for Vehicles

Number	Intersection	Vehicular Matrix Footprint	Existing Countermeasures	Proposed Engineering Countermeasures
1	Towne Centre Drive / Eastgate Mall	Footprint #3	-	Backplates w/Retroreflective Borders
2	Towne Centre Drive / Project Driveway "A"	-	*new intersection (Project Driveway)	-
3	Towne Centre Drive / Executive Drive	Footprint #3	-	Backplates w/Retroreflective Borders
4	Towne Centre Drive / Towne Centre Driveway	Footprint #1	-	Backplates w/Retroreflective Borders
5	Towne Centre Drive / La Jolla Village Drive	Footprint #2	-	Backplates w/Retroreflective Borders
6	Executive Drive / Project Driveway "B"	-	*new intersection (Project Driveway)	-
7	Judicial Drive / Executive Drive	-	-	-
8	Judicial Drive / Judicial Driveway	-	-	-
9	Judicial Drive / Golden Haven Drive / Brook Lane	Footprint #3	-	Backplates w/Retroreflective Borders
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps	Footprint #2	-	Backplates w/Retroreflective Borders

1.0 INTRODUCTION

Urban Systems Associates, Inc. has prepared this LMA to evaluate the Project's effects on mobility, access, circulation, and related safety elements in the proximate area of the Project per the City of San Diego ("City") Transportation Study Manual (TSM; dated *9/29/2020*).

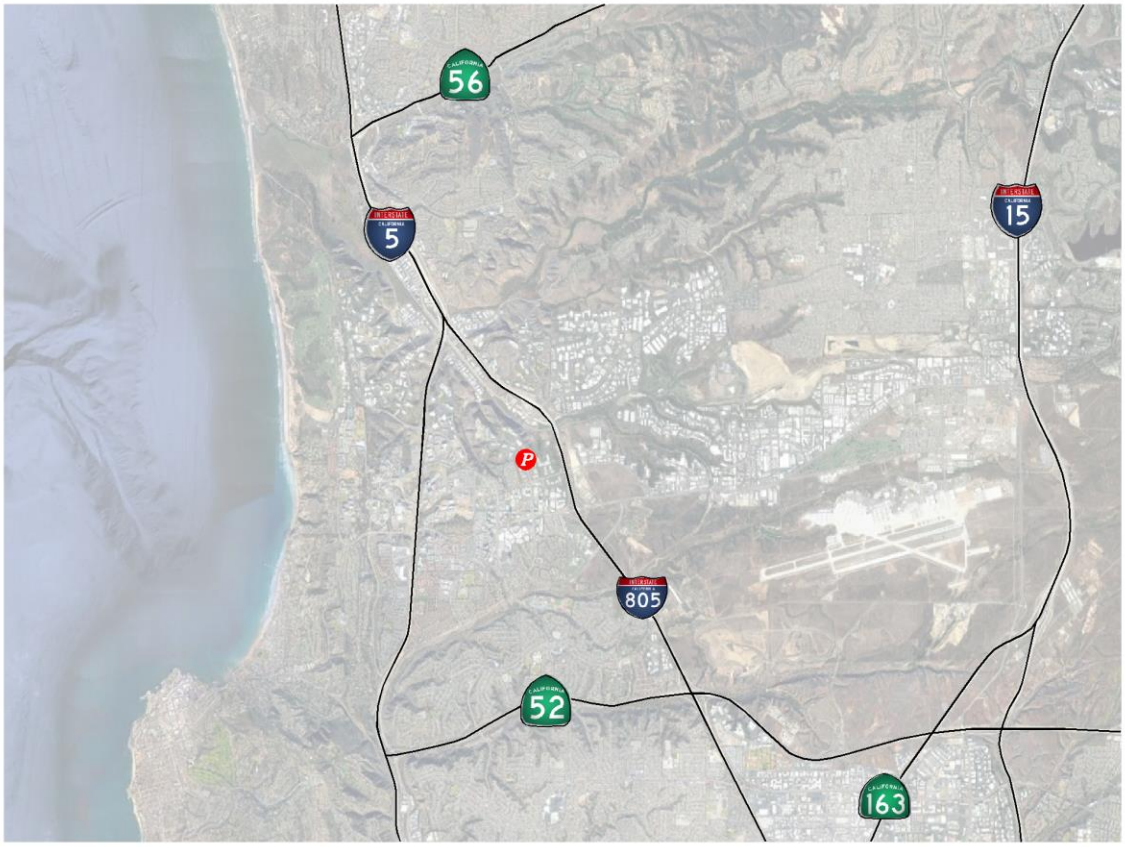
The Project is on a 4-acre site located at 9363, 9373, and 9393 Towne Centre Drive in the University Community Planning Area of the City of San Diego. The project site is bound by 9455 Towne Centre Drive to the north, Towne Centre Drive to the west, Executive Drive to the south, and 4690 and 9380 Judicial Drive to the east. The project site can be accessed through Towne Centre Drive to the west and Executive Drive to the south.

Figure 1-1 includes a project vicinity map.

Figure 1-2 includes a project location map.

Refer to **Appendix A** for a Project Information Form (PIF).

Figure 1-1: Project Vicinity Map



URBAN SYSTEMS ASSOCIATES, INC.
PLANNING & TRAFFIC ENGINEERING

Figure 1-2: Project Location Map

URBAN SYSTEMS ASSOCIATES, INC.
PLANNING & TRAFFIC ENGINEERING

2.0 PROJECT DESCRIPTION

2.1 Existing Setting

The Project is located on a 4-acre site located at 9363, 9373, and 9393 Towne Centre Drive in the University Community Planning Area of the City of San Diego. The project site is bound by 9455 Towne Centre Drive to the north, Towne Centre Drive to the west, Executive Drive to the south, and 4690 and 9380 Judicial Drive to the east. The project site can be accessed through Towne Centre Drive to the west and Executive Drive to the south.

Regional access to the project site is provided by several locations that include the junction of Interstate 5 with Genesee Avenue (1.6 miles northwest of the project site), the junction of Interstate 805 with La Jolla Village Drive (0.6 miles southeast of the project site), the junction of Interstate 805 with Nobel Drive (1.2 miles southeast of the project site), and the junction of Interstate 5 with La Jolla Village Drive (1.4 miles southwest of the project site). Local access to the project site is provided through the intersection of Towne Centre Drive and Eastgate Mall (0.2 miles north of the project site) and the intersection of Towne Centre Drive and Executive Drive (fronting the southwest corner of the project site). Primary vehicle access to the project site will occur through three (3) access driveways; two (2) driveways along Towne Centre Drive and one (1) driveway along Executive Drive.

The project site has an "Industrial Public / Semi-Public" land use designation in the current University Community Plan. The Project site is zoned RS-1-14 (Residential Single Unit).

The project site is currently developed with two (2) existing three-story scientific research and development buildings consisting of approximately 138,400 square feet (SF) of gross floor area (GFA) and a partially below-grade parking structure.

2.2 Proposed Project

The Project will entail the demolition of two (2) existing three-story scientific research and development buildings consisting of approximately 138,400 square feet (SF) of gross floor area (GFA) and the demolition of the partially below-grade parking structure for the construction of two (2) new four-story scientific research and development buildings that will be connected by two (2) two-level bridge connectors. These two (2) new buildings will consist of a total building area of two-level bridge connectors. These two (2) new buildings will consist of a total building area of 369,878 SF and are proposed as scientific research and development uses. Within the proposed uses, accessory/amenity spaces will be built, which will consist of a 7,655 SF market, a 563 SF food and beverage space, a 23,397 SF fitness center, and a 27,847 SF conference space. The accessory/amenity space will consist of a combination of retail, drinking, and eating areas. The Project will be constructed in one phase over a three-story below-grade parking structure.

The anticipated Opening Day of the Project is estimated to be during Year 2023.

Figure 2-1 includes the Project site plan.

As shown in the project site plan in **Figure 2-1**, access to the project site will be provided through three (3) driveways, providing access to the below-grade parking structure. Two (2) driveways will be located along Towne Centre Drive and one (1) driveway will be located along Executive Drive.

The driveway along Towne Centre Drive (referred to as the "southwest driveway") will be configured as a 20 feet-wide one-way right-in-only driveway.

The driveway along Towne Centre north of the southwest driveway (referred to as the "northwest driveway") will be configured as a 30 feet-wide two-way right-in/right-out driveway. This driveway is proposed to deviate from the maximum permitted width of 25 feet that is established in the San Diego Municipal Code (SDMC) for two-way driveways in parking impact areas. This deviation from the standard is proposed to accommodate the turning radius into the site for large semi-trucks (WB-65) for deliveries. The deviation will allow semi-trucks entering the site to fit in between the planned driveway curbs and to lessen the need to cross multiple turn lanes while turning into the driveway.

The driveway along Executive Drive (referred to as the "southeast driveway") will be configured as a 25-feet wide one-way right-out driveway. This driveway is proposed to deviate from the maximum permitted width of 20 feet that is established in the SDMC for one-way driveways in parking impact areas. This deviation from the standard is proposed to accommodate the egress turning radius from the site for large semi-trucks (WB-65).

At full buildout of the Project, parking will consist of a total supply of 938 vehicle parking spaces, 19 motorcycle spaces, and 121 bicycle spaces. A detailed breakdown of the Project's parking supply and facilities is discussed under **Chapter 12.0**.

TDM measures as required by the City of San Diego Climate Action Plan (CAP) Consistency Checklist Strategy 3, Item 7, will be provided as a TDM Program which will consist of the following:

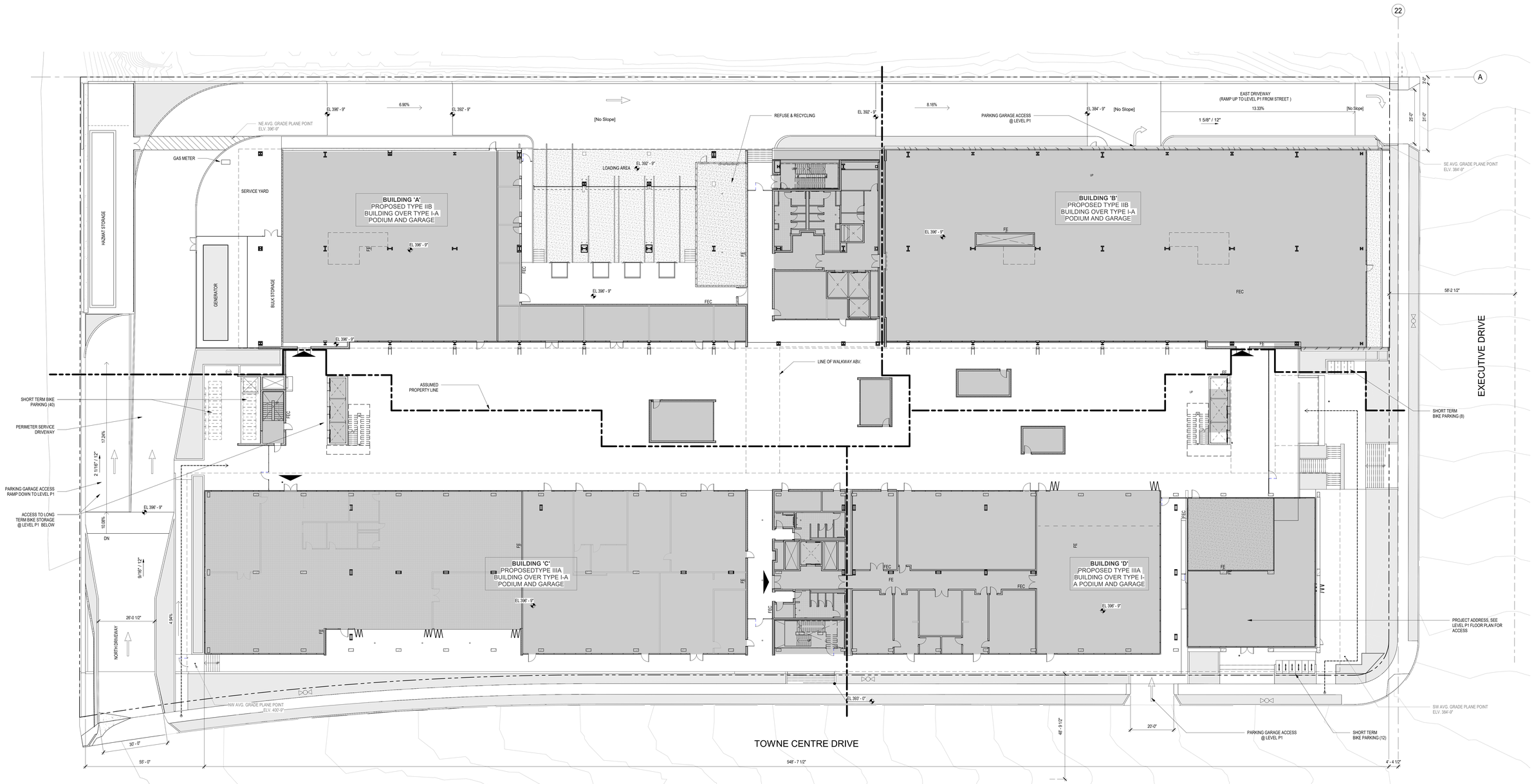
A. Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development.
B. Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees.
C. Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, and gyms, either onsite or within 1,320 feet (1/4 mile) of the structure/use.
D. Flexible or Alternative Work Hours

The Project will implement additional TDM measures as discussed in **Chapter 13.0**.

Discretionary actions required by the Project include a Specific Plan Amendment (SPA) to the Nexus Technology Centre Specific Plan, a Planned Development Permit (PDP), a Rezone, and a Community Plan Amendment (CPA). The Project proposes a Rezone from a Residential Base (RS-1-14) zone to an Employment Mixed-Use (EMX-2) zone, in which the proposed scientific research and development land use is permitted.

Figure 2-1: Project Site Plan

Provided on the following page. The page is intentionally left blank.



1 G100 **ARCHITECTURAL SITE PLAN**
1/16" = 1'-0"

GENERAL SITE PLAN NOTES

1. SEE LANDSCAPE SHEET L110 FOR LANDSCAPE AND HARDSCAPE PLAN.
2. SEE CIVIL SHEET C200 FOR CIVIL/ GRADING PLAN.
3. ALL MECHANICAL EQUIPMENT, TRASH STORAGE, SERVICE AREAS AND UTILITY APPURTENANCES, SHALL BE SCREENED FROM PUBLIC VIEW. SCREENING MAY INCLUDE WALLS AND LANDSCAPING.
4. PROVIDE BUILDING ADDRESS NUMBERS, VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY PER FHPS POLICY P-00-6 (UFC 901.4.4)
5. NO EXISTING OR PROPOSED EASEMENTS ON SITE
6. NO OBSTRUCTION INCLUDING LANDSCAPING OR SOLID WALLS IN THE VISIBILITY AREA SHALL EXCEED 36" IN HEIGHT.

LEGEND

- PROPERTY LINE
- ASSUMED PROPERTY LINE
- LIMIT-OF-WORK LINE
- ACCESSIBLE PATH OF TRAVEL
- FIRE HYDRANT SEE C200 FOR MORE INFO.
- BUILDING MAIN ENTRY

SHEET INDEX LINK: G002

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ALEXANDRIA.

STAMP

KEY PLAN

A B C D

Alexandria Science Village

9393 Towne Centre Drive,
San Diego, California 92121

SUBMITTAL
100% DESIGN DEVELOPMENT PACKAGE
05/24/22

REVISIONS

No.	Description	Date

Drawn: TA
Checked: TBD
M|H Proj No.: A19.0087.00
Issue Date: 05/24/22

SHEET
ARCHITECTURAL SITE PLAN

G100

2.3 Trip Generation

Trip Generation for the Project is presented below. Using the *City of San Diego Trip Generation Manual (May 2003)* trip generation rates, the total Project trip generation has been calculated using driveway rates as shown below and considers the remaining site entitlement. Existing uses onsite have been calculated to generate 1,107 daily unadjusted driveway trips with 177 (159 In / 18 Out) AM peak hour trips and 155 (16 In / 140 Out) PM peak hour trips. The Project is anticipated to generate approximately 2,959 daily unadjusted driveway trips with 473 (426 In / 47 Out) AM peak hour trips and 414 (41 In / 373 Out) PM peak hour trips. The Project is calculated to generate a net increase of approximately **1,778** average daily trips (ADT) with **252** (227 In / 25 Out) AM peak hour trips and **220** (22 In / 198 Out) PM peak hour trips.

Table 2-1 includes the project trip generation.

Table 2-1: Project Trip Generation

Land Use	Intensity	Rate*	ADT	AM						PM					
				Peak%*	Vol.	In %	Out%	In	Out	Peak%*	Vol.	In %	Out%	In	Out
Existing Land Uses															
Scientific Research and Development	138.4 KSF	8 /KSF	1,107	16%	177	90% : 10%		159	18	14%	155	10% : 90%		16	140
Existing Sub-Total			1,107		177			159	18		155			16	140
Proposed Land Uses															
Scientific Research and Development	369.878 KSF	8 /KSF	2,959	16%	473	90% : 10%		426	47	14%	414	10% : 90%		41	373
Proposed Sub-Total			2,959		473			426	47		414			41	373
Transit Reductions															
*Transit Reduction % (Scientific Research and Development - Industrial)**			4%		15%			15%	15%		15%			15%	15%
Transit Reduction (Scientific Research and Development - Industrial) of Existing Uses			44		27			24	3		23			2	21
Transit Reduction (Scientific Research and Development - Industrial) of Proposed Uses			118		71			64	7		62			6	56
Existing Sub-Total With Transit Credit			1,063		151			136	15		132			13	119
Proposed Sub-Total With Transit Credit			2,841		402			362	40		352			35	317
Net Increase			1,778		252			227	25		220			22	198

Source:

*Rates taken from the City of San Diego Trip Generation Manual, May 2003

Note:

ADT= Average Daily Trips

KSF = 1,000 Square Feet

T = Trips

X = GFA in 1,000 Square Feet

*Transit Reduction Credits referenced from Table 1 of City of San Diego Transportation Study Manual (09/29/2020)

**The Project includes Specialty Retail amenities that are treated as non-trip generating space. These amenities consist of a 5,748 SF coffee shop, a 2,097 SF market, and 16,411 SF of common rooms (conference rooms, lounges, etc.) consistent with the current University Community Plan, these uses will be non-freestanding and oriented towards the interior of the project.

3.0 METHODOLOGY PROCEDURES AND CRITERIA

3.1 City of San Diego Transportation Study Manual

The City of San Diego has recently released a new set of guidelines for indicating the procedures to prepare transportation analysis for land development, roadway projects, and specific plans in the City of San Diego. This new set of guidelines known as the Transportation Study Manual (9/29/2020) is designed to implement a required shift from a LOS analysis to vehicle miles traveled (VMT) CEQA analysis as a result of Senate Bill 743 and to better address all transportation modes.

Consistent with the City's TSM, a Local Mobility Analysis (LMA) evaluates the effects of a development project on mobility, access, circulation, and related safety elements in the proximate area of the project. The LMA has the following objectives:

- Ensures that improvements identified in the Community Plan that support multi-modal circulation and access are constructed when needed.
- Identifies improvements needed to support and promote active transportation and transit modes.
- Ensures the project provides connections to the active transportation network and transit system.
- Addresses issues related to operations and safety for all transportation modes.

3.2 Screening Criteria

As identified within the City's TSM, all projects must complete an LMA unless they meet the following trip generation screening criteria:

- Land uses consistent with Community Plan/Zoning designation: generate less than 1,000 daily unadjusted driveway vehicle trips

  - The project is not consistent with the current University Community Plan and is calculated to generate 2,841 daily unadjusted driveway vehicle trips defined per page 7 of the City's TSM, which are based on trip generation rates from the City of San Diego, Trip Generation Manual (*May 2003*).

- Land uses inconsistent with Community Plan/Zoning designation: generate less than 500 daily unadjusted driveway vehicle trips.

  - The project is not consistent with the current University Community Plan. Therefore, this item does apply to this project.

- Within the Downtown Community Planning Area and generates less than 2,400 daily unadjusted trips.

  - The project is not located within the Downtown Community Planning Area and generates more than 2,400 daily unadjusted trips. Therefore, this item does not apply to this project.

3.3 Extents of Study

The extent of the LMA study area is determined for each mode as follows:

- Pedestrian: Documentation of pedestrian facilities and basic deficiencies (missing sidewalk, curb ramps, and major obstructions) within ½-mile walking distance measured

from each pedestrian access point (for example, driveways, internal project sidewalk connections to the street, etc.).

- Bicycle: Documentation of bicycle facilities and basic deficiencies (bike lane gaps, obstructions) within a ½-mile bicycling distance measured from the center of the intersection formed by each project driveway.

- Transit: Identification of the closest transit routes and stops to the project. If the transit stops are within ½-mile walking distance of each pedestrian access point, the condition of the stop amenities must be described/evaluated.

- Intersection Operations: Intersections are focal points within a mobility network where multiple modes interact and at times, conflict, in their movements. Understanding intersection operations is essential for understanding circulation and safety for all modes that traverse through the intersection.

    - For projects that generate less than 2,400 daily final driveway trips the typical study intersections are as follows:

        - All signalized intersections and signalized project driveways located within a ½-mile path of travel distance measured from the center of the intersection formed by each project driveway AND the project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the intersection.

        - All unsignalized intersections (side street stop-controlled, all-way stop-controlled, and roundabouts) and unsignalized project driveways located

within a ½-mile path of travel distance measured from the center of the intersection formed by each project driveway AND the project will add 50 or more peak hour final primary (cumulative) trips in either direction.

- All freeway ramp terminal intersections where a project adds 50 or more peak hour final primary (cumulative) (AM or PM) net new trips in either direction must be analyzed regardless of their distance from the project site.

- For projects that generate more than 2,400 daily final driveway trips the typical study intersections are as follows:
  - All signalized intersections and signalized project driveways where the project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the intersection.
  - All unsignalized intersections (side street stop-controlled, all-way stop-controlled, and roundabouts) and unsignalized project driveways located within a ½-mile path of travel distance measured from the center of the intersection formed by each project driveway AND the project will add 50 or more peak hour final primary (cumulative) trips on any approach.
  - All freeway ramp terminal intersections where a project adds 50 or more peak hour final primary (cumulative) (AM or PM) net new trips in either direction must be analyzed regardless of their distance from the project site.

- Roadway Segments: The study area should include any roadway segments where the project adds 1,000 or more daily final primary trips (cumulative trips) if consistent with the Community Plan, or 500 or more daily final primary trips (cumulative trips) if inconsistent with the Community Plan AND:
    - Have improvements identified in the community plan; OR
    - Not built to the community plan ultimate classification (including planned new circulation element roadways).

3.4 Analysis Methodology

3.4.1 Pedestrian Analysis

Pedestrian analysis should primarily focus on pedestrian connectivity, walkshed analysis, the presence of adequate facilities, etc. However, in dense, urban environments featuring substantial pedestrian volumes, analysis of pedestrian facilities (i.e., sidewalks and crosswalks) may be required per the latest version of the HCM. Mid-block pedestrian crossing treatments should also be evaluated using available research and recommendations.

3.4.2 Bicycle Analysis

Project effects on existing and proposed bicycle facilities should be reviewed in consideration of the following:

- Bicycle analysis should primarily focus on bicycle connectivity, bikeshed analysis, presence of adequate facilities, etc.;

- Consistency with the City's Bicycle Master Plan and the Community's Bicycle Mobility Element;
- On-site bike parking supply as well as bike-share bicycles that may be parked/stored on public sidewalks.

3.4.3 Transit Analysis

Project effects on the transportation system should be evaluated in consideration of the following:

- Increased travel time for buses that could adversely affect on-time performance (intersection delay, corridor delay, movement delay (for transit));
- Conflicts (e.g., weaving, sight distance, etc.) involving buses at a stop due to nearby driveways;
- Planned and/or proposed transit improvements and stops identified in community plans, the RTIP, and/or RTP within the study area Project effects on transit system ridership are not typically considered an issue but may be evaluated under special circumstances (e.g., new office building along a bus line that already has substantial peak period ridership).

3.4.4 Systemic Safety Review

Study intersections should be compared to the City of San Diego Systemic Safety: The Data-Driven Path to Vision Zero report to determine if a study intersection meets any hot spot criteria identified in Appendix C: Identification of Systemic Hotspots of the report. If a study intersection meets any of the criteria, the applicant should evaluate any potential countermeasures and

coordinate with the Development Services Department Transportation Development Section staff to determine appropriate intersection improvements.

3.4.5 Signalized & Unsignalized Intersection Analysis

Traffic operational impacts at signalized intersections and unsignalized intersections (all-way stop, side-street stop, and roundabout) shall be analyzed using standard or state-of-the-practice procedures consistent with the latest edition of the Highway Capacity Manual (HCM) published by the Transportation Research Board.

The following provides general guidelines for the parameters necessary to perform the analysis. For existing and opening year conditions within five years of commencement of the LMA, the parameters should generally be based on field measurements taken during traffic data collection or field observation. For new study intersections or to analyze an opening year that is beyond five years of commencement of the LMA, the guidelines in **Table 3-1** can be used to determine input parameters.

Table 3-1: Signalized Intersection Analysis Parameters

Parameter	Guidance
Peak Hour Factor	Use the measured PHF by intersection approach that is obtained during traffic data collection. For new intersections or to analyze conditions beyond five years of commencing the LMA, refer to the HCM and maintain consistency across analysis periods, scenarios, and intersections.
Saturation Flow Rate	Use the typical saturation flow rate presented in the HCM. The current typical saturation flow rate is 1,900 vehicles per hour per lane.
Signal Timing	Obtain signal timing plans from the appropriate agency and use the timing (by time of day if provided) for the analysis. For new traffic signals, typically use a maximum cycle length of 120 seconds for intersections near freeway interchanges or at the intersection of two arterial roadways. For all other conditions use a maximum of 90 seconds. For all conditions, ensure that the minimum pedestrian crossing times are utilized.
Conflicting Pedestrians and Pedestrian Calls	Use pedestrian count data if available. If not available, refer to the HCM for appropriate minimum values.
Heavy Truck Percentage	If available, use observed values from field observations or traffic counts. If unavailable, the minimum recommended value is 3%. Heavy truck percentages should be higher on truck routes.
Lane Utilization Factor	If applicable, adjust the lane utilization factor based on field observations. Otherwise, refer to the HCM.

The most recent procedure from the HCM (HCM 6th Edition, *Transportation Research Board, 2016*) has been implemented in this LMA. The procedure in Chapter 19, which is used to analyze signalized intersections, is the "operational method." This method determines the Level of Service (LOS) based on the average control delay for the entire intersection expressed in seconds. **Table 3-2** shows the LOS based on the delay. The procedure in Chapter 20 (Two Way Stop Control) and Chapter 21 (All-Way Stop Control) were used to analyze unsignalized intersections. The measure of effectiveness for unsignalized intersections is determined by the computed control delay for the entire intersection for all-way stop control and is defined for each minor movement for two-

way stop control. A computer software package called "Synchro Version 10" supports this methodology and is used to complete the analysis for signalized and unsignalized intersections.

Table 3-2: Level of Service Criteria for Intersections

Signalized Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	≤ 1.0	> 1.0
≤ 10	A	F
> 10-20	B	F
> 20-35	C	F
> 35-55	D	F
> 55-80	E	F
> 80	F	F

Source: HCM 6th Edition, Transportation Research Board 2016, Exhibit 19-8

Two-Way Stop-Controlled Intersections (1)(2)

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤ 1.0	v/c > 1.0
0-10	A	F
> 10-15	B	F
> 15-25	C	F
> 25-35	D	F
> 35-50	E	F
> 50	F	F

Source: HCM 6th Edition, Transportation Research Board 2016, Exhibit 20-2

Note:

1) The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

2) The intersection worst approach delay is the reported delay for TWSC intersections. Note that it its important to consider measures of effectiveness such as V/C ratios, average queue lengths, and 95th percentile queue lengths in addition to considering delay.

All-Way Stop-Controlled Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio	
	v/c ≤ 1.0	v/c > 1.0
0-10	A	F
> 10-15	B	F
> 15-25	C	F
> 25-35	D	F
> 35-50	E	F
> 50	F	F

Source: HCM 6th Edition, Transportation Research Board 2016, Exhibit 21-8

3.4.6 Roadway Segment Analysis

Roadway segment analysis should be evaluated for any roadway segment that has identified improvements (including planned new circulation element roadways) in the Community Plan and the project is expected to add 1,000 or more daily final primary trips (cumulative trips) if consistent with the Community Plan, or 500 or more daily final primary trips (cumulative trips) if inconsistent with the Community Plan. Roadways should be evaluated using the roadway classification criteria shown in **Table 3-3**. This analysis intends to determine if the project results in the need to implement roadway improvements as identified in the Community Plan. The functional classification of the roadway segment should be evaluated in this analysis.

Table 3-3: Roadway Classifications, LOS, and ADT

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Expressway	8 lanes	40,000	56,000	80,000	93,500	107,000
Expressway	7 lanes	35,000	49,000	70,000	82,000	93,500
Expressway	6 lanes	30,000	42,000	60,000	70,000	80,000
Prime Arterial[1]	8 lanes	35,000	50,000	70,000	75,000	80,000
Prime Arterial[1]	7 lanes	30,000	42,500	60,000	65,000	70,000
Prime Arterial	6 lanes	25,000	35,000	50,000	55,000	60,000
Prime Arterial[10]	5 lanes	20,000	28,000	40,000	45,000	50,000
Prime Arterial[11]	4 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial[2]	7 lanes	22,500	31,500	45,000	50,000	55,000
Major Arterial	6 lanes	20,000	28,000	40,000	45,000	50,000
Major Arterial[3]	5 lanes	17,500	24,500	35,000	40,000	45,000
Major Arterial	4 lanes	15,000	21,000	30,000	35,000	40,000
Major Arterial	3 lanes	11,250	15,750	22,500	26,250	30,000
Major Arterial	2 lanes	7,500	10,500	15,000	17,500	20,000
Major Arterial *(one-way)*[4]	3 lanes	12,500	16,500	22,500	25,000	27,500
Major Arterial *(one-way)*[5]	2 lanes	10,000	13,000	17,500	20,000	22,500

Table 3-3: Roadway Classifications, LOS, and ADT (cont'd)

STREET CLASSIFICATION	LANES	LEVEL OF SERVICE				
		A	B	C	D	E
Collector *(with two-way left turn lane)*	5 lanes	12,500	17,500	25,000	30,750	37,500
Collector *(with two-way left turn lane)*	4 lanes	10,000	14,000	20,000	25,000	30,000
Collector *(with two-way left turn lane)*	3 lanes	7,500	10,500	15,000	18,750	22,500
Collector *(with two-way left turn lane)*	2 lanes	5,000	7,000	10,000	13,000	15,000
Collector *(without two-way left turn lane)*	4 lanes	5,000	7,000	10,000	13,000	15,000
Collector *(without two-way left turn lane)*[6]	3 lanes	4,000	5,000	7,500	10,000	11,000
Collector *(without two-way left turn lane)*	2 lanes	2,500	3,500	5,000	6,500	8,000
Collector *(with no fronting property)*	2 lanes	4,000	5,500	7,500	9,000	10,000
Collector *(one-way)*[7]	3 lanes	11,000	14,000	19,000	22,500	26,000
Collector *(one-way)*[8]	2 lanes	7,500	9,500	12,500	15,000	17,500
Collector *(one-way)*[9]	1 lane	2,500	3,500	5,000	6,500	7,500
Sub-Collector *(Single-family)*	2 lanes	--	--	2,200	--	--

Notes:

The volumes and the average daily level of service listed above are only intended as a general planning guideline. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

[1]Calculated assuming that each additional lane above a 6-Ln Arterial adds 5,000 ADT for LOS A, 7,500 ADT for LOS B and 10,000 ADT for LOS C, D, and E

[2]Calculated assuming that ADT is 1/2 way between steps of a 6-Ln Major Arterial & 6 Ln Prime Arterial

[3]Calculated assuming that ADT is 1/2 way between steps of a 4-Ln Major Arterial & 6 Ln Major Arterial

[4]Calculated using: Capacity = 0.5 (6-Ln Major (2-way) + Added Capacity of 2,500 ADT)

[5]Calculated using: Capacity = 0.5 (4-Ln Major (2-way) + Added Capacity of 2,500 ADT)

[6]Calculated using: Capacity = 4-Ln Collector (no center lane) * (3/4)

[7]Calculated using: Capacity = 2-Ln Collector (one-way) * (3/2)

[8]Calculated using: Capacity = 0.5 (4-Ln Collector w/continuous left turn lane) + Added Capacity of 2,500 ADT)

[9]Calculated using: Capacity = 0.5 (2-Ln Collector w/ continuous left turn lane). Capacity took into account parking friction from both sides of roadway

[10] Calculated by applying same differences between 8-Ln Prime & 7-Ln Prime & 7-Ln Prime & 6-Ln Prime

[11] Calculated assuming ratio between 6-Ln Prime & 6-Ln Major applied to 4-Ln Major

3.4.7 Freeway Analysis

Freeway analysis should focus on off-ramp queuing spillbacks onto the freeway mainline. Studies should normally document changes in off-ramp maximum queues and propose mitigation for queues that spill back onto mainline (or exacerbate conditions already or projected to be) occurring. Freeway interchange analysis should be coordinated with Caltrans.

3.4.8 Identifying Off-Site Improvements

Off-site improvements to accommodate project traffic that addresses access, circulation, and safety for all modes should be determined using the following analysis methods for each type of improvement:

- **Pedestrian Facilities**
  - Closing sidewalk gaps/removing obstructions:
    - The project should construct sidewalks to close sidewalk gaps adjacent to the project site.
    - The project should remove sidewalk obstructions that constrain pedestrian access routes to less than four feet adjacent to the project site.
    - The project should construct curb ramps/meet accessibility standards for any intersections adjacent to the project site.
  - Accommodating pedestrian demand:
    - The project should consider adding traffic calming and pedestrian-related signal timing changes (such as pedestrian hybrid beacons, leading pedestrian interval signal timing, etc.) to accommodate an increase in

pedestrian demand on roadways and intersections adjacent to the project site.

- **Bicycle Facilities**
  - Accommodating bicycle demand:
    - The project should construct (or reserve space for) any planned bicycle facility per the Community Plan or Bicycle Master Plan.
    - The project should consider upgrading adjacent bicycle facilities by adding upgraded treatments (such as green bike lane paint, buffers, etc. where appropriate) to accommodate an increase in bicycle demand.
- **Transit Facilities**
  - Transit priority treatments/improvements:
    - The project should consider transit priority treatments when operational analysis determines a transit movement would experience LOS E or worse.
    - The project should consider transit priority treatments identified within the Community Plan for the study area.
  - Proposed transit stops:
    - The project should consider accommodating transit stops to serve existing or proposed transit services, including those identified in the Community Plan, RTIP, and/or RTP within the study area. The project should coordinate any identified transit stops with SANDAG, the Metropolitan Transit System (MTS), and/or the North County Transit District (NCTD).

- Transit stop amenities:
  - The project should coordinate with MTS and/or the NCTD, as applicable, to determine additional or upgraded transit stop amenities.

➢ **Signalized Intersections**

- Adding or lengthening a turn lane:
  - Left-Turn Lane
    - No Existing Left-Turn Lane: If the project adds traffic to an individual left-turn movement causing the total number of peak hour left-turns to exceed 100, consider adding a left-turn lane.
    - Existing Left-Turn Lane: If the project adds traffic to an individual left-turn movement causing the total number of peak hour left-turns to exceed 300, consider adding a second left-turn lane.
  - Right-Turn Lane
    - No Existing Right-Turn Lane: If the addition of a right-turn lane will not negatively affect other roadway users, will maintain a comfortable roadway environment, and the project adds traffic to an individual right-turn movement causing the total number of peak hour left-turns to exceed 500, consider adding a right-turn lane.
    - Existing Right-Turn Lane: If the addition of a right-turn lane will not negatively affect other roadway users, will maintain a comfortable roadway environment, and the project adds traffic to an individual right-turn movement causing the total number of peak hour left-

turns to exceed 800, consider adding a second right-turn lane. Dual right-turns may require supplementary treatments including but not limited to the following:

- ➔ No right-turn on red with blank-out signs
- ➔ Lead pedestrian intervals (LPIs)
- ➔ Cycle treatment for bicyclists

- Lengthening a Turn Pocket
  - If the project adds traffic to a turning movement and causes the 95th percentile queue to exceed the available turn pocket length, consider lengthening the turn pocket.

- A signal timing improvement or signal modification is required if:
  - The project is within a ½-mile path of travel of a Major Transit Stop, and the project causes the intersection to degrade to a LOS F, or if the project adds traffic to a signal that is operating at a LOS F without project traffic.
  - The project is outside a ½-mile path of travel of a Major Transit Stop, and the project causes an intersection to degrade to a LOS E or F, or if the project adds traffic to a signal operating at a LOS E or F without project traffic.

- **Unsignalized Intersections**
  - A traffic signal or roundabout can be constructed to a side-street stop-controlled intersection if:

- The project is within ½ mile path of travel of a Major Transit Stop, and the project causes the worst movement of a side street stop-controlled intersection to degrade to a LOS F, or if the project adds traffic to the worst movement that is operating at a LOS F without project traffic.
- The project is outside ½ mile path of travel of a Major Transit Stop, and the project causes the worst movement of a side street stop-controlled intersection to degrade to a LOS E or F, or if the project adds traffic to the worst movement that is operating at a LOS E or F without project traffic.

➢ **Roadway Segments**

- A roadway segment should be improved as identified in the community plan (including upgrading to ultimate classification) based on the following:
  - If the project adds greater than 50% of total daily vehicle trips to the segment, the project should consider implementing the improvement as identified in the community plan.
  - If the project adds less than or equal to 50% of total daily vehicle trips on the segment, the project should evaluate its fair share towards the improvement.

4.0 PROJECT STUDY AREA, TRIP DISTRIBUTION, & TRIP ASSIGNMENT

4.1 Project Study Area

Figure 4-1 shows the study area which includes 10 intersections and 8 roadway segments.

4.1.1 Intersections

As shown in the Project trip generation in **Table 2-1**, the Project is calculated to generate a net increase of approximately **1,778** average daily trips (ADT) with **252** (227 In / 25 Out) AM peak hour trips and **220** (22 In / 198 Out) PM peak hour trips.

Consistent with the City's TSM, for projects that generate less than 2,400 daily final driveway trips the typical study intersections are as follows:

- All signalized intersections and project driveways located within a ½-mile path of travel distance measured from the center of the intersection formed by each project driveway AND the project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the intersection.
- All unsignalized intersections and unsignalized project driveways located within a ½-mile path of travel distance measured from the center of the intersection formed by each project driveway AND the project will add 50 or more peak hour final primary (cumulative) trips in either direction.
- All freeway ramp terminal intersections where a project adds 50 or more peak hour final primary (cumulative) (AM or PM) net new trips in either direction must be analyzed regardless of their distance from the project site.

A list of the Project study intersections is included in **Table 4-1** below.

Although the Project includes three (3) project driveways, only two (2) driveways are analyzed as study intersections. The two (2) driveway intersections analyzed consist of the two-way right-in/right-out driveway along Towne Centre Drive and the one-way right-out driveway along Executive Drive.

The one-way right-in driveway along Towne Centre Drive is not analyzed as a study intersection the driveway will primarily accommodate pick-up and drop-off operations.

4.1.2 Roadway segments

The Project is not consistent with the current University Community Plan. Therefore, consistent with the City's TSM, the study area should include roadway segments where a project adds 500 or more daily final primary trips (cumulative trips) if inconsistent with the Community Plan, AND:

- Have improvements identified in the community plan; OR
- Not built to the community plan ultimate classification (including planned new circulation element roadways).

A list of the Project study roadway segments is included in **Table 4-2** below.

Figure 4-1: Project Study Area and Intersection Key

Legend

= Project Location

= Study Street Segment

= Study Intersection

N
NO SCALE

Table 4-1: Study Intersections

Number	Intersection
1	Towne Centre Drive / Eastgate Mall
2	Towne Centre Drive / Project Driveway "A"
3	Towne Centre Drive / Executive Drive
4	Towne Centre Drive / Towne Centre Driveway
5	Towne Centre Drive / La Jolla Village Drive
6	Executive Drive / Project Driveway "B"
7	Judicial Drive / Executive Drive
8	Judicial Drive / Judicial Driveway
9	Judicial Drive / Golden Haven Drive / Brook Lane
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps

Table 4-2: Study Roadway Segments

Road	Segment
Towne Centre Drive	Eastgate Mall - Project Driveway "A"
Towne Centre Drive	Project Driveway "A" - Executive Drive
Towne Centre Drive	Executive Drive - Towne Centre Driveway
Towne Centre Drive	Towne Centre Driveway - La Jolla Village Drive
Judicial Drive	Executive Drive - Judicial Driveway
Judicial Drive	Judicial Driveway - Golden Haven Drive / Brook Lane
Executive Drive	Towne Centre Drive - Judicial Drive
Executive Drive	Towne Centre Drive - Judicial Drive

4.2 Project Trip Distribution and Trip Assignment

Trip distribution of project traffic is based on a SANDAG Series 14 Year 2025 Select Zone Forecast (refer to **Appendix C**) within Traffic Analysis Zone (TAZ) 2236.

Two (2) individual trip assignments have been prepared for this evaluation. These trip assignments include one (1) trip assignment for the existing uses and one (1) trip assignment for the Project uses; both consisting of Scientific Research and Development uses as shown in the trip generation in **Table 2-1**. The trip assignments are based on the Series 14 Year 2025 SANDAG Select Zone Analysis (SZA) specific to the Project within TAZ 2236. The main differential between the existing uses and Project uses concerning the trip distribution and trip assignment rests on the configuration of the project site driveways.

For the existing uses, both existing driveways operate with a two-way right-in/right-out configuration.

For the Project uses, three (3) driveways will provide access to the site, with two (2) driveways located along Towne Centre Drive (southwest and northwest driveways) and one (1) driveway (southeast driveway) located along Executive Drive.

The southwest driveway along Towne Centre Drive will be configured as a 20 feet-wide one-way right-in-only driveway.

The northwest driveway will be configured as a 30 feet-wide two-way right-in/right-out driveway.

The southeast driveway will be configured as a 25-feet wide one-way right-out driveway.

Consequently, the distribution and assignment of the Project traffic and existing uses have been separately adjusted to distinguish the behavior of traffic patterns associated with the different driveway configurations between the existing uses and Project uses; particularly for inbound traffic where the different driveway configurations between the Existing uses and Project uses directly affects the travel behavior of traffic accessing the site. This approach has been followed to create "net" Project volumes by subtracting the peak hour traffic of the Existing uses from the peak hour traffic of the Project Only traffic.

Refer to **Appendix C** for the SANDAG Series 14 ABM 2 Year 2025 Select Zone Analysis.

Figure 4-2 shows the Existing uses trip distribution percentages.

Figure 4-3 shows the Project Only trip distribution percentages.

Figure 4-4 shows the Existing uses trip assignment for inbound Project traffic.

Figure 4-5 shows the Project Only trip assignment for inbound Project traffic.

Figure 4-6 shows the Existing uses trip assignment for outbound Project traffic.

Figure 4-7 shows the Project Only trip assignment for outbound Project traffic.

Figure 4-8 shows the net Project ADT.

Figure 4-9 shows the Existing uses AM and PM peak hour traffic volumes assigned to the local street system.

Figure 4-10 shows the Project Only AM and PM peak hour traffic volumes assigned to the local street system.

Figure 4-11 shows the net Project AM and PM peak hour traffic volumes assigned to the local street system.

An adjustment to the loading points of the trip distribution percentages for TAZ 2236 that are shown to load 59% at the intersection of Judicial Drive and Nexus Center Drive and 41% at the intersection of Judicial Drive and Executive Drive, east of the actual location of the project site has been made. The loading point shown to contain 59% of the project traffic has been assumed to be loaded to the northern project driveway along Towne Centre Drive and the loading point shown to contain 41% of the project traffic has been assumed to be loaded to the project driveway along Executive Drive. These assumptions are also carried over to the project trip distribution percentages shown directly adjacent to the project site in the Select Zone Forecast along the segments directly south, west, north, and east of the project site.

As part of the existing conditions of the project's study area, raised medians fronting the project along Towne Centre Drive and Executive Drive have been identified. The raised medians restrict the existing driveways to a right-in / right-out configuration, which in turn prohibits left-turn access to and from the project site prompting project traffic to need U-turn locations to navigate through the existing roadway network adjacent to the project site. These conditions have prompted the elaboration of inbound and outbound trip assignment figures.

Existing Uses

As shown in **Figure 4-4**, inbound existing uses traffic is shown to enter the project site conditioned by the existing driveway configurations and existing raised medians. At ID#1, 10% of inbound existing uses traffic converge and travel southbound along Towne Centre Drive approaching ID#3.

At ID#3, 57% of inbound existing uses traffic converge, of which 10% will make a southbound U-turn and proceed northbound along Towne Centre Drive to access the existing driveway, 35% will travel through the intersection, and northbound along Towne Centre Drive and onto the existing access, and 12% will make an eastbound left-turn and proceed northbound along Towne Centre Drive onto the existing access. At ID#7, 43% of inbound existing uses traffic converge, of which 25% will make a northbound left-turn and proceed westbound along Executive Drive and onto the existing access along Executive Drive, and 18% will make a southbound right-turn and proceed westbound along the existing access at Executive Drive.

As shown in **Figure 4-6**, outbound existing uses traffic is shown to exit the project at both existing driveways and proceed to the nearest downstream signalized intersections of Towne Centre Drive at Eastgate Mall (Intersection ID#1) and Towne Centre Drive at Executive Drive (Intersection ID#3). For intersection ID#1, 59% of outbound existing uses traffic will travel north from the existing access point along Towne Centre Drive and reach this intersection, of which 10% will turn left and travel westbound along Eastgate Mall, 18% will turn right and travel eastbound along Eastgate Mall, and 31% will make a U-turn and proceed southbound along Towne Centre Drive and disperse through the roadway network. For intersection ID#3, 41% of outbound existing uses traffic will travel westbound along Executive Drive and reach this intersection, of which 12% will travel westbound through the intersection along Executive Drive, 4% will turn left and travel southbound along Towne Centre Drive, and 25% will make a U-turn and proceed eastbound along Executive Drive to then proceed southbound along Judicial Drive to disperse through the roadway network.

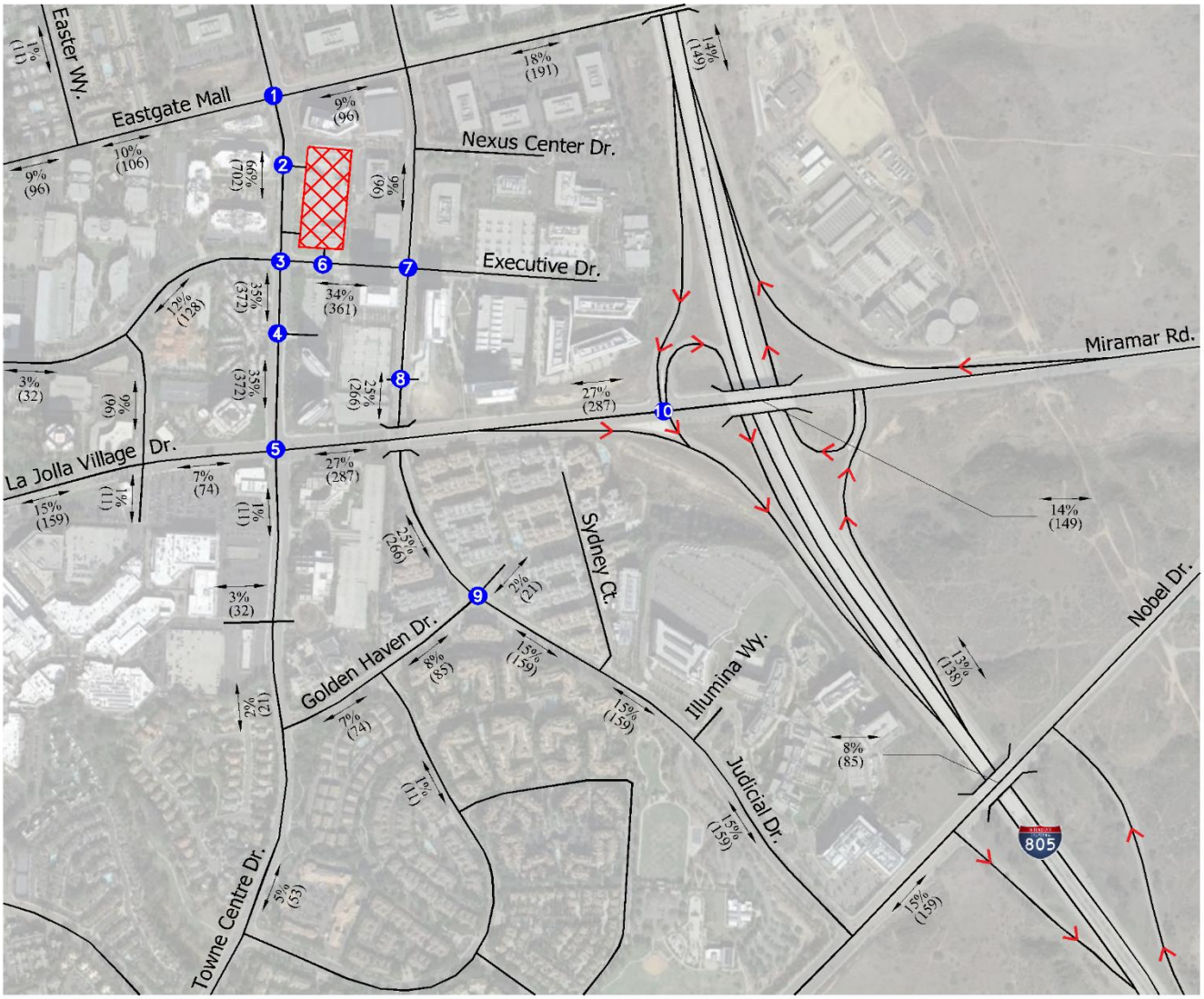
Project Uses

As shown in **Figure 4-5**, inbound project traffic is shown to enter the project site conditioned by the project driveway configurations and existing raised medians. At ID#1, 10% of inbound project traffic converges and travels southbound along Towne Centre Drive approaching ID#3. At ID#3, 100% of inbound project traffic converges, of which 10% will make a southbound U-turn and proceed northbound along Towne Centre Drive to access the project through the project driveway located along Towne Centre Drive, 35% will travel through the intersection and northbound along Towne Centre Drive and onto the project access, 12% will make an eastbound left-turn and proceed northbound along Towne Centre Drive and onto the project access, and 43% will make a westbound right-turn and proceed northbound along Towne Centre Drive. At ID#7, 43% of inbound project traffic converges, of which 25% will make a northbound left-turn and proceed westbound along Executive and 18% will make a southbound right-turn and proceed westbound along Executive Drive. The 43% of project traffic traveling westbound along Executive Drive will make a westbound right-turn and proceed northbound along Towne Centre Drive and onto the project access.

As shown in **Figure 4-7**, outbound project traffic is shown to exit the project at both project driveways and proceed to the nearest downstream signalized intersections of Towne Centre Drive at Eastgate Mall (Intersection ID#1) and Towne Centre Drive at Executive Drive (Intersection ID#3). For intersection ID#1, 59% of outbound project traffic will travel north from the project access point along Towne Centre Drive and reach this intersection, of which 10% will turn left and travel westbound along Eastgate Mall, 18% will turn right and travel eastbound along Eastgate Mall, and 31% will make a U-turn and proceed southbound along Towne Centre Drive and disperse through

the roadway network. For intersection ID#3, 41% of outbound project traffic will travel westbound along Executive Drive and reach this intersection, of which 12% will travel westbound through the intersection along Executive Drive, 4% will turn left and travel southbound along Towne Centre Drive, and 25% will make a U-turn and proceed eastbound along Executive Drive to then proceed southbound along Judicial Drive to disperse through the roadway network.

Figure 4-2: Existing Uses Trip Distribution Percentages



Legend

= Project Location

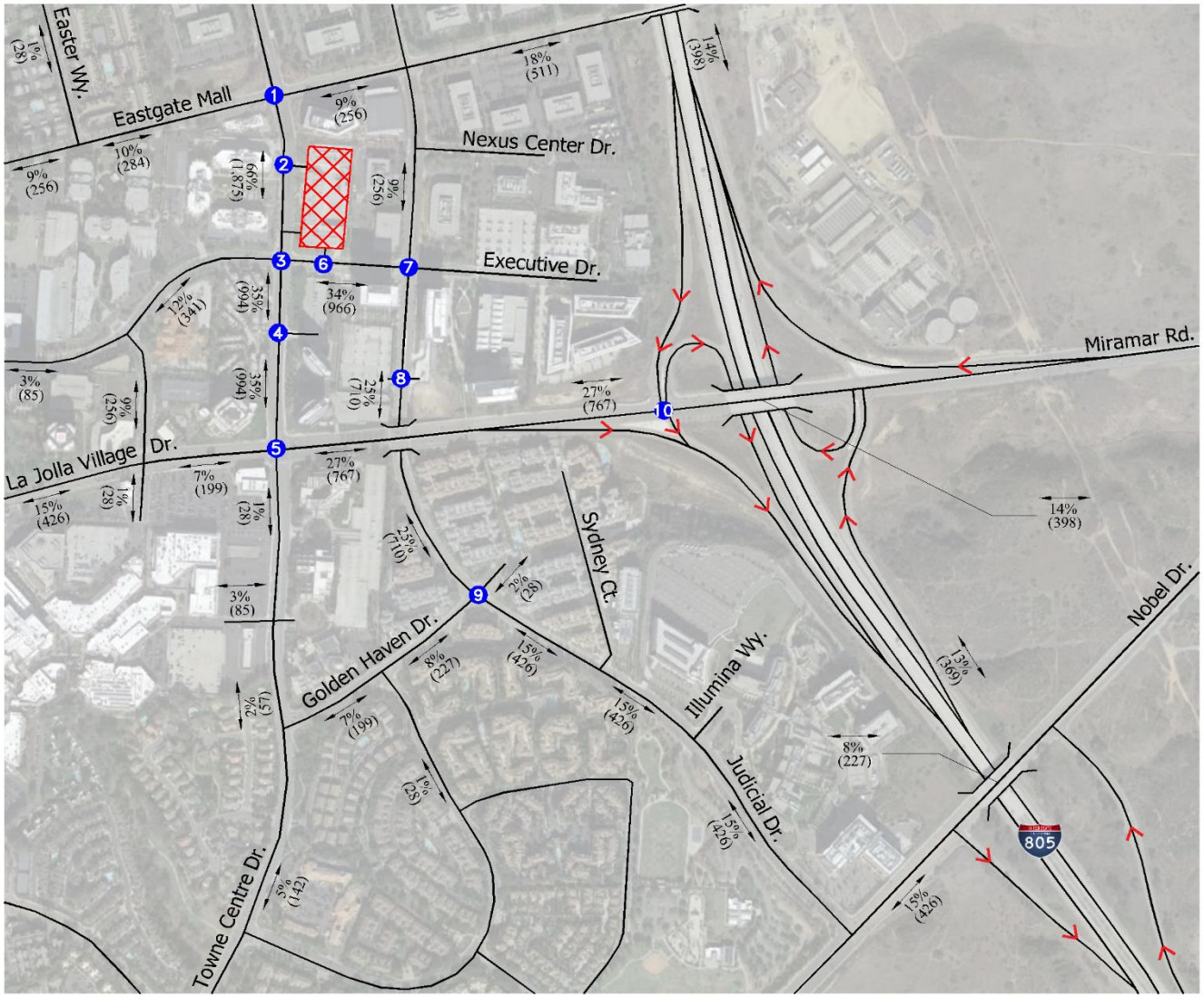
XX% = Existing Uses Trip Distribution Percentage

(XX,XXX) = Existing Uses ADT

= Study Intersection

N
NO SCALE

Figure 4-3: Project Only Trip Distribution Percentages



Legend

= Project Location

XX% = Project Only Trip Distribution Percentage

(XX,XXX) = Project Only ADT

= Study Intersection

N
NO SCALE

Figure 4-4: Existing Uses Inbound Trip Assignment Percentages

Legend

= Project Location

XX% = Existing Uses Trip Assignment (Inbound – AM Peak Hour)

= Study Intersection

N NO SCALE

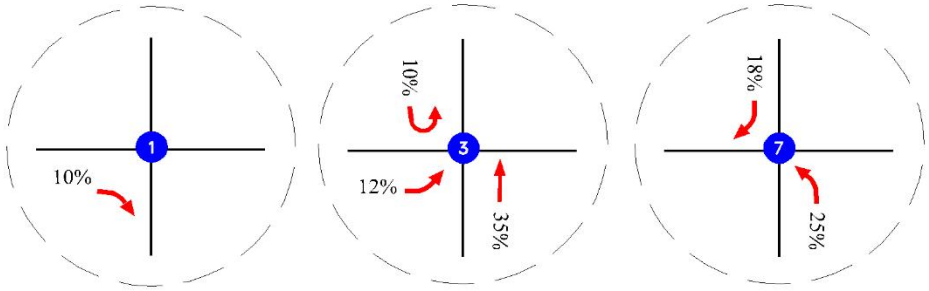


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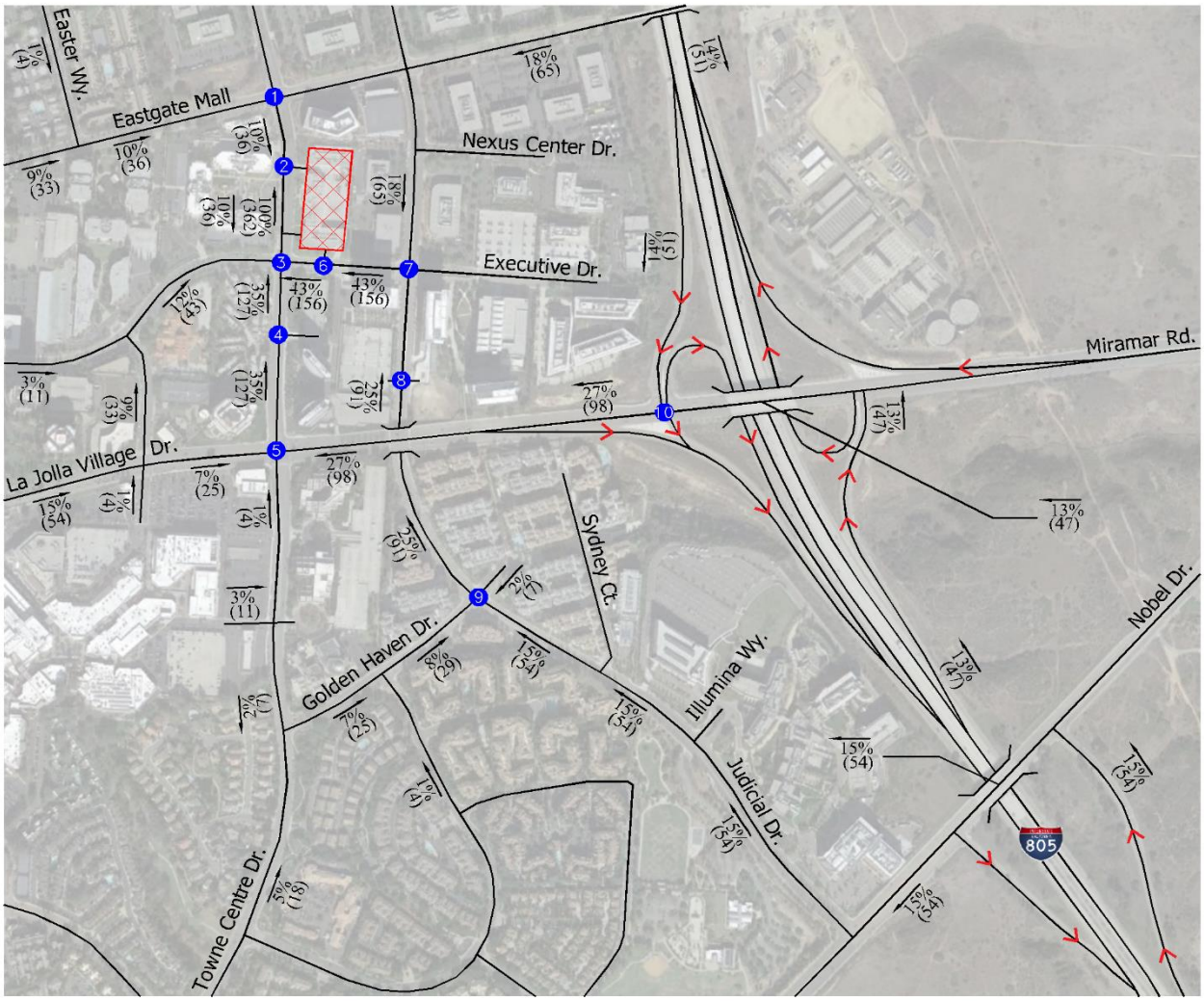
Figure 4-5: Project Only Inbound Trip Assignment Percentages



Legend

= Project Location

XX% = Project Only Trip Assignment (Inbound – AM Peak Hour)

= Study Intersection

N NO SCALE

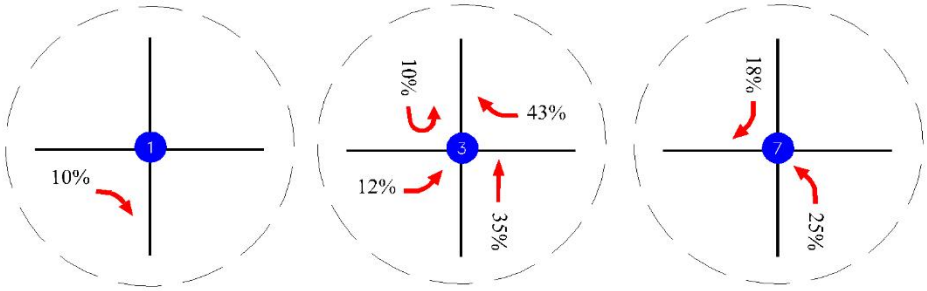


Figure 4-6: Existing Uses Outbound Trip Assignment Percentages

Legend

= Project Location

XX% = Existing Uses Trip Assignment (Outbound – PM Peak Hour)

= Study Intersection

NO SCALE

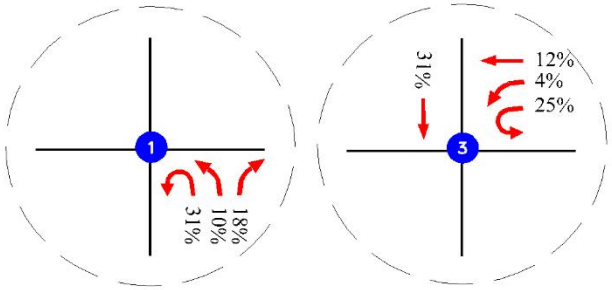


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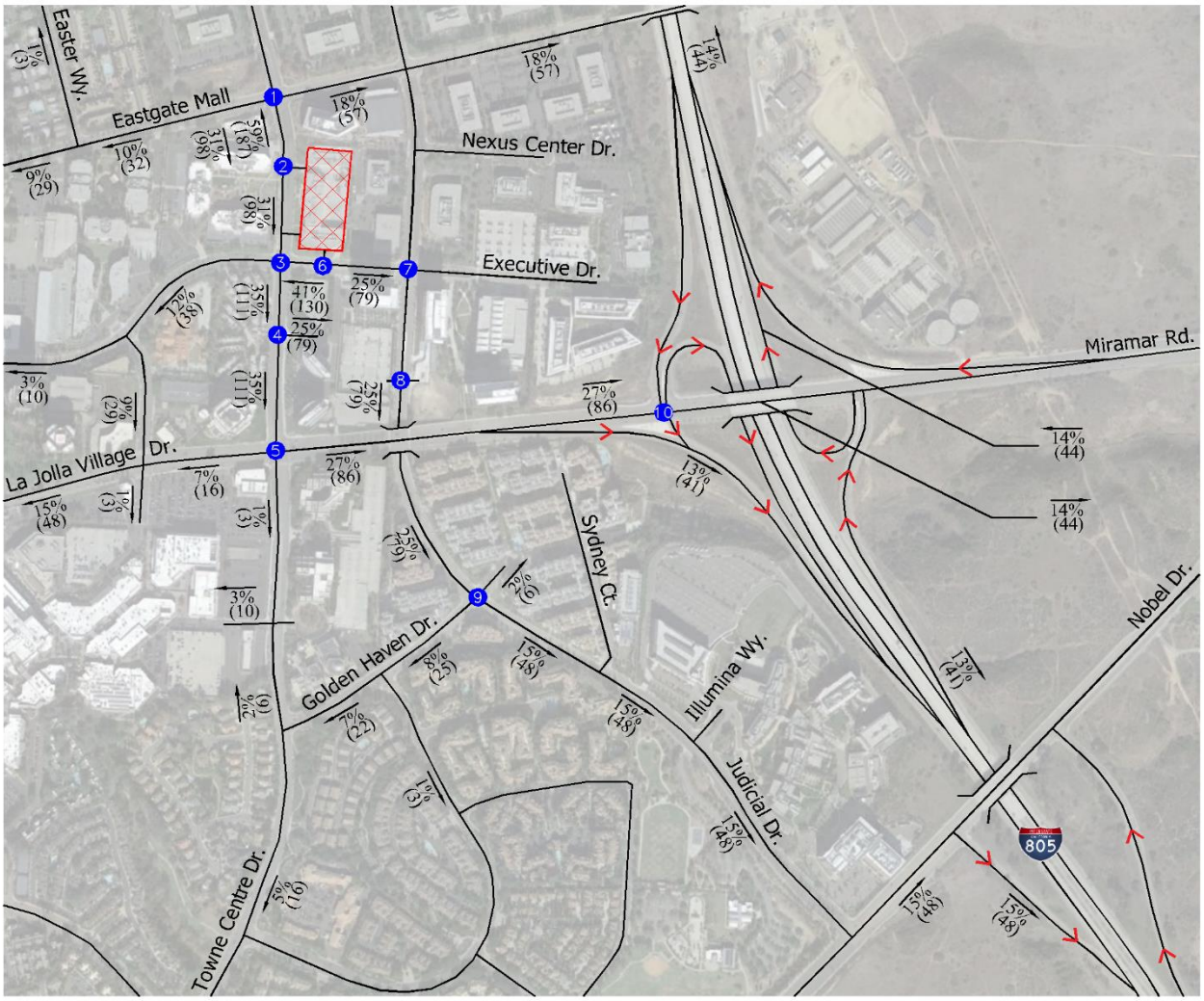
Figure 4-7: Project Only Outbound Trip Assignment Percentages



Legend

= Project Location

XX% = Project Only Trip Assignment (Outbound – PM Peak Hour)

= Study Intersection

N
NO SCALE

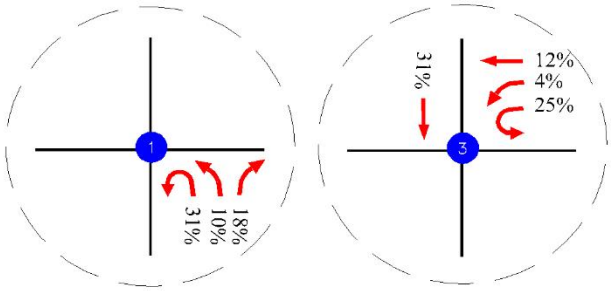


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Figure 4-8: Net Project Average Daily Traffic

Legend

= Project Location

XX,XXX = ADT Number

= Study Intersection

N
NO SCALE

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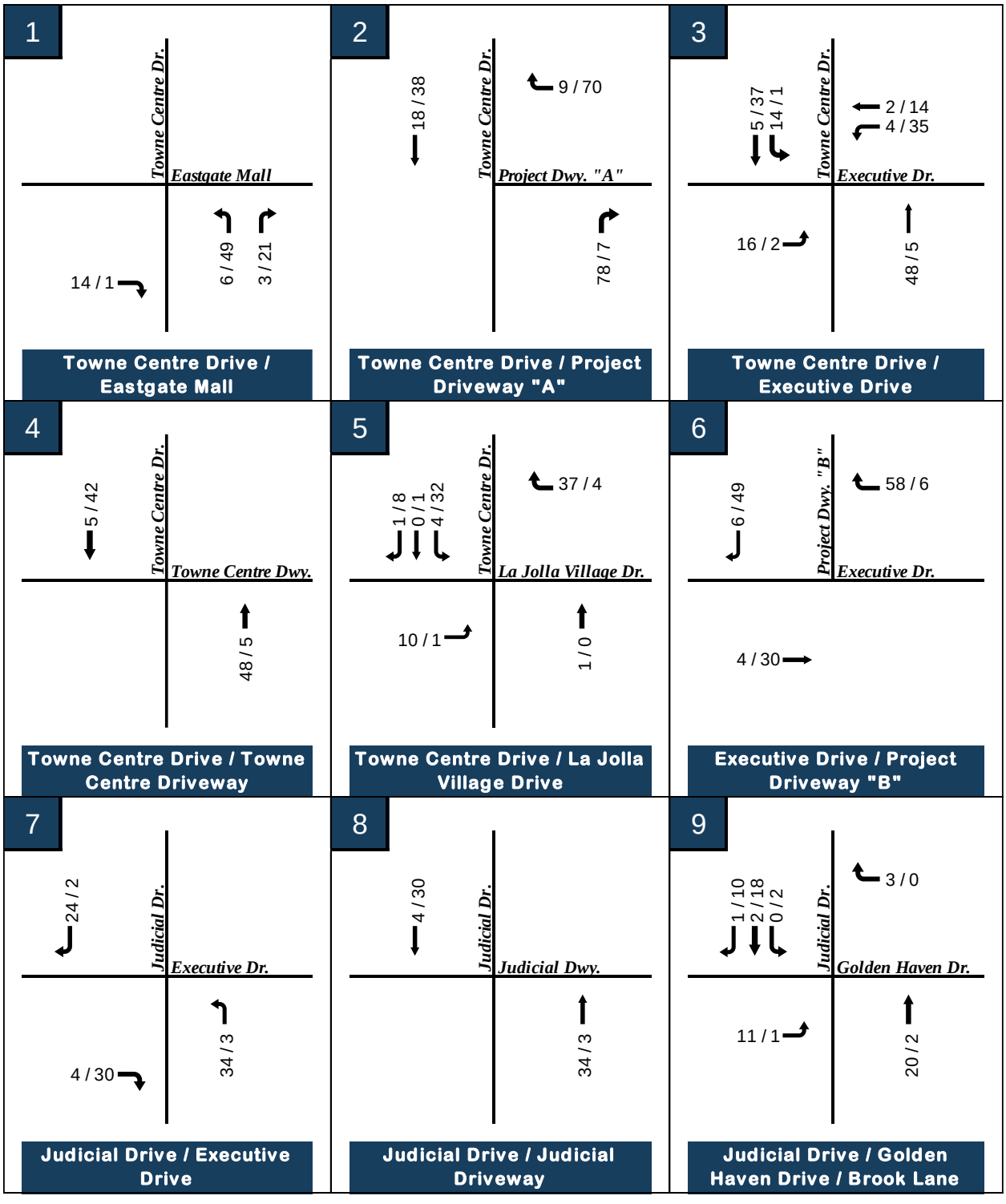
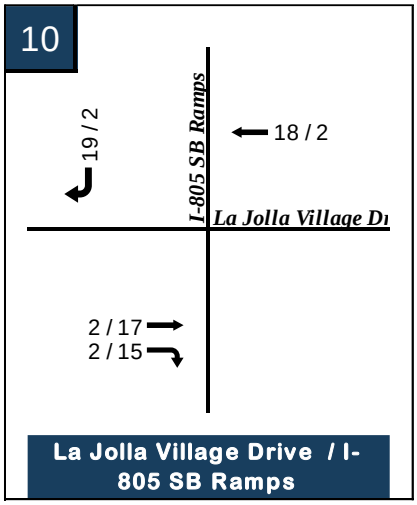
Figure 4-9: Existing Uses AM / PM Peak Hour Volumes



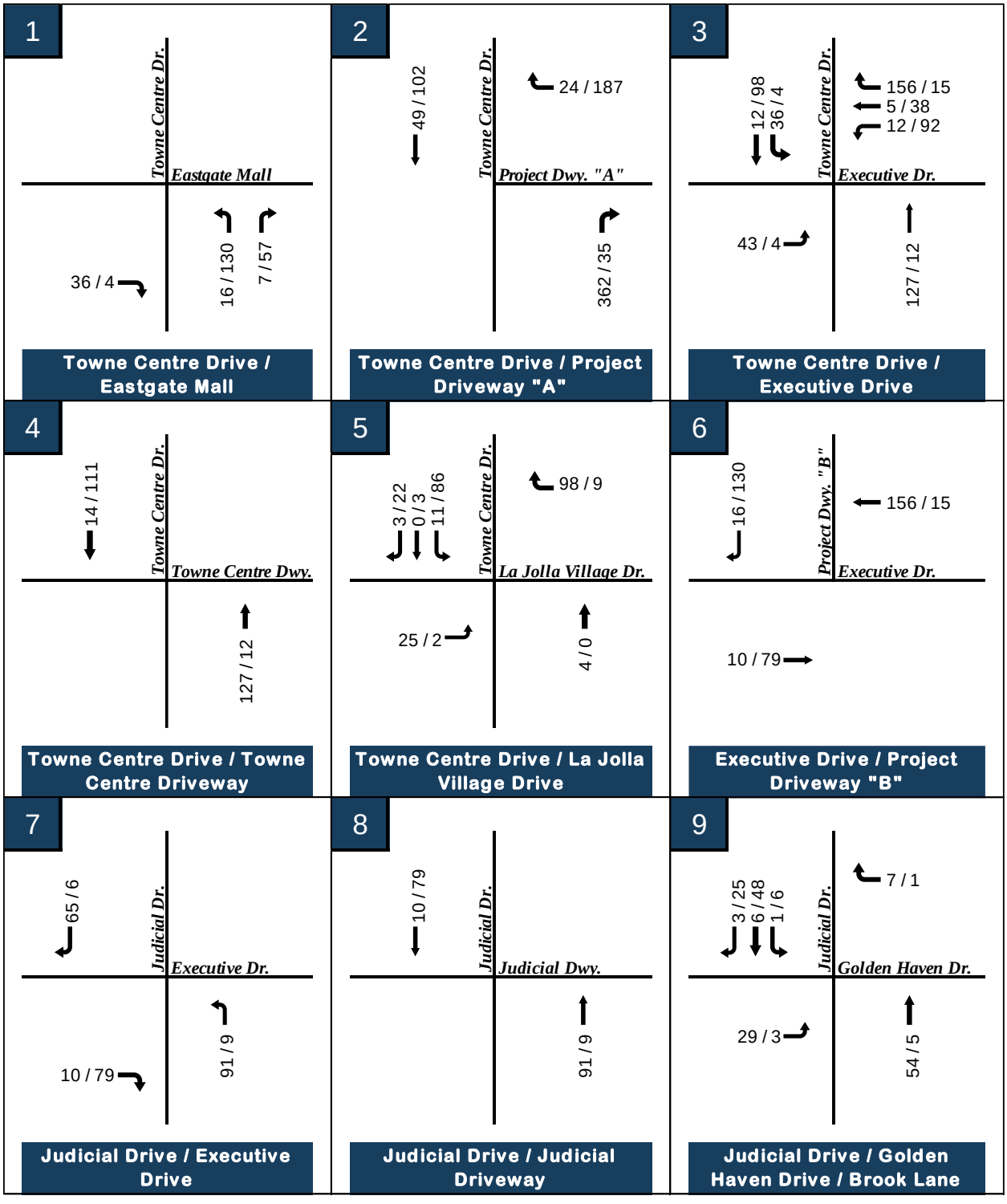
XX / XX = AM / PM Peak hour volumes

Figure 4-9: Existing Uses AM / PM Peak Hour Volumes (cont'd)



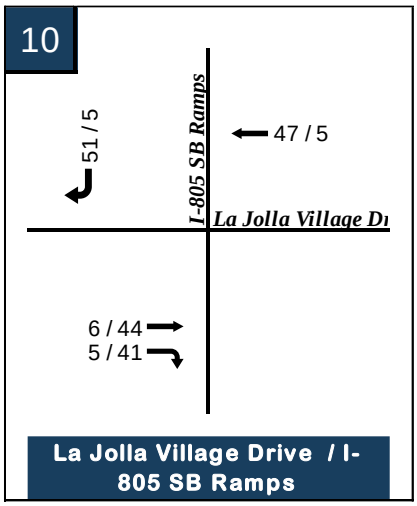
XX / XX = AM / PM Peak hour volumes

Figure 4-10: Project Only AM / PM Peak Hour Volumes



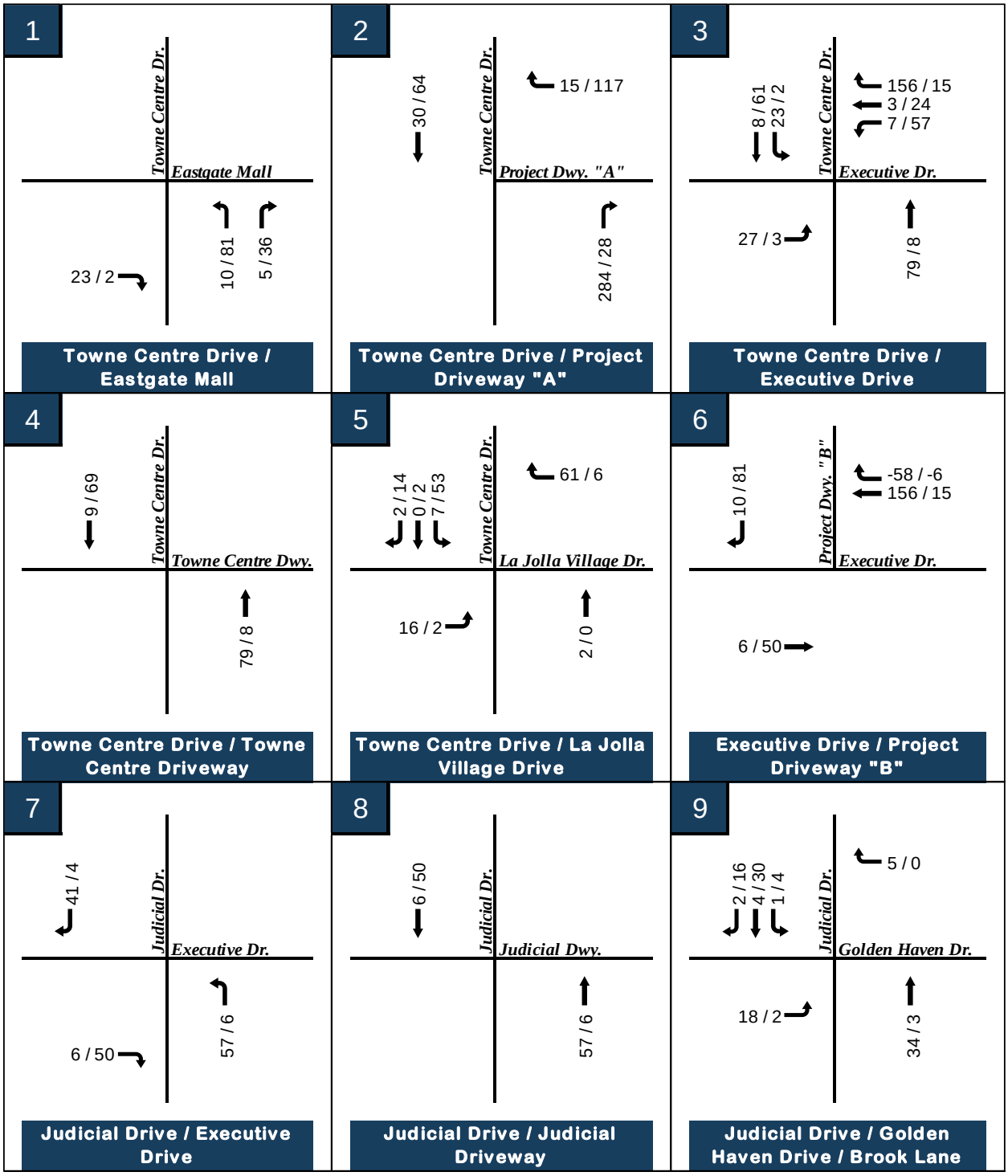
XX / XX = AM / PM Peak hour volumes

Figure 4-10: Project Only AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

Figure 4-11: Net Project AM / PM Peak Hour Volumes



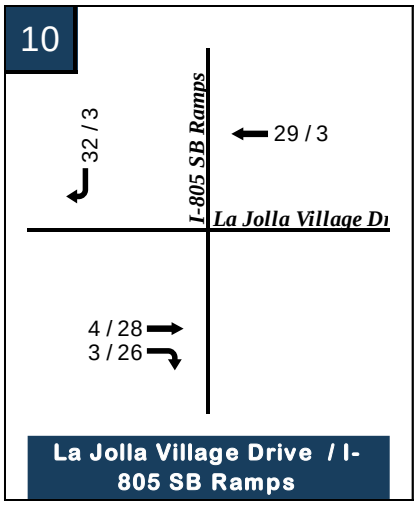
XX / XX = AM / PM Peak hour volumes

* NB U-Turn Traffic at Intersection #1 consists of 7 AM trips and 54 PM trips.

**SB U-Turn Traffic at Intersection #3 consists of 41 AM trips and 4 PM trips.

***WB U-Turn Traffic at Intersection #3 consists of 7 AM trips and 61 PM trips.

Figure 4-11: Net Project AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

5.0 EXISTING CONDITIONS

5.1 Pedestrian Facilities

Pedestrian connectivity will be provided from the Project access points along Towne Centre Drive and along Executive Drive via 5-foot-wide non-contiguous sidewalks along the project frontage that extend uninterrupted on both sides of the roadways via contiguous sidewalks from the Project property lines to the intersections of Towne Centre Drive at Eastgate Mall and Executive Drive at Judicial Drive.

Connectivity to the University Community is provided primarily via existing contiguous sidewalks (but also noncontiguous sidewalks) along local roadways. **Table 5-1** shows a summary of the existing pedestrian facilities within a ½-mile walking distance at the roadway segment level from the project site.

Table 5-1: Existing Pedestrian Facilities (Roadway Segment Level)

Road	Segment	Contiguous Sidewalks	Noncontiguous Sidewalks	Missing Sidewalks	Notes
Towne Centre Dr.	Towne Centre Ct. - Eastgate Mall	Yes	Yes	No	-
Towne Centre Dr.	Eastgate Mall - Executive Dr.	Yes	Yes	No	-
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	Yes	No	No	-
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	Yes	No	No	-
Towne Centre Dr.	La Jolla Village Dr. - Towne Centre Gateway	Yes	No	No	-
Towne Centre Dr.	Towne Centre Gateway - Golden Haven Dr.	Yes	No	No	-
Executive Dr.	Regents Park Row - Genesee Ave.	Yes	No	No	-
Executive Dr.	Genesee Ave. - Executive Wy.	Yes	Yes	No	-
Executive Dr.	Executive Wy. - Towne Centre Dr.	No	Yes	No	-
Executive Dr.	Towne Centre Dr. - Judicial Dr.	Yes	No	No	-
Executive Dr.	Judicial Dr. - Eastern Terminus	Yes	Yes	No	-
La Jolla Village Dr.	Genesee Ave. - Executive Wy.	Yes	No	No	
La Jolla Village Dr.	Executive Wy. - Towne Centre Dr.	Yes	Yes	No	
La Jolla Village Dr.	Towne Centre Dr. - I-805 SB Ramps	Yes	No	Yes	South sidewalk extends 0.25 miles from Towne Centre Dr.
Genesee Ave.	Fez St. - Eastgate Mall	Yes	No	No	-
Genesee Ave.	Eastgate Mall - Executive Dr.	Yes	No	No	-
Genesee Ave.	Executive Dr. - Executive Sq.	Yes	No	No	-
Genesee Ave.	Executive Sq. - La Jolla Village Dr.	Yes	No	No	-
Golden Haven Dr.	Towne Centre Dr. - Renaissance Ave.	Yes	Yes	No	-
Golden Haven Dr.	Renaissance Ave. - Judicial Dr.	Yes	No	No	-
Judicial Dr.	Eastgate Mall - Nexus Center Dr.	No	Yes	No	-
Judicial Dr.	Nexus Center Dr. - Executive Dr.	No	Yes	No	-
Judicial Dr.	Executive Dr. - Judicial Dwy.	Yes	Yes	No	-
Judicial Dr.	Judicial Dwy. - Golden Haven Dr.	Yes	Yes	No	-
Executive Wy.	Northern Terminus - La Jolla Village Dr.	Yes	Yes	No	-

As shown in **Table 5-1**, roadway segments within a ½-mile walking distance from the project site provide pedestrian users with ample pedestrian accommodations, except for La Jolla Village Drive between Towne Centre Drive and Interstate 805 SB Ramps where the south sidewalk extends an approximately ¼-mile distance from the intersection of Towne Centre Drive at La Jolla Village Drive.

Table 5-2 shows a summary of the existing pedestrian facilities within a ½-mile walking distance at the intersection level from the project site.

Table 5-2: Existing Pedestrian Facilities (Intersection Level)

Intersection	Intersection Control	Marked Crosswalks	Unmarked Crosswalks	Curb Ramps	Missing Curb Ramps	Truncated Domes	Missing Truncated Domes
Towne Centre Drive / Executive Drive	*Signalized*	N, S, W, E*	-	NW, NE, SW, SE	-	NW, NE, SW, SE	-
Towne Centre Drive / Eastgate Mall	*Signalized*	N*, S, W, E	-	NW, NE, SW, SE	-	NW, NE, SW, SE	-
Towne Centre Drive / Towne Centre Court	*Unsignalized*	-	S, W, E	NW, NE, SW, SE	-	NW, NE, SW, SE	-
Towne Centre Drive / Towne Centre Driveway	*Signalized*	N, E	-	NW, NE, SE, median	-	NW, NE, SE, median	-
Towne Centre Drive / La Jolla Village Drive	*Signalized*	N*, S*, W*, E*	-	NW, NE, SW, SE	-	NW, NE, SW, SE	-
Towne Centre Drive / Towne Centre Gateway	*Signalized*	S, E	W	NW, NE, SW, SE	-	NW, SW	NE, SE
Towne Centre Drive / Golden Haven Drive	*Signalized*	N, E	-	NW, NE, SE	-	-	NW, NE, SE
Executive Drive / Judicial Drive	*Signalized*	N*, S, W, E	-	NW, NE, SW, SE		NW, NE, SW, SE	-
Executive Drive / Executive Way	*Signalized*	N*, S, W, E*	-	NW, NE, SW, SE	-	NW, NE	SW, SE
Executive Drive / Genesee Avenue	*Signalized*	N*, S*, W*, E*	-	NW, NE, SW, SE	-	NW, NE, SW, SE	-
Eastgate Mall / Genesee Avenue	*Signalized*	N*, S*, W*, E*	-	NW, NE, SW, SE	-	NW, NE, SW, SE	-
Eastgate Mall / Easter Way	*Signalized*	N*, W, E	-	NW, NE, SW, SE	-	NW, NE, SW, SE	-
Eastgate Mall / Judicial Drive	*Signalized*	N, S*, W, E	-	NW, NE, SW, SE	-	NW, NE, SW	SE
Judicial Drive / Judicial Driveway	*Signalized*	N, W	-	NW, NE, SW	-	NW, NE, SW	-
Judicial Drive / Nexus Center Drive	*Unsignalized*	-	E	NE, SE	-	-	NE, SE
Judicial Drive / Golden Haven Drive	*Signalized*	N, S, W, E	-	NW, NE, SW, SE	-	NW, SW	NE, SE
Golden Haven Drive / Renaissance Avenue	*Signalized*	S*, E	-	NE, SW, SE	-	SE	NE, SW
La Jolla Village Drive / Genesee Avenue	*Signalized*	S*, W*	-	NW, SW, SE	-	NW, SW, SE	-
La Jolla Village Drive / Executive Way	*Signalized*	N, S*, E*	-	NW, NE, SW, SE	-	NW, NE, SW, SE	-

Legend:

N = North Quadrant / North Leg

S = South Quadrant / South Leg

W = West Quadrant / West Leg

E = East Quadrant / East Leg

* = Continental Crosswalk

As shown in **Table 5-2**, intersections within a ½-mile walking distance from the project site provide pedestrian users with ample pedestrian accommodations, except for a few highlighted locations that are missing marked crosswalks and truncated domes at the curb ramps, including the following intersections:

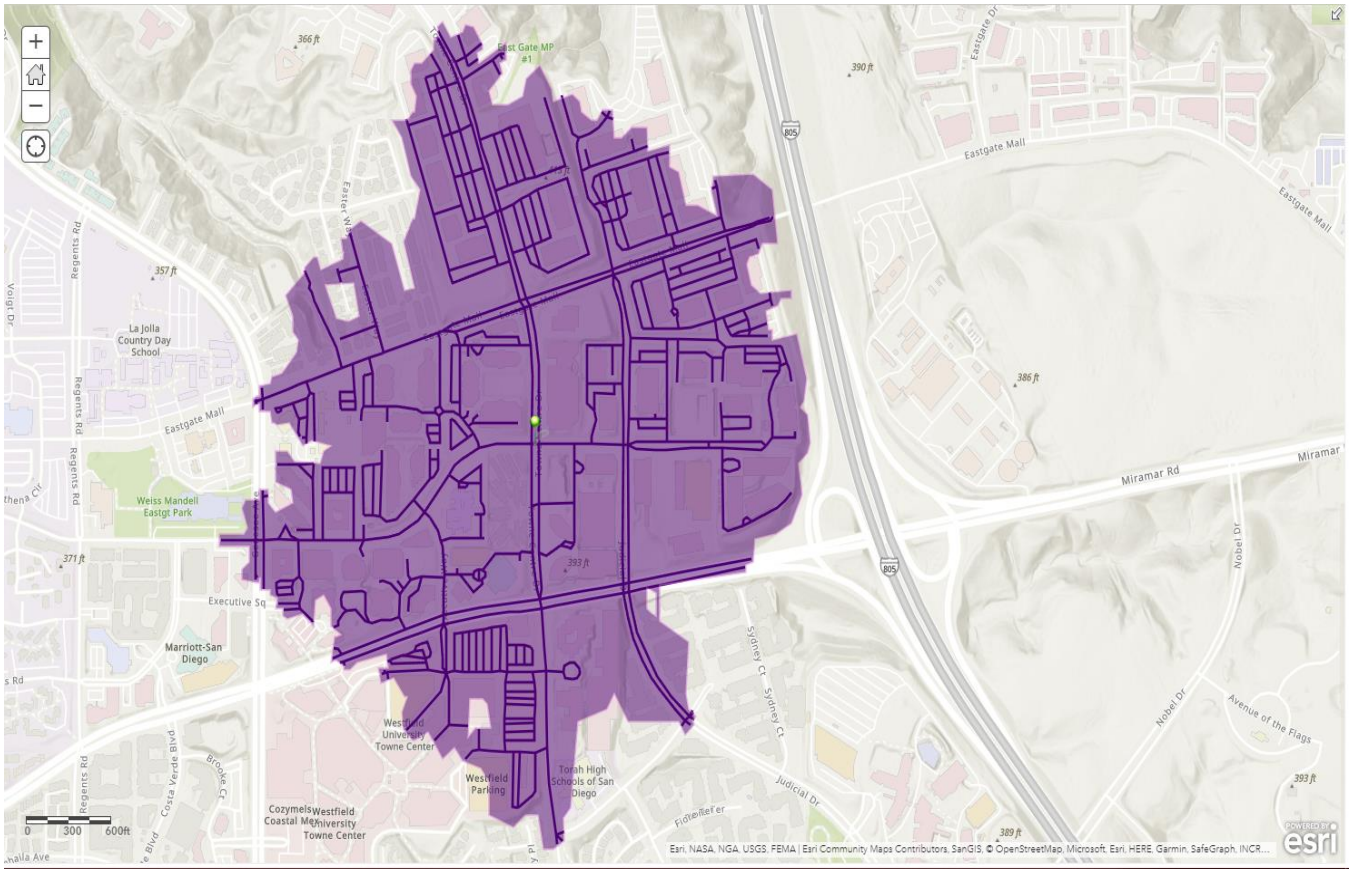
- Towne Centre Drive / Towne Centre Driveway
- Towne Centre Drive / Towne Centre Gateway
- Towne Centre Drive / Golden Haven Drive
- Executive Drive / Executive Way
- Eastgate Mall / Judicial Drive

- Judicial Drive / Nexus Center Drive
- Judicial Drive / Golden Haven Drive
- Golden Haven Drive / Executive Way

Figure 5-1 shows a walkshed analysis that was prepared to evaluate the connectivity of the existing pedestrian facilities relative to the project site location. A Project frontage location at the northeast quadrant of the intersection of Towne Centre Drive at Executive Drive was selected as the reference point for this analysis. This reference point was used to measure a ½-mile walking distance in all directions. The shaded regions within the walkshed represent the areas where pedestrian facilities exist for pedestrian travel.

As shown in **Figure 5-1** the area under the shaded region extends widely throughout the University community, highlighting the ample supply of pedestrian facilities in the vicinity of the project site for pedestrian travel to and from the Project. The walkshed analysis results show that within a ½-mile path of travel, pedestrians can travel to and from University Towne Centre (UTC), the Executive Drive Trolley Station, Genesee Executive Plaza, and other destinations within the University community, reaching as far as Golden Haven Drive to the south, Towne Centre Court to the north, Genesee Avenue and Regents Park Row to the west, and to the eastern boundaries of the University City with Interstate 805.

Figure 5-1: Walkshed Analysis



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5.2 Bicycle Facilities

Table 5-3 shows a summary of the existing bicycle facilities within a ½-mile path of travel distance from the project site.

Table 5-3: Existing Bicycle Facilities

Road	Segment	Existing Bike Facilities?	Bike Facility Class	City of San Diego Bicycle Master Plan	Notes
Towne Centre Dr.	Towne Centre Ct. - Eastgate Mall	No	-	proposed Class III	-
Towne Centre Dr.	Eastgate Mall - Executive Dr.	No	-	proposed Class II or Class III	-
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	Yes	Class II	proposed Class II or Class III	provided along both directions of travel
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	Yes	Class II	proposed Class II or Class III	provided along both directions of travel
Towne Centre Dr.	La Jolla Village Dr. - Towne Centre Gateway	No	-	proposed Class II or Class III	-
Towne Centre Dr.	Towne Centre Gateway - Golden Haven Dr.	No	-	proposed Class II or Class III	-
Executive Dr.	Regents Park Row - Genesee Ave.	No	-	proposed Class III	-
Executive Dr.	Genesee Ave. - Executive Wy.	No	-	proposed Class III	-
Executive Dr.	Executive Wy. - Towne Centre Dr.	No	-	proposed Class III	-
Executive Dr.	Towne Centre Dr. - Judicial Dr.	Yes	Class III	proposed Class III	-
Executive Dr.	Judicial Dr. - Eastern Terminus	-	-	-	-
La Jolla Village Dr.	Genesee Ave. - Executive Wy.	No	-	proposed Class II	-
La Jolla Village Dr.	Executive Wy. - Towne Centre Dr.	No	-	proposed Class II	-
La Jolla Village Dr.	Towne Centre Dr. - I-805 SB Ramps	No	-	proposed Class II	-
Genesee Ave.	Fez St. - Eastgate Mall	Yes	Class II	existing Class II	provided along both directions of travel
Genesee Ave.	Eastgate Mall - Executive Dr.	Yes	Class II	existing Class II	provided along both directions of travel
Genesee Ave.	Executive Dr. - Executive Sq.	Yes	Class II	existing Class II	provided along both directions of travel
Genesee Ave.	Executive Sq. - La Jolla Village Dr.	Yes	Class II	existing Class II	provided along both directions of travel
Golden Haven Dr.	Towne Centre Dr. - Renaissance Ave.	Yes	Class II	existing Class II	provided along both directions of travel
Golden Haven Dr.	Renaissance Ave. - Judicial Dr.	Yes	Class II	existing Class II	provided along both directions of travel
Judicial Dr.	Eastgate Mall - Nexus Center Dr.	No	-	proposed Class II	-
Judicial Dr.	Nexus Center Dr. - Executive Dr.	No	-	proposed Class II	-
Judicial Dr.	Executive Dr. - Judicial Dwy.	Yes	Class II	proposed Class II	provided along both directions of travel
Judicial Dr.	Judicial Dwy. - Golden Haven Dr.	Yes	Class II	proposed Class II	provided along both directions of travel
Executive Wy.	Northern Terminus - La Jolla Village Dr.	No	-	-	-

Legend:
Class I = Bike Path
Class II = Bike Lane
Classs III = Bike Route
Class IV = Cycle Track

The Project will provide 60 short-term bicycle spaces and 61 long-term bicycle spaces.

Figure 5-2 shows a bikeshed analysis that was prepared to evaluate the connectivity of the existing roadway facilities relative to the project site location. A Project frontage location at the northwest quadrant of the intersection of Towne Centre Drive at Executive Drive was selected as the

reference point for this analysis. This reference point was used to measure a ½-mile distance in all directions. The shaded regions within the bikeshed represent the areas where roadway facilities exist for bicycle travel.

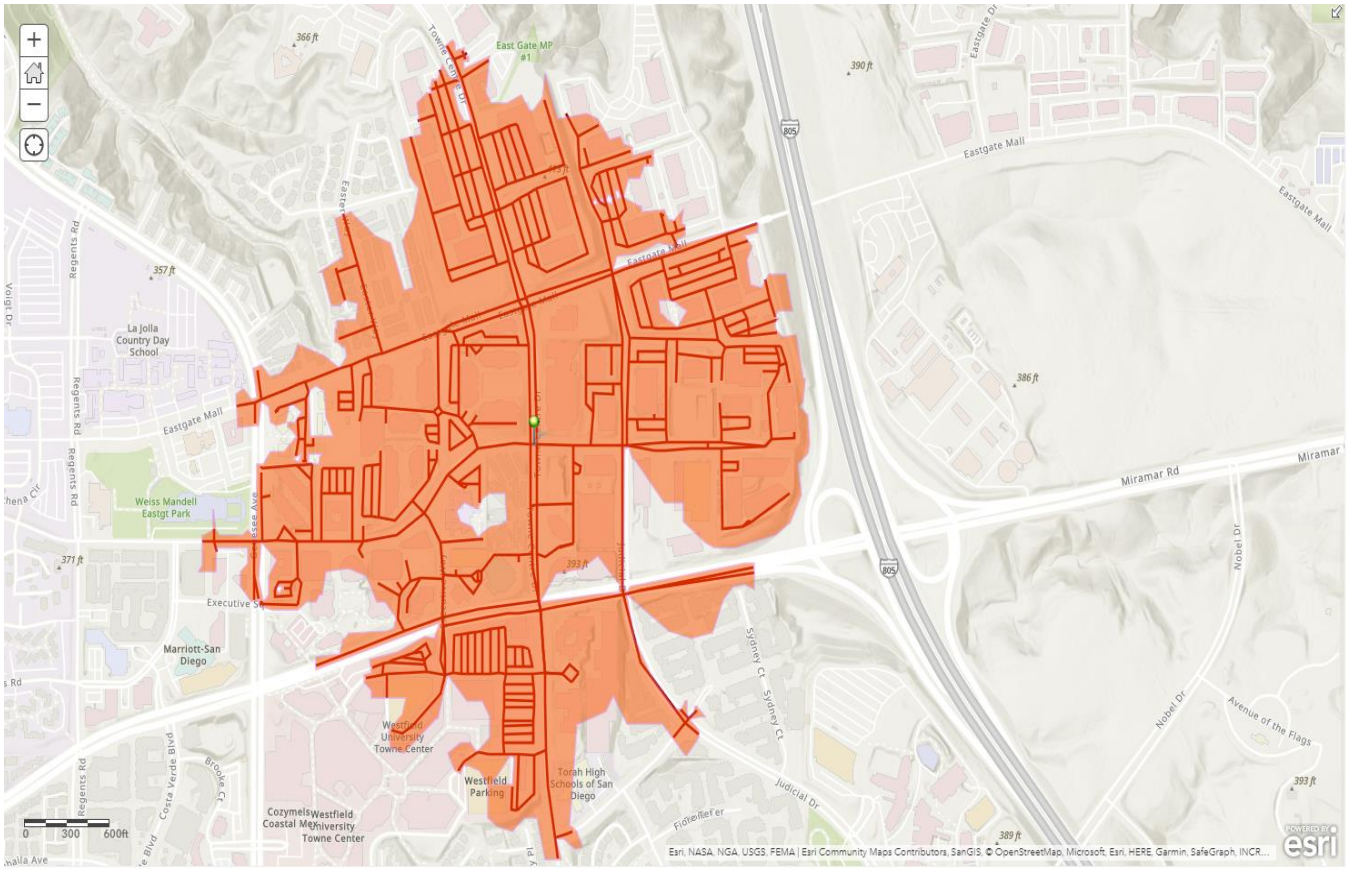
Note that the shaded area does include roadways that do not have an existing bicycle facility. The GIS tool does not distinguish whether there is the availability of separate bicycle facilities or not in the analyzed area. However, bicycles are allowed on all public streets other than freeways and can travel on public roadways whether bike lanes, bike routes, bike paths, and cycle tracks exist or not. Therefore, the bikeshed analysis represents the area where bicyclists can travel within a ½-mile travel distance from the reference point including roadways that provide separate bicycle facilities and roadways that do not provide separate bicycle facilities.

Consistent with the University Community Plan Update Existing Conditions Report (*April 2018*), the following roadway segments within the shaded area shown in **Figure 5-2** do not provide a separate bicycle facility:

- La Jolla Village Dr. (Costa Verde Blvd. – I-805 SB Ramps)
- Executive Dr. (Regents Rd. – eastern terminus)
- Executive Wy. (Executive Dr. – La Jolla Village Dr.)
- Towne Centre Dr. (Eastgate Mall – Executive Dr.)
- Towne Centre Dr. (La Jolla Village Dr. – Golden Haven Dr.)
- Judicial Dr. (Eastgate Mall – Executive Dr.)
- Eastgate Mall (Regents Rd. – Genesee Ave.)

As shown in **Figure 5-2** the area under the shaded region extends widely throughout the University community, highlighting the ample supply of bicycle facilities in the vicinity of the project site for pedestrian travel to and from the Project. The bikeshed analysis results show that within a ½-mile path of travel, bicyclists can travel to and from various destinations across the community, including University Towne Centre (UTC) and UC San Diego Health-La Jolla. Bicycle users can travel as far south as Golden Haven Drive, as far west as Regents Road, and to the eastern boundaries of the University City with Interstate 805.

Figure 5-2: Bikeshed Analysis



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5.3 Transit Facilities

Figure 5-3 shows a Project location map relative to the closest existing transit stops. This figure identifies the walking distance from the Project site to the transit stops and transit route(s) that service(s) each of these transit stops.

As shown in **Figure 5-3**, 13 existing transit stops have been identified in the vicinity of the Project site, including one (1) trolley station. This trolley transit station is part of the Mid-Coast Corridor Transit project, which began service on November 21st, 2021.

Table 5-4 below shows a list of the transit stops identified within a ½-mile walking distance from the project site, routes servicing these transit stops, existing amenities, and distance from the project site.

Table 5-4: Routes, Amenities, and Location of Transit Stops

ID	Transit Stop Location	Routes	Amenities	Walking Distance from Project Site
#1	NW corner of Towne Centre Dr. / Executive Dr.	979	1 steel bench	0.10 mi.
#2	SE corner of Executive Dr. / Executive Wy.	979	-	0.21 mi.
#3	NE corner of Executive Dr. / Executive Wy.	204	3 double benches / shelter / 1 trash can	0.21 mi.
#4	NW corner of Towne Centre Dr. / La Jolla Village Dr.	31 / 60 / 921	1 steel bench	0.25 mi.
#5	NW corner of La Jolla Village Dr. / Executive Wy.	31 / 60 / 921	1 steel bench	0.38 mi.
#6	SE corner of La Jolla Village Dr. / Executive Wy.	204	1 steel bench / shelter / 2 trash cans	0.36 mi.
#7	SE corner of Judicial Dr. / Golden Haven Dr.	204	4 double benches / ADA / shelter / 1 trash can	0.51 mi.
#8	SW corner of Eastgate Mall / Executive Dr.	979	-	0.11 mi.
#9	SW corner of Eastgate Mall / Towne Centre Dr.	979	-	0.10 mi.
#10	SW corner of Eastgate Mall / Easter Wy.	979	-	0.30 mi.
#11	NE corner of Eastgate Mall / Genesee Ave.	979	-	0.47 mi.
#12	SW corner of Eastgate Mall / Judicial Dr.	204	-	0.16 mi.
#13*	Executive Dr. Station	Blue Line (*Trolley*)	-	0.50 mi.

Legend:

* = Major Transit Stop

California Environmental Quality Act (CEQA) Section 21064.3 identifies *major transit stops* as sites containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

As shown in **Table 5-4**, one (1) of the existing transit facilities identified above fall under a *major transit stop* designation per CEQA definition. This transit stop is the Executive Drive Station.

Table 5-5 shows a summary of the destinations of the routes that service the identified transit stops.

Table 5-5: Transit Routes Destinations

Routes	Destinations
MTS 31	UTC Transit Center – Miramar Rd. & Miramar Mall – Black Mountain Rd. & Miramar Rd. – Miramar College Transit Station
MTS 60	Euclid Ave. Transit Center – City Heights Transit Plaza – The Boulevard Transit Plaza – Balboa Ave. & Ruffin Rd. – Clairemont Mesa Bl. & Shawline St. – UTC Transit Center
MTS 204	Colony Plaza - Costa Verde Center - La Jolla Village Square - Nobel Athletic Area & Library - Scripps Memorial Hospital - UCSD Medical Center - Westfield UTC
MTS 921	UTC Transit Center – Mira Mesa Bl. & Pacific Heights Bl. – Mira Mesa Bl. & Camino Santa Fe – Mira Mesa Bl. & Camino Ruiz – Miramar College Transit Station
MTS 979	University City - Sorrento Valley COASTER Station
Blue Line (Trolley)	America Plaza - Santa Fe Depot - Little Italy - Middletown - Washington Street - Old Town Transit Center - Tecolote Road - Clairemont Drive - Balboa Avenue - Nobel Drive - VA Medical Center - UCSD Central Campus - UCSD Health La Jolla - UTC Transit Center

Refer to **Appendix D** for the SDMTS transit schedules of the identified transit stops.

Figure 5-3: Project Location Map w/ Nearby Transit Facilities

Legend

= Project Location

= Transit Stop Locations (Within 1/2 Mile Walking Distance of Project Site)

ID	Transit Stop Location	Walking Distance from Project Site	Route(s)
1	NW corner of Towne Centre Dr. / Executive Dr.	0.10 mi.	(979)
2	SE corner of Executive Dr. / Executive Wy.	0.21 mi.	(979)
3	NE corner of Executive Dr. / Executive Wy.	0.21 mi.	(204)
4	NW corner of Towne Centre Dr. / La Jolla Village Dr.	0.25 mi.	(31) (60) (921)
5	NW corner of La Jolla Village Dr. / Executive Wy.	0.38 mi.	(31) (60) (921)
6	SE corner of La Jolla Village Dr. / Executive Wy.	0.36 mi.	(31) (60) (921)
7	SE corner of Judicial Dr. / Golden Haven Dr.	0.51 mi.	(204)
8	SW corner of Judicial Dr. / Executive Dr.	0.11 mi.	(204)
9	SW corner of Eastgate Mall / Towne Centre Dr.	0.10 mi.	(979)
10	SW corner of Eastgate Mall / Easter Wy.	0.30 mi.	(979)
11	NE corner of Eastgate Mall / Genesee Ave.	0.47 mi.	(979)
12	SW corner of Eastgate Mall / Judicial Dr.	0.16 mi.	(204)
13	*Executive Station (Mid-Coast Trolley)	0.50 mi.	(Blue Line)

Notes: * = Major Transit Stop

5.4 Existing Roadway Facilities

- **Towne Centre Drive** is predominantly a north-south roadway that spans approximately 1.8 miles and extends through Eastgate Mall, Executive Drive, and La Jolla Village Drive. This roadway transitions to east-west north of Eastgate Mall and has a northern terminus at a cul-de-sac located 0.1 miles west of the intersection of Towne Centre Drive at Westerra Court and a southern terminus at Nobel Drive. The roadway segments under study have a curb-to-curb width that ranges between 70 feet and 82 feet. The roadway segments under study are predominantly divided by a raised median. Within the study area, the roadway functions as a 4-lane major arterial (consisting of the segment between Eastgate Mall and La Jolla Village Drive). Parking is prohibited between Eastgate Mall and Towne Centre Drive. Bicycle facilities supported along this roadway consist of a Class II Bike Lane for both directions of travel between La Jolla Village Drive and Executive Drive. The posted speed limit is 40 miles (mph) per hour for the roadway segments under study. All of the roadway segments under study include sidewalks; with a mixture of contiguous and noncontiguous sidewalks with widths of 4 feet to 10 feet (for the roadway segment between Eastgate Mall and La Jolla Village Drive). Per the University Community Plan, this roadway segment is built to its ultimate classification.
- **Judicial Drive** is a north-south roadway that spans approximately 1.3 miles and extends through Eastgate Mall, Executive Drive, and La Jolla Village Drive. This roadway has a northern terminus approximately 850 feet north of Eastgate Mall and a southern terminus at Nobel Drive. The roadway segments under study have a curb-to-curb width that ranges between 70 feet and 78 feet. The roadway segments under study are divided by a raised median. Within the study area, the functional classification of Judicial Drive is a 4-lane major arterial. Parking

is prohibited between Executive Drive and Golden Haven Drive. Bicycle facilities supported along Judicial Drive for the roadway segments under study consist of a Class II Bike Lane for both directions of travel between Executive Drive and Golden Haven Drive. The posted speed limit is 35 mph. All of the roadway segments under study include a mixture of contiguous and non-contiguous sidewalks with an approximate width of 6 feet. Per the University Community Plan, this roadway segment is built to its ultimate classification.

- **Executive Drive** is an east-west two-way four-lane roadway that spans approximately 1.0 miles and extends through Genesee Avenue, Towne Centre Drive, and Judicial Drive. This roadway has a western terminus at Regents Road and an eastern terminus approximately 950 feet east of Judicial Drive. The roadway segment under study has a curb-to-curb width that ranges between 76 feet and 96 feet. The roadway segment under study is divided by a raised median. Within the study area, the functional classification of Executive Drive is a 4-lane collector with a continuous left-turn lane. Parking is prohibited between Towne Centre Drive and Executive Drive. Bicycle facilities supported along Executive Drive for the roadway segments under study consist of a Class III Bike Route with signage for both directions of travel between Towne Centre Drive and Judicial Drive. The posted speed limit along the roadway segments under study is 30 mph. The roadway segment under study includes contiguous and non-contiguous sidewalks with an approximate width of 6 feet. Per the University Community Plan, this roadway segment is not built to its ultimate classification of a 4-lane major arterial.

5.5 Traffic Counts

Existing traffic conditions in the University Community Plan area, for a few years, had been subjected to an alteration of their historical patterns from substantial construction occurring predominantly along Genesee Avenue due to the Mid-Coast Trolley Extension project and the Genesee Avenue / Interstate 5 interchange project. Additionally, historical traffic patterns may still be disrupted due to the ongoing Covid-19 pandemic.

As a result of these factors, USAI has conducted research on available count data that was collected before the beginning of construction work along Genesee Avenue and/or predating the potential effects on traffic patterns due to Covid-19. This approach was taken to reflect Existing conditions where traffic patterns are as close as possible to the historical traffic patterns in the study area.

Based on available satellite imagery, construction work along Genesee Avenue due to the Mid-Coast Trolley Extension project is approximated to have started between the Year 2016 and Year 2017. Similarly, construction work along Genesee Avenue due to the Interstate 5 interchange project is approximated to have started between the Year 2015 and Year 2016. The use of count data predating these events has been coordinated with City staff. Due to the likely traffic pattern disruptions stemming from the ongoing Covid-19 pandemic, collecting traffic counts at the time of preparation of this study would likely result in disrupted traffic volumes that are likely lower than historical volumes.

The count data set from the University Community Plan Update Draft Existing Conditions Summary (*December 2015*) would be anticipated to show traffic patterns in Genesee Avenue and

the surroundings closer to historical conditions. This count data was validated for continued use in the University Community Plan Update Existing Conditions Summary (*April 2018*).

The second set of count data extending from late-2016 to mid-2017 is available for reference. This second set of count data was collected during a time at which potential traffic patterns disruptions associated with the Mid-Coast Trolley project and the Genesee Avenue / Interstate 5 interchange project were commencing.

As the Covid-19 epidemic has recently significantly impacted counts and data collection, newer data taken during the existing time period may not be available. Both count data sets discussed above predate Covid-19 traffic pattern conditions. These count data sets were available to be used as an existing baseline condition stemming from the combination of these data sets.

USAI referenced the second count data set for study intersections and roadway segments. For the Towne Centre Drive and Towne Centre Driveway intersection, where neither count data sets contained available count data, new counts were obtained on Thursday, June 3rd, 2021.

Table 5-6 shows the study roadway segments with the date on which the count data was collected.

Table 5-7 shows the study intersections with the date on which the count data was collected and the source for which the counts were used.

Table 5-6: Study Roadway Segments and Count Data Date and Source

Road	Segment	Date of Counts	Source of Counts
Towne Centre Drive	Eastgate Mall - Project Driveway "A"	5/23/2017	USAI Count Request (Year 2017)
Towne Centre Drive	Project Driveway "A" - Executive Drive	5/23/2017	USAI Count Request (Year 2017)
Towne Centre Drive	Executive Drive - Towne Centre Driveway	5/25/2017	USAI Count Request (Year 2017)
Towne Centre Drive	Towne Centre Driveway - La Jolla Village Drive	5/25/2017	USAI Count Request (Year 2017)
Judicial Drive	Executive Drive - Judicial Driveway	8/9/2017	USAI Count Request (Year 2017)
Judicial Drive	Judicial Driveway - Golden Haven Drive / Brook Lane	8/9/2017	USAI Count Request (Year 2017)
Executive Drive	Towne Centre Drive - Project Driveway "B"	11/17/2016	USAI Count Request (Year 2016)
Executive Drive	Proejct Driveway "B" - Judicial Drive	11/17/2016	USAI Count Request (Year 2016)

Table 5-7: Study Intersections and Count Data Date and Source

Number	Intersection	Date of Counts	Source of Counts
1	Towne Centre Drive / Eastgate Mall	5/23/2017	USAI Count Request (Year 2017)
2	Towne Centre Drive / Project Driveway "A"	-	-
3	Towne Centre Drive / Executive Drive	5/23/2017	USAI Count Request (Year 2017)
4	Towne Centre Drive / Towne Centre Driveway	6/3/2021	USAI Count Request (Year 2021)
5	Towne Centre Drive / La Jolla Village Drive	5/25/2017	USAI Count Request (Year 2017)
6	Executive Drive / Project Driveway "B"	-	-
7	Judicial Drive / Executive Drive	8/9/2017	USAI Count Request (Year 2017)
8	Judicial Drive / Judicial Driveway	6/3/2021	USAI Count Request (Year 2021)
9	Judicial Drive / Golden Haven Drive / Brook Lane	8/9/2017	USAI Count Request (Year 2017)
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps	5/25/2017	USAI Count Request (Year 2017)

To establish an Existing baseline for Year 2021 conditions, the application of a growth factor based on the comparison between SANDAG TFIC Series 14 Year 2016 and Year 2025 roadway segment volumes has been conducted. For the study roadway segments and roadway segments corresponding to each study intersection leg, a growth rate per year has been calculated. For both the available count data sets, a growth factor has been applied based on the differential of the number of years between the date of count data collection (Year 2016 through Year 2017) and the Existing baseline of Year 2021. Where neither count data sets contained available count data, SANDAG Series 14 Base Year 2016 volumes were grown to Year 2021. The resulting Existing baseline roadway segment volumes have then been used to project the intersection peak hour volumes. The peak hour volume projections are based on the relationship between the individual turning movement directionality at a given intersection with regards to the roadway segment to which each turning movement is directed.

Table 5-8 shows the comparison of the SANDAG TFIC Series 14 Year 2016 and 2025 volumes and the resulting growth factors along with the projected Existing baseline (Year 2021) roadway segment volumes.

Refer to **Appendix E** for the count data and signal timing data used for this analysis.

Refer to **Appendix F** for the computations performed to calculate the Existing baseline Year 2021 intersection volumes.

Table 5-8: Existing Baseline Volume Projections

Road	Segment	SANDAG TFIC S14 Year 2016 ADT (Scenario ID 434)	SANDAG TFIC S14 Year 2025 ADT (Scenario ID 466)	SANDAG TFIC S14 Year 2050 ADT (Scenario ID 463)	% Growth (2016 - 2025)	% Growth / Year (2016 - 2025)	Year of Data Collection	Segment Volume (*from available count data*)	# of Years to Existing	Growth Projection ADT for Year 2021
Towne Centre Drive	Eastgate Mall - Project Driveway "A"	10,400	12,500	12,900	20.2%	2.2%	2017	14,016	4	15,274
Towne Centre Drive	Project Driveway "A" - Executive Drive	10,400	12,500	12,900	20.2%	2.2%	2017	14,016	4	15,274
Towne Centre Drive	Executive Drive - Towne Centre Driveway	13,200	15,700	18,300	18.9%	2.1%	2017	20,187	4	21,886
Towne Centre Drive	Towne Centre Driveway - La Jolla Village Drive	13,200	15,700	18,300	18.9%	2.1%	2017	20,187	4	21,886
Judicial Drive	Executive Drive - Judicial Driveway	6,800	8,800	11,500	29.4%	3.3%	2017	7,984	4	9,028
Judicial Drive	Judicial Driveway - Golden Haven Drive / Brook Lane	8,200	10,400	13,600	26.8%	3.0%	2017	8,327	4	9,320
Executive Drive	Towne Centre Drive - Project Driveway "B"	8,000	9,400	13,100	17.5%	1.9%	2016	7,897	5	8,665
Executive Drive	Proejct Driveway "B" - Judicial Drive	8,000	9,400	13,100	17.5%	1.9%	2016	7,897	5	8,665

5.6 Roadway Segments

Table 5-9 summarizes the roadway segment analysis for Existing conditions. Based on Existing volumes and the City's roadway segment classification thresholds, the roadway segments operate at an acceptable LOS "D" or better in the Existing condition.

Figure 5-4 displays the Existing ADT volumes for the study roadway segments.

Figure 5-4: Existing ADT Volumes

Legend

= Project Location

XX,XXX = ADT Number

= Study Intersection

N
NO SCALE

Table 5-9: Existing Roadway Segment Analysis

Road	Segment	Standard	# of Ln.	Roadway Classification	Capacity	Volume	V/C	LOS
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	SD	4	4-MA	40,000	15,274	0.382	B
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	SD	4	4-MA	40,000	15,274	0.382	B
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	SD	4	4-MA	40,000	21,886	0.547	C
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	SD	4	4-MA	40,000	21,886	0.547	C
Judicial Dr.	Executive Dr. - Judicial Dwy.	SD	4	4-MA	40,000	9,028	0.226	A
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	SD	4	4-MA	40,000	9,320	0.233	A
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	SD	4	4-C (w/ TWLTL)	30,000	8,665	0.289	A
Executive Dr.	Project Dwy. "B" - Judicial Dr.	SD	4	4-C (w/ TWLTL)	30,000	8,665	0.289	A

Legend:

LOS = Level of Service
V/C = Volume to Capacity Ratio
4-MA = 4-Lane Major Arterial
4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Existing volumes are calculated by applying a yearly growth rate to Pre-Existing count data for each individual street segment, which has been calculated by comparing the street segment volume growth between SANDAG TFIC Series 14 Year 2016 and Year 2025 models.

5.7 Intersections

Intersection peak hour traffic volumes for Existing conditions at the studied intersections are shown in **Figure 5-5**.

Figure 5-6 shows the existing lane configuration of the study intersections.

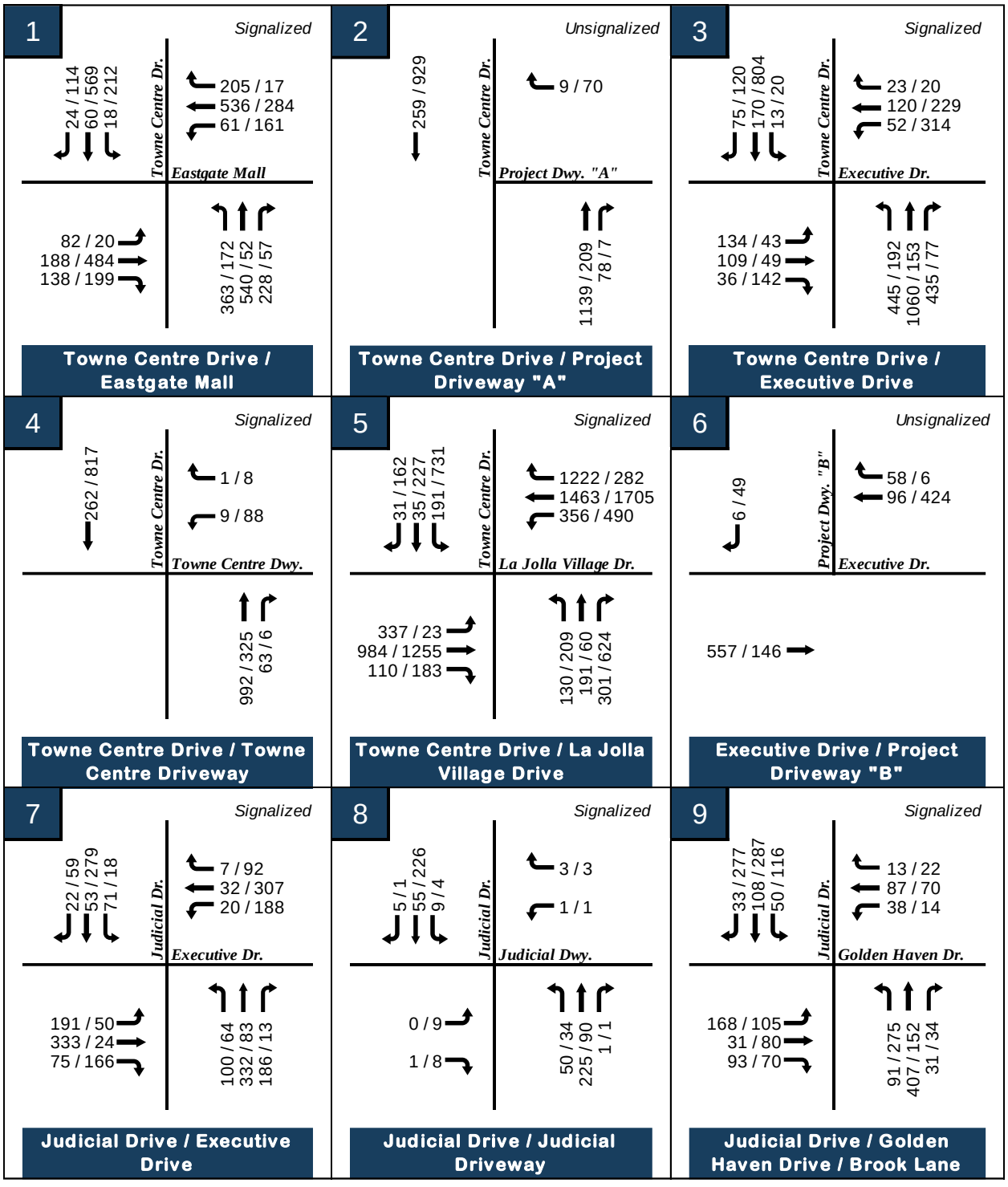
The lane configuration used for the evaluation of Existing conditions is based on the latest satellite imagery available from Google Earth as of July 2021.

Table 5-10 shows the Existing intersection AM / PM Peak Hour LOS. As shown in the table, the study intersections operate at an acceptable LOS D or better in both AM and PM peak hour settings, except for the following:

- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS E*

Refer to **Appendix G** for the Synchro worksheets of Existing conditions.

Figure 5-5: Existing AM/PM Peak Hour Volumes



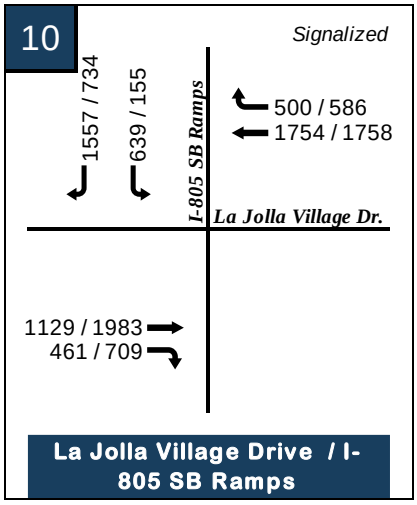
XX / XX = AM / PM Peak hour volumes

* NB U-Turn Traffic at Intersection #1 consists of 5 AM trips and 18 PM trips.

**SB U-Turn Traffic at Intersection #3 consists of 2 AM trips and 0 PM trips.

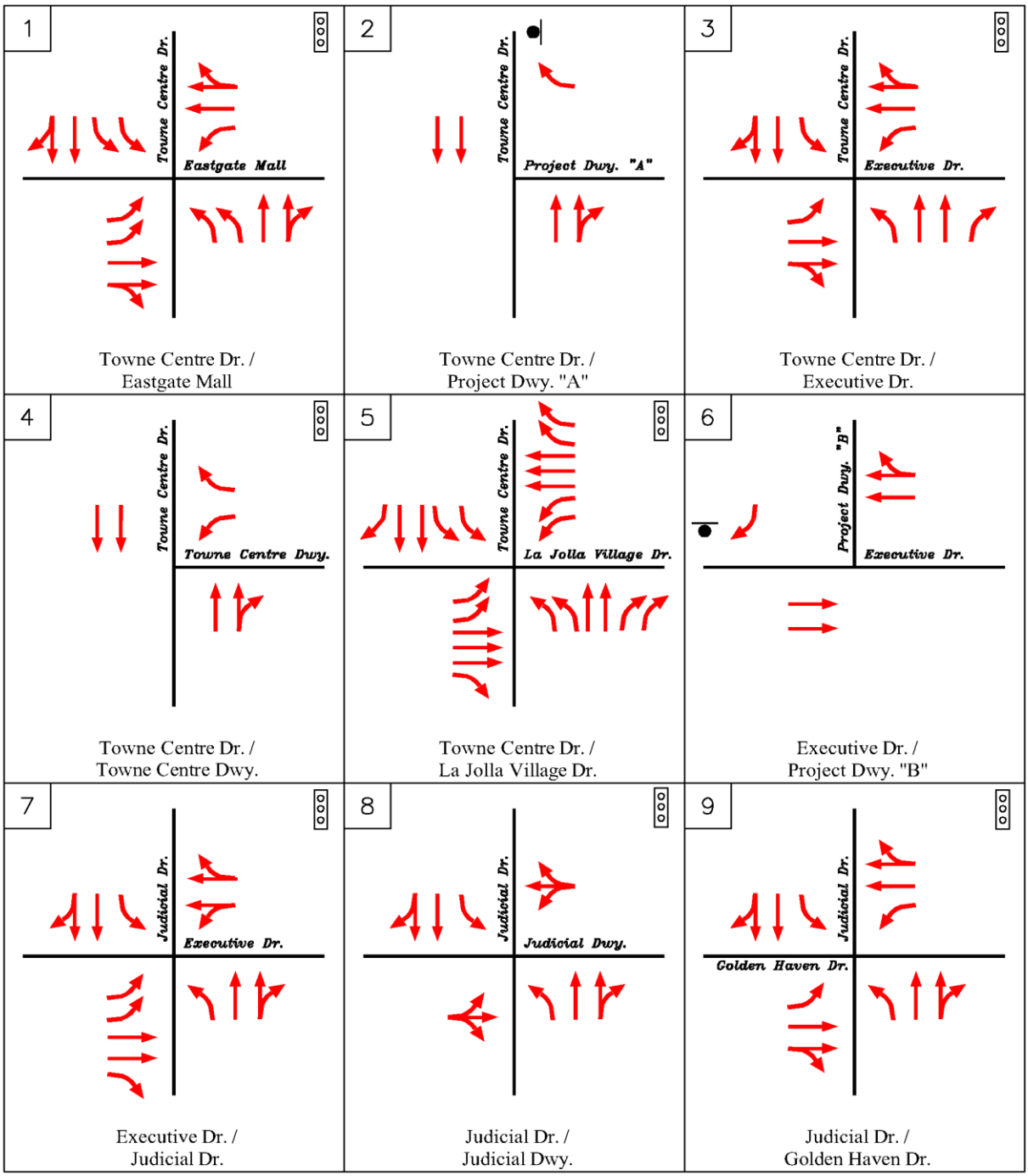
***WB U-Turn Traffic at Intersection #3 consists of 1 AM trips and 1 PM trips.

Figure 5-5: Existing AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

Figure 5-6: Existing Lane Configurations

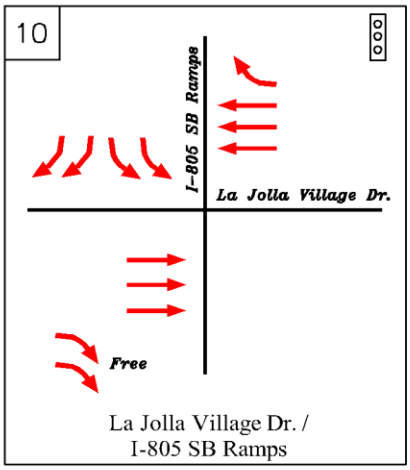


Legend

= Signalized Intersection

= Unsignalized Intersection

Figure 5-6: Existing Lane Configurations (cont'd)



Legend

= Signalized Intersection

Table 5-10: Existing Intersection Peak Hour Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Towne Centre Drive / Eastgate Mall	Signalized	36.2	D	45.9	D
2	Towne Centre Drive / Project Driveway "A"	Unsignalized	14.1	B	9.3	A
3	Towne Centre Drive / Executive Drive	Signalized	21.6	C	51.2	D
4	Towne Centre Drive / Towne Centre Driveway	Signalized	3.8	A	4.7	A
5	Towne Centre Drive / La Jolla Village Drive	Signalized	35.3	D	64.3	E
6	Executive Drive / Project Driveway "B"	Unsignalized	8.8	A	10.0	A
7	Judicial Drive / Executive Drive	Signalized	47.1	D	41.0	D
8	Judicial Drive / Judicial Driveway	Signalized	8.1	A	8.1	A
9	Judicial Drive / Golden Haven Drive / Brook Lane	Signalized	34.1	C	47.1	D
10	La Jolla Village Drive / I-805 SB Ramps	Signalized	28.2	C	24.3	C

Notes:

LOS = Level of Service

D = Delay (in sec.)

6.0 CUMULATIVE PROJECTS

An examination of the immediate area surrounding the Project was conducted to explore the Cumulative Projects that were approved, pending approval, or planned in the area and assumed to be constructed and occupied between Existing (Year 2021) and the project's opening day (Year 2023). Nine (9) Cumulative Projects were identified in the vicinity area of the Project with overlapping study area.

The list of Cumulative Projects including project trip generation, trip assignment, and trip distribution is included in **Appendix H.**

Figure 6-1 shows a map of the Cumulative Projects location relative to the Project.

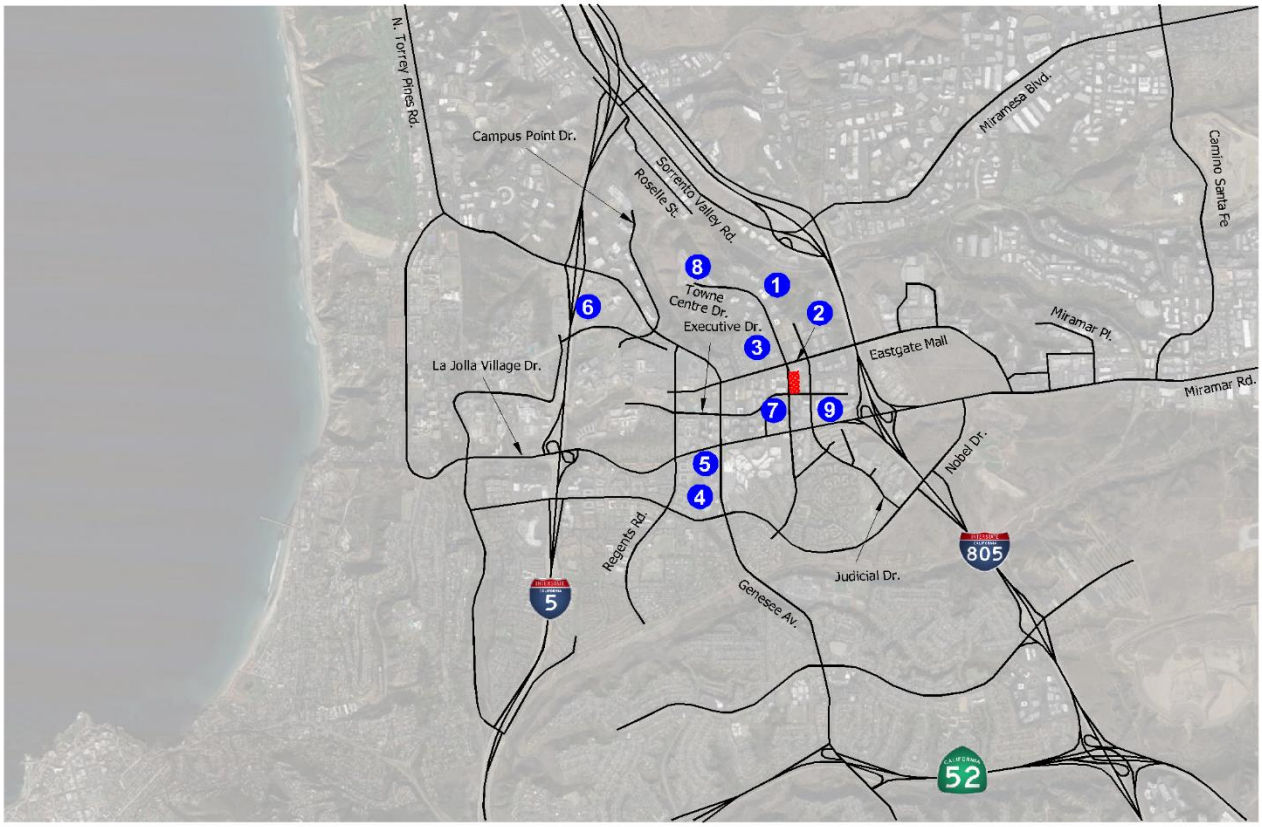
The Project Only traffic for these "Cumulative Projects" was scoped with City staff to be added to the developed Existing Year 2021 volumes to reflect an "Existing plus Cumulative Project" or Near-Term (Opening Day Year 2023) scenario. These Cumulative Projects include the following:

- PTS# 527644 – 9775 Towne Centre Dr. – *Constructed / (Opening Day Year 2021 est.)*
- PTS# 291342 – 9455 Towne Centre Dr. – *Under Construction / (Opening Day Year 2022 est.)*
- PTS# 218594 – 9514 Towne Centre Dr. – *Approved*
- PTS# 477943 – Costa Verde Revitalization – *Under Review / (Opening Day Year 2023)*
- PTS# 6563 – Monte Verde – *First Building Opened (2018); Second Building Under Construction*
- PTS# 127567 – Scripps Hospital La Jolla (Amendment 8) – *Approved*
- PTS# 686158 – Scripps Health Headquarters – *Under Review / (Opening Day Year 2023)*
- PTS# 624751 – Towne Centre Drive – *Under Review / (Opening Day Year 2027)*
- PTS# 667592 – UTC Hotel/Apts. – *Under Review (Opening Year 2023*)

Figure 6-2 displays the Cumulative Projects ADT volumes for the study roadway segments.

Figure 6-3 shows the Cumulative Projects' peak hour traffic volumes at the study intersections.

Figure 6-1: Cumulative Projects Location Map



Legend

= Project Location

= Cumulative Project Location ID

N
NO SCALE

ID	Cumulative Project	PTS#
1	9775 Towne Centre Dr.	527644
2	9455 Towne Centre Dr.	291342
3	9514 Towne Centre Dr.	218594
4	Costa Verde Revitalization	477943
5	Monte Verde	6563
6	Scripps Hospital - La Jolla (Amend. 8)	127654
7	Scripps Health Headquarters	686158
8	Towne Centre View	624751
9	UTC Hotel / Apartments	667592

Figure 6-2: Cumulative Projects ADT Volumes

Legend

= Project Location

XX,XXX = ADT Number

= Study Intersection

N
NO SCALE

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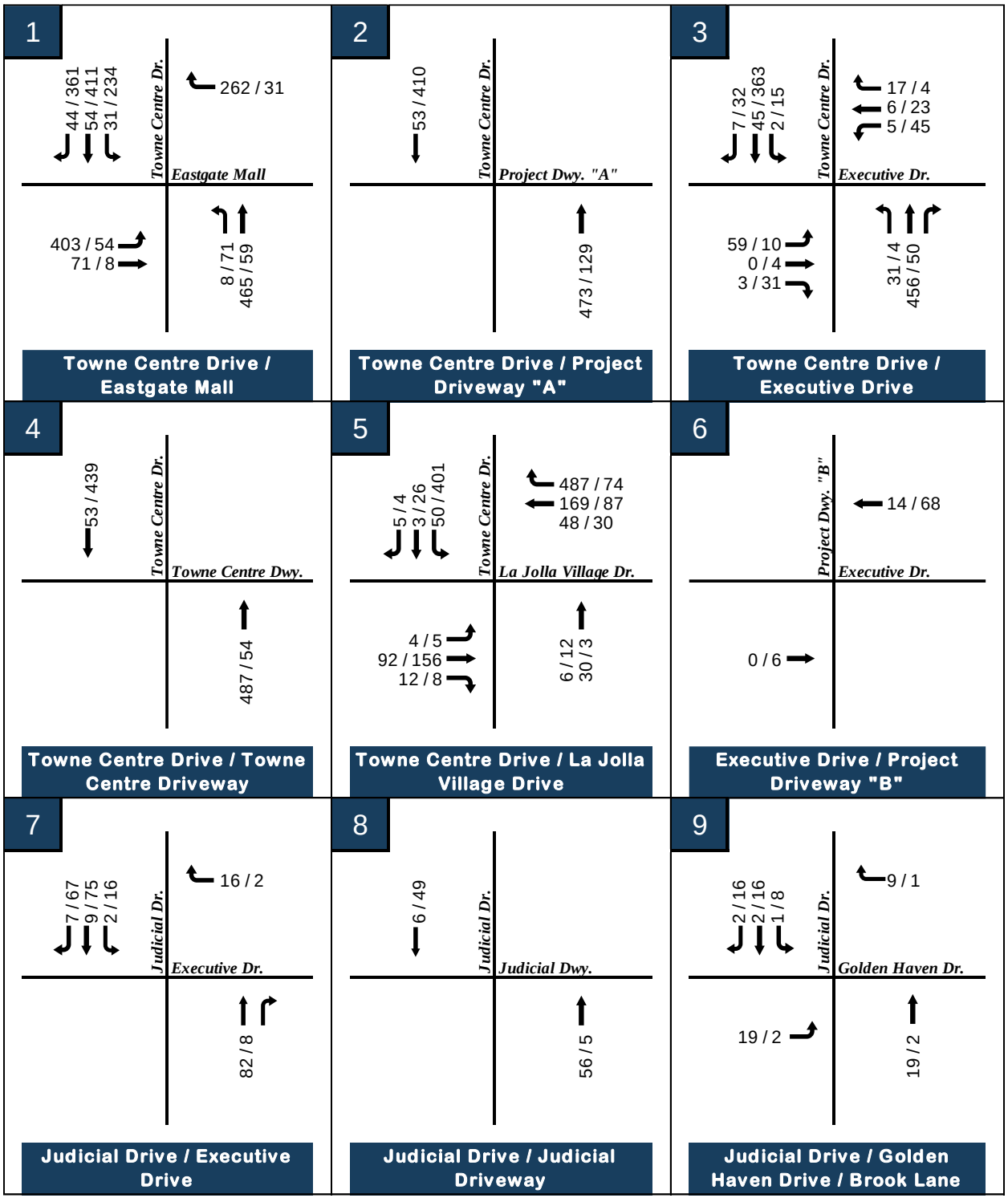
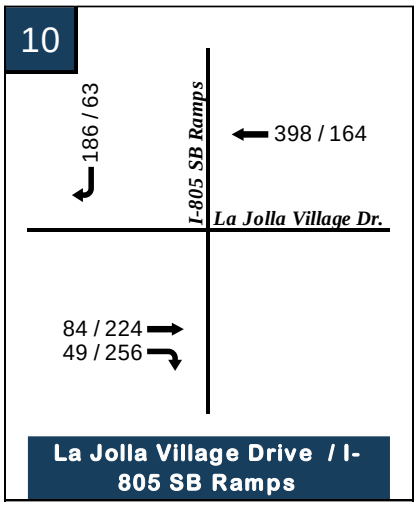
Figure 6-3: Cumulative Projects AM / PM Peak Hour Volumes



XX / XX = AM / PM Peak hour volumes

Figure 6-3: Cumulative Projects AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

7.0 NEAR-TERM (OPENING DAY YEAR 2023)

The purpose of this chapter is to evaluate roadway segments and intersections within the Project's study area in the Near-Term scenario.

An examination of the immediate area surrounding the Project to include Cumulative Projects that were approved, pending approval, or planned in the area and assumed to be constructed and occupied at or before the Project's Opening Day (Year 2023) were evaluated as discussed in **Chapter 6.0** of this document.

The project-only traffic data for these Cumulative Projects was added to the developed Existing traffic to reflect an "Existing plus Cumulative Projects" or Near-Term scenario. In addition to adding the Cumulative Project volumes to Existing volumes, as a conservative measure, an ambient growth factor of 0.25% per year between Existing (Year 2021) and Near-Term (Opening Day Year 2023) has been applied to Existing volumes. This approach has been undertaken to account for the growth that the community is anticipated to sustain over the coming years through the various Cumulative Projects in the vicinity of the Project.

No changes to the existing roadway network were assumed for this analysis.

7.1 Pedestrian Facilities

No changes are assumed to pedestrian facilities within the immediate Project vicinity between Existing and Near-Term (Opening Day Year 2023) conditions.

7.2 Bicycle Facilities

No changes are assumed to bicycle facilities within the immediate Project vicinity between Existing and Near-Term (Opening Day Year 2023) conditions.

7.3 Transit Facilities

No changes are assumed to transit facilities within the immediate Project vicinity between Existing and Near-Term (Opening Day Year 2023) conditions.

7.4 Roadway Segments

No changes are assumed to the roadway classifications within the immediate Project vicinity between Existing and Near-Term (Opening Day Year 2023) conditions.

Table 7-1 summarizes the roadway segment analysis for Near-Term (Opening Day Year 2023) conditions. Based on Near-Term (Opening Day Year 2023) volumes and the City's roadway segment classification thresholds, all analyzed roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Near-Term (Opening Day Year 2023) condition.

Figure 7-1 displays the Near-Term (Opening Day Year 2023) ADT volumes for the study roadway segments.

Figure 7-1: Near-Term (Opening Day Year 2023) ADT Volumes

Legend

= Project Location

XX,XXX = ADT Number

= Study Intersection

N
NO SCALE

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Table 7-1: Near-Term (Opening Day Year 2023) Roadway Segment Analysis

Road	Segment	Standard	# of Ln.	Roadway Classification	Capacity	Volume	V/C	LOS
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	SD	4	4-MA	40,000	19,567	0.489	B
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	SD	4	4-MA	40,000	19,567	0.489	B
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	SD	4	4-MA	40,000	26,133	0.653	C
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	SD	4	4-MA	40,000	26,133	0.653	C
Judicial Dr.	Executive Dr. - Judicial Dwy.	SD	4	4-MA	40,000	9,712	0.243	A
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	SD	4	4-MA	40,000	10,006	0.250	A
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	SD	4	4-C (w/ TWLTL)	30,000	9,345	0.312	A
Executive Dr.	Project Dwy. "B" - Judicial Dr.	SD	4	4-C (w/ TWLTL)	30,000	9,345	0.312	A

Legend:

LOS = Level of Service

V/C = Volume to Capacity Ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Near-Term (Opening Day Year 2023) street segment volumes are calculated by adding the Cumulative Project street segment volumes plus an ambient yearly growth rate of 0.25%

7.5 Intersections

Intersection peak hour traffic volumes for Near-Term (Opening Day Year 2023) conditions at the studied intersections are shown in **Figure 7-2**.

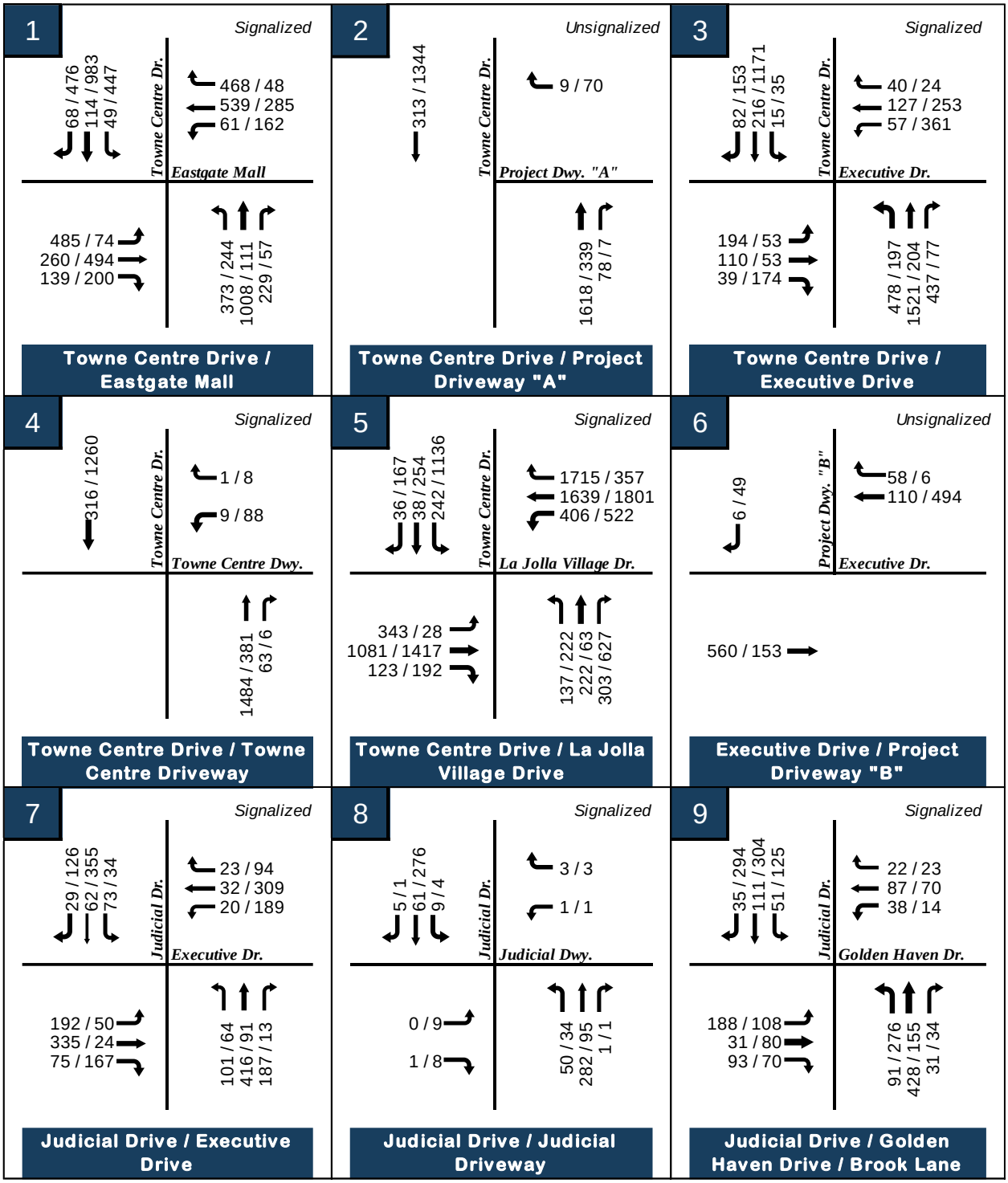
No changes to the existing lane configurations of the study intersections are assumed for this analysis.

Table 7-2 shows the Near-Term (Opening Day Year 2023) intersection AM / PM Peak Hour LOS. As shown in the table, the study intersections are anticipated to operate at an acceptable LOS D or better in both AM and PM peak hour settings, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / Executive Drive
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*

Refer to **Appendix I** for the Synchro worksheets of Near-Term (Opening Day Year 2023) conditions.

Figure 7-2: Near-Term (Opening Day Year 2023) AM/PM Peak Hour Volumes



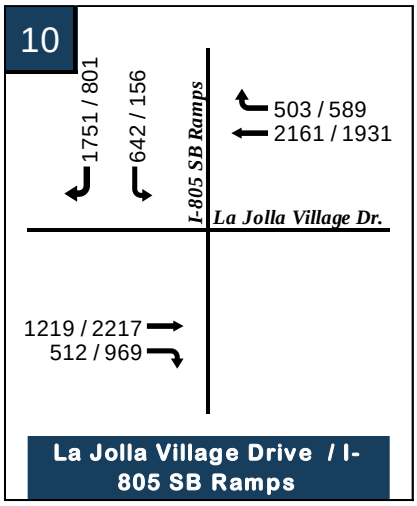
XX / XX = AM / PM Peak hour volumes

* NB U-Turn Traffic at Intersection #1 consists of 5 AM trips and 18 PM trips.

**SB U-Turn Traffic at Intersection #3 consists of 2 AM trips and 0 PM trips.

***WB U-Turn Traffic at Intersection #3 consists of 1 AM trips and 1 PM trips.

Figure 7-2: Near-Term (Opening Day Year 2023) AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

Table 7-2: Near-Term (Opening Day Year 2023) Intersection Peak Hour Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Towne Centre Drive / Eastgate Mall	Signalized	84.1	F	116.0	F
2	Towne Centre Drive / Project Driveway "A"	Unsignalized	18.7	C	9.8	A
3	Towne Centre Drive / Executive Drive	Signalized	40.9	D	109.7	F
4	Towne Centre Drive / Towne Centre Driveway	Signalized	6.3	A	5.7	A
5	Towne Centre Drive / La Jolla Village Drive	Signalized	39.9	D	120.6	F
6	Executive Drive / Project Driveway "B"	Unsignalized	8.8	A	10.4	B
7	Judicial Drive / Executive Drive	Signalized	47.5	D	41.4	D
8	Judicial Drive / Judicial Driveway	Signalized	7.6	A	7.7	A
9	Judicial Drive / Golden Haven Drive / Brook Lane	Signalized	39.6	D	49.7	D
10	La Jolla Village Drive / I-805 SB Ramps	Signalized	51.7	D	28.1	C

Notes:

LOS = Level of Service

D = Delay (in sec.)

8.0 NEAR-TERM (OPENING DAY YEAR 2023) WITH PROJECT

The purpose of this chapter is to evaluate roadway segments and intersections within the project's study area in the Near-Term (Opening Day Year 2023) With Project scenario. The net Project traffic was added to the Near-Term (Opening Day Year 2023) traffic to determine if any transportation infrastructure improvements would be triggered by the Project.

8.1 Pedestrian Facilities

No changes are assumed to pedestrian facilities within the immediate Project vicinity between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project conditions.

8.2 Bicycle Facilities

No changes are assumed to bicycle facilities within the immediate Project vicinity between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project conditions.

8.3 Transit Facilities

No changes are assumed to transit facilities within the immediate Project vicinity between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project conditions.

8.4 Roadway Segments

No changes are assumed to the roadway segments within the Project vicinity between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project conditions.

Table 8-1 summarizes the roadway segment analysis for Near-Term (Opening Day Year 2023) With Project conditions. Based on Near-Term (Opening Day Year 2023) With Project volumes and the

City's roadway segment classification thresholds, all analyzed roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Near-Term (Opening Day Year 2023) With Project condition.

Figure 8-1 displays the Near-Term (Opening Day Year 2023) With Project ADT volumes for the study roadway segments.

Table 8-2 shows a roadway segment comparison table for Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project conditions. As shown in the table, no study roadway segment is identified to be subjected to a Project traffic ADT consisting of more than 50% of the total roadway segment ADT.

The two Executive Drive roadway segments under study are identified in the current University Community Plan with an ultimate roadway classification of a 4-lane major arterial. Currently, these roadway segments operate as a 4-lane collector with a continuous left-turn lane.

Figure 8-1: Near-Term (Opening Day Year 2023) With Project ADT Volumes

Legend

= Project Location

XX,XXX = ADT Number

= Study Intersection

N
NO SCALE

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Table 8-1: Near-Term (Opening Day Year 2023) With Project Roadway Segment Analysis

Road	Segment	Standard	# of Ln.	Roadway Classification	Capacity	Volume	V/C	LOS
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	SD	4	4-MA	40,000	20,740	0.519	B
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	SD	4	4-MA	40,000	20,740	0.519	B
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	SD	4	4-MA	40,000	26,755	0.669	C
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	SD	4	4-MA	40,000	26,755	0.669	C
Judicial Dr.	Executive Dr. - Judicial Dwy.	SD	4	4-MA	40,000	10,156	0.254	A
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	SD	4	4-MA	40,000	10,450	0.261	A
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	SD	4	4-C (w/ TWLTL)	30,000	9,950	0.332	A
Executive Dr.	Project Dwy. "B" - Judicial Dr.	SD	4	4-C (w/ TWLTL)	30,000	9,950	0.332	A

Legend:

LOS = Level of Service

V/C = Volume to Capacity Ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Table 8-2: Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project Roadway Segment Analysis Comparison

Road	Segment	# of Ln.	Capacity	Roadway Classification	Near-Term			Near-Term + Project			ΔV/C	% of Total ADT	Does the Segment have identified improvements in Community Plan?
					LOS	Volume	V/C	LOS	Volume	V/C			
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	4	40,000	4-MA	C	26,133	0.653	C	26,755	0.669	0.016	2.3%	**No**
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	4	40,000	4-MA	C	26,133	0.653	C	26,755	0.669	0.016	2.3%	**No**
Judicial Dr.	Executive Dr. - Judicial Dwy.	4	40,000	4-MA	A	9,712	0.243	A	10,156	0.254	0.011	4.4%	**No**
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	4	40,000	4-MA	A	10,006	0.250	A	10,450	0.261	0.011	4.2%	**No**
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	4	30,000	4-C (w/ TWLTL)	A	9,345	0.312	A	9,950	0.332	0.020	6.1%	**Yes***
Executive Dr.	Project Dwy. "B" - Judicial Dr.	4	30,000	4-C (w/ TWLTL)	A	9,345	0.312	A	9,950	0.332	0.020	6.1%	**Yes***

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Identified improvements in the Community Plans have been referenced from the following sources:

* University Community Plan (7/2019)

8.5 Intersections

No changes are assumed to the intersection lane configurations within the Project vicinity between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project conditions. Intersection peak hour traffic volumes for Near-Term (Opening Day Year 2023) With Project conditions at the studied intersections are shown in **Figure 8-2**.

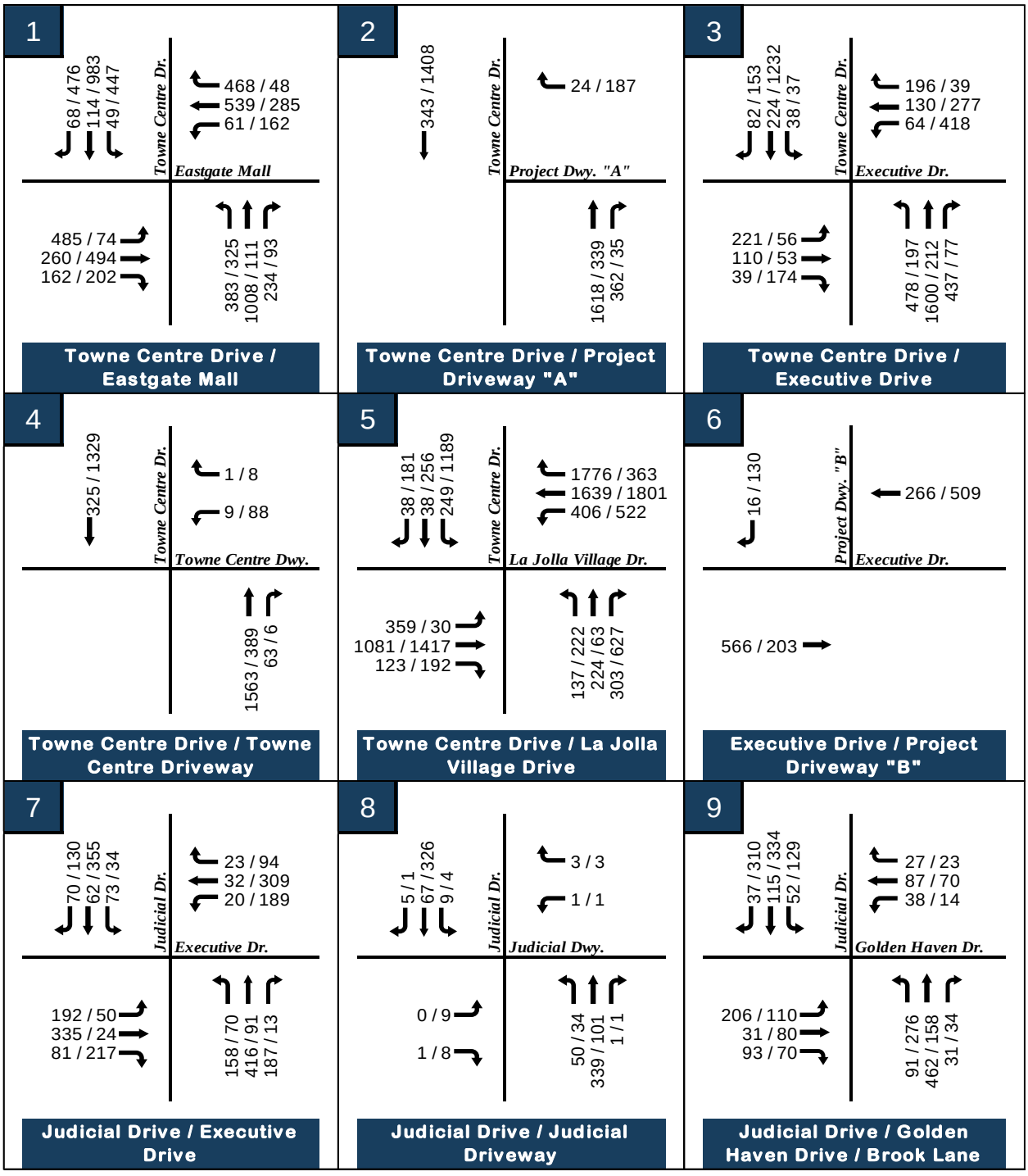
Table 8-3 shows the Near-Term (Opening Day Year 2023) With Project intersection AM / PM Peak Hour LOS. As shown in the table, the study intersections are anticipated to operate at an acceptable LOS D or better in both AM and PM peak hour settings, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / Executive Drive
    - AM Peak Hour – *LOS E*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*
- Judicial Dr. / Executive Dr.
    - AM Peak Hour – *LOS E*

Table 8-4 shows intersection AM / PM Peak Hour LOS comparison table for Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project conditions.

Refer to **Appendix J** for the Synchro worksheets of Near-Term (Opening Day Year 2023) With Project conditions.

Figure 8-2: Near-Term (Opening Day Year 2023) With Project AM/PM Peak Hour Volumes



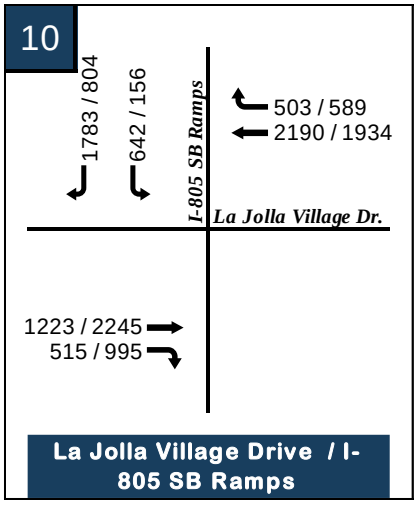
XX / XX = AM / PM Peak hour volumes

* NB U-Turn Traffic at Intersection #1 consists of 12 AM trips and 72 PM trips.

**SB U-Turn Traffic at Intersection #3 consists of 43 AM trips and 4 PM trips.

***WB U-Turn Traffic at Intersection #3 consists of 8 AM trips and 62 PM trips.

Figure 8-2: Near-Term (Opening Day Year 2023) With Project AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

Table 8-3: Near-Term (Opening Day Year 2023) With Project Intersection Peak Hour Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Towne Centre Drive / Eastgate Mall	Signalized	86.0	F	128.6	F
2	Towne Centre Drive / Project Driveway "A"	Unsignalized	24.0	C	11.0	B
3	Towne Centre Drive / Executive Drive	Signalized	76.8	E	140.7	F
4	Towne Centre Drive / Towne Centre Driveway	Signalized	7.0	A	6.0	A
5	Towne Centre Drive / La Jolla Village Drive	Signalized	47.4	D	122.4	F
6	Executive Drive / Project Driveway "B"	Unsignalized	9.2	A	11.2	B
7	Judicial Drive / Executive Drive	Signalized	75.1	E	47.2	D
8	Judicial Drive / Judicial Driveway	Signalized	7.2	A	7.5	A
9	Judicial Drive / Golden Haven Drive / Brook Lane	Signalized	46.0	D	49.8	D
10	La Jolla Village Drive / I-805 SB Ramps	Signalized	53.2	D	28.4	C

Notes:

LOS = Level of Service

D = Delay (in sec.)

Table 8-4: Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project Intersection Peak Hour Analysis Comparison

#	Intersection	Near-Term				Near-Term + Project						Is the intersection within 1/2-mile path of travel of a *Major Transit Stop*?	***Within a 1/2-mile distance of a Major Transit Stop*:** Does the Project cause the intersection to degrade to LOS F? / Does the project add traffic to a signal already operating at LOS F?	***Not within a 1/2-mile distance of a Major Transit Stop*:** Does the Project cause the intersection to degrade to LOS E or F? / Does the project add traffic to a signal already operating at LOS E or F?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	PM Peak Hour		Δ			
		D	LOS	D	LOS	D	LOS		D	LOS				
1	Towne Centre Drive / Eastgate Mall	84.1	F	116.0	F	86.0	F	1.9	128.6	F	12.6	Yes	Yes	-
2	Towne Centre Drive / Project Driveway "A"	18.7	C	9.8	A	24.0	C	5.3	11.0	B	1.2	Yes	No	-
3	Towne Centre Drive / Executive Drive	40.9	D	109.7	F	76.8	E	35.9	140.7	F	31.0	Yes	Yes	-
4	Towne Centre Drive / Towne Centre Driveway	6.3	A	5.7	A	7.0	A	0.7	6.0	A	0.3	Yes	No	-
5	Towne Centre Drive / La Jolla Village Drive	39.9	D	120.6	F	47.4	D	7.5	122.4	F	1.8	Yes	Yes	-
6	Executive Drive / Project Driveway "B"	8.8	A	10.4	B	9.2	A	0.4	11.2	B	0.8	Yes	No	-
7	Judicial Drive / Executive Drive	47.5	D	41.4	D	75.1	E	27.6	47.2	D	5.8	Yes	No	-
8	Judicial Drive / Judicial Driveway	7.6	A	7.7	A	7.2	A	-0.4	7.5	A	-0.2	No	-	No
9	Judicial Drive / Golden Haven Drive / Brook Lane	39.6	D	49.7	D	46.0	D	6.4	49.8	D	0.1	No	-	No
10	La Jolla Village Drive / I-805 SB Ramps	51.7	D	28.1	C	53.2	D	1.5	28.4	C	0.3	No	-	No

Notes:

LOS = Level of Service

D = Delay (in sec.)

Δ = Change in Delay (in sec.)

9.0 HORIZON YEAR 2050

The purpose of this chapter is to evaluate roadway segments and intersections within the Project's study area in the community buildout Year 2050 scenario.

To determine Horizon Year 2050 traffic volumes, USAI applied a linear annual growth rate for each roadway segment under study that was calculated using SANDAG Series 14 Year 2016 and Series 14 Year 2050 forecast volumes. The growth rates were calculated as follows:

$$\text{Linear Growth} = \frac{\left(\frac{2050\ ADT}{2016\ ADT}\right)-1}{N}$$

Where: N = Number of Years (Year 2050 – Year 2016) = 34

For this application, the value "N" is determined to be equal to 34. Once the linear growth for a roadway segment is determined, the growth rate is applied for a period of 29 years to the Existing baseline conditions (Year 2021) to calculate the Horizon Year 2050 volumes for each roadway segment under study.

For intersections, a growth factor was determined for each turning movement at a study intersection by comparing the receiving segment Existing baseline volumes average daily trips to the Year 2050 average daily trips sourced from the TFIC and the traffic volume projections described above. For the turning movements and roadway segments where these calculations resulted in lower peak hour volumes and roadway segment volumes than the volumes of the Near-Term (Opening Day Year 2023) conditions, the volumes of the Near-Term (Opening Day Year 2023) conditions were used instead.

Refer to **Appendix K** for the calculations that were conducted to determine Horizon Year 2050 traffic volumes and the SANDAG Transportation Forecast Information Center (TFIC) Series 14 Year 2016 and 2050 volumes.

9.1 Pedestrian Facilities

No changes are assumed to pedestrian facilities within the immediate Project vicinity between Existing and Horizon Year 2050 conditions.

9.2 Bicycle Facilities

The identified improvements within the City of San Diego Bicycle Master Plan (*12/2013*) that are proposed for Towne Centre Drive north of Eastgate Mall, which include the construction of a Class III Bike Route facility, are assumed to become implemented between Existing and Horizon Year 2050 conditions.

9.3 Transit Facilities

The SANDAG 2021 Regional Plan (*December 2021*) identifies several future planned improvements that will result in transit network changes by Year 2050. These planned improvements within the study area include the following:

- **MTS Route 870**: is planned to provide Bus Rapid Transit (BRT) service between EL Cajon and UTC/Campus Point during peak hours and would extend the existing Route 870, serving the University community. The expected Year for completion of this improvement is Year 2035.

- **MTS Route 41**: is a planned conversion of the existing MTS Route 41 to a rapid bus route that would connect Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont. The expected year for the completion of this improvement is Year 2035.
- **MTS Route 30**: is a planned addition of a Rapid Bus service to the existing route, providing 10-minute headways and connections between Old Town and Sorrento Mesa including the UTC area. The expected year for completion of this improvement is Year 2035.
- **MTS Route 473**: is a planned Rapid Bus service providing connections between Oceanside and UTC. The expected year for completion of this improvement is Year 2035.

9.4 Roadway Segments

No changes are assumed to the roadway classifications within the immediate Project vicinity between Existing and Horizon Year 2050 conditions. **Table 9-1** summarizes the roadway segment analysis for Horizon Year 2050 conditions. Based on Horizon Year 2050 volumes and the City's roadway segment classification thresholds, all analyzed roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Horizon Year 2050 condition.

Figure 9-1 displays the Horizon Year 2050 ADT volumes for the study roadway segments.

Figure 9-1: Horizon Year 2050 ADT Volumes

Legend

= Project Location

XX,XXX = ADT Number

= Study Intersection

NO SCALE

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Table 9-1: Horizon Year 2050 Roadway Segment Analysis

Road	Segment	Standard	# of Ln.	Roadway Classification	Capacity	Volume	V/C	LOS
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	SD	4	4-MA	40,000	19,567	0.489	B
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	SD	4	4-MA	40,000	19,567	0.489	B
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	SD	4	4-MA	40,000	29,098	0.727	C
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	SD	4	4-MA	40,000	29,098	0.727	C
Judicial Dr.	Executive Dr. - Judicial Dwy.	SD	4	4-MA	40,000	14,350	0.359	A
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	SD	4	4-MA	40,000	14,555	0.364	A
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	SD	4	4-C (w/ TWLTL)	30,000	13,377	0.446	B
Executive Dr.	Project Dwy. "B" - Judicial Dr.	SD	4	4-C (w/ TWLTL)	30,000	13,377	0.446	B

Legend:

LOS = Level of Service
V/C = Volume to Capacity Ratio
4-MA = 4-Lane Major Arterial
4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Year 2050 street segment volumes are calculated by applying a linear growth rate to Existing (Year 2021) volumes for each individual street segment over the course of 29 years (number of years between Year 2021 and Year 2050), which has been calculated by comparing the street segment volume growth between SANDAG TFIC Series 14 Year 2016 and Year 2050 models.

9.5 Intersections

Intersection peak hour traffic volumes for Horizon Year 2050 conditions at the studied intersections are shown in **Figure 9-2**.

The University Community Plan Amendment Final PEIR Transportation Impact Study (*June 2016*) analyzed a series of improvements to intersections in the vicinity of the project site that are estimated to exist around the time that the Project will be complete (Opening Day Year 2023). None of these improvements converge with the study area intersections. Therefore, no changes to the existing lane configurations of the study intersections are assumed for this analysis.

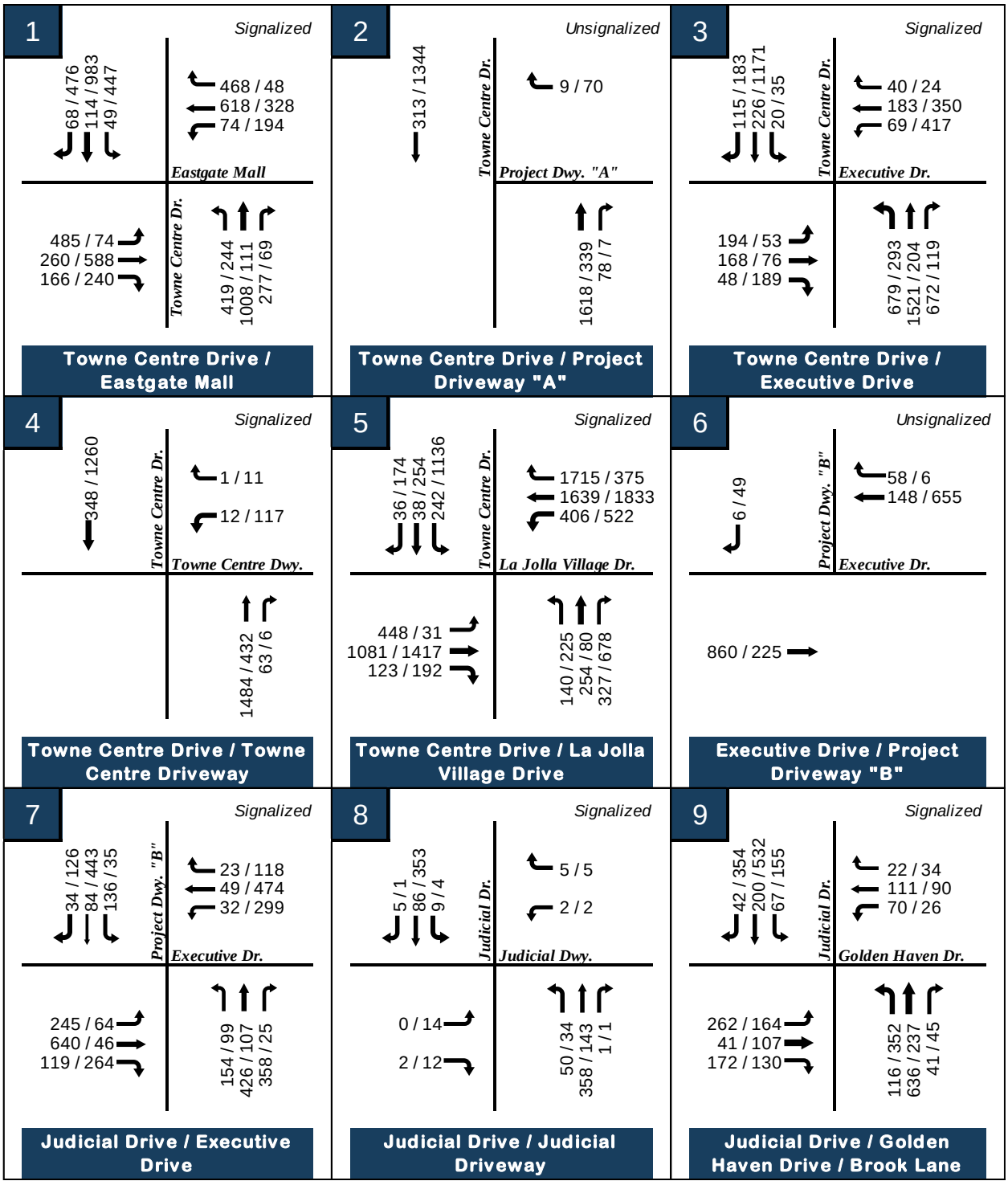
Table 9-2 shows the Horizon Year 2050 intersection AM / PM Peak Hour LOS. As shown in the table, the study intersections are anticipated to operate at an acceptable LOS D or better in both AM and PM peak hour settings, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / Executive Drive
    - AM Peak Hour – *LOS E*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*
- Judicial Dr. / Executive Dr.
    - AM Peak Hour – *LOS E*

- Judicial Dr. / Golden Haven Dr. / Brook Ln.
    - PM Peak Hour – *LOS E*

Refer to **Appendix L** for the Synchro worksheets of Horizon Year 2050 conditions.

Figure 9-2: Horizon Year 2050 AM/PM Peak Hour Volumes



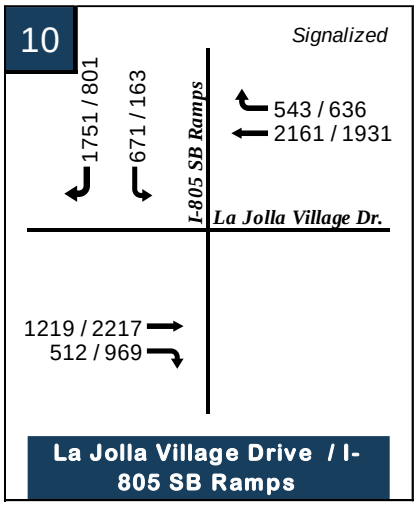
XX / XX = AM / PM Peak hour volumes

* NB U-Turn Traffic at Intersection #1 consists of 5 AM trips and 18 PM trips.

**SB U-Turn Traffic at Intersection #3 consists of 2 AM trips and 0 PM trips.

***WB U-Turn Traffic at Intersection #3 consists of 1 AM trips and 1 PM trips.

Figure 9-2: Horizon Year 2050 AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

Table 9-2: Horizon Year 2050 Intersection Peak Hour Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Towne Centre Drive / Eastgate Mall	Signalized	149.6	F	247.6	F
2	Towne Centre Drive / Project Driveway "A"	Unsignalized	18.7	C	9.8	A
3	Towne Centre Drive / Executive Drive	Signalized	61.1	E	111.7	F
4	Towne Centre Drive / Towne Centre Driveway	Signalized	6.4	A	6.3	A
5	Towne Centre Drive / La Jolla Village Drive	Signalized	51.8	D	126.4	F
6	Executive Drive / Project Driveway "B"	Unsignalized	8.9	A	11.2	B
7	Judicial Drive / Executive Drive	Signalized	56.2	E	53.2	D
8	Judicial Drive / Judicial Driveway	Signalized	7.3	A	7.7	A
9	Judicial Drive / Golden Haven Drive / Brook Lane	Signalized	35.6	D	60.4	E
10	La Jolla Village Drive / I-805 SB Ramps	Signalized	51.2	D	28.2	C

Notes:

LOS = Level of Service

D = Delay (in sec.)

10.0 HORIZON YEAR 2050 WITH PROJECT

The purpose of this chapter is to evaluate roadway segments and intersections within the project's study area in the Horizon Year 2050 With Project scenario. The net Project traffic was added to the Horizon Year 2050 traffic to determine if any transportation infrastructure improvements would be triggered by the Project.

10.1 Pedestrian Facilities

No changes are assumed to pedestrian facilities within the immediate Project vicinity between Horizon Year 2050 and Horizon Year 2050 With Project conditions.

10.2 Bicycle Facilities

No changes are assumed to bicycle facilities within the immediate Project vicinity between Horizon Year 2050 and Horizon Year 2050 With Project conditions.

10.3 Transit Facilities

No changes are assumed to transit facilities within the immediate Project vicinity between Horizon Year 2050 and Horizon Year 2050 With Project conditions.

10.4 Roadway Segments

No changes are assumed to the roadway segments within the Project vicinity between Horizon Year 2050 and Horizon Year 2050 With Project conditions.

Table 10-1 summarizes the roadway segment analysis for Horizon Year 2050 With Project conditions. Based on Horizon Year 2050 With Project volumes and the City's roadway segment

classification thresholds, all analyzed roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Horizon Year 2050 With Project conditions.

Figure 10-1 displays the Horizon Year 2050 With Project ADT volumes for the study roadway segments.

Table 10-2 shows a roadway segment comparison table for Horizon Year 2050 and Horizon Year 2050 With Project conditions. As shown in the table, no study roadway segment is identified to be subjected to a Project traffic ADT consisting of more than 50% of the total roadway segment ADT.

The two Executive Drive roadway segments under study are identified in the current University Community Plan with an ultimate roadway classification of a 4-lane major arterial. Currently, these roadway segments operate as a 4-lane collector with a continuous left-turn lane.

Figure 10-1: Horizon Year 2050 With Project ADT Volumes

Legend

= Project Location

XX,XXX = ADT Number

= Study Intersection

N
NO SCALE

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Table 10-1: Horizon Year 2050 With Project Roadway Segment Analysis

Road	Segment	Standard	# of Ln.	Roadway Classification	Capacity	Volume	V/C	LOS
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	SD	4	4-MA	40,000	20,740	0.519	B
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	SD	4	4-MA	40,000	20,740	0.519	B
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	SD	4	4-MA	40,000	29,720	0.743	C
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	SD	4	4-MA	40,000	29,720	0.743	C
Judicial Dr.	Executive Dr. - Judicial Dwy.	SD	4	4-MA	40,000	14,794	0.370	A
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	SD	4	4-MA	40,000	14,999	0.375	A
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	SD	4	4-C (w/ TWLTL)	30,000	13,982	0.466	B
Executive Dr.	Project Dwy. "B" - Judicial Dr.	SD	4	4-C (w/ TWLTL)	30,000	13,982	0.466	B

Legend:

LOS = Level of Service

V/C = Volume to Capacity Ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Table 10-2: Horizon Year 2050 and Horizon Year 2050 With Project Roadway Segment Analysis Comparison

Road	Segment	# of Ln.	Capacity	Roadway Classification	Year 2050			Year 2050 + Project			ΔV/C	% of Total ADT	Does the Segment have identified improvements in Community Plan?
					LOS	Volume	V/C	LOS	Volume	V/C			
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	4	40,000	4-MA	B	19,567	0.489	B	20,740	0.519	0.029	5.7%	**No**
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	4	40,000	4-MA	C	29,098	0.727	C	29,720	0.743	0.016	2.1%	**No**
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	4	40,000	4-MA	C	29,098	0.727	C	29,720	0.743	0.016	2.1%	**No**
Judicial Dr.	Executive Dr. - Judicial Dwy.	4	40,000	4-MA	A	14,350	0.359	A	14,794	0.370	0.011	3.0%	**No**
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	4	40,000	4-MA	A	14,555	0.364	A	14,999	0.375	0.011	3.0%	**No**
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	4	30,000	4-C (w/ TWLTL)	B	13,377	0.446	B	13,982	0.466	0.020	4.3%	**Yes***
Executive Dr.	Project Dwy. "B" - Judicial Dr.	4	30,000	4-C (w/ TWLTL)	B	13,377	0.446	B	13,982	0.466	0.020	4.3%	**Yes***

Legend:

LOS= Level of Service

V/C= Volume to Capacity Ratio

ΔV/C= Change in V/C ratio

4-MA = 4-Lane Major Arterial

4-C (w/ TWLTL) = 4-Lane Collector with Two-Way Left-Turn Lane

Notes:

Identified improvements in the Community Plans have been referenced from the following sources:

* University Community Plan (7/2019)

10.5 Intersections

Intersection peak hour traffic volumes for Horizon Year 2050 With Project conditions at the studied intersections are shown in **Figure 10-2**.

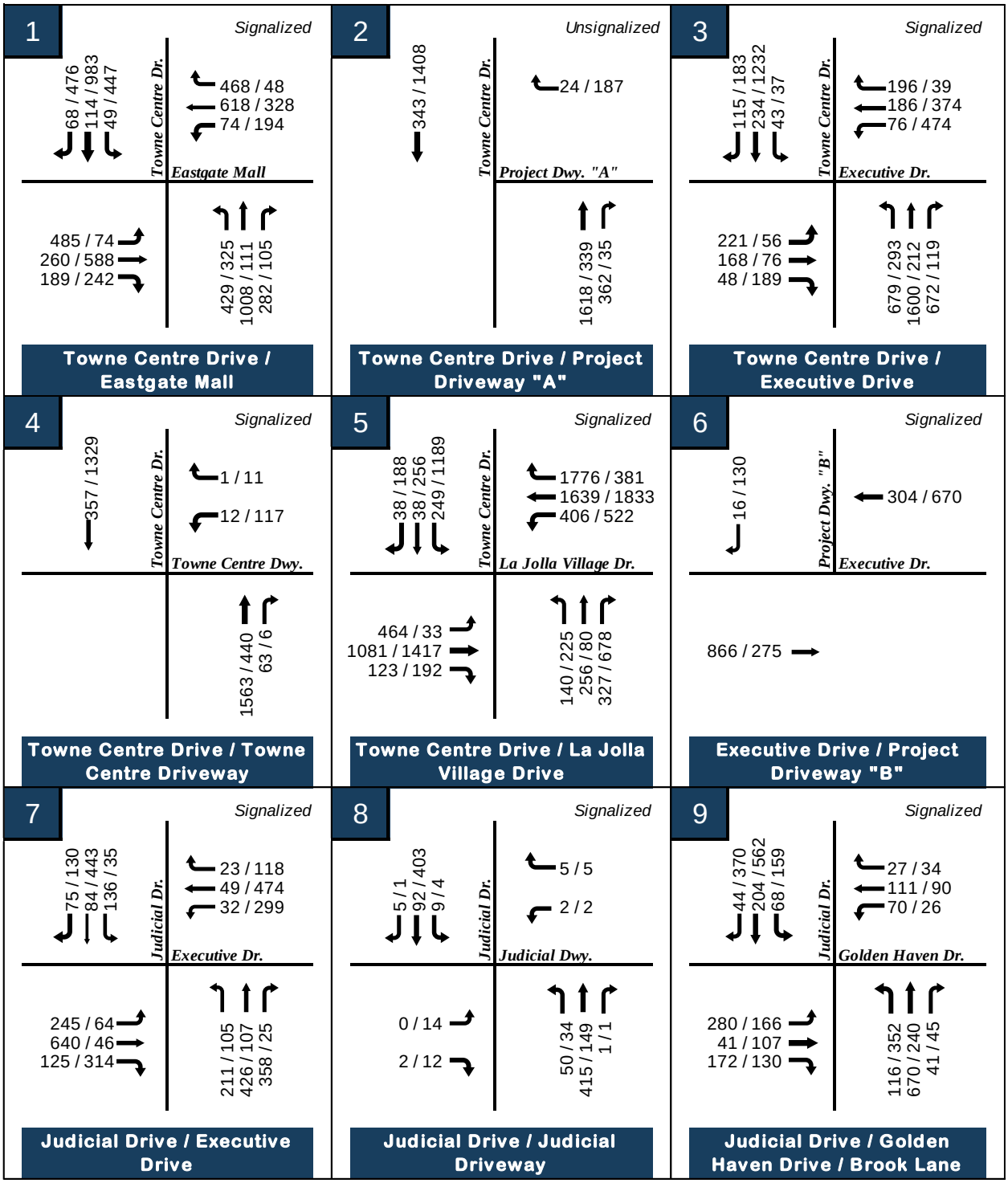
Table 10-3 shows the Horizon Year 2050 With Project intersection AM / PM Peak Hour LOS. As shown in the table, the study intersections are anticipated to operate at an acceptable LOS D or better in both AM and PM peak hour settings, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / Executive Drive
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*
- Judicial Dr. / Executive Dr.
    - AM Peak Hour – *LOS E*
- Judicial Dr. / Golden Haven Dr. / Brook Ln.
    - PM Peak Hour – *LOS E*

Table 10-4 shows the intersection AM / PM Peak Hour LOS comparison table for Horizon Year 2050 and Horizon Year 2050 With Project conditions.

Refer to **Appendix M** for the Synchro worksheets of Horizon Year 2050 With Project conditions.

Figure 10-2: Horizon Year 2050 With Project AM/PM Peak Hour Volumes



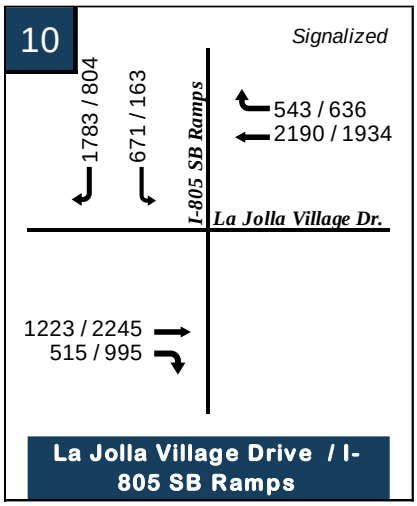
XX / XX = AM / PM Peak hour volumes

* NB U-Turn Traffic at Intersection #1 consists of 12 AM trips and 72 PM trips.

**SB U-Turn Traffic at Intersection #3 consists of 43 AM trips and 4 PM trips.

***WB U-Turn Traffic at Intersection #3 consists of 8 AM trips and 62 PM trips.

Figure 10-2: Horizon Year 2050 With Project AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

Table 10-3: Horizon Year 2050 With Project Intersection Peak Hour Analysis

#	Intersection	Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Towne Centre Drive / Eastgate Mall	Signalized	150.1	F	255.4	F
2	Towne Centre Drive / Project Driveway "A"	Unsignalized	24.0	C	11.0	B
3	Towne Centre Drive / Executive Drive	Signalized	98.6	F	148.3	F
4	Towne Centre Drive / Towne Centre Driveway	Signalized	7.1	A	6.7	A
5	Towne Centre Drive / La Jolla Village Drive	Signalized	53.8	D	132.6	F
6	Executive Drive / Project Driveway "B"	Signalized	9.3	A	12.3	B
7	Judicial Drive / Executive Drive	Signalized	79.4	E	54.2	D
8	Judicial Drive / Judicial Driveway	Signalized	7.1	A	7.6	A
9	Judicial Drive / Golden Haven Drive / Brook Lane	Signalized	41.2	D	64.8	E
10	La Jolla Village Drive / I-805 SB Ramps	Signalized	52.7	D	29.0	C

Notes:

LOS = Level of Service

D = Delay (in sec.)

Table 10-4: Horizon Year 2050 and Horizon Year 2050 With Project Intersection Peak Hour Analysis Comparison

#	Intersection	Year 2050				Year 2050 + Project						Is the intersection within 1/2-mile path of travel of a *Major Transit Stop*?	***Within a 1/2-mile distance of a Major Transit Stop*:** Does the Project cause the intersection to degrade to LOS F? / Does the project add traffic to a signal already operating at LOS F?	***Not within a 1/2-mile distance of a Major Transit Stop*:** Does the Project cause the intersection to degrade to LOS E or F? / Does the project add traffic to a signal already operating at LOS E or F?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		Δ	PM Peak Hour		Δ			
		D	LOS	D	LOS	D	LOS		D	LOS				
1	Towne Centre Drive / Eastgate Mall	149.6	F	247.6	F	150.1	F	0.5	255.4	F	7.8	Yes	Yes	-
2	Towne Centre Drive / Project Driveway "A"	18.7	C	9.8	A	24.0	C	5.3	11.0	B	1.2	Yes	No	-
3	Towne Centre Drive / Executive Drive	61.1	E	111.7	F	98.6	F	37.5	148.3	F	36.6	Yes	Yes	-
4	Towne Centre Drive / Towne Centre Driveway	6.4	A	6.3	A	7.1	A	0.7	6.7	A	0.4	Yes	No	-
5	Towne Centre Drive / La Jolla Village Drive	51.8	D	126.4	F	53.8	D	2.0	132.6	F	6.2	Yes	Yes	-
6	Executive Drive / Project Driveway "B"	8.9	A	9.8	A	9.3	A	0.4	12.3	B	2.5	Yes	No	-
7	Judicial Drive / Executive Drive	56.2	E	53.2	D	79.4	E	23.2	54.2	D	1.0	Yes	No	-
8	Judicial Drive / Judicial Driveway	7.3	A	7.7	A	7.1	A	-0.2	7.6	A	-0.1	No	-	No
9	Judicial Drive / Golden Haven Drive / Brook Lane	35.6	D	60.4	E	41.2	D	5.6	64.8	E	4.4	No	-	Yes
10	La Jolla Village Drive / I-805 SB Ramps	51.2	D	28.2	C	52.7	D	1.5	29.0	C	0.8	No	-	No

Notes:

LOS = Level of Service

Δ = Change

D= Delay

11.0 PROJECT EFFECTS AND OFF-SITE IMPROVEMENTS

11.1 Pedestrian Facilities

As shown in **Table 5-1** and **Table 5-2**, none of the immediately adjacent intersections and roadway segments have missing sidewalk gaps, obstructions, or an absence of curb ramps. Additionally, the curb ramps of the immediately adjacent pedestrian facilities meet accessibility standards by providing truncated domes for pedestrian users.

11.2 Bicycle Facilities

As shown in **Table 5-3**, there are immediately adjacent roadway segments that have been identified within the City of San Diego Bicycle Master Plan (*12/2013*) with planned bicycle facilities and are not yet implemented, which includes the following roadway segments and proposed bicycle facilities:

- Towne Centre Dr. (Eastgate Mall - Judicial Dr.)
    - **Planned Class II Bike Lane or Class III Bike Route facilities.**
- Executive Dr. (Towne Centre Dr. – Judicial Dr.)
    - **Planned Class III Bike Route facility.**

11.3 Transit Facilities

As shown in **Figure 5-3**, up to 13 existing transit stops have been identified in the vicinity of the Project site including one (1) trolley station. This trolley station is part of the Mid-Coast Corridor Transit project, which began service on November 21st, 2021. Additionally, as shown in **Table 5-4**, the transit stop fronting the project site (ID#1) is currently providing transit users with one (1)

steel bench as a transit amenity. In addition, the SANDAG 2021 Regional Plan (*December 2021*) identifies several future planned improvements that will result in transit network changes by Year 2050. These planned improvements within the study area include the following:

- **MTS Route 870**: is planned to provide Bus Rapid Transit (BRT) service between EL Cajon and UTC/Campus Point during peak hours and would extend the existing Route 870, serving the University community. The expected Year for completion of this improvement is Year 2035.
- **MTS Route 41**: is a planned conversion of the existing MTS Route 41 to a rapid bus route that would connect Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont. The expected year for the completion of this improvement is Year 2035.
- **MTS Route 30**: is a planned addition of a Rapid Bus service to the existing route, providing 10-minute headways and connections between Old Town and Sorrento Mesa including the UTC area. The expected year for completion of this improvement is Year 2035.
- **MTS Route 473**: is a planned Rapid Bus service providing connections between Oceanside and UTC. The expected year for completion of this improvement is Year 2035.

No off-site transit facility improvements are proposed by the Project.

11.4 Signalized Intersections

11.4.1 Signal Timing Improvements/Modifications and Turn Lanes

Consistent with the City's TSM criteria for the evaluation of signalized intersections, the study area signalized intersections have been evaluated to determine whether signal timing improvements/ signal modifications and/or the addition/lengthening of turn lanes are required due to the construction of the Project.

As shown in **Table 8-4** for Near-Term (Opening Day Year 2023) and **Table 10-4** for Horizon Year 2050, conditions that would warrant a signal timing/modification improvement as required by the City's TSM are met for the following analyzed intersections:

- Towne Centre Dr. / Eastgate Mall
    - Near-Term (Opening Day Year 2023) – *AM & PM Peak Hours*
    - Horizon Year 2050 – *AM & PM Peak Hours*
- Towne Centre Dr. / Executive Dr.
    - Near-Term (Opening Day Year 2023) – *PM Peak Hour*
    - Horizon Year 2050 – *AM & PM Peak Hours*
- Towne Centre Dr. / La Jolla Village Dr.
    - Near-Term (Opening Day Year 2023) – *PM Peak Hour*
    - Horizon Year 2050 – *PM Peak Hour*
- Judicial Dr. / Golden Haven Dr. / Brook Ln.
    - Horizon Year 2050 – *PM Peak Hour*

Further evaluation of the signalized intersections that have been shown to require signal timing improvements/ signal modifications have been conducted as described below.

A. Towne Centre Dr. / Eastgate Mall

Near-Term (Opening Day Year 2023) & Horizon Year 2050

The project will implement the following ITS improvements for this intersection.

- Upgrade traffic signal controller to a 2070 controller (including software update).
- Implementation of Audible Pedestrian Signals.

B. Towne Centre Dr. / Executive Dr.

Near-Term (Opening Day Year 2023) & Horizon Year 2050

The project will implement the following ITS improvements for this intersection.

- Upgrade traffic signal controller to a 2070 controller (including software update).
- Implementation of Audible Pedestrian Signals.

C. Towne Centre Dr. / La Jolla Village Dr.

Near-Term (Opening Day Year 2023) & Horizon Year 2050

The University of California San Diego (UCSD) Long Range Development Plan (LRDP) Environmental Impact Report (EIR) (*10/*2018) identified this intersection as a location with a significance impact. The proposed mitigation measure consists of the implementation of Adaptive Traffic Signal Control (ATSC) on the La Jolla Village Drive corridor between Torrey Pines Road and I-805 NB Ramps. The Project proposes to engage in a private agreement with UCSD to contribute a 11.9 % fair-share payment towards the installation of this improvement at this intersection.

D. Judicial Dr. / Golden Haven Dr. / Brook Ln.

The project will implement the following ITS improvements for this intersection.

- Upgrade traffic signal controller to a 2070 controller (including software update).
- Implementation of Audible Pedestrian Signal

Furthermore, an assessment of the potential need to expand the available turn lanes of the study area signalized intersections was conducted.

Table 11-1 shows a comparison of the Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project AM/PM peak hour volumes for all left-turn and right-turn movements at the study signalized intersections.

Table 11-2 shows a comparison of the Horizon Year 2050 and Horizon Year 2050 With Project AM/PM peak hour volumes for all left-turn and right-turn movements at the study signalized intersections.

As shown in both tables, three (3) turn movements have been identified to exceed the City's TSM thresholds for peak hour volumes in "With" and "Without" Project conditions. These turning movements consist of the following:

- Towne Centre Dr. / Executive Dr.
  - NB-L (*AM peak hour*)
  - WB-L (*PM peak hour*)
- Judicial Dr. / Executive Dr.
  - WB-L (*PM peak hour*)

However, per the City's TSM criteria, the Project does not propose the addition of turn lanes to the intersections listed above. Although the results shown in **Table 11-3** and **Table 11-4** show that the turning movements listed above have an exceedance of the thresholds established in the City's TSM in "Without" Project conditions, these exceedances are not the result of adding Project traffic to these turning movements.

Table 11-1: Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project Intersection Peak Hour Turning Movement Volume Comparison

#	Intersection	NB Approach								SB Approach								EB Approach								WB Approach							
		Near-Term				Near-Term + Project				Near-Term				Near-Term + Project				Near-Term				Near-Term + Project				Near-Term				Near-Term + Project			
		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn	
		# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)
1	Towne Centre Drive / Eastgate Mall	2	373 / 244	0	229 / 57	2	383 / 323	0	234 / 93	2	49 / 447	0	68 / 476	2	49 / 447	0	68 / 476	2	485 / 74	0	139 / 200	2	485 / 74	0	162 / 202	1	61 / 162	0	468 / 48	1	61 / 162	0	468 / 48
2	Towne Centre Drive / Project Driveway "A"	-	-	0	78 / 7	-	-	0	362 / 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9 / 70	-	-	1	24 / 187
3	Towne Centre Drive / Executive Drive	1	478 / 197	1	437 / 77	1	478 / 197	1	437 / 77	1	15 / 35	0	82 / 153	1	38 / 37	0	82 / 153	1	194 / 53	0	39 / 174	1	221 / 56	0	39 / 174	1	57 / 361	0	40 / 24	1	64 / 418	0	196 / 39
4	Towne Centre Drive / Towne Centre Driveway	-	-	0	63 / 6	-	-	0	63 / 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	9 / 88	1	1 / 8	1	9 / 88	1	1 / 8
5	Towne Centre Drive / La Jolla Village Drive	2	137 / 222	2	303 / 627	2	137 / 222	2	303 / 627	2	242 / 1136	1	36 / 167	2	249 / 1189	1	38 / 181	2	343 / 28	1	123 / 192	2	359 / 30	1	123 / 192	2	406 / 522	2	1715 / 357	2	406 / 522	2	1776 / 363
6	Executive Drive / Project Driveway "B"	-	-	-	-	-	-	-	-	-	-	1	6 / 49	-	-	1	16 / 130	-	-	-	-	-	-	-	-	-	-	0	58 / 6	-	-	0	0 / 0
7	Judicial Drive / Executive Drive	1	101 / 64	0	187 / 13	1	158 / 70	0	187 / 13	1	73 / 34	0	29 / 126	1	73 / 34	0	70 / 130	2	192 / 50	1	75 / 167	2	192 / 50	1	81 / 217	0	20 / 189	0	23 / 94	0	20 / 189	0	23 / 94
8	Judicial Drive / Judicial Driveway	1	50 / 34	0	1 / 1	1	50 / 34	0	1 / 1	1	9 / 4	0	5 / 1	1	9 / 4	0	5 / 1	0	0 / 9	0	1 / 8	0	0 / 9	0	1 / 8	0	1 / 1	0	3 / 3	0	1 / 1	0	3 / 3
9	Judicial Drive / Golden Haven Drive / Brook Lane	1	91 / 276	0	31 / 34	1	91 / 276	0	31 / 34	1	51 / 125	0	35 / 294	1	52 / 129	0	37 / 310	1	188 / 108	0	93 / 70	1	206 / 110	0	93 / 70	1	38 / 14	0	22 / 23	1	38 / 14	0	27 / 23
10	La Jolla Village Drive / I-805 SB Ramps	-	-	-	-	-	-	-	-	2	642 / 156	2	1751 / 801	2	642 / 156	2	1783 / 804	-	-	2	512 / 969	-	-	2	515 / 995	-	-	1	503 / 589	-	-	1	503 / 589

Notes:

LOS = Level of Service

D = Delay (in sec.)

Δ = Change in Delay (in sec.)

Legend:

Signalized Intersections

Left-Turn Lane: 0 Lanes ≤ 100 vehicles; 1 Lane < 100 ≥ 300 vehicles; 2 Lanes < 300 vehicles

Right-Turn Lane: 0 Lanes ≤ 500 vehicles; 1 Lane < 500 ≥ 800 vehicles; 2 Lanes < 800 vehicles

Table 11-2: Horizon Year 2050 and Horizon Year 2050 With Project Intersection Peak Hour Turning Movement Volume Comparison

#	Intersection	NB Approach								SB Approach								EB Approach								WB Approach							
		Year 2050				Year 2050 + Project				Year 2050				Year 2050 + Project				Year 2050				Year 2050 + Project				Year 2050				Year 2050 + Project			
		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn		Left-Turn		Right-Turn	
		# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)	# of Lanes	Volume (AM/PM)
1	Towne Centre Drive / Eastgate Mall	2	419 / 244	0	277 / 69	2	429 / 325	0	282 / 105	2	49 / 447	0	68 / 476	2	49 / 447	0	68 / 476	2	485 / 74	0	166 / 240	2	485 / 74	0	189 / 242	1	74 / 194	0	468 / 48	1	74 / 194	0	468 / 48
2	Towne Centre Drive / Project Driveway "A"	-	-	0	78 / 7	-	-	0	362 / 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	9 / 70	-	-	1	24 / 187
3	Towne Centre Drive / Executive Drive	1	679 / 293	1	672 / 119	1	679 / 293	1	672 / 119	1	20 / 35	0	115 / 183	1	43 / 37	0	115 / 183	1	194 / 53	0	48 / 189	1	221 / 56	0	48 / 189	1	69 / 417	0	40 / 24	1	76 / 474	0	196 / 39
4	Towne Centre Drive / Towne Centre Driveway	-	-	0	63 / 6	-	-	0	63 / 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	12 / 117	1	1 / 11	1	12 / 117	1	1 / 11
5	Towne Centre Drive / La Jolla Village Drive	2	140 / 225	2	327 / 678	2	140 / 225	2	327 / 678	2	242 / 1136	1	36 / 174	2	249 / 1189	1	38 / 188	2	448 / 31	1	123 / 192	2	464 / 33	1	123 / 192	2	406 / 522	2	1715 / 375	2	406 / 522	2	1776 / 381
6	Executive Drive / Project Driveway "B"	-	-	-	-	-	-	-	-	-	-	1	6 / 49	-	-	1	16 / 130	-	-	-	-	-	-	-	-	-	-	0	58 / 6	-	-	0	0 / 0
7	Judicial Drive / Executive Drive	1	154 / 99	0	358 / 25	1	211 / 105	0	358 / 25	1	136 / 35	0	34 / 126	1	136 / 35	0	75 / 130	2	245 / 64	1	119 / 264	2	245 / 64	1	125 / 314	0	32 / 299	0	23 / 118	0	32 / 299	0	23 / 118
8	Judicial Drive / Judicial Driveway	1	50 / 34	0	1 / 1	1	50 / 34	0	1 / 1	1	9 / 4	0	5 / 1	1	9 / 4	0	5 / 1	0	0 / 14	0	2 / 12	0	0 / 14	0	2 / 12	0	2 / 2	0	5 / 5	0	2 / 2	0	5 / 5
9	Judicial Drive / Golden Haven Drive / Brook Lane	1	116 / 352	0	41 / 45	1	116 / 352	0	41 / 45	1	67 / 155	0	42 / 354	1	68 / 159	0	44 / 370	1	262 / 164	0	172 / 130	1	280 / 166	0	172 / 130	1	70 / 26	0	22 / 34	1	70 / 26	0	27 / 34
10	La Jolla Village Drive / I-805 SB Ramps	-	-	-	-	-	-	-	-	2	671 / 163	2	1751 / 801	2	671 / 163	2	1783 / 804	-	-	2	512 / 969	-	-	2	515 / 995	-	-	1	543 / 636	-	-	1	543 / 636

Notes:

LOS = Level of Service

D = Delay (in sec.)

Δ = Change in Delay (in sec.)

Legend:

Signalized Intersections

Left-Turn Lane: 0 Lanes ≤ 100 vehicles; 1 Lane < 100 ≥ 300 vehicles; 2 Lanes < 300 vehicles

Right-Turn Lane: 0 Lanes ≤ 500 vehicles; 1 Lane < 500 ≥ 800 vehicles; 2 Lanes < 800 vehicles

11.4.2 Queueing

Queuing analysis for existing turn pockets of the intersections within the study area have been analyzed for 95th percentile expected queues. The queueing at the study intersections during the AM and PM peak hours was analyzed using a software package extension of Synchro 10 called SimTraffic, which is an application of the Highway Capacity Manual methodology. SimTraffic worksheets for the 95th percentile queuing evaluation of Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions are included under **Appendix N**.

Note: *The queueing results presented in this section may yield a decrease in queue length between "Without" and "With" Project conditions at a turn-lane with an increase in delay between the two analyzed conditions. Increasing volume on a turn movement wouldn't always result in a queue increase if a turn movement is allocated more green time. Due to this reallocation of green time, queue results for a movement with increased volumes may decrease or remain the same as the "Without" Project scenario.*

Table 11-3 shows a queueing analysis summary of Towne Centre Dr. / Eastgate Mall

Table 11-4 shows a queueing analysis summary of Towne Centre Dr. / Executive Dr.

Table 11-5 shows a queueing analysis summary of Towne Centre Dr. / Towne Centre Dwy.

Table 11-6 shows a queueing analysis summary of Towne Centre Dr. / La Jolla Village Dr.

Table 11-7 shows a queueing analysis summary of Judicial Dr. / Executive Dr.

Table 11-8 shows a queueing analysis summary of Judicial Dr. / Judicial Dwy.

Table 11-9 shows a queueing analysis summary of Judicial Dr. / Golden Haven Dr.

Table 11-10 shows a queueing analysis summary of La Jolla Village Dr. / I-805 SB Ramps

Table 11-3: Queueing Analysis of Towne Centre Dr. / Eastgate Mall

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)*	245' + 245' = 490'	157	-333	590	100	601	111	11	532	42	531	41	-1
EB-L (PM)*	245' + 245' = 490'	64	-426	334	-156	344	-146	10	287	-203	304	-186	17
WB-L (AM)*	145'	165	20	169	24	180	35	11	188	43	172	27	-16
WB-L (PM)*	145'	187	42	195	50	181	36	-14	186	41	183	38	-3
SB-L (AM)*	145' + 145' = 290'	52	-238	115	-175	116	-174	1	117	-173	118	-172	1
SB-L (PM)*	145' + 145' = 290'	380	90	418	128	408	118	-10	388	98	380	90	-8
NB-L (AM)	260' + 260' = 520'	412	-108	549	29	491	-29	-58	487	-33	437	-83	-50
NB-L (PM)	260' + 260' = 520'	219	-301	358	-162	517	-3	159	279	-241	639	119	360

Note: * Project does not contribute peak hour trips to the turn movement.
A) Red font queues indicate queues exceeding the available storage length
B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-3**, the queueing analysis results for the intersection of Towne Centre Drive at Eastgate Mall shows 95th percentile queues that exceed the available storage capacity of the following turning movements:

- EB-L (*AM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 490 feet in the analyzed scenarios, provided through two (2) left-turn lanes.
        - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the EB-L movement.
- WB-L (*AM & PM Peak Hours*):
    - The available storage capacity for the turning movement is approximately 145 feet in the analyzed scenarios, provided through one (1) left-turn lane.
        - As shown in **Table 11-3**, the 95th percentile queues exceed the storage capacity in Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.

- **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the WB-L movement.

- SB-L (*PM Peak Hour*):
  - The available storage capacity for the turning movement is approximately 290 feet in the analyzed scenarios, provided through two (2) left-turn lanes.
    - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the SB-L movement.

- NB-L (*AM & PM Peak Hours*):
  - The available storage capacity for the turning movement is approximately 520 feet in the analyzed scenarios, provided through two (2) left-turn lanes.
    - As shown in **Table 11-3**, the 95th percentile queues exceed the storage capacity in Near-Term (Opening Day Year 2023) and Horizon Year 2050 With Project.
    - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the NB-L movement.
  - Since the queues exceeding the threshold established in the City's TSM would be accommodated by the approximately 100 ft of taper length provided by the existing turn lanes, no lengthening is proposed for this turn pocket.

Table 11-4: Queueing Analysis of Towne Centre Dr. / Executive Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	110'	133	23	157	47	137	27	-20	144	34	137	27	-7
EB-L (PM)	110'	71	-39	86	-24	83	-27	-3	123	13	111	1	-12
WB-L (AM)	110'	80	-30	83	-27	75	-35	-8	100	-10	110	0	10
WB-L (PM)	110'	147	37	140	30	140	30	0	141	31	142	32	1
SB-L (AM)	230'	35	-195	43	-187	59	-171	16	41	-189	59	-171	18
SB-L (PM)	230'	206	-24	281	51	248	18	-33	218	-12	252	22	34
NB-L (AM)*	240'	280	40	318	78	316	76	-2	302	62	301	61	-1
NB-L (PM)*	240'	194	-46	215	-25	193	-47	-22	304	64	315	75	11
NB-R (AM)*	90'	142	52	143	53	146	56	3	135	45	139	49	4
NB-R (PM)*	90'	59	-31	59	-31	61	-29	2	74	-16	87	-3	13

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-4**, the queueing analysis results for the intersection of Towne Centre Drive at Executive Drive shows 95th percentile queues that exceed the available storage capacity of the following turning movements:

- EB-L (*AM & PM Peak Hours*):
    - The available storage capacity for the turning movement is approximately 110 feet in the analyzed scenarios, provided through one (1) left-turn lane.
        - As shown in **Table 11-4**, the 95th percentile queues exceed the storage capacity in Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the EB-L movement.

- Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.

- WB-L (*PM Peak Hour*):
  - The available storage capacity for the turning movement is approximately 110 feet in the analyzed scenarios, provided through one (1) left-turn lane.
    - As shown in **Table 11-4**, the 95th percentile queues exceed the storage capacity in Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.
    - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the WB-L movement.
  - Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.

- SB-L (*PM Peak Hour*):
  - The available storage capacity for the turning movement is approximately 230 feet in the analyzed scenarios, provided through one (1) left-turn lane.
    - As shown in **Table 11-4**, the 95th percentile queues exceed the storage capacity in Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, and Horizon Year 2050 With Project conditions.

- **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the SB-L movement.

  - Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.

- NB-L (*AM & PM Peak Hours*):
  - The available storage capacity for the turning movement is approximately 240 feet in the analyzed scenarios, provided through one (1) left-turn lane.
    - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the NB-L movement.
- NB-R (*AM Peak Hour*):
  - The available storage capacity for the turning movement is approximately 90 feet in the analyzed scenarios, provided through one (1) right-turn lane.
    - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the NB-R movement.

Table 11-5: Queueing Analysis of Towne Centre Dr. / Towne Centre Dwy.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
WB-L (AM)*	130'	28	-102	29	-101	26	-104	-3	33	-97	33	-97	0
WB-L (PM)*	130'	105	-25	101	-29	103	-27	2	144	14	134	4	-10
WB-R (AM)*	130'	11	-119	10	-120	11	-119	1	13	-117	13	-117	0
WB-R (PM)*	130'	26	-104	24	-106	25	-105	1	28	-102	27	-103	-1

Note: * Project does not contribute peak hour trips to the turn movement.
A) Red font queues indicate queues exceeding the available storage length
B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-5**, the queueing analysis results for the intersection of Towne Centre Drive at Towne Centre Driveway shows 95th percentile queues that exceed the available storage capacity of the following turning movements:

- WB-L (*PM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 130 feet in the analyzed scenarios, provided through one (1) left-turn lane.
        - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the WB-L movement.

Table 11-6: Queueing Analysis of Towne Centre Dr. / La Jolla Village Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	135' + 135' = 270'	366	96	352	82	344	74	-8	322	52	320	50	-2
EB-L (PM)	135' + 135' = 270'	133	-137	132	-138	157	-113	25	147	-123	166	-104	19
EB-R (AM)*	150'	188	38	206	56	221	71	15	212	62	213	63	1
EB-R (PM)*	150'	240	90	247	97	247	97	0	247	97	246	96	-1
WB-L (AM)*	190' + 190' = 380'	481	101	473	93	473	93	0	463	83	458	78	-5
WB-L (PM)*	190' + 190' = 380'	478	98	454	74	461	81	7	462	82	459	79	-3
WB-R (AM)	170'	228	58	201	31	202	32	1	200	30	200	30	0
WB-R (PM)	170'	42	-128	51	-119	51	-119	0	52	-118	51	-119	-1
SB-L (AM)	335' + 335' = 670'	277	-393	322	-348	298	-372	-24	283	-387	264	-406	-19
SB-L (PM)	335' + 335' = 670'	783	113	720	50	718	48	-2	720	50	720	50	0
SB-R (AM)	160'	40	-120	44	-116	43	-117	-1	38	-122	38	-122	0
SB-R (PM)	160'	139	-21	105	-55	100	-60	-5	107	-53	115	-45	8
NB-L (AM)*	140' + 140' = 280'	256	-24	258	-22	280	0	22	278	-2	294	14	
NB-L (PM)*	140' + 140' = 280'	369	89	373	93	367	87	-6	376	96	378	98	2
NB-R (AM)*	200' + 200' = 400'	199	-201	214	-186	229	-171	15	249	-151	256	-144	7
NB-R (PM)*	200' + 200' = 400'	506	106	499	99	497	97	-2	505	105	501	101	-4

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-6**, the queueing analysis results for the intersection of Towne Centre Drive at La Jolla Village Drive shows 95th percentile queues that exceed the available storage capacity of the following turning movements:

- EB-L (*AM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 270 feet in the analyzed scenarios, provided through two (2) left-turn lanes.
        - As shown in **Table 11-6**, the 95th percentile queues exceed the storage capacity in Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the EB-L movement.
    - Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.
- EB-R (*AM & PM Peak Hours*):
    - The available storage capacity for the turning movement is approximately 150 feet in the analyzed scenarios, provided through one (1) right-turn lane.
        - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the EB-R movement.
- WB-L (*AM & PM Peak Hours*):
    - The available storage capacity for the turning movement is approximately 380 feet in the analyzed scenarios, provided through two (2) left-turn lanes.
        - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the WB-L movement.

- WB-R (*AM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 170 feet in the analyzed scenarios, provided through one (1) right-turn lane.
        - As shown in **Table 11-6**, the 95th percentile queues exceed the storage capacity in Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the WB-R movement.
    - Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.
- SB-L (*PM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 670 feet in the analyzed scenarios, provided through two (2) left-turn lanes.
        - As shown in **Table 11-6**, the 95th percentile queues exceed the storage capacity in Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the SB-L movement.

- Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.

- NB-L (*PM Peak Hour*):
  - The available storage capacity for the turning movement is approximately 280 feet in the analyzed scenarios, provided through two (2) left-turn lanes.
    - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the NB-L movement.

- NB-R (*PM Peak Hour*):
  - The available storage capacity for the turning movement is approximately 400 feet in the analyzed scenarios, provided through one (1) right-turn lane.
    - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the NB-R movement.

Table 11-7: Queueing Analysis of Judicial Dr. / Executive Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	175' + 175' = 350'	222	-128	211	-139	209	-141	-2	317	-33	326	-24	9
EB-L (PM)	175' + 175' = 350'	107	-243	108	-242	104	-246	-4	131	-219	136	-214	5
EB-R (AM)	155'	93	-62	63	-92	70	-85	7	200	45	198	43	-2
EB-R (PM)	155'	81	-74	79	-76	88	-67	9	116	-39	130	-25	14
SB-L (AM)*	240'	127	-113	134	-106	134	-106	0	193	-47	206	-34	13
SB-L (PM)*	240'	52	-188	136	-104	81	-159	-55	225	-15	228	-12	3
NB-L (AM)	170'	217	47	205	35	217	47	12	220	50	233	63	13
NB-L (PM)	170'	169	-1	243	73	230	60	-13	223	53	222	52	-1

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-7**, the queueing analysis results for the intersection of Judicial Drive at Executive Drive shows 95th percentile queues that exceed the available storage capacity of the following turning movements:

- EB-R (*PM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 155 feet in the analyzed scenarios, provided through one (1) right-turn lane.
        - As shown in **Table 11-7**, the 95th percentile queues exceed the storage capacity in Horizon Year 2050 and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the EB-R movement.
    - Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.
- NB-L (*AM & PM Peak Hours*):
    - The available storage capacity for the turning movement is approximately 170 feet in the analyzed scenarios, provided through one (1) left-turn lane.
        - As shown in **Table 11-7**, the 95th percentile queues exceed the storage capacity in Horizon Year 2050 and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the NB-L movement.

- Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.

Table 11-8: Queueing Analysis of Judicial Dr. / Judicial Dwy.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
SB-L (AM)*	95'	29	-66	27	-68	28	-67	1	31	-64	28	-67	-3
SB-L (PM)*	95'	17	-78	15	-80	18	-77	3	16	-79	18	-77	2
NB-L (AM)*	85'	54	-31	55	-30	53	-32	-2	47	-38	54	-31	7
NB-L (PM)*	85'	44	-41	46	-39	56	-29	10	60	-25	67	-18	7

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-8**, the queueing analysis results for the intersection of Judicial Drive at Judicial Driveway shows no 95th percentile queues that exceed the available storage capacity.

Table 11-9: Queueing Analysis of Judicial Dr. / Golden Haven Dr.

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-L (AM)	185'	198	13	229	44	253	68	24	238	53	249	64	11
EB-L (PM)	185'	141	-44	132	-53	132	-53	0	226	41	212	27	-14
WB-L (AM)*	70'	63	-7	61	-9	61	-9	0	87	17	88	18	1
WB-L (PM)*	70'	42	-28	46	-24	39	-31	-7	69	-1	78	8	9
SB-L (AM)	190'	75	-115	72	-118	75	-115	3	96	-94	90	-100	-6
SB-L (PM)	190'	119	-71	134	-56	132	-58	-2	230	40	232	42	2
NB-L (AM)*	195'	133	-62	128	-67	123	-72	-5	163	-32	186	-9	23
NB-L (PM)*	195'	229	34	241	46	235	40	-6	273	78	246	51	-27

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-9**, the queueing analysis results for the intersection of Judicial Drive at Golden Haven Drive shows 95th percentile queues that exceed the available storage capacity of the following turning movements:

- EB-L (*AM & PM Peak Hours*):
    - The available storage capacity for the turning movement is approximately 185 feet in the analyzed scenarios, provided through one (1) left-turn lane.
        - As shown in **Table 11-9**, the 95th percentile queues exceed the storage capacity in Existing, Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the EB-L movement.
    - Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.
- WB-L (*AM & PM Peak Hours*):
    - The available storage capacity for the turning movement is approximately 70 feet in the analyzed scenarios, provided through one (1) left-turn lane.
        - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the WB-L movement.
- SB-L (*PM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 190 feet in the analyzed scenarios, provided through one (1) left-turn lane.

- As shown in **Table 11-9**, the 95th percentile queues exceed the storage capacity in Horizon Year 2050 and Horizon Year 2050 With Project conditions.
- **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the SB-L movement.

- Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.

- NB-L (*PM Peak Hour*):
  - The available storage capacity for the turning movement is approximately 195 feet in the analyzed scenarios, provided through one (1) left-turn lane.
    - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the NB-L movement.

Table 11-10: Queueing Analysis of La Jolla Village Dr. / I-805 SB Ramps

Movement	Approx. Storage Length	Existing Queue	Excess Queue?	Near-Term Queue	Excess Queue?	Near-Term + P Queue	Excess Queue?	Δ (Near-Term)	Year 2050 Queue	Excess Queue?	Year 2050 + P Queue	Excess Queue?	Δ (Year 2050)
EB-R (AM)	Channelized	-	-	-	-	-	-	-	-	-	-	-	-
EB-R (PM)	Channelized	-	-	-	-	-	-	-	-	-	-	-	-
WB-R (AM)*	585'	140	-445	906	321	871	286	-35	839	254	801	216	-38
WB-R (PM)*	585'	79	-506	86	-499	85	-500	-1	82	-503	92	-493	10
SB-L (AM)*	455'	275	-180	408	-47	378	-77	-30	398	-57	369	-86	-29
SB-L (PM)*	455'	82	-373	86	-369	81	-374	-5	87	-368	81	-374	-6
SB-R (AM)	1000'	986	-14	1,028	28	1,026	26	-2	1,032	32	1,025	25	-7
SB-R (PM)	1000'	250	-750	294	-706	294	-706	0	296	-704	289	-711	-7

Note: * Project does not contribute peak hour trips to the turn movement.

A) Red font queues indicate queues exceeding the available storage length

B) Red font queues with yellow background indicate queues exceeding the available storage length for turn movements where the Project contributes peak hour traffic volumes

As shown in **Table 11-10**, the queueing analysis results for the intersection of La Jolla Village Drive at I-805 SB Ramps shows 95th percentile queues that exceed the available storage capacity of the following turning movements:

- WB-R (*AM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 585 feet in the analyzed scenarios, provided through one (1) right-turn lane.
        - **Note:** As shown in **Figure 4-10,** the Project does not add peak hour traffic to the WB-R movement.
- SB-R (*AM Peak Hour*):
    - The available storage capacity for the turning movement is approximately 1000 feet provided through one right-turn lane. This turning movement is also served by a second right-turn lane that extends approximately 1,000 feet. This would increase the capacity of this turning movement further than 1,000 feet, but this additional turn lane is part of the freeway off-ramp. Therefore, for this evaluation, the westernmost right turn lane is being analyzed as a conservative approach.
        - As shown in **Table 11-10**, the 95th percentile queues exceed the storage capacity in Near-Term (Opening Day Year 2023), Near-Term (Opening Day Year 2023) With Project, Horizon Year 2050, and Horizon Year 2050 With Project conditions.
        - **Note:** As shown in **Figure 4-10,** the Project does add peak hour traffic to the SB-R movement.

- Since the queues exceed the threshold established in the City's TSM in "Without" Project conditions and not as a result of adding Project traffic, no lengthening is proposed for this turn pocket.

11.5 Unsignalized Intersections

As a result of the peak hour intersection analysis results in **Chapter 8.5** (Near-Term Opening Day Year 2023) and **Chapter 10.5** (Horizon Year 2050) of this report, no off-site intersection improvements to unsignalized intersections are proposed by the Project.

11.6 Roadway Segments

As a result of the roadway segment analysis in **Chapter 8.4** (Near-Term Opening Day Year 2023) and **Chapter 10.4** (Horizon Year 2050) of this report, and consistent with the City's TSM criteria for identifying off-site improvements for roadway segments, no off-site improvements are proposed.

12.0 SITE ACCESS, CIRCULATION, & PARKING

12.1 Access & Circulation

Access to the project site is will be through three (3) driveways, providing access to the below-grade parking structure. The three (3) driveways will provide access and egress to the site, with the southwest and northwest driveways located along Towne Centre Drive and the southeast driveway located along Executive Drive. The driveway along Towne Centre Drive closest to the intersection with Executive Drive (southwest driveway) will be configured as a one-way right-in-only driveway. The driveway along Towne Centre north of the southwest driveway (northwest driveway) will be configured as a two-way right-in/right-out driveway. The driveway along Executive Drive (southeast driveway) will be configured as a one-way right-out driveway.

As shown in the Project Site Plan in **Figure 2-1**, the driveways along Towne Centre Drive and Executive Drive will connect to an internal two-way alley that will loop around the project site and will provide access to the sub-grade parking structure.

12.2 Parking

Parking for the project is planned to meet the minimum parking requirements contained in the City of San Diego Municipal Code and will be accommodated through below-grade parking spaces within the underground parking structure, which will be accessed through the project driveways discussed in **Chapter 12.1**.

The Project will provide parking facilities that will support 938 parking spaces (*769 required parking spaces*) at a rate of 2.58 parking spaces per 1,000 SF of building area, which as shown in the Project included in tabulation **Figure 12-1** will consist of the following:

- Total Parking = **938 spaces**
    - Standard = 919 spaces
        - Clean Air / Vanpool / EV = 207 spaces
            - Future Electric Vehicle Charging Stations (EVCS) = 141 spaces
            - EVCS = 47 spaces
            - Van ADA EVCS = 2 spaces
            - Standard ADA EVCS = 5 spaces
            - Ambulatory EVCS = 5 spaces
    - ADA = 19 spaces
        - Van = 3 spaces
        - Electric Vehicle Charging Stations = 7 spaces
    - Motorcycle = 19 spaces
    - Bicycle = 101 spaces
        - Short-term = 60 spaces
        - Long-term = 61 spaces

The planned total parking supply of 938 parking spaces exceeds the minimum required by the Municipal Code which is shown to be a total of 769 parking spaces.

Figure 12-1: Project Parking Tabulations

PARKING INFORMATION

EXISTING PARKING INFORMATION
EXISTING TOTAL SITE PARKING: 430 SPACES
STANDARD SPACES: 422
ACCESSIBLE SPACES: 8

PARKING RATIO REQUIRED PER 1,000 SF FOR R&D AND MIXED-USE DEV'T (RETAIL/ EATING & DRINKING):

	EMX-2 Ratio	EMX-2 Area	Subtotal	R&D Ratio	R&D Area	Subtotal
MINIMUM	1.5	8,218	12	2.5	361660	904
TRANSIT PRIORITY	1.0	8,218	9	2.1	361660	760
MAXIMUM	5.5	8,218	45	4.0	361,660	1447

EMX-2 AREA: 8,218 *Retail, Drinking and Eating (SDMC 142.0530)*
R&D AREA: 361,660
TOTAL AREA: 369,878
TOTAL PARKING REQUIRED: 769
TOTAL PARKING PROPOSED: 938
PARKING RATIO PROPOSED: 2.58
STANDARD SPACES: 919
ACCESSIBLE SPACES: 19

OTHER PARKING PROVIDED	PROVIDED (IN PROJECT)	REQ'D QTY.	CODE (MOST STRINGENT)
ACCESSIBLE SPACES (Req'd Total)	16 (19 total)	19	CBC
ACCESSIBLE VAN SPACES (Included in Req'd Total)	3	3	CBC
CLEAN AIR/ VANPOOL/ EV (provided no. excl. EVCS, see notes)	19 (207 total)	207	CalGreen T2
TOTAL EVCS (incl. future,accesible and installed charging equipment)	188	57	CalGreen T2
FUTURE EVCS (incl. future accessible evcs spaces)	141	29	CalGreen T2
EV CHARGING STN. "EVCS" (Installed Charging Equipment incl. access.)	47	29	SD CAP
VAN ACCESSIBLE EVCS (1 provided, remaining are "future evcs")	2	1	CBC
STANDARD ACCESSIBLE EVCS (1 provided, remaining are "future evcs")	5	1	CBC
AMBULATORY EVCS (1 provided, remaining are "future evcs")	5	1	CBC
MOTORCYLE PARKING	19	19	SDMC
SHORT TERM BICYCLE	60	47	CAP
LONG TERM BICYCLE	61	47	CalGreen T2

NOTES:
1. EVCS SPACES COUNT TOWARD THE (VOLUNTARY) CALGREEN TIER 2 REQUIRED FUTURE EVCS SPACES. ALL EVCS & FUTURE EVCS SPACES PROVIDED COUNT TOWARD THE MIN. CLEAN AIR/VANPOOL/EV SPACES REQUIRED.

13.0 TRANSPORTATION DEMAND MANAGEMENT (TDM)

Transportation Demand Management (TDM) is a strategy designed to reduce single-occupant vehicle trips during the AM and PM peak weekday hours. Since most commuting and congestion occur during weekday peak periods, TDM seeks to shift commuters to transportation modes other than single-occupancy vehicles as well as reduce peak hour trips by encouraging commuting in non-peak periods and other strategies.

TDM elements have been incorporated into the design and siting of the project. The TDM measures that will be provided by the Project consist of the following:

- Necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use.
  - (CAP Checklist requirement)
- A bicycle repair station offering an air pump and basic repair and maintenance tools for bicycles.
  - (Mobility Choices requirement)
- Changing/Shower facilities are required by the CAP Consistency Checklist in accordance with the voluntary measures under the California Green Building Standards Code.
- One (1) off-street loading space/zone onsite is required by the SDMC.
- Designated parking for low-emitting, fuel-efficient, and carpool/vanpool vehicles consisting of 207 parking spaces.
- Bicycle parking consisting of 60 short-term bicycle spaces and 61 long-term bicycle spaces.
  - (Mobility Choices requirement)
- The Project will provide a subsidized/discounted regional adult monthly pass for public transit usage. The current regional adult monthly pass is $72 (consistent with the current pass rate from SDMTS as of December 2020). This pass will be subsidized for 25% of the pass value (equating to $18.00 of the total cost of the regional adult monthly pass). The transit pass will be provided to tenants/employees on a first-come-first-serve basis. The

transit pass subsidy will be publicized through a notice in "new employee" paperwork followed up with a yearly announcement/reminder to employees.

- Transit encouragement will be implemented by providing employees with assistance with transit route planning and transit field trips (both with assistance provided by the Employee Transportation Coordinator), gamifying transit use based on the number of transit trips taken during a monthly period (threshold of 1% of total trips per month for $25 prize/incentive).
- A TDM association/coordinator for the tenants/employees on site will be provided to facilitate the publication and distribution of information related to TDM as well as ensure it remains current.
- A Transportation Demand Management program that will be applicable to existing and future tenants and will incorporate the following features:
  - (CAP Checklist requirement)
    - Unbundled parking
    - Flexible or Alternative Work Hours
    - Commitment to maintaining an Employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees
    - Access to services that reduce the need to drive, including cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either on-site or within 1,320 feet (1/4-mile) or the project site

14.0 SYSTEMIC SAFETY ANALYSIS

A systemic safety review was conducted to determine if any of the study area intersections satisfy hotspot criteria as defined under Appendix C of the City of San Diego's Systemic Safety, The Data-Driven Path To Vision Zero (*April 2019*).

An analysis summary of the study intersections that meet any of the hotspot systemic safety intersection footprints along with existing countermeasures and proposed engineering countermeasures is found in **Table 14-1** (for pedestrians), **Table 14-2** (for bicycles), and **Table 14-3** (for vehicles).

As shown in the tables below, the following intersections have been found to satisfy at least one of the hotspot systemic safety intersection footprint criteria along with a requirement for the project to provide the following engineering countermeasures:

- Towne Centre Dr. / Eastgate Mall
  - Backplates with retroreflective borders if asset owner agrees
- Towne Centre Dr. / Executive Dr.
  - Bicycle Loop Detector is existing for NB approach
  - Backplates with retroreflective borders if asset owner agrees
- Towne Centre Dr. / Towne Centre Dwy.
  - High visibility crosswalks for North and East quadrants
  - Bicycle Loop Detector is existing for NB and SB approaches
  - Backplates with retroreflective borders if asset owner agrees

- Towne Centre Dr. / La Jolla Village Dr.
  - Backplates with retroreflective borders if asset owner agrees
- Judicial Dr. / Executive Dr.
  - Project does not propose NB through movements that would require bicycle detection
- Judicial Dr. / Judicial Dwy.
  - High visibility crosswalks for North, East, and West quadrants
  - Bicycle Loop Detector is existing for NB and SB approaches
- Judicial Dr. / Golden Haven Dr. / Brook Ln.
  - Bicycle Loop Detector for SB approach. Bicycle detection is existing for NB approach and Project does not propose EB through movements that would require bicycle detection.
  - Backplates with retroreflective borders if asset owner agrees
- La Jolla Village Dr. / Miramar Rd. / I-805 SB Ramps
  - Backplates with retroreflective borders if asset owner agrees

Table 14-1: Systemic Safety Analysis for Pedestrians

Number	Intersection	Pedestrian Matrix Footprint	Existing Countermeasures	Proposed Engineering Countermeasures
1	Towne Centre Drive / Eastgate Mall	-	-	-
2	Towne Centre Drive / Project Driveway "A"	-	*new intersection (Project Driveway)	-
3	Towne Centre Drive / Executive Drive	-	-	-
4	Towne Centre Drive / Towne Centre Driveway	Footprint #3	Pedestrian Countdown Signals	High Visibility Crosswalks (N & E quadrants)
5	Towne Centre Drive / La Jolla Village Drive	-	-	-
6	Executive Drive / Project Driveway "B"	-	*new intersection (Project Driveway)	-
7	Judicial Drive / Executive Drive	-	-	-
8	Judicial Drive / Judicial Driveway	Footprint #2	Pedestrian Countdown Signals	High Visibility Crosswalks (N, E, & W quadrants)
9	Judicial Drive / Golden Haven Drive / Brook Lane	-	-	-
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps	-	-	-

Table 14-2: Systemic Safety Analysis for Bicycles

Number	Intersection	Bicycle Matrix Footprint	Existing Countermeasures	Proposed Engineering Countermeasures
1	Towne Centre Drive / Eastgate Mall	Footprint #1	-	-
2	Towne Centre Drive / Project Driveway "A"	Footprint #2	*new intersection (Project Driveway)	-
3	Towne Centre Drive / Executive Drive	Footprint #1	Bicycle Loop Detector for NB approach	-
4	Towne Centre Drive / Towne Centre Driveway	Footprint #1	Bicycle Loop Detector for NB & SB approaches	-
5	Towne Centre Drive / La Jolla Village Drive	-	-	-
6	Executive Drive / Project Driveway "B"	Footprint #1	*new intersection (Project Driveway)	-
7	Judicial Drive / Executive Drive	Footprint #2	-	-
8	Judicial Drive / Judicial Driveway	Footprint #1	Bicycle Loop Detector for NB & SB approaches	-
9	Judicial Drive / Golden Haven Drive / Brook Lane	Footprint #1	Bicycle Loop Detector for NB approach	Bicycle Loop Detector for SB approach
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps	-	-	-

Table 14-3: Systemic Safety Analysis for Vehicles

Number	Intersection	Vehicular Matrix Footprint	Existing Countermeasures	Proposed Engineering Countermeasures
1	Towne Centre Drive / Eastgate Mall	Footprint #3	-	Backplates w/Retroreflective Borders
2	Towne Centre Drive / Project Driveway "A"	-	*new intersection (Project Driveway)	-
3	Towne Centre Drive / Executive Drive	Footprint #3	-	Backplates w/Retroreflective Borders
4	Towne Centre Drive / Towne Centre Driveway	Footprint #1	-	Backplates w/Retroreflective Borders
5	Towne Centre Drive / La Jolla Village Drive	Footprint #2	-	Backplates w/Retroreflective Borders
6	Executive Drive / Project Driveway "B"	-	*new intersection (Project Driveway)	-
7	Judicial Drive / Executive Drive	-	-	-
8	Judicial Drive / Judicial Driveway	-	-	-
9	Judicial Drive / Golden Haven Drive / Brook Lane	Footprint #3	-	Backplates w/Retroreflective Borders
10	La Jolla Village Drive / Miramar Road / I-805 SB Ramps	Footprint #2	-	Backplates w/Retroreflective Borders

15.0 CONCLUSION

15.1 Project Trip Generation

Trip Generation for the Project is presented below. Using the *City of San Diego Trip Generation Manual (May 2003)* trip generation rates, the total Project trip generation has been calculated using driveway rates as shown below and considers the remaining site entitlement. Existing uses onsite have been calculated to generate 1,107 daily unadjusted driveway trips with 177 (159 In / 18 Out) AM peak hour trips and 155 (16 In / 140 Out) PM peak hour trips. The Project is anticipated to generate approximately 2,959 daily unadjusted driveway trips with 473 (426 In / 47 Out) AM peak hour trips and 414 (41 In / 373 Out) PM peak hour trips. The Project is calculated to generate a net increase of approximately **1,778** average daily trips (ADT) with **252** (227 In / 25 Out) AM peak hour trips and **220** (22 In / 198 Out) PM peak hour trips.

Table 2-1 includes the project trip generation.

15.2 Existing

Roadway Segments:

All study roadway segments operate at an acceptable LOS "D" or better in the Existing condition.

Table A shows a summary of the analysis of roadway segments for Existing conditions.

Intersections:

All study intersections operate at an acceptable LOS "D" or better in the Existing condition at both the AM and PM peak hour setting, except for the following:

- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS E*

Table D shows a summary of the analysis of intersections for Existing conditions.

15.3 Near-Term (Opening Day Year 2023)

Roadway Segments:

All study roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Near-Term (Opening Day Year 2023).

Intersections:

All study intersections are anticipated to operate at an acceptable LOS "D" or better in the Near-Term (Opening Day Year 2023) condition at both the AM and PM peak hour setting, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / Executive Drive
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*

15.4 Near-Term (Opening Day Year 2023) With Project

Roadway Segments:

All study roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Near-Term (Opening Day Year 2023) With Project conditions.

Table B summarizes the Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project roadway segment LOS comparison.

Intersections:

All study intersections are anticipated to operate at an acceptable LOS "D" or better in the Near-Term (Opening Day Year 2023) With Project conditions at both the AM and PM peak hour setting, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*

- Towne Centre Dr. / Executive Drive
    - AM Peak Hour – *LOS E*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*
- Judicial Dr. / Executive Dr.
    - AM Peak Hour – *LOS E*

Table E summarizes the Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project peak hour LOS comparison.

15.5 Horizon Year 2050

Roadway Segments:

All study roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Horizon Year 2050.

Intersections:

All study intersections are anticipated to operate at an acceptable LOS "D" or better in the Horizon Year 2050 condition at both the AM and PM peak hour setting, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*

- Towne Centre Dr. / Executive Drive
    - AM Peak Hour – *LOS E*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*
- Judicial Dr. / Executive Dr.
    - AM Peak Hour – *LOS E*
- Judicial Dr. / Golden Haven Dr. / Brook Ln.
    - PM Peak Hour – *LOS E*

15.6 Horizon Year 2050 With Project

Roadway Segments:

All study roadway segments are anticipated to operate at an acceptable LOS "D" or better in the Horizon Year 2050 With Project conditions.

Table C summarizes the Horizon Year 2050 and Horizon Year 2050 With Project roadway segment LOS comparison.

Intersections:

All study intersections are anticipated to operate at an acceptable LOS "D" or better in the Horizon Year 2050 With Project conditions at both the AM and PM peak hour setting, except for the following:

- Towne Centre Dr. / Eastgate Mall
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / Executive Drive
    - AM Peak Hour – *LOS F*
    - PM Peak Hour – *LOS F*
- Towne Centre Dr. / La Jolla Village Dr.
    - PM Peak Hour – *LOS F*
- Judicial Dr. / Executive Dr.
    - AM Peak Hour – *LOS E*
- Judicial Dr. / Golden Haven Dr. / Brook Ln.
    - PM Peak Hour – *LOS E*

Table F summarizes the Horizon Year 2050 and Horizon Year 2050 With Project peak hour LOS comparison.

15.7 Off-Site Improvements

15.7.1 Signal Timing Improvements/Modifications and Turn Lanes

The Project will result in conditions that would warrant a signal timing/modification improvement as required by the City's TSM are met for four (4) of the analyzed intersections:

- **Towne Centre Dr. / Eastgate Mall**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in **Table E**, this intersection is anticipated to operate with a LOS F in the AM and PM peak hours. Additionally, as shown in the peak hour LOS comparison between Horizon Year 2050 and Horizon Year 2050 With Project included in **Table F**, this intersection is anticipated to operate with a LOS F in the AM and PM peak hours. The project will install an upgraded 2070 traffic signal controller (including software update) and Audible Pedestrian Signals as Intelligent Transportation Systems (ITS) improvements.
- **Towne Centre Dr. / Executive Dr.**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in **Table E**, this intersection is anticipated to operate with a LOS F in the PM peak hour. Additionally, as shown in the peak hour LOS comparison between Horizon Year 2050 and Horizon Year 2050 With Project included in **Table F**, this intersection is anticipated to operate with a LOS F in the PM peak hour. The project will install an upgraded 2070 traffic signal controller (including software update) and Audible Pedestrian Signals as Intelligent Transportation Systems (ITS) improvements.

- **Towne Centre Dr. / La Jolla Village Dr.**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in **Table E**, this intersection is anticipated to operate with a LOS F in the PM peak hour. Additionally, as shown in the peak hour LOS comparison between Horizon Year 2050 and Horizon Year 2050 With Project included in **Table F**, this intersection is anticipated to operate with a LOS F in the PM peak hour. The University of California San Diego (UCSD) Long Range Development Plan (LRDP) Environmental Impact Report (EIR) (*10/*2018) identified this intersection as a location with a significance impact. The proposed mitigation measure consists of the implementation of an Adaptive Traffic Signal Control (ATSC) on the La Jolla Village Drive corridor between Torrey Pines Road and I-805 NB Ramps.
  - The Project proposes to engage in a private agreement with UCSD to contribute a 11.9% fair-share payment towards the installation of this improvement at this intersection.
- **Judicial Dr. / Golden Haven Dr. / Brook Ln.**
  - As shown in the peak hour LOS comparison between Near-Term (Opening Day Year 2023) and Near-Term (Opening Day Year 2023) With Project included in **Table E**, this intersection is anticipated to operate with a LOS F in the AM peak hour. The project will install an upgraded 2070 traffic signal

controller (including software update) and Audible Pedestrian Signals as Intelligent Transportation Systems (ITS) improvements.

An assessment of the potential need to expand the available turn lanes of the study area signalized intersections was conducted. **Table G** and **Table H** show a comparison of the AM/PM peak hour volumes for all left-turn and right-turn movements at the study signalized intersections for Near-Term (Opening Day Year 2023) and Horizon Year 2050 conditions respectively. As shown in the tables, three (3) turn movements have been identified to exceed the City's TSM thresholds for peak hour volumes in "With" and "Without" Project conditions. These turning movements consist of the following:

- Towne Centre Dr. / Executive Dr.
  - NB-L (*AM peak hour*)
  - WB-L (*PM peak hour*)
- Judicial Dr. / Executive Dr.
  - WB-L (*PM peak hour*)

The Project does not propose the addition of turn lanes to the intersections listed above. Although the results shown in **Table G** and **Table H** show that the turning movements listed above have an exceedance of the thresholds established in the City's TSM in "Without" Project conditions, these exceedances are not the result of adding Project traffic to these turning movements.

15.7.2 Queueing

The Project will not result in conditions that would warrant a turn lane modification/improvement as a result of 95th percentile queueing deficiencies due to the addition of the project for any study intersection, except for the following location:

- **Towne Centre Dr. / Eastgate Mall**
  - NB-L (*AM & PM Peak Hours*):
    - Since the queues exceeding the threshold established in the City's TSM would be accommodated by the approximately 100 ft of taper length provided by the existing turn lanes, no lengthening is proposed for this turn pocket.

15.7.3 Systemic Safety

A systemic safety review was conducted to determine if any of the study area intersections are located within a safety hotspot as defined under Appendix C of the City of San Diego's Systemic Safety, The Data-Driven Path To Vision Zero (*April 2019*). As shown in **Table Q** (for pedestrian users), **Table R** (for bicycle users), and **Table S** (for vehicle users) the following intersections have been found to satisfy at least one of the hotspot systemic safety intersection footprint criteria along with a requirement for the project to provide the following engineering countermeasures:

- Towne Centre Dr. / Eastgate Mall
  - Backplates with retroreflective borders if asset owner agrees
- Towne Centre Dr. / Executive Dr.
  - Bicycle Loop Detector is existing for NB approach

- Backplates with retroreflective borders if asset owner agrees

- Towne Centre Dr. / Towne Centre Dwy.
  - High visibility crosswalks for North and East quadrants
  - Bicycle Loop Detector is existing for NB and SB approaches
  - Backplates with retroreflective borders if asset owner agrees
- Towne Centre Dr. / La Jolla Village Dr.
  - Backplates with retroreflective borders if asset owner agrees
- Judicial Dr. / Executive Dr.
  - Project does not propose NB through movements that would require bicycle detection
- Judicial Dr. / Judicial Dwy.
  - High visibility crosswalks for North, East, and West quadrants
  - Bicycle Loop Detector is existing for NB and SB approaches
- Judicial Dr. / Golden Haven Dr. / Brook Ln.
  - Bicycle Loop Detector for SB approach. Bicycle detection is existing for NB approach and Project does not propose EB through movements that would require bicycle detection.
  - Backplates with retroreflective borders if asset owner agrees
- La Jolla Village Dr. / Miramar Rd. / I-805 SB Ramps
  - Backplates with retroreflective borders if asset owner agrees

16.0 REFERENCES

- City of San Diego. 2003. San Diego Municipal Code, Land Development Code, Trip Generation Manual. San Diego, California: Development Services Department. May 2003.
- City of San Diego, *Transportation Study Manual.* San Diego, California: Development Services Department September 29, 2020
- City of San Diego. 2016. California Environmental Quality Act, Significance Determination Thresholds. San Diego, California: Development Services Department. July 2016.
- Transportation Research Board. 2016. Highway Capacity Manual 6th *Edition*. Washington, D.C.: Transportation Research Board.

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This report is site and time specific and is intended for a one-time use for this intended project under the conditions described as "Proposed Project". Any changes or delay in implementation may require re-analysis and re-consideration by the public agency granting approvals. California land development planning involves subjective political considerations as well as frequently re-interpreted principals of law as well as changes in regulations, policies, guidelines, and procedures. Urban Systems and their professionals make no warrant, either express or implied, regarding our findings, recommendations, or professional advice as to the ability to successfully accomplish this land development project.

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Appendix A: Project Information Form (PIF)

Provided on the following page.

City of San Diego
Project Information Form

Project Information

Project Name:	Science Village				
Project Applicant					
Name:	Christopher Clement				
Address:	10996 Torreyana Rd. San Diego, CA 92121				
Contact Information	Phone Number:	(858) 378-4106	Email:	cclement@are.com	
Project Location and Context					
Project Address:	9363 / 9373 / 9393 Towne Centre Drive				
APN:	345-200-0500 & 345-200-0400				
Driveway Cross Streets:	Towne Centre Drive and Executive Drive				
Please attach a Project Location Map that clearly identifies project driveways and access points.					
Community Plan Area:	University	Land Use Designation:	Commercial	Zoning Designation:	RS-1-14

Is any portion of the project located in an RTIP Transit Priority Area?: ☐Yes ☐No

Project Description (with Proposed Land Uses and Intensities):

The proposed Science Village project involves the demolition of two (2) existing three-story scientific research and development buildings consisting of approximately 138,400 square feet (SF) of gross floor area (GFA) and the demolition of the partially below-grade parking structure and associated landscape, hardscape, and onsite utilities for the construction of two (2) new four-story scientific research and development buildings that will be connected by two (2) two-level bridge connectors. These two (2) new buildings will consist of a total building area of 394,134 SF, of which 369,878 SF are proposed as scientific research and development uses and 24,256 SF are planned as accessory/amenity space. The accessory/amenity space will consist of a 5,748 SF coffee shop, a 2,097 SF market, and 16,411 SF of common rooms (conference rooms and lounge space). The proposed project buildings will be constructed over a three-story below-grade parking structure. Consistent with the current University Community Plan, these accessory-amenity spaces will be provided on-site within the principal buildings (non-freestanding) and the uses are planned to be oriented towards the interior of the project.

Number of Parking Spaces:	Vehicle Spaces	Accessible Spaces	Bicycle Spaces *(racks and secure Storage)*	Motorcycle Spaces
	956	23	60	19

Identify any project features related to TDM and Identify any transportation amenities or travel demand management measures that are required based on the San Diego Municipal Code Section 142.0528 (transportation amenities) or the Climate Action Plan Consistency Checklist. For example: transit pass subsidies, unbundled parking, shuttle services, car share, bicycle supportive features (bike repair station, bike lockers, etc.).

Please attach a project site plan that clearly identifies the following:

- Land use types and quantities, and number of parking spaces provided (vehicle and bicycle) clearly identified.
- Driveway locations and type (full access, partial access, right in/out only) identified.
- Pedestrian access, bicycle access and on-site pedestrian circulation clearly identified.
- Location/distance of closest existing transit stop and proposed transit stops identified in RTIP (measured as walking distance to project entrance/or middle of parcel).

City of San Diego
Project Information Form

Trip Generation Estimates (calculated using the process described in the TSM):	Unadjusted Driveway Trips		Total Net New Trips	
	Daily:	2,841	Daily:	1,778
	AM Peak Hour:	402	AM Peak Hour:	252
	PM Peak Hour:	352	PM Peak Hour:	220

Preliminary Screening Criteria

	CEQA Transportation Analysis Screening 1) Select the Land Uses that apply to your project 2) Answer the questions for each Land Use that applies to your project *(if "Yes" in any land use category below then that land use (or a portion of the land use) is screened from CEQA Transportation Analysis)*	Screened Out **Yes**	Not Screened Out **No**
☑	1. Redevelopment Project:		
	a. Does the project result in a net decrease in total Project VMT?	○	◉
	b. Answer if yes to 1a. If the project replaces affordable housing with market rate housing, are there more market rate units planned than existing affordable units being replaced.	○	○
☐	2. Residential Project:		
	a. Is the project in a VMT/Capita Efficient Area (per SANDAG screening maps)?	○	○
	b. Does the project include Affordable Housing? $\frac{}{Affordable\ Units} + \frac{}{Market\ Rate\ Units} = \frac{}{Total\ Units}$ All affordable units are screened out.	○	○
☑	3. Commercial Employment Project:		
	• Is the project in a VMT/Employee Efficient Area? (per SANDAG screening maps?)	○	◉
☐	4. Industrial Employment Project		
	• Is the project in a VMT/Industrial Employee Efficient Area?	○	○
☐	5. Retail/Public Facility/Recreational		
	• Is the project locally serving: - Retail OR Public Facility OR Recreational	○	○
☐	6. Small Project		
	• For all components of a project that are not screened out above (all 'Yes' in a land use category), what is the daily unadjusted driveway trip generation? _____ Is it less than 300 daily trips?	○	○

Local Mobility Analysis			
Is your project's land use consistent with the Community Plan zoning?	○ Consistent ☐ Generates less than 1,000 daily trips (unadjusted driveway trips)	◉ Inconsistent ☐ Generates less than 500 daily trips (unadjusted driveway trips)	
Will project development be phased?	No	In what month are traffic counts planned to be conducted?	To be determined (refer to Existing Baseline Conditions within Scoping Memo for LMA)

City of San Diego
Project Information Form

If a project generates 1,000 or more daily trips (consistent with Community Plan Zoning) or 500 or more daily trips (inconsistent with Community Plan zoning), attach an exhibit showing the project's trip distribution percentages and project trip assignment using the process described in the TSM.

Appendix B: Climate Action Plan Consistency Checklist Form for Science Village

Provided on the following page.

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST INTRODUCTION

In December 2015, the City adopted a Climate Action Plan (CAP) that outlines the actions that City will undertake to achieve its proportional share of State greenhouse gas (GHG) emission reductions. The purpose of the Climate Action Plan Consistency Checklist (Checklist) is to, in conjunction with the CAP, provide a streamlined review process for proposed new development projects that are subject to discretionary review and trigger environmental review pursuant to the California Environmental Quality Act (CEQA).[1]

Analysis of GHG emissions and potential climate change impacts from new development is required under CEQA. The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

This Checklist is part of the CAP and contains measures that are required to be implemented on a project-by-project basis to ensure that the specified emissions targets identified in the CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP as determined through the use of this Checklist may rely on the CAP for the cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in this Checklist to the extent feasible. Cumulative GHG impacts would be significant for any project that is not consistent with the CAP.

The Checklist may be updated to incorporate new GHG reduction techniques or to comply with later amendments to the CAP or local, State, or federal law.

[1] Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

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CAP CONSISTENCY CHECKLIST SUBMITTAL APPLICATION

- The Checklist is required only for projects subject to CEQA review.[2]
- If required, the Checklist must be included in the project submittal package. Application submittal procedures can be found in Chapter 11: Land Development Procedures of the City's Municipal Code.
- The requirements in the Checklist will be included in the project's conditions of approval.
- The applicant must provide an explanation of how the proposed project will implement the requirements described herein to the satisfaction of the Planning Department.

Application Information

Contact Information

Project No./Name: Project No. 647676 / Alexandria Science Village

Property Address: 9363, 9373 & 9393 Towne Centre Drive, San Diego, CA 92121

Applicant Name/Co.: Alexandria-SD Region No. 53, LLC – Neil Hyytinen

Contact Phone: 858-610-5420 Contact Email: nhyytinen@hechtsolberg.com

Was a consultant retained to complete this checklist? ■ Yes ☐ No If Yes, complete the following

Consultant Name: RT Lonsdale Contact Phone: 858-405-0869

Company Name: Miller Hull Partnership Contact Email: rlonsdale@millerhull.com

Project Information

1. What is the size of the project (acres)? 3.97 acres (gross)
2. Identify all applicable proposed land uses:
   - ☐ Residential (indicate # of single-family units):
   - ☐ Residential (indicate # of multi-family units):
   - ☐ Commercial (total square footage):
   - ■ Industrial (total square footage): 310,416 S.F. Research & Development
   - ■ Other (describe): 59,462 S.F. Retail, Drinking and Eating
3. Is the project or a portion of the project located in a Transit Priority Area? ■ Yes ☐ No
4. Provide a brief description of the project proposed:

The Research & Development (R&D) center project will include demolition of the existing scientific research buildings on-site and redevelopment of the site with approximately 369,878 s.f. of mixed-use research, retail, and office uses across 2 buildings, of 4 stories in height. Secondary uses would comprise more than 10% of the total gross floor area, as required by the EMX zoning, serving primarily as tenant spaces. Additionally, 3 levels of subterranean parking offering approximately 938 parking spaces are proposed. The proposed plaza deck would be open to the sky above, have landscaping, and a partially open shade canopy.

[2] Certain projects seeking ministerial approval may be required to complete the Checklist. For example, projects in a Community Plan Implementation Overlay Zone may be required to use the Checklist to qualify for ministerial level review. See Supplemental Development Regulations in the project's community plan to determine applicability.

CAP CONSISTENCY CHECKLIST QUESTIONS

Step 1: Land Use Consistency

The first step in determining CAP consistency for discretionary development projects is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the City to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
A. Is the proposed project consistent with the existing General Plan and Community Plan land use and zoning designations?;[3] OR,		
B. If the proposed project is not consistent with the existing land use plan and zoning designations, and includes a land use plan and/or zoning designation amendment, would the proposed amendment result in an increased density within a Transit Priority Area (TPA)[4] and implement CAP Strategy 3 actions, as determined in Step 3 to the satisfaction of the Development Services Department?; OR,	☑	☐
C. If the proposed project is not consistent with the existing land use plan and zoning designations, does the project include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?		

If "***Yes***," proceed to Step 2 of the Checklist. For question B above, complete Step 3. For question C above, provide estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation.

If "***No***," in accordance with the City's Significance Determination Thresholds, the project's GHG impact is significant. The project must nonetheless incorporate each of the measures identified in Step 2 to mitigate cumulative GHG emissions impacts unless the decision maker finds that a measure is infeasible in accordance with CEQA Guidelines Section 15091. Proceed and complete Step 2 of the Checklist.

The General Plan designates the site for "Industrial Employment" and Prime Industrial Lands; the University Community Plan designates the site as Scientific Research. The proposed project does not change the Scientific Research use designation or Prime Industrial classification, and therefore, the proposed land use (Research and Development - or R&D - with accessory/amenity space) is consistent with that currently allowed for the site under existing land use designations.

The project proposes to rezone the site from RS-1-14 (Residential--Single-Unit) to EMX-2 (Employment Mixed-Use) which is consistent with and would implement the Scientific Research and Prime Industrial classifications. The project would require a Community Plan Amendment, Specific Plan Amendment, and rezone to increase the allowable development intensity for scientific research and accessory commercial uses. The project would transfer development intensity rights (3,744 average daily trips or "ADT") from University Community Plan Area Subarea 37 (City Ownership) to newly created Subarea 102 and Subarea 10 as follows: 1,933 ADT transferred to new Subarea 102 (project site), which will allow an additional 241,600 square feet of scientific research/R&D; and 1,811 ADT transferred to Subarea 10 (Alexandria, Campus Point), which will allow an additional 226,400 s.f. of scientific research/R&D space.

The project will not adversely affect the applicable land use plan since the increase in development intensity is accommodated by the CPA, planned development permit, and ADT transfer from Subarea 37. Additionally, the project is consistent with the Scientific Research and Prime Industrial classifications, and all other policies in the University Community Plan.

The project would increase employment intensity within a Transit Priority Area (TPA) and implement CAP Strategy 3 actions (see attached Step 3 responses).

[3] This question may also be answered in the affirmative if the project is consistent with SANDAG Series 12 growth projections, which were used to determine the CAP projections, as determined by the Planning Department.

[4] This category applies to all projects that answered in the affirmative to question 3 on the previous page: Is the project or a portion of the project located in a transit priority area.

Step 2: CAP Strategies Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable strategies and actions of the CAP. Step 2 only applies to development projects that involve permits that would require a certificate of occupancy from the Building Official or projects comprised of one and two family dwellings or townhouses as defined in the California Residential Code and their accessory structures.[5] All other development projects that would not require a certificate of occupancy from the Building Official shall implement Best Management Practices for construction activities as set forth in the Greenbook (for public projects).

Step 2: CAP Strategies Consistency			
Checklist Item (Check the appropriate box and provide explanation for your answer)	Yes	No	N/A
Strategy 1: Energy & Water Efficient Buildings			
1. *Cool/Green Roofs*. • Would the project include roofing materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under California Green Building Standards Code (Attachment A)?; OR • Would the project roof construction have a thermal mass over the roof membrane, including areas of vegetated (green) roofs, weighing at least 25 pounds per square foot as specified in the voluntary measures under California Green Building Standards Code?; OR • Would the project include a combination of the above two options? Check "N/A" only if the project does not include a roof component. The project shall install a membrane roof with a slope less than 2:12 with a minimum 3-year aged solar reflectance of 0.55, a thermal emittance of 0.75 and a SRI of 64. This is consistent with Attachment A in the CAP Consistency Checklist requirements for a non-residential project.	☑	☐	☐

[5] Actions that are not subject to Step 2 would include, for example: 1) discretionary map actions that do not propose specific development, 2) permits allowing wireless communication facilities, 3) special events permits, 4) use permits or other permits that do not result in the expansion or enlargement of a building (e.g., decks, garages, etc.), and 5) non-building infrastructure projects such as roads and pipelines. Because such actions would not result in new occupancy buildings from which GHG emissions reductions could be achieved, the items contained in Step 2 would not be applicable.

2. *Plumbing fixtures and fittings* With respect to plumbing fixtures or fittings provided as part of the project, would those low-flow fixtures/appliances be consistent with each of the following: Residential buildings: • Kitchen faucets: maximum flow rate not to exceed 1.5 gallons per minute at 60 psi; • Standard dishwashers: 4.25 gallons per cycle; • Compact dishwashers: 3.5 gallons per cycle; and • Clothes washers: water factor of 6 gallons per cubic feet of drum capacity? Nonresidential buildings: • Plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 (voluntary measures) of the California Green Building Standards Code (See Attachment A); and • Appliances and fixtures for commercial applications that meet the provisions of Section A5.303.3 (voluntary measures) of the California Green Building Standards Code (See Attachment A)? Check "N/A" only if the project does not include any plumbing fixtures or fittings. All plumbing fixtures would not exceed the maximum flow rate specified in Table A5.303.2.3.1, and all appliances and fixtures for commercial applications would meet the provisions of Section A5.303.3.	☑	☐	☐

Strategy 3: Bicycling, Walking, Transit & Land Use			
3. *Electric Vehicle Charging* • Multiple-family projects of 17 dwelling units or less: Would 3% of the total parking spaces required, or a minimum of one space, whichever is greater, be provided with a listed cabinet, box or enclosure connected to a conduit linking the parking spaces with the electrical service, in a manner approved by the building and safety official, to allow for the future installation of electric vehicle supply equipment to provide electric vehicle charging stations at such time as it is needed for use by residents? • Multiple-family projects of more than 17 dwelling units: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use by residents? • Non-residential projects: Of the total required listed cabinets, boxes or enclosures, would 50% have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use? Check "N/A" only if the project is a single-family project or would not require the provision of listed cabinets, boxes, or enclosures connected to a conduit linking the parking spaces with electrical service, e.g., projects requiring fewer than 10 parking spaces. Per the SDMC, a total of 769 parking spaces is required; the project as designed proposes 938 total parking spaces. Refer to parking breakdown tables provided on Sheet G001E of the March 2022 Development Plan set. Of these parking spaces, a minimum of 6% (57 spaces) is required to be allocated for Electrical Vehicle Charging (EVCS) per CalGreen mandatory measures. A minimum of half of those spaces, or 3% (29 spaces), would be required to be provided with a listed cabinet, box, or enclosure connected to a conduit linking parking spaces with electrical service for future installation of electric vehicle supply equipment (EVSE). The remaining half (minimum) would be required to provide active charging stations ready for use. See Sheets A1P31 Level P3, A1P21 Level P2, A1P11 Level P1.	☑	☐	☐
Strategy 3: Bicycling, Walking, Transit & Land Use (Complete this section if project includes non-residential or mixed uses)			
4. *Bicycle Parking Spaces* Would the project provide more short- and long-term bicycle parking spaces than required in the City's Municipal Code (Chapter 14, Article 2, Division 5)?[6] Check "N/A" only if the project is a residential project. The City's Municipal Code requires that the project provide a minimum of 47 short-term and 47 long-term bicycle parking spaces. The project would provide 10% beyond the minimum requirement by providing 60 short-term spaces at the Level P1 main building entrance at the southwest corner and at the north plaza on Level 1 as well as 61 long-term secure spaces inside the building at the bike storage room on Level P1. See Sheets A1P11 and A111.	☑	☐	☐

[6] Non-portable bicycle corrals within 600 feet of project frontage can be counted towards the project's bicycle parking requirements.

5. *Shower facilities*

If the project includes nonresidential development that would accommodate over 10 tenant occupants (employees), would the project include changing/shower facilities in accordance with the voluntary measures under the California Green Building Standards Code as shown in the table below?

Number of Tenant Occupants (Employees)	Shower/Changing Facilities Required	Two-Tier (12" X 15" X 72") Personal Effects Lockers Required
0-10	0	0
11-50	1 shower stall	2
51-100	1 shower stall	3
101-200	1 shower stall	4
Over 200	1 shower stall plus 1 additional shower stall for each 200 additional tenant-occupants	1 two-tier locker plus 1 two-tier locker for each 50 additional tenant-occupants

Check "N/A" only if the project is a residential project, or if it does not include nonresidential development that would accommodate over 10 tenant occupants (employees).

The project proposes to include showers and lockers in compliance with CalGreen A5.106.4.3 and would provide a total of 16 shower stalls (16 min.) and 56 stacked/two-tiered lockers (31 min.), or 112 lockers in total. See Sheet A1P11 (see Grid W1 & J).

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6. *Designated Parking Spaces*

If the project includes a nonresidential use in a TPA, would the project provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles in accordance with the following table?

Number of Required Parking Spaces	Number of Designated Parking Spaces
0-9	0
10-25	2
26-50	4
51-75	6
76-100	9
101-150	11
151-200	18
201 and over	At least 10% of total

This measure does not cover electric vehicles. See Question 4 for electric vehicle parking requirements.

Note: Vehicles bearing Clean Air Vehicle stickers from expired HOV lane programs may be considered eligible for designated parking spaces. The required designated parking spaces are to be provided within the overall minimum parking requirement, not in addition to it.

Check "N/A" only if the project is a residential project, or if it does not include nonresidential use in a TPA.

The project is located within a TPA. The total number of required parking spaces for the project per the SDMC is 769 spaces. The project proposes a total of 938 parking spaces.

A minimum of 10% (or 77 designated parking spaces) would be required for low-emitting, fuel-efficient, and carpool/vanpool vehicles. The project would provide the required spaces to meet the CalGreen Tier 2 voluntary measure of 22% (or 207) of total parking spaces which will include a combination of low-emitting, fuel-efficient, carpool/vanpool vehicles and EVCS spaces per CalGreen 2019 w/July 2021 supplement. Refer to Sheet G001E of the Development Plan set.

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7. *Transportation Demand Management Program* If the project would accommodate over 50 tenant-occupants (employees), would it include a transportation demand management program that would be applicable to existing tenants and future tenants that includes: At least one of the following components: • Parking cash out program • Parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools • Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development And at least three of the following components: • Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees • On-site carsharing vehicle(s) or bikesharing • Flexible or alternative work hours • Telework program • Transit, carpool, and vanpool subsidies • Pre-tax deduction for transit or vanpool fares and bicycle commute costs • Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either onsite or within 1,320 feet (1/4 mile) of the structure/use? Check "N/A" only if the project is a residential project or if it would not accommodate over 50 tenant-occupants (employees). A Transportation Demand Management (TDM) Program has been prepared for the project and will be applicable to future tenants. The TDM Program will include the following: 1) Unbundled parking; 2) Flexible or alternative work hours (implemented by not allowing mass starts/stops during the workday, as specified in individual leases); 3) Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees; 4) Access to services that reduce the need to drive, including cafes, commercial stores, banks, post offices, restaurants, gyms, or childcare, either on-site or within 1,320 feet (1/4 mile) of the project site. The components included in the TDM Program are discussed in the attached Step 3 responses (Step 3, Item #2) as well as in the Local Mobility Analysis (March 2022) prepared for the project.	☑	☐	☐

Step 3: Project CAP Conformance Evaluation (if applicable)

Refer to Attachment 1 for responses.

The third step of the CAP consistency review only applies if Step 1 is answered in the affirmative under option B. The purpose of this step is to determine whether a project that is located in a TPA but that includes a land use plan and/or zoning designation amendment is nevertheless consistent with the assumptions in the CAP because it would implement CAP Strategy 3 actions. In general, a project that would result in a reduction in density inside a TPA would not be consistent with Strategy 3.The following questions must each be answered in the affirmative and fully explained.

1. **Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?**
   Considerations for this question:
   - Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?
   - Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?
   - Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?

2. **Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?**
   Considerations for this question:
   - Does the proposed project support/incorporate identified transit routes and stops/stations?
   - Does the project include transit priority measures?

3. **Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?**
   Considerations for this question:
   - Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?
   - Does the proposed project urban design include features for walkability to promote a transit supportive environment?

4. **Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?**
   Considerations for this question:
   - Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?
   - Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?

5. **Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?**
   Considerations for this question:
   - Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?
   - Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?
   - Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?

6. **Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?**
   Considerations for this question:
   - Does the proposed project provide at least three different species for the primary, secondary and accent trees in order to accommodate varying parkway widths?
   - Does the proposed project include policies or strategies for preserving existing trees?
   - Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?

CLIMATE ACTION PLAN CONSISTENCY CHECKLIST
ATTACHMENT A

This attachment provides performance standards for applicable Climate Action Pan (CAP) Consistency Checklist measures.

Table 1 Roof Design Values for Question 1: Cool/Green Roofs supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan

Land Use Type	Roof Slope	Minimum 3-Year Aged Solar Reflectance	Thermal Emittance	Solar Reflective Index
Low-Rise Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
High-Rise Residential Buildings, Hotels and Motels	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16
Non-Residential	≤ 2:12	0.55	0.75	64
	> 2:12	0.20	0.75	16

Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 residential and non-residential voluntary measures shown in Tables A4.106.5.1 and A5.106.11.2.2, respectively. Roof installation and verification shall occur in accordance with the CALGreen Code.

CALGreen does not include recommended values for low-rise residential buildings with roof slopes of ≤ 2:12 for San Diego's climate zones (7 and 10). Therefore, the values for climate zone 15 that covers Imperial County are adapted here.

Solar Reflectance Index (SRI) equal to or greater than the values specified in this table may be used as an alternative to compliance with the aged solar reflectance values and thermal emittance.

Table 2	Fixture Flow Rates for Non-Residential Buildings related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan
Fixture Type	**Maximum Flow Rate**
Showerheads	1.8 gpm @ 80 psi
Lavatory Faucets	0.35 gpm @60 psi
Kitchen Faucets	1.6 gpm @ 60 psi
Wash Fountains	1.6 [rim space(in.)/20 gpm @ 60 psi]
Metering Faucets	0.18 gallons/cycle
Metering Faucets for Wash Fountains	0.18 [rim space(in.)/20 gpm @ 60 psi]
Gravity Tank-type Water Closets	1.12 gallons/flush
Flushometer Tank Water Closets	1.12 gallons/flush
Flushometer Valve Water Closets	1.12 gallons/flush
Electromechanical Hydraulic Water Closets	1.12 gallons/flush
Urinals	0.5 gallons/flush

Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 non-residential voluntary measures shown in Tables A5.303.2.3.1 and A5.106.11.2.2, respectively. See the California Plumbing Code for definitions of each fixture type.

Where complying faucets are unavailable, aerators rated at 0.35 gpm or other means may be used to achieve reduction.

Acronyms:
gpm = gallons per minute
psi = pounds per square inch (unit of pressure)
in. = inch

Table 3	**Standards for Appliances and Fixtures for Commercial Application related to Question 2: Plumbing Fixtures and Fittings supporting Strategy 1: Energy & Water Efficient Buildings of the Climate Action Plan**	
Appliance/Fixture Type	**Standard**	
Clothes Washers	Maximum Water Factor (WF) that will reduce the use of water by 10 percent below the California Energy Commissions' WF standards for commercial clothes washers located in Title 20 of the *California Code of Regulations*.	
Conveyor-type Dishwashers	0.70 maximum gallons per rack (2.6 L) (High-Temperature)	0.62 maximum gallons per rack (4.4 L) (Chemical)
Door-type Dishwashers	0.95 maximum gallons per rack (3.6 L) (High-Temperature)	1.16 maximum gallons per rack (2.6 L) (Chemical)
Undercounter-type Dishwashers	0.90 maximum gallons per rack (3.4 L) (High-Temperature)	0.98 maximum gallons per rack (3.7 L) (Chemical)
Combination Ovens	Consume no more than 10 gallons per hour (38 L/h) in the full operational mode.	
Commercial Pre-rinse Spray Valves (manufactured on or after January 1, 2006)	Function at equal to or less than 1.6 gallons per minute (0.10 L/s) at 60 psi (414 kPa) and • Be capable of cleaning 60 plates in an average time of not more than 30 seconds per plate. • Be equipped with an integral automatic shutoff. • Operate at static pressure of at least 30 psi (207 kPa) when designed for a flow rate of 1.3 gallons per minute (0.08 L/s) or less.	

Source: Adapted from the California Green Building Standards Code (CALGreen) Tier 1 non-residential voluntary measures shown in Section A5.303.3. See the California Plumbing Code for definitions of each appliance/fixture type.

Acronyms:
L = liter
L/h = liters per hour
L/s = liters per second
psi = pounds per square inch (unit of pressure)
kPa = kilopascal (unit of pressure)

ATTACHMENT 1

ARE Science Village Project, La Jolla, California

CAP Checklist - Step 3: Project CAP Conformance Evaluation

April 2022

1) **Would the proposed project implement the General Plan's City of Villages strategy in an identified Transit Priority Area (TPA) that will result in an increase in the capacity for transit-supportive residential and/or employment densities?**

Considerations for this question:

- Does the proposed land use and zoning designation associated with the project provide capacity for transit-supportive residential densities within the TPA?

The project would demolish the existing scientific research buildings on-site and redevelop the site with two 4-story buildings to support mixed-use research, retail, and office uses, as well as an underground parking structure. The proposed project does not include residential development. As the existing site does not support residential uses, the proposed project would not displace population or housing.

The 3.97-acre site is designated as Scientific Research in the University Community Plan. The General Plan designates the site for "Industrial Employment" and Prime Industrial Lands. The project does not propose to change the existing Scientific Research use designation or Prime Industrial classification. A rezone would be required to re-designate the property from RS-1-14 (Residential--Single Family Unit) to EMX-2 (Employment Mixed-Use), as the existing RS-1-14 zone does not allow for the proposed Scientific Research (SR) Community Plan land use. The proposed rezone would change the zoning from RS-1-14 to EMX-2, which is consistent with and implements the Scientific Research and Prime Industrial classifications.

- Is the project site suitable to accommodate mixed-use village development, as defined in the General Plan, within the TPA?

Refer also to the above response. Although the project site currently supports scientific research uses, the project site is zoned RS-1-14 (Residential—Single-Family Unit). As such, the project requires a rezone to accommodate the proposed development.

The project would result in redevelopment of the subject site with approximately 369,878 square feet (sq. ft.) of mixed-use research, retail, and office uses across two

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buildings. The project would consist of approximately 310,416 sq. ft. of Research and Development and 59,462 sq. ft. are planned as accessory/amenity space. The accessory/amenity space is expected to consist of a 7,655 sq. ft. market, 563 sq. ft. food and beverage space, 23,397 sq. ft. fitness center, and 27,847 sq. ft. conference space(s).

Multiple cafes, commercial stores, banks, post offices, restaurants, and gyms are present within 1,320 feet (1/4 mile) of the project site, accessible by bike or walking. The proposed pedestrian network would also provide access to local transit that would link to the larger regional transportation system. Additionally, there are 3 existing major transit stops (as defined in the City of San Diego Preliminary DRAFT Transportation Study Manual guidelines) located within a walking distance of ½ mile from the project site. As such, although the project does not propose a residential component, the development would support mixed-use development in the area through the provision of amenities, goods, and services available to tenants as well as the public, and ease of access to public transportation and other alternative modes of transit.

- Does the land use and zoning associated with the project increase the capacity for transit-supportive employment intensities within the TPA?

The proposed project consists of two primary components: (1) demolition of existing on-site buildings that total 138,400 square feet (sq. ft.) and (2) construction of two 4-story structures that would support approximately 369,878 sq. ft. for scientific research and secondary uses (market, food and beverage space, fitness center, and conference space for tenants/employees). Per SANDAG employment estimates based on land use and square footage, the existing site supports approximately 461 employees (138,400 sq. ft./300 sq. ft. per employee) while the proposed project would support approximately 1,233 employees (369,878 sq. ft./300 sq. ft. per employee).

It should be noted that the proposed project would transfer development intensity rights (3,744 average daily trips or "ADT") from University Community Plan Area Subarea 37 (City Ownership) to newly created Subarea 102 and Subarea 10 as follows: 1,933 ADT transferred to new Subarea 102 (project site), which will allow an additional 241,600 sq. ft. of scientific research/R&D; and 1,811 ADT transferred to Subarea 10 (Alexandria, Campus Point), which will allow an additional 226,400 sq. ft. of scientific research/R&D space. The increase in development intensity is accommodated by the

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proposed community plan amendment, planned development permit, and ADT transfer from Subarea 37.

Therefore, the project would increase the capacity for transit-supportive employment intensities within the TPA.

2) Would the proposed project implement the General Plan's Mobility Element in Transit Priority Areas to increase the use of transit?

Considerations for this question:

- Does the proposed project support/incorporate identified transit routes and stops/stations?

As stated above, there are 3 existing major transit stops (as defined in the City of San Diego Preliminary DRAFT Transportation Study Manual guidelines) that are located within a walking distance of ½ mile from the project site. The project would provide pedestrian connectivity through a pedestrian access network that would link to existing external streets and pedestrian facilities contiguous with the project site to promote the use of transit routes and stations. These transit stops offer access to bus service operated by the Metropolitan Transit System. The locations of these transit stop facilities are provided below:

1. Northwest corner of La Jolla Village Drive / Towne Centre Drive
2. Southeast corner of La Jolla Village Drive / Executive Way
3. Northwest corner of La Jolla Village Drive / Executive Way

Additionally, MTS operates the City's light rail system (San Diego Trolley). The rail line was recently extended to La Jolla, with tracks extending along Genesee Avenue, approximately 0.4 mile to the west of the site. The nearest access to the trolley system from the site would be provided at the University Town Center shopping center.

- Does the project include transit priority measures?

The proposed project would include a transportation demand management (TDM) program that would be applicable to existing tenants and future tenants. The project would implement the following TDM measures: (1) provide unbundled parking, (2) participate in the SANDAG iCommute and RideMatcher programs, (3) provide access to services that reduce vehicle trips, and (4) allow for flexible or alternative work hours. A TDM coordinator would be available on-site to provide information and

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distribute publications on current TDM measures available for the tenants and employees.

Unbundled Parking

All on-site parking would be provided in conformance with City parking regulations and with respect for the site being located in a transit priority area. A total of 938 on-site parking spaces are proposed. Unbundled parking would be provided whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development.

SANDAG iCommute and RideMatcher Programs

The project would be conditioned to ensure continued commitment to maintaining an Employer network in SANDAG's iCommute Program and promoting its RideMatcher service to tenants/employees to encourage the use of alternative means of transit.

Access to Services

The project site is located in a dense urban setting in the University Community Plan Area. There are multiple cafes, commercial stores, banks, post offices, restaurants, and gyms within 1,320 feet (1/4 mile) of the project site. The project would provide pedestrian connectivity through a pedestrian access network that links to existing external streets and pedestrian facilities contiguous with the project site to promote pedestrian trips to surrounding services off-site. Additionally, the project includes a market (7,655 sq. ft.), 23,397 sq. ft. fitness center, 563 sq. ft. food and beverage space, and conference space (27,847 sq. ft.) for tenant and employee use that would reduce the need for vehicle trips to access surrounding services.

Flexible or Alternative Work Hours

The project would encourage tenants to allow employees to telecommute to work or offer alternative work schedules to reduce the number of commute trips. This may be implemented by not allowing for mass starts/stops as specified in tenant leases.

3) Would the proposed project implement pedestrian improvements in Transit Priority Areas to increase walking opportunities?

Considerations for this question:

- Does the proposed project circulation system provide multiple and direct pedestrian connections and accessibility to local activity centers (such as transit stations, schools, shopping centers, and libraries)?

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Refer to Response 2, above. The project would provide pedestrian connectivity through a pedestrian access network that would link to existing external streets and pedestrian facilities contiguous with the project site and that would promote the use of public transit and surrounding services.

- Does the proposed project urban design include features for walkability to promote a transit supportive environment?

  Refer to the above response.

4) Would the proposed project implement the City of San Diego's Bicycle Master Plan to increase bicycling opportunities?

Considerations for this question:

- Does the proposed project circulation system include bicycle improvements consistent with the Bicycle Master Plan?

  The proposed project would provide 60 short-term bicycle parking spaces and 61 long-term bicycle parking spaces on-site which is consistent with requirements of the City's Municipal Code (Chapter 14, Article 2, Division 5). Bike lockers and shower facilities would be provided on-site consistent with the City of San Diego Climate Action Plan in accordance with voluntary measures under the California Green Buildings Standards Code. Bicycle repair stations that offer basic repair and maintenance tools would also be provided on-site.

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- Does the overall project circulation system provide a balanced, multimodal, "complete streets" approach to accommodate mobility needs of all users?

  The project is located in a highly developed area with established sidewalks and streetscapes. The project would reconfigure driveways to access the site, but the project does not propose alterations to the streetscape or sidewalk network. Pedestrians would continue to be able to access the site through the use of existing sidewalks and crosswalks. Pedestrians on-site would be able to use the internal pedestrian access network to reach destinations on-site and in the project vicinity, including the 3 transit stations currently located within a walking distance of ½ mile from the project site. As mentioned above, the project site would provide bicycle parking and storage on-site as well as access to bicycle repair stations. The project would provide 115 preferential parking spaces for carpool/clean air/vanpool/electric

vehicles. Through project design and access to amenities, the project would provide a multimodal approach to accommodate the mobility needs of a variety of users.

5) Would the proposed project incorporate implementation mechanisms that support Transit Oriented Development?

Considerations for this question:

- Does the proposed project include new or expanded urban public spaces such as plazas, pocket parks, or urban greens in the TPA?

The project would offer landscaped areas along the perimeter of the site as well as a small plaza outside of the proposed market/food and beverage area in the southwestern portion of the property for passive and active recreation. This plaza would be open for public use and is intended to engage pedestrians along the adjacent streets and offer opportunities for passive recreation in the form of gathering, eating, and other such activities. The project also includes an open-air plaza/atrium that would provide landscaped areas for employees of the proposed development to gather. The project does not propose a pocket park.

- Does the land use and zoning associated with the proposed project increase the potential for jobs within the TPA?

Refer to Response 1, above. The proposed Community Plan designation of SR (Scientific Research) and rezone to EMX-2 would allow for development of new research development, retail, and office uses on the site. As mentioned above, the existing site supports approximately 461 employees (138,400 sq.ft./300 sq. ft. per employee) while the proposed project would support approximately 1,233 employees (369,878 sq. ft./300 sq. ft. per employee). Therefore, the project would increase the potential for jobs within the TPA.

- Do the zoning/implementing regulations associated with the proposed project support the efficient use of parking through mechanisms such as: shared parking, parking districts, unbundled parking, reduced parking, paid or time-limited parking, etc.?

Refer to Response 2, above. All parking would be provided in conformance with City parking regulations and with respect for the site being located in a transit priority area. A total of 938 on-site parking spaces are proposed. Unbundled parking would be

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provided whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development.

6) **Would the proposed project implement the Urban Forest Management Plan to increase urban tree canopy coverage?**

Considerations for this question:

- Does the proposed project provide at least three different species for the primary, secondary and accent trees in order to accommodate varying parkway widths?

  The project does not propose any new parkways; however, a number of street trees (four proposed species of varying sizes) would be planted within the adjacent public right-of-way; refer to Attachment 2. All landscaping for the project site would be in conformance with City landscaping design standards. Proposed landscaping would include a variety of plantings, including street trees (within the public right-of-way), and "canopy trees," "understory accent trees," "street frontage accent trees," and "evergreen vertical trees" to visually enhance the site and street frontage, and to define exterior gathering and pedestrian spaces.

- Does the proposed project include policies or strategies for preserving existing trees?

  The project site is highly developed with no designated open space or natural areas on-site. Landscaped areas on the property currently support ornamental trees typical of commercial development in urbanized areas. As such, the project does not include strategies for the preservation of existing trees as no native mature trees occur on-site.
  The project would replace all existing trees on-site; however, the project proposes the planting of 76 new trees (51 new trees within the property line and 25 new trees within the parkway). Refer to Attachment 2, Tree Count, which provides an illustration of existing and proposed tree plantings. Refer also to the response below.

- Does the proposed project incorporate tree planting that will contribute to the City's 20% urban canopy tree coverage goal?

  See above responses. On-site landscaped areas would support a various types of tree species consistent with City landscaping design standards. Under current conditions, there are 33 trees within the project site boundary; the project proposes to plant 51 new trees, for a net increase of 18 trees (or 55%) above existing conditions. Similarly,

Deleted: The site currently supports one two-story building and two three-story office buildings which are connected below grade by one level of subterranean parking.

Deleted: existing

Deleted: policies

there are 17 existing trees within the adjacent parkway; the project proposes to plant 25 new trees within the parkway, for a net increase of 8 trees (or 47%) above existing conditions. The project would therefore exceed the requirement as outlined in the City of San Diego Draft CAP to achieve a 25% increase in canopy trees by year 2035 (consistent with the City's 2015 Urban Forest Management Action Plan).

EXISTING TREES:

Existing Trees
Total Count: 33 Trees

Existing Perimeter Trees
Total Count: 17 Trees

To be replaced with future installation of parkway planting

N

0 10' 20' 40'

Scale: 1"=20'-0"

ATTACHMENT 2A

MILLER HULL
The Miller Hull Partnership, LLP
Architecture and Planning
Point Loma Marina
4660 North Harbor Drive, Suite 100
San Diego, CA 92106
Phone: 619-220-0984
Contact: Name

ALEXANDRIA

GROUNDLEVEL
Landscape Architecture
2605 State Street, Suite B
San Diego, CA 92103
619 325 1990
GroundLevelSD.com

STAMP

Alexandria Science Village

9393 Towne Centre Drive,
San Diego, California 92121

SUBMITTAL

REVISIONS

No.	Description	Date

Drawn: MS DW JB
Checked: YN
M|H Proj No.: A19.0087.00
Issue Date:

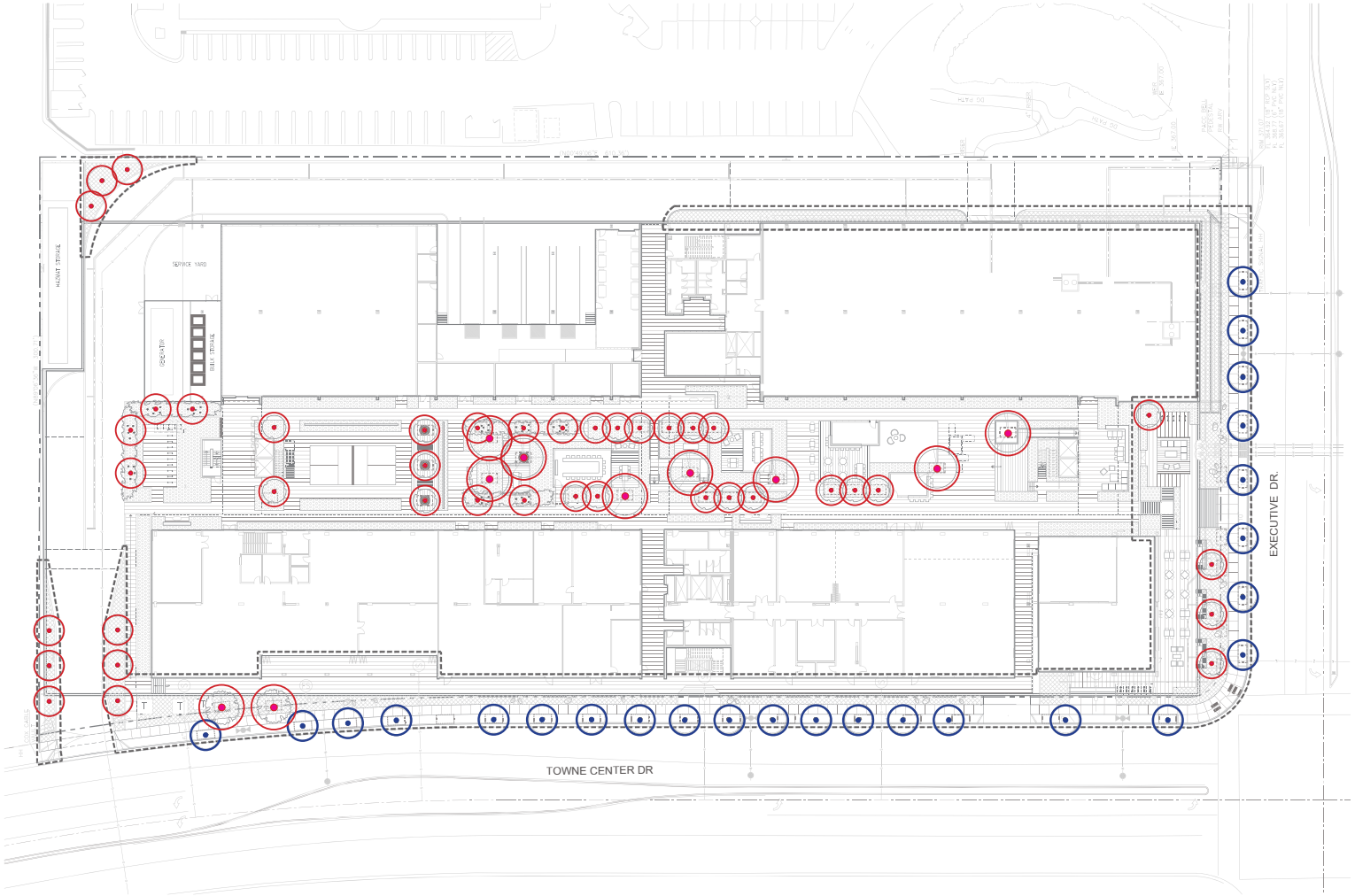
SHEET

EXISTING TREE COUNT

NEW TREES:

Trees within Property Line
New Trees Total Count: 51
Existing Trees Total Count: 33
Net Increase: 18 Trees = 55%

Parkway Trees
New Trees Total Count: 25
Existing Trees Total Count: 17
Net Increase: 8 Trees = 47%



N

0 10' 20' 40'

Scale: 1"=20'-0"

ATTACHMENT 2B

MILLER HULL
The Miller Hull Partnership, LLP
Architecture and Planning
Point Loma Marina
4660 North Harbor Drive, Suite 100
San Diego, CA 92106
Phone: 619-220-0984
Contact: Name

ALEXANDRIA

STAMP

GROUNDLEVEL
Landscape Architecture
2605 State Street, Suite B
San Diego, CA 92103
619 325 1990
GroundLevelSD.com

Alexandria Science Village

9393 Towne Centre Drive,
San Diego, California 92121

SUBMITTAL

REVISIONS
No. Description Date

Drawn: MS DW JB
Checked: YN
M|H Proj No.: A19.0087.00
Issue Date:

SHEET
NEW TREE COUNT

Appendix C: SANDAG Series 14 ABM 2 Year 2025 SZA

Provided on the following page.

SANDAG
SR14
versiom14_1_1
hwy_load 466

2025rc

Select Zone Run

TAZ 2236

join_sz2236

Selected Zone(s)

**Select Zone Vol and %**

**Model Estimated ADT**

SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

N

0 0.085 0.17 0.255
Miles

SANDAG
servicebureau

Date: August 12, 2021

Appendix D: SDMTS Transit Schedules

Provided on the following page

ONE-WAY FARES / Tarifas Sencillas

Exact fare, please / Favor de pagar la cantidad exacta	
Adult / Adulto	**$2.50**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$1.25**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$2.50**

DAY PASS (Regional) / Pase diario (Regional)

Adult / Adulto	**$6.00**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$3.00**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$3.00**

MONTHLY PASSES / Pases mensual

Adult / Adulto	**$72.00**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$23.00**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$23.00**

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
*Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.

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TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 557-4555**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

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Effective JANUARY 26, 2020

31
UTC – Mira Mesa
via Miramar Rd.

921
UTC – Mira Mesa
via Mira Mesa Bl.

DESTINATIONS
- MCAS Miramar - North Gate
- Miramar College
- Miramar College Transit Station
- Mira Mesa Marketcenter
- Westfield UTC

ROUTE 921
- Miramar College
- Miramar College Transit Station
- Mira Mesa High School
- Mira Mesa Mall
- Mira Mesa Marketcenter
- Sorrento Mesa
- VA Medical Center (921A)
- Westfield UTC
- UC San Diego (921A)

01/20

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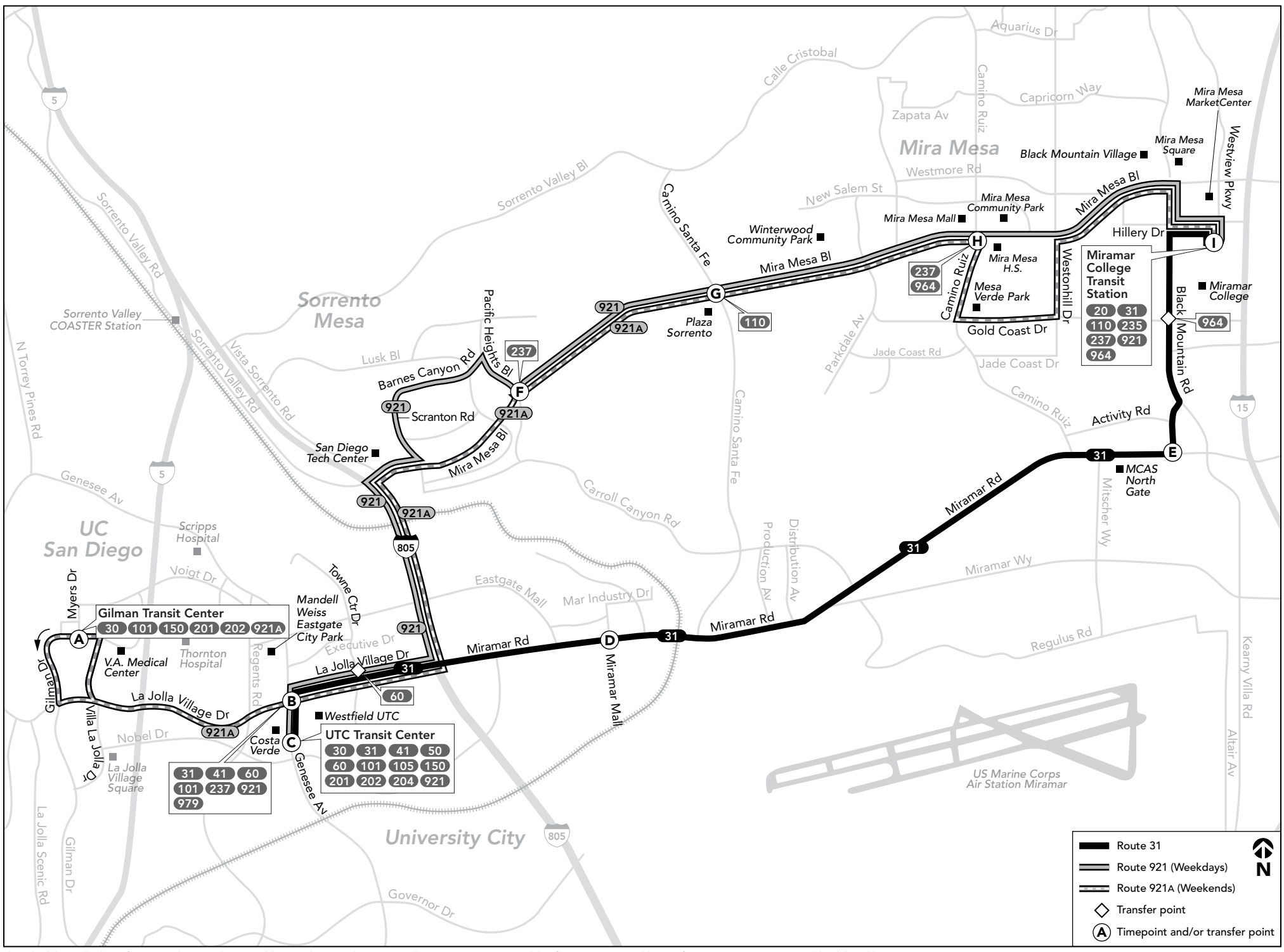

The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 31 – Monday through Friday / *lunes a viernes*

University City ➡ Miramar ➡ Mira Mesa

Ⓒ UTC Transit Center **DEPART**	Ⓓ Miramar Rd. & Miramar Mall	Ⓔ Black Mountain Rd. & Miramar Rd.	Ⓘ Miramar College Transit Station **ARRIVE**
5:55a	6:01a	6:11a	6:18a
6:28	6:35	6:46	6:53
6:58	7:05	7:16	7:23
7:27	7:35	7:47	7:55
7:57	8:05	8:17	8:25
8:28	8:36	8:47	8:55
2:27p	**2:35p**	**2:46p**	**2:54p**
3:03	**3:10**	**3:23**	**3:31**
3:33	**3:40**	**3:53**	**4:01**
4:01	**4:09**	**4:23**	**4:32**
4:31	**4:39**	**4:53**	**5:02**
5:03	**5:11**	**5:25**	**5:34**
5:33	**5:41**	**5:55**	**6:04**
6:03	**6:10**	**6:23**	**6:31**
6:33	**6:40**	**6:51**	**6:58**

Mira Mesa ➡ Miramar ➡ University City

Ⓘ Miramar College Transit Station **DEPART**	Ⓔ Miramar Rd. & Black Mountain Rd.	Ⓓ Miramar Rd. & Miramar Mall	Ⓒ UTC Transit Center **ARRIVE**
5:39a	5:46a	5:59a	6:07a
6:09	6:16	6:29	6:37
6:39	6:47	7:00	7:09
7:07	7:16	7:29	7:39
7:38	7:47	8:00	8:10
8:08	8:17	8:30	8:40
8:38	8:47	9:00	9:10
9:09	9:17	9:29	9:38
2:43p	**2:50p**	**3:02p**	**3:12p**
3:11	**3:18**	**3:30**	**3:40**
3:41	**3:48**	**4:00**	**4:10**
4:11	**4:18**	**4:30**	**4:40**
4:41	**4:48**	**5:01**	**5:12**
5:11	**5:18**	**5:31**	**5:42**
5:49	**5:56**	**6:07**	**6:16**

Route 31 does not operate on weekends or on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas
La ruta 31 no ofrece servicio durante el fin de semana o durante los siguientes días festivos y feriados observados

Route 921 – Monday through Friday / *lunes a viernes*

University City ➡ Sorrento Valley ➡ Mira Mesa

Ⓒ UTC Transit Center **DEPART**	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓘ Miramar College Transit Station **ARRIVE**
6:17a	6:33a	6:38a	6:44a	6:53a
6:41	6:57	7:02	7:08	7:17
7:11	7:27	7:32	7:38	7:47
7:35	7:53	7:59	8:06	8:15
8:05	8:23	8:29	8:36	8:45
8:35	8:53	8:59	9:06	9:15
9:08	9:24	9:29	9:36	9:45
9:38	9:54	9:59	10:06	10:15
10:08	10:24	10:29	10:36	10:45
10:38	10:54	10:59	11:06	11:15
11:08	11:24	11:29	11:36	11:45
11:38	11:54	11:59	**12:06p**	**12:15p**
12:08p	**12:24p**	**12:29p**	**12:36**	**12:45**
12:38	**12:54**	**12:59**	**1:06**	**1:15**
1:06	**1:23**	**1:28**	**1:35**	**1:45**
1:36	**1:53**	**1:58**	**2:05**	**2:15**
2:11	**2:28**	**2:33**	**2:40**	**2:50**
2:41	**2:58**	**3:03**	**3:10**	**3:20**
3:11	**3:28**	**3:33**	**3:40**	**3:50**
3:39	**3:56**	**4:02**	**4:09**	**4:20**
4:06	**4:24**	**4:30**	**4:38**	**4:50**
4:36	**4:54**	**5:00**	**5:08**	**5:20**
5:06	**5:24**	**5:30**	**5:38**	**5:50**
5:31	**5:49**	**5:55**	**6:03**	**6:15**
6:04	**6:21**	**6:26**	**6:34**	**6:45**
6:36	**6:53**	**6:58**	**7:05**	**7:15**
7:07	**7:24**	**7:29**	**7:36**	**7:46**

Mira Mesa ➡ Sorrento Valley ➡ University City

Ⓘ Miramar College Transit Station **DEPART**	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓕ Pacific Heights Bl. & Mira Mesa Bl.	Ⓒ UTC Transit Center **ARRIVE**
5:35a	5:44a	5:50a	5:55a	6:12a
6:09	6:18	6:24	6:29	6:47
6:39	6:48	6:54	6:59	7:16
7:09	7:19	7:26	7:31	7:50
7:39	7:49	7:56	8:01	8:20
8:09	8:19	8:26	8:31	8:50
8:39	8:49	8:56	9:01	9:20
9:09	9:19	9:26	9:31	9:50
9:44	9:53	9:59	10:04	10:22
10:14	10:23	10:29	10:34	10:52
10:44	10:53	10:59	11:04	11:22
11:14	11:23	11:29	11:34	11:52
11:44	11:53	11:59	**12:04p**	**12:22p**
12:14p	**12:23p**	**12:29p**	**12:34**	**12:52**
12:44	**12:53**	**12:59**	**1:04**	**1:22**
1:14	**1:23**	**1:29**	**1:34**	**1:52**
1:44	**1:53**	**1:59**	**2:04**	**2:22**
2:14	**2:23**	**2:29**	**2:34**	**2:54**
2:39	**2:48**	**2:54**	**2:59**	**3:21**
3:06	**3:15**	**3:21**	**3:26**	**3:48**
3:36	**3:45**	**3:51**	**3:56**	**4:18**
4:07	**4:16**	**4:22**	**4:27**	**4:49**
4:37	**4:46**	**4:52**	**4:57**	**5:19**
5:07	**5:16**	**5:22**	**5:27**	**5:49**
5:37	**5:46**	**5:52**	**5:57**	**6:19**
6:07	**6:16**	**6:22**	**6:27**	**6:46**
6:35	**6:44**	**6:50**	**6:55**	**7:14**

Route 921A – Saturday and Sunday / *sábado y domingo*

University City ➡ Sorrento Valley ➡ Mira Mesa

	Ⓐ Gilman Transit Center (UCSD) **DEPART**	Ⓑ La Jolla Village Dr. & Genesee Av.	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓗ Camino Ruiz & Mira Mesa Bl.	Ⓘ Miramar College Transit Station **ARRIVE**
A	7:19a	7:29a	7:37a	7:40a	7:45a	7:57a
A	8:19	8:29	8:37	8:40	8:45	8:57
A	9:19	9:30	9:39	9:42	9:48	10:01
A	10:19	10:30	10:39	10:42	10:48	11:01
A	11:19	11:30	11:39	11:42	11:48	**12:01p**
A	**12:19p**	**12:30p**	**12:39p**	**12:42p**	**12:48p**	**1:01**
A	**1:19**	**1:30**	**1:39**	**1:42**	**1:48**	**2:01**
A	**2:19**	**2:30**	**2:39**	**2:42**	**2:48**	**3:01**
A	**3:19**	**3:30**	**3:39**	**3:42**	**3:48**	**4:01**
A	**4:19**	**4:30**	**4:39**	**4:42**	**4:48**	**5:01**
A	**5:18**	**5:29**	**5:38**	**5:41**	**5:47**	**6:00**
A	**6:18**	**6:29**	**6:38**	**6:41**	**6:47**	**7:00**
A	**7:22**	**7:32**	**7:40**	**7:43**	**7:48**	**8:00**

Mira Mesa ➡ Sorrento Valley ➡ University City

	Ⓘ Miramar College Transit Station **DEPART**	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓑ La Jolla Village Dr. & Genesee Av.	Ⓐ Gilman Transit Center (UCSD) **ARRIVE**
A	7:27a	7:39a	7:44a	7:47a	7:55a	8:04a
A	8:27	8:39	8:44	8:47	8:55	9:04
A	9:28	9:42	9:47	9:50	9:59	10:09
A	10:28	10:42	10:47	10:50	10:59	11:09
A	11:28	11:42	11:47	11:50	11:59	**12:09p**
A	**12:28p**	**12:42p**	**12:47p**	**12:50p**	**12:59p**	**1:09**
A	**1:28**	**1:42**	**1:47**	**1:50**	**1:59**	**2:09**
A	**2:28**	**2:42**	**2:47**	**2:50**	**2:59**	**3:09**
A	**3:28**	**3:42**	**3:47**	**3:50**	**3:59**	**4:09**
A	**4:27**	**4:41**	**4:46**	**4:49**	**4:58**	**5:08**
A	**5:27**	**5:41**	**5:46**	**5:49**	**5:58**	**6:08**
A	**6:27**	**6:41**	**6:46**	**6:49**	**6:58**	**7:08**

A = Saturday/Sunday trips have an alternate routing in Mira Mesa & Sorrento Mesa. See map. / *Viajes de sábado/domingo tienen ruta alternativa en Mira Mesa y Sorrento Mesa. Vea el mapa.*

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays
Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

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Exact fare, please / *Favor de pagar la cantidad exacta*	
Adult / *Adulto*	**$2.50**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$1.25**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$2.50**

DAY PASS (Regional) / *Pase diario (Regional)*

Adult / *Adulto*	**$6.00**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$3.00**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$3.00**

MONTHLY PASSES / *Pases mensual*

Adult / *Adulto*	**$72.00**
Senior/Disabled/Medicare* *Personas Mayores/con Discapacidades/Medicare**	**$23.00**
Youth (ages 6-18)* *Jóvenes (edades 6-18)**	**$23.00**

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TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas* (via teléfono de teclas)	**(619) 685-4900**
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MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 557-4555**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

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Effective SEPTEMBER 1, 2019

60

Euclid Transit Center – UTC

via I-15 Mid City / Kearny Mesa

DESTINATIONS
- Boulevard Transit Plaza
- City Heights Transit Plaza
- Market Creek Plaza
- Westfield UTC

TROLLEY CONNECTIONS
- Euclid Av.

09/19

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Route 60 – Monday through Friday / *lunes a viernes*

Euclid Transit Center ➡ City Heights ➡ Kearny Mesa ➡ University City

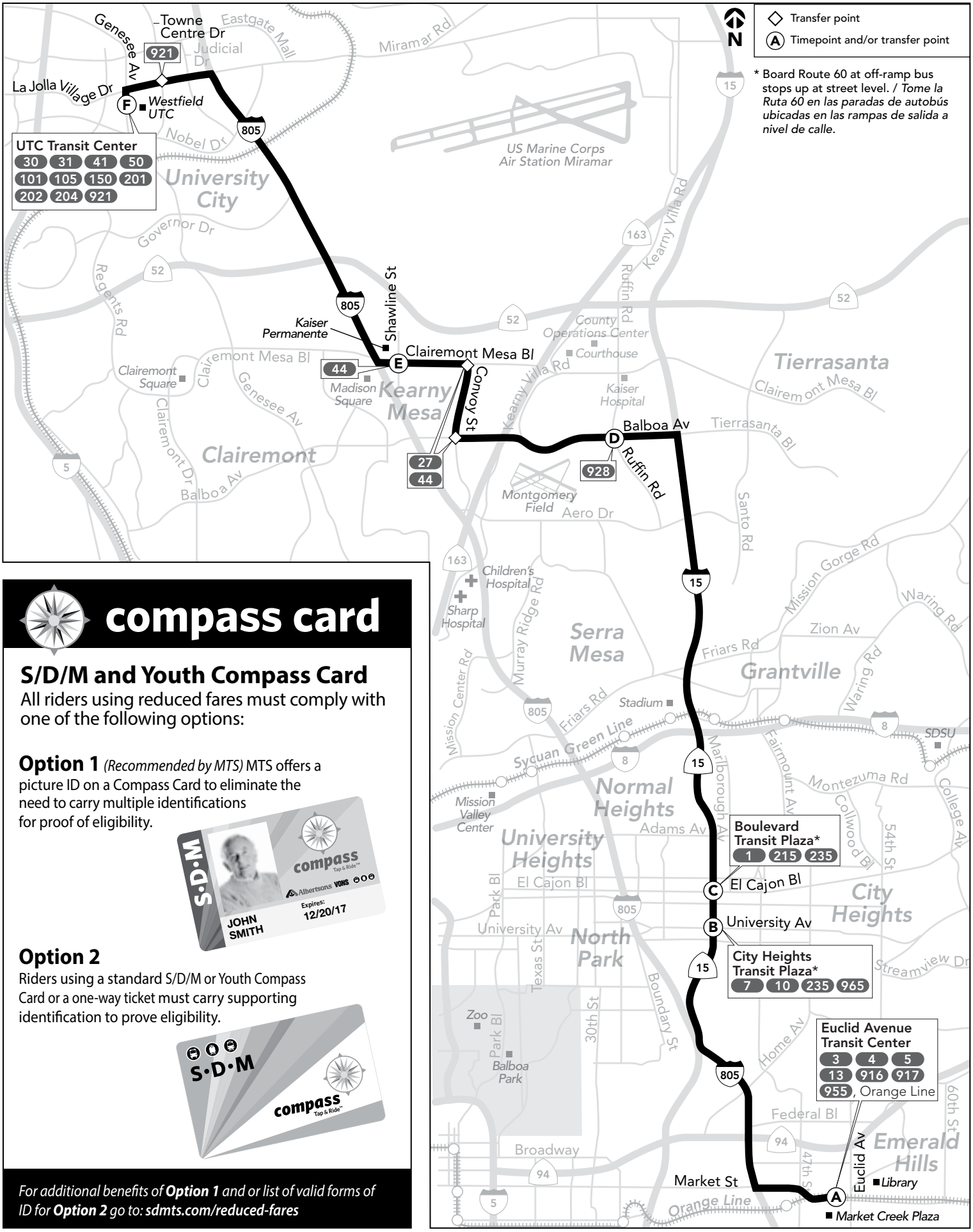
Ⓐ Euclid Ave. Transit Center **DEPART**	Ⓑ City Heights Transit Plaza (University Av.) *	Ⓒ The Boulevard Transit Plaza (El Cajon Bl.) *	Ⓓ Balboa Av. & Ruffin Rd.	Ⓔ Clairemont Mesa Bl. & Shawline St.	Ⓕ UTC Transit Center **ARRIVE**
5:04a	5:11a	5:13a	5:21a	5:31a	5:42a
5:34	5:42	5:44	5:52	6:02	6:15
5:49	5:57	5:59	6:07	6:17	6:30
6:04	6:13	6:15	6:24	6:35	6:50
6:19	6:29	6:31	6:41	6:52	7:09
6:34	6:45	6:47	6:58	7:09	7:26
7:04	7:15	7:17	7:30	7:42	7:59

University City ➡ Kearny Mesa ➡ City Heights ➡ Euclid Transit Center

Ⓕ UTC Transit Center **DEPART**	Ⓔ Clairemont Mesa Bl. & Shawline St.	Ⓓ Balboa Av. & Ruffin Rd.	Ⓒ The Boulevard Transit Plaza (El Cajon Bl.) *	Ⓑ City Heights Transit Plaza (University Av.) *	Ⓐ Euclid Ave. Transit Center **ARRIVE**
3:25p	**3:42p**	**3:56p**	**4:06p**	**4:08p**	**4:21p**
3:55	**4:14**	**4:30**	**4:41**	**4:43**	**4:56**
4:25	**4:44**	**5:00**	**5:11**	**5:13**	**5:26**
5:00	**5:19**	**5:35**	**5:46**	**5:48**	**6:01**
5:35	**5:54**	**6:09**	**6:20**	**6:22**	**6:34**
6:05	**6:23**	**6:37**	**6:47**	**6:49**	**7:01**

* Board Route 60 at off-ramp bus stops up at street level. / *Tome la Ruta 60 en las paradas de autobús ubicadas en las rampas de salida a nivel de calle.*

Route 60 does not operate on weekends or on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas
La ruta 60 no ofrece servicio durante el fin de semana ó durante los siguientes días festivos y feriados observados



compass card

S/D/M and Youth Compass Card

All riders using reduced fares must comply with one of the following options:

Option 1 *(Recommended by MTS)* MTS offers a picture ID on a Compass Card to eliminate the need to carry multiple identifications for proof of eligibility.

Option 2

Riders using a standard S/D/M or Youth Compass Card or a one-way ticket must carry supporting identification to prove eligibility.

*For additional benefits of **Option 1** and or list of valid forms of ID for **Option 2** go to: **sdmts.com/reduced-fares***

ONE-WAY FARES / Tarifas Sencillas

Exact fare, please / Favor de pagar la cantidad exacta	
Adult / Adulto	**$2.50**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$1.25**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$2.50**

DAY PASS (Regional) / Pase diario (Regional)

Adult / Adulto	**$6.00**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$3.00**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$3.00**

MONTHLY PASSES / Pases mensual

Adult / Adulto	**$72.00**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$23.00**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$23.00**

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
*Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.

COMPASS CARDS / Tarjeta Compass
There is a $2 charge for Compass Cards, which can be reloaded for future use.
Hay un costo de $2 por la tarjeta Compass Card, la cual puede ser recargada para usos futuros.

COMPASS CLOUD
Download the free Compass Cloud app on your Apple or Android phone.
Descargue la aplicación gratis Compass Cloud en su teléfono Apple o Android.

Visit sdmts.com/fares for more info. Visite sdmts.com/fares para más información.

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 557-4555**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit **sdmts.com**.
*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a **sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JANUARY 26, 2020

201/202 UTC Transit Center – UC San Diego
via UC San Diego Medical Center or Nobel Dr.

204 UTC East Loop
via Executive Dr. / Judicial Dr. / Nobel Dr.

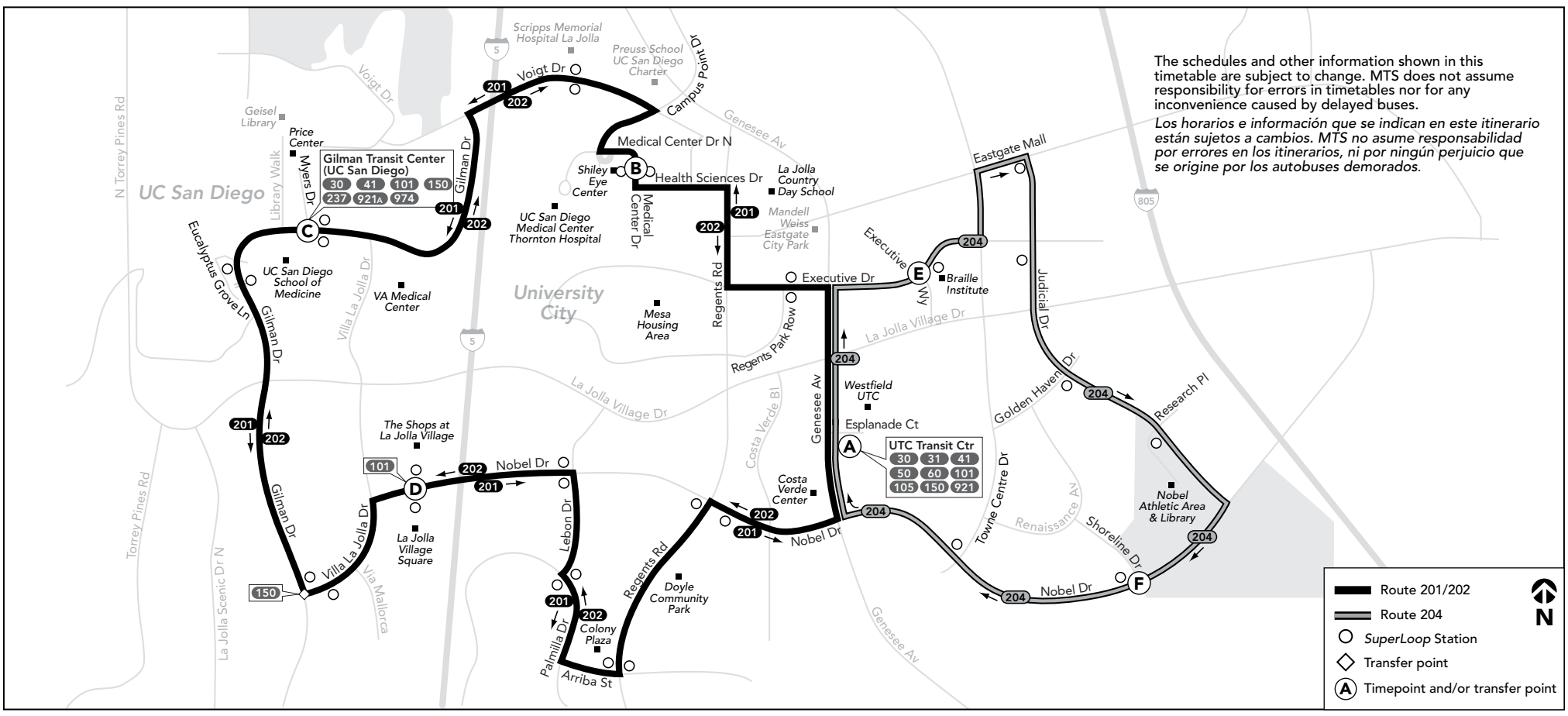
DESTINATIONS
- Colony Plaza
- Costa Verde Center
- La Jolla Village Square/Shops at La Jolla Village
- Nobel Athletic Area & Library
- Scripps Memorial Hospital
- UC San Diego Medical Center (La Jolla)
- Westfield UTC

SuperLoop Rapid

01/20

sdmts.com
Route Alerts, Updated Schedules, Connections & More

MTS



The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 204 – Monday through Friday / *lunes a viernes*

UTC ➡ Executive Dr. ➡ Judicial Dr. ➡ Nobel Dr. ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓔ Executive Dr. & Executive Wy.	Ⓕ Nobel Dr. & Shoreline Dr.	Ⓐ UTC Transit Center **ARRIVE**
5:48a	5:51a	5:57a	6:00a
6:18	6:21	6:27	6:30
6:46	6:49	6:56	7:00
7:16	7:20	7:27	7:31
7:46	7:50	7:57	8:01
8:16	8:20	8:27	8:31
8:46	8:50	8:57	9:01
9:16	9:20	9:27	9:31
9:46	9:50	9:57	10:01
10:16	10:20	10:27	10:31
10:47	10:51	10:58	11:02
11:17	11:21	11:28	11:32
11:47	11:51	11:58	**12:02p**
12:17p	**12:21p**	**12:28p**	**12:32**
12:47	**12:51**	**12:58**	**1:02**
1:17	**1:21**	**1:28**	**1:32**
1:47	**1:51**	**1:58**	**2:02**
2:17	**2:21**	**2:28**	**2:32**
2:47	**2:51**	**2:58**	**3:02**
3:17	**3:21**	**3:28**	**3:32**
3:47	**3:51**	**3:58**	**4:02**
4:17	**4:21**	**4:28**	**4:32**
4:47	**4:51**	**4:58**	**5:02**
5:17	**5:21**	**5:28**	**5:32**
5:47	**5:51**	**5:58**	**6:02**
6:17	**6:21**	**6:28**	**6:32**
6:52	**6:56**	**7:03**	**7:07**
7:23	**7:26**	**7:33**	**7:37**
7:53	**7:56**	**8:03**	**8:07**
8:23	**8:26**	**8:33**	**8:37**
8:55	**8:58**	**9:04**	**9:07**
9:25	**9:28**	**9:34**	**9:37**
9:55	**9:58**	**10:04**	**10:07**

Route 204 does not operate on weekends or on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

La ruta 204 no ofrece servicio durante el fin de semana o durante los siguientes días festivos y feriados observados

Alternative formats available upon request.
Please call: (619) 557-4555

Formato alternativo disponible al preguntar.
Favor de llamar: (619) 557-4555

Route 201 – Monday through Friday / *lunes a viernes*

UTC ➡ UCSD Med. Ctr. ➡ UCSD ➡ La Jolla Village Square ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓑ Medical Center Dr. & Health Sciences Dr.	Ⓒ Gilman Transit Center (UC San Diego)	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓐ UTC Transit Center **ARRIVE**
5:50a	5:56a	6:02a	6:08a	6:16a
6:05	6:11	6:17	6:23	6:31
6:20	6:26	6:32	6:38	6:46
6:35	6:41	6:48	6:55	7:04
6:50	6:56	7:03	7:10	7:19
7:05	7:11	7:18	7:25	7:34
7:20	7:27	7:35	7:42	7:52
7:35	7:42	7:50	7:57	8:07
7:45	7:52	8:00	8:07	8:17
7:55	8:02	8:10	8:17	8:27
8:05	8:12	8:20	8:27	8:37
8:15	8:22	8:30	8:37	8:47
8:25	8:32	8:40	8:47	8:57
8:35	8:42	8:50	8:57	9:07
8:45	8:52	9:00	9:07	9:17
8:55	9:02	9:10	9:17	9:27
9:05	9:12	9:20	9:27	9:37
9:15	9:22	9:30	9:37	9:47
9:25	9:32	9:40	9:47	9:57
9:35	9:42	9:50	9:58	10:09
9:45	9:52	10:00	10:08	10:19
9:55	10:02	10:10	10:18	10:29
10:05	10:12	10:20	10:28	10:39
10:15	10:22	10:30	10:38	10:49
10:25	10:32	10:40	10:48	10:59
10:35	10:42	10:50	10:58	11:09
10:45	10:52	11:00	11:08	11:19
10:55	11:02	11:10	11:18	11:29
11:05	11:12	11:20	11:28	11:39
11:15	11:22	11:30	11:38	11:49
11:25	11:32	11:40	11:48	11:59
11:35	11:43	11:51	11:59	**12:10p**
11:45	11:53	**12:01p**	**12:09p**	**12:20**
11:55	**12:03p**	**12:11**	**12:19**	**12:30**
12:05p	**12:13**	**12:21**	**12:29**	**12:40**
12:15	**12:23**	**12:31**	**12:39**	**12:50**
12:25	**12:33**	**12:41**	**12:49**	**1:00**
12:35	**12:43**	**12:51**	**12:59**	**1:10**
12:45	**12:53**	**1:01**	**1:09**	**1:20**
12:55	**1:03**	**1:11**	**1:19**	**1:30**
1:05	**1:13**	**1:21**	**1:29**	**1:40**
1:15	**1:23**	**1:31**	**1:39**	**1:50**
1:25	**1:33**	**1:41**	**1:49**	**2:00**
1:35	**1:43**	**1:51**	**1:59**	**2:10**
1:45	**1:53**	**2:01**	**2:09**	**2:20**
1:55	**2:03**	**2:11**	**2:19**	**2:30**
2:05	**2:13**	**2:21**	**2:29**	**2:40**
2:15	**2:23**	**2:31**	**2:39**	**2:50**
2:25	**2:33**	**2:41**	**2:49**	**3:00**
2:35	**2:43**	**2:51**	**2:59**	**3:10**
2:45	**2:53**	**3:01**	**3:09**	**3:20**
2:55	**3:03**	**3:11**	**3:19**	**3:30**
3:05	**3:13**	**3:21**	**3:29**	**3:40**
3:15	**3:23**	**3:31**	**3:39**	**3:50**
3:25	**3:33**	**3:41**	**3:49**	**4:00**
3:35	**3:43**	**3:51**	**3:59**	**4:10**
3:45	**3:53**	**4:01**	**4:09**	**4:20**
3:55	**4:03**	**4:11**	**4:19**	**4:30**
4:05	**4:13**	**4:21**	**4:29**	**4:40**
4:15	**4:23**	**4:31**	**4:39**	**4:50**
4:25	**4:33**	**4:41**	**4:49**	**5:00**
4:35	**4:43**	**4:51**	**4:59**	**5:10**
4:45	**4:53**	**5:01**	**5:09**	**5:20**
4:55	**5:03**	**5:11**	**5:19**	**5:30**
5:05	**5:13**	**5:21**	**5:29**	**5:40**
5:15	**5:23**	**5:31**	**5:39**	**5:50**
5:25	**5:33**	**5:41**	**5:49**	**6:00**
5:35	**5:43**	**5:51**	**5:59**	**6:10**
5:45	**5:53**	**6:01**	**6:09**	**6:20**
5:55	**6:03**	**6:11**	**6:19**	**6:30**
6:05	**6:13**	**6:21**	**6:29**	**6:40**
6:15	**6:23**	**6:31**	**6:39**	**6:50**
6:25	**6:33**	**6:41**	**6:49**	**7:00**
6:35	**6:43**	**6:51**	**6:59**	**7:10**
6:50	**6:57**	**7:04**	**7:12**	**7:23**
7:05	**7:12**	**7:19**	**7:27**	**7:38**
7:20	**7:27**	**7:34**	**7:42**	**7:53**
7:35	**7:42**	**7:49**	**7:57**	**8:08**
7:50	**7:57**	**8:04**	**8:12**	**8:23**
8:05	**8:11**	**8:18**	**8:26**	**8:36**
8:20	**8:26**	**8:33**	**8:41**	**8:51**
8:35	**8:41**	**8:48**	**8:56**	**9:06**
8:50	**8:56**	**9:03**	**9:11**	**9:21**
9:05	**9:11**	**9:18**	**9:26**	**9:36**
9:20	**9:26**	**9:33**	**9:41**	**9:51**
9:35	**9:41**	**9:48**	**9:56**	**10:06**
9:50	**9:56**	**10:03**	**10:11**	**10:21**
10:05	**10:11**	**10:18**	**10:25**	**10:34**
10:20	**10:26**	**10:33**	**10:40**	**10:49**
10:35	**10:41**	**10:48**	**10:55**	**11:04**
10:50	**10:56**	**11:03**	**11:10**	**11:19**
11:05	**11:11**	**11:18**	**11:25**	**11:34**
11:20	**11:26**	**11:33**	**11:40**	**11:49**
11:35	**11:41**	**11:48**	**11:55**	12:04a
11:50	**11:56**	12:03a	12:10a	12:19

Route 201 – Saturday and Sunday / *sábado y domingo*

UTC ➡ UCSD Med. Ctr. ➡ UCSD ➡ La Jolla Village Square ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓑ Medical Center Dr. & Health Sciences Dr.	Ⓒ Gilman Transit Center (UC San Diego)	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓐ UTC Transit Center **ARRIVE**
5:50a	5:55a	6:00a	6:05a	6:13a
6:05	6:10	6:15	6:20	6:28
6:20	6:25	6:30	6:35	6:43
6:35	6:40	6:45	6:51	7:00
6:50	6:55	7:00	7:06	7:15
7:05	7:10	7:15	7:21	7:30
7:20	7:25	7:30	7:36	7:45
7:35	7:40	7:45	7:51	8:00
7:50	7:55	8:00	8:06	8:15
8:05	8:10	8:15	8:21	8:30
8:20	8:25	8:30	8:36	8:45
8:35	8:40	8:45	8:51	9:00
8:50	8:55	9:01	9:08	9:18
9:05	9:10	9:16	9:23	9:33
9:20	9:25	9:31	9:38	9:48
9:35	9:41	9:47	9:55	10:06
9:50	9:56	10:02	10:10	10:21
10:05	10:11	10:17	10:25	10:36
10:20	10:26	10:32	10:40	10:51
10:35	10:41	10:47	10:55	11:06
10:50	10:56	11:02	11:10	11:21
11:05	11:11	11:17	11:25	11:36
11:20	11:26	11:32	11:40	11:51
11:35	11:41	11:47	11:55	**12:06p**
11:50	11:56	**12:02p**	**12:10p**	**12:21**
12:05p	**12:11p**	**12:17**	**12:25**	**12:36**
12:20	**12:26**	**12:32**	**12:40**	**12:51**
12:35	**12:41**	**12:47**	**12:55**	**1:06**
12:50	**12:56**	**1:02**	**1:10**	**1:21**
1:05	**1:11**	**1:17**	**1:25**	**1:36**
1:20	**1:26**	**1:32**	**1:40**	**1:51**
1:35	**1:41**	**1:47**	**1:55**	**2:06**
1:50	**1:56**	**2:02**	**2:10**	**2:21**
2:05	**2:11**	**2:17**	**2:25**	**2:36**
2:20	**2:26**	**2:32**	**2:40**	**2:51**
2:35	**2:41**	**2:47**	**2:55**	**3:06**
2:50	**2:56**	**3:02**	**3:10**	**3:21**
3:05	**3:11**	**3:17**	**3:25**	**3:36**
3:20	**3:26**	**3:32**	**3:40**	**3:51**
3:35	**3:41**	**3:47**	**3:55**	**4:06**
3:50	**3:56**	**4:02**	**4:10**	**4:21**
4:05	**4:11**	**4:17**	**4:25**	**4:36**
4:20	**4:26**	**4:32**	**4:40**	**4:51**
4:35	**4:41**	**4:47**	**4:55**	**5:06**
4:50	**4:56**	**5:02**	**5:10**	**5:21**
5:05	**5:11**	**5:17**	**5:25**	**5:36**
5:20	**5:26**	**5:32**	**5:40**	**5:51**
5:35	**5:41**	**5:47**	**5:55**	**6:06**
5:50	**5:56**	**6:02**	**6:10**	**6:21**
6:05	**6:11**	**6:17**	**6:25**	**6:36**
6:20	**6:26**	**6:32**	**6:40**	**6:51**
6:35	**6:41**	**6:47**	**6:55**	**7:06**
6:50	**6:55**	**7:01**	**7:09**	**7:19**
7:05	**7:10**	**7:16**	**7:24**	**7:34**
7:20	**7:25**	**7:31**	**7:39**	**7:49**
7:35	**7:40**	**7:46**	**7:54**	**8:04**
7:50	**7:55**	**8:01**	**8:09**	**8:19**
8:05	**8:10**	**8:16**	**8:24**	**8:34**
8:20	**8:25**	**8:31**	**8:39**	**8:49**
8:35	**8:40**	**8:46**	**8:54**	**9:04**
8:50	**8:55**	**9:01**	**9:08**	**9:17**
9:05	**9:10**	**9:16**	**9:23**	**9:32**
9:20	**9:25**	**9:31**	**9:38**	**9:47**
9:35	**9:40**	**9:46**	**9:53**	**10:02**
9:50	**9:55**	**10:01**	**10:08**	**10:17**
10:05	**10:10**	**10:16**	**10:23**	**10:32**

Route 202 – Monday through Friday / *lunes a viernes*

UTC ➡ La Jolla Village Square ➡ UCSD ➡ UCSD Med. Ctr. ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓒ Gilman Transit Center (UC San Diego)	Ⓑ Medical Center Dr. & Health Sciences Dr.	Ⓐ UTC Transit Center **ARRIVE**
5:45a	5:54a	6:00a	6:04a	6:11a
6:00	6:09	6:15	6:19	6:26
6:15	6:24	6:30	6:34	6:41
6:30	6:40	6:47	6:51	6:59
6:45	6:55	7:02	7:06	7:14
7:00	7:11	7:19	7:23	7:32
7:10	7:21	7:29	7:33	7:42
7:20	7:31	7:39	7:43	7:52
7:30	7:41	7:49	7:53	8:02
7:40	7:51	7:59	8:03	8:12
7:50	8:01	8:09	8:13	8:22
8:00	8:11	8:19	8:23	8:32
8:10	8:21	8:29	8:33	8:42
8:20	8:31	8:39	8:43	8:52
8:30	8:41	8:49	8:53	9:02
8:40	8:51	8:59	9:03	9:12
8:50	9:01	9:09	9:13	9:22
9:00	9:11	9:19	9:24	9:34
9:10	9:21	9:29	9:34	9:44
9:20	9:31	9:39	9:44	9:54
9:30	9:41	9:49	9:54	10:04
9:40	9:51	9:59	10:04	10:14
9:50	10:01	10:09	10:14	10:24
10:00	10:11	10:19	10:24	10:34
10:10	10:21	10:29	10:34	10:44
10:20	10:31	10:39	10:44	10:54
10:30	10:41	10:49	10:54	11:04
10:40	10:51	10:59	11:04	11:14
10:50	11:01	11:09	11:14	11:24
11:00	11:11	11:19	11:24	11:34
11:10	11:21	11:29	11:34	11:44
11:20	11:31	11:39	11:44	11:54
11:30	11:41	11:49	11:54	**12:04p**
11:40	11:51	11:59	**12:04p**	**12:14**
11:50	**12:01p**	**12:09p**	**12:14**	**12:24**
12:00p	**12:11**	**12:19**	**12:24**	**12:34**
12:10	**12:21**	**12:29**	**12:34**	**12:44**
12:20	**12:31**	**12:39**	**12:44**	**12:54**
12:30	**12:41**	**12:49**	**12:54**	**1:04**
12:40	**12:51**	**12:59**	**1:04**	**1:14**
12:50	**1:01**	**1:09**	**1:14**	**1:24**
1:00	**1:11**	**1:19**	**1:24**	**1:34**
1:10	**1:21**	**1:29**	**1:34**	**1:44**
1:20	**1:31**	**1:39**	**1:44**	**1:54**
1:30	**1:41**	**1:49**	**1:54**	**2:04**
1:40	**1:51**	**1:59**	**2:04**	**2:14**
1:50	**2:01**	**2:09**	**2:14**	**2:24**
2:00	**2:11**	**2:19**	**2:24**	**2:34**
2:10	**2:21**	**2:29**	**2:34**	**2:44**
2:20	**2:31**	**2:39**	**2:44**	**2:54**
2:30	**2:41**	**2:49**	**2:54**	**3:04**
2:40	**2:51**	**2:59**	**3:04**	**3:14**
2:50	**3:01**	**3:09**	**3:14**	**3:24**
3:00	**3:11**	**3:19**	**3:24**	**3:34**
3:10	**3:21**	**3:29**	**3:34**	**3:44**
3:20	**3:31**	**3:39**	**3:44**	**3:54**
3:30	**3:41**	**3:49**	**3:54**	**4:04**
3:40	**3:51**	**3:59**	**4:04**	**4:14**
3:50	**4:01**	**4:09**	**4:14**	**4:24**
4:00	**4:11**	**4:19**	**4:24**	**4:34**
4:10	**4:21**	**4:29**	**4:34**	**4:44**
4:20	**4:31**	**4:39**	**4:44**	**4:54**
4:30	**4:41**	**4:49**	**4:54**	**5:04**
4:40	**4:51**	**4:59**	**5:04**	**5:14**
4:50	**5:01**	**5:09**	**5:14**	**5:24**
5:00	**5:11**	**5:19**	**5:24**	**5:34**
5:10	**5:21**	**5:29**	**5:34**	**5:44**
5:20	**5:31**	**5:39**	**5:44**	**5:54**
5:30	**5:41**	**5:49**	**5:54**	**6:04**
5:40	**5:51**	**5:59**	**6:04**	**6:14**
5:50	**6:01**	**6:09**	**6:13**	**6:22**
6:00	**6:11**	**6:19**	**6:23**	**6:32**
6:10	**6:21**	**6:29**	**6:33**	**6:42**
6:20	**6:31**	**6:39**	**6:43**	**6:52**
6:30	**6:41**	**6:49**	**6:53**	**7:02**
6:45	**6:56**	**7:04**	**7:08**	**7:17**
7:00	**7:10**	**7:17**	**7:21**	**7:29**
7:15	**7:25**	**7:32**	**7:36**	**7:44**
7:30	**7:40**	**7:47**	**7:51**	**7:59**
7:45	**7:55**	**8:02**	**8:06**	**8:14**
8:00	**8:10**	**8:17**	**8:21**	**8:29**
8:15	**8:25**	**8:32**	**8:36**	**8:44**
8:28	**8:38**	**8:45**	**8:49**	**8:57**
8:43	**8:53**	**9:00**	**9:04**	**9:12**
8:58	**9:08**	**9:15**	**9:19**	**9:27**
9:13	**9:23**	**9:30**	**9:34**	**9:42**
9:28	**9:37**	**9:44**	**9:48**	**9:55**
9:43	**9:52**	**9:59**	**10:03**	**10:10**
10:00	**10:09**	**10:16**	**10:20**	**10:27**

Route 202 – Saturday and Sunday / *sábado y domingo*

UTC ➡ La Jolla Village Square ➡ UCSD ➡ UCSD Med. Ctr. ➡ UTC

Ⓐ UTC Transit Center **DEPART**	Ⓓ Nobel Dr. & La Jolla Village Square	Ⓒ Gilman Transit Center (UC San Diego)	Ⓑ Medical Center Dr. & Health Sciences Dr.	Ⓐ UTC Transit Center **ARRIVE**
5:45a	5:54a	5:59a	6:03a	6:08a
6:00	6:09	6:14	6:18	6:23
6:15	6:24	6:29	6:33	6:38
6:30	6:39	6:44	6:48	6:53
6:45	6:54	6:59	7:03	7:08
7:00	7:09	7:14	7:18	7:23
7:15	7:24	7:30	7:34	7:40
7:30	7:39	7:45	7:49	7:55
7:45	7:54	8:00	8:04	8:10
8:00	8:09	8:15	8:19	8:25
8:15	8:24	8:30	8:34	8:40
8:30	8:39	8:45	8:49	8:55
8:45	8:54	9:00	9:04	9:10
9:00	9:09	9:15	9:19	9:25
9:15	9:25	9:31	9:35	9:42
9:30	9:40	9:46	9:50	9:57
9:45	9:55	10:01	10:05	10:12
10:00	10:10	10:16	10:20	10:27
10:15	10:25	10:31	10:35	10:42
10:30	10:40	10:46	10:50	10:57
10:45	10:55	11:02	11:06	11:14
11:00	11:10	11:17	11:21	11:29
11:15	11:25	11:32	11:36	11:44
11:30	11:40	11:47	11:51	11:59
11:45	11:55	**12:02p**	**12:06p**	**12:14p**
12:00p	**12:10p**	**12:17**	**12:21**	**12:29**
12:15	**12:25**	**12:32**	**12:36**	**12:44**
12:30	**12:40**	**12:47**	**12:51**	**12:59**
12:45	**12:55**	**1:02**	**1:06**	**1:14**
1:00	**1:10**	**1:17**	**1:21**	**1:29**
1:15	**1:25**	**1:32**	**1:36**	**1:44**
1:30	**1:40**	**1:47**	**1:51**	**1:59**
1:45	**1:55**	**2:02**	**2:06**	**2:14**
2:00	**2:10**	**2:17**	**2:21**	**2:29**
2:15	**2:25**	**2:32**	**2:36**	**2:44**
2:30	**2:40**	**2:47**	**2:51**	**2:59**
2:45	**2:55**	**3:02**	**3:06**	**3:14**
3:00	**3:10**	**3:17**	**3:21**	**3:29**
3:15	**3:25**	**3:32**	**3:36**	**3:44**
3:30	**3:40**	**3:47**	**3:51**	**3:59**
3:45	**3:55**	**4:02**	**4:06**	**4:14**
4:00	**4:10**	**4:17**	**4:21**	**4:29**
4:15	**4:25**	**4:32**	**4:36**	**4:44**
4:30	**4:40**	**4:47**	**4:51**	**4:59**
4:45	**4:55**	**5:02**	**5:06**	**5:14**
5:00	**5:10**	**5:17**	**5:21**	**5:29**
5:15	**5:25**	**5:32**	**5:36**	**5:44**
5:30	**5:40**	**5:47**	**5:51**	**5:59**
5:45	**5:55**	**6:02**	**6:06**	**6:14**
6:00	**6:10**	**6:17**	**6:21**	**6:29**
6:15	**6:25**	**6:32**	**6:36**	**6:44**
6:30	**6:40**	**6:47**	**6:51**	**6:59**
6:45	**6:55**	**7:01**	**7:05**	**7:12**
7:00	**7:10**	**7:16**	**7:20**	**7:27**
7:15	**7:25**	**7:31**	**7:35**	**7:42**
7:30	**7:40**	**7:46**	**7:50**	**7:57**
7:45	**7:55**	**8:01**	**8:05**	**8:12**
8:00	**8:10**	**8:16**	**8:20**	**8:26**
8:15	**8:25**	**8:31**	**8:35**	**8:41**
8:30	**8:40**	**8:46**	**8:50**	**8:56**
8:45	**8:55**	**9:01**	**9:05**	**9:11**
9:00	**9:10**	**9:16**	**9:20**	**9:26**
9:15	**9:25**	**9:31**	**9:35**	**9:41**
9:30	**9:39**	**9:45**	**9:49**	**9:54**
9:45	**9:54**	**10:00**	**10:04**	**10:09**
10:00	**10:09**	**10:15**	**10:19**	**10:24**

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays
Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados

>>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

ONE-WAY FARES / Tarifas Sencillas

Exact fare, please / Favor de pagar la cantidad exacta	
Adult / Adulto	**$2.50**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$1.25**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$2.50**

DAY PASS (Regional) / Pase diario (Regional)

Adult / Adulto	**$6.00**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$3.00**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$3.00**

MONTHLY PASSES / Pases mensual

Adult / Adulto	**$72.00**
Senior/Disabled/Medicare* Personas Mayores/con Discapacidades/Medicare*	**$23.00**
Youth (ages 6-18)* Jóvenes (edades 6-18)*	**$23.00**

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
*Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.

COMPASS CARDS / Tarjeta Compass
There is a $2 charge for Compass Cards, which can be reloaded for future use.
Hay un costo de $2 por la tarjeta Compass Card, la cual puede ser recargada para usos futuros.

COMPASS CLOUD
Download the free Compass Cloud app on your Apple or Android phone.
Descargue la aplicación gratis Compass Cloud en su teléfono Apple o Android.

Visit sdmts.com/fares for more info. Visite sdmts.com/fares para más información.

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 557-4555**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit **sdmts.com**.
*Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a **sdmts.com**.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JANUARY 26, 2020

31
UTC – Mira Mesa
via Miramar Rd.

921
UTC – Mira Mesa
via Mira Mesa Bl.

DESTINATIONS
- MCAS Miramar - North Gate
- Miramar College
- Miramar College Transit Station
- Mira Mesa Marketcenter
- Westfield UTC

ROUTE 921
- Miramar College
- Miramar College Transit Station
- Mira Mesa High School
- Mira Mesa Mall
- Mira Mesa Marketcenter
- Sorrento Mesa
- VA Medical Center (921A)
- Westfield UTC
- UC San Diego (921A)

01/20

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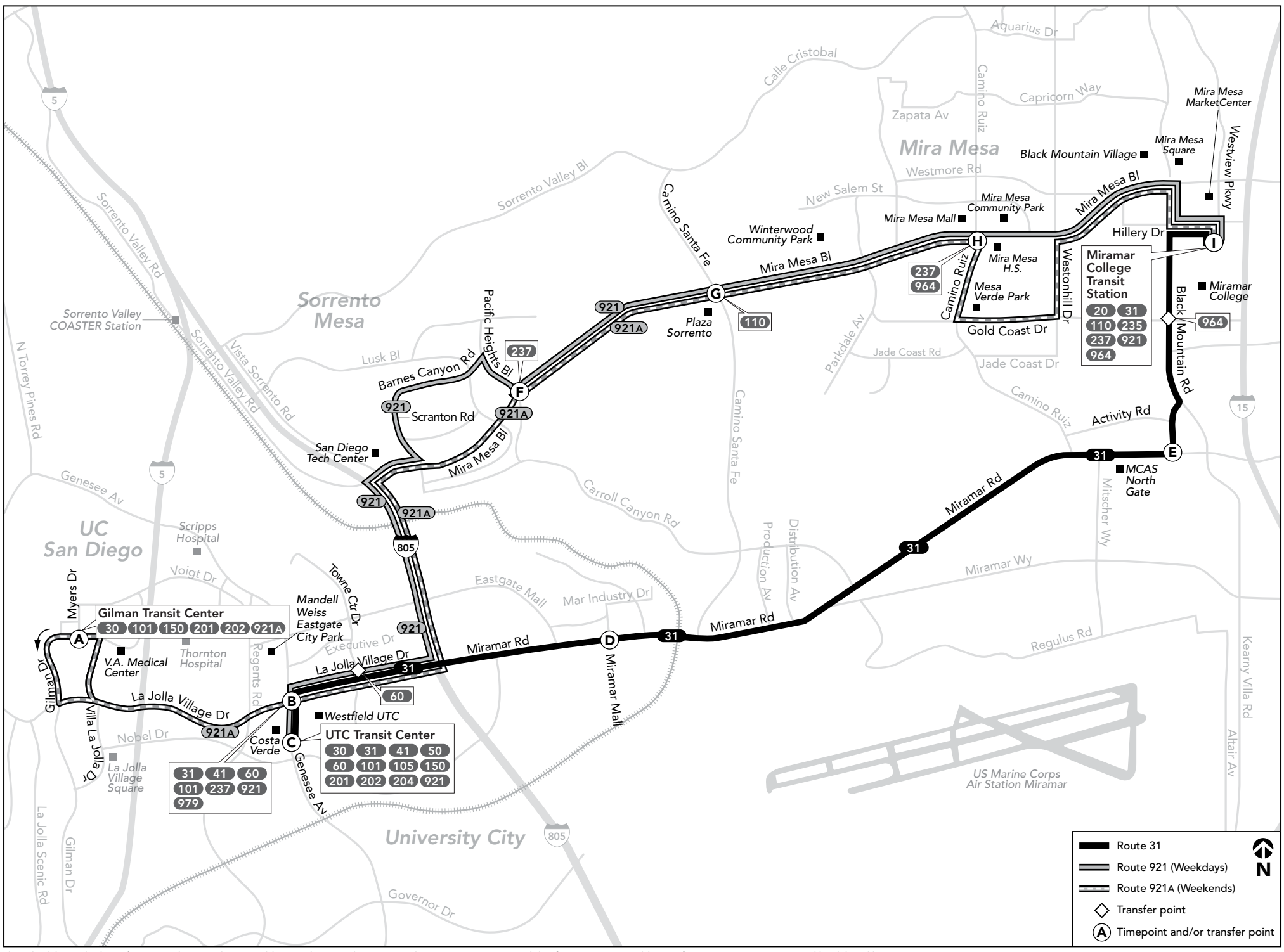
Alternative formats available upon request. Please call: (619) 557-4555 / ***Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555***



The schedules and other information shown in this timetable are subject to change. MTS does not assume responsibility for errors in timetables nor for any inconvenience caused by delayed buses.
Los horarios e información que se indican en este itinerario están sujetos a cambios. MTS no asume responsabilidad por errores en los itinerarios, ni por ningún perjuicio que se origine por los autobuses demorados.

Route 31 – Monday through Friday / *lunes a viernes*

University City ➡ Miramar ➡ Mira Mesa

Ⓒ UTC Transit Center **DEPART**	Ⓓ Miramar Rd. & Miramar Mall	Ⓔ Black Mountain Rd. & Miramar Rd.	Ⓘ Miramar College Transit Station **ARRIVE**
5:55a	6:01a	6:11a	6:18a
6:28	6:35	6:46	6:53
6:58	7:05	7:16	7:23
7:27	7:35	7:47	7:55
7:57	8:05	8:17	8:25
8:28	8:36	8:47	8:55
2:27p	**2:35p**	**2:46p**	**2:54p**
3:03	**3:10**	**3:23**	**3:31**
3:33	**3:40**	**3:53**	**4:01**
4:01	**4:09**	**4:23**	**4:32**
4:31	**4:39**	**4:53**	**5:02**
5:03	**5:11**	**5:25**	**5:34**
5:33	**5:41**	**5:55**	**6:04**
6:03	**6:10**	**6:23**	**6:31**
6:33	**6:40**	**6:51**	**6:58**

Mira Mesa ➡ Miramar ➡ University City

Ⓘ Miramar College Transit Station **DEPART**	Ⓔ Miramar Rd. & Black Mountain Rd.	Ⓓ Miramar Rd. & Miramar Mall	Ⓒ UTC Transit Center **ARRIVE**
5:39a	5:46a	5:59a	6:07a
6:09	6:16	6:29	6:37
6:39	6:47	7:00	7:09
7:07	7:16	7:29	7:39
7:38	7:47	8:00	8:10
8:08	8:17	8:30	8:40
8:38	8:47	9:00	9:10
9:09	9:17	9:29	9:38
2:43p	**2:50p**	**3:02p**	**3:12p**
3:11	**3:18**	**3:30**	**3:40**
3:41	**3:48**	**4:00**	**4:10**
4:11	**4:18**	**4:30**	**4:40**
4:41	**4:48**	**5:01**	**5:12**
5:11	**5:18**	**5:31**	**5:42**
5:49	**5:56**	**6:07**	**6:16**

Route 31 does not operate on weekends or on the following holidays and observed holidays >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas
La ruta 31 no ofrece servicio durante el fin de semana o durante los siguientes días festivos y feriados observados

Route 921 – Monday through Friday / *lunes a viernes*

University City ➡ Sorrento Valley ➡ Mira Mesa

Ⓒ UTC Transit Center **DEPART**	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓘ Miramar College Transit Station **ARRIVE**
6:17a	6:33a	6:38a	6:44a	6:53a
6:41	6:57	7:02	7:08	7:17
7:11	7:27	7:32	7:38	7:47
7:35	7:53	7:59	8:06	8:15
8:05	8:23	8:29	8:36	8:45
8:35	8:53	8:59	9:06	9:15
9:08	9:24	9:29	9:36	9:45
9:38	9:54	9:59	10:06	10:15
10:08	10:24	10:29	10:36	10:45
10:38	10:54	10:59	11:06	11:15
11:08	11:24	11:29	11:36	11:45
11:38	11:54	11:59	**12:06p**	**12:15p**
12:08p	**12:24p**	**12:29p**	**12:36**	**12:45**
12:38	**12:54**	**12:59**	**1:06**	**1:15**
1:06	**1:23**	**1:28**	**1:35**	**1:45**
1:36	**1:53**	**1:58**	**2:05**	**2:15**
2:11	**2:28**	**2:33**	**2:40**	**2:50**
2:41	**2:58**	**3:03**	**3:10**	**3:20**
3:11	**3:28**	**3:33**	**3:40**	**3:50**
3:39	**3:56**	**4:02**	**4:09**	**4:20**
4:06	**4:24**	**4:30**	**4:38**	**4:50**
4:36	**4:54**	**5:00**	**5:08**	**5:20**
5:06	**5:24**	**5:30**	**5:38**	**5:50**
5:31	**5:49**	**5:55**	**6:03**	**6:15**
6:04	**6:21**	**6:26**	**6:34**	**6:45**
6:36	**6:53**	**6:58**	**7:05**	**7:15**
7:07	**7:24**	**7:29**	**7:36**	**7:46**

Mira Mesa ➡ Sorrento Valley ➡ University City

Ⓘ Miramar College Transit Station **DEPART**	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓕ Pacific Heights Bl. & Mira Mesa Bl.	Ⓒ UTC Transit Center **ARRIVE**
5:35a	5:44a	5:50a	5:55a	6:12a
6:09	6:18	6:24	6:29	6:47
6:39	6:48	6:54	6:59	7:16
7:09	7:19	7:26	7:31	7:50
7:39	7:49	7:56	8:01	8:20
8:09	8:19	8:26	8:31	8:50
8:39	8:49	8:56	9:01	9:20
9:09	9:19	9:26	9:31	9:50
9:44	9:53	9:59	10:04	10:22
10:14	10:23	10:29	10:34	10:52
10:44	10:53	10:59	11:04	11:22
11:14	11:23	11:29	11:34	11:52
11:44	11:53	11:59	**12:04p**	**12:22p**
12:14p	**12:23p**	**12:29p**	**12:34**	**12:52**
12:44	**12:53**	**12:59**	**1:04**	**1:22**
1:14	**1:23**	**1:29**	**1:34**	**1:52**
1:44	**1:53**	**1:59**	**2:04**	**2:22**
2:14	**2:23**	**2:29**	**2:34**	**2:54**
2:39	**2:48**	**2:54**	**2:59**	**3:21**
3:06	**3:15**	**3:21**	**3:26**	**3:48**
3:36	**3:45**	**3:51**	**3:56**	**4:18**
4:07	**4:16**	**4:22**	**4:27**	**4:49**
4:37	**4:46**	**4:52**	**4:57**	**5:19**
5:07	**5:16**	**5:22**	**5:27**	**5:49**
5:37	**5:46**	**5:52**	**5:57**	**6:19**
6:07	**6:16**	**6:22**	**6:27**	**6:46**
6:35	**6:44**	**6:50**	**6:55**	**7:14**

Route 921A – Saturday and Sunday / *sábado y domingo*

University City ➡ Sorrento Valley ➡ Mira Mesa

	Ⓐ Gilman Transit Center (UCSD) **DEPART**	Ⓑ La Jolla Village Dr. & Genesee Av.	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓗ Camino Ruiz & Mira Mesa Bl.	Ⓘ Miramar College Transit Station **ARRIVE**
A	7:19a	7:29a	7:37a	7:40a	7:45a	7:57a
A	8:19	8:29	8:37	8:40	8:45	8:57
A	9:19	9:30	9:39	9:42	9:48	10:01
A	10:19	10:30	10:39	10:42	10:48	11:01
A	11:19	11:30	11:39	11:42	11:48	**12:01p**
A	**12:19p**	**12:30p**	**12:39p**	**12:42p**	**12:48p**	**1:01**
A	**1:19**	**1:30**	**1:39**	**1:42**	**1:48**	**2:01**
A	**2:19**	**2:30**	**2:39**	**2:42**	**2:48**	**3:01**
A	**3:19**	**3:30**	**3:39**	**3:42**	**3:48**	**4:01**
A	**4:19**	**4:30**	**4:39**	**4:42**	**4:48**	**5:01**
A	**5:18**	**5:29**	**5:38**	**5:41**	**5:47**	**6:00**
A	**6:18**	**6:29**	**6:38**	**6:41**	**6:47**	**7:00**
A	**7:22**	**7:32**	**7:40**	**7:43**	**7:48**	**8:00**

Mira Mesa ➡ Sorrento Valley ➡ University City

	Ⓘ Miramar College Transit Station **DEPART**	Ⓗ Mira Mesa Bl. & Camino Ruiz	Ⓖ Mira Mesa Bl. & Camino Santa Fe	Ⓕ Mira Mesa Bl. & Pacific Heights Bl.	Ⓑ La Jolla Village Dr. & Genesee Av.	Ⓐ Gilman Transit Center (UCSD) **ARRIVE**
A	7:27a	7:39a	7:44a	7:47a	7:55a	8:04a
A	8:27	8:39	8:44	8:47	8:55	9:04
A	9:28	9:42	9:47	9:50	9:59	10:09
A	10:28	10:42	10:47	10:50	10:59	11:09
A	11:28	11:42	11:47	11:50	11:59	**12:09p**
A	**12:28p**	**12:42p**	**12:47p**	**12:50p**	**12:59p**	**1:09**
A	**1:28**	**1:42**	**1:47**	**1:50**	**1:59**	**2:09**
A	**2:28**	**2:42**	**2:47**	**2:50**	**2:59**	**3:09**
A	**3:28**	**3:42**	**3:47**	**3:50**	**3:59**	**4:09**
A	**4:27**	**4:41**	**4:46**	**4:49**	**4:58**	**5:08**
A	**5:27**	**5:41**	**5:46**	**5:49**	**5:58**	**6:08**
A	**6:27**	**6:41**	**6:46**	**6:49**	**6:58**	**7:08**

A = Saturday/Sunday trips have an alternate routing in Mira Mesa & Sorrento Mesa. See map. / *Viajes de sábado/domingo tienen ruta alternativa en Mira Mesa y Sorrento Mesa. Vea el mapa.*

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays
Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados >>> New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas

EASY FARES!

COMPASS CLOUD

Free mobile ticketing app

Day Passes; 30-day Passes
Buy for your entire group on one phone.
Your phone is your ticket.

MTS | CHANGING THE WAY SAN DIEGO MOVES

COMPASS CASH

Load money on your Compass Card.

Great for One-Ways.
Follow prompts on machine to load value.
Just tap and ride!

Compass Service Center
(619) 595-5636
sdmts.com

CASH FARES / *Tarifas en efectivo*

The Sorrento Valley COASTER Connection is a free service for COASTER passengers! This service is provided as a courtesy by the Metropolitan Transit System and the North County Transit District.

¡El Sorrento Valley COASTER Connection es un servicio gratuito para los pasajeros del COASTER! Este servicio es proveído como cortesía por el Metropolitan Transit System y el North County Transit District.

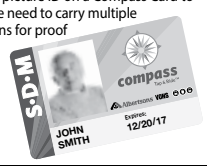
compass card

S/D/M and Youth Compass Card

All riders using reduced fares must comply with one of the following options:

Option 1 *(Recommended by MTS)*

MTS offers a picture ID on a Compass Card to eliminate the need to carry multiple identifications for proof of eligibility.



Option 2

Riders using a standard S/D/M or Youth Compass Card or a one-way ticket must carry supporting identification to prove eligibility.

For additional benefits of ***Option 1*** *and or list of valid forms of ID for* ***Option 2*** *go to:* ***sdmts.com/reduced-fares***

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**511** or/ó **(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / Suggestions *Servicio al cliente / Sugerencias*	**(619) 557-4555**
MTS Security *MTS Seguridad*	**(619) 595-4960**
Lost & Found *Objetos extraviados*	**(619) 557-4555**
Transit Store	**(619) 234-1060** 12th & Imperial Transit Center M–F 8am–5pm
For MTS online trip planning *Planificación de viajes por Internet*	**sdmts.com**

For more information on riding MTS services, pick up a Rider's Guide on a bus or at the Transit Store, or visit **sdmts.com**.

Para obtener más información sobre el uso de los servicios de MTS, recoja un 'Rider's Guide' en un autobús o en la Transit Store, o visita a ***sdmts.com****.*

Thank you for riding MTS! ***¡Gracias por viajar con MTS!***

Effective JANUARY 26, 2020

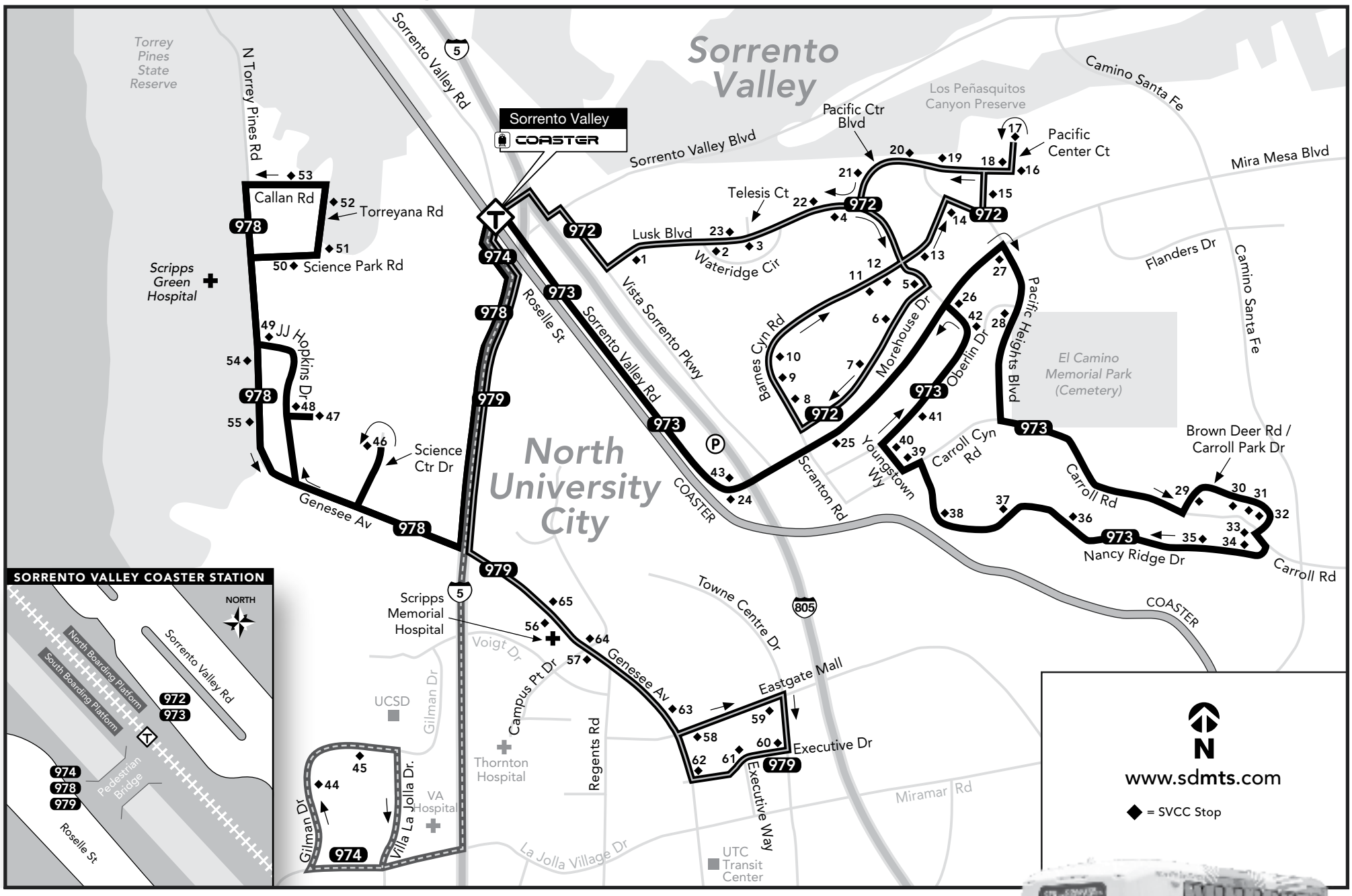
COASTER CONNECTION

Sorrento Valley COASTER Station

972	**Sorrento Mesa**
973	**Carroll Canyon**
974	**UC San Diego**
978	**Torrey Pines**
979	**North University City**

01/20

sdmts.com
Route Alerts, Updated Schedules, Connections & More



COASTER

Oceanside ➡ San Diego

	Morning (AM)				Afternoon/Evening (PM)		
Oceanside	6:02a	6:33a	7:15a	7:40a	**3:32p**	**5:11p**	**5:41p**
Carlsbad Village	6:06	6:37	7:20	7:44	**3:36**	**5:16**	**5:46**
Carlsbad Poinsettia	6:12	6:42	7:26	7:49	**3:43**	**5:21**	**5:51**
Encinitas	6:18	6:50	7:32	7:56	**3:49**	**5:27**	**5:56**
Solana Beach	6:23	6:57	7:39	8:01	**3:54**	**5:34**	**6:01**
Sorrento Valley	6:40	7:08	7:49	8:12	**4:03**	**5:43**	**6:12**
Old Town	7:04	7:30	8:12	8:37	**4:28**	**6:07**	**6:38**
San Diego	7:11	7:38	8:20	8:45	**4:35**	**6:15**	**6:46**

San Diego ➡ Oceanside

	Morning (AM)		Afternoon/Evening (PM)				
San Diego	6:15a	7:39a	**3:36p**	**4:21p**	**4:53p**	**5:38p**	**6:26p**
Old Town	6:23	7:47	**3:44**	**4:29**	**5:01**	**5:46**	**6:34**
Sorrento Valley	6:45	8:10	**4:06**	**4:51**	**5:24**	**6:08**	**6:56**
Solana Beach	6:57	8:23	**4:17**	**5:00**	**5:34**	**6:21**	**7:06**
Encinitas	7:03	8:30	**4:23**	**5:08**	**5:40**	**6:27**	**7:12**
Carlsbad Poinsettia	7:09	8:36	**4:29**	**5:14**	**5:46**	**6:33**	**7:18**
Carlsbad Village	7:15	8:42	**4:35**	**5:21**	**5:52**	**6:39**	**7:24**
Oceanside	7:20	8:47	**4:41**	**5:28**	**5:58**	**6:46**	**7:30**

COASTER schedule shown is effective October 14, 2019 and is subject to change without notice. This may not reflect the most current schedule. Only trips that connect with the Sorrento Valley COASTER Connection are shown. Additional days and times of service can be found at www.gonctd.com.
COASTER calendario que se muestra es a partir del 14 del octubre de 2019 y está sujeto a cambios sin previo aviso. Esto puede no reflejar el calendario más actual. Sólo los viajes que conectan con el Sorrento Valley COASTER Connection se muestran. Días adicionales y las horas de servicio se pueden encontrar en www.gonctd.com.

ROUTE DEVIATIONS / *Desviaciones de la Ruta*

The SVCC is a demand-response service that will provide a route deviation of up to 3/4 of a mile off an operating SVCC route for requesting passengers traveling to or from the Sorrento Valley COASTER Station. This service is provided anywhere in the SVCC service area during the corresponding hours that the SVCC service operates. Lift-equipped buses are available. To ensure availability, please call (877) 841-3278 at least one hour before your trip to schedule a curb-to-curb trip.

El SVCC es un servicio de demanda-respuesta que proveerá una desviación de ruta de hasta 3/4 de milla de una ruta SVCC operativa a pasajeros que viajen a y de Sorrento Valley COASTER Station. Este servicio es proveído en cualquier parte del la área de servicio del SVCC, durante las horas correspondientes al servicio que SVCC opera. Autobuses equipados para levantar sillas también están disponibles. Para asegurarse de su disponibilidad, por favor hable al (877) 841-3278 por lo menos una hora antes de su viaje para fijar el horario de su viaje de banqueta-a-banqueta.

COMMUTER TAX BENEFIT PROGRAM FOR EMPLOYERS / *Programa de Asistencia de Tránsito del Empleador*

Employers can provide their employees a payroll tax deduction for riding transit to work of up to $125 per month. Employers benefit from this program through reduced payroll taxes and other business deductions. For more information about this and other free commuter services for employers visit iCommuteSD.com or call 511 and say "iCommute."

Los empleadores pueden proporcionar a sus empleados una deducción de los impuestos sobre nóminas de hasta $125 dólares al mes por trasladarse al trabajo usando el transporte interurbano. Los empleadores sacan provecho de este programa mediante menores impuestos sobre nómina y otras deducciones empresariales. Para mayores informes sobre éste y otros servicios gratuitos para pasajeros interurbanos para los empleadores, favor de visitar iCommuteSD.com o llamar al 511 y decir 'iCommute'.

Alternative formats available upon request. Please call: (619) 557-4555 / *Formato alternativo disponible al preguntar. Favor de llamar: (619) 557-4555*

Route 972 – Monday through Friday / *lunes a viernes*

Sorrento Mesa ➡ Sorrento Valley COASTER Station

		Morning (AM)				Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:40a	7:10a	7:50a	8:16a	—	**4:05p**	**4:40p**	**5:22p**	**6:10p**
1	10525 Vista Sorrento					**3:30p**				
2	EB Lusk Blvd & Wateridge Circle (after intersection)									
3	EB Lusk Blvd & Telesis Ct. (after intersection)									
4	Across from 6455 Lusk Blvd.	6:47	7:17	7:57	8:23	**3:31**	**4:14**	**4:49**	**5:31**	**6:19**
5	10225 Lusk Blvd. (electrical boxes)									
6	Across from 5525 Morehouse Drive									
7	5510 Morehouse Drive									
8	5424 Scranton Road									
9	9605 Scranton Road									
10	9805 Scranton Road									
11	10055 Barnes Canyon Road									
12	10225 Barnes Canyon Road									
13	EB Barnes Canyon Road & Lusk Blvd. (after intersection)	6:53	7:23	8:03	8:29	**3:37**	**4:20**	**4:55**	**5:37**	**6:25**
14	EB Barnes Canyon Road & Pacific Heights Blvd. (before turn)									
15	10211 Pacific Mesa Blvd.									
16	10309 Pacific Center Ct.									
17	10450 Pacific Center Ct.									
18	5910 Pacific Center Blvd.									
19	5788 Pacific Center Blvd.									
20	5764 Pacific Center Blvd.									
21	WB Pacific Center Blvd & McKellar Ct. (after intersection)									
22	Qualcomm Design Center (45 mph sign)	7:01	7:31	8:11	8:37	**3:45**	**4:28**	**5:03**	**5:45**	**6:33**
23	WB Lusk Blvd & Telesis Ct. (after intersection)									
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:07	7:37	8:16	—	**3:54**	**4:37**	**5:12**	**5:56**	**6:42**

Route 973 – Monday through Friday / *lunes a viernes*

Carroll Canyon ➡ Sorrento Valley COASTER Station

		Morning (AM)				Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:40a	7:10a	7:53a	8:22a	—	**4:06p**	**4:41p**	**5:25p**	**6:10p**
24	10240 Sorrento Valley Road					—				
25	EB Mira Mesa Blvd. & Scranton Road (after intersection)					**3:30p**				
26	EB Mira Mesa Blvd. & Oberlin Drive (after intersection)									
27	Pacific Heights Blvd. & Mira Mesa Blvd. (after turn, electrical boxes)	6:48	7:18	8:01	8:30	**3:31**	**4:14**	**4:49**	**5:33**	**6:18**
28	Pacific Heights Blvd. & Cornerstone Ct. (after intersection)									
29	Brown Deer Road & Ferris Square (at pedestrian crossing sign)									
30	9215 Brown Deer Road									
31	9339 Carroll Park Drive									
32	9449 Carroll Park Drive									
33	Nancy Ridge Drive & Carroll Road (after turn, Carroll Ridge Bus. Park)	6:57	7:27	8:09	8:39	**3:40**	**4:23**	**4:58**	**5:42**	**6:27**
34	6868 Nancy Ridge Drive									
35	6650 Nancy Ridge Drive									
36	6310 Nancy Ridge Drive									
37	6150 Nancy Ridge Drive (Sorrento Ridge Business Park)									
38	5960 Nancy Ridge Drive (Sorrento Vista Industrial Park)									
39	5280 Carroll Canyon Road									
40	Youngstown Way & Oberlin Drive (before turn, at fire hydrant)									
41	5807 Oberlin Drive									
42	5871 Oberlin Drive (mailboxes)	7:01	7:31	8:13	8:43	**3:44**	**4:27**	**5:02**	**5:46**	**6:31**
43	Across street from 10260 Sorrento Valley Rd.									
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:10	7:40	8:22	—	**3:54**	**4:37**	**5:12**	**5:56**	**6:41**

Route 974 – Monday through Friday / *lunes a viernes*

UC San Diego ➡ Sorrento Valley COASTER Station

		Morning (AM)				Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:40a	7:10a	7:49a	8:19a	—	**4:11p**	**4:47p**	**5:29p**	**6:14p**
44	Gilman Drive & Eucalyptus Grove Lane									
45	Gilman Transit Center (UCSD)	6:49	7:20	7:59	8:29	**3:38p**	**4:23**	**4:59**	**5:41**	**6:26**
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:00	7:32	8:11	—	**3:51**	**4:37**	**5:13**	**5:55**	**6:39**

Route 978 – Monday through Friday / *lunes a viernes*

Torrey Pines ➡ Sorrento Valley COASTER Station

		Morning (AM)				Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:40a	7:14a	7:55a	8:24a	—	**4:10p**	**4:40p**	**5:23p**	**6:10p**
46	10350 Science Center Drive	6:46	7:20	8:01	8:30	**3:34p**	**4:16**	**4:48**	**5:33**	**6:20**
47	General Atomics Court (at end of turnaround)									
48	General Atomics Court & John Hopkins Drive (before turn)									
49	John Hopkins Drive & North Torrey Pines Road (before turn)									
50	3033 Science Park Road									
51	Torreyana Rd. & Road to the Cure (before intersection)	6:53	7:27	8:07	8:37	**3:41**	**4:23**	**4:55**	**5:40**	**6:27**
52	Torreyana Rd. & Callan Road (before turn)									
53	11099 Callan Road									
54	10666 North Torrey Pines Road	6:56	7:30	8:10	8:40	**3:44**	**4:26**	**4:58**	**5:43**	**6:30**
55	3366 North Torrey Pines Road									
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:14	7:46	8:24	—	**3:53**	**4:37**	**5:10**	**5:55**	**6:41**

Route 979 – Monday through Friday / *lunes a viernes*

University City ➡ Sorrento Valley COASTER Station

		Morning (AM)				Afternoon/Evening (PM)				
ⓣ	Sorrento Valley COASTER Station **DEPART***	6:40a	7:10a	7:49a	8:17a	—	**4:13p**	**4:46p**	**5:30p**	**6:16p**
56	SB Genesee Ave. & Scripps Driveway (after intersection)					—				
57	SB Genesee Ave. & Campus Point Drive (after intersection)	6:47	7:17	7:56	8:24	**3:35p**	**4:20**	**4:53**	**5:37**	**6:23**
58	EB Eastgate Mall & Easter Way (before intersection)									
59	EB Eastgate Mall & Towne Centre Way (before turn)									
60	Towne Centre Way & Executive Drive (before turn)									
61	Executive Drive & Executive Way	6:52	7:22	8:01	8:29	**3:40**	**4:25**	**4:58**	**5:42**	**6:28**
62	NB Genesee Ave. & Executive Drive (after turn)									
63	NB Genesee Ave. & Eastgate Mall (after intersection)									
64	NB Genesee Ave. & Campus Point Drive (after intersection)									
65	NB Genesee Ave. & Scripps Driveway (after intersection)									
ⓣ	Sorrento Valley COASTER Station **ARRIVE**	7:02	7:32	8:11	—	**3:53**	**4:40**	**5:13**	**5:57**	**6:41**

Routes 972, 973, 974, 978, and 979 do not operate on weekends or on the observation of the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas
Las rutas 972, 973, 974, 978 y 979 no ofrecen servicio durante el fin de semana ó durante los siguientes días festivos: Año Nuevo, Memorial Day, Día de la Independencia (E.E.U.U.), Labor Day, Día de Acción de Gracias, y Navidad

* All morning departures from Sorrento Valley COASTER Station wait for the arriving southbound train. Morning buses may depart the station earlier than time shown, once all passengers have transferred from the designated COASTER train. Afternoon departures from Sorrento Valley COASTER Station may leave up to ten minutes earlier than shown.

Todas las salidas de Sorrento Valley COASTER Station en la mañana esperan la llegada del tren hacia el sur. En la mañana, cuando todos los pasajeros del COASTER se han trasladado a los autobuses, los autobuses podrán salir de la estación, aunque sea unos minutos antes del horario. En la tarde, las salidas de Sorrento Valley COASTER Station pueden salir hasta diez minutos antes de lo mostrado.

FARES / *Tarifas*

Exact fare, please / *Favor de pagar la cantidad exacta*

Fares *Tarifas*	Adult *Adulto*	Senior/Disabled/ Medicare/Youth* *Personas Mayores/con Discapacidades/Medicare/ Jóvenes**
ONE-WAY FARES *Tarifas Sencillas*	**$2.50**	**$1.25**
EARNED DAY PASS *Pase del Día Ganado*	**$6.00**	**$3.00**
MONTH PASS *Pase mensual*	**$72.00**	**$23.00**
Child (5 and under) / *Niño (5 años o menos):* **FREE** / *GRATIS*		

*Proof of eligibility required. Senior Eligibility: Age 65+ or born on or before September 1, 1959.
**Se requiere verificación de elegibilidad. Elegibilidad para Personas Mayores: Edad 65+ o nacido en o antes del 1 de septiembre, 1959.*

For more information, visit: / *Para más información, visite:*

sdmts.com/fares

Load money into your PRONTO account to earn Day Passes and Month Passes. Tap your PRONTO card ($2) or scan your PRONTO mobile app (free) to ride. *Carga dinero a tu cuenta de PRONTO para ganar Pases del Día y Pases Mensuales. Toca tu tarjeta PRONTO ($2) o escanea tu aplicación móvil PRONTO (gratis) para viajar.*

- **One-ways with PRONTO receive free transfers for two hours. No free transfers for cash.** *Los viajes de ida con PRONTO reciben transbordes gratuitos por dos horas. No se permiten transbordes gratuitos con pagos en efectivo.*
- **Day Passes not sold in advance. Earned with PRONTO.** *Los pases diarios no se venden por adelantado. Se obtienen con PRONTO.*
- **A month pass can be purchased in advanced or earned with PRONTO. Good from first day to last day of the month.** *El Pase Mensual se puede comprar por adelantado o se obtiene mientras viaja con PRONTO. Válido desde el primer día hasta el último día del mes.*

TRANSIT FARE / *Tarifa de Transporte Público*

Tap or Scan, Every Time You Ride: Riders must tap their PRONTO card or scan their PRONTO mobile app at station validators every trip. It's the only way to earn a two hour free transfer, day and month passes.

Toca o Escanea Cada Vez que Viajes: *Los pasajeros deben tocar su tarjeta PRONTO o escanear la aplicación móvil PRONTO en validadores de estación antes de cada viaje. Es la única manera de ganar transbordes gratis por dos horas, pases del día y del mes.*

PRONTO Card: PRONTO cards cost $2 at ticket machines, retail outlets or the MTS Transit Store. At the time of purchase, riders will need to load a minimum value onto their PRONTO card ($3 at the Transit Store or ticket machine, $5 at retail outlets). Riders can reload money (or pre-pay for a Month Pass) instantly online at RidePRONTO.com, at ticket machines, retail outlets or the MTS Transit Store.

Tarjeta PRONTO: *Las Tarjetas PRONTO tienen un costo de $2 en las máquinas expendedoras de boletos, establecimientos comerciales o en la tienda MTS Transit Store. Al comprarla, los pasajeros deberán cargar un valor mínimo en su tarjeta PRONTO ($3 en la tienda Transit Store o en máquinas de boletos, $5 en establecimientos comerciales). Los pasajeros pueden recargar dinero (o comprar un pase mensual por adelantado) instantáneamente en línea en ridePRONTO.com, en máquinas de boletos, en establecimientos comerciales o en la tienda MTS Transit Store.*

Aplicación Móvil PRONTO: *La aplicación móvil PRONTO está disponible para descargar en teléfonos Apple y Android.*

PRONTO Mobile App: The PRONTO mobile app is available for download on Apple and Android phones.

Paga mientras viajas y Adquiere la Mejor Tarifa: *Gracias a una nueva función de limitación de tarifas, los pasajeros pueden cargar dinero en su cuenta PRONTO y pagar a su medida para obtener siempre la mejor tarifa. Carga dinero a tu tarjeta o aplicación móvil PRONTO, luego toca o escanea cada vez que viajes.*
Se deducirá una tarifa de viaje sencillo cada vez que toques o escanees, hasta alcanzar el valor de un Pase de Día o Mes. ¡Nunca pagarás más del valor de un Pase de un Día—$6 para adultos, $3 para Adultos Mayores/con Discapacidades/ Medicare (SDM, por sus siglas en inglés) y Jóvenes en un día, o el valor de un Pase Mensual ($72 para Adultos, $23 para SDM y Jóvenes) en un mes del calendario!

Pay-As-You-Go & Earn the Best Fare: Thanks to best fare capabilities, riders can load money to their PRONTO account and pay-as-they-go to always get the best fare! Load money onto your PRONTO card or mobile app, then tap or scan every time you ride.
A one-way fare will be deducted with each tap or scan, up to the value of a Day or Month Pass. You'll never pay more than the value of a Day Pass ($6 Adult, $3 Senior/Disabled/ Medicare and Youth), in a day, or the value of a Month Pass ($72 Adult, $23 SDM/Youth) in a calendar month.

Carga Dinero a PRONTO: *Los pasajeros pueden cargar dinero a su cuenta PRONTO a través de la aplicación móvil, en línea en ridePRONTO.com, en la tienda MTS Transit Store, en las máquinas expendedoras de boletos, en establecimientos comerciales, o teléfono* 619-595-5636. *(No está disponible cargar pases o dinero a cuentas PRONTO a bordo de los autobuses).*

Loading Money to PRONTO: Riders can load money to PRONTO through the mobile app, online at RidePRONTO.com, at the MTS Transit Store, ticket machines, participating retail outlets, or over the phone at 619-595-5636. (Loading passes or money to PRONTO on board buses is not available.)

Transbordes Gratis: *Con la tarjeta o la aplicación móvil PRONTO, las tarifas de viaje sencillo son válidas para transbordes ilimitados dentro de dos horas después de su activación. (Los pasajeros deben seguir tocando su tarjeta o escaneando la aplicación cada vez que aborden, pero no se les cobrará una tarifa dentro de las dos horas después del primer toque o escaneo).*

Free Transfers: With the PRONTO card or mobile app, one-way fares are valid for unlimited transfers within two hours of activation. (Riders should tap or scan their card or app every time they board, but they will not be charged for a fare within two hours of a previous tap or scan.)

Usando Efectivo: *Los pasajeros pueden comprar tarifas de viaje sencillo con efectivo en las máquinas de boletos y a bordo de autobuses. Sin embargo, las tarifas de viaje sencillo en efectivo no son elegibles para transbordes y no contribuyen hacia la ganancia de un Pase de Día o Mes.*

Using Cash: Riders can purchase one-way fares using cash at ticket machines and onboard buses. Cash one-way fares are not eligible for transfers, and do not contribute towards earning a Day Pass or Month Pass.

Reduced Fares: All PRONTO cards will look the same. Reduced fare designations (Senior, Disabled, Medicare, or Youth) are identified at the account level. Riders can have their PRONTO card or mobile app account switched to a reduced fare category by visiting the MTS Transit Store, or calling the PRONTO Support Team at 619-595-5636. Riders with a reduced fare must travel with proof of eligibility at all times. A PRONTO Photo ID card is encouraged, but not required (available at the Transit Store). Approved IDs include: Government-issue Photo ID with birth date (seniors), student school photo ID, Medicare card & Government Photo ID, California DMV Placard ID & Government Photo ID, California Senior ID card, MTS Senior/Disabled Photo ID, NCTD Senior/Disabled Photo ID. **Senior Eligibility: Age 65+ or born on or before September 1, 1959. Youth Eligibility: Age 18 & Under (kids five and under ride free).**

Tarifas Reducidas: *Todas las tarjetas PRONTO tendrán el mismo aspecto. Las designaciones de tarifas reducidas (SDM o Jóvenes) se identifican a nivel de cuenta. Los pasajeros pueden cambiar su tarjeta PRONTO o su cuenta de aplicación móvil a una categoría de tarifa reducida visitando la tienda MTS Transit Store o llamando al equipo de asistencia de PRONTO al 619-595-5636. Los pasajeros con tarifa reducida deben viajar con prueba de elegibilidad en todo momento. Se recomienda una tarjeta de identificación PRONTO con fotografía, pero no es obligatoria. Las identificaciones aprobadas incluyen: identificación con fotografía con fecha de nacimiento emitida por el gobierno (para personas mayores), identificación con fotografía de la escuela del estudiante, tarjeta de Medicare junto con una identificación gubernamental con fotografía, placa de discapacidad del DMV de California junto con identificación gubernamental con fotografía, tarjeta de identificación para personas mayores de California, identificación con fotografía para personas mayores/con discapacidades de MTS, identificación con fotografía para personas mayores/con discapacidades de NCTD.* ***Elegibilidad para Personas Mayores: mayores de 65 años o nacidos el 1 de septiembre de 1959 o antes. Elegibilidad para Jóvenes: menores de 18 años (los niños menores de cinco años viajan gratis).***

Scan for PRONTO information.
Escanea este código para ver información sobre PRONTO.
RidePRONTO.com

ACCESSIBLE SERVICE
Accesibilidad de los servicios

All Trolleys are equipped with ramps. Seats closest to the doors are reserved for senior and disabled riders.
Todos los Trolleys cuentan con rampas para sillas de ruedas. Los asientos más cercanos a las puertas están reservados por gentileza para pasajeros mayores o discapacitados.

ANIMALS / *Animales*

A trained service animal may accompany a rider with disabilities. Non-service animals must be in enclosed carriers and transported by passengers without the assistance of drivers or operators.
Se permite que un animal de servicio entrenado acompañe a un pasajero discapacitado. Los pasajeros deben transportar los animales que no sean de servicio en una jaula cerrada, sin ayuda de los conductores ni de los choferes.

BIKES / *Bicicletas*

On Trolleys with stairs, board at rear doors of each car. Board low-floor cars at any door. Stay with bike to keep it secure One bike is allowed per car during weekday rush hours, two bikes per car at all other times. MTS is not responsible for loss or damage to bicycles. *En los Trolleys con escaleras, aborde en las puertas traseras. Aborde los Trolleys de piso bajo en cualquiera puerta. Por seguridad, manténgase junto a la bicicleta En las horas pico durante la semana, sólo se admite una bicicleta por unidad. En otros tiempos, se admiten dos bicicletas. MTS no es responsable por el extravío o daño de bicicletas.*

DIRECTORY / *Directorio*

MTS Information & Trip Planning *MTS Información y planeo de viaje*	**(619) 233-3004**
TTY/TDD (teletype for hearing impaired) *Teletipo para sordos*	**(619) 234-5005** or/ó **(888) 722-4889**
InfoExpress (24-hour info via Touch-Tone phone) *Información las 24 horas (via teléfono de teclas)*	**(619) 685-4900**
Customer Service / *Servicio al cliente*	**(619) 557-4555**
MTS Security / *Seguridad de MTS*	**(619) 595-4960**
PRONTO Support Center	**(619) 595-5636**
Lost & Found / *Objetos extraviados*	**(619) 233-3004**
Transit Store	**(619) 234-1060**

sdmts.com

Trip planning, route alerts, updated schedules, connections and more! *¡Planificación de viajes, alertas de ruta, horarios actualizados, conexiones y más!*

Alternative formats available upon request. Please call (619) 557-4555. *Formato alternativo disponible al preguntar. Favor de llamar (619) 557-4555*

Effective November 21, 2021

Trolley

UC San Diego Blue Line
San Ysidro ↔ America Plaza ↔ UTC

Orange Line
Arnele Ave. ↔ Courthouse (Downtown)

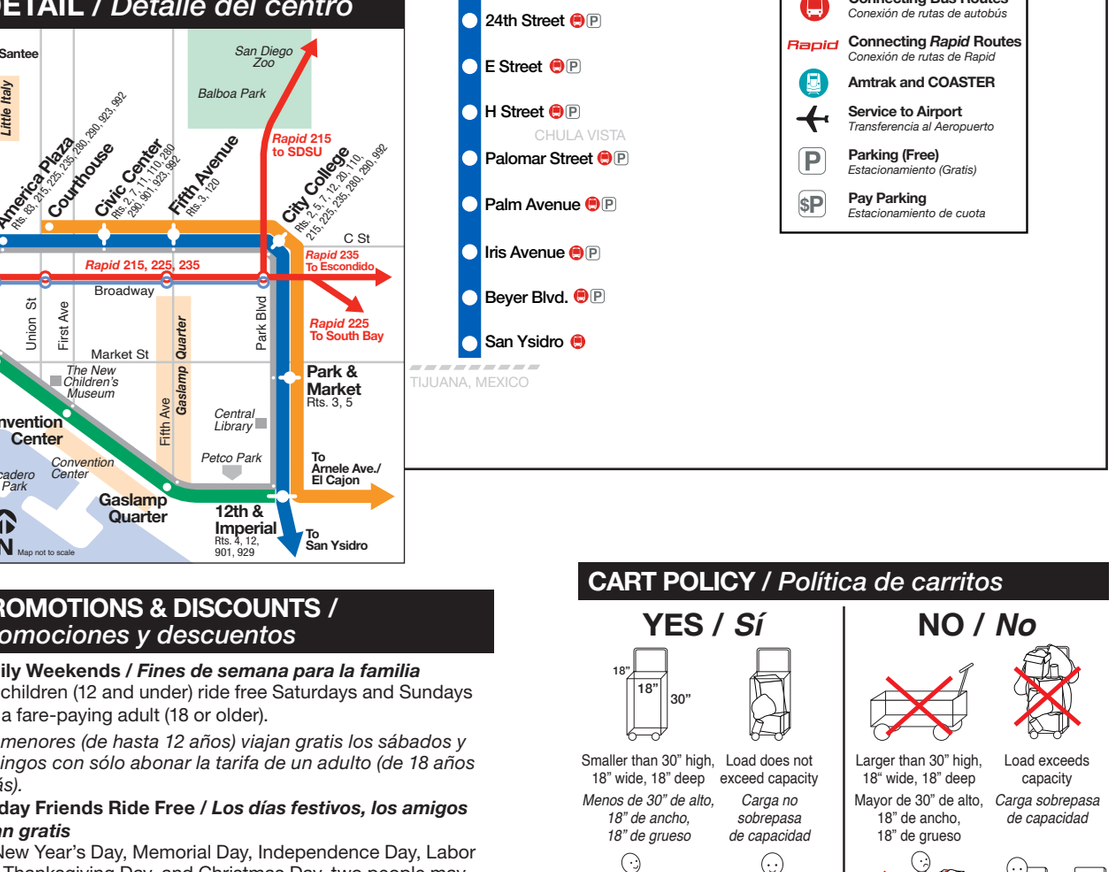
Green Line
Santee ↔ 12th & Imperial (Downtown)

Silver Line
Downtown San Diego Loop

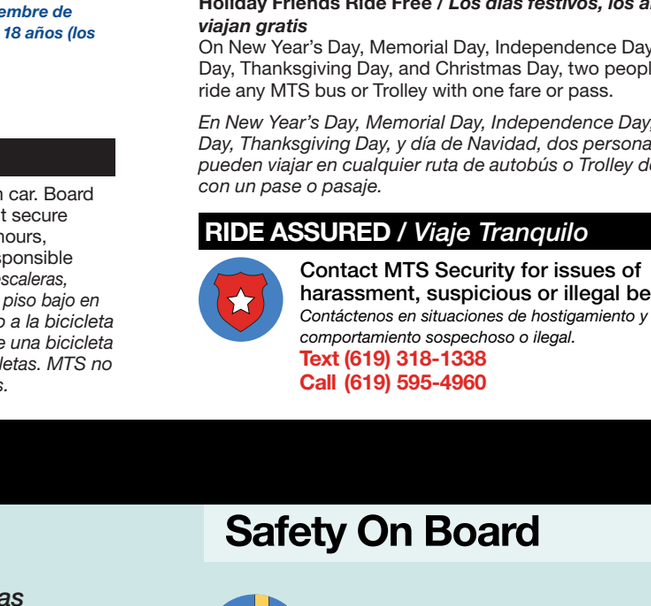
MTS

11/21

Trolley System / *sistema de Trolley*



DOWNTOWN DETAIL / *Detalle del centro*



LEGEND

- Connecting Bus Routes / *Conexión de rutas de autobús*
- Rapid — Connecting *Rapid* Routes / *Conexión de rutas de Rapid*
- Amtrak and COASTER
- Service to Airport / *Transferencia al Aeropuerto*
- P — Parking (Free) / *Estacionamiento (Gratis)*
- $P — Pay Parking / *Estacionamiento de cuota*

PROMOTIONS & DISCOUNTS / *Promociones y descuentos*

Family Weekends / *Fines de semana para la familia*
Two children (12 and under) ride free Saturdays and Sundays with a fare-paying adult (18 or older).
Dos menores (de hasta 12 años) viajan gratis los sábados y domingos con sólo abonar la tarifa de un adulto (de 18 años o más).

Holiday Friends Ride Free / *Los días festivos, los amigos viajan gratis*
On New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, two people may ride any MTS bus or Trolley with one fare or pass.
En New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, y día de Navidad, dos personas pueden viajar en cualquier ruta de autobús o Trolley de MTS con un pase o pasaje.

RIDE ASSURED / *Viaje Tranquilo*

Contact MTS Security for issues of harassment, suspicious or illegal behavior.
Contáctenos en situaciones de hostigamiento y comportamiento sospechoso o ilegal.
Text (619) 318-1338
Call (619) 595-4960

CART POLICY / *Política de carritos*

YES / *Sí*

Smaller than 30" high, 18" wide, 18" deep
Menos de 30" de alto, 18" de ancho, 18" de grueso

Load does not exceed capacity
Carga no sobrepasa de capacidad

Can be loaded in a single trip
Se puede cargar en un solo viaje

Does not block aisle
No obstruye el pasillo

No more than two carry-on items
No más que dos piezas de equipaje de mano

More details on
Más detalles en
sdmts.com

NO / *No*

Larger than 30" high, 18" wide, 18" deep
Mayor de 30" de alto, 18" de ancho, 18" de grueso

Load exceeds capacity
Carga sobrepasa de capacidad

Cannot be loaded in a single trip
No se puede cargar en un solo viaje

Blocks aisle
Obstruye el pasillo

More than two carry-on items
Más que dos piezas de equipaje de mano

Bags of cans/ Leaking items
Bolsa de latas/ objetos goteando

Think **FAST**

Fun **A**nd **S**afe **T**ransit

sdmts.com/Think-FAST

Safety at the Station

Stay Behind the Line
Mantente Detrás de la Línea

No Jumping or Climbing between Trolleys
No Brincar o Escalar entre Trolleys

Stay Alert for Vehicles
Mantente Alerta para los Vehículos

Keep Off Tracks
Mantente Fuera de las Vías

Don't Chase a Moving Vehicle
No Persigas un Vehículo en Movimiento

Walk, Don't Ride
Bájate y Camina

Use Crosswalks
Usa los Cruces

Safety On Board

Always Hold On
Agárrate Siempre

Remain Seated
Permanece en tu Asiento

Keep Aisles Clear
Mantén Despejados los Pasillos

Don't Block Doors
Mantén las puertas despejadas

Pull Carts Behind You
Jala tu Carrito Detrás de Ti

Watch Your Step
Cuida Donde Pisas

Stay Awake
No te Duermas

UC San Diego Blue Line

Monday through Friday / *lunes a viernes*

SAN YSIDRO ➡ AMERICA PLAZA ➡ UTC

San Ysidro	Iris Avenue	H Street	8th Street	12th & Imperial	City College	America Plaza	Santa Fe Depot	Old Town	Balboa Avenue	UCSD Central Campus	UTC
—	—	—	—	4:23a	4:28a	4:34a	4:37a	4:46a	4:55a	5:06a	5:12a
—	—	—	—	4:38	4:43	4:49	4:52	5:01	5:10	5:21	5:27
—	4:26a	4:35a	4:43a	4:53	4:58	5:04	5:07	5:16	5:25	5:36	5:42
4:28a	4:35	4:44	4:52	5:02	5:07	5:13	—	—	—	—	—
4:34	4:41	4:50	4:58	5:08	5:13	5:19	5:22	5:31	5:40	5:51	5:57
4:43	4:50	4:59	5:07	5:17	5:22	5:28	—	—	—	—	—
4:49	4:56	5:05	5:13	5:23	5:28	5:34	5:37	5:46	5:55	6:06	6:12
AND THEN EVERY 6/9 & 15 MINUTES AT: / *Y LUEGO CADA 6/9 & 15 MINUTOS A LA:*											
:58	:05	:14	:22	:32	:37	:43	—	—	—	—	—
:04	:11	:20	:28	:38	:43	:49	:52	:01	:10	:21	:27
:13	:20	:29	:37	:47	:52	:58	—	—	—	—	—
:19	:26	:35	:43	:53	:58	:04	:07	:16	:25	:36	:42
:28	:35	:44	:52	:02	:07	:13	—	—	—	—	—
:34	:41	:50	:58	:08	:13	:19	:22	:31	:40	:51	:57
:43	:50	:59	:07	:17	:22	:28	—	—	—	—	—
:49	:56	:05	:13	:23	:28	:34	:37	:46	:55	:06	:12
UNTIL: / *HASTA:*											
7:49p	7:56p	8:05p	8:13p	8:23p	8:28p	8:34p	8:37p	8:46p	8:55p	9:06p	9:12p
7:58	8:05	8:14	8:22	8:32	8:37	8:43	—	—	—	—	—
8:04	8:11	8:20	8:28	8:38	8:43	8:49	8:52	9:01	9:10	9:21	9:27
8:13	8:20	8:29	8:37	8:47	8:52	8:58	—	—	—	—	—
8:19	8:26	8:35	8:43	8:53	8:58	9:04	9:07	9:16	9:25	9:36	9:42
8:34	8:41	8:50	8:58	9:08	9:13	9:19	9:22	9:31	9:40	9:51	9:57
8:49	8:56	9:05	9:13	9:23	9:28	9:34	—	—	—	—	—
9:04	9:11	9:20	9:28	9:38	9:43	9:49	9:52	10:01	10:10	10:21	10:27
9:19	9:26	9:35	9:43	9:53	9:58	10:04	—	—	—	—	—
9:34	9:41	9:50	9:58	10:08	10:13	10:19	10:22	10:31	10:40	10:51	10:57
9:49	9:56	10:05	10:13	10:23	10:28	10:34	—	—	—	—	—
10:04	10:11	10:20	10:28	10:38	10:43	10:49	10:52	11:01	11:10	11:21	11:27
10:19	10:26	10:35	10:43	10:53	10:58	11:04	—	—	—	—	—
10:34	10:41	10:50	10:58	11:08	11:13	11:19	11:22	11:31	11:40	11:51	11:57
10:49	10:56	11:05	11:13	11:23	11:28	11:34	—	—	—	—	—
11:04	11:11	11:20	11:28	11:38	11:43	11:49	—	—	—	—	—
11:19	11:26	11:35	11:43	11:53	11:58	12:04a	—	—	—	—	—
11:34	11:41	11:50	11:58	12:08a	12:13a	12:19	—	—	—	—	—
11:49	11:56	12:05a	12:13a	12:23	12:28	12:34	—	—	—	—	—
12:04a	12:11a	12:20	12:28	12:38	12:43	12:49	—	—	—	—	—
12:19	12:26	12:35	12:43	12:53	12:58	1:04	—	—	—	—	—
12:49	12:56	1:05	1:13	1:23	1:28	1:34	—	—	—	—	—

B = Trip begins at Barrio Logan Station six minutes earlier than time shown. / *Viaje comienza en la estación de Barrio Logan seis minutos antes del tiempo indicado.*

UTC ➡ AMERICA PLAZA ➡ SAN YSIDRO

UTC	UCSD Central Campus	Balboa Avenue	Old Town	Santa Fe Depot	America Plaza	City College	12th & Imperial	8th Street	H Street	Iris Avenue	San Ysidro
—	—	—	—	—	—	—	—	B 4:24a	4:32a	4:41a	4:48a
—	—	—	—	—	—	—	—	B 4:31	4:39	4:48	4:55
—	—	—	—	—	—	—	—	B 4:39	4:47	4:56	5:03
—	—	—	—	—	—	—	—	B 4:46	4:54	5:03	5:10
—	—	—	—	—	—	—	—	B 4:54	5:02	5:11	5:18
—	—	—	—	—	—	—	—	B 5:01	5:09	5:18	5:25
—	—	—	—	—	4:48a	4:54a	5:00a	5:09	5:17	5:26	5:33
—	—	—	—	—	—	—	—	B 5:16	5:14	5:33	5:40
—	—	—	—	—	5:03	5:09	5:15	5:24	5:32	5:41	5:48
—	—	—	—	—	5:10	5:16	5:22	5:31	5:39	5:48	5:55
—	—	—	—	—	5:18	5:24	5:30	5:39	5:47	5:56	6:03
—	—	5:04a	5:13a	5:22a	5:25	5:31	5:37	5:46	5:54	6:03	6:10
—	—	—	—	—	5:33	5:39	5:45	5:54	6:02	6:11	6:18
5:03a	5:09a	5:19	5:28	5:37	5:40	5:46	5:52	6:01	6:09	6:18	6:25
AND THEN EVERY 7/8 & 15 MINUTES AT: / *Y LUEGO CADA 7/8 & 15 MINUTOS A LA:*											
—	—	—	—	—	:48	:54	:00	:09	:17	:26	:33
:18	:24	:34	:43	:52	:55	:01	:07	:16	:24	:33	:40
—	—	—	—	—	:03	:09	:15	:24	:32	:41	:48
:33	:39	:49	:58	:07	:10	:16	:22	:31	:39	:48	:55
—	—	—	—	—	:18	:24	:30	:39	:47	:56	:03
:48	:54	:04	:13	:22	:25	:31	:37	:46	:54	:03	:10
—	—	—	—	—	:33	:39	:45	:54	:02	:11	:18
:03	:09	:19	:28	:37	:40	:46	:52	:01	:09	:18	:25
UNTIL: / *HASTA:*											
7:18p	7:24p	7:34p	7:43p	7:52p	7:55p	8:01p	8:07p	8:16p	8:24p	8:33p	8:40p
7:33	7:39	7:49	7:58	8:07	8:10	8:16	8:22	8:31	8:39	8:48	8:55
7:48	7:54	8:04	8:13	8:22	8:25	8:31	8:37	8:46	8:54	9:03	9:10
8:03	8:09	8:19	8:28	8:37	8:40	8:46	8:52	9:01	9:09	9:18	9:25
8:18	8:24	8:34	8:43	8:52	8:55	9:01	9:07	9:16	9:24	9:33	9:40
8:33	8:39	8:49	8:58	9:07	9:10	9:16	9:22	9:31	9:39	9:48	9:55
8:48	8:54	9:04	9:13	9:22	9:25	9:31	9:37	9:46	9:54	10:03	10:10
9:03	9:09	9:19	9:28	9:37	9:40	9:46	9:52	10:01	10:09	10:18	10:25
9:18	9:24	9:34	9:43	9:52	9:55	10:01	10:07	10:16	10:24	10:33	10:40
9:33	9:39	9:49	9:58	10:07	10:10	10:16	10:22	10:31	10:39	10:48	10:55
9:48	9:54	10:04	10:13	10:22	10:25	10:31	10:37	10:46	10:54	11:03	11:10
10:03	10:09	10:19	10:28	10:37	10:40	10:46	10:52	11:01	11:09	11:18	11:25
10:18	10:24	10:34	10:43	10:52	10:55	11:01	11:07	11:16	11:24	11:33	11:40
—	—	—	—	—	11:10	11:16	11:22	11:31	11:39	11:48	11:55
10:48	10:54	11:04	11:13	11:22	11:25	11:31	11:37	11:46	11:54	12:03a	12:10a
11:18	11:24	11:34	11:43	11:52	11:55	12:01a	12:07a	12:16a	12:24a	12:33	12:40
11:48	11:54	12:04a	12:13a	12:22a	12:25a	12:31	12:37	—	—	—	—
12:18a	12:24a	12:34	12:43	12:52	12:55	1:01	1:07	—	—	—	—

Saturday & Sunday / *sábado & domingo*

SAN YSIDRO ➡ AMERICA PLAZA ➡ UTC

San Ysidro	Iris Avenue	H Street	8th Street	12th & Imperial	City College	America Plaza	Santa Fe Depot	Old Town	Balboa Avenue	UCSD Central Campus	UTC
—	—	—	—	—	—	—	4:52a	5:01a	5:10a	5:21a	5:27a
—	—	—	—	4:53a	4:58a	5:04a	5:07	5:16	5:25	5:36	5:42
4:34a	4:41a	4:50a	4:58a	5:08	5:13	5:19	5:22	5:31	5:40	5:51	5:57
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*											
:49	:56	:05	:13	:23	:28	:34	:37	:46	:55	:06	:12
:04	:11	:20	:28	:38	:43	:49	:52	:01	:10	:21	:27
:19	:26	:35	:43	:53	:58	:04	:07	:16	:25	:36	:42
:34	:41	:50	:58	:08	:13	:19	:22	:31	:40	:51	:57
UNTIL: / *HASTA:*											
7:34p	7:41p	7:50p	7:58p	8:08p	8:13p	8:19p	8:22p	8:31p	8:40p	8:51p	8:57p
7:49	7:56	8:05	8:13	8:23	8:28	8:34	—	—	—	—	—
8:04	8:11	8:20	8:28	8:38	8:43	8:49	8:52	9:01	9:10	9:21	9:27
8:19	8:26	8:35	8:43	8:53	8:58	9:04	—	—	—	—	—
8:34	8:41	8:50	8:58	9:08	9:13	9:19	9:22	9:31	9:40	9:51	9:57
8:49	8:56	9:05	9:13	9:23	9:28	9:34	—	—	—	—	—
9:04	9:11	9:20	9:28	9:38	9:43	9:49	9:52	10:01	10:10	10:21	10:27
9:19	9:26	9:35	9:43	9:53	9:58	10:04	—	—	—	—	—
9:34	9:41	9:50	9:58	10:08	10:13	10:19	10:22	10:31	10:40	10:51	10:57
9:49	9:56	10:05	10:13	10:23	10:28	10:34	—	—	—	—	—
10:04	10:11	10:20	10:28	10:38	10:43	10:49	10:52	11:01	11:10	11:21	11:27
10:19	10:26	10:35	10:43	10:53	10:58	11:04	—	—	—	—	—
10:34	10:41	10:50	10:58	11:08	11:13	11:19	11:22	11:31	11:40	11:51	11:57
10:49	10:56	11:05	11:13	11:23	11:28	11:34	—	—	—	—	—
11:04	11:11	11:20	11:28	11:38	11:43	11:49	—	—	—	—	—
11:19	11:26	11:35	11:43	11:53	11:58	12:04a	—	—	—	—	—
11:34	11:41	11:50	11:58	12:08a	12:13a	12:19	—	—	—	—	—
11:49	11:56	12:05a	12:13a	12:23	12:28	12:34	—	—	—	—	—
12:04a	12:11a	12:20	12:28	12:38	12:43	12:49	—	—	—	—	—
12:19	12:26	12:35	12:43	12:53	12:58	1:04	—	—	—	—	—
12:49	12:56	1:05	1:13	1:23	1:28	1:34	—	—	—	—	—

UTC ➡ AMERICA PLAZA ➡ SAN YSIDRO

UTC	UCSD Central Campus	Balboa Avenue	Old Town	Santa Fe Depot	America Plaza	City College	12th & Imperial	8th Street	H Street	Iris Avenue	San Ysidro
—	—	—	—	—	—	—	—	B 4:31a	4:39a	4:48a	4:55a
—	—	—	—	—	—	—	—	B 4:46	4:54	5:03	5:10
—	—	—	—	—	—	—	—	B 5:01	5:09	5:18	5:25
—	—	—	—	—	4:55a	5:01a	5:07a	5:16	5:24	5:33	5:40
—	—	—	—	—	5:10	5:16	5:22	5:31	5:39	5:48	5:55
—	—	5:04a	5:13a	5:22a	5:25	5:31	5:37	5:46	5:54	6:03	6:10
5:03a	5:09a	5:19	5:28	5:37	5:40	5:46	5:52	6:01	6:09	6:18	6:25
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*											
:18	:24	:34	:43	:52	:55	:01	:07	:16	:24	:33	:40
:33	:39	:49	:58	:07	:10	:16	:22	:31	:39	:48	:55
:48	:54	:04	:13	:22	:25	:31	:37	:46	:54	:03	:10
:03	:09	:19	:28	:37	:40	:46	:52	:01	:09	:18	:25
UNTIL: / *HASTA:*											
9:18p	9:24p	9:34p	9:43p	9:52p	9:55p	10:01p	10:07p	10:16p	10:24p	10:33p	10:40p
—	—	—	—	—	10:10	10:16	10:22	10:31	10:39	10:48	10:55
9:48	9:54	10:04	10:13	10:22	10:25	10:31	10:37	10:46	10:54	11:03	11:10
—	—	—	—	—	10:40	10:46	10:52	11:01	11:09	11:18	11:25
10:18	10:24	10:34	10:43	10:52	10:55	11:01	11:07	11:16	11:24	11:33	11:40
—	—	—	—	—	11:10	11:16	11:22	11:31	11:39	11:48	11:55
10:48	10:54	11:04	11:13	11:22	11:25	11:31	11:37	11:46	11:54	12:03a	12:10a
11:18	11:24	11:34	11:43	11:52	11:55	12:01a	12:07a	12:16a	12:24a	12:33	12:40
11:48	11:54	12:04a	12:13a	12:22a	12:25a	12:31	12:37	—	—	—	—
12:18a	12:24a	12:34	12:43	12:52	12:55	1:01	1:07	—	—	—	—

B = Trip begins at Barrio Logan Station six minutes earlier than time shown. / *Viaje comienza en la estación de Barrio Logan seis minutos antes del tiempo indicado.*

Orange Line

Monday through Friday / *lunes a viernes*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
—	—	—	—	D 4:58a	5:12a	5:17a	5:23a
4:45a	4:48a	4:54a	5:00a	5:13	5:27	5:32	5:38
5:00	5:03	5:09	5:15	5:28	5:42	5:47	5:53
5:15	5:18	5:24	5:30	5:43	5:57	6:02	6:08
5:30	5:33	5:39	5:45	5:58	6:12	6:17	6:23
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:00	6:03	6:09	6:15	6:28	6:42	6:47	6:53
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:30	6:33	6:39	6:45	6:58	7:12	7:17	7:23
—	—	—	6:53	7:06	7:20	7:25	—
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
—	—	—	7:08	7:21	7:35	7:40	—
7:00	7:03	7:09	7:15	7:28	7:42	7:47	7:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
8:15p	8:18p	8:24p	8:30p	8:43p	8:57p	9:02p	9:08p
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:15	11:18	11:24	11:30	11:43	11:57	12:02a	12:08a
11:45	11:48	11:54	12:00a	12:13a	12:27a	12:27	12:38
12:15a	12:18a	12:24a	12:30	12:43	12:57	1:02	1:08
12:45	12:48	12:54	1:00	1:13	1:27	1:32	1:38

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	E 4:09a	4:23a	4:29a	4:36a	4:38a
—	—	—	E 4:24	4:38	4:44	4:51	4:53
—	—	—	E 4:39	4:53	4:59	5:06	5:08
—	—	—	E 4:54	5:08	5:14	5:21	5:23
—	—	—	E 5:09	5:23	5:29	5:36	5:38
5:00a	5:05a	5:11a	5:24	5:38	5:44	5:51	5:53
5:15	5:20	5:26	5:39	5:53	5:59	6:06	6:08
5:30	5:35	5:41	5:54	6:08	6:14	6:21	6:23
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:00	6:05	6:11	6:24	6:38	6:44	6:51	6:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
7:15p	7:20p	7:26p	7:39p	7:53p	7:59p	8:06p	8:08p
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:15	10:20	10:26	10:39	10:53	10:59	11:06	11:08
10:45	10:50	10:56	11:09	11:23	11:29	11:36	11:38
11:15	11:20	11:26	11:39	11:53	11:59	12:06a	12:08a
11:45	11:50	11:56	12:09a	12:23a	12:29a	12:36	12:38

Saturday / *sábado*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
5:15a	5:18a	5:24a	5:30a	5:43a	5:57a	6:02a	6:08a
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
—	—	—	—	—	7:42	7:47	7:53
7:15	7:18	7:24	7:30	7:43	7:57	8:02	8:08
7:30	7:33	7:39	7:45	7:58	8:12	8:17	8:23
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:00	8:03	8:09	8:15	8:28	8:42	8:47	8:53
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:30	8:33	8:39	8:45	8:58	9:12	9:17	9:23
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:00	9:03	9:09	9:15	9:28	9:42	9:47	9:53
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:30	9:33	9:39	9:45	9:58	10:12	10:17	10:23
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:00	10:03	10:09	10:15	10:28	10:42	10:47	10:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
7:15p	7:18p	7:24p	7:30p	7:43p	7:57p	8:02p	8:08p
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:15	11:18	11:24	11:30	11:43	11:57	12:02a	12:08a
11:45	11:48	11:54	12:00a	12:13a	12:27a	12:32	12:38
12:15a	12:18a	12:24a	12:30	12:43	12:57	1:02	1:08
12:45	12:48	12:54	1:00	1:13	1:27	1:32	1:38

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	E 4:39a	4:53a	4:59a	5:06a	5:08a
—	—	—	E 5:09	5:23	5:29	5:36	5:38
5:15a	5:20a	5:26a	5:39	5:53	5:59	6:06	6:08
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:15	6:20	6:26	6:39	6:53	6:59	7:06	7:08
—	—	—	E 6:54	7:08	7:14	7:21	7:23
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
—	—	—	E 7:24	7:38	7:44	7:51	7:53
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
—	—	—	E 7:54	8:08	8:14	8:21	8:23
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:00	8:05	8:11	8:24	8:38	8:44	8:51	8:53
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:30	8:35	8:41	8:54	9:08	9:14	9:21	9:23
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:00	9:05	9:11	9:24	9:38	9:44	9:51	9:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
6:15p	6:20p	6:26p	6:39p	6:53p	6:59p	7:06p	7:08p
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:15	10:20	10:26	10:39	10:53	10:59	11:06	11:08
10:45	10:50	10:56	11:09	11:23	11:29	11:36	11:38
11:15	11:20	11:26	11:39	11:53	11:59	12:06a	12:08a
11:45	11:50	11:56	12:09a	12:23a	12:29a	12:36	12:38

Sunday / *domingo*

ARNELE AVE. ➡ DOWNTOWN

Arnele Ave.	El Cajon	Grossmont	Spring Street	Euclid Avenue	12th & Imperial	City College	Courthouse
5:15a	5:18a	5:24a	5:30a	5:43a	5:57a	6:02a	6:08a
5:45	5:48	5:54	6:00	6:13	6:27	6:32	6:38
6:15	6:18	6:24	6:30	6:43	6:57	7:02	7:08
6:45	6:48	6:54	7:00	7:13	7:27	7:32	7:38
7:15	7:18	7:24	7:30	7:43	7:57	8:02	8:08
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
—	—	—	—	—	9:42	9:47	9:53
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
—	—	—	—	—	10:12	10:17	10:23
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
—	—	—	—	—	10:42	10:47	10:53
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
—	—	—	—	—	11:12	11:17	11:23
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:00	11:03	11:09	11:15	11:28	11:42	11:47	11:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:18	:24	:30	:43	:57	:02	:08
:30	:33	:39	:45	:58	:12	:17	:23
:45	:48	:54	:00	:13	:27	:32	:38
:00	:03	:09	:15	:28	:42	:47	:53
UNTIL: / *HASTA:*							
7:15p	7:18p	7:24p	7:30p	7:43p	7:57p	8:02p	8:08p
7:45	7:48	7:54	8:00	8:13	8:27	8:32	8:38
8:15	8:18	8:24	8:30	8:43	8:57	9:02	9:08
8:45	8:48	8:54	9:00	9:13	9:27	9:32	9:38
9:15	9:18	9:24	9:30	9:43	9:57	10:02	10:08
9:45	9:48	9:54	10:00	10:13	10:27	10:32	10:38
10:15	10:18	10:24	10:30	10:43	10:57	11:02	11:08
10:45	10:48	10:54	11:00	11:13	11:27	11:32	11:38
11:15	11:18	11:24	11:30	11:43	11:57	12:02a	12:08a

DOWNTOWN ➡ ARNELE AVE.

Courthouse	City College	12th & Imperial	Euclid Avenue	Spring Street	Grossmont	El Cajon	Arnele Ave.
—	—	—	E 4:39a	4:53a	4:59a	5:06a	5:08a
—	—	—	E 5:09	5:23	5:29	5:36	5:38
5:15a	5:20a	5:26a	5:39	5:53	5:59	6:06	6:08
5:45	5:50	5:56	6:09	6:23	6:29	6:36	6:38
6:15	6:20	6:26	6:39	6:53	6:59	7:06	7:08
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:00	10:05	10:11	10:24	10:38	10:44	10:51	10:53
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*							
:15	:20	:26	:39	:53	:59	:06	:08
:30	:35	:41	:54	:08	:14	:21	:23
:45	:50	:56	:09	:23	:29	:36	:38
:00	:05	:11	:24	:38	:44	:51	:53
UNTIL: / *HASTA:*							
6:15p	6:20p	6:26p	6:39p	6:53p	6:59p	7:06p	7:08p
6:45	6:50	6:56	7:09	7:23	7:29	7:36	7:38
7:15	7:20	7:26	7:39	7:53	7:59	8:06	8:08
7:45	7:50	7:56	8:09	8:23	8:29	8:36	8:38
8:15	8:20	8:26	8:39	8:53	8:59	9:06	9:08
8:45	8:50	8:56	9:09	9:23	9:29	9:36	9:38
9:15	9:20	9:26	9:39	9:53	9:59	10:06	10:08
9:45	9:50	9:56	10:09	10:23	10:29	10:36	10:38
10:15	10:20	10:26	10:39	10:53	10:59	11:06	11:08

E = Trip begins at 25th & Commercial Station ten minutes earlier than time show. / *Este viaje comienza diez minutos antes del tiempo indicado en la estacion de 25th & Commercial.*
D = Trip begins at Encanto/62nd Street Station three minutes earlier than time show. / *Este viaje comienza tres minutos antes del tiempo indicado en la estacion deEncanto/62nd Street.*

Green Line

Monday through Friday / *lunes a viernes*

SANTEE ➡ DOWNTOWN

Santee	El Cajon	Grossmont	SDSU	Stadium	Fashion Valley	Old Town	Santa Fe Depot	12th & Imperial
—	—	—	—	—	—	4:52a	5:01a	5:08a
—	—	—	—	4:52a	5:01a	5:07	5:16	5:23
—	—	—	—	—	—	5:22	5:31	5:38
—	—	—	—	5:22	5:31	5:37	5:46	5:53
5:03a	5:14a	5:20a	5:29a	5:37	5:46	5:52	6:01	6:08
5:18	5:29	5:35	5:44	5:52	6:01	6:07	6:16	6:23
5:33	5:44	5:50	5:59	6:07	6:16	6:22	6:31	6:38
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:48	:59	:05	:14	:22	:31	:37	:46	:53
:03	:14	:20	:29	:37	:46	:52	:01	:08
:18	:29	:35	:44	:52	:01	:07	:16	:23
:33	:44	:50	:59	:07	:16	:22	:31	:38
UNTIL: / *HASTA:*								
8:48p	8:59p	9:05p	9:14p	9:22p	9:31p	9:37p	9:46p	9:53p
9:18	9:29	9:35	9:44	9:52	10:01	10:07	10:16	10:23
9:48	9:59	10:05	10:14	10:22	10:31	10:37	10:46	10:53
10:18	10:29	10:35	10:44	10:52	11:01	11:07	11:16	11:23
10:48	10:59	11:05	11:14	11:22	11:31	11:37	11:46	11:53
—	—	—	11:29	11:37	11:46	11:52	12:01a	12:08a
11:18	11:29	11:35	11:44	11:52	12:01a	12:07a	12:16	12:23
—	—	—	11:59	12:07a	12:16	12:22	12:31	12:38
—	—	—	12:29a	12:37	12:46	12:52	1:01	1:08

DOWNTOWN ➡ SANTEE

12th & Imperial	Santa Fe Depot	Old Town	Fashion Valley	Stadium	SDSU	Grossmont	El Cajon	Santee
—	H 3:58a	4:07a	4:13a	4:22a	4:30a	4:39a	4:46a	4:57a
—	H 4:13	4:22	4:28	4:37	4:45	4:54	5:01	5:12
—	H 4:28	4:37	4:43	4:52	5:00	5:09	5:16	5:27
—	H 4:43	4:52	4:58	5:07	5:15	5:24	5:31	5:42
—	H 4:58	5:07	5:13	5:22	5:30	5:39	5:46	5:57
5:06a	5:13	5:22	5:28	5:37	5:45	5:54	6:01	6:12
5:21	5:28	5:37	5:43	5:52	6:00	6:09	6:16	6:27
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	:30	:39	:46	:57
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	:00	:09	:16	:27
UNTIL: / *HASTA:*								
7:36p	7:43p	7:52p	7:58p	8:07p	8:15p	8:24p	8:31p	8:42p
8:06	8:13	8:22	8:28	8:37	8:45	8:54	9:01	9:12
8:36	8:43	8:52	8:58	9:07	9:15	9:24	9:31	9:42
9:06	9:13	9:22	9:28	9:37	9:45	9:54	10:01	10:12
9:36	9:43	9:52	9:58	10:07	10:15	10:24	10:31	10:42
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:36	10:43	10:52	10:58	11:07	11:15	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	—	—	—
11:36	11:43	11:52	11:58	12:07a	12:15a	—	—	—

Saturday / *sábado*

SANTEE ➡ DOWNTOWN

Santee	El Cajon	Grossmont	SDSU	Stadium	Fashion Valley	Old Town	Santa Fe Depot	12th & Imperial
—	—	—	—	4:52a	5:01a	5:07a	5:16a	5:23a
—	—	—	—	5:22	5:31	5:37	5:46	5:53
5:18a	5:29a	5:35a	5:44a	5:52	6:01	6:07	6:16	6:23
5:48	5:59	6:05	6:16	6:22	6:31	6:37	6:46	6:53
—	—	—	—	6:37	6:46	6:52	7:01	7:08
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:18	:29	:35	:44	:52	:01	:07	:16	:23
—	—	—	—	:07	:16	:22	:31	:38
:48	:59	:05	:14	:22	:31	:37	:46	:53
—	—	—	—	:37	:46	:52	:01	:08
UNTIL: / *HASTA:*								
11:18	11:29	11:35	11:44	11:52	12:01p	12:07p	12:16p	12:23p
11:33	11:44	11:50	11:59	12:07p	12:16	12:22	12:31	12:38
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:48	:59	:05	:14	:22	:31	:37	:46	:53
:03	:14	:20	:29	:37	:46	:52	:01	:08
:18	:29	:35	:44	:52	:01	:07	:16	:23
:33	:44	:50	:59	:07	:16	:22	:31	:38
UNTIL: / *HASTA:*								
7:48p	7:59p	8:05p	8:14p	8:22	8:31	8:37	8:46	8:53
8:18	8:29	8:35	8:44	8:52	9:01	9:07	9:16	9:23
8:48	8:59	9:05	9:14	9:22	9:31	9:37	9:46	9:53
9:18	9:29	9:35	9:44	9:52	10:01	10:07	10:16	10:23
9:48	9:59	10:05	10:14	10:22	10:31	10:37	10:46	10:53
10:18	10:29	10:35	10:44	10:52	11:01	11:07	11:16	11:23
10:48	10:59	11:05	11:14	11:22	11:31	11:37	11:46	11:53
—	—	—	11:29	11:37	11:46	11:52	12:01a	12:08a
11:18	11:29	11:35	11:44	11:52	12:01a	12:07a	12:16	12:23
—	—	—	11:59	12:07a	12:16	12:22	12:31	12:38
—	—	—	12:29a	12:37	12:46	12:52	1:01	1:08

H = Trip begins at Gaslamp Quarter Station five minutes earlier than time show. / Este viaje comienza cinco minutos antes del tiempo indicado en la estacion de Gaslamp Quarter.

DOWNTOWN ➡ SANTEE

12th & Imperial	Santa Fe Depot	Old Town	Fashion Valley	Stadium	SDSU	Grossmont	El Cajon	Santee
—	H 4:13a	4:22a	4:28a	4:37a	4:45a	4:54a	5:01a	5:12a
—	H 4:43	4:52	4:58	5:07	5:15	5:24	5:31	5:42
5:06a	5:13	5:22	5:28	5:37	5:45	5:54	6:01	6:12
5:36	5:43	5:52	5:58	6:07	6:15	6:24	6:31	6:42
5:51	5:58	6:07	6:13	6:22	—	—	—	—
6:06	6:13	6:22	6:28	6:37	6:45	6:54	7:01	7:12
AND THEN EVERY 15-30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:21	:28	:37	:43	:52	—	—	—	—
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	—	—	—	—
:06	:13	:22	:28	:37	:45	:54	:01	:12
UNTIL: / *HASTA:*								
10:21	10:28	10:37	10:43	10:52	11:00	11:09	11:16	11:27
10:36	10:43	10:52	10:58	11:07	11:15	11:24	11:31	11:42
10:51	10:58	11:07	11:13	11:22	11:30	11:39	11:46	11:57
11:06	11:13	11:22	11:28	11:37	11:45	11:54	12:01p	12:12p
11:21	11:28	11:37	11:43	11:52	12:00p	12:09p	12:16	12:27
AND THEN EVERY 15 MINUTES AT: / *Y LUEGO CADA 15 MINUTOS A LA:*								
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	:30	:39	:46	:57
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	:00	:09	:16	:27
UNTIL: / *HASTA:*								
6:36p	6:43p	6:52p	6:58p	7:07p	7:15	7:24	7:31	7:42
7:06	7:13	7:22	7:28	7:37	7:45	7:54	8:01	8:12
7:36	7:43	7:52	7:58	8:07	8:15	8:24	8:31	8:42
8:06	8:13	8:22	8:28	8:37	8:45	8:54	9:01	9:12
8:36	8:43	8:52	8:58	9:07	9:15	9:24	9:31	9:42
9:06	9:13	9:22	9:28	9:37	9:45	9:54	10:01	10:12
9:36	9:43	9:52	9:58	10:07	10:15	10:24	10:31	10:42
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:36	10:43	10:52	10:58	11:07	11:15	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	—	—	—
11:36	11:43	11:52	11:58	12:07a	12:15a	—	—	—

Sunday / *domingo*

SANTEE ➡ DOWNTOWN

Santee	El Cajon	Grossmont	SDSU	Stadium	Fashion Valley	Old Town	Santa Fe Depot	12th & Imperial
—	—	—	—	4:52a	5:01a	5:07a	5:16a	5:23a
—	—	—	—	5:22	5:31	5:37	5:46	5:53
5:18a	5:29a	5:35a	5:44a	5:52	6:01	6:07	6:16	6:23
5:48	5:59	6:05	6:14	6:22	6:31	6:37	6:46	6:53
6:18	6:29	6:35	6:44	6:52	7:01	7:07	7:16	7:23
6:48	6:59	7:05	7:14	7:22	7:31	7:37	7:46	7:53
—	—	—	—	7:37	7:46	7:52	8:01	8:08
7:18	7:29	7:35	7:44	7:52	8:01	8:07	8:16	8:23
—	—	—	—	8:07	8:16	8:22	8:31	8:38
7:48	7:59	8:05	8:14	8:22	8:31	8:37	8:46	8:53
—	—	—	—	8:37	8:46	8:52	9:01	9:08
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:18	:29	:35	:44	:52	:01	:07	:16	:23
—	—	—	—	:07	:16	:22	:31	:38
:48	:59	:05	:14	:22	:31	:37	:46	:53
—	—	—	—	:37	:46	:52	:01	:08
UNTIL: / *HASTA:*								
11:18	11:29	11:35	11:44	11:52	12:01p	12:07p	12:16p	12:23p
—	—	—	11:59	12:07p	12:16	12:22	12:31	12:38
11:48	11:59	12:05p	12:14p	12:22	12:31	12:37	12:46	12:53
—	—	—	12:29	12:37	12:46	12:52	1:01	1:08
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:18	:29	:35	:44	:52	:01	:07	:16	:23
—	—	—	:59	:07	:16	:22	:31	:38
:48	:59	:05	:14	:22	:31	:37	:46	:53
—	—	—	:29	:37	:46	:52	:01	:08
UNTIL: / *HASTA:*								
7:18p	7:29p	7:35	7:44	7:52	8:01	8:07	8:16	8:23
7:48	7:59	8:05	8:14	8:22	8:31	8:37	8:46	8:53
8:18	8:29	8:35	8:44	8:52	9:01	9:07	9:16	9:23
8:48	8:59	9:05	9:14	9:22	9:31	9:37	9:46	9:53
9:18	9:29	9:35	9:44	9:52	10:01	10:07	10:16	10:23
9:48	9:59	10:05	10:14	10:22	10:31	10:37	10:46	10:53
10:18	10:29	10:35	10:44	10:52	11:01	11:07	11:16	11:23
10:48	10:59	11:05	11:14	11:22	11:31	11:37	11:46	11:53
—	—	—	11:29	11:37	11:46	11:52	12:01a	12:08a
11:18	11:29	11:35	11:44	11:52	12:01a	12:07a	12:16	12:23
—	—	—	11:59	12:07a	12:16	12:22	12:31	12:38
—	—	—	12:29a	12:37	12:46	12:52	1:01	1:08

H = Trip begins at Gaslamp Quarter Station five minutes earlier than time show. / Este viaje comienza cinco minutos antes del tiempo indicado en la estacion de Gaslamp Quarter.

DOWNTOWN ➡ SANTEE

12th & Imperial	Santa Fe Depot	Old Town	Fashion Valley	Stadium	SDSU	Grossmont	El Cajon	Santee
—	H 4:13a	4:22a	4:28a	4:37a	4:45a	4:54a	5:01a	5:12a
—	H 4:43	4:52	4:58	5:07	5:15	5:24	5:31	5:42
5:06a	5:13	5:22	5:28	5:37	5:45	5:54	6:01	6:12
5:36	5:43	5:52	5:58	6:07	6:15	6:24	6:31	6:42
6:06	6:13	6:22	6:28	6:37	6:45	6:54	7:01	7:12
6:36	6:43	6:52	6:58	7:07	7:15	7:24	7:31	7:42
6:51	6:58	7:07	7:13	7:22	—	—	—	—
7:06	7:13	7:22	7:28	7:37	7:45	7:54	8:01	8:12
7:21	7:28	7:37	7:43	7:52	—	—	—	—
7:36	7:43	7:52	7:58	8:07	8:15	8:24	8:31	8:42
7:51	7:58	8:07	8:13	8:22	—	—	—	—
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	—	—	—	—
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	—	—	—	—
UNTIL: / *HASTA:*								
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:21	10:28	10:37	10:43	10:52	—	—	—	—
10:36	10:43	10:52	10:58	11:07	11:15	11:24	11:31	11:42
10:51	10:58	11:07	11:13	11:22	11:30	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	11:54	12:01p	12:12p
11:21	11:28	11:37	11:43	11:52	12:00p	—	—	—
AND THEN EVERY 15–30 MINUTES AT: / *Y LUEGO CADA 15–30 MINUTOS A LA:*								
:36	:43	:52	:58	:07	:15	:24	:31	:42
:51	:58	:07	:13	:22	:30	—	—	—
:06	:13	:22	:28	:37	:45	:54	:01	:12
:21	:28	:37	:43	:52	:00	—	—	—
UNTIL: / *HASTA:*								
6:36p	6:43p	6:52p	6:58p	7:07p	7:15	7:24p	7:31	7:42
7:06	7:13	7:22	7:28	7:37	7:45	7:54	8:01	8:12
7:36	7:43	7:52	7:58	8:07	8:15	8:24	8:31	8:42
8:06	8:13	8:22	8:28	8:37	8:45	8:54	9:01	9:12
8:36	8:43	8:52	8:58	9:07	9:15	9:24	9:31	9:42
9:06	9:13	9:22	9:28	9:37	9:45	9:54	10:01	10:12
9:36	9:43	9:52	9:58	10:07	10:15	10:24	10:31	10:42
10:06	10:13	10:22	10:28	10:37	10:45	10:54	11:01	11:12
10:36	10:43	10:52	10:58	11:07	11:15	—	—	—
11:06	11:13	11:22	11:28	11:37	11:45	—	—	—
11:36	11:43	11:52	11:58	12:07a	12:15a	—	—	—

Silver Line

Saturday & Sunday / *sábado & domingo*

DOWNTOWN LOOP

12th & Imperial	Gaslamp Quarter	Convention Center	Seaport Village	America Plaza	Civic Center	Fifth Avenue	City College	Park & Market	12th & Imperial
9:07a	9:09a	9:10a	9:12a	9:20a	9:22a	9:24a	9:26a	9:29a	9:32a
9:37	9:39	9:40	9:42	9:50	9:52	9:54	9:56	9:59	10:02
10:07	10:09	10:10	10:12	10:20	10:22	10:24	10:26	10:29	10:32
10:37	10:39	10:40	10:42	10:50	10:52	10:54	10:56	10:59	11:02
11:07	11:09	11:10	11:12	11:20	11:22	11:24	11:26	11:29	11:32
11:52	11:54	11:55	11:57	12:05p	12:07p	12:09p	12:11p	12:14p	12:17p
12:22p	12:24p	12:25p	12:27p	12:35p	12:37p	12:39p	12:41p	12:44p	12:47p
12:52	12:54	12:55	12:57	1:05	1:07	1:09	1:11	1:14	1:17
1:22	1:24	1:25	1:27	1:35	1:37	1:39	1:41	1:44	1:47

times continue next column / horario continúa en la siguiente columna -->

DOWNTOWN LOOP

12th & Imperial	Gaslamp Quarter	Convention Center	Seaport Village	America Plaza	Civic Center	Fifth Avenue	City College	Park & Market	12th & Imperial
2:22p	2:24p	2:25p	2:27p	2:35p	2:37p	2:39p	2:41p	2:44p	2:47p
2:52	2:54	2:55	2:57	3:05	3:07	3:09	3:11	3:14	3:17
3:22	3:24	3:25	3:27	3:35	3:37	3:39	3:41	3:44	3:47
3:52	3:54	3:55	3:57	4:05	4:07	4:09	4:11	4:14	4:17
4:37	4:39	4:40	4:42	4:50	4:52	4:54	4:56	4:59	5:02
5:07	5:09	5:10	5:12	5:20	5:22	5:24	5:26	5:29	5:32
5:37	5:39	5:40	5:42	5:50	5:52	5:54	5:56	5:59	6:02
6:07	6:09	6:10	6:12	6:20	6:22	6:24	6:26	6:29	6:32

Silver Line subject to cancellation due to holidays, construction, special events or vehicle maintenance / *Silver Line Sujeto a cancelación por días festivos, construcción, eventos especiales o mantenimiento de vehículos*

Scan for Current schedules and alerts
Escanea para horarios y alertas actuales

Holiday Service

A Saturday or Sunday schedule will be operated on the following holidays and observed holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day and Thanksgiving. Christmas schedule: Trolleys operate every 30 minutes throughout the day on all lines. No Silver Line on Holidays. Call 511 or (619) 233-3004 for more information.

Servicio de los días festivos

Se operará con horario de sábado o domingo durante los siguientes días festivos y feriados observados: *New Year's Day, Presidents' Day, Memorial Day, Independence Day (EE.UU.), Labor Day y Thanksgiving.* **Servicio durante Navidad:** *Los carros operarán cada 30 minutos durante todo el día en todas las líneas. No habrá Silver Line en días festivos. Llame al 511 ó* (619) 233-3004 *para más información.*

Appendix E: Signal Timing and Traffic Count Data

Provided on the following page

INTERSECTION: EASTGATE MALL & TOWNE CENTRE DR

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Towne Centre Dr
E/W Street: Eastgate Mall

Last Database Change:

Timing sheets by: JMV
Approved by:
Timing implemented on: 9/15/2010

		Eastgate Mall	Towne Centre Dr	Eastgate Mall	Towne Centre Dr										
		Phase													
Row	Phase Numbers---->	1	2	3	4	5	6	7	8		E		F	Row
0	Ped Walk		7		7		7		7	RR-1 Delay		Permit	12345678	0
1	Ped FDW		20		19		19		19	RR-1 Clear		Red Lock		1
2	Min Green	4	7	4	7	4	7	4	7	EV-A Delay	0	Yellow Lock		2
3	Type 3 Disconnect									EV-A Clear	0	Min Recall		3
4	Added per Vehicle									EV-B Delay	0	Ped Recall		4
5	Veh Extension	2.0	5.1	2.0	4.7	2.0	4.8	2.0	4.7	EV-B Clear	0	*View Set Peds*		5
6	Max Gap	2.0	5.1	2.0	4.7	2.0	4.8	2.0	4.7	EV-C Delay	0	Rest In Walk		6
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2	EV-C Clear	0	Red Rest		7
8	Max Limit	30	60	30	40	30	60	30	40	EV-D Delay	0	Double Entry		8
9	Max Limit 2									EV-D Clear	0	Max Recall		9
A	Adv. / Delay Walk									RR-2 Delay		Soft Recall	2 6	A
B	PE Min Ped FDW									RR-2 Clear		Max 2		B
C	Cond Serv Check									*View EV Delay*	- - -	Cond. Service		C
D	Reduce Every		0.6		0.7		0.7		0.7	*View EV Clear*	- - -	Man Cntrl Calls		D
E	Yellow Change	3.4	3.9	3.4	4.2	3.4	4.7	3.4	4.2	*View RR Delay*	- - -	Yellow Start	2 6	E
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	*View RR Clear*	- - -	First Phases	4 8	F

Phase Timing - Bank 1 <F/1+Phase+Row>

Preempt Timing <F/1+E+Row>

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number		<C/0+0+0>
Zone Number		<C/0+0+1>
Area Number		<C/0+0+2>
Area Address		<C/0+0+3>
QuicNet Channel		(QuicNet)

Communication Addresses

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag 2 4 6 8 <C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1
F + 9 + E = 1

Notes: 34681-8-D

Version: 233 RV
Rivision: San Diego 1

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term		4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls		E
Start-up Ped Calls		F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Configuration <E/125+F+Row>

	C	Row
EV-A		0
EV-B		1
EV-C		2
EV-D		3
RR-1 *	---	4
RR-2 *	---	5
SE-1	0	6
SE-2	0	7
		8
		9
		A
		B
		C
		D
		E
		F

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSECTION: EASTGATE MALL & TOWNE CENTRE D

233 Program

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39					1.8
1	6J2U	40					1.8
2	4 I6U	41					1.8
3	8 J6U	42					1.8
4		43					
5		44					
6		45					
7		46					
8		47					
9		48					
A		49					
B		50					
C		55					
D		56					
E		57					
F		58					

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	0

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59					
1		60					
2		61					
3		62					
4		63					
5		64					
6		65					
7		66					
8		67					
9		68					
A		69					
B		70					
C		76					
D		77					
E		78					
F		79					

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Spec. Funct. 1	NOT-3	Max 2	Pretimed	Set Monday	Dial 2 (7-Wire)	Sim Term	0
1	Spec. Funct. 2	NOT-4	System Det 1	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A	1
2	Spec. Funct. 3	OR-4 (a)	System Det 2	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B	2
3	Spec. Funct. 4	OR-4 (b)	System Det 3	Plan 3	Dimming	Offset 2 (7-Wire)	EV-C	3
4	NAND-3 (a)	OR-5 (a)	System Det 4	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D	4
5	NAND-3 (b)	OR-5 (b)	System Det 5	Plan 5	Stop Time	Free (7-Wire)	RR-1	5
6	NAND-4 (a)	OR-6 (a)	System Det 6	Plan 6	Flash Sense 81	Flash (7-Wire)	RR-2	6
7	NAND-4 (b)	OR-6 (b)	System Det 7	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1	7
8	OR-7 (a)	Fig 3 Diamond	System Det 8	Plan 8	Man. Advance	NOT-1	Spec. Event 2	8
9	OR-7 (b)	Fig 4 Diamond	Max Inhibit (nema)	Plan 9	External Alarm	NOT-2	External Lag	9
A	OR-7 (c)	AND-4 (a)	Force A (nema)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)	A
B	OR-7 (d)	AND-4 (b)	Force B (nema)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)	B
C	OR-8 (a)	NAND-1 (a)	C.N.A. (nema)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)	C
D	OR-8 (b)	NAND-1 (b)	Hold (nema)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)	D
E	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)	E
F	OR-8 (d)	NAND-2 (b)	Min Recall	DELAY-F	Detector Set 3	OR-3 (b)	AND-3 (b)	F

Assignable Inputs **<E/126+Column+Row>**

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)	0
1	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)	1
2	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)	2
3	Phase ON - 4	Sp Evnt Out 3	Fig 3 Diamond	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)	3
4	Phase ON - 5	Sp Evnt Out 4	Fig 4 Diamond	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)	4
5	Phase ON - 6	Sp Evnt Out 5		Plan 5	AND-2	TOD Out 6	Free (7-Wire)	5
6	Phase ON - 7	Sp Evnt Out 6		Plan 6	AND-3	TOD Out 7	Flash (7-Wire)	6
7	Phase ON - 8	Sp Evnt Out 7		Plan 7	NOT-2	TOD Out 8	Preempt	7
8	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A	8
9	Ph. Check - 2		NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B	9
A	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C	A
B	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D	B
C	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C		C
D	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D		D
E	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E		E
F	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F		F

Assignable Outputs **<E/127+Column+Row>**

INTERSECTION: TOWNE CENTER & EXECUTIVE

Group Assignment: **NONE**
Field Master Assignment: **NONE**
System Reference Number: **632**

N/S Street Name: **TOWNE CENTER**
E/W Street Name: **EXECUTIVE**

Last Database Change: **8/6/2012 14:07**

Change Record					
Change	By	Date	Change	By	Date
SUPERLOOP		5/12			

Notes:

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Drop Number	7	<C/0+0+0>
Zone Number	7	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	47	<C/0+0+3>
QuicNet Channel	COM46:	(QuicNet)

Communication Addresses

Manual Plan		<C/0+A+1>
Manual Offset		<C/0+B+1>

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	5.0	<F/1+C+0>

Start / Revert Times

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase
(Outputs specified in Assignable Outputs at E/127+A+E & F)

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	20	0	20	0	18	0	21
2	Min Green	4	7	4	4	4	7	4	7
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	2.0	3.8	2.0	5.3	2.0	3.8	2.0	5.4
6	Max Gap	2.0	3.8	2.0	5.3	2.0	3.8	2.0	5.4
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	0	1	0	1	0	1	0	1
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	0.6	0.0	0.6	0.0	0.8	0.0	0.6
E	Yellow Change	3.4	3.9	3.4	3.9	3.4	4.3	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <C+0+F=1>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <C+0+F=1>

	E
RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	2 6
4	Ped Recall	
5	*View Set Peds*	-----
6	Rest In Walk	
7	Red Rest	
8	Dual Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	2 6
F	First Phases	3 7

Phase Functions <C+0+F=1>

yellow time update 11/06/17 -Shaikh.

Row	Column Numbers --->	Overlap 1	2	3	4	5	6	7	8
	Overlap Name --->								
0	Load Switch Number	0	0	0	0	0	0	0	0
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Assignments <C+0+E=29>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = Solid FDW on EV
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Row		C
0	EV-A	0
1	EV-B	0
2	EV-C	0
3	EV-D	0
4	RR-1 *	---
5	RR-2 *	---
6	SE-1	0
7	SE-2	0

Preempt Priority <C+0+E=125>

(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row	Column Numbers --->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	1 5
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <C+0+E=125>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <C+0+E=125>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Specials <C+0+F=2>

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

	2
Phase 1	10
Phase 2	10
Phase 3	10
Phase 4	10
Phase 5	10
Phase 6	10
Phase 7	10
Phase 8	10

Coordination Transition Minimums <C+0+C=5>

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Column Numbers --->	Plan 1	2	3	4	5	6	7	8	9	Row
0	Plan Name --->										0
1	Cycle Length	100	100	100	100	100	100	100	100	100	1
2	Phase 1 - ForceOff	55	55	55	55	55	55	55	55	55	2
3	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	3
4	Phase 3 - ForceOff	20	20	20	20	20	20	20	20	20	4
5	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40	5
6	Phase 5 - ForceOff	55	55	55	55	55	55	55	55	55	6
7	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	7
8	Phase 7 - ForceOff	20	20	20	20	20	20	20	20	20	8
9	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40	9
A	Ring Offset	0	0	0	0	0	0	0	0	0	A
B	Offset 1	0	0	0	0	0	0	0	0	0	B
C	Offset 2	0	0	0	0	0	0	0	0	0	C
D	Offset 3	0	0	0	0	0	0	0	0	0	D
E	Perm 1 - End	15	15	15	15	15	15	15	15	15	E
F	Hold Release	255	255	255	255	255	255	255	255	255	F
	Zone Offset	0	0	0	0	0	0	0	0	0	

Coordination - Bank 1 <C+0+C=1>

Row		E	Row
0			0
1	Plan 1 - Sync	2 6	1
2	Plan 2 - Sync	2 6	2
3	Plan 3 - Sync	2 6	3
4	Plan 4 - Sync	2 6	4
5	Plan 5 - Sync	2 6	5
6	Plan 6 - Sync	2 6	6
7	Plan 7 - Sync	2 6	7
8	Plan 8 - Sync	2 6	8
9	Plan 9 - Sync	2 6	9
A	NEMA Sync		A
B	NEMA Hold		B
C			C
D			D
E	Coord Extra		E
F			F

Sync Phases <C+0+C=1>

Row		1	2	3	4	5	6	7	8	9	Row
0	Ped Adjustment	0	0	0	0	0	0	0	0	0	0
1	Perm 2 - Start	0	0	0	0	0	0	0	0	0	1
2	Perm 2 - End	0	0	0	0	0	0	0	0	0	2
3	Perm 3 - Start	0	0	0	0	0	0	0	0	0	3
4	Perm 3 - End	0	0	0	0	0	0	0	0	0	4
5	Reservice Time	0	0	0	0	0	0	0	0	0	5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	A
B	Perm 1 Ped Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Bank 2 <C+0+C=2>

Row		F	Row
0	Free Lag	2 4 6 8	0
1	Plan 1 - Lag	2 4 6 8	1
2	Plan 2 - Lag	2 4 6 8	2
3	Plan 3 - Lag	2 4 6 8	3
4	Plan 4 - Lag	2 4 6 8	4
5	Plan 5 - Lag	2 4 6 8	5
6	Plan 6 - Lag	2 4 6 8	6
7	Plan 7 - Lag	2 4 6 8	7
8	Plan 8 - Lag	2 4 6 8	8
9	Plan 9 - Lag	2 4 6 8	9
A	External Lag		A
B			B
C			C
D			D
E			E
F			F

Lag Phases <C+0+C=1>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1	0	NOT-3	0	Max 2	0	Pretimed	0	Set Monday	0	Dial 2 (7-Wire)	0	Sim Term	0	0
1	Spec. Funct. 2	0	NOT-4	0	System Det 1	0	Plan 1	0	Ext. Perm 1	0	Dial 3 (7-Wire)	0	EV-A	71	1
2	Spec. Funct. 3	0	OR-4 (a)	0	System Det 2	0	Plan 2	0	Ext. Perm 2	0	Offset 1 (7-Wire)	0	EV-B	72	2
3	Spec. Funct. 4	0	OR-4 (b)	0	System Det 3	0	Plan 3	0	Dimming	0	Offset 2 (7-Wire)	0	EV-C	73	3
4	NAND-3 (a)	0	OR-5 (a)	0	System Det 4	0	Plan 4	0	Set Clock	0	Offset 3 (7-Wire)	0	EV-D	74	4
5	NAND-3 (b)	0	OR-5 (b)	0	System Det 5	0	Plan 5	0	Stop Time	82	Free (7-Wire)	0	RR-1	51	5
6	NAND-4 (a)	0	OR-6 (a)	0	System Det 6	0	Plan 6	0	Flash Sense	81	Flash (7-Wire)	0	RR-2	52	6
7	NAND-4 (b)	0	OR-6 (b)	0	System Det 7	0	Plan 7	0	Manual Enable	0	Excl. Ped Omit	0	Spec. Event 1	0	7
8	OR-7 (a)	0	Fig 3 Diamond	0	System Det 8	0	Plan 8	0	Man. Advance	0	NOT-1	0	Spec. Event 2	0	8
9	OR-7 (b)	0	Fig 4 Diamond	0	Max Inhibit (nema)	0	Plan 9	0	External Alarm	0	NOT-2	0	External Lag	0	9
A	OR-7 (c)	0	AND-4 (a)	0	Force A (nema)	0	DELAY-A	0	Phase Bank 2	0	OR-1 (a)	0	AND-1 (a)	0	A
B	OR-7 (d)	0	AND-4 (b)	0	Force B (nema)	0	DELAY-B	0	Phase Bank 3	0	OR-1 (b)	0	AND-1 (b)	0	B
C	OR-8 (a)	0	NAND-1 (a)	0	C.N.A. (nema)	0	DELAY-C	0	Overlap Set 2	0	OR-2 (a)	0	AND-2 (a)	0	C
D	OR-8 (b)	0	NAND-1 (b)	0	Hold (nema)	0	DELAY-D	0	Overlap Set 3	0	OR-2 (b)	0	AND-2 (b)	0	D
E	OR-8 (c)	0	NAND-2 (a)	0	Max Recall	0	DELAY-E	0	Detector Set 2	0	OR-3 (a)	0	AND-3 (a)	0	E
F	OR-8 (d)	0	NAND-2 (b)	0	Min Recall	0	DELAY-F	0	Detector Set 3	0	OR-3 (b)	0	AND-3 (b)	0	F

Assignable Inputs <C+0+E=126>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1	0	Preempt Fail	0	Flasher 0	0	Free	0	NOT-1	0	TOD Out 1	0	Dial 2 (7-Wire)	0	0
1	Phase ON - 2	0	Sp Evnt Out 1	0	Flasher 1	0	Plan 1	0	OR-1	0	TOD Out 2	0	Dial 3 (7-Wire)	0	1
2	Phase ON - 3	0	Sp Evnt Out 2	0	Fast Flasher	0	Plan 2	0	OR-2	0	TOD Out 3	0	Offset 1 (7-Wire)	0	2
3	Phase ON - 4	0	Sp Evnt Out 3	0	Fig 3 Diamond	0	Plan 3	0	OR-3	0	TOD Out 4	0	Offset 2 (7-Wire)	0	3
4	Phase ON - 5	0	Sp Evnt Out 4	0	Fig 4 Diamond	0	Plan 4	0	AND-1	0	TOD Out 5	0	Offset 3 (7-Wire)	0	4
5	Phase ON - 6	0	Sp Evnt Out 5	0			Plan 5	0	AND-2	0	TOD Out 6	0	Free (7-Wire)	0	5
6	Phase ON - 7	0	Sp Evnt Out 6	0			Plan 6	0	AND-3	0	TOD Out 7	0	Flash (7-Wire)	0	6
7	Phase ON - 8	0	Sp Evnt Out 7	0			Plan 7	0	NOT-2	0	TOD Out 8	0	Preempt	0	7
8	Ph. Check - 1	0	Sp Evnt Out 8	0	NOT-3	0	Plan 8	0	EV-A	0	Adv. Warn - 1	0	Low Priority A	0	8
9	Ph. Check - 2	0			NOT-4	0	Plan 9	0	EV-B	0	Adv. Warn - 2	0	Low Priority B	0	9
A	Ph. Check - 3	0	Detector Fail	0	OR-4	0	Spec. Funct. 3	0	EV-C	0	DELAY-A	0	Low Priority C	0	A
B	Ph. Check - 4	0	Spec. Funct. 1	0	OR-5	0	Spec. Funct. 4	0	EV-D	0	DELAY-B	0	Low Priority D	0	B
C	Ph. Check - 5	0	Spec. Funct. 2	0	OR-6	0	NAND-3	0	RR-1	0	DELAY-C	0			C
D	Ph. Check - 6	0	Central Control	0	AND-4	0	NAND-4	0	RR-2	0	DELAY-D	0			D
E	Ph. Check - 7	0	Excl. Ped DW	0	NAND-1	0	OR-7	0	Spec. Event 1	0	DELAY-E	0			E
F	Ph. Check - 8	0	Excl. Ped WK	0	NAND-2	0	OR-8	0	Spec. Event 2	0	DELAY-F	0			F

Assignable Outputs <C+0+E=127>

Row	Column Numbers ⟶ / Phase Names ⟶	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+9>

TBC Transition

Lag Hold Phases	_____	<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Daylight Savings Date
If set to all zeros, standard dates will be used.

Begin Month	3	<C/5+2+A>
Begin Week	2	<C/5+2+B>
End Month	11	<C/5+2+C>
End Week	1	<C/5+2+D>

Daylight Savings Time

Row		1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Long Failure	0.7	<F/1+0+6>
Short Failure	0.7	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Column Numbers --->	0	1	2	3	1	3	
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0	I-2-U	39	45_7_	_2_____	123___8	0.0	1.8
1	J-2-U	40	45_7_	____6__	123___8	0.0	1.8
2	I-6-U	41	45_7_	___4___	123___8	0.0	1.8
3	J-6-U	42	45_7_	_____8_	123___8	0.0	1.8
4	I-2-L	43	45_7_	_2_____	123___8	0.0	0.0
5	J-2-L	44	45_7_	____6__	123___8	0.0	0.0
6	I-6-L	45	45_7_	___4___	123___8	0.0	0.0
7	J-6-L	46	45_7_	_____8_	123___8	0.0	0.0
8	I-4	47	___67_	_2_____	123___8	0.0	0.0
9	J-4	48	___67_	____6__	123___8	0.0	0.0
A	I-8	49	___67_	___4___	123___8	0.0	0.0
B	J-8	50	___67_	_____8_	123___8	0.0	0.0
C	J-1	55	45_7_	___5___	123___8	0.0	0.0
D	I-1	56	45_7_	1_____	123___8	0.0	0.0
E	J-5	57	45_7_	_____7_	123___8	2.0	0.0
F	I-5	58	45_7_	_3_____	123___8	2.0	0.0

	4	5	6	7	2	4	
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0	J-9-U	59	45_7_	___5___	123___8	0.0	0.0
1	I-9-U	60	45_7_	1_____	123___8	0.0	0.0
2	J-9-L	61	45_7_	_____7_	123___8	0.0	0.0
3	I-9-L	62	45_7_	_3_____	123___8	0.0	0.0
4	I-3-U	63	45_7_	_2_____	123___8	0.0	0.0
5	J-3-U	64	45_7_	____6__	123___8	0.0	0.0
6	I-7-U	65	45_7_	___4___	123___8	0.0	0.0
7	J-7-U	66	45_7_	_____8_	123___8	0.0	0.0
8	I-12-U (Ped)	67	_2_____	_2_____	123___8	0.0	0.0
9	I-13-U (Ped)	68	_2_____	____6__	123___8	0.0	0.0
A	I-12-L (Ped)	69	_2_____	___4___	123___8	0.0	0.0
B	I-13-L (Ped)	70	_2_____	_____8_	123___8	0.0	0.0
C	I-3-L	76	45_7_	_2_____	123___8	0.0	0.0
D	J-3-L	77	45_7_	____6__	123___8	0.0	0.0
E	I-7-L	78	45_7_	___4___	123___8	0.0	0.0
F	J-7-L	79	45_7_	_____8_	123___8	0.0	0.0

Detector Assignments <C+0+E=126>

<C+0+D=0>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Column Numbers --->	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	1
Phase Green	0	0	0	0	0	0	0	0	2
Phase Yellow	0	0	0	0	0	0	0	0	3
Phase Red	0	0	0	0	0	0	0	0	4
Overlap Green	0	0	0	0	0	0	0	0	5
Overlap Yellow	0	0	0	0	0	0	0	0	6
Overlap Red	0	0	0	0	0	0	0	0	7

Redirect Phase Outputs <C+0+E=127>

Cabinet Type	0	<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	7	<D/0+0+2>

Detector Failure Monitor

	D	Row
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <C+0+E=125>

	D
Number of Digits	0
1 st Digit	0
2 ed Digit	0
3 ed Digit	0
4 th Digit	0
5 th Digit	0
6 th Digit	0
7 th Digit	0
8 th Digit	0
9 th Digit	0
10 th Digit	0
11 th Digit	0
12 th Digit	0
13 th Digit	0
14 th Digit	0
15 th Digit	0

<C+0+C=5>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

Delay Logic Times
<C+0+D=0> (seconds)

Omit Alarm		<C/5+F+0>

Disable Alarm Reporting

Time	10	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.1>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

TOD Function <C+0+7=0.1> <C+0+E=27>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.1>
(Bank 1)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.1>
(Bank 1)

T.O.D. Functions
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 5 - Disable Low Priority Preempt
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

Holiday TOD Function <C+0+7=0.2> <C+0+E=28>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.2>
(Bank 2)

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select
A = Offset A
B = Offset B
C = Offset C

Month Select
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 1 <C+0+E=27>

Notes:

0 <E/27+5+F>
Limited Service Interval

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 2 <C+0+E=28>

Notes:

0 <E/28+5+F>
Limited Service Interval

Min Time (seconds) | 4 | <F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes) | 4 | <F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds) | 0 | <F/1+0+A>

Min Time Between Same Preempts

(Does Not Apply To Railroad Preempt)

Low Pri. Channel | _____ | <E/125+C+8>

Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Delay Time (seconds) | 0 | <F/1+A+D>

Bus Delay

Max Time (seconds) | 0 | <F/1+A+E>

Max Early Green

Max Time (seconds) | 0 | <F/1+A+F>

Max Green Extension

Row	Time	Headway	Direction	Day of Week
0	00 : 00	0	0	_____
1	00 : 00	0	0	_____
2	00 : 00	0	0	_____
3	00 : 00	0	0	_____
4	00 : 00	0	0	_____
5	00 : 00	0	0	_____
6	00 : 00	0	0	_____
7	00 : 00	0	0	_____
8	00 : 00	0	0	_____
9	00 : 00	0	0	_____
A	00 : 00	0	0	_____
B	00 : 00	0	0	_____
C	00 : 00	0	0	_____
D	00 : 00	0	0	_____
E	00 : 00	0	0	_____
F	00 : 00	0	0	_____

Headway <C+0+9=2.1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

Low Priority Preemption (Bus Priority)

Only available with *Program 233RV2.B* (and above)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

INTERSECTION: Towne Centre Dr & Towne Centre Dwy

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Towne Centre Dr
E/W Street: Towne Centre Dwy

Last Database Change:

Timing sheets by: CAC
Approved by:
Timing implemented on:

Row	Phase Numbers—>	1	2	3	4	5	6	7	8
			↑				↓		←
0	Ped Walk		7						7
1	Ped FDW		8						15
2	Min Green		7				7		4
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension		3.9				4.1		2.0
6	Max Gap		3.9				4.1		2.0
7	Min Gap		0.2				0.2		2.0
8	Max Limit		60				60		40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.8				0.8		
E	Yellow Change		3.9				3.9		3.9
F	Red Clear		1.0				1.0		1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

Row		E
0	RR-1 Delay	
1	RR-1 Clear	
2	EV-A Delay	0
3	EV-A Clear	0
4	EV-B Delay	
5	EV-B Clear	
6	EV-C Delay	0
7	EV-C Clear	0
8	EV-D Delay	0
9	EV-D Clear	0
A	RR-2 Delay	
B	RR-2 Clear	
C	*View EV Delay*	- - -
D	*View EV Clear*	- - -
E	*View RR Delay*	- - -
F	*View RR Clear*	- - -

Preempt Timing <F/1+E+Row>

Row		F
0	Permit	2 6 8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	2 6
4	Ped Recall	
5	*View Set Peds*	
6	Rest In Walk	
7	Red Rest	
8	Double Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	2 6
F	First Phases	8

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number		<C/0+0+0>
Zone Number		<C/0+0+1>
Area Number		<C/0+0+2>
Area Address		<C/0+0+3>
QuicNet Channel		(QuicNet)

Communication Addresses

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Notes: 37552-11-D

Free Lag	2 6 8	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1
F + 9 + E = 1

Version: 233 RV
Rivision: San Diego 1

INTERSECTION: Towne Centre Dr & Towne Centre Dwy

233 Program

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	
Start-up Ped Calls	

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	
C	EV-C Phases	6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1_345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	
Ped for 4P Output	
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	---
RR-2 *	---
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

Version: 233 RV2
Revision: San Diego 1

INTERSECTION: Towne Centre Dr & Towne Centre Dwy

233 Program

	0	1	2	3	1	3
Row	*Detector Name*	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0	2I2U	39					1.8
1	6J2U	40					1.8
2	4I6U	41					
3	8J6U	42					
4	2I2L	43					1.8
5	6J2L	44					1.8
6	4I6L	45					
7	8J6L	46					
8	2I4	47					
9	6J4	48					
A	4I8	49					
B	8J8	50					
C	5J1U	55					
D	1I1U	56					
E	7J5	57					
F	3I5	58					

Program Type:

	4	5	6	7	2	4
Row	*Detector Name*	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-Over
0	5J9U	59					
1	1I9U	60					
2	7J9L	61					
3	3I9L	62					
4	2I3U	63					1.8
5	6J3U	64					1.8
6	4I7U	65					
7	8J7U	66					
8	2 PPB	67					
9	6 PPB	68					
A	4 PPB	69					
B	8 PPB	70					
C	2I3L	76					
D	6J3L	77					
E	4I7L	78					
F	8J7L	79					

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	Ped / Phase / Overlap								
	1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Version: 233 RV2
Revision San Diego 1

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Row	Time	Funct.	Day of Week
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
A			
B			
C			
D			
E			
F			

TOD Function <7/0.1+Row>

Row	Column 4 Phases/Bits
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
A	
B	
C	
D	
E	
F	

<E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Row	Time	Plan	Offset	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Events <9/1.1+Row>
(Bank 1)

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.2+Row>
(Bank 2)

Row	Time	Funct.	Holiday Type
0			
1			
2			
3			
4			
5			
6			
7			
8			
9			
A			
B			
C			
D			
E			
F			

Holiday TOD Function <7/0.2+Row>

Row	Column 4 Phases/Bits
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
A	
B	
C	
D	
E	
F	

<E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Row	Time	Plan	Offset	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Events <9/1.2+Row>
(Bank 2)

INTERSECTION: Towne Centre Dr & Towne Centre Dwy

233 Program

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name ---->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
0	Cycle Length									
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset 1									
B	Offset 2									
C	Offset 3									
D	Perm 1 - End									
E	Hold Release									
F	Zone Offset									

Coordination - Timing Plans <C/1+Plan+Row>

Row	E
0	
1	Plan 1 - Sync
2	Plan 2 - Sync
3	Plan 3 - Sync
4	Plan 4 - Sync
5	Plan 5 - Sync
6	Plan 6 - Sync
7	Plan 7 - Sync
8	Plan 8 - Sync
9	Plan 9 - Sync
A	NEMA Sync
B	NEMA Hold
C	
D	
E	Coord Extra
F	

Sync Phases <C/1+E+Row>

Row	Ped Adjustment	Perm 2 - Start	Perm 2 - End	Perm 3 - Start	Perm 3 - End	Reservice Time	Reservice Phases		Pretimed Phases	Max Recall	Perm 1 Veh Phase	Perm 1 Ped Phase	Perm 2 Veh Phase	Perm 2 Ped Phase	Perm 3 Veh Phase	Perm 3 Ped Phase
0																
1																
2																
3																
4																
5																
6																
7																
8																
9																
A																
B																
C																
D																
E																
F																

Coordination - Parameters <C/2+Plan+Row>

Row	F
0	Free Lag
1	Plan 1 - Lag
2	Plan 2 - Lag
3	Plan 3 - Lag
4	Plan 4 - Lag
5	Plan 5 - Lag
6	Plan 6 - Lag
7	Plan 7 - Lag
8	Plan 8 - Lag
9	Plan 9 - Lag
A	External Lag
B	
C	
D	
E	
F	

Lag Phases <C/1+F+Row>

Coordination Timing By:

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Spec. Funct. 1	NOT-3	Max 2	Pretimed	Set Monday	Dial 2 (7-Wire)	Sim Term	0
1	Spec. Funct. 2	NOT-4	System Det 1	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A 71	1
2	Spec. Funct. 3	OR-4 (a)	System Det 2	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B 72	2
3	Spec. Funct. 4	OR-4 (b)	System Det 3	Plan 3	Dimming	Offset 2 (7-Wire)	EV-C 73	3
4	NAND-3 (a)	OR-5 (a)	System Det 4	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D 74	4
5	NAND-3 (b)	OR-5 (b)	System Det 5	Plan 5	Stop Time	Free (7-Wire)	RR-1 51	5
6	NAND-4 (a)	OR-6 (a)	System Det 6	Plan 6	Flash Sense 81	Flash (7-Wire)	RR-2 52	6
7	NAND-4 (b)	OR-6 (b)	System Det 7	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1	7
8	OR-7 (a)	Fig 3 Diamond	System Det 8	Plan 8	Man. Advance	NOT-1	Spec. Event 2	8
9	OR-7 (b)	Fig 4 Diamond	Max Inhibit (nema)	Plan 9	External Alarm	NOT-2	External Lag	9
A	OR-7 (c)	AND-4 (a)	Force A (nema)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)	A
B	OR-7 (d)	AND-4 (b)	Force B (nema)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)	B
C	OR-8 (a)	NAND-1 (a)	C.N.A. (nema)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)	C
D	OR-8 (b)	NAND-1 (b)	Hold (nema)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)	D
E	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)	E
F	OR-8 (d)	NAND-2 (b)	Min Recall	DELAY-F	Detector Set 3	OR-3 (b)	AND-3 (b)	F

Assignable Inputs **<E/126+Column+Row>**

Row	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)	0
1	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)	1
2	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)	2
3	Phase ON - 4	Sp Evnt Out 3	Fig 3 Diamond	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)	3
4	Phase ON - 5	Sp Evnt Out 4	Fig 4 Diamond	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)	4
5	Phase ON - 6	Sp Evnt Out 5		Plan 5	AND-2	TOD Out 6	Free (7-Wire)	5
6	Phase ON - 7	Sp Evnt Out 6		Plan 6	AND-3	TOD Out 7	Flash (7-Wire)	6
7	Phase ON - 8	Sp Evnt Out 7		Plan 7	NOT-2	TOD Out 8	Preempt	7
8	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A	8
9	Ph. Check - 2		NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B	9
A	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C	A
B	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D	B
C	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C		C
D	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D		D
E	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E		E
F	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F		F

Assignable Outputs **<E/127+Column+Row>**

Row		Phase 1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.0	<C/5+1+9>

TBC Transition

Lag Hold Phases		<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Row		1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Long Failure	0.5	<F/1+0+6>
Short Failure	0.5	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Min Time (seconds)	0	<F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes)	0	<F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds)	0	<F/1+0+A>

Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Low Pri. Channel	#NAME?	<E/125+C+8>

Disable Low Priority Channel

INTERSECTION: LA JOLLA VILLAGE DR @ TOWNE CENTRE DR

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: TOWNE CENTRE
E/W Street Name: LA JOLLA VILLAGE

N

		LA JOLLA VILLAGE	TOWNE CENTRE		LA JOLLA VILLAGE		TOWNE CENTRE		
Column # ---->		Phase							
Phase # ---->		1	2	3	4	5	6	7	8
Row		1+8							
0	Ped Walk		7		7		7		5
1	Ped FDW		21		29		21		32
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.5	2.0	4.6	2.0	4.3	2.0	5.2
6	Max Gap	2.0	4.5	2.0	4.6	2.0	4.3	2.0	5.2
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	30	30	60	35	30
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.7		0.7		0.7		0.6
E	Yellow	3.4	4.5	3.4	4.3	3.4	4.3	3.4	4.0
F	Red Clear	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E	
RR-1 Delay		
RR-1 Clear		
EV-A Delay	0	
EV-A Clear	0	
EV-B Delay	0	
EV-B Clear	0	
EV-C Delay	0	
EV-C Clear	0	
EV-D Delay	0	
EV-D Clear	0	
RR-2 Delay		
RR-2 Clear		
View EV Delay	---	
View EV Clear	---	
View RR Delay	---	
View RR Clear	---	

F + E + Row

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
Peds (View)	_2_4_6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	__3___7_	F

F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	5	C + 0 + 0
Zone Number	5	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	45	C + 0 + 3
QuicNet Channel	COM 46	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_45__8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> F + COLOR +

<D Page> D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

Timing Sheet By: M2S
Approved By: FLG
Drawing Number: 29562-3-D
Timing Implemented On: 04/23/10

9

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	1 8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 = Bus Advance

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	8
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8	10.0	
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: LA JOLLA VILLAGE DR @ TOWNE CENTRE DR

223 Program

Coordination Timing By: KH&A
Implemented On: 10/13/2009

		Plan								
	Column # →	1	2	3	4	5	6	7	8	9
Row	Plan Name →		MID			AM	PM			
0	Cycle Length		146			140	150			
1	Phase 1 - ForceOff		111			102	96			
2	Phase 2 - ForceOff		0			0	0			
3	Phase 3 - ForceOff		32			33	21			
4	Phase 4 - ForceOff		77			77	67			
5	Phase 5 - ForceOff		16			18	82			
6	Phase 6 - ForceOff		0			0	0			
7	Phase 7 - ForceOff		40			37	67			
8	Phase 8 - ForceOff		77			77	36			
9	Ring Offset									
A	Offset A		140			13	93			
B	Offset B									
C	Offset C									
D	Permissive		17			17	17			
E	Hold Release		255			255	255			
F	Ped Shift		0			0	6			

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06 : 30	5	A	_23456_
1	10 : 00	2	A	_23456_
2	15 : 00	6	A	_23456_
3	19 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

	E	Row		F
		0	Free Lag	
Plan 1		1	Plan 1 - Lag	
Plan 2	_2__6__	2	Plan 2 - Lag	_2_45__8
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5	_2__6__	5	Plan 5 - Lag	_2_45__8
Plan 6	_2__6__	6	Plan 6 - Lag	_2_4_67_
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: LA JOLLA VILLAGE DR & TOWNE CEN[illegible] DR

223 Pro[illegible]m

Group Assignment:
Field Master Assignment:

N/S Street Name: TOWNE CENTRE DR
E/W Street Name: LA JOLLA VILLAGE DR

Last Database Change: N/A
System Ref. Number: N/A

Column # ---->		Phase							
		LJ VILLAGE DR		TOWNE CENTRE DR		LJ VILLAGE DR		TOWNE CENTRE DR	
Row	Phase # ---->	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		5
1	Ped FDW		21		29		25		31
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.8	2.0	4.8	2.0	3.6	2.0	4.8
6	Max Gap	2.0	3.8	2.0	4.8	2.0	3.6	2.0	4.8
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	30	30	60	30	30
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.8		0.6		0.9		0.6
E	Yellow	3.4	4.7	3.4	3.9	3.4	4.3	3.4	3.9
F	Red Clear	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row
<F Page>

Row	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row	F
Permit	12345678
Red Lock	
Yellow Lock	
Min Recall	_2___6__
Ped Recall	
Peds (View)	_2_4_6_8
Rest In Walk	
Red Rest	
Dbl Entry	
Max Recall	
Soft Recall	
Max 2	
Cond Serv	
Ped Lock	12345678
Yellow Start	_2___6__
1st Phases	__3___7_

Phase Functions <F Page>
F + F + Row

****PPLT FOR EB & WB TRAFFIC****

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0 ~~5.0~~	F + C + O

Start / Revert Times

Drop Number	5	C + 0 + 0
Zone Number	5	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	45	C + 0 + 3
QuicNet Channel	Com46	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_45__8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: SB
Approved By: G.P.
Drawing Number: 21236-14-D
Timing Implemented On:

15

INTERSECTION: LA JOLLA VILLAGE DR & TOWNE CENTRE DR

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	1 8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration

E + F + ROW

<E Page>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	8
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week

8-1 Day-of-Month, Year, Month

8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program

C + C + F = version

Remote Download

C + 0 + 4 = 1 -255

w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8	10.0	
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12354678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	1234578
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: LA JOLLA VILLAGE DR & TOWNE CENTRE DR

223 Program

Row	Column # ---->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name ---->									
0	Cycle Length	138	146	150						
1	Phase 1 - ForceOff	106	111	119						
2	Phase 2 - ForceOff	0	0	0						
3	Phase 3 - ForceOff	30	32	30						
4	Phase 4 - ForceOff	83	77	86						
5	Phase 5 - ForceOff	16	16	16						
6	Phase 6 - ForceOff	0	0	0						
7	Phase 7 - ForceOff	42	40	45						
8	Phase 8 - ForceOff	83	77	86						
9	Ring Offset									
A	Offset A	130	140	16						
B	Offset B									
C	Offset C									
D	Permissive	17	17	17						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

Coordination Timing By: MBF
Implemented On: 10/28/2005

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Coordination <C Page>

C + Plan + ROW

Row	Time	Plan	Offset	Day of Week
0	06 : 30	1	A	23456
1	10 : 00	2	A	23456
2	15 : 00	3	A	23456
3	19 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

	E	Row		F
		0	Free Lag	2 45 8
Plan 1	2 6	1	Plan 1 - Lag	2 45 8
Plan 2	2 6	2	Plan 2 - Lag	2 45 8
Plan 3	2 6	3	Plan 3 - Lag	2 45 8
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

TERSECTION: La Jolla Village Dr & Towne Centre Dr

223 [illegible] ram

Group Assignment: None
Field Master Assignment: None
N/S Street Name: Towne Centre Dr
E/W Street Name: La Jolla Village Dr
Last Change: 04/16/01
Timing Sheet By: VAC
Approved By:
Drawing Number: 2[illegible]
System Ref. Num.:
Timing implemented on: 8/27/01

15

Row	Column # →	LJ Village Dr		Towne Centre Dr		LJ Village Dr		Towne Centre Dr	
	Phase # →	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		5
1	Ped FDW		21		29		25		31
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.8	2.0	4.8	2.0	3.6	2.0	4.8
6	Max Gap	2.0	3.8	2.0	4.8	2.0	3.6	2.0	4.8
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	30	30	60	30	30
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.8		0.6		0.9		0.6
E	Yellow	3.4 ~~3.0~~	4.7	3.4 ~~3.0~~	3.9 ~~3.3~~	3.4 ~~3.0~~	4.3	3.4 ~~3.0~~	3.9 ~~3.0~~
F	Red Clear	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0

POC 1/2/03

Phase Timing - Bank 1 <F Page>
F + Phase + Row

Row		E
	RR-1 Delay	
	RR-1 Clear	
	EV-A Delay	0
	EV-A Clear	0
	EV-B Delay	0
	EV-B Clear	0
	EV-C Delay	0
	EV-C Clear	0
	EV-D Delay	0
	EV-D Clear	0
	RR-2 Delay	
	RR-2 Clear	
	View EV Delay	---
	View EV Clear	---
	View RR Delay	---
	View RR Clear	---

Preempt Timing
F + E + Row

Row		F
	Permit	12345678
	Red Lock	
	Yellow Lock	
	Min Recall	2 4
	Ped Recall	
	Peds (View)	_2_4_6_8
	Rest In Walk	
	Red Rest	
	Dbl Entry	
	Max Recall	
	Soft Recall	_2___6__
	Max 2	
	Cond Serv	
	Ped Lock	12345678
	Yellow Start	_2___6__
	1st Phases	__3___7_

Phase Functions <F Page>
F + F + Row

Max Initial	0 F + 0 + E
Red Revert	5.0 F + 0 + F
All Red Start	0.0 F + C + O

Start / Revert Times

Drop Number	5 20	C + 0 + 0
Zone Number	5	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	45	C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses
C + F + O

Free Lag	F	Row
	_245__8	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0 C + A + 1
Manual Offset	0 C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	60 (minutes)

255

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

IN RSECTION: La Jolla Village Dr & Towne Centre Dr

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	1 8
B	Overlap B - Phases	67
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	8
6	Overlap B - Green Omit	6
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week

8-1 Day-of-Month, Year, Month

8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

Program Information

C + C + 0 = program

C + C + F = version

Remote Download

C + 0 + 4 = 1 -255

w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7		1.8		4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7		1.8		8J6U	4
8	10.0			8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

SECTION: La Jolla Village Dr & Towne Centre Dr

223 Program

Row	Column # →	Plan 1	2	3	4	5	6	7	8	9
	Plan Name →	AM	MID	PM						
0	Cycle Length	138	146	150						
1	Phase 1 - ForceOff	106	111	119						
2	Phase 2 - ForceOff	0	0	0						
3	Phase 3 - ForceOff	30	32	30						
4	Phase 4 - ForceOff	83	77	86						
5	Phase 5 - ForceOff	16	16	16						
6	Phase 6 - ForceOff	0	0	0						
7	Phase 7 - ForceOff	42	40	45						
8	Phase 8 - ForceOff	83	77	86						
9	Ring Offset									
A	Offset A	130	140	16						
B	Offset B									
C	Offset C									
D	Permissive	17	17	17						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

Coordination <C Page>

C + Plan + ROW

Coordination Timing By: VAC
Implemented On: 09/01/99

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06:30	1	A	_23456_
1	10:00	2	A	_23456_
2	15:00	3	A	_23456_
3	19:00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

	E	Row		F
		0	Free Lag	_2_45__8
Plan 1	_2___6__	1	Plan 1 - Lag	_2_45__8
Plan 2	_2___6__	2	Plan 2 - Lag	_2_45__8
Plan 3	_2___6__	3	Plan 3 - Lag	_2_45__8
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases
C + E + FUNCTION #

Lag Phases <C Page>
C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: EXECUTIVE DR & JUDICIAL DR

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: **Judicial Dr**
E/W Street: **Executive Dr**

Last Database Change:

Timing sheets by: **JMV**
Approved by:
Timing implemented on: 5/27/2010

		Judicial Dr	Executive Dr			Judicial Dr		
		Phase						
Row	Phase Numbers—>	1	2	3	4	5	6	7	8
0	Ped Walk		7	7	7		7		
1	Ped FDW		22	20	20		23		
2	Min Green	4	7	7	7	4	7		
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	4.4	3.3	3.3	2.0	4.4		
6	Max Gap	2.0	4.4	3.3	3.3	2.0	4.4		
7	Min Gap	2.0	0.2	0.2	0.2	2.0	0.2		
8	Max Limit	30	60	40	40	30	60		
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.7	1.0	1.0		0.7		
E	Yellow Change	3.4	4.3	3.9	3.9	3.4	4.3		
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0		

Phase Timing - Bank 1 <F/1+Phase+Row>

Row		E
0	RR-1 Delay	
1	RR-1 Clear	
2	EV-A Delay	0
3	EV-A Clear	0
4	EV-B Delay	0
5	EV-B Clear	0
6	EV-C Delay	0
7	EV-C Clear	0
8	EV-D Delay	0
9	EV-D Clear	0
A	RR-2 Delay	
B	RR-2 Clear	
C	*View EV Delay*	- - -
D	*View EV Clear*	- - -
E	*View RR Delay*	- - -
F	*View RR Clear*	- - -

Preempt Timing <F/1+E+Row>

Row		F
0	Permit	123456__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	*View Set Peds*	
6	Rest In Walk	
7	Red Rest	
8	Double Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	_2___6__
F	First Phases	___4____

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	18	<C/0+0+0>
Zone Number	18	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	177	<C/0+0+3>
QuicNet Channel	Com 4b	(QuicNet)

Communication Addresses

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	14	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Notes:

Free Lag	_2_4_6__	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

INTERSECTION: EXECUTIVE DR & JUDICIAL DR

233 Program

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	
Start-up Ped Calls	

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	3
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	3
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	---
RR-2 *	---
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSECTION: JUDICIAL DR & JUDICIAL DWY

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street Name: **Judicial Dr**
E/W Street Name: **Judicial Dwy**

Last Database Change:

Change Record					
Change	By	Date	Change	By	Date

Notes: ***37552-13-D***

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Drop Number		<C/0+0+0>
Zone Number		<C/0+0+1>
Area Number		<C/0+0+2>
Area Address		<C/0+0+3>
QuicNet Channel		(QuicNet)

Communication Addresses

Free Lag	**_2_4_6_8**	**<C/1+F+0>**

Manual Plan	**14**	<C/0+A+1>
Manual Offset	**0**	<C/0+B+1>

Manual Selection

Flash Start	**0**	<F/1+0+E>
Red Revert	**5.0**	<F/1+0+F>
All Red Start	**0.0**	<F/1+C+0>
FYA Red Revert	**0.0**	<F/1+0+5>
OVLP CHG Red	**0.0**	<F/1+0+3>

Start / Revert Times

Exclusive Walk	**0**	<F/1+0+0>
Exclusive FDW	**0**	<F/1+0+1>
All Red Clear	**0.0**	<F/1+0+2>

Exclusive Ped Phase
(Outputs specified in Assignable Outputs at E/127+A+E & F)

Judicial Dr — Judicial Dr

		Phase							
	Column Numbers ---->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Row	*Phase Names ---->*								
0	Ped Walk		**7**				**7**		**7**
1	Ped FDW		**10**				**12**		**18**
2	Min Green	**4**	**7**		**4**	**4**	**7**		**4**
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	**2.0**	**3.8**		**2.0**	**2.0**	**3.8**		**2.0**
6	Max Gap	**2.0**	**3.8**		**2.0**	**2.0**	**3.8**		**2.0**
7	Min Gap	**2.0**	**0.2**		**2.0**	**2.0**	**0.2**		**2.0**
8	Max Limit	**30**	**60**		**40**	**30**	**60**		**40**
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		**0.8**				**0.8**		
E	Yellow Change	**3.4**	**3.9**		**3.9**	**3.4**	**3.9**		**3.9**
F	Red Clear	**1.0**	**1.0**		**1.0**	**1.0**	**1.0**		**1.0**

Phase Timing - Bank 1 <F/1+Phase+Row>

	9	**A**	**B**	**C**	**D**
	- - -	- - -	- - -	- - -	- - -
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	**0**
EV-A Clear	**0**
EV-B Delay	**0**
EV-B Clear	**0**
EV-C Delay	**0**
EV-C Clear	**0**
EV-D Delay	**0**
EV-D Clear	**0**
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

Row		**F**
0	Permit	**12_456_8**
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	*View Set Peds*	
6	Rest In Walk	
7	Red Rest	
8	Dual Entry	**___4___8**
9	Max Recall	
A	Soft Recall	**_2___6__**
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	**_2___6__**
F	First Phases	**___4___8**

Phase Functions <F/1+F+Row>

How to Set Page Access Code: F/1 -- C + 0 + F = 1

Row	Column Numbers ---->	Overlap 1	2	3	4	5	6	7	8	Row
	Overlap Name ---->									
0	Load Switch Number									0
1	Veh Set 1 - Phases									1
2	Veh Set 2 - Phases									2
3	Veh Set 3 - Phases									3
4	Neg Veh Phases									4
5	Neg Ped Phases									5
6	Green Omit Phases									6
7	Green Clear Omit Phs.									7
8	Overlap Recall									8
9	Queue Jump Phase									9
A	Queue Jump Time									A
B	Minimum Green									B
C	Maximum Green									C
D	Green Clear									D
E	Yellow Change									E
F	Red Clear									F

Overlap Assignments <E/29+Column+Row>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = Solid FDW on EV
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

Extra 2 Flags
1 = AWB During Initial
2 = Reserved
3 = Disable Min Walk
4 = QuicNet System
5 = Ignore P/P on EV
6 = Manual Hold in FDW
7 = Allow QuicNet PE
8 = Flash Grn B4 Yellow

	C	Row
EV-A	0	0
EV-B	0	1
EV-C	0	2
EV-D	0	3
RR-1 *	- - -	4
RR-2 *	- - -	5
SE-1	0	6
SE-2	0	7

Preempt Priority <E/125+C+Row>

(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <E/125+F+Row>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	
Start-up Ped Calls	

Specials <F/2+F+Row>

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 =
5 =
6 = Simplex Master
7 =
8 = Offset Interrupter

	2	Row
		0
Phase 1	10	1
Phase 2	10	2
Phase 3	10	3
Phase 4	10	4
Phase 5	10	5
Phase 6	10	6
Phase 7	10	7
Phase 8	10	8
		9
		A
		B
		C
		D
		E
		F

Coordination Transition Minimums <C/5+2+Row>

Column Numbers ----->	**0**	**1**	**2**	**3**	**1**	**3**
Row	*Detector Name*	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0	2 I2U	39	___45_7_	_2_____	123____		**1.8**
1	6 J2U	40	___45_7_	_____6__	123____		**1.8**
2	4 I6U	41	___45_7_	___4____	123____		
3	8 J6U	42	___45_7_	_______8	123____		
4	I2L	43	___45_7_	_2_____	123____		**1.8**
5	6 J2L	44	___45_7_	_____6__	123____		**1.8**
6	4 I6L	45	___45_7_	___4____	123____		
7	8 J6L	46	___45_7_	_______8	123____		
8	2 I4	47	_____67_	_2_____	123____		
9	6 J4	48	_____67_	_____6__	123____		
A	4 I8	49	_____67_	___4____	123____		
B	8 J8	50	_____67_	_______8	123____		
C	5 J1U	55	___45_7_	_____5__	123____		
D	1 I1U	56	___45_7_	1_______	123____		
E	7 J5	57	___45_7_	_____7_	123____		
F	3 I5	58	___45_7_	__3_____	123____		

	4	**5**	**6**	**7**	**2**	**4**
Row	*Detector Name*	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0	5 J9U	59	___45_7_	___5____	123____		
1	1 I9U	60	___45_7_	1_______	123____		
2	7 J9L	61	___45_7_	_____7_	123____		
3	3 I9L	62	___45_7_	__3_____	123____		
4	2 I3U	63	___45_7_	_2_____	123____		**1.8**
5	6 J3U	64	___45_7_	_____6__	123____		**1.8**
6	4 I7U	65	___45_7_	___4____	123____		
7	8 J7U	66	___45_7_	_______8	123____		
8	2 PPB	30	_2_____	_2_____	123____		
9	6 PPB	68	_2_____	_____6__	123____		
A	4 PPB	69	_2_____	___4____	123____		
B	8 PPB	70	_2_____	_______8	123____		
C	2 I3L	76	___45_7_	_2_____	123____		
D	6 J3L	77	___45_7_	_____6__	123____		
E	4 I7L	78	___45_7_	___4____	123____		
F	8 J7L	79	___45_7_	_______8	123____		

Detector Assignments <E/126+Column+Row> **<D/0+Column+Row>**

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 = Overlap
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	Ped / Phase / Overlap								
Column Numbers ----->	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	Row
Walk									**0**
Don't Walk									**1**
Phase Green									**2**
Phase Yellow									**3**
Phase Red									**4**
Overlap Green									**5**
Overlap Yellow									**6**
Overlap Red									**7**

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	**0**	**<E/125+D+0>**

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	**20**	<D/0+0+1>
Max ON (minutes)	**7**	<D/0+0+2>
Chatter Fail Time	**0**	<D/0+0+4>

Detector Failure Monitor

	B	Row
One-Shot	**0**	**8**
Ext. Timer	**0**	**9**
DELAY-A	**0**	**A**
DELAY-B	**0**	**B**
DELAY-C	**0**	**C**
DELAY-D	**0**	**D**
DELAY-E	**0**	**E**
DELAY-F	**0**	**F**

Delay Logic Times
<D/0+B+Row> (seconds)

Row	Column 8	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	One-Shot Timer	Latch 1 Set	NOT-3	Max 2	Pretimed	Set Monday	Dial 2 (7-Wire)	Sim Term 0	0
1	AND-5 (a)	Latch 1 Reset	NOT-4	Reserved	Plan 1	Ext. Perm 1	Dial 3 (7-Wire)	EV-A 71	1
2	AND-5 (b)	Latch 2 Set	OR-4 (a)	Reserved	Plan 2	Ext. Perm 2	Offset 1 (7-Wire)	EV-B 72	2
3	AND-6 (a)	Latch 2 Reset	OR-4 (b)	Reserved	Plan 3	Gate Down	Offset 2 (7-Wire)	EV-C 73	3
4	AND-6 (b)	NAND-3 (a)	OR-5 (a)	Reserved	Plan 4	Set Clock	Offset 3 (7-Wire)	EV-D 74	4
5	Reserved	NAND-3 (b)	OR-5 (b)	Reserved	Plan 5	Stop Time 82	Free (7-Wire)	RR-1 51	5
6	Reserved	NAND-4 (a)	OR-6 (a)	Reserved	Plan 6	Flash Sense 81	Flash (7-Wire)	RR-2 52	6
7	Reserved	NAND-4 (b)	OR-6 (b)	Reserved	Plan 7	Manual Enable	Excl. Ped Omit	Spec. Event 1	7
8	Spec. Funct. 1	OR-7 (a)	EXTMR	Reserved	Plan 8	Man. Advance	NOT-1	Spec. Event 2	8
9	Spec. Funct. 2	OR-7 (b)	Reserved	Max Inhibit (nema)	Plan 9	External Alarm	NOT-2	External Lag	9
A	Spec. Funct. 3	OR-7 (c)	AND-4 (a)	Force A (nema)	DELAY-A	Phase Bank 2	OR-1 (a)	AND-1 (a)	A
B	Spec. Funct. 4	OR-7 (d)	AND-4 (b)	Force B (nema)	DELAY-B	Phase Bank 3	OR-1 (b)	AND-1 (b)	B
C	Reserved	OR-8 (a)	NAND-1 (a)	C.N.A. (nema)	DELAY-C	Overlap Set 2	OR-2 (a)	AND-2 (a)	C
D	Reserved	OR-8 (b)	NAND-1 (b)	Hold (nema)	DELAY-D	Overlap Set 3	OR-2 (b)	AND-2 (b)	D
E	Reserved	OR-8 (c)	NAND-2 (a)	Max Recall	DELAY-E	Detector Set 2	OR-3 (a)	AND-3 (a)	E
F	Reserved	OR-8 (d)	NAND-2 (b)	Min Recall	DELAY-F	Detector Set 3	OR-3 (b)	AND-3 (b)	F

Assignable Inputs <E/126+Column+Row>

Row	Column 8	Column 9	Column A	Column B	Column C	Column D	Column E	Column F	Row
0	Reserved	Phase ON - 1	Preempt Fail	Flasher 0	Free	NOT-1	TOD Out 1	Dial 2 (7-Wire)	0
1	Reserved	Phase ON - 2	Sp Evnt Out 1	Flasher 1	Plan 1	OR-1	TOD Out 2	Dial 3 (7-Wire)	1
2	Reserved	Phase ON - 3	Sp Evnt Out 2	Fast Flasher	Plan 2	OR-2	TOD Out 3	Offset 1 (7-Wire)	2
3	Reserved	Phase ON - 4	Sp Evnt Out 3	EXTMR	Plan 3	OR-3	TOD Out 4	Offset 2 (7-Wire)	3
4	Reserved	Phase ON - 5	Sp Evnt Out 4	One-Shot Timer	Plan 4	AND-1	TOD Out 5	Offset 3 (7-Wire)	4
5	Reserved	Phase ON - 6	Sp Evnt Out 5	Reserved	Plan 5	AND-2	TOD Out 6	Free (7-Wire)	5
6	Reserved	Phase ON - 7	Sp Evnt Out 6	Latch 1	Plan 6	AND-3	TOD Out 7	Flash (7-Wire)	6
7	Reserved	Phase ON - 8	Sp Evnt Out 7	Latch 2	Plan 7	NOT-2	TOD Out 8	Preempt	7
8	Flh Yell Arrow 1	Ph. Check - 1	Sp Evnt Out 8	NOT-3	Plan 8	EV-A	Adv. Warn - 1	Low Priority A	8
9	Green 1	Ph. Check - 2	Coord On	NOT-4	Plan 9	EV-B	Adv. Warn - 2	Low Priority B	9
A	Flh Yell Arrow 3	Ph. Check - 3	Detector Fail	OR-4	Spec. Funct. 3	EV-C	DELAY-A	Low Priority C	A
B	Green 3	Ph. Check - 4	Spec. Funct. 1	OR-5	Spec. Funct. 4	EV-D	DELAY-B	Low Priority D	B
C	Flh Yell Arrow 5	Ph. Check - 5	Spec. Funct. 2	OR-6	NAND-3	RR-1	DELAY-C	AND-5	C
D	Green 5	Ph. Check - 6	Central Control	AND-4	NAND-4	RR-2	DELAY-D	AND-6	D
E	Flh Yell Arrow 7	Ph. Check - 7	Excl. Ped DW	NAND-1	OR-7	Spec. Event 1	DELAY-E	Reserved	E
F	Green 7	Ph. Check - 8	Excl. Ped WK	NAND-2	OR-8	Spec. Event 2	DELAY-F	Reserved	F

Assignable Outputs <E/127+Column+Row>

INTERSECTION: JUDICIAL & GOLDEN HAVEN

Group Assignment: **NONE**
Field Master Assignment: **NONE**
System Reference Number: **983**

N/S Street Name: **JUDICIAL DR**
E/W Street Name: **GOLDEN HAVEN**

Last Database Change: **8/31/2012 14:36**

Change Record					
Change	By	Date	Change	By	Date
SUPERLOOP		5/12			

Notes:

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Drop Number	15	<C/0+0+0>
Zone Number	15	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	150	<C/0+0+3>
QuicNet Channel	COM46:	(QuicNet)

Communication Addresses

Manual Plan		<C/0+A+1>
Manual Offset		<C/0+B+1>

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	5.0	<F/1+C+0>

Start / Revert Times

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase
(Outputs specified in Assignable Outputs at E/127+A+E & F)

Row	Column Numbers ----> / Phase Names ---->	Phase 1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	16	0	19	0	19	0	20
2	Min Green	4	7	4	7	4	7	4	7
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	2.0	4.4	2.0	4.4	2.0	4.4	2.0	2.0
6	Max Gap	2.0	4.4	2.0	4.4	2.0	4.4	2.0	2.0
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	2.0
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	0	1	0	1	0	1	0	1
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	0.7	0.0	0.7	0.0	0.7	0.0	0.0
E	Yellow Change	3.4	4.3	3.4	4.3	3.4	4.3	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <C+0+F=1>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <C+0+F=1>

	E
RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing

Row	F
	Permit: 12345678
1	Red Lock:
2	Yellow Lock:
3	Min Recall: 2 6
4	Ped Recall:
5	*View Set Peds*: -----
6	Rest In Walk:
7	Red Rest:
8	Dual Entry:
9	Max Recall:
A	Soft Recall:
B	Max 2:
C	Cond. Service:
D	Man Cntrl Calls:
E	Yellow Start: 2 6
F	First Phases: 3 7

Phase Functions <C+0+F=1>

Row	Column Numbers ---->	Overlap 1	2	3	4	5	6	7	8
	Overlap Name ---->								
0	Load Switch Number	0	0	0	0	0	0	0	0
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Assignments <C+0+E=29>

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = Solid FDW on EV
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Row		C
0	EV-A	0
1	EV-B	0
2	EV-C	0
3	EV-D	0
4	RR-1 *	- - -
5	RR-2 *	- - -
6	SE-1	0
7	SE-2	0

Preempt Priority <C+0+E=125>
(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <C+0+E=125>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <C+0+E=125>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Specials <C+0+F=2>

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

	2
Phase 1	10
Phase 2	10
Phase 3	10
Phase 4	10
Phase 5	10
Phase 6	10
Phase 7	10
Phase 8	10

Coordination Transition Minimums <C+0+C=5>

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Column Numbers ---->	Plan 1	2	3	4	5	6	7	8	9	Row
	Plan Name ---->										
0	Cycle Length	100	100	100	100	100	100	100	100	100	0
1	Phase 1 - ForceOff	55	55	55	55	55	55	55	55	55	1
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0	2
3	Phase 3 - ForceOff	20	20	20	20	20	20	20	20	20	3
4	Phase 4 - ForceOff	40	40	40	40	40	40	40	40	40	4
5	Phase 5 - ForceOff	55	55	55	55	55	55	55	55	55	5
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0	6
7	Phase 7 - ForceOff	20	20	20	20	20	20	20	20	20	7
8	Phase 8 - ForceOff	40	40	40	40	40	40	40	40	40	8
9	Ring Offset	0	0	0	0	0	0	0	0	0	9
A	Offset 1	0	0	0	0	0	0	0	0	0	A
B	Offset 2	0	0	0	0	0	0	0	0	0	B
C	Offset 3	0	0	0	0	0	0	0	0	0	C
D	Perm 1 - End	15	15	15	15	15	15	15	15	15	D
E	Hold Release	255	255	255	255	255	255	255	255	255	E
F	Zone Offset	0	0	0	0	0	0	0	0	0	F

Coordination - Bank 1 <C+0+C=1>

Row		E	Row
0			0
1	Plan 1 - Sync	2 6	1
2	Plan 2 - Sync	2 6	2
3	Plan 3 - Sync	2 6	3
4	Plan 4 - Sync	2 6	4
5	Plan 5 - Sync	2 6	5
6	Plan 6 - Sync	2 6	6
7	Plan 7 - Sync	2 6	7
8	Plan 8 - Sync	2 6	8
9	Plan 9 - Sync	2 6	9
A	NEMA Sync		A
B	NEMA Hold		B
C			C
D			D
E	Coord Extra		E
F			F

Sync Phases <C+0+C=1>

Row		1	2	3	4	5	6	7	8	9	Row
0	Ped Adjustment	0	0	0	0	0	0	0	0	0	0
1	Perm 2 - Start	0	0	0	0	0	0	0	0	0	1
2	Perm 2 - End	0	0	0	0	0	0	0	0	0	2
3	Perm 3 - Start	0	0	0	0	0	0	0	0	0	3
4	Perm 3 - End	0	0	0	0	0	0	0	0	0	4
5	Reservice Time	0	0	0	0	0	0	0	0	0	5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	A
B	Perm 1 Ped Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Bank 2 <C+0+C=2>

Row		F	Row
0	Free Lag	2 4 6 8	0
1	Plan 1 - Lag	2 4 6 8	1
2	Plan 2 - Lag	2 4 6 8	2
3	Plan 3 - Lag	2 4 6 8	3
4	Plan 4 - Lag	2 4 6 8	4
5	Plan 5 - Lag	2 4 6 8	5
6	Plan 6 - Lag	2 4 6 8	6
7	Plan 7 - Lag	2 4 6 8	7
8	Plan 8 - Lag	2 4 6 8	8
9	Plan 9 - Lag	2 4 6 8	9
A	External Lag		A
B			B
C			C
D			D
E			E
F			F

Lag Phases <C+0+C=1>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1	0	NOT-3	0	Max 2	0	Pretimed	0	Set Monday	0	Dial 2 (7-Wire)	0	Sim Term	0	0
1	Spec. Funct. 2	0	NOT-4	0	System Det 1	0	Plan 1	0	Ext. Perm 1	0	Dial 3 (7-Wire)	0	EV-A	71	1
2	Spec. Funct. 3	0	OR-4 (a)	0	System Det 2	0	Plan 2	0	Ext. Perm 2	0	Offset 1 (7-Wire)	0	EV-B	72	2
3	Spec. Funct. 4	0	OR-4 (b)	0	System Det 3	0	Plan 3	0	Dimming	0	Offset 2 (7-Wire)	0	EV-C	73	3
4	NAND-3 (a)	0	OR-5 (a)	0	System Det 4	0	Plan 4	0	Set Clock	0	Offset 3 (7-Wire)	0	EV-D	74	4
5	NAND-3 (b)	0	OR-5 (b)	0	System Det 5	0	Plan 5	0	Stop Time	82	Free (7-Wire)	0	RR-1	51	5
6	NAND-4 (a)	0	OR-6 (a)	0	System Det 6	0	Plan 6	0	Flash Sense	81	Flash (7-Wire)	0	RR-2	52	6
7	NAND-4 (b)	0	OR-6 (b)	0	System Det 7	0	Plan 7	0	Manual Enable	0	Excl. Ped Omit	0	Spec. Event 1	0	7
8	OR-7 (a)	0	Fig 3 Diamond	0	System Det 8	0	Plan 8	0	Man. Advance	0	NOT-1	0	Spec. Event 2	0	8
9	OR-7 (b)	0	Fig 4 Diamond	0	Max Inhibit (nema)	0	Plan 9	0	External Alarm	0	NOT-2	0	External Lag	0	9
A	OR-7 (c)	0	AND-4 (a)	0	Force A (nema)	0	DELAY-A	0	Phase Bank 2	0	OR-1 (a)	0	AND-1 (a)	0	A
B	OR-7 (d)	0	AND-4 (b)	0	Force B (nema)	0	DELAY-B	0	Phase Bank 3	0	OR-1 (b)	0	AND-1 (b)	0	B
C	OR-8 (a)	0	NAND-1 (a)	0	C.N.A. (nema)	0	DELAY-C	0	Overlap Set 2	0	OR-2 (a)	0	AND-2 (a)	0	C
D	OR-8 (b)	0	NAND-1 (b)	0	Hold (nema)	0	DELAY-D	0	Overlap Set 3	0	OR-2 (b)	0	AND-2 (b)	0	D
E	OR-8 (c)	0	NAND-2 (a)	0	Max Recall	0	DELAY-E	0	Detector Set 2	0	OR-3 (a)	0	AND-3 (a)	0	E
F	OR-8 (d)	0	NAND-2 (b)	0	Min Recall	0	DELAY-F	0	Detector Set 3	0	OR-3 (b)	0	AND-3 (b)	0	F

Assignable Inputs <C+0+E=126>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1	0	Preempt Fail	0	Flasher 0	0	Free	0	NOT-1	0	TOD Out 1	0	Dial 2 (7-Wire)	0	0
1	Phase ON - 2	0	Sp Evnt Out 1	0	Flasher 1	0	Plan 1	0	OR-1	0	TOD Out 2	0	Dial 3 (7-Wire)	0	1
2	Phase ON - 3	0	Sp Evnt Out 2	0	Fast Flasher	0	Plan 2	0	OR-2	0	TOD Out 3	0	Offset 1 (7-Wire)	0	2
3	Phase ON - 4	0	Sp Evnt Out 3	0	Fig 3 Diamond	0	Plan 3	0	OR-3	0	TOD Out 4	0	Offset 2 (7-Wire)	0	3
4	Phase ON - 5	0	Sp Evnt Out 4	0	Fig 4 Diamond	0	Plan 4	0	AND-1	0	TOD Out 5	0	Offset 3 (7-Wire)	0	4
5	Phase ON - 6	0	Sp Evnt Out 5	0			Plan 5	0	AND-2	0	TOD Out 6	0	Free (7-Wire)	0	5
6	Phase ON - 7	0	Sp Evnt Out 6	0			Plan 6	0	AND-3	0	TOD Out 7	0	Flash (7-Wire)	0	6
7	Phase ON - 8	0	Sp Evnt Out 7	0			Plan 7	0	NOT-2	0	TOD Out 8	0	Preempt	0	7
8	Ph. Check - 1	0	Sp Evnt Out 8	0	NOT-3	0	Plan 8	0	EV-A	0	Adv. Warn - 1	0	Low Priority A	0	8
9	Ph. Check - 2	0			NOT-4	0	Plan 9	0	EV-B	0	Adv. Warn - 2	0	Low Priority B	0	9
A	Ph. Check - 3	0	Detector Fail	0	OR-4	0	Spec. Funct. 3	0	EV-C	0	DELAY-A	0	Low Priority C	0	A
B	Ph. Check - 4	0	Spec. Funct. 1	0	OR-5	0	Spec. Funct. 4	0	EV-D	0	DELAY-B	0	Low Priority D	0	B
C	Ph. Check - 5	0	Spec. Funct. 2	0	OR-6	0	NAND-3	0	RR-1	0	DELAY-C	0			C
D	Ph. Check - 6	0	Central Control	0	AND-4	0	NAND-4	0	RR-2	0	DELAY-D	0			D
E	Ph. Check - 7	0	Excl. Ped DW	0	NAND-1	0	OR-7	0	Spec. Event 1	0	DELAY-E	0			E
F	Ph. Check - 8	0	Excl. Ped WK	0	NAND-2	0	OR-8	0	Spec. Event 2	0	DELAY-F	0			F

Assignable Outputs <C+0+E=127>

Row	Column Numbers ---->	Phase 1	2	3	4	5	6	7	8
	Phase Names ---->								
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+9>

TBC Transition

Lag Hold Phases	_____	<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Daylight Savings Date
If set to all zeros, standard dates will be used.

Begin Month	3	<C/5+2+A>
Begin Week	2	<C/5+2+B>
End Month	11	<C/5+2+C>
End Week	1	<C/5+2+D>

Daylight Savings Time

Row		1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0

Max Initial
Alternate Walk
Alternate FDW
Alternate Initial
Alternate Extension

Alternate Timing

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Long Failure	0.5	<F/1+0+6>
Short Failure	0.5	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Column Numbers --->	0	1	2	3	1	3
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0	I-2-U	39	45_7_	2	123 8	0.0	1.8
1	J-2-U	40	45_7_	6	123 8	0.0	1.8
2	I-6-U	41	45_7_	4	123 8	0.0	1.8
3	J-6-U	42	45_7_	8	123 8	0.0	0.0
4	I-2-L	43	45_7_	2	123 8	0.0	1.8
5	J-2-L	44	45_7_	6	123 8	0.0	1.8
6	I-6-L	45	45_7_	4	123 8	0.0	1.8
7	J-6-L	46	45_7_	8	123 8	0.0	0.0
8	I-4	47	67	2	123 8	0.0	0.0
9	J-4	48	67	6	123 8	0.0	0.0
A	I-8	49	67	4	123 8	0.0	0.0
B	J-8	50	67	8	123 8	0.0	0.0
C	J-1	55	45_7_	5	123 8	0.0	0.0
D	I-1	56	45_7_	1	123 8	0.0	0.0
E	J-5	57	45_7_	7	123 8	0.0	0.0
F	I-5	58	45_7_	3	123 8	0.0	0.0

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-over
0	J-9-U	59	45_7_	5	123 8	0.0	0.0
1	I-9-U	60	45_7_	1	123 8	0.0	0.0
2	J-9-L	61	45_7_	7	123 8	0.0	0.0
3	I-9-L	62	45_7_	3	123 8	0.0	0.0
4	I-3-U	63	45_7_	2	123 8	0.0	0.0
5	J-3-U	64	45_7_	6	123 8	0.0	0.0
6	I-7-U	65	45_7_	4	123 8	0.0	0.0
7	J-7-U	66	45_7_	8	123 8	0.0	0.0
8	I-12-U (Ped)	67	2	2	123 8	0.0	0.0
9	I-13-U (Ped)	68	2	6	123 8	0.0	0.0
A	I-12-L (Ped)	69	2	4	123 8	0.0	0.0
B	I-13-L (Ped)	70	2	8	123 8	0.0	0.0
C	I-3-L	76	45_7_	2	123 8	0.0	0.0
D	J-3-L	77	45_7_	6	123 8	0.0	0.0
E	I-7-L	78	45_7_	4	123 8	0.0	0.0
F	J-7-L	79	45_7_	8	123 8	0.0	0.0

Detector Assignments <C+0+E=126> <C+0+D=0>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Column Numbers --->	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	1
Phase Green	0	0	0	0	0	0	0	0	2
Phase Yellow	0	0	0	0	0	0	0	0	3
Phase Red	0	0	0	0	0	0	0	0	4
Overlap Green	0	0	0	0	0	0	0	0	5
Overlap Yellow	0	0	0	0	0	0	0	0	6
Overlap Red	0	0	0	0	0	0	0	0	7

Redirect Phase Outputs <C+0+E=127>

Cabinet Type	0 <E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	20 <D/0+0+1>
Max ON (minutes)	7 <D/0+0+2>

Detector Failure Monitor

Row		D
0		
1	Output Port 1	
2	Output Port 2	
3	Output Port 3	
4	Output Port 4	
5	Output Port 5	
6	Output Port 6	
7	Output Port 7	

Dimming <C+0+E=125>

	D
Number of Digits	0
1 st Digit	0
2 ed Digit	0
3 ed Digit	0
4 th Digit	0
5 th Digit	0
6 th Digit	0
7 th Digit	0
8 th Digit	0
9 th Digit	0
10 th Digit	0
11 th Digit	0
12 th Digit	0
13 th Digit	0
14 th Digit	0
15 th Digit	0 <C+0+C=5>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

Row		B
A	DELAY-A	0
B	DELAY-B	0
C	DELAY-C	0
D	DELAY-D	0
E	DELAY-E	60
F	DELAY-F	0

Delay Logic Times
<C+0+D=0> (seconds)

Omit Alarm		<C/5+F+0>

Disable Alarm Reporting

Time	10	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

TOD Coordination <C+0+9=0.1>
(Bank 1)

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Function <C+0+7=0.1> <C+0+E=27>

Time	Funct.	Day of Week	Column 4 Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

Holiday Dates <C+0+8=1.1>
(Bank 1)

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Events <C+0+9=1.1>
(Bank 1)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

TOD Coordination <C+0+9=0.2>
(Bank 2)

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

Holiday TOD Function <C+0+7=0.2> <C+0+E=28>

Time	Funct.	Holiday Type	Column 4 Phases/Bits
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		
00 : 00	0		

Holiday Dates <C+0+8=1.2>
(Bank 2)

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Events <C+0+9=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

T.O.D. Functions

0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 5 - Disable Low Priority Preempt
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select

1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Offset Select

A = Offset A
B = Offset B
C = Offset C

Month Select

1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 1 <C+0+E=27>

Notes:

0 <E/27+5+F>

Limited Service Interval

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 2 <C+0+E=28>

Notes:

0 <E/28+5+F>

Limited Service Interval

Min Time (seconds) | 4 | <F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes) | 4 | <F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds) | 0 | <F/1+0+A>

Min Time Between Same Preempts

(Does Not Apply To Railroad Preempt)

Low Pri. Channel | _____ | <E/125+C+8>

Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Delay Time (seconds) | 0 | <F/1+A+D>

Bus Delay

Max Time (seconds) | 0 | <F/1+A+E>

Max Early Green

Max Time (seconds) | 0 | <F/1+A+F>

Max Green Extension

Row	Time	Headway	Direction	Day of Week
0	00 : 00	0	0	_____
1	00 : 00	0	0	_____
2	00 : 00	0	0	_____
3	00 : 00	0	0	_____
4	00 : 00	0	0	_____
5	00 : 00	0	0	_____
6	00 : 00	0	0	_____
7	00 : 00	0	0	_____
8	00 : 00	0	0	_____
9	00 : 00	0	0	_____
A	00 : 00	0	0	_____
B	00 : 00	0	0	_____
C	00 : 00	0	0	_____
D	00 : 00	0	0	_____
E	00 : 00	0	0	_____
F	00 : 00	0	0	_____

Headway <C+0+9=2.1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

Low Priority Preemption (Bus Priority)

Only available with *Program 233RV2.B* (and above)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

TUESDAY MAY 23, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

Towne Centre Drive (Between Eastgate Mall and Executive Drive)

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		12					12:00	106		121				
00:15	4		8					12:15	97		116				
00:30	2		6					12:30	105		105				
00:45	5	15	5	31			46	12:45	158	466	122	464			930
01:00	6		4					13:00	160		135				
01:15	5		5					13:15	129		114				
01:30	1		2					13:30	101		141				
01:45	6	18	3	14			32	13:45	122	512	135	525			1037
02:00	1		4					14:00	78		125				
02:15	3		2					14:15	79		141				
02:30	4		1					14:30	65		133				
02:45	2	10	2	9			19	14:45	60	282	128	527			809
03:00	5		4					15:00	64		159				
03:15	1		2					15:15	72		166				
03:30	4		1					15:30	52		174				
03:45	10	20	6	13			33	15:45	59	247	184	683			930
04:00	6		8					16:00	58		188				
04:15	15		4					16:15	51		225				
04:30	17		9					16:30	54		205				
04:45	32	70	12	33			103	16:45	43	206	189	807			1013
05:00	43		8					17:00	62		252				
05:15	64		9					17:15	52		206				
05:30	76		12					17:30	64		214				
05:45	111	294	11	40			334	17:45	41	219	162	834			1053
06:00	119		15					18:00	40		151				
06:15	129		19					18:15	54		135				
06:30	117		20					18:30	31		141				
06:45	213	578	22	76			654	18:45	34	159	152	579			738
07:00	196		33					19:00	27		116				
07:15	242		40					19:15	34		108				
07:30	255		48					19:30	25		88				
07:45	317	1010	51	172			1182	19:45	8	94	95	407			501
08:00	288		66					20:00	19		70				
08:15	237		58					20:15	34		55				
08:30	292		60					20:30	22		51				
08:45	297	1114	51	235			1349	20:45	23	98	40	216			314
09:00	288		54					21:00	20		48				
09:15	220		54					21:15	20		49				
09:30	182		68					21:30	20		50				
09:45	158	848	55	231			1079	21:45	12	72	40	187			259
10:00	106		68					22:00	17		35				
10:15	106		70					22:15	16		22				
10:30	81		55					22:30	7		19				
10:45	86	379	84	277			656	22:45	12	52	12	88			140
11:00	77		95					23:00	12		15				
11:15	96		77					23:15	5		11				
11:30	85		84					23:30	2		9				
11:45	108	366	111	367			733	23:45	8	27	10	45			72
Total Vol.		4722		1498			**6220**			2434		5362			**7796**

Daily Totals

NB	SB	EB	WB	**Combined**
7156	6860			**14016**

	AM			**PM**		
Split %	75.9%	24.1%	**44.4%**	31.2%	68.8%	**55.6%**
Peak Hour	07:45	11:45	**07:45**	12:30	16:15	**16:45**
Volume	1134	453	**1369**	552	871	**1082**
P.H.F.	0.89	0.94	**0.93**	0.91	0.86	**0.86**

THURSDAY MAY 25, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

Towne Centre Drive (Between Executive Drive and La Jolla Village Drive)

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	10		19					12:00	166		219				
00:15	3		11					12:15	181		177				
00:30	9		3					12:30	203		160				
00:45	8	30	9	42			72	12:45	218	768	125	681			1449
01:00	3		11					13:00	218		159				
01:15	4		7					13:15	196		134				
01:30	2		8					13:30	168		138				
01:45	2	11	4	30			41	13:45	168	750	138	569			1319
02:00	3		6					14:00	118		202				
02:15	5		16					14:15	137		153				
02:30	2		13					14:30	136		221				
02:45	3	13	6	41			54	14:45	111	502	183	759			1261
03:00	6		2					15:00	66		254				
03:15	5		6					15:15	106		213				
03:30	2		8					15:30	71		265				
03:45	9	22	2	18			40	15:45	91	334	208	940			1274
04:00	10		8					16:00	84		288				
04:15	13		3					16:15	80		305				
04:30	21		6					16:30	77		278				
04:45	37	81	13	30			111	16:45	81	322	266	1137			1459
05:00	51		6					17:00	88		319				
05:15	99		2					17:15	69		275				
05:30	144		4					17:30	77		284				
05:45	181	475	7	19			494	17:45	91	325	221	1099			1424
06:00	195		21					18:00	120		239				
06:15	225		29					18:15	115		200				
06:30	257		28					18:30	106		174				
06:45	311	988	29	107			1095	18:45	82	423	134	747			1170
07:00	335		33					19:00	65		140				
07:15	361		48					19:15	50		105				
07:30	407		62					19:30	52		81				
07:45	493	1596	66	209			1805	19:45	49	216	85	411			627
08:00	425		72					20:00	44		76				
08:15	408		63					20:15	41		49				
08:30	432		56					20:30	46		44				
08:45	395	1660	51	242			1902	20:45	36	167	29	198			365
09:00	387		76					21:00	21		50				
09:15	314		75					21:15	38		45				
09:30	231		70					21:30	35		39				
09:45	221	1153	58	279			1432	21:45	18	112	29	163			275
10:00	174		81					22:00	22		37				
10:15	144		81					22:15	30		27				
10:30	111		85					22:30	21		32				
10:45	130	559	112	359			918	22:45	18	91	37	133			224
11:00	114		131					23:00	18		24				
11:15	148		140					23:15	17		20				
11:30	151		177					23:30	13		23				
11:45	177	590	191	639			1229	23:45	12	60	20	87			147
Total Vol.		7178		2015			**9193**			4070		6924			**10994**

Daily Totals

NB	SB	EB	WB	**Combined**
11248	8939			**20187**

	AM			**PM**		
Split %	78.1%	21.9%	**45.5%**	37.0%	63.0%	**54.5%**
Peak Hour	07:45	11:30	**07:45**	12:30	16:15	**16:15**
Volume	1758	764	**2015**	835	1168	**1494**
P.H.F.	0.89	0.87	**0.90**	0.98	0.92	**0.92**

WEDNESDAY - AUGUST 9TH , 2017 CITY: UTC PROJECT: PTD17-0811-02

JUDICIAL BTN EXECUTIVE & GOLDEN HAVEN

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	1		5					12:00	43		68				
00:15	3		12					12:15	62		88				
00:30	3		5					12:30	56		60				
00:45	1	8	7	29			37	12:45	65	226	57	273			499
01:00	2		4					13:00	66		71				
01:15	5		4					13:15	58		52				
01:30	4		4					13:30	68		54				
01:45	3	14	4	16			30	13:45	69	261	48	225			486
02:00	2		5					14:00	33		71				
02:15	4		4					14:15	46		70				
02:30	3		4					14:30	40		65				
02:45	5	14	3	16			30	14:45	62	181	63	269			450
03:00	0		1					15:00	24		92				
03:15	2		4					15:15	25		76				
03:30	1		0					15:30	28		108				
03:45	4	7	0	5			12	15:45	36	113	92	368			481
04:00	4		0					16:00	38		118				
04:15	2		1					16:15	28		108				
04:30	2		1					16:30	30		126				
04:45	16	24	2	4			28	16:45	35	131	135	487			618
05:00	18		4					17:00	49		199				
05:15	24		2					17:15	41		139				
05:30	34		7					17:30	42		124				
05:45	61	137	7	20			157	17:45	40	172	125	587			759
06:00	63		9					18:00	30		119				
06:15	86		11					18:15	31		98				
06:30	85		15					18:30	27		73				
06:45	100	334	16	51			385	18:45	35	123	94	384			507
07:00	94		22					19:00	25		65				
07:15	116		12					19:15	34		67				
07:30	126		29					19:30	29		44				
07:45	151	487	26	89			576	19:45	12	100	32	208			308
08:00	156		30					20:00	17		45				
08:15	144		32					20:15	27		34				
08:30	151		31					20:30	20		41				
08:45	158	609	32	125			734	20:45	13	77	26	146			223
09:00	168		39					21:00	17		28				
09:15	133		40					21:15	20		30				
09:30	91		30					21:30	7		22				
09:45	89	481	38	147			628	21:45	11	55	24	104			159
10:00	69		33					22:00	11		22				
10:15	45		26					22:15	7		15				
10:30	52		36					22:30	5		12				
10:45	50	216	29	124			340	22:45	6	29	10	59			88
11:00	38		44					23:00	7		18				
11:15	48		41					23:15	6		11				
11:30	41		72					23:30	5		13				
11:45	46	173	52	209			382	23:45	3	21	4	46			67
Total Vol.		2504		835			**3339**			1489		3156			**4645**

Daily Totals

NB	SB	EB	WB	**Combined**
3993	3991			**7984**

	AM			**PM**		
Split %	75.0%	25.0%	**41.8%**	32.1%	67.9%	**58.2%**
Peak Hour	08:15	11:30	**08:15**	13:00	16:30	**16:45**
Volume	621	280	**755**	261	599	**764**
P.H.F.	0.92	0.80	**0.91**	0.96	0.75	**0.77**

WEDNESDAY - AUGUST 9TH , 2017 CITY: UTC PROJECT: PTD17-0811-02

JUDICIAL BTN GOLDEN HAVEN & ILLUMINA

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	53		52				
00:15	7		6					12:15	63		79				
00:30	3		5					12:30	47		54				
00:45	3	16	7	24			40	12:45	62	225	51	236			461
01:00	2		3					13:00	57		61				
01:15	0		6					13:15	55		56				
01:30	4		2					13:30	48		57				
01:45	5	11	4	15			26	13:45	56	216	58	232			448
02:00	1		2					14:00	34		76				
02:15	2		4					14:15	44		71				
02:30	3		3					14:30	48		61				
02:45	4	10	4	13			23	14:45	56	182	41	249			431
03:00	0		1					15:00	45		57				
03:15	1		4					15:15	39		53				
03:30	2		0					15:30	47		72				
03:45	5	8	0	5			13	15:45	43	174	60	242			416
04:00	3		0					16:00	61		83				
04:15	2		3					16:15	47		57				
04:30	4		2					16:30	62		77				
04:45	18	27	3	8			35	16:45	61	231	80	297			528
05:00	19		8					17:00	87		131				
05:15	22		5					17:15	111		84				
05:30	39		10					17:30	114		61				
05:45	56	136	9	32			168	17:45	109	421	85	361			782
06:00	69		18					18:00	70		79				
06:15	75		20					18:15	58		67				
06:30	74		21					18:30	62		67				
06:45	99	317	33	92			409	18:45	44	234	76	289			523
07:00	91		26					19:00	45		58				
07:15	121		60					19:15	39		55				
07:30	115		66					19:30	42		53				
07:45	130	457	84	236			693	19:45	28	154	39	205			359
08:00	144		90					20:00	25		40				
08:15	131		81					20:15	41		45				
08:30	141		77					20:30	33		42				
08:45	150	566	80	328			894	20:45	39	138	35	162			300
09:00	122		68					21:00	32		31				
09:15	90		70					21:15	33		25				
09:30	77		55					21:30	14		22				
09:45	69	358	40	233			591	21:45	9	88	25	103			191
10:00	51		36					22:00	19		27				
10:15	44		42					22:15	8		23				
10:30	38		48					22:30	6		19				
10:45	55	188	49	175			363	22:45	12	45	19	88			133
11:00	52		39					23:00	9		21				
11:15	48		50					23:15	5		11				
11:30	56		68					23:30	5		16				
11:45	60	216	48	205			421	23:45	5	24	7	55			79
Total Vol.		2310		1366			**3676**			2132		2519			**4651**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
	4442	3885			**8327**

	AM			PM		
Split %	62.8%	37.2%	**44.1%**	45.8%	54.2%	**55.9%**
Peak Hour	08:00	07:45	**08:00**	17:00	16:30	**17:00**
Volume	566	332	**894**	421	372	**782**
P.H.F.	0.94	0.92	**0.96**	0.93	0.71	**0.90**

THURSDAY - NOVEMBER 17TH, 2016 CITY: UTC PROJECT: PTD16-1118-03

EXECUTIVE DR BTN TOWNE CENTRE & JUDICIAL

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		1			12:00			104		66		
00:15			1		3			12:15			71		64		
00:30			3		5			12:30			86		45		
00:45			2	8	0	9	17	12:45			115	376	56	231	607
01:00			1		1			13:00			114		62		
01:15			4		0			13:15			81		38		
01:30			1		2			13:30			79		47		
01:45			2	8	1	4	12	13:45			74	348	63	210	558
02:00			4		1			14:00			63		58		
02:15			4		1			14:15			50		54		
02:30			0		8			14:30			38		64		
02:45			3	11	5	15	26	14:45			50	201	52	228	429
03:00			1		0			15:00			51		89		
03:15			1		1			15:15			42		84		
03:30			6		2			15:30			40		93		
03:45			4	12	2	5	17	15:45			44	177	87	353	530
04:00			4		2			16:00			44		121		
04:15			6		1			16:15			51		88		
04:30			23		0			16:30			40		105		
04:45			34	67	1	4	71	16:45			52	187	99	413	600
05:00			23		4			17:00			66		101		
05:15			44		1			17:15			48		81		
05:30			68		2			17:30			66		77		
05:45			78	213	5	12	225	17:45			61	241	66	325	566
06:00			93		9			18:00			65		76		
06:15			92		10			18:15			69		59		
06:30			84		17			18:30			62		55		
06:45			115	384	11	47	431	18:45			56	252	49	239	491
07:00			116		24			19:00			42		49		
07:15			101		25			19:15			42		38		
07:30			99		37			19:30			40		30		
07:45			116	432	38	124	556	19:45			24	148	17	134	282
08:00			115		41			20:00			20		14		
08:15			105		45			20:15			23		11		
08:30			131		40			20:30			7		8		
08:45			142	493	51	177	670	20:45			10	60	5	38	98
09:00			161		53			21:00			16		7		
09:15			97		36			21:15			9		12		
09:30			83		38			21:30			12		14		
09:45			77	418	32	159	577	21:45			9	46	7	40	86
10:00			69		26			22:00			11		6		
10:15			70		29			22:15			9		6		
10:30			51		39			22:30			10		6		
10:45			69	259	48	142	401	22:45			6	36	1	19	55
11:00			65		47			23:00			8		2		
11:15			79		62			23:15			7		4		
11:30			74		68			23:30			4		3		
11:45			96	314	66	243	557	23:45			5	24	2	11	35
Total Vol.				2619		941	**3560**					2096		2241	**4337**

	NB	SB	EB	WB	**Combined**
Daily Totals			4715	3182	**7897**

	AM			**PM**		
Split %	73.6%	26.4%	**45.1%**	48.3%	51.7%	**54.9%**
Peak Hour	08:15	11:30	**08:15**	12:30	16:00	**12:15**
Volume	539	264	**728**	396	413	**613**
P.H.F.	0.84	0.97	**0.85**	0.86	0.85	**0.87**

TUESDAY MAY 23, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

Eastgate Mall (Between Easter Way and Towne Centre Drive)

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			18		9			12:00			108		134		
00:15			22		6			12:15			111		108		
00:30			15		8			12:30			91		87		
00:45			11	66	8	31	97	12:45			91	401	112	441	842
01:00			5		7			13:00			116		110		
01:15			10		2			13:15			121		105		
01:30			15		6			13:30			114		100		
01:45			9	39	10	25	64	13:45			135	486	98	413	899
02:00			8		5			14:00			108		84		
02:15			5		2			14:15			101		94		
02:30			4		8			14:30			114		96		
02:45			5	22	3	18	40	14:45			116	439	104	378	817
03:00			1		3			15:00			111		86		
03:15			5		4			15:15			133		80		
03:30			2		4			15:30			118		96		
03:45			6	14	5	16	30	15:45			131	493	95	357	850
04:00			1		6			16:00			151		126		
04:15			8		12			16:15			130		116		
04:30			12		22			16:30			144		102		
04:45			9	30	28	68	98	16:45			158	583	127	471	1054
05:00			15		23			17:00			166		146		
05:15			6		32			17:15			189		122		
05:30			15		50			17:30			155		124		
05:45			22	58	67	172	230	17:45			162	672	104	496	1168
06:00			41		66			18:00			144		121		
06:15			55		85			18:15			116		104		
06:30			58		88			18:30			108		103		
06:45			54	208	126	365	573	18:45			121	489	78	406	895
07:00			55		128			19:00			103		46		
07:15			80		180			19:15			88		55		
07:30			81		237			19:30			90		47		
07:45			88	304	252	797	1101	19:45			70	351	26	174	525
08:00			115		208			20:00			66		38		
08:15			101		188			20:15			61		54		
08:30			91		212			20:30			68		42		
08:45			88	395	219	827	1222	20:45			50	245	32	166	411
09:00			99		228			21:00			40		26		
09:15			105		177			21:15			44		45		
09:30			88		153			21:30			51		30		
09:45			80	372	133	691	1063	21:45			44	179	28	129	308
10:00			77		130			22:00			41		25		
10:15			71		119			22:15			30		17		
10:30			84		104			22:30			28		16		
10:45			65	297	104	457	754	22:45			33	132	20	78	210
11:00			55		88			23:00			38		21		
11:15			101		102			23:15			30		10		
11:30			90		110			23:30			25		6		
11:45			118	364	124	424	788	23:45			34	127	7	44	171
Total Vol.				2169		3891	**6060**					4597		3553	**8150**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			6766	7444	**14210**

	AM			**PM**		
Split %	35.8%	64.2%	**42.6%**	56.4%	43.6%	**57.4%**
Peak Hour	11:45	07:30	**07:30**	17:00	16:45	**16:45**
Volume	428	885	**1270**	672	519	**1187**
P.H.F.	0.91	0.88	**0.93**	0.89	0.89	**0.95**

TUESDAY MAY 23, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

Eastgate Mall (Between Towne Centre Drive and Judicial Way)

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			9		2			12:00			89		125		
00:15			6		5			12:15			106		110		
00:30			4		6			12:30			99		92		
00:45			6	25	4	17	42	12:45			100	394	94	421	815
01:00			2		4			13:00			105		91		
01:15			8		3			13:15			99		90		
01:30			11		7			13:30			93		96		
01:45			4	25	5	19	44	13:45			99	396	68	345	741
02:00			5		0			14:00			79		76		
02:15			6		2			14:15			103		84		
02:30			3		4			14:30			102		107		
02:45			0	14	0	6	20	14:45			80	364	95	362	726
03:00			2		2			15:00			101		87		
03:15			4		5			15:15			113		73		
03:30			1		4			15:30			122		91		
03:45			7	14	1	12	26	15:45			113	449	83	334	783
04:00			5		7			16:00			154		115		
04:15			8		10			16:15			138		109		
04:30			7		16			16:30			159		99		
04:45			13	33	12	45	78	16:45			164	615	110	433	1048
05:00			12		9			17:00			190		131		
05:15			14		20			17:15			170		115		
05:30			21		36			17:30			167		102		
05:45			34	81	44	109	190	17:45			149	676	106	454	1130
06:00			44		51			18:00			111		93		
06:15			55		67			18:15			111		77		
06:30			59		92			18:30			108		73		
06:45			62	220	115	325	545	18:45			79	409	73	316	725
07:00			67		118			19:00			54		45		
07:15			71		172			19:15			71		36		
07:30			97		205			19:30			57		37		
07:45			105	340	217	712	1052	19:45			45	227	25	143	370
08:00			97		190			20:00			44		33		
08:15			103		185			20:15			42		24		
08:30			112		183			20:30			22		27		
08:45			109	421	205	763	1184	20:45			27	135	19	103	238
09:00			100		197			21:00			28		8		
09:15			114		139			21:15			31		39		
09:30			91		109			21:30			28		18		
09:45			86	391	114	559	950	21:45			18	105	19	84	189
10:00			66		94			22:00			20		11		
10:15			65		97			22:15			15		11		
10:30			53		81			22:30			17		9		
10:45			62	246	95	367	613	22:45			13	65	8	39	104
11:00			83		75			23:00			14		10		
11:15			87		80			23:15			16		6		
11:30			78		105			23:30			10		6		
11:45			105	353	117	377	730	23:45			17	57	4	26	83
Total Vol.				2163		3311	**5474**					3892		3060	**6952**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			6055	6371	**12426**

	AM			**PM**		
Split %	39.5%	60.5%	**44.1%**	56.0%	44.0%	**55.9%**
Peak Hour	08:30	07:30	**07:30**	16:45	16:45	**16:45**
Volume	435	797	**1199**	691	458	**1149**
P.H.F.	0.95	0.92	**0.93**	0.91	0.87	**0.89**

Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 17. Executive Dr, West of Towne Center Dr

Orientation: *East-West*

Date of Count: *Wednesday, May 13, 2015*

Analysts: *DASH*

Weather: *Sunny*

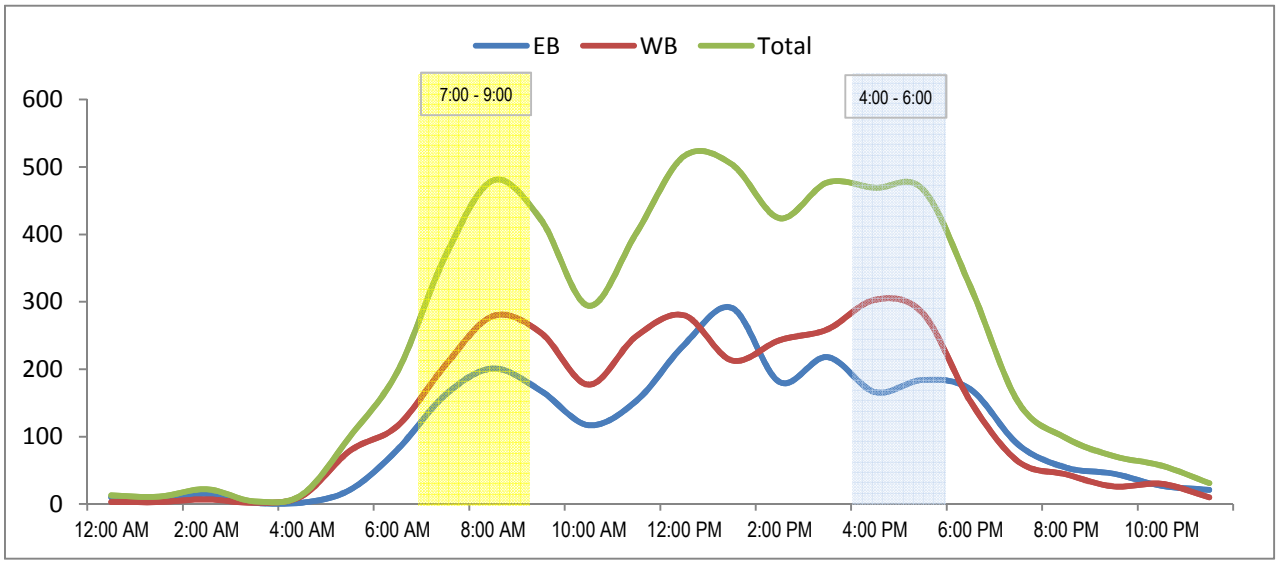
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*5,914*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	10	3	13
1:00 AM - 2:00 AM	8	3	11
2:00 AM - 3:00 AM	15	7	22
3:00 AM - 4:00 AM	2	2	4
4:00 AM - 5:00 AM	2	12	14
5:00 AM - 6:00 AM	21	79	100
6:00 AM - 7:00 AM	81	116	197
7:00 AM - 8:00 AM	162	206	368
8:00 AM - 9:00 AM	201	279	480
9:00 AM - 10:00 AM	168	254	422
10:00 AM - 11:00 AM	117	177	294
11:00 AM - 12:00 PM	153	249	402
Total	**940**	**1,387**	**2,327**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	236	280	516
1:00 PM - 2:00 PM	291	213	504
2:00 PM - 3:00 PM	181	243	424
3:00 PM - 4:00 PM	218	259	477
4:00 PM - 5:00 PM	166	303	469
5:00 PM - 6:00 PM	184	283	467
6:00 PM - 7:00 PM	170	152	322
7:00 PM - 8:00 PM	88	63	151
8:00 PM - 9:00 PM	54	44	98
9:00 PM - 10:00 PM	45	26	71
10:00 PM - 11:00 PM	27	30	57
11:00 PM - 12:00 AM	21	10	31
Total	**1,681**	**1,906**	**3,587**

24-Hour	*EB*	*Volume*	*2,621*	*24-Hour*	*WB*	*Volume*	*3,293*



Kimley»Horn

24 Hour Segment Count

Accurate Video Counts Inc
info@accuratevideocounts.com
(619) 987-5136

Location: 79. Golden Haven Dr, West of Judicial Dr

Orientation: *East-West*

Date of Count: *Tuesday, June 16, 2015*

Analysts: *DASH*

Weather: *Sunny*

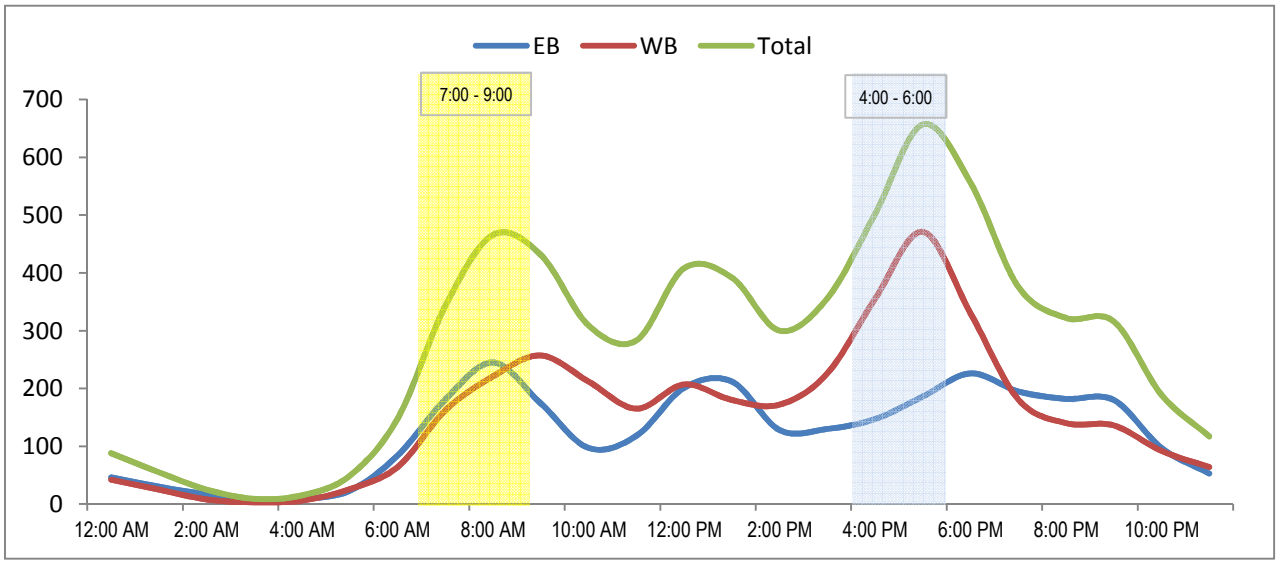
AVC Proj. No: *15-0345*

24 Hour Segment Volume			*6,712*

Time	Hourly Volume		
	EB	WB	Total
12:00 AM - 1:00 AM	46	42	88
1:00 AM - 2:00 AM	30	25	55
2:00 AM - 3:00 AM	17	8	25
3:00 AM - 4:00 AM	6	3	9
4:00 AM - 5:00 AM	9	6	15
5:00 AM - 6:00 AM	23	26	49
6:00 AM - 7:00 AM	84	64	148
7:00 AM - 8:00 AM	181	162	343
8:00 AM - 9:00 AM	245	221	466
9:00 AM - 10:00 AM	174	257	431
10:00 AM - 11:00 AM	97	212	309
11:00 AM - 12:00 PM	118	165	283
Total	**1,030**	**1,191**	**2,221**

Time	Hourly Volume		
	EB	WB	Total
12:00 PM - 1:00 PM	201	207	408
1:00 PM - 2:00 PM	212	180	392
2:00 PM - 3:00 PM	128	172	300
3:00 PM - 4:00 PM	130	226	356
4:00 PM - 5:00 PM	147	355	502
5:00 PM - 6:00 PM	186	471	657
6:00 PM - 7:00 PM	226	330	556
7:00 PM - 8:00 PM	195	181	376
8:00 PM - 9:00 PM	182	140	322
9:00 PM - 10:00 PM	180	136	316
10:00 PM - 11:00 PM	97	92	189
11:00 PM - 12:00 AM	53	64	117
Total	**1,937**	**2,554**	**4,491**

24-Hour	*EB*	*Volume*	*2,967*	*24-Hour*	*WB*	*Volume*	*3,745*



WEDNESDAY - AUGUST 9TH , 2017 CITY: UTC PROJECT: PTD17-0811-02

JUDICIAL BTN EASTGATE MALL & EXECUTIVE

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		3					12:00	45		41				
00:15	0		3					12:15	47		39				
00:30	2		3					12:30	49		32				
00:45	3	7	3	12			19	12:45	39	180	42	154			334
01:00	0		0					13:00	53		36				
01:15	1		2					13:15	35		28				
01:30	0		1					13:30	65		35				
01:45	0	1	2	5			6	13:45	36	189	27	126			315
02:00	1		1					14:00	41		41				
02:15	0		1					14:15	49		31				
02:30	2		0					14:30	39		29				
02:45	2	5	0	2			7	14:45	49	178	28	129			307
03:00	0		1					15:00	53		42				
03:15	1		0					15:15	37		38				
03:30	0		0					15:30	33		49				
03:45	4	5	0	1			6	15:45	45	168	43	172			340
04:00	2		0					16:00	77		49				
04:15	2		0					16:15	51		66				
04:30	3		0					16:30	50		70				
04:45	7	14	0	0			14	16:45	44	222	88	273			495
05:00	6		4					17:00	68		81				
05:15	11		4					17:15	51		70				
05:30	14		4					17:30	44		60				
05:45	28	59	12	24			83	17:45	40	203	51	262			465
06:00	24		12					18:00	41		43				
06:15	35		15					18:15	27		45				
06:30	39		14					18:30	25		28				
06:45	64	162	16	57			219	18:45	21	114	34	150			264
07:00	77		15					19:00	15		21				
07:15	71		26					19:15	15		17				
07:30	88		37					19:30	13		20				
07:45	91	327	31	109			436	19:45	9	52	16	74			126
08:00	105		26					20:00	13		16				
08:15	116		35					20:15	4		8				
08:30	101		31					20:30	8		13				
08:45	151	473	27	119			592	20:45	7	32	4	41			73
09:00	106		36					21:00	12		12				
09:15	90		30					21:15	10		8				
09:30	80		27					21:30	5		6				
09:45	7	283	20	113			396	21:45	6	33	5	31			64
10:00	43		23					22:00	6		5				
10:15	32		13					22:15	1		7				
10:30	39		27					22:30	3		4				
10:45	31	145	15	78			223	22:45	2	12	1	17			29
11:00	34		21					23:00	2		6				
11:15	41		19					23:15	1		4				
11:30	53		54					23:30	2		4				
11:45	55	183	27	121			304	23:45	2	7	2	16			23
Total Vol.		1664		641			**2305**			1390		1445			**2835**

Daily Totals

NB	SB	EB	WB	**Combined**
3054	2086			**5140**

	AM			**PM**		
Split %	72.2%	27.8%	**44.8%**	49.0%	51.0%	**55.2%**
Peak Hour	08:15	11:30	**08:15**	15:45	16:30	**16:30**
Volume	474	161	**603**	223	309	**522**
P.H.F.	0.78	0.75	**0.85**	0.73	0.88	**0.88**

WEDNESDAY - AUGUST 9TH , 2017 CITY: UTC PROJECT: PTD17-0811-02

JUDICIAL BTN GOLDEN HAVEN & ILLUMINA

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	53		52				
00:15	7		6					12:15	63		79				
00:30	3		5					12:30	47		54				
00:45	3	16	7	24			40	12:45	62	225	51	236			461
01:00	2		3					13:00	57		61				
01:15	0		6					13:15	55		56				
01:30	4		2					13:30	48		57				
01:45	5	11	4	15			26	13:45	56	216	58	232			448
02:00	1		2					14:00	34		76				
02:15	2		4					14:15	44		71				
02:30	3		3					14:30	48		61				
02:45	4	10	4	13			23	14:45	56	182	41	249			431
03:00	0		1					15:00	45		57				
03:15	1		4					15:15	39		53				
03:30	2		0					15:30	47		72				
03:45	5	8	0	5			13	15:45	43	174	60	242			416
04:00	3		0					16:00	61		83				
04:15	2		3					16:15	47		57				
04:30	4		2					16:30	62		77				
04:45	18	27	3	8			35	16:45	61	231	80	297			528
05:00	19		8					17:00	87		131				
05:15	22		5					17:15	111		84				
05:30	39		10					17:30	114		61				
05:45	56	136	9	32			168	17:45	109	421	85	361			782
06:00	69		18					18:00	70		79				
06:15	75		20					18:15	58		67				
06:30	74		21					18:30	62		67				
06:45	99	317	33	92			409	18:45	44	234	76	289			523
07:00	91		26					19:00	45		58				
07:15	121		60					19:15	39		55				
07:30	115		66					19:30	42		53				
07:45	130	457	84	236			693	19:45	28	154	39	205			359
08:00	144		90					20:00	25		40				
08:15	131		81					20:15	41		45				
08:30	141		77					20:30	33		42				
08:45	150	566	80	328			894	20:45	39	138	35	162			300
09:00	122		68					21:00	32		31				
09:15	90		70					21:15	33		25				
09:30	77		55					21:30	14		22				
09:45	69	358	40	233			591	21:45	9	88	25	103			191
10:00	51		36					22:00	19		27				
10:15	44		42					22:15	8		23				
10:30	38		48					22:30	6		19				
10:45	55	188	49	175			363	22:45	12	45	19	88			133
11:00	52		39					23:00	9		21				
11:15	48		50					23:15	5		11				
11:30	56		68					23:30	5		16				
11:45	60	216	48	205			421	23:45	5	24	7	55			79
Total Vol.		2310		1366			**3676**			2132		2519			**4651**

Daily Totals

NB	SB	EB	WB	**Combined**
4442	3885			**8327**

	AM			**PM**		
Split %	62.8%	37.2%	**44.1%**	45.8%	54.2%	**55.9%**
Peak Hour	08:00	07:45	**08:00**	17:00	16:30	**17:00**
Volume	566	332	**894**	421	372	**782**
P.H.F.	0.94	0.92	**0.96**	0.93	0.71	**0.90**

THURSDAY MAY 25, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

Miramar Road (Between I-805 Southbound Ramps and I-805 Northbound Ramps)

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			37		50			12:00			362		426		
00:15			27		42			12:15			356		466		
00:30			27		24			12:30			364		484		
00:45			16	107	27	143	250	12:45			378	1460	510	1886	3346
01:00			24		20			13:00			400		475		
01:15			20		26			13:15			409		499		
01:30			20		30			13:30			398		515		
01:45			33	97	15	91	188	13:45			387	1594	455	1944	3538
02:00			17		31			14:00			437		534		
02:15			20		14			14:15			380		492		
02:30			12		20			14:30			402		582		
02:45			15	64	13	78	142	14:45			398	1617	590	2198	3815
03:00			15		16			15:00			402		511		
03:15			14		22			15:15			379		449		
03:30			22		29			15:30			457		515		
03:45			18	69	34	101	170	15:45			394	1632	441	1916	3548
04:00			33		50			16:00			481		505		
04:15			29		41			16:15			466		488		
04:30			35		84			16:30			484		519		
04:45			44	141	98	273	414	16:45			508	1939	544	2056	3995
05:00			55		122			17:00			535		535		
05:15			56		186			17:15			488		506		
05:30			107		289			17:30			490		544		
05:45			153	371	339	936	1307	17:45			430	1943	511	2096	4039
06:00			156		351			18:00			384		434		
06:15			174		431			18:15			315		501		
06:30			224		475			18:30			342		481		
06:45			261	815	385	1642	2457	18:45			295	1336	375	1791	3127
07:00			279		505			19:00			300		287		
07:15			310		464			19:15			226		305		
07:30			377		551			19:30			216		277		
07:45			385	1351	535	2055	3406	19:45			253	995	283	1152	2147
08:00			410		562			20:00			214		194		
08:15			417		480			20:15			235		252		
08:30			375		535			20:30			190		198		
08:45			420	1622	521	2098	3720	20:45			194	833	205	849	1682
09:00			369		500			21:00			214		171		
09:15			394		487			21:15			175		145		
09:30			347		514			21:30			107		168		
09:45			321	1431	490	1991	3422	21:45			110	606	136	620	1226
10:00			325		470			22:00			123		135		
10:15			322		437			22:15			97		135		
10:30			325		425			22:30			70		128		
10:45			321	1293	452	1784	3077	22:45			51	341	123	521	862
11:00			335		452			23:00			56		116		
11:15			332		453			23:15			66		70		
11:30			348		434			23:30			64		64		
11:45			339	1354	497	1836	3190	23:45			60	246	66	316	562
Total Vol.				8715		13028	**21743**					14542		17345	**31887**

Daily Totals

NB	SB	EB	WB	**Combined**
		23257	30373	**53630**

	AM			**PM**		
Split %	40.1%	59.9%	**40.5%**	45.6%	54.4%	**59.5%**
Peak Hour	08:00	07:30	**08:00**	16:45	14:00	**16:45**
Volume	1622	2128	**3720**	2021	2198	**4150**
P.H.F.	0.97	0.95	**0.96**	0.94	0.93	**0.97**

THURSDAY MAY 25, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

La Jolla Village Drive (Between Executive Way and Towne Centre Drive)

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			58		23			12:00			321		378		
00:15			47		32			12:15			341		383		
00:30			34		12			12:30			375		379		
00:45			33	172	20	87	259	12:45			339	1376	359	1499	2875
01:00			31		22			13:00			372		360		
01:15			24		19			13:15			382		360		
01:30			33		12			13:30			378		340		
01:45			20	108	12	65	173	13:45			366	1498	333	1393	2891
02:00			18		11			14:00			416		303		
02:15			30		9			14:15			407		344		
02:30			19		13			14:30			417		327		
02:45			4	71	9	42	113	14:45			394	1634	381	1355	2989
03:00			17		7			15:00			370		361		
03:15			7		9			15:15			350		344		
03:30			15		15			15:30			378		379		
03:45			11	50	26	57	107	15:45			311	1409	411	1495	2904
04:00			11		22			16:00			366		366		
04:15			9		19			16:15			335		492		
04:30			18		53			16:30			322		505		
04:45			24	62	66	160	222	16:45			309	1332	503	1866	3198
05:00			27		77			17:00			374		519		
05:15			40		103			17:15			338		515		
05:30			46		191			17:30			319		496		
05:45			75	188	227	598	786	17:45			302	1333	466	1996	3329
06:00			73		203			18:00			295		452		
06:15			106		243			18:15			292		499		
06:30			148		239			18:30			335		436		
06:45			196	523	290	975	1498	18:45			345	1267	372	1759	3026
07:00			193		251			19:00			310		272		
07:15			230		288			19:15			313		241		
07:30			340		342			19:30			305		191		
07:45			332	1095	403	1284	2379	19:45			281	1209	226	930	2139
08:00			343		355			20:00			290		163		
08:15			330		396			20:15			289		177		
08:30			367		411			20:30			245		145		
08:45			335	1375	380	1542	2917	20:45			262	1086	163	648	1734
09:00			341		399			21:00			236		135		
09:15			294		358			21:15			189		131		
09:30			248		363			21:30			150		125		
09:45			298	1181	384	1504	2685	21:45			128	703	124	515	1218
10:00			255		326			22:00			150		113		
10:15			255		363			22:15			122		86		
10:30			265		356			22:30			130		86		
10:45			274	1049	373	1418	2467	22:45			76	478	87	372	850
11:00			307		341			23:00			93		76		
11:15			281		328			23:15			81		47		
11:30			305		359			23:30			88		35		
11:45			342	1235	391	1419	2654	23:45			72	334	55	213	547
Total Vol.				7109		9151	**16260**					13659		14041	**27700**

Daily Totals

NB	SB	EB	WB	**Combined**
		20768	23192	**43960**

	AM			**PM**		
Split %	43.7%	56.3%	**37.0%**	49.3%	50.7%	**63.0%**
Peak Hour	11:45	08:15	**08:15**	14:00	16:30	**16:30**
Volume	1379	1586	**2959**	1634	2042	**3385**
P.H.F.	0.92	0.96	**0.95**	0.98	0.98	**0.95**

THURSDAY MAY 25, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

La Jolla Village Drive (Between Judicial Drive and (I-805 Southbound Ramps)

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			72		30			12:00			484		492		
00:15			51		30			12:15			513		490		
00:30			39		17			12:30			517		508		
00:45			37	199	20	97	296	12:45			456	1970	532	2022	3992
01:00			48		16			13:00			533		494		
01:15			28		22			13:15			565		480		
01:30			41		13			13:30			543		443		
01:45			31	148	11	62	210	13:45			547	2188	442	1859	4047
02:00			23		14			14:00			679		347		
02:15			39		12			14:15			579		419		
02:30			33		10			14:30			714		434		
02:45			11	106	10	46	152	14:45			681	2653	445	1645	4298
03:00			17		15			15:00			669		400		
03:15			11		14			15:15			614		398		
03:30			29		21			15:30			663		417		
03:45			16	73	36	86	159	15:45			553	2499	471	1686	4185
04:00			19		34			16:00			680		433		
04:15			7		29			16:15			620		505		
04:30			28		73			16:30			599		539		
04:45			35	89	99	235	324	16:45			581	2480	479	1956	4436
05:00			34		121			17:00			649		513		
05:15			44		186			17:15			630		568		
05:30			53		291			17:30			620		576		
05:45			74	205	355	953	1158	17:45			559	2458	575	2232	4690
06:00			91		353			18:00			562		558		
06:15			106		380			18:15			514		578		
06:30			171		399			18:30			525		520		
06:45			199	567	439	1571	2138	18:45			521	2122	458	2114	4236
07:00			222		465			19:00			502		312		
07:15			259		560			19:15			437		284		
07:30			364		609			19:30			406		271		
07:45			362	1207	676	2310	3517	19:45			412	1757	271	1138	2895
08:00			356		650			20:00			396		194		
08:15			410		656			20:15			359		213		
08:30			365		630			20:30			318		190		
08:45			375	1506	626	2562	4068	20:45			323	1396	192	789	2185
09:00			386		577			21:00			339		142		
09:15			374		535			21:15			292		157		
09:30			343		487			21:30			217		152		
09:45			335	1438	511	2110	3548	21:45			183	1031	140	591	1622
10:00			344		450			22:00			183		135		
10:15			355		493			22:15			150		93		
10:30			368		424			22:30			152		90		
10:45			372	1439	482	1849	3288	22:45			107	592	93	411	1003
11:00			428		421			23:00			116		76		
11:15			407		491			23:15			104		63		
11:30			445		464			23:30			120		44		
11:45			495	1775	482	1858	3633	23:45			106	446	51	234	680
Total Vol.				8752		13739	**22491**					21592		16677	**38269**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			30344	30416	**60760**

	AM			**PM**		
Split %	38.9%	61.1%	**37.0%**	56.4%	43.6%	**63.0%**
Peak Hour	11:45	07:45	**07:45**	14:30	17:30	**17:00**
Volume	2009	2612	**4105**	2678	2287	**4690**
P.H.F.	0.97	0.97	**0.96**	0.94	0.99	**0.98**

THURSDAY - NOVEMBER 17TH, 2016 CITY: UTC PROJECT: PTD16-1118-03

TOWNE CENTRE N-O EASTGATE MALL

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		8					12:00	98		140				
00:15	4		6					12:15	83		92				
00:30	3		3					12:30	100		77				
00:45	1	12	3	20			32	12:45	135	416	79	388			804
01:00	5		6					13:00	98		78				
01:15	2		3					13:15	98		49				
01:30	1		3					13:30	75		55				
01:45	1	9	2	14			23	13:45	79	350	72	254			604
02:00	3		4					14:00	44		84				
02:15	2		2					14:15	39		78				
02:30	2		2					14:30	37		102				
02:45	3	10	2	10			20	14:45	44	164	99	363			527
03:00	1		5					15:00	50		106				
03:15	2		2					15:15	33		106				
03:30	4		3					15:30	31		162				
03:45	0	7	1	11			18	15:45	22	136	136	510			646
04:00	5		1					16:00	15		177				
04:15	5		6					16:15	19		141				
04:30	9		2					16:30	22		215				
04:45	26	45	4	13			58	16:45	19	75	188	721			796
05:00	30		6					17:00	16		262				
05:15	47		13					17:15	18		199				
05:30	55		10					17:30	15		184				
05:45	96	228	6	35			263	17:45	16	65	159	804			869
06:00	89		10					18:00	15		117				
06:15	108		9					18:15	13		102				
06:30	168		14					18:30	25		93				
06:45	169	534	19	52			586	18:45	22	75	66	378			453
07:00	184		20					19:00	7		64				
07:15	151		19					19:15	11		32				
07:30	188		22					19:30	8		31				
07:45	195	718	28	89			807	19:45	2	28	21	148			176
08:00	188		19					20:00	4		29				
08:15	155		22					20:15	8		14				
08:30	162		23					20:30	11		13				
08:45	177	682	20	84			766	20:45	6	29	18	74			103
09:00	188		29					21:00	5		12				
09:15	136		28					21:15	4		8				
09:30	106		35					21:30	4		6				
09:45	103	533	31	123			656	21:45	5	18	4	30			48
10:00	80		37					22:00	5		6				
10:15	72		30					22:15	7		8				
10:30	61		42					22:30	2		8				
10:45	57	270	45	154			424	22:45	2	16	5	27			43
11:00	66		44					23:00	6		5				
11:15	70		35					23:15	4		8				
11:30	88		65					23:30	5		8				
11:45	95	319	88	232			551	23:45	8	23	5	26			49
Total Vol.		3367		837			**4204**			1395		3723			**5118**

Daily Totals

NB	SB	EB	WB	Combined
4762	4560			**9322**

	AM			PM		
Split %	80.1%	19.9%	**45.1%**	27.3%	72.7%	**54.9%**
Peak Hour	07:30	11:45	**07:30**	12:30	16:30	**16:30**
Volume	726	397	**817**	431	864	**939**
P.H.F.	0.93	0.71	**0.92**	0.80	0.82	**0.84**

THURSDAY MAY 25, 2017 CITY: LA JOLLA / UC PROJECT: PTD17-0526-01

Towne Centre Drive (Between La Jolla Village Drive and Golden Haven Drive)

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	11		16					12:00	207		172				
00:15	11		15					12:15	187		151				
00:30	11		7					12:30	200		158				
00:45	8	41	9	47			88	12:45	184	778	139	620			1398
01:00	18		9					13:00	194		136				
01:15	8		9					13:15	219		133				
01:30	5		4					13:30	198		98				
01:45	8	39	0	22			61	13:45	199	810	119	486			1296
02:00	4		4					14:00	199		95				
02:15	2		5					14:15	172		120				
02:30	1		5					14:30	212		112				
02:45	1	8	0	14			22	14:45	184	767	113	440			1207
03:00	3		4					15:00	181		99				
03:15	3		4					15:15	146		101				
03:30	2		4					15:30	161		136				
03:45	6	14	8	20			34	15:45	130	618	117	453			1071
04:00	2		4					16:00	174		137				
04:15	2		5					16:15	191		177				
04:30	12		9					16:30	188		184				
04:45	8	24	14	32			56	16:45	170	723	181	679			1402
05:00	12		16					17:00	215		205				
05:15	17		30					17:15	202		244				
05:30	24		28					17:30	235		205				
05:45	32	85	46	120			205	17:45	205	857	244	898			1755
06:00	32		40					18:00	167		177				
06:15	21		46					18:15	145		155				
06:30	55		45					18:30	162		183				
06:45	81	189	48	179			368	18:45	153	627	141	656			1283
07:00	66		55					19:00	129		101				
07:15	105		90					19:15	113		104				
07:30	133		88					19:30	119		88				
07:45	114	418	105	338			756	19:45	125	486	91	384			870
08:00	165		121					20:00	108		87				
08:15	147		140					20:15	95		82				
08:30	151		121					20:30	100		87				
08:45	163	626	119	501			1127	20:45	96	399	71	327			726
09:00	167		110					21:00	121		45				
09:15	180		95					21:15	114		53				
09:30	125		83					21:30	90		68				
09:45	114	586	95	383			969	21:45	51	376	40	206			582
10:00	103		90					22:00	57		74				
10:15	95		88					22:15	47		47				
10:30	134		94					22:30	45		33				
10:45	117	449	107	379			828	22:45	24	173	34	188			361
11:00	109		100					23:00	32		29				
11:15	116		144					23:15	17		31				
11:30	145		147					23:30	27		18				
11:45	164	534	159	550			1084	23:45	37	113	13	91			204
Total Vol.		3013		2585			**5598**			6727		5428			**12155**

Daily Totals

NB	SB	EB	WB	**Combined**
9740	8013			**17753**

	AM			**PM**		
Split %	53.8%	46.2%	**31.5%**	55.3%	44.7%	**68.5%**
Peak Hour	11:45	11:45	**11:45**	17:00	17:00	**17:00**
Volume	758	640	**1398**	857	898	**1755**
P.H.F.	0.92	0.93	**0.92**	0.94	0.92	**0.98**

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:				
5/23/17	LOCATION:	LA JOLLA / UC	PROJECT #:	PTD17-0526-01
TUESDAY	NORTH & SOUTH:	TOWNE CENTER	LOCATION #:	1
	EAST & WEST:	EASTGATE MALL	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

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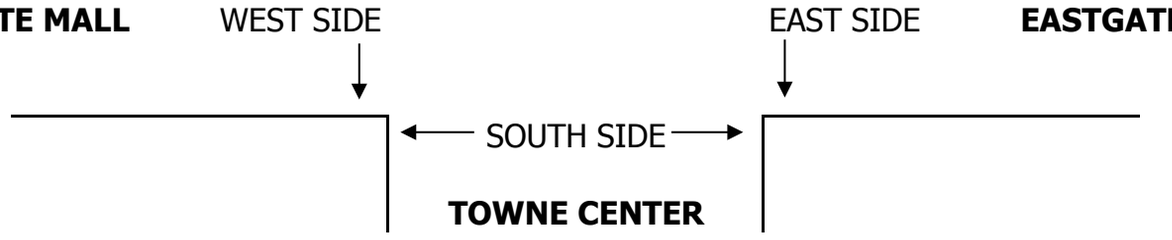
		NORTHBOUND TOWNE CENTER			SOUTHBOUND TOWNE CENTER			EASTBOUND EASTGATE MALL			WESTBOUND EASTGATE MALL				U-TURNS				
	LANES:	NL 2	NT 2	NR 0	SL 2	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM	25	125	31	5	5	7	11	30	11	8	81	27	366	1				1
	7:15 AM	60	138	26	4	10	7	14	36	24	7	120	37	483	2				2
	7:30 AM	80	141	42	4	12	2	13	47	25	9	149	50	574			1		1
	7:45 AM	111	132	55	2	16	9	16	44	25	14	146	49	619	1		1		2
	8:00 AM	75	145	52	4	11	5	22	39	41	16	127	56	593	1		1		2
	8:15 AM	66	120	45	5	13	3	24	56	24	11	113	59	539	1				1
	8:30 AM	87	147	59	6	15	6	19	35	37	15	122	42	590	2				2
	8:45 AM	78	153	48	5	12	7	13	44	21	14	131	46	572			2		2
	VOLUMES	582	1,101	358	35	94	46	132	331	208	94	989	366	4,336	8	0	5	0	13
	APPROACH %	29%	54%	18%	20%	54%	26%	20%	49%	31%	6%	68%	25%						
	APP/DEPART	2,041	/	1,599	175	/	396	671	/	724	1,449	/	1,617	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	339	544	211	17	55	23	81	174	127	56	508	206	2,341					
	APPROACH %	31%	50%	19%	18%	58%	24%	21%	46%	33%	7%	66%	27%						
	PEAK HR FACTOR		0.918			0.880			0.918			0.921		0.945					
	APP/DEPART	1,094	/	831	95	/	238	382	/	402	770	/	870	0					
PM	4:00 PM	27	22	13	31	140	23	5	115	29	27	78	5	515		1	1		2
	4:15 PM	31	18	10	30	93	17	10	89	35	29	69	6	437	5		1		6
	4:30 PM	32	11	15	46	121	24	3	98	37	32	57	8	484	2		1		3
	4:45 PM	22	14	12	42	116	24	2	116	35	33	76	1	493	3				3
	5:00 PM	48	8	18	67	173	33	12	95	45	42	67	5	613	8				8
	5:15 PM	28	13	10	42	110	24	2	126	54	33	73	6	521	3				3
	5:30 PM	47	17	13	45	123	27	4	110	49	40	53	5	533	4				4
	5:45 PM	20	9	9	32	84	19	3	103	44	28	64	5	420	1				1
	VOLUMES	255	112	100	335	960	191	41	852	328	264	537	41	4,016	26	1	3	0	30
	APPROACH %	55%	24%	21%	23%	65%	13%	3%	70%	27%	31%	64%	5%						
	APP/DEPART	467	/	194	1,486	/	1,552	1,221	/	1,287	842	/	983	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	145	52	53	196	522	108	20	447	183	148	269	17	2,160					
	APPROACH %	58%	21%	21%	24%	63%	13%	3%	69%	28%	34%	62%	4%						
	PEAK HR FACTOR		0.812			0.756			0.893			0.952		0.881					
	APP/DEPART	250	/	89	826	/	853	650	/	696	434	/	522	0					



		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	2		1	1	4					0	1	2	1		4
	7:15 AM	1	1	1	3	6					0	2	2	1		5
	7:30 AM	1	1		2	4					0	1	1	1		3
	7:45 AM		2		1	3					0		1		1	2
	8:00 AM	5	4	3	6	18					0	1			1	2
	8:15 AM	2	1		1	4					0	1	2	1		4
	8:30 AM	3	4	3	3	13					0	1	1		1	3
	8:45 AM		2	1	1	4					0	3	1			4
	TOTAL	14	15	9	18	56	0	0	0	0	0	10	10	4	3	27
PM	4:00 PM				1	1					0	1				1
	4:15 PM			1	1	2					0	2				2
	4:30 PM	3	1		5	9					0					0
	4:45 PM	4	2	3	8	17					0	1	2			3
	5:00 PM		3	1	2	6					0	3	2			5
	5:15 PM		1	4	2	7					0	6	1			7
	5:30 PM	3	1		7	11					0	1				1
	5:45 PM		1		5	6					0	3	1			4
	TOTAL	10	9	9	31	59	0	0	0	0	0	17	6	0	0	23

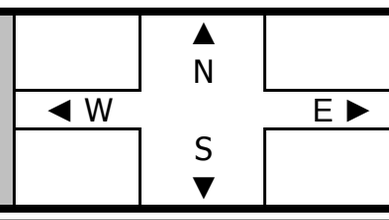
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

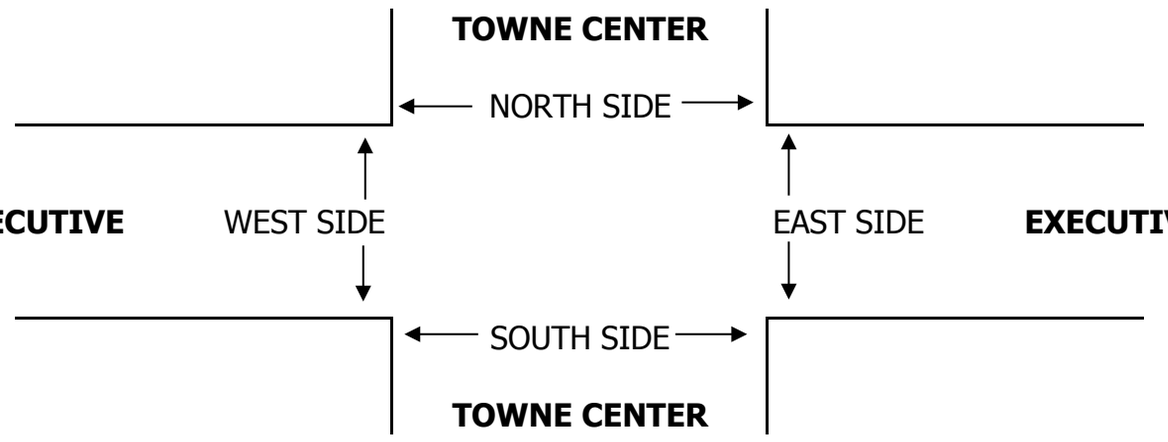
DATE:				
5/23/17	LOCATION:	LA JOLLA / UC	PROJECT #:	PTD17-0526-01
TUESDAY	NORTH & SOUTH:	TOWNE CENTER	LOCATION #:	2
	EAST & WEST:	EXECUTIVE	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER



		NORTHBOUND TOWNE CENTER			SOUTHBOUND TOWNE CENTER			EASTBOUND EXECUTIVE			WESTBOUND EXECUTIVE				U-TURNS				
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM	46	174	83	3	20	8	19	26	0	9	6	2	396	1	0	0	0	1
	7:15 AM	30	209	104	0	30	6	27	19	5	11	7	5	453	3	1	2	0	6
	7:30 AM	44	265	105	0	33	8	21	22	6	11	19	5	539	2	1	1	0	4
	7:45 AM	58	280	112	2	42	16	26	21	9	10	21	7	604	0	0	2	1	3
	8:00 AM	97	239	92	1	39	18	35	31	11	7	24	8	602	1	2	0	0	3
	8:15 AM	111	208	114	4	32	10	30	15	4	15	21	3	567	1	0	0	0	1
	8:30 AM	81	246	78	3	44	15	30	32	9	15	28	3	584	0	0	0	0	0
	8:45 AM	88	241	84	3	38	9	37	27	13	21	29	6	596	1	2	0	1	4
	VOLUMES	555	1,862	772	16	278	90	225	193	57	99	155	39	4,341	9	6	5	2	22
	APPROACH %	17%	58%	24%	4%	72%	23%	47%	41%	12%	34%	53%	13%						
	APP/DEPART	3,189	/	2,126	384	/	434	475	/	981	293	/	800	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	347	973	396	10	157	59	121	99	33	47	94	21	2,357					
	APPROACH %	20%	57%	23%	4%	69%	26%	48%	39%	13%	29%	58%	13%						
	PEAK HR FACTOR		0.953			0.911			0.821			0.880		0.976					
	APP/DEPART	1,716	/	1,115	226	/	237	253	/	505	162	/	500	0					
PM	4:00 PM	18	49	13	9	151	29	6	17	45	72	45	2	456	15	0	0	0	15
	4:15 PM	24	33	15	8	181	25	8	10	41	80	41	2	468	10	0	0	0	10
	4:30 PM	20	39	16	0	182	29	8	11	33	78	50	4	470	14	0	0	0	14
	4:45 PM	32	28	20	3	168	15	9	8	26	68	50	4	431	11	0	0	1	12
	5:00 PM	27	40	19	7	211	25	14	16	31	63	39	8	500	13	0	0	0	13
	5:15 PM	18	33	17	2	164	25	6	23	35	70	62	7	462	18	2	0	0	20
	5:30 PM	23	43	15	4	180	40	11	22	33	59	41	2	473	17	0	0	2	19
	5:45 PM	28	32	34	2	132	16	3	12	30	61	35	5	390	13	0	0	0	13
	VOLUMES	190	297	149	35	1,369	204	65	119	274	551	363	34	3,650	111	2	0	3	116
	APPROACH %	30%	47%	23%	2%	85%	13%	14%	26%	60%	58%	38%	4%						
	APP/DEPART	636	/	396	1,608	/	2,194	458	/	303	948	/	757	0					
	BEGIN PEAK HR		4:15 PM																
	VOLUMES	103	140	70	18	742	94	39	45	131	289	180	18	1,869					
	APPROACH %	33%	45%	22%	2%	87%	11%	18%	21%	61%	59%	37%	4%						
	PEAK HR FACTOR		0.910			0.879			0.881			0.922		0.935					
	APP/DEPART	313	/	197	854	/	1,162	215	/	133	487	/	377	0					



		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	1	1	0	2					0	1	0	0	1	2
	7:15 AM	1	4	1	3	9					0	1	0	0	0	1
	7:30 AM	1	2	1	2	6					0	1	0	0	1	2
	7:45 AM	2	3	8	1	14					0	0	0	0	0	0
	8:00 AM	4	2	4	3	13					0	4	0	0	0	4
	8:15 AM	1	3	3	0	7					0	1	0	0	0	1
	8:30 AM	4	0	3	5	12					0	0	2	0	0	2
	8:45 AM	2	0	2	3	7					0	2	1	1	0	4
	TOTAL	15	15	23	17	70	0	0	0	0	0	10	3	1	2	16
PM	4:00 PM	4	3	2	0	9					0	0	0	0	0	0
	4:15 PM	2	5	4	1	12					0	0	0	0	0	0
	4:30 PM	2	3	4	1	10					0	0	0	0	0	0
	4:45 PM	4	1	1	1	7					0	0	1	0	0	1
	5:00 PM	1	1	3	1	6					0	0	1	0	0	1
	5:15 PM	0	2	1	2	5					0	2	2	0	1	5
	5:30 PM	5	2	2	4	13					0	1	0	0	0	1
	5:45 PM	5	2	5	2	14					0	0	0	1	0	1
	TOTAL	23	19	22	12	76	0	0	0	0	0	3	4	1	1	9

National Data & Surveying Services Intersection Turning Movement Count

Location: Towne Center Dr & Towne Center Dwy
City: San Diego
Control: Signalized

Project ID: 21-040098-003
Date: 6/3/2021

Data - Totals

NS/EW Streets:	Towne Center Dr				Towne Center Dr				Towne Center Dwy				Towne Center Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	176	6	0	0	35	3	0	0	0	1	0	1	0	0	0	222
7:15 AM	0	183	7	0	0	23	0	0	0	0	6	0	0	0	0	0	219
7:30 AM	0	210	9	0	0	64	1	0	0	0	1	0	0	0	0	0	285
7:45 AM	0	244	16	0	0	47	1	0	0	0	2	0	3	0	0	0	313
8:00 AM	0	211	21	0	0	48	1	0	0	0	2	0	2	0	1	0	286
8:15 AM	0	232	13	0	0	71	0	0	0	0	3	0	3	0	0	0	322
8:30 AM	0	228	10	0	0	72	2	0	0	0	1	0	0	0	0	0	313
8:45 AM	0	199	7	0	0	65	1	0	0	0	2	0	2	1	0	0	277
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1683	89	0	0	425	9	0	0	0	18	0	11	1	1	0	2237
APPROACH %'s :	0.00%	94.98%	5.02%	0.00%	0.00%	97.93%	2.07%	0.00%	0.00%	0.00%	100.00%	0.00%	84.62%	7.69%	7.69%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	915	60	0	0	238	4	0	0	0	8	0	8	0	1	0	1234
PEAK HR FACTOR :	0.000	0.938	0.714	0.000	0.000	0.826	0.500	0.000	0.000	0.000	0.667	0.000	0.667	0.000	0.250	0.000	0.958
		0.938				0.818				0.667				0.750			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	0	0	0	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	63	2	0	0	200	3	0	0	0	2	0	16	0	0	0	286
4:15 PM	0	66	1	0	0	156	2	0	0	0	3	0	15	0	2	0	245
4:30 PM	0	81	1	0	0	188	2	0	0	0	0	0	20	0	2	0	294
4:45 PM	0	66	1	0	0	180	4	0	0	0	1	0	17	0	1	0	270
5:00 PM	0	73	2	0	0	203	1	0	0	0	1	0	23	0	3	0	306
5:15 PM	0	80	2	0	0	174	2	0	0	0	1	0	21	0	1	0	281
5:30 PM	0	57	0	0	0	139	0	0	0	0	2	0	10	0	0	0	208
5:45 PM	0	82	1	0	0	123	2	0	0	0	2	0	9	0	1	0	220
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	568	10	0	0	1363	16	0	0	0	12	0	131	0	10	0	2110
APPROACH %'s :	0.00%	98.27%	1.73%	0.00%	0.00%	98.84%	1.16%	0.00%	0.00%	0.00%	100.00%	0.00%	92.91%	0.00%	7.09%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	300	6	0	0	745	9	0	0	0	3	0	81	0	7	0	1151
PEAK HR FACTOR :	0.000	0.926	0.750	0.000	0.000	0.917	0.563	0.000	0.000	0.000	0.750	0.000	0.880	0.000	0.583	0.000	0.940
		0.933				0.924				0.750				0.846			

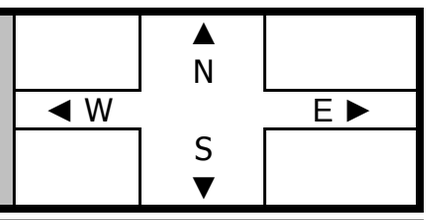
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:				
5/25/17	LOCATION:	LA JOLLA / UTC	PROJECT #:	PTD17-0526-01
THURSDAY	NORTH & SOUTH:	TOWNE CENTER	LOCATION #:	3
	EAST & WEST:	LA JOLLA VILLAGE	CONTROL:	SIGNAL

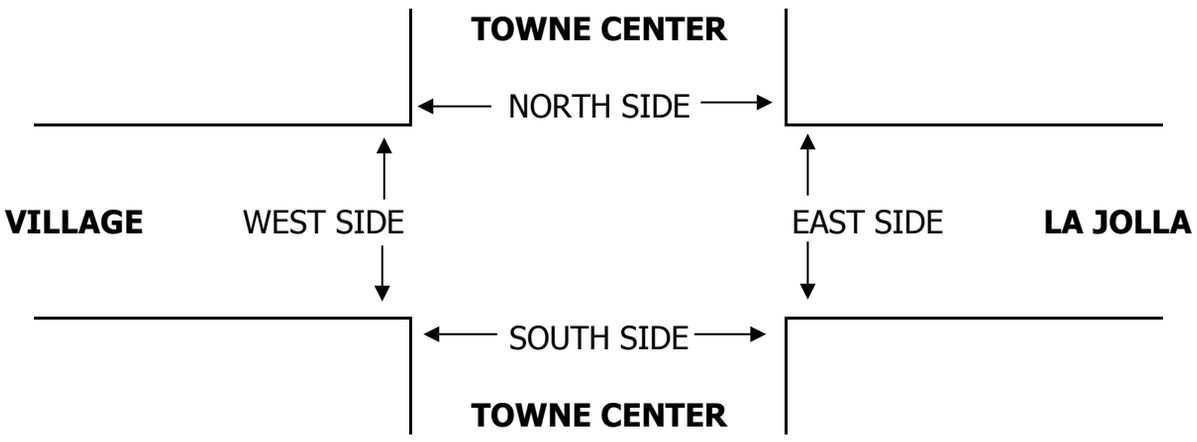
NOTES:

AM / PM / MD / OTHER / OTHER



		NORTHBOUND TOWNE CENTER			SOUTHBOUND TOWNE CENTER			EASTBOUND LA JOLLA VILLAGE			WESTBOUND LA JOLLA VILLAGE			
	LANES:	NL 2	NT 2	NR 2	SL 2	ST 1	SR 0	EL 2	ET 3	ER 0	WL 2	WT 3	WR 2	TOTAL
AM	7:00 AM	17	19	43	35	4	4	56	131	12	41	223	210	795
	7:15 AM	20	28	52	39	5	3	35	180	11	81	256	261	971
	7:30 AM	33	44	64	44	6	7	66	260	20	61	285	278	1,168
	7:45 AM	29	38	59	49	11	13	97	225	18	78	365	316	1,298
	8:00 AM	33	46	73	39	7	4	69	223	34	81	312	291	1,212
	8:15 AM	40	41	84	61	8	7	69	233	22	100	355	256	1,276
	8:30 AM	22	51	71	33	8	6	76	256	33	87	363	264	1,270
	8:45 AM	38	45	86	35	9	9	63	234	35	76	340	262	1,232
	VOLUMES	232	312	532	335	58	53	531	1,742	185	605	2,499	2,138	9,222
	APPROACH %	22%	29%	49%	75%	13%	12%	22%	71%	8%	12%	48%	41%	
	APP/DEPART	1,076	/	2,981	446	/	848	2,458	/	2,609	5,242	/	2,784	0
	BEGIN PEAK HR		7:45 AM											
	VOLUMES	124	176	287	182	34	30	311	937	107	346	1,395	1,127	5,056
	APPROACH %	21%	30%	49%	74%	14%	12%	23%	69%	8%	12%	49%	39%	
	PEAK HR FACTOR		0.889			0.809			0.928			0.945		0.974
	APP/DEPART	587	/	1,614	246	/	487	1,355	/	1,406	2,868	/	1,549	0
PM	4:00 PM	38	12	138	199	54	37	8	337	29	76	284	47	1,259
	4:15 PM	49	14	129	192	42	41	7	308	37	93	388	52	1,352
	4:30 PM	46	9	114	201	52	45	3	308	25	99	405	64	1,371
	4:45 PM	42	12	124	178	48	37	4	281	44	95	404	68	1,337
	5:00 PM	47	9	150	166	42	42	4	343	50	101	423	71	1,448
	5:15 PM	46	19	152	183	44	41	7	305	46	144	410	54	1,451
	5:30 PM	60	13	152	178	58	40	3	287	38	110	401	58	1,398
	5:45 PM	46	14	140	169	77	31	7	260	44	122	392	77	1,379
	VOLUMES	374	102	1,099	1,466	417	314	43	2,429	313	840	3,107	491	10,995
	APPROACH %	24%	6%	70%	67%	19%	14%	2%	87%	11%	19%	70%	11%	
	APP/DEPART	1,575	/	636	2,197	/	1,570	2,785	/	4,994	4,438	/	3,795	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	199	55	594	696	221	154	21	1,195	178	477	1,626	260	5,676
	APPROACH %	23%	6%	70%	65%	21%	14%	2%	86%	13%	20%	69%	11%	
	PEAK HR FACTOR		0.942			0.967			0.878			0.972		0.978
	APP/DEPART	848	/	336	1,071	/	876	1,394	/	2,485	2,363	/	1,979	0

U-TURNS					
	NB X	SB X	EB X	WB X	TTL
7:00 AM					0
7:15 AM					0
7:30 AM					0
7:45 AM					0
8:00 AM					0
8:15 AM					0
8:30 AM					0
8:45 AM					0
VOLUMES	0	0	0	0	0
4:00 PM					0
4:15 PM		1	1	1	3
4:30 PM					0
4:45 PM					0
5:00 PM					0
5:15 PM					0
5:30 PM					0
5:45 PM					0
VOLUMES	0	1	1	1	3



		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM	2	1		4	7
	7:15 AM	1	1			2
	7:30 AM		1	1		2
	7:45 AM	2	1	1	3	7
	8:00 AM	1	4	1	1	7
	8:15 AM	1		2	3	6
	8:30 AM	1	2	1		4
	8:45 AM		3	4	1	8
	TOTAL	8	13	10	12	43
PM	4:00 PM		1		2	3
	4:15 PM		1		5	6
	4:30 PM		3		2	5
	4:45 PM	3			3	6
	5:00 PM	5	2		3	10
	5:15 PM	1	1		3	5
	5:30 PM	3				3
	5:45 PM		2		6	8
	TOTAL	12	10	0	24	46

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
				0
				0
				0
				0
	1			1
				0
				0
0	1	0	0	1
				0
				0
	1		2	3
	1			1
1				1
			1	1
1			1	2
		1		1
2	2	1	4	9

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:	LOCATION:	LA JOLLA	PROJECT #:	PTD17-0811-02
8/9/17	NORTH & SOUTH:	JUDITIAL	LOCATION #:	1
WEDNESDAY	EAST & WEST:	EXECUTIVE DR	CONTROL:	SIGNAL

NOTES:

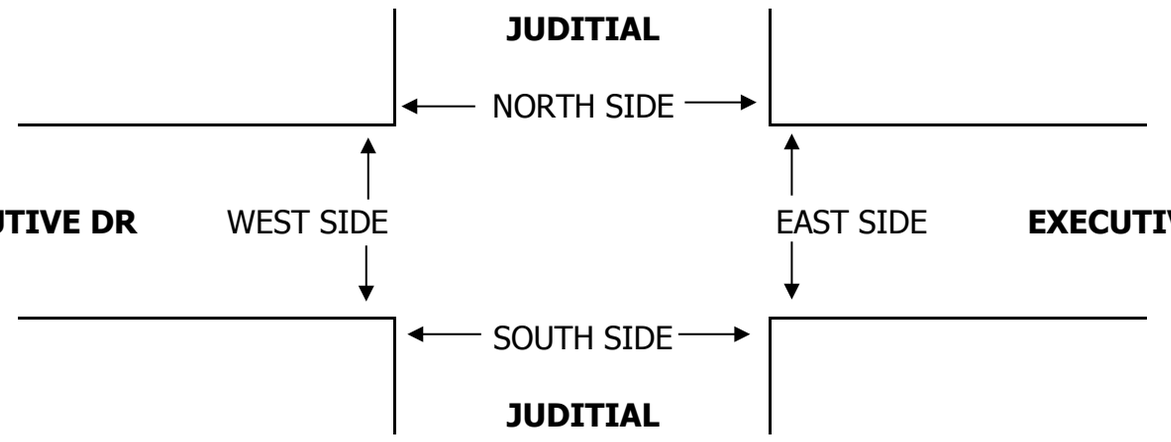
AM / PM / MD / OTHER / OTHER

N ▲ S ▼ W ◄ E ►

		NORTHBOUND JUDITIAL			SOUTHBOUND JUDITIAL			EASTBOUND EXECUTIVE DR			WESTBOUND EXECUTIVE DR			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 2	ET 2	ER 1	WL 0	WT 2	WR 0	TOTAL
AM	7:00 AM	9	44	35	9	5	3	25	46	14	3	1	1	195
	7:15 AM	15	50	52	17	5	1	27	68	12	3	4	0	254
	7:30 AM	15	55	47	20	13	4	31	69	11	2	7	1	275
	7:45 AM	31	66	47	14	13	3	27	82	14	4	8	1	310
	8:00 AM	19	72	47	14	10	3	31	82	10	2	4	2	296
	8:15 AM	21	69	43	13	8	6	38	89	23	3	6	3	322
	8:30 AM	18	81	45	16	14	3	30	55	17	6	7	1	293
	8:45 AM	33	91	31	14	15	8	57	71	16	3	12	1	352
	VOLUMES	161	528	347	117	83	31	266	562	117	26	49	10	2,297
	APPROACH %	16%	51%	33%	51%	36%	13%	28%	59%	12%	31%	58%	12%	
	APP/DEPART	1,036	/	804	231	/	226	945	/	1,026	85	/	241	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	91	313	166	57	47	20	156	297	66	14	29	7	1,263
	APPROACH %	16%	55%	29%	46%	38%	16%	30%	57%	13%	28%	58%	14%	
	PEAK HR FACTOR		0.919			0.838			0.865			0.781		0.897
	APP/DEPART	570	/	476	124	/	127	519	/	520	50	/	140	0
PM	4:00 PM	14	25	1	1	48	5	12	7	26	39	67	29	274
	4:15 PM	11	13	2	2	44	13	9	6	16	31	39	19	205
	4:30 PM	9	12	6	6	50	13	6	3	27	49	68	22	271
	4:45 PM	15	17	1	5	69	12	5	6	19	33	69	27	278
	5:00 PM	15	26	4	1	70	13	9	6	55	55	80	26	360
	5:15 PM	16	23	1	1	58	16	15	6	46	27	63	12	284
	5:30 PM	14	21	2	0	46	8	8	12	30	33	69	18	261
	5:45 PM	18	19	4	4	45	6	8	15	50	22	48	11	250
	VOLUMES	112	156	21	20	430	86	72	61	269	289	503	164	2,183
	APPROACH %	39%	54%	7%	4%	80%	16%	18%	15%	67%	30%	53%	17%	
	APP/DEPART	289	/	392	536	/	988	402	/	102	956	/	701	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	55	78	12	13	247	54	35	21	147	164	280	87	1,193
	APPROACH %	38%	54%	8%	4%	79%	17%	17%	10%	72%	31%	53%	16%	
	PEAK HR FACTOR		0.806			0.913			0.725			0.825		0.828
	APP/DEPART	145	/	200	314	/	558	203	/	46	531	/	389	0

U-TURNS

AM / PM	NB	SB	EB	WB	TTL
	X	X	X	X	
7:00 AM			4	1	5
7:15 AM			8		8
7:30 AM		2	8		10
7:45 AM			9		9
8:00 AM		1	3		4
8:15 AM		1	4	1	6
8:30 AM		1	5	2	8
8:45 AM		2	12	1	15
VOLUMES	0	7	53	5	65
4:00 PM	1	1	1	2	5
4:15 PM	1		5	1	7
4:30 PM	1	3	2	1	7
4:45 PM	2		1		3
5:00 PM			5	1	6
5:15 PM			4		4
5:30 PM			4	1	5
5:45 PM	2	2	3		7
VOLUMES	7	6	25	6	44



		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM		1			1
	7:15 AM		1		1	2
	7:30 AM	1		1		2
	7:45 AM		5			5
	8:00 AM	3	2	3	3	11
	8:15 AM	2	1	2	1	6
	8:30 AM	2	1	5	3	11
	8:45 AM	1	6	4		11
	TOTAL	9	17	15	8	49
PM	4:00 PM		3	1	1	5
	4:15 PM	1	2			3
	4:30 PM	1	1			2
	4:45 PM		2	1	4	7
	5:00 PM		1		2	3
	5:15 PM				1	1
	5:30 PM	1	2	4	2	9
	5:45 PM		5	2	4	11
	TOTAL	3	16	8	14	41

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
	1		2	3
			1	1
			0	0
			1	1
				0
		1		1
		1	2	3
	1		1	2
0	2	2	7	11
		2		2
				0
				0
				0
			1	1
				0
1		3		4
				0
1	0	5	1	7

National Data & Surveying Services Intersection Turning Movement Count

Location: Judicial Dr & Judicial Dwy
City: San Diego
Control: Signalized

Project ID: 21-040098-004
Date: 6/3/2021

Data - Totals

NS/EW Streets:	Judicial Dr				Judicial Dr				Judicial Dwy				Judicial Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	2	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	30	0	6	0	9	3	2	0	0	1	0	0	0	1	0	53
7:15 AM	0	55	0	5	1	10	4	2	0	0	0	0	0	0	1	0	78
7:30 AM	1	32	0	7	1	9	4	0	0	0	0	0	0	0	2	0	56
7:45 AM	0	53	0	7	0	14	3	0	0	0	0	0	0	0	0	0	77
8:00 AM	1	47	0	7	2	9	2	3	0	0	0	0	0	0	1	0	72
8:15 AM	0	46	0	13	0	17	1	2	0	0	0	0	0	0	1	0	80
8:30 AM	2	51	1	15	1	14	1	1	0	0	1	0	0	0	0	0	87
8:45 AM	1	55	0	9	0	9	1	0	0	0	0	0	1	0	1	0	77
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	369	1	69	5	91	19	10	0	0	2	0	1	0	7	0	580
APPROACH %'s :	1.35%	82.92%	0.22%	15.51%	4.00%	72.80%	15.20%	8.00%	0.00%	0.00%	100.00%	0.00%	12.50%	0.00%	87.50%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	4	199	1	44	3	49	5	6	0	0	1	0	1	0	3	0	316
PEAK HR FACTOR :	0.500	0.905	0.250	0.733	0.375	0.721	0.625	0.500	0.000	0.000	0.250	0.000	0.250	0.000	0.750	0.000	0.908
		0.899				0.788				0.250				0.500			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	0	2	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	18	0	8	0	46	0	0	1	0	6	0	0	0	0	0	79
4:15 PM	0	14	0	11	1	28	1	0	2	0	3	0	0	0	0	0	60
4:30 PM	0	6	0	12	0	49	0	1	4	0	2	0	1	0	2	0	77
4:45 PM	0	29	0	6	1	38	0	1	1	0	1	0	0	0	1	0	78
5:00 PM	0	21	0	5	0	58	0	0	2	0	1	0	0	0	0	0	87
5:15 PM	0	24	1	9	0	57	1	1	1	0	3	0	0	0	0	0	97
5:30 PM	0	18	1	6	0	47	0	0	1	0	3	0	0	0	0	0	76
5:45 PM	0	14	0	1	0	45	1	0	0	0	0	0	0	0	0	0	61
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	144	2	58	2	368	3	3	12	0	19	0	1	0	3	0	615
APPROACH %'s :	0.00%	70.59%	0.98%	28.43%	0.53%	97.87%	0.80%	0.80%	38.71%	0.00%	61.29%	0.00%	25.00%	0.00%	75.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	80	1	32	1	202	1	3	8	0	7	0	1	0	3	0	339
PEAK HR FACTOR :	0.000	0.690	0.250	0.667	0.250	0.871	0.250	0.750	0.500	0.000	0.583	0.000	0.250	0.000	0.375	0.000	0.874
		0.807				0.877				0.625				0.333			

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:	LOCATION:	LA JOLLA	PROJECT #:	PTD17-0811-02
8/9/17	NORTH & SOUTH:	JUDITIAL	LOCATION #:	2
WEDNESDAY	EAST & WEST:	GOLDEN HAVEN	CONTROL:	SIGNAL

NOTES:

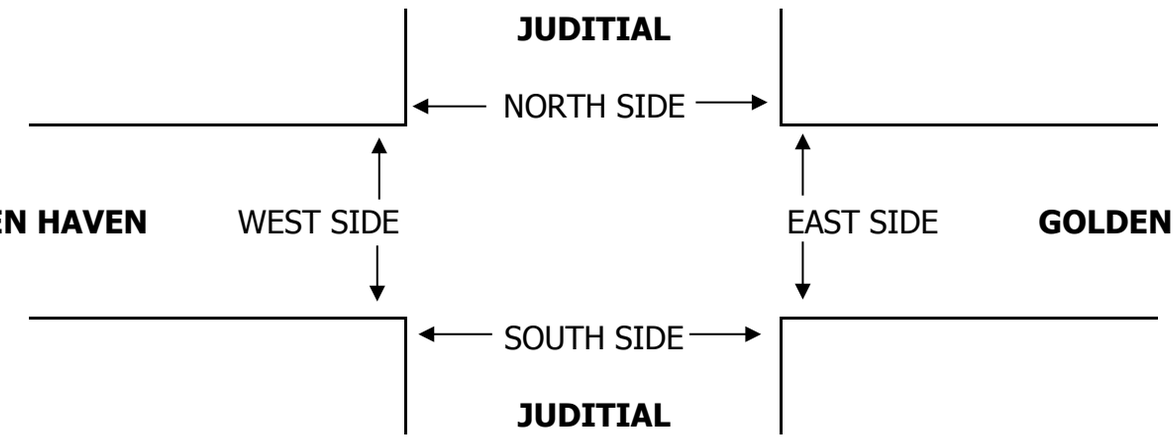
AM / PM / MD / OTHER / OTHER

N ▲ S ▼ W ◄ E ►

		NORTHBOUND JUDITIAL			SOUTHBOUND JUDITIAL			EASTBOUND GOLDEN HAVEN			WESTBOUND GOLDEN HAVEN			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	15	79	1	4	11	4	18	4	10	3	8	2	159
	7:15 AM	11	84	1	4	12	2	19	5	14	9	13	4	178
	7:30 AM	10	93	0	1	23	11	21	3	16	4	20	3	205
	7:45 AM	13	102	4	0	21	4	40	4	23	10	13	4	238
	8:00 AM	20	97	3	4	24	5	33	9	22	13	15	2	247
	8:15 AM	21	82	6	8	21	8	36	2	18	8	21	5	236
	8:30 AM	16	89	6	6	23	7	36	4	20	7	19	3	236
	8:45 AM	19	96	10	5	31	8	37	10	26	7	18	2	269
	VOLUMES	125	722	31	32	166	49	240	41	149	61	127	25	1,768
	APPROACH %	14%	82%	4%	13%	67%	20%	56%	10%	35%	29%	60%	12%	
	APP/DEPART	878	/	987	247	/	376	430	/	104	213	/	301	0
	BEGIN PEAK HR		8:00 AM											
	VOLUMES	76	364	25	23	99	28	142	25	86	35	73	12	988
	APPROACH %	16%	78%	5%	15%	66%	19%	56%	10%	34%	29%	61%	10%	
	PEAK HR FACTOR		0.930			0.852			0.866			0.882		0.918
	APP/DEPART	465	/	518	150	/	220	253	/	73	120	/	177	0
PM	4:00 PM	27	20	4	10	50	44	9	16	20	4	5	3	212
	4:15 PM	31	16	2	10	45	38	14	13	12	2	12	6	201
	4:30 PM	36	18	5	12	50	61	11	11	16	6	5	6	237
	4:45 PM	31	23	10	11	56	66	18	17	15	5	7	5	264
	5:00 PM	44	37	6	20	80	74	15	12	20	4	15	4	331
	5:15 PM	69	38	1	16	68	63	20	18	18	2	11	4	328
	5:30 PM	68	36	8	18	61	54	16	25	10	3	12	5	316
	5:45 PM	50	25	12	17	55	41	23	9	16	4	21	7	280
	VOLUMES	356	213	48	114	465	441	126	121	127	30	88	40	2,169
	APPROACH %	58%	35%	8%	11%	46%	43%	34%	32%	34%	19%	56%	25%	
	APP/DEPART	617	/	379	1,020	/	622	374	/	283	158	/	885	0
	BEGIN PEAK HR		5:00 PM											
	VOLUMES	231	136	27	71	264	232	74	64	64	13	59	20	1,255
	APPROACH %	59%	35%	7%	13%	47%	41%	37%	32%	32%	14%	64%	22%	
	PEAK HR FACTOR		0.879			0.815			0.902			0.719		0.948
	APP/DEPART	394	/	230	567	/	341	202	/	162	92	/	522	0

U-TURNS

NB	SB	EB	WB	TTL
X	X	X	X	
	2	4		6
	1	3		4
	1	3		4
		6		6
	3	1		4
	6			6
	3	5		8
	5	2		7
0	21	24	0	45
1	3	1		5
	3	1		4
	5	1		6
	6	7		13
	8	5		13
	5	6		11
	4	4		8
	5	5		10
1	39	30	0	70



		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM	1	5	2	4	12
	7:15 AM	1	6	3	2	12
	7:30 AM	1	2		1	4
	7:45 AM	2	3	2		7
	8:00 AM		12	1	4	17
	8:15 AM		3	4	8	15
	8:30 AM	1	5	4	3	13
	8:45 AM	5	8	7	11	31
	TOTAL	11	44	23	33	111
PM	4:00 PM	2	6		1	9
	4:15 PM	2	4		2	8
	4:30 PM	3	5	7	4	19
	4:45 PM	6	4		1	11
	5:00 PM	2	10	3	8	23
	5:15 PM	4	4	5	2	15
	5:30 PM	4	7	6	4	21
	5:45 PM	5	10	2	2	19
	TOTAL	28	50	23	24	125

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0
				0
				0
				0
				0
				0
				0
				0
				0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
			2	2
		1		1
				0
				0
			1	1
				0
		1	2	3
				0
0	0	2	5	7
	1	1		2
	1		1	2
		1	1	2
		1		1
	2	1		3
	1	2		3
		3		3
	2			2
0	7	9	2	18

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TECHNICAL DATA

DATE:				
5/25/17	LOCATION:	LA JOLLA / UTC	PROJECT #:	PTD17-0526-01
THURSDAY	NORTH & SOUTH:	I-805 SB RAMPS	LOCATION #:	23
	EAST & WEST:	LA JOLLA VILLAGE	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

		NORTHBOUND I-805 SB RAMPS			SOUTHBOUND I-805 SB RAMPS			EASTBOUND LA JOLLA VILLAGE			WESTBOUND LA JOLLA VILLAGE				U-TURNS				
	LANES:	NL X	NT X	NR X	SL 2	ST X	SR 2	EL X	ET 3	ER 2	WL X	WT 3	WR 1	TOTAL	NB X	SB X	EB X	WB X	TTL
AM	7:00 AM				128		176		146	63		353	91	957					0
	7:15 AM				98		240		179	72		406	111	1,106					0
	7:30 AM				141		301		220	119		395	85	1,261					0
	7:45 AM				126		386		231	130		483	112	1,468					0
	8:00 AM				182		362		234	106		390	113	1,387					0
	8:15 AM				131		382		287	111		415	108	1,434					0
	8:30 AM				164		375		274	116		412	129	1,470					0
	8:45 AM				135		364		287	109		453	132	1,480					0
	VOLUMES	0	0	0	1,105	0	2,586	0	1,858	826	0	3,307	881	10,563	0	0	0	0	0
	APPROACH %	0%	0%	0%	30%	0%	70%	0%	69%	31%	0%	79%	21%						
	APP/DEPART	0	/	881	3,691	/	826	2,684	/	2,963	4,188	/	5,893	0					
	BEGIN PEAK HR		8:00 AM																
	VOLUMES	0	0	0	612	0	1,483	0	1,082	442	0	1,670	482	5,771					
	APPROACH %	0%	0%	0%	29%	0%	71%	0%	71%	29%	0%	78%	22%						
	PEAK HR FACTOR		0.000			0.963			0.957			0.920		0.975					
	APP/DEPART	0	/	482	2,095	/	442	1,524	/	1,694	2,152	/	3,153	0					
PM	4:00 PM				39		135		444	224		320	144	1,306					0
	4:15 PM				40		190		430	200		378	130	1,368					0
	4:30 PM				34		221		432	171		371	159	1,388					0
	4:45 PM				26		148		452	181		432	137	1,376					0
	5:00 PM				43		172		480	164		409	139	1,407					0
	5:15 PM				39		185		494	177		425	150	1,470					0
	5:30 PM				41		194		474	158		408	139	1,414					0
	5:45 PM				30		149		450	166		394	140	1,329					0
	VOLUMES	0	0	0	292	0	1,394	0	3,656	1,441	0	3,137	1,138	11,058	0	0	0	0	0
	APPROACH %	0%	0%	0%	17%	0%	83%	0%	72%	28%	0%	73%	27%						
	APP/DEPART	0	/	1,138	1,686	/	1,441	5,097	/	3,948	4,275	/	4,531	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	0	0	0	149	0	699	0	1,900	680	0	1,674	565	5,667					
	APPROACH %	0%	0%	0%	18%	0%	82%	0%	74%	26%	0%	75%	25%						
	PEAK HR FACTOR		0.000			0.902			0.961			0.973		0.964					
	APP/DEPART	0	/	565	848	/	680	2,580	/	2,049	2,239	/	2,373	0					

		PEDESTRIAN CROSSINGS					PEDESTRIAN ACTIVATIONS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM					0					0					0
	7:15 AM					0					0					0
	7:30 AM					0					0					0
	7:45 AM					0					0					0
	8:00 AM					0					0					0
	8:15 AM					0					0			1		1
	8:30 AM					0					0					0
	8:45 AM					0					0					0
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
PM	4:00 PM					0					0					0
	4:15 PM					0					0					0
	4:30 PM					0					0	1				1
	4:45 PM					0					0					0
	5:00 PM					0					0					0
	5:15 PM					0					0					0
	5:30 PM					0					0					0
	5:45 PM					0					0					0
	TOTAL	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1

Appendix F: Volume Projections for Existing Conditions

Provided on the following page

Existing Volume Projections

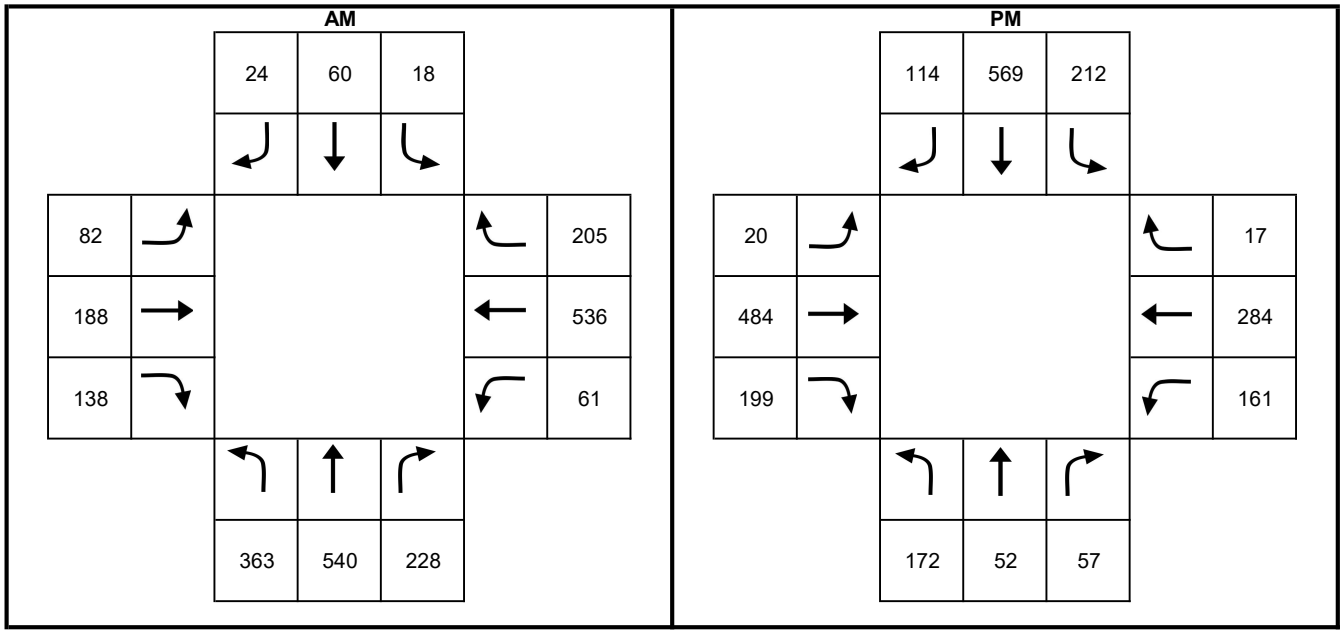
Intersection 1

Analyst: JM
Intersection: Towne Centre Drive / Eastgate Mall
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: Eastgate Mall
N/S Street Name: Towne Centre Dr.

Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	344	163	14,210	14,981	105%	363	172
NTH	544	52	**9,322**	**9,262**	**99%**	540	52
NRT	211	53	12,426	13,445	108%	228	57
SLT	17	196	12,426	13,445	108%	18	212
STH	55	522	**14,016**	**15,274**	**109%**	60	569
SRT	23	108	14,210	14,981	105%	24	114
ELT	83	20	9,322	9,262	99%	82	20
ETH	174	447	**12,426**	**13,445**	**108%**	188	484
ERT	127	183	14,016	15,274	109%	138	199
WLT	56	148	14,016	15,274	109%	61	161
WTH	508	269	**14,210**	**14,981**	**105%**	536	284
WRT	206	17	9,322	9,262	99%	205	17



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Existing Volume Projections

Intersection 2

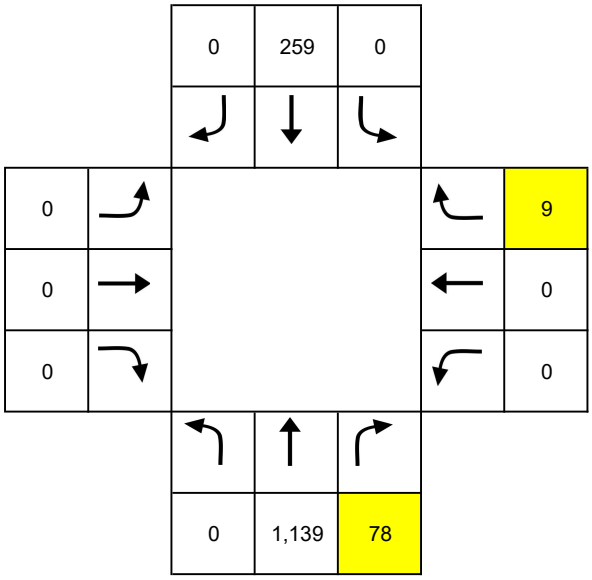
Analyst: JM
Intersection: Towne Centre Drive / Project Driveway "A"
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Unsignalized

E/W Street Name: Project Dwy. "A"
N/S Street Name: Towne Centre Dr.

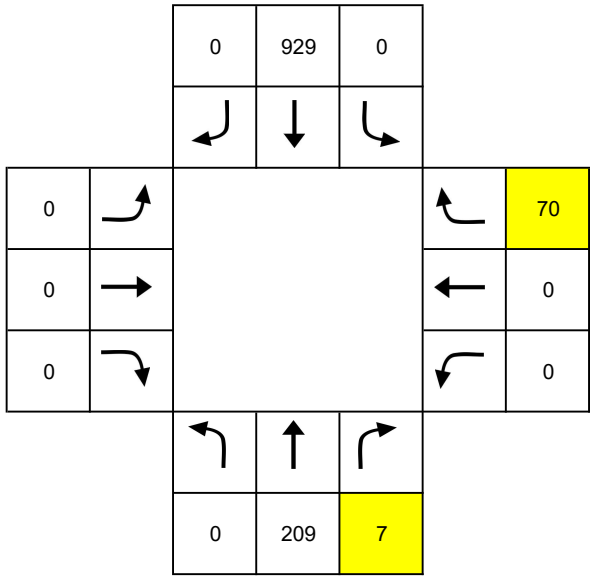
Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	0	0	0	0	100%	0	0
NTH	0	0	**14,016**	**15,274**	**109%**	0	0
NRT	70	9	0	0	100%	70	9
SLT	0	0	0	0	100%	0	0
STH	0	0	**14,016**	**15,274**	**109%**	0	0
SRT	0	0	0	0	100%	0	0
ELT	0	0	14,016	15,274	109%	0	0
ETH	0	0	**0**	**0**	**100%**	0	0
ERT	0	0	14,016	15,274	109%	0	0
WLT	0	0	14,016	15,274	109%	0	0
WTH	0	0	**0**	**0**	**100%**	0	0
WRT	9	70	14,016	15,274	109%	10	76

AM



PM



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Existing-use Volumes manually added.

Existing Volume Projections

Intersection 3

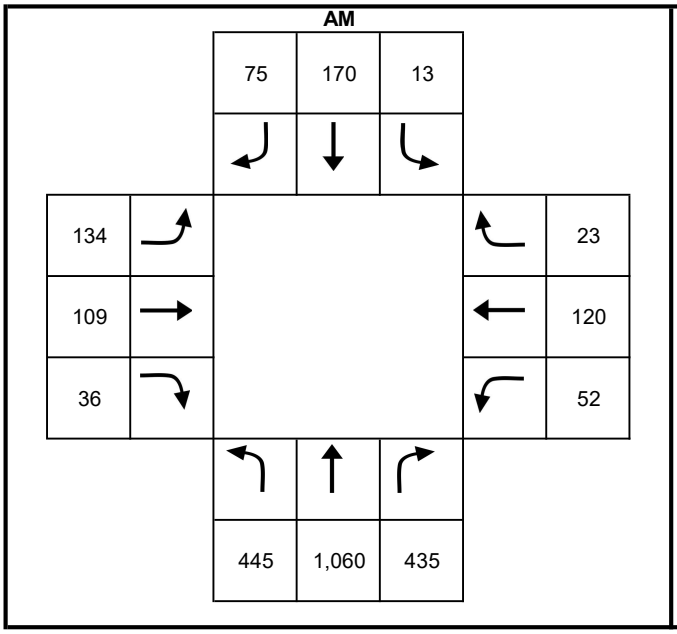
Analyst: JM
Intersection: Towne Centre Drive / Executive Drive
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: Executive Dr.
N/S Street Name: Towne Centre Dr.

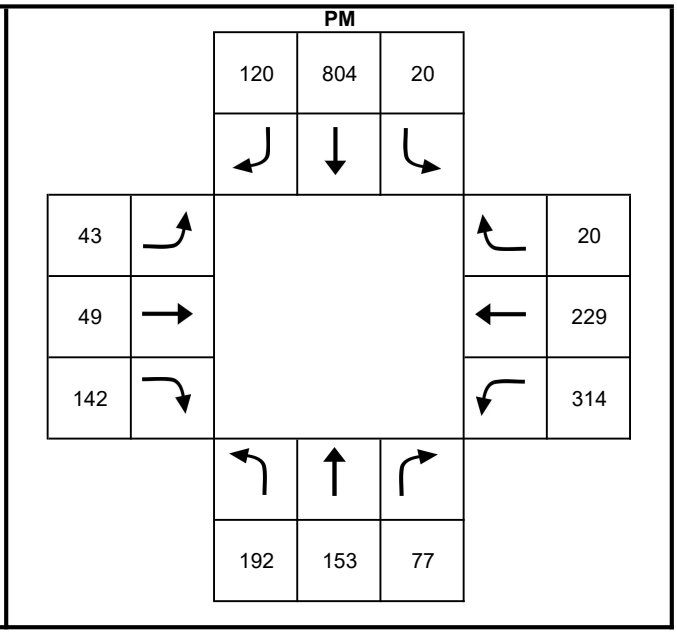
Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	349	151	5,914	7,537	127%	445	192
NTH	973	140	**14,016**	**15,274**	**109%**	1060	153
NRT	396	70	7,897	8,665	110%	435	77
SLT	12	18	7,897	8,665	110%	13	20
STH	157	742	**20,187**	**21,886**	**108%**	170	804
SRT	59	94	5,914	7,537	127%	75	120
ELT	123	39	14,016	15,274	109%	134	43
ETH	99	45	**7,897**	**8,665**	**110%**	109	49
ERT	33	131	20,187	21,886	108%	36	142
WLT	48	290	20,187	21,886	108%	52	314
WTH	94	180	**5,914**	**7,537**	**127%**	120	229
WRT	21	18	14,016	15,274	109%	23	20

AM



PM



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Existing Volume Projections

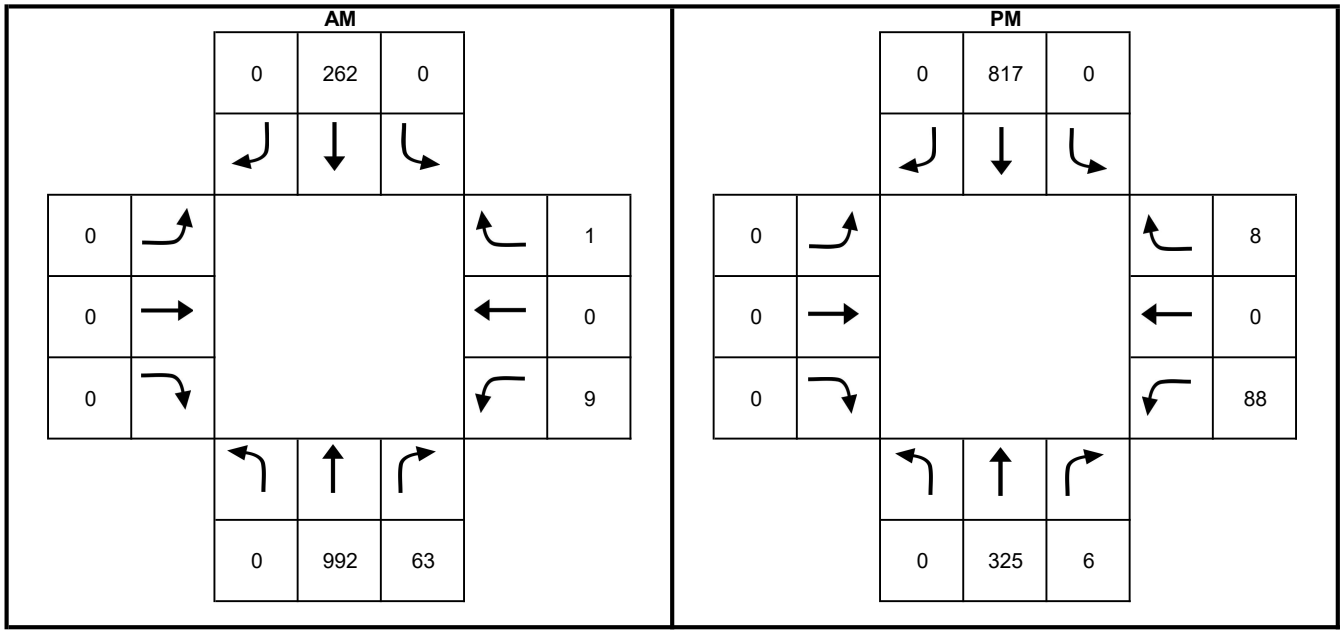
Intersection 4

Analyst: JM
Intersection: Towne Centre Drive / Towne Centre Driveway
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: Towne Centre Dwy.
N/S Street Name: Towne Centre Dr.

Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	0	0	0	0	105%	0	0
NTH	915	300	**20,187**	**21,886**	**108%**	992	325
NRT	60	6	0	0	105%	63	6
SLT	0	0	0	0	105%	0	0
STH	242	754	**20,187**	**21,886**	**108%**	262	817
SRT	0	0	0	0	105%	0	0
ELT	0	0	20,187	21,886	108%	0	0
ETH	0	0	**0**	**0**	**105%**	0	0
ERT	0	0	20,187	21,886	108%	0	0
WLT	8	81	20,187	21,886	108%	9	88
WTH	0	0	**0**	**0**	**105%**	0	0
WRT	1	7	20,187	21,886	108%	1	8



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Towne Centre Driveway has been conservatively assumed to have a 5% growth due to having a buildout condition east and west of Towne Centre Drive.

Existing Volume Projections

Intersection 5

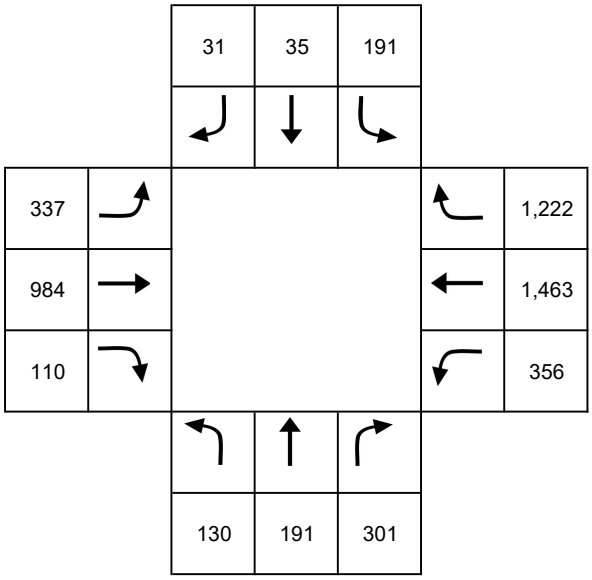
Analyst: JM
Intersection: Towne Centre Drive / La Jolla Village Drive
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: La Jolla Village Dr.
N/S Street Name: Towne Centre Dr.

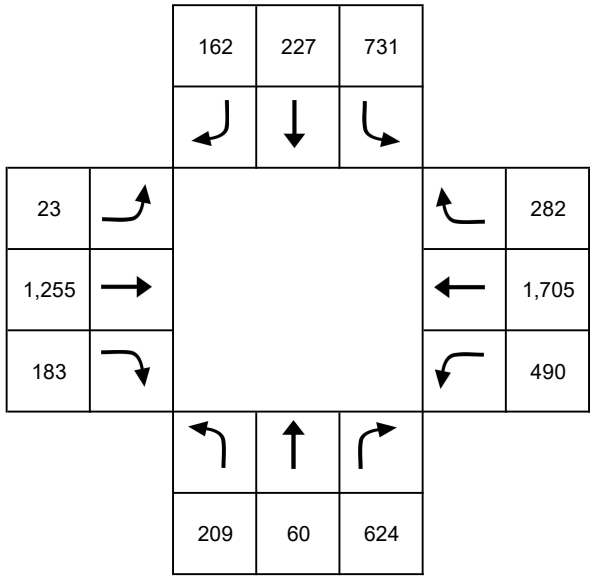
Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	124	199	43,960	46,102	105%	130	209
NTH	176	55	**20,187**	**21,886**	**108%**	191	60
NRT	287	594	60,760	63,799	105%	301	624
SLT	182	696	60,760	63,799	105%	191	731
STH	34	221	**17,753**	**18,244**	**103%**	35	227
SRT	30	154	43,960	46,102	105%	31	162
ELT	311	21	20,187	21,886	108%	337	23
ETH	937	1,195	**60,760**	**63,799**	**105%**	984	1255
ERT	107	178	17,753	18,244	103%	110	183
WLT	346	477	17,753	18,244	103%	356	490
WTH	1,395	1,626	**43,960**	**46,102**	**105%**	1463	1705
WRT	1,127	260	20,187	21,886	108%	1222	282

AM



PM



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Existing Volume Projections

Intersection 6

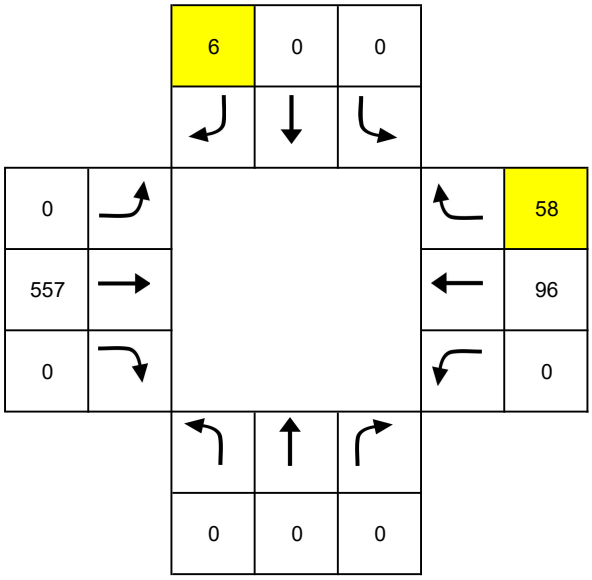
Analyst: JM
Intersection: Executive Drive / Project Driveway "B"
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Unsignalized

E/W Street Name: Executive Dr.
N/S Street Name: Project Dwy. "B"

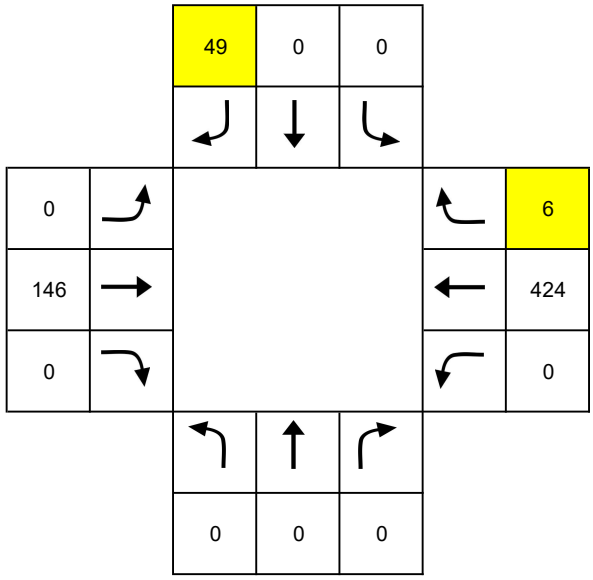
Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	0	0	7,897	8,665	110%	0	0
NTH	0	0	**0**	**0**	**100%**	0	0
NRT	0	0	7,897	8,665	110%	0	0
SLT	0	0	7,897	8,665	110%	0	0
STH	0	0	**0**	**0**	**100%**	0	0
SRT	6	49	7,897	8,665	110%	7	54
ELT	0	0	0	0	100%	0	0
ETH	0	0	**7,897**	**8,665**	**110%**	0	0
ERT	0	0	0	0	100%	0	0
WLT	0	0	0	0	100%	0	0
WTH	0	0	**7,897**	**8,665**	**110%**	0	0
WRT	45	4	0	0	100%	45	4

AM



PM



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Existing-use Volumes manually added.

Existing Volume Projections

Intersection 7

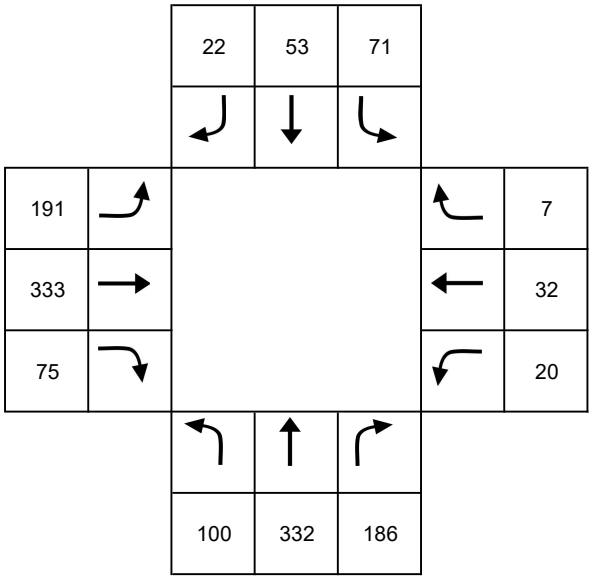
Analyst: JM
Intersection: Judicial Drive / Executive Drive
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: Executive Dr.
N/S Street Name: Project Dwy. "B"

Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	91	58	7,897	8,665	110%	100	64
NTH	313	78	**5,140**	**5,454**	**106%**	332	83
NRT	166	12	3,700	4,144	112%	186	13
SLT	63	16	3,700	4,144	112%	71	18
STH	47	247	**7,984**	**9,028**	**113%**	53	279
SRT	20	54	7,897	8,665	110%	22	59
ELT	180	47	5,140	5,454	106%	191	50
ETH	297	21	**3,700**	**4,144**	**112%**	333	24
ERT	66	147	7,984	9,028	113%	75	166
WLT	18	166	7,984	9,028	113%	20	188
WTH	29	280	**7,897**	**8,665**	**110%**	32	307
WRT	7	87	5,140	5,454	106%	7	92

AM



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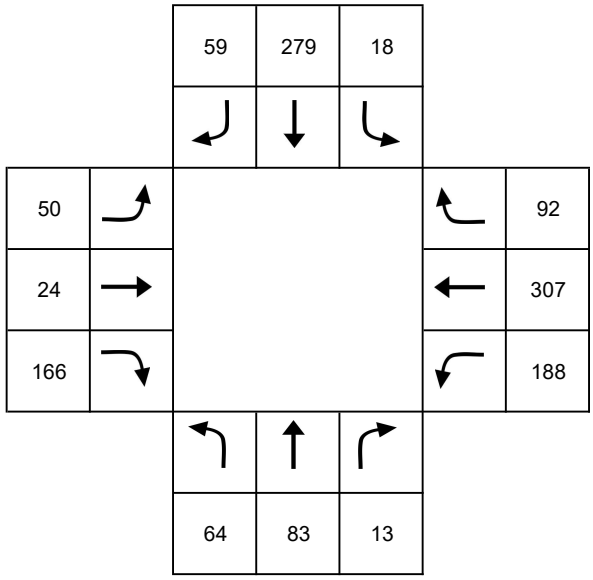


Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Existing Volume Projections

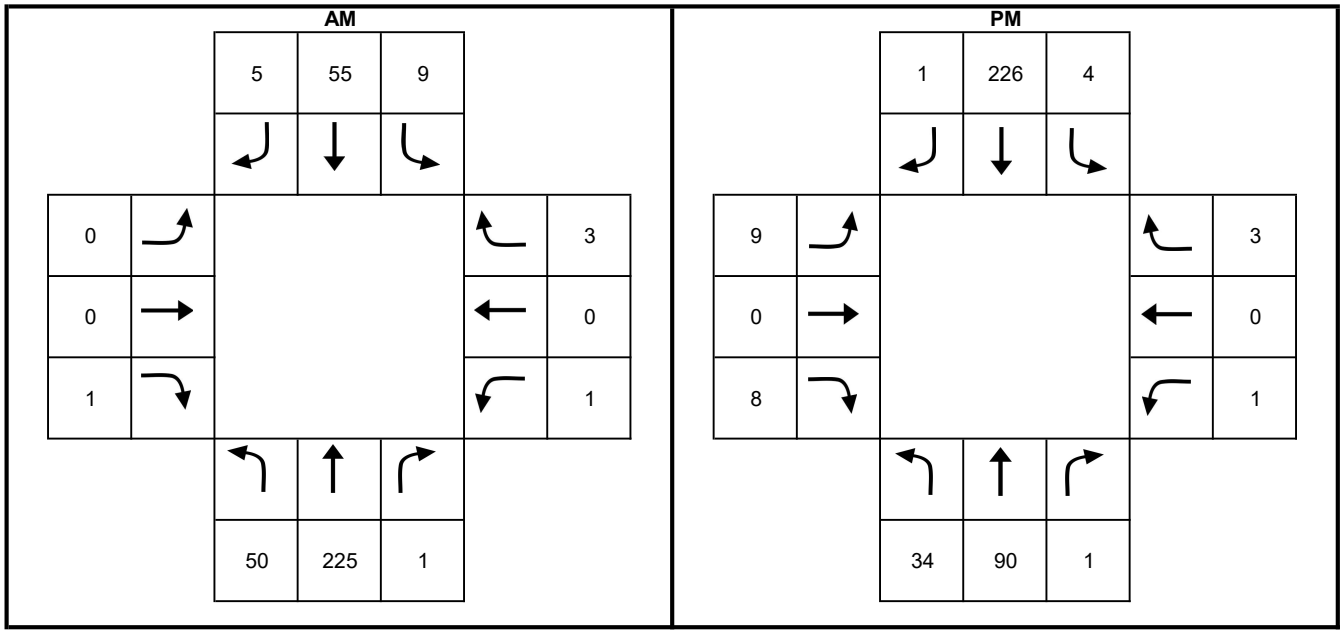
Intersection 8

Analyst: JM
Intersection: Judicial Drive / Judicial Driveway
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: Judicial Dwy.
N/S Street Name: Judicial Dr.

Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	48	32	0	0	105%	50	34
NTH	199	80	**7,984**	**9,028**	**113%**	225	90
NRT	1	1	0	0	105%	1	1
SLT	9	4	0	0	105%	9	4
STH	49	202	**8,327**	**9,320**	**112%**	55	226
SRT	5	1	0	0	105%	5	1
ELT	0	8	7,984	9,028	113%	0	9
ETH	0	0	**0**	**0**	**105%**	0	0
ERT	1	7	8,327	9,320	112%	1	8
WLT	1	1	8,327	9,320	112%	1	1
WTH	0	0	**0**	**0**	**105%**	0	0
WRT	3	3	7,984	9,028	113%	3	3



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Judicial Driveway has been conservatively assumed to have a 5% growth due to having a buildout condition east and west of Judicial Drive.

Existing Volume Projections

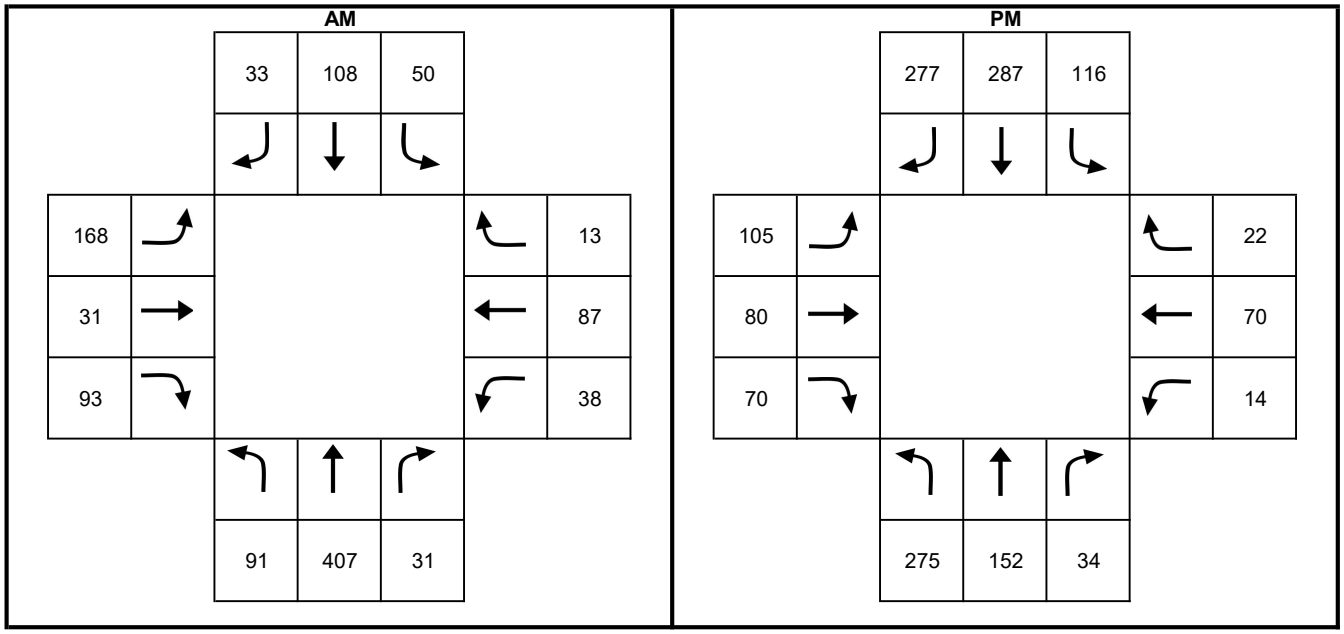
Intersection 9

Analyst: JM
Intersection: Judicial Drive / Golden Haven Drive / Brook Lane
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: Golden Haven Dr.
N/S Street Name: Judicial Dr.

Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	76	231	6,712	8,003	119%	91	275
NTH	364	136	**8,327**	**9,320**	**112%**	407	152
NRT	25	27	5,300	6,633	125%	31	34
SLT	40	93	5,300	6,633	125%	50	116
STH	99	264	**8,327**	**9,047**	**109%**	108	287
SRT	28	232	6,712	8,003	119%	33	277
ELT	150	94	8,327	9,320	112%	168	105
ETH	25	64	**5,300**	**6,633**	**125%**	31	80
ERT	86	64	8,327	9,047	109%	93	70
WLT	35	13	8,327	9,047	109%	38	14
WTH	73	59	**6,712**	**8,003**	**119%**	87	70
WRT	12	20	8,327	9,320	112%	13	22



Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Existing Volume Projections

Intersection 10

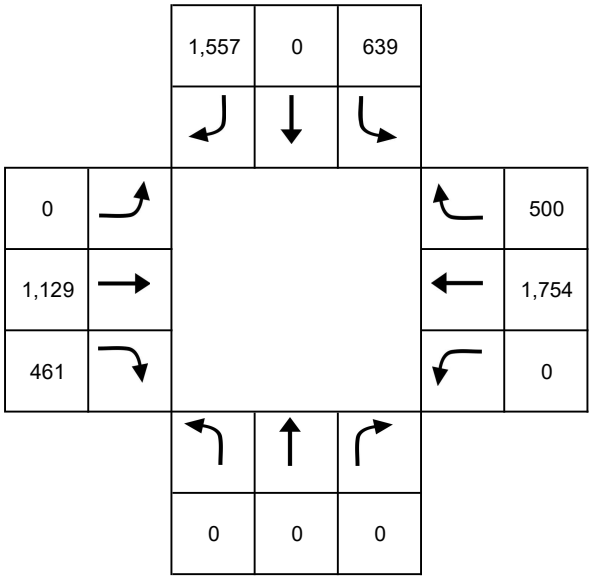
Analyst: JM
Intersection: La Jolla Village Drive / I-805 SB Ramps
Future Condition: Existing (Volume Projections)
Date: 9/28/2022
Company: Urban Systems Associates, Inc.
Project Number: 002219
Intersection Control: Signalized

E/W Street Name: La Jolla Village Dr.
N/S Street Name: I-805 SB Ramps

Factored Turns

Turn Movement	Pre-Existing turn (v) AM	Pre-Existing turn (v) PM	Pre-Existing ADT	Existing ADT	% Factor	Existing turn (v) AM	Existing turn (v) PM
NLT	0	0	60,760	63,799	105%	0	0
NTH	0	0	**0**	**0**	**100%**	0	0
NRT	0	0	53,630	55,961	104%	0	0
SLT	612	149	53,630	55,961	104%	639	155
STH	0	0	**0**	**0**	**100%**	0	0
SRT	1,483	699	60,760	63,799	105%	1557	734
ELT	0	0	0	0	100%	0	0
ETH	1,082	1,900	**53,630**	**55,961**	**104%**	1129	1983
ERT	442	680	15,500	16,167	104%	461	709
WLT	0	0	0	0	100%	0	0
WTH	1,670	1,674	**60,760**	**63,799**	**105%**	1754	1758
WRT	482	565	3,000	3,111	104%	500	586

AM



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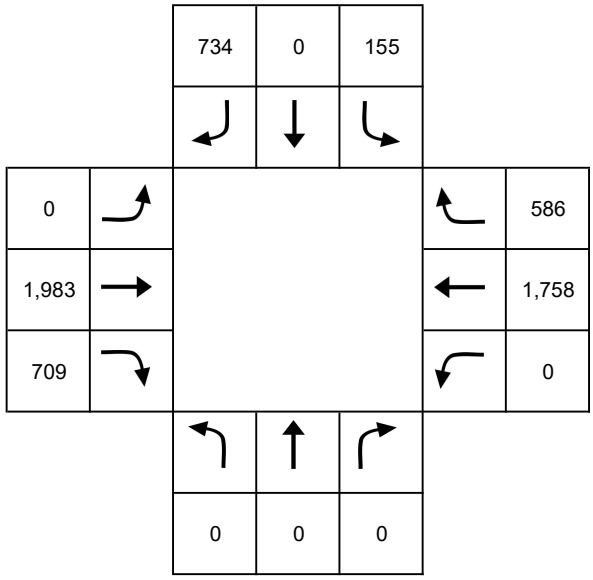


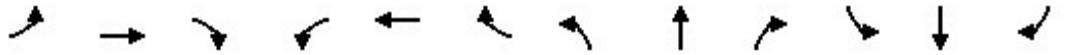
Note: spreadsheet used to project Pre-Existing peak ohur volumes onto Existing peak hour volumes by means of growth projections calculated by comparing street segment growth through a defined period of time.

Manually input due to freeway ramp configurations.

Road	Segment	Date of Counts	Source of Counts	SANDAG TFIC S14 Year 2016 ADT (Scenario ID 434)	SANDAG TFIC S14 Year 2025 ADT (Scenario ID 466)	SANDAG TFIC S14 Year 2050 ADT (Scenario ID 463)	% Growth (2016 - 2025)	% Growth / Year (2016 - 2025)	Year of Data Collection	Segment Volume (*from available count data*)	# of Years to Existing	Growth Projection ADT for Year 2021
Towne Centre Drive	Eastgate Mall - Project Driveway "A"	5/23/2017	USAI Count Request (Year 2017)	10,400	12,500	12,900	20.2%	2.2%	2017	14,016	4	15,274
Towne Centre Drive	Project Driveway "A" - Executive Drive	5/23/2017	USAI Count Request (Year 2017)	10,400	12,500	12,900	20.2%	2.2%	2017	14,016	4	15,274
Towne Centre Drive	Executive Drive - Towne Centre Driveway	5/25/2017	USAI Count Request (Year 2017)	13,200	15,700	18,300	18.9%	2.1%	2017	20,187	4	21,886
Towne Centre Drive	Towne Centre Driveway - La Jolla Village Drive	5/25/2017	USAI Count Request (Year 2017)	13,200	15,700	18,300	18.9%	2.1%	2017	20,187	4	21,886
Judicial Drive	Executive Drive - Judicial Driveway	8/9/2017	USAI Count Request (Year 2017)	6,800	8,800	11,500	29.4%	3.3%	2017	7,984	4	9,028
Judicial Drive	Judicial Driveway - Golden Haven Drive / Brook Lane	8/9/2017	USAI Count Request (Year 2017)	8,200	10,400	13,600	26.8%	3.0%	2017	8,327	4	9,320
Executive Drive	Towne Centre Drive - Project Driveway "B"	11/17/2016	USAI Count Request (Year 2016)	8,000	9,400	13,100	17.5%	1.9%	2015	7,897	5	8,665
Executive Drive	Proejct Driveway "B" - Judicial Drive	11/17/2016	USAI Count Request (Year 2016)	8,000	9,400	13,100	17.5%	1.9%	2015	7,897	5	8,665
Towne Centre Drive	N/O Eastgate Mall	11/17/2016	USAI Count Request (Year 2016)	8,700	8,600	8,900	-1.1%	-0.1%	2016	9,322	5	9,262
Towne Centre Drive	S/O La Jolla Village Drive	5/25/2017	USAI Count Request (Year 2017)	24,100	25,600	24,700	6.2%	0.7%	2017	17,753	4	18,244
Eastgate Mall	W/O Towne Centre Drive	5/23/2017	USAI Count Request (Year 2017)	17,200	19,300	20,300	12.2%	1.4%	2017	14,210	4	14,981
Eastgate Mall	E/O Towne Centre Drive	5/23/2017	USAI Count Request (Year 2017)	10,300	12,200	12,900	18.4%	2.0%	2017	12,426	4	13,445
Judicial Drive	N/O Executive Drive	8/9/2017	USAI Count Request (Year 2017)	5,100	5,800	6,800	13.7%	1.5%	2017	5,140	4	5,454
Judicial Drive	S/O Golden Haven Drive	8/9/2017	USAI Count Request (Year 2017)	3,600	4,300	7,200	19.4%	2.2%	2017	8,327	4	9,047
Golden Haven Drive	W/O Judicial Drive	6/16/2015	University CPU	5,200	6,700	6,900	28.8%	3.2%	2015	6,712	6	8,003
Brook Lane	E/O Judicial Drive	-	Projected with SANDAG TFIC volumes	5,300	7,700	7,400	45.3%	5.0%	*SANDAG*	5,300	5	6,633
La Jolla Village Drive	W/O Towne Centre Drive	5/25/2017	USAI Count Request (Year 2017)	37,400	41,500	40,700	11.0%	1.2%	2017	43,960	4	46,102
La Jolla Village Drive	Towne Centre Drive - I-805 SB Ramps	5/25/2017	USAI Count Request (Year 2017)	69,300	77,100	76,300	11.3%	1.3%	2017	60,760	4	63,799
Miramar Road	I-805 SB Ramps - I-805 NB Ramps	5/25/2017	USAI Count Request (Year 2017)	50,100	55,000	53,000	9.8%	1.1%	2017	53,630	4	55,961
I-805 SB Ramps (On-Ramp)	N/O La Jolla Village Drive	-	Projected with SANDAG TFIC volumes	3,000	3,200	3,300	6.7%	0.7%	*SANDAG*	3,000	5	3,111
I-805 SB Ramps (On-Ramp)	S/O La Jolla Village Drive	-	Projected with SANDAG TFIC volumes	15,500	16,700	17,200	7.7%	0.9%	*SANDAG*	15,500	5	16,167
I-805 SB Ramps (Off-Ramp)	N/O La Jolla Village Drive	-	Projected with SANDAG TFIC volumes	17,000	18,400	16,300	8.2%	0.9%	*SANDAG*	17,000	5	17,778
Executive Drive	W/O Towne Centre Drive	5/13/2015	University CPU	3,400	4,800	5,500	41.2%	4.6%	2015	5,914	6	7,537
Executive Drive	E/O Judicial Drive	-	Projected with SANDAG TFIC volumes	3,700	4,500	7,700	21.6%	2.4%	*SANDAG*	3,700	5	4,144

Appendix G: Existing AM/PM Synchro Worksheets

Provided on the following page



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	188	138	61	536	205	363	540	228	18	60	24
Future Volume (veh/h)	82	188	138	61	536	205	363	540	228	18	60	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	89	204	150	66	583	223	395	587	248	20	68	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	139	748	519	85	960	366	462	927	391	56	667	249
Arrive On Green	0.04	0.38	0.38	0.05	0.39	0.39	0.13	0.39	0.39	0.02	0.27	0.27
Sat Flow, veh/h	3428	1968	1367	1767	2478	946	3428	2402	1013	3428	2493	930
Grp Volume(v), veh/h	89	181	173	66	414	392	395	431	404	20	47	48
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1767	1763	1661	1714	1763	1652	1714	1763	1660
Q Serve(g_s), s	3.0	8.3	8.9	4.3	21.9	21.9	13.1	23.0	23.1	0.7	2.3	2.5
Cycle Q Clear(g_c), s	3.0	8.3	8.9	4.3	21.9	21.9	13.1	23.0	23.1	0.7	2.3	2.5
Prop In Lane	1.00		0.87	1.00		0.57	1.00		0.61	1.00		0.56
Lane Grp Cap(c), veh/h	139	670	597	85	683	643	462	680	638	56	472	444
V/C Ratio(X)	0.64	0.27	0.29	0.78	0.61	0.61	0.86	0.63	0.63	0.36	0.10	0.11
Avail Cap(c_a), veh/h	224	670	597	177	718	677	697	680	638	165	472	444
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	24.9	25.1	54.6	28.5	28.5	49.1	28.9	29.0	56.5	32.0	32.1
Incr Delay (d2), s/veh	1.8	1.0	1.2	5.7	2.1	2.2	4.4	4.4	4.8	1.4	0.4	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	1.3	3.6	3.5	2.0	9.5	9.0	5.9	10.5	9.9	0.3	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	25.9	26.3	60.4	30.5	30.7	53.5	33.4	33.7	57.9	32.4	32.5
LnGrp LOS	E	C	C	E	C	C	D	C	C	E	C	C
Approach Vol, veh/h		443			872			1230			115	
Approach Delay, s/veh		32.2			32.9			40.0			36.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.8	20.0	36.3	9.1	50.6	6.3	50.0
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	11.6	* 44	23.6	26.8	7.6	47.3	5.6	44.8
Max Q Clear Time (g_c+I1), s	6.3	10.9	15.1	4.5	5.0	23.9	2.7	25.1
Green Ext Time (p_c), s	0.0	4.6	0.6	0.7	0.0	9.5	0.0	8.9

Intersection Summary	
HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

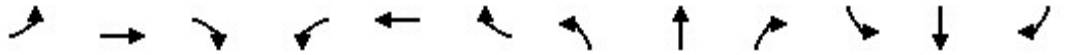
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	1139	78	0	259
Future Vol, veh/h	0	9	1139	78	0	259
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, %	2	2	2	2	2	2
Mvmt Flow	0	10	1238	85	0	282

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	662	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	404	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	404	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	404	-
HCM Lane V/C Ratio	-	-	0.024	-
HCM Control Delay (s)	-	-	14.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	109	36	52	120	23	445	1060	435	13	170	75
Future Volume (veh/h)	134	109	36	52	120	23	445	1060	435	13	170	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	163	133	44	59	136	26	468	1116	458	14	187	82
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	199	567	180	75	432	80	658	1684	743	191	861	362
Arrive On Green	0.11	0.22	0.22	0.04	0.15	0.15	0.13	0.48	0.48	0.01	0.36	0.36
Sat Flow, veh/h	1767	2616	829	1767	2945	547	1767	3526	1555	1767	2411	1015
Grp Volume(v), veh/h	163	88	89	59	80	82	468	1116	458	14	135	134
Grp Sat Flow(s),veh/h/ln	1767	1763	1681	1767	1763	1729	1767	1763	1555	1767	1763	1664
Q Serve(g_s), s	7.1	3.2	3.5	2.6	3.2	3.4	10.6	19.1	17.2	0.4	4.2	4.5
Cycle Q Clear(g_c), s	7.1	3.2	3.5	2.6	3.2	3.4	10.6	19.1	17.2	0.4	4.2	4.5
Prop In Lane	1.00		0.49	1.00		0.32	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	199	382	365	75	259	254	658	1684	743	191	629	594
V/C Ratio(X)	0.82	0.23	0.24	0.79	0.31	0.32	0.71	0.66	0.62	0.07	0.21	0.23
Avail Cap(c_a), veh/h	233	761	726	166	698	685	658	1684	743	281	629	594
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	25.5	25.6	37.5	30.1	30.2	14.5	15.8	15.3	16.4	17.7	17.8
Incr Delay (d2), s/veh	15.5	0.3	0.4	6.6	1.2	1.3	3.1	2.1	3.8	0.1	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	1.4	1.4	1.2	1.4	1.5	5.4	7.5	6.3	0.2	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	25.8	26.0	44.1	31.3	31.5	17.5	17.8	19.1	16.4	18.5	18.6
LnGrp LOS	D	C	C	D	C	C	B	B	B	B	B	B
Approach Vol, veh/h		340			221			2042			283	
Approach Delay, s/veh		37.3			34.8			18.0			18.4	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	43.5	7.8	22.2	15.0	34.0	13.3	16.7
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 34	7.4	34.1	10.6	28.2	10.4	* 31
Max Q Clear Time (g_c+I1), s	2.4	21.1	4.6	5.5	12.6	6.5	9.1	5.4
Green Ext Time (p_c), s	0.0	8.6	0.0	1.1	0.0	1.6	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	21.6
HCM 6th LOS	C

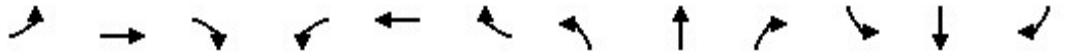
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	1	992	63	0	262
Future Volume (veh/h)	9	1	992	63	0	262
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	12	1	1055	67	0	320
Peak Hour Factor	0.75	0.75	0.94	0.94	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	24	22	2157	137	0	2260
Arrive On Green	0.01	0.01	0.64	0.64	0.00	0.64
Sat Flow, veh/h	1767	1572	3458	214	0	3711
Grp Volume(v), veh/h	12	1	553	569	0	320
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1816	0	1763
Q Serve(g_s), s	0.2	0.0	4.7	4.7	0.0	1.0
Cycle Q Clear(g_c), s	0.2	0.0	4.7	4.7	0.0	1.0
Prop In Lane	1.00	1.00		0.12	0.00	
Lane Grp Cap(c), veh/h	24	22	1130	1164	0	2260
V/C Ratio(X)	0.49	0.05	0.49	0.49	0.00	0.14
Avail Cap(c_a), veh/h	1369	1219	1130	1164	0	2260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	13.8	2.7	2.7	0.0	2.0
Incr Delay (d2), s/veh	5.7	0.3	1.5	1.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.5	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	14.1	4.2	4.1	0.0	2.1
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	13		1122			320
Approach Delay, s/veh	19.2		4.2			2.1
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		23.1				23.1	5.3
Change Period (Y+Rc), s		4.9				4.9	4.9
Max Green Setting (Gmax), s		18.2				18.2	22.0
Max Q Clear Time (g_c+I1), s		6.7				3.0	2.2
Green Ext Time (p_c), s		7.0				2.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.8
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	984	110	356	1463	1222	130	191	301	191	35	31
Future Volume (veh/h)	337	984	110	356	1463	1222	130	191	301	191	35	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	362	1058	64	379	1556	874	146	215	248	236	43	26
Peak Hour Factor	0.93	0.93	0.93	0.94	0.94	0.94	0.89	0.89	0.89	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	418	2476	846	433	2516	1599	196	555	781	287	650	286
Arrive On Green	0.12	0.49	0.49	0.13	0.50	0.50	0.06	0.16	0.16	0.08	0.18	0.18
Sat Flow, veh/h	3428	5066	1546	3428	5066	2754	3428	3526	2741	3428	3526	1555
Grp Volume(v), veh/h	362	1058	64	379	1556	874	146	215	248	236	43	26
Grp Sat Flow(s),veh/h/ln	1714	1689	1546	1714	1689	1377	1714	1763	1371	1714	1763	1555
Q Serve(g_s), s	14.5	18.9	2.7	15.2	31.2	27.3	5.9	7.7	10.0	9.5	1.4	1.9
Cycle Q Clear(g_c), s	14.5	18.9	2.7	15.2	31.2	27.3	5.9	7.7	10.0	9.5	1.4	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	418	2476	846	433	2516	1599	196	555	781	287	650	286
V/C Ratio(X)	0.87	0.43	0.08	0.88	0.62	0.55	0.75	0.39	0.32	0.82	0.07	0.09
Avail Cap(c_a), veh/h	700	2476	846	590	2516	1599	392	1148	1242	441	1191	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.3	23.1	15.1	60.1	25.6	18.1	65.0	52.9	39.5	63.1	47.2	47.4
Incr Delay (d2), s/veh	2.9	0.5	0.2	8.7	1.2	1.3	2.1	1.0	0.5	4.0	0.1	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	6.5	7.7	1.0	7.1	12.8	8.9	2.6	3.5	3.5	4.3	0.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	23.7	15.2	68.8	26.8	19.4	67.1	53.9	40.0	67.1	47.2	47.6
LnGrp LOS	E	C	B	E	C	B	E	D	D	E	D	D
Approach Vol, veh/h		1484			2809			609			305	
Approach Delay, s/veh		33.0			30.1			51.4			62.7	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	73.9	12.4	31.1	21.5	75.0	16.1	27.4
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	24.1	32.5	16.0	47.3	28.6	* 29	18.0	* 46
Max Q Clear Time (g_c+I1), s	17.2	20.9	7.9	3.9	16.5	33.2	11.5	12.0
Green Ext Time (p_c), s	0.5	7.7	0.1	0.6	0.6	0.0	0.2	5.5

Intersection Summary	
HCM 6th Ctrl Delay	35.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

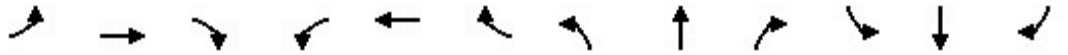
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	557	96	58	0	6
Future Vol, veh/h	0	557	96	58	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	605	104	63	0	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	84
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	958
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	958
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

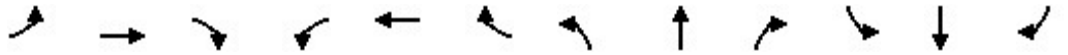
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	958
HCM Lane V/C Ratio	-	-	-	0.007
HCM Control Delay (s)	-	-	-	8.8
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	333	75	20	32	7	100	332	186	71	53	22
Future Volume (veh/h)	191	333	75	20	32	7	100	332	186	71	53	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	222	387	87	26	41	9	109	361	202	85	63	26
Peak Hour Factor	0.86	0.86	0.86	0.78	0.78	0.78	0.92	0.92	0.92	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	592	608	263	316	526	119	99	669	367	99	760	294
Arrive On Green	0.17	0.17	0.17	0.27	0.27	0.27	0.06	0.31	0.31	0.06	0.31	0.31
Sat Flow, veh/h	3428	3526	1525	1173	1955	441	1767	2173	1192	1767	2467	955
Grp Volume(v), veh/h	222	387	87	40	0	36	109	291	272	85	44	45
Grp Sat Flow(s),veh/h/ln	1714	1763	1525	1797	0	1772	1767	1763	1602	1767	1763	1660
Q Serve(g_s), s	5.7	10.2	5.0	1.7	0.0	1.5	5.6	13.8	14.2	4.8	1.8	1.9
Cycle Q Clear(g_c), s	5.7	10.2	5.0	1.7	0.0	1.5	5.6	13.8	14.2	4.8	1.8	1.9
Prop In Lane	1.00		1.00	0.65		0.25	1.00		0.74	1.00		0.58
Lane Grp Cap(c), veh/h	592	608	263	484	0	477	99	543	494	99	543	511
V/C Ratio(X)	0.38	0.64	0.33	0.08	0.00	0.08	1.10	0.54	0.55	0.86	0.08	0.09
Avail Cap(c_a), veh/h	923	949	410	484	0	477	99	543	494	99	543	511
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	38.6	36.4	27.4	0.0	27.3	47.4	28.8	28.9	47.0	24.6	24.7
Incr Delay (d2), s/veh	0.4	1.2	0.8	0.3	0.0	0.3	121.7	3.8	4.4	47.9	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	2.4	4.5	1.9	0.8	0.0	0.7	5.8	6.3	6.0	3.4	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	39.8	37.2	27.7	0.0	27.7	169.1	32.5	33.3	94.8	24.9	25.0
LnGrp LOS	D	D	D	C	A	C	F	C	C	F	C	C
Approach Vol, veh/h		696			76			672			174	
Approach Delay, s/veh		38.6			27.7			55.0			59.1	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	36.2		22.2	10.0	36.2		31.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	5.6	30.9		27.0	5.6	30.9		27.0				
Max Q Clear Time (g_c+I1), s	6.8	16.2		12.2	7.6	3.9		3.7				
Green Ext Time (p_c), s	0.0	4.6		3.6	0.0	0.7		0.4				

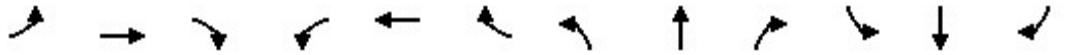
Intersection Summary			
HCM 6th Ctrl Delay		47.1	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	1	0	3	50	225	1	9	55	5
Future Volume (veh/h)	0	0	1	1	0	3	50	225	1	9	55	5
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	0.98		0.98	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	4	2	0	6	56	250	1	11	70	6
Peak Hour Factor	0.25	0.25	0.25	0.50	0.50	0.50	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	0	25	130	0	15	84	2077	8	20	1778	150
Arrive On Green	0.00	0.00	0.02	0.02	0.00	0.02	0.05	0.58	0.58	0.01	0.54	0.54
Sat Flow, veh/h	0	0	1568	316	0	948	1767	3601	14	1767	3288	278
Grp Volume(v), veh/h	0	0	4	8	0	0	56	122	129	11	37	39
Grp Sat Flow(s),veh/h/ln	0	0	1568	1264	0	0	1767	1763	1853	1767	1763	1804
Q Serve(g_s), s	0.0	0.0	0.1	0.2	0.0	0.0	1.1	1.1	1.1	0.2	0.4	0.4
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.3	0.0	0.0	1.1	1.1	1.1	0.2	0.4	0.4
Prop In Lane	0.00		1.00	0.25		0.75	1.00		0.01	1.00		0.15
Lane Grp Cap(c), veh/h	0	0	25	146	0	0	84	1017	1069	20	953	975
V/C Ratio(X)	0.00	0.00	0.16	0.05	0.00	0.00	0.66	0.12	0.12	0.54	0.04	0.04
Avail Cap(c_a), veh/h	0	0	1092	1166	0	0	325	1017	1069	251	953	975
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)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.4	17.6	0.0	0.0	16.8	3.5	3.5	17.6	3.9	3.9
Incr Delay (d2), s/veh	0.0	0.0	2.9	0.2	0.0	0.0	8.7	0.2	0.2	20.2	0.1	0.1
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	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.2	0.3	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	20.3	17.7	0.0	0.0	25.5	3.7	3.7	37.8	3.9	3.9
LnGrp LOS	A	A	C	B	A	A	C	A	A	D	A	A
Approach Vol, veh/h		4			8			307			87	
Approach Delay, s/veh		20.3			17.7			7.7			8.2	
Approach LOS		C			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	25.6		5.5	6.1	24.3		5.5				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	6.6	19.2		25.0				
Max Q Clear Time (g_c+I1), s	2.2	3.1		2.1	3.1	2.4		2.3				
Green Ext Time (p_c), s	0.0	1.2		0.0	0.0	0.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A



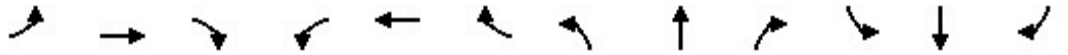
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	31	93	38	87	13	91	407	31	50	108	33
Future Volume (veh/h)	168	31	93	38	87	13	91	407	31	50	108	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	181	33	100	45	102	15	103	462	35	57	124	38
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	186	468	404	58	593	85	125	1305	99	72	970	285
Arrive On Green	0.10	0.27	0.27	0.03	0.19	0.19	0.07	0.39	0.39	0.04	0.36	0.36
Sat Flow, veh/h	1767	1763	1524	1767	3070	440	1767	3321	251	1767	2670	785
Grp Volume(v), veh/h	181	33	100	45	57	60	103	245	252	57	80	82
Grp Sat Flow(s),veh/h/ln	1767	1763	1524	1767	1763	1746	1767	1763	1809	1767	1763	1692
Q Serve(g_s), s	7.4	1.0	3.7	1.8	2.0	2.1	4.2	7.1	7.1	2.3	2.2	2.3
Cycle Q Clear(g_c), s	7.4	1.0	3.7	1.8	2.0	2.1	4.2	7.1	7.1	2.3	2.2	2.3
Prop In Lane	1.00		1.00	1.00		0.25	1.00		0.14	1.00		0.46
Lane Grp Cap(c), veh/h	186	468	404	58	341	337	125	693	711	72	640	615
V/C Ratio(X)	0.98	0.07	0.25	0.77	0.17	0.18	0.83	0.35	0.36	0.79	0.13	0.13
Avail Cap(c_a), veh/h	186	675	583	159	658	651	125	693	711	173	640	615
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	19.9	20.9	34.7	24.4	24.4	33.2	15.5	15.5	34.4	15.4	15.4
Incr Delay (d2), s/veh	58.5	0.1	0.5	7.9	0.1	0.1	33.1	1.4	1.4	7.1	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	6.1	0.4	1.3	0.9	0.8	0.8	2.9	2.9	3.0	1.1	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.8	20.0	21.4	42.6	24.4	24.5	66.3	16.9	16.9	41.5	15.8	15.9
LnGrp LOS	F	C	C	D	C	C	E	B	B	D	B	B
Approach Vol, veh/h		314			162			600			219	
Approach Delay, s/veh		61.3			29.5			25.4			22.5	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	33.7	6.8	24.5	9.5	31.6	12.0	19.3
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	7.1	24.3	6.5	27.7	5.1	26.3	7.6	* 27
Max Q Clear Time (g_c+I1), s	4.3	9.1	3.8	5.7	6.2	4.3	9.4	4.1
Green Ext Time (p_c), s	0.0	4.0	0.0	1.1	0.0	1.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Notes

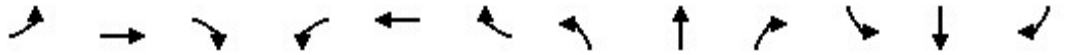
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1129	0	0	1754	500	0	0	0	639	0	1557
Future Volume (veh/h)	0	1129	0	0	1754	500	0	0	0	639	0	1557
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	1176	0	0	1907	271				666	0	1049
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2344	0	0	2344	1401				1468	0	1185
Arrive On Green	0.00	0.46	0.00	0.00	0.46	0.46				0.43	0.00	0.43
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	1176	0	0	1907	271				666	0	1049
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	19.5	0.0	0.0	38.9	2.7				16.5	0.0	41.9
Cycle Q Clear(g_c), s	0.0	19.5	0.0	0.0	38.9	2.7				16.5	0.0	41.9
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2344	0	0	2344	1401				1468	0	1185
V/C Ratio(X)	0.00	0.50	0.00	0.00	0.81	0.19				0.45	0.00	0.89
Avail Cap(c_a), veh/h	0	2344	0	0	2344	1401				1754	0	1416
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.6	0.0	0.0	27.8	0.9				24.4	0.0	31.6
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	3.2	0.3				0.2	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.8	0.0	0.0	16.0	5.0				6.7	0.0	14.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.3	0.0	0.0	31.0	1.2				24.6	0.0	37.8
LnGrp LOS	A	C	A	A	C	A				C	A	D
Approach Vol, veh/h		1176			2178						1715	
Approach Delay, s/veh		23.3			27.3						32.7	
Approach LOS		C			C						C	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		63.0		57.0		63.0						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		45.5		61.4		45.5						
Max Q Clear Time (g_c+I1), s		21.5		43.9		40.9						
Green Ext Time (p_c), s		9.4		7.5		4.1						

Intersection Summary												
HCM 6th Ctrl Delay			28.2									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	484	199	161	284	17	172	52	57	212	569	114
Future Volume (veh/h)	20	484	199	161	284	17	172	52	57	212	569	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	544	224	169	299	18	212	64	70	279	749	150
Peak Hour Factor	0.89	0.89	0.89	0.95	0.95	0.95	0.81	0.81	0.81	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	60	774	317	196	1395	84	268	538	476	339	950	190
Arrive On Green	0.02	0.32	0.32	0.11	0.41	0.41	0.08	0.30	0.30	0.10	0.33	0.33
Sat Flow, veh/h	3428	2420	993	1767	3374	202	3428	1763	1560	3428	2917	584
Grp Volume(v), veh/h	22	396	372	169	155	162	212	64	70	279	453	446
Grp Sat Flow(s),veh/h/ln	1714	1763	1651	1767	1763	1814	1714	1763	1560	1714	1763	1738
Q Serve(g_s), s	0.8	23.5	23.6	11.2	6.8	6.8	7.2	3.1	3.9	9.5	27.8	27.8
Cycle Q Clear(g_c), s	0.8	23.5	23.6	11.2	6.8	6.8	7.2	3.1	3.9	9.5	27.8	27.8
Prop In Lane	1.00		0.60	1.00		0.11	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	60	564	528	196	729	750	268	538	476	339	574	566
V/C Ratio(X)	0.37	0.70	0.71	0.86	0.21	0.22	0.79	0.12	0.15	0.82	0.79	0.79
Avail Cap(c_a), veh/h	150	564	528	261	735	756	334	538	476	489	574	566
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	35.6	35.6	52.1	22.5	22.5	54.0	29.9	30.1	52.7	36.5	36.5
Incr Delay (d2), s/veh	1.4	7.1	7.7	15.9	0.3	0.3	7.7	0.5	0.7	4.9	10.5	10.7
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	0.3	11.1	10.6	5.8	2.9	3.0	3.4	1.4	1.6	4.3	13.5	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.3	42.7	43.3	67.9	22.8	22.8	61.6	30.3	30.8	57.5	47.0	47.1
LnGrp LOS	E	D	D	E	C	C	E	C	C	E	D	D
Approach Vol, veh/h		790			486			346			1178	
Approach Delay, s/veh		43.5			38.5			49.6			49.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	43.8	13.7	44.0	6.5	55.0	16.2	41.5
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	17.6	* 38	11.6	38.8	5.2	49.7	17.0	33.4
Max Q Clear Time (g_c+I1), s	13.2	25.6	9.2	29.8	2.8	8.8	11.5	5.9
Green Ext Time (p_c), s	0.1	6.5	0.1	5.5	0.0	3.8	0.3	1.3

Intersection Summary	
HCM 6th Ctrl Delay	45.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

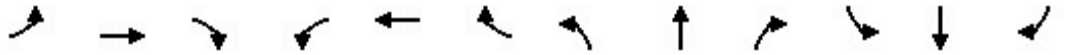
Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	70	209	7	0	929
Future Vol, veh/h	0	70	209	7	0	929
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, %	2	2	2	2	2	2
Mvmt Flow	0	76	227	8	0	1010

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	118	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	912	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	912	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	912	-
HCM Lane V/C Ratio	-	-	0.083	-
HCM Control Delay (s)	-	-	9.3	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	49	142	314	229	20	192	153	77	20	804	120
Future Volume (veh/h)	43	49	142	314	229	20	192	153	77	20	804	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	0.99		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	49	56	104	341	249	11	211	168	58	23	914	119
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	62	278	240	266	940	41	278	1502	664	553	1180	154
Arrive On Green	0.04	0.16	0.16	0.15	0.27	0.27	0.07	0.43	0.43	0.02	0.38	0.38
Sat Flow, veh/h	1767	1763	1520	1767	3438	151	1767	3526	1559	1767	3135	408
Grp Volume(v), veh/h	49	56	104	341	127	133	211	168	58	23	514	519
Grp Sat Flow(s),veh/h/ln	1767	1763	1520	1767	1763	1827	1767	1763	1559	1767	1763	1781
Q Serve(g_s), s	2.2	2.2	5.0	12.1	4.5	4.6	5.6	2.3	1.8	0.6	20.6	20.6
Cycle Q Clear(g_c), s	2.2	2.2	5.0	12.1	4.5	4.6	5.6	2.3	1.8	0.6	20.6	20.6
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	62	278	240	266	482	500	278	1502	664	553	663	670
V/C Ratio(X)	0.79	0.20	0.43	1.28	0.26	0.27	0.76	0.11	0.09	0.04	0.77	0.77
Avail Cap(c_a), veh/h	255	712	614	266	727	753	278	1502	664	630	663	670
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.4	29.4	30.6	34.1	22.8	22.8	18.4	13.9	13.7	14.8	22.0	22.0
Incr Delay (d2), s/veh	8.2	0.4	1.4	151.6	0.5	0.5	10.4	0.2	0.3	0.0	8.6	8.5
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	1.1	0.9	1.9	16.3	1.9	2.0	3.0	0.9	0.6	0.2	9.6	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	29.8	32.0	185.7	23.3	23.3	28.9	14.0	14.0	14.8	30.6	30.6
LnGrp LOS	D	C	C	F	C	C	C	B	B	B	C	C
Approach Vol, veh/h		209			601			437			1056	
Approach Delay, s/veh		34.8			115.5			21.2			30.3	
Approach LOS		C			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	40.0	16.5	17.8	10.0	36.0	7.2	27.1
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 31	12.1	32.4	5.6	30.2	11.6	* 33
Max Q Clear Time (g_c+I1), s	2.6	4.3	14.1	7.0	7.6	22.6	4.2	6.6
Green Ext Time (p_c), s	0.0	1.4	0.0	1.0	0.0	4.1	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	51.2
HCM 6th LOS	D

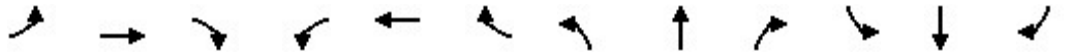
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	88	8	325	6	0	817
Future Volume (veh/h)	88	8	325	6	0	817
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	104	9	349	6	0	888
Peak Hour Factor	0.85	0.85	0.93	0.93	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	143	127	2118	36	0	2106
Arrive On Green	0.08	0.08	0.60	0.60	0.00	0.60
Sat Flow, veh/h	1767	1572	3637	61	0	3711
Grp Volume(v), veh/h	104	9	173	182	0	888
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1843	0	1763
Q Serve(g_s), s	1.8	0.2	1.3	1.3	0.0	4.1
Cycle Q Clear(g_c), s	1.8	0.2	1.3	1.3	0.0	4.1
Prop In Lane	1.00	1.00		0.03	0.00	
Lane Grp Cap(c), veh/h	143	127	1053	1101	0	2106
V/C Ratio(X)	0.73	0.07	0.16	0.17	0.00	0.42
Avail Cap(c_a), veh/h	1276	1136	1053	1101	0	2106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	12.9	2.7	2.7	0.0	3.3
Incr Delay (d2), s/veh	2.6	0.1	0.3	0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2	0.2	0.0	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.3	13.0	3.1	3.1	0.0	3.9
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	113		355			888
Approach Delay, s/veh	16.1		3.1			3.9
Approach LOS	B		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		23.1			23.1	7.4
Change Period (Y+Rc), s		4.9			4.9	4.9
Max Green Setting (Gmax), s		18.2			18.2	22.0
Max Q Clear Time (g_c+I1), s		3.3			6.1	3.8
Green Ext Time (p_c), s		2.3			6.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.7
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	1255	183	490	1705	282	209	60	624	731	227	162
Future Volume (veh/h)	23	1255	183	490	1705	282	209	60	624	731	227	162
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	26	1426	106	505	1758	167	222	64	611	754	234	115
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	60	1462	574	482	2102	1681	268	814	1020	706	1264	551
Arrive On Green	0.02	0.29	0.29	0.14	0.41	0.41	0.08	0.23	0.23	0.21	0.36	0.36
Sat Flow, veh/h	3428	5066	1564	3428	5066	2678	3428	3526	2732	3428	3526	1536
Grp Volume(v), veh/h	26	1426	106	505	1758	167	222	64	611	754	234	115
Grp Sat Flow(s),veh/h/ln	1714	1689	1564	1714	1689	1339	1714	1763	1366	1714	1763	1536
Q Serve(g_s), s	1.1	41.8	6.9	21.1	46.6	3.8	9.6	2.1	27.2	30.9	6.8	7.8
Cycle Q Clear(g_c), s	1.1	41.8	6.9	21.1	46.6	3.8	9.6	2.1	27.2	30.9	6.8	7.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	1462	574	482	2102	1681	268	814	1020	706	1264	551
V/C Ratio(X)	0.43	0.98	0.18	1.05	0.84	0.10	0.83	0.08	0.60	1.07	0.19	0.21
Avail Cap(c_a), veh/h	117	1462	574	482	2102	1681	366	917	1100	706	1264	551
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	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	72.9	52.8	32.3	64.4	39.3	11.5	68.1	45.2	38.2	59.5	33.1	33.4
Incr Delay (d2), s/veh	1.8	18.4	0.7	53.9	4.1	0.1	8.1	0.1	1.5	52.4	0.1	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	0.5	20.2	2.8	12.8	20.1	1.2	4.5	1.0	9.4	18.6	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	71.2	33.0	118.3	43.5	11.6	76.2	45.3	39.6	112.0	33.2	33.7
LnGrp LOS	E	E	C	F	D	B	E	D	D	F	C	C
Approach Vol, veh/h		1558			2430			897			1103	
Approach Delay, s/veh		68.7			56.8			49.1			87.1	
Approach LOS		E			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	48.8	16.1	59.1	7.0	67.7	35.3	39.9
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	21.1	39.2	16.0	53.6	5.1	* 56	30.9	* 39
Max Q Clear Time (g_c+I1), s	23.1	43.8	11.6	9.8	3.1	48.6	32.9	29.2
Green Ext Time (p_c), s	0.0	0.0	0.2	3.7	0.0	6.6	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	64.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

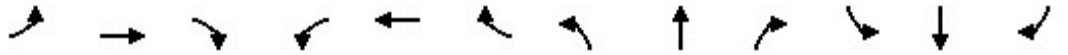
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	146	424	6	0	49
Future Vol, veh/h	0	146	424	6	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	159	461	7	0	53

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	234
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	768
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	768
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10
HCM LOS			B

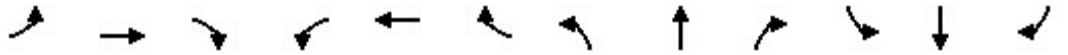
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	768
HCM Lane V/C Ratio	-	-	-	0.069
HCM Control Delay (s)	-	-	-	10
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	24	166	188	307	92	64	83	13	18	279	59
Future Volume (veh/h)	50	24	166	188	307	92	64	83	13	18	279	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	33	231	229	374	112	79	102	16	20	307	65
Peak Hour Factor	0.72	0.72	0.72	0.82	0.82	0.82	0.81	0.81	0.81	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	611	628	278	292	504	157	101	1050	161	30	876	183
Arrive On Green	0.18	0.18	0.18	0.27	0.27	0.27	0.06	0.34	0.34	0.02	0.30	0.30
Sat Flow, veh/h	3428	3526	1562	1088	1880	584	1767	3063	471	1767	2893	603
Grp Volume(v), veh/h	69	33	231	379	0	336	79	58	60	20	185	187
Grp Sat Flow(s),veh/h/ln	1714	1763	1562	1801	0	1750	1767	1763	1770	1767	1763	1733
Q Serve(g_s), s	1.7	0.8	14.4	19.6	0.0	17.5	4.4	2.2	2.3	1.1	8.2	8.5
Cycle Q Clear(g_c), s	1.7	0.8	14.4	19.6	0.0	17.5	4.4	2.2	2.3	1.1	8.2	8.5
Prop In Lane	1.00		1.00	0.60		0.33	1.00		0.27	1.00		0.35
Lane Grp Cap(c), veh/h	611	628	278	483	0	469	101	605	607	30	534	525
V/C Ratio(X)	0.11	0.05	0.83	0.78	0.00	0.72	0.78	0.10	0.10	0.66	0.35	0.36
Avail Cap(c_a), veh/h	920	946	419	483	0	469	105	605	607	97	534	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	34.3	39.9	34.1	0.0	33.4	46.9	22.5	22.5	49.2	27.3	27.4
Incr Delay (d2), s/veh	0.1	0.0	9.1	12.1	0.0	9.0	27.4	0.3	0.3	9.0	1.8	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	6.1	10.1	0.0	8.5	2.7	1.0	1.0	0.6	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	34.4	49.0	46.2	0.0	42.4	74.3	22.8	22.8	58.2	29.1	29.3
LnGrp LOS	C	C	D	D	A	D	E	C	C	E	C	C
Approach Vol, veh/h		333			715			197			392	
Approach Delay, s/veh		44.6			44.4			43.4			30.7	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	39.8		22.8	10.1	35.8		31.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	5.5	31.0		27.0	6.0	30.5		27.0				
Max Q Clear Time (g_c+I1), s	3.1	4.3		16.4	6.4	10.5		21.6				
Green Ext Time (p_c), s	0.0	1.0		1.0	0.0	3.3		2.3				

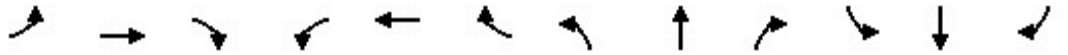
Intersection Summary			
HCM 6th Ctrl Delay		41.0	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	8	1	0	3	34	90	1	4	226	1
Future Volume (veh/h)	9	0	8	1	0	3	34	90	1	4	226	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	15	0	13	3	0	9	42	111	1	5	257	1
Peak Hour Factor	0.62	0.62	0.62	0.33	0.33	0.33	0.81	0.81	0.81	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	0	28	138	0	49	67	2043	18	10	1939	8
Arrive On Green	0.04	0.00	0.04	0.04	0.00	0.04	0.04	0.57	0.57	0.01	0.54	0.54
Sat Flow, veh/h	808	0	700	411	0	1234	1767	3580	32	1767	3602	14
Grp Volume(v), veh/h	28	0	0	12	0	0	42	55	57	5	126	132
Grp Sat Flow(s),veh/h/ln	1509	0	0	1646	0	0	1767	1763	1850	1767	1763	1853
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.5	0.1	1.3	1.3
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.2	0.0	0.0	0.9	0.5	0.5	0.1	1.3	1.3
Prop In Lane	0.54		0.46	0.25		0.75	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	210	0	0	187	0	0	67	1006	1056	10	949	997
V/C Ratio(X)	0.13	0.00	0.00	0.06	0.00	0.00	0.63	0.05	0.05	0.52	0.13	0.13
Avail Cap(c_a), veh/h	1134	0	0	1143	0	0	282	1006	1056	244	949	997
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	0.0	17.2	0.0	0.0	17.5	3.5	3.5	18.3	4.2	4.2
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.1	0.0	0.0	9.2	0.1	0.1	37.8	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	0.2	0.0	0.0	0.1	0.0	0.0	0.5	0.1	0.1	0.1	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	0.0	17.3	0.0	0.0	26.8	3.6	3.6	56.1	4.5	4.5
LnGrp LOS	B	A	A	B	A	A	C	A	A	E	A	A
Approach Vol, veh/h		28			12			154			263	
Approach Delay, s/veh		17.6			17.3			9.9			5.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	26.0		6.4	5.8	24.8		6.4				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	5.9	19.9		25.0				
Max Q Clear Time (g_c+I1), s	2.1	2.5		2.6	2.9	3.3		2.2				
Green Ext Time (p_c), s	0.0	0.5		0.1	0.0	1.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A



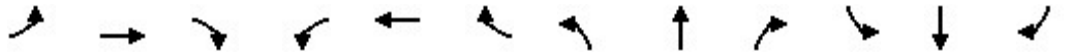
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	80	70	14	70	22	275	152	34	116	287	277
Future Volume (veh/h)	105	80	70	14	70	22	275	152	34	116	287	277
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.99	1.00		0.96
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	119	91	80	17	86	27	382	211	47	129	319	308
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.72	0.72	0.72	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	121	397	309	28	429	128	360	1265	276	162	579	494
Arrive On Green	0.07	0.21	0.21	0.02	0.16	0.16	0.20	0.44	0.44	0.09	0.33	0.33
Sat Flow, veh/h	1767	1850	1439	1767	2654	793	1767	2872	626	1767	1763	1505
Grp Volume(v), veh/h	119	86	85	17	56	57	382	128	130	129	319	308
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1767	1763	1684	1767	1763	1735	1767	1763	1505
Q Serve(g_s), s	5.5	3.3	3.8	0.8	2.2	2.4	16.6	3.6	3.7	5.8	12.1	14.1
Cycle Q Clear(g_c), s	5.5	3.3	3.8	0.8	2.2	2.4	16.6	3.6	3.7	5.8	12.1	14.1
Prop In Lane	1.00		0.94	1.00		0.47	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	121	378	327	28	285	272	360	776	764	162	579	494
V/C Ratio(X)	0.98	0.23	0.26	0.61	0.20	0.21	1.06	0.16	0.17	0.80	0.55	0.62
Avail Cap(c_a), veh/h	121	586	507	110	583	557	360	776	764	273	579	494
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	26.5	26.6	39.9	29.6	29.7	32.5	13.8	13.8	36.3	22.5	23.1
Incr Delay (d2), s/veh	75.3	0.5	0.7	7.9	0.1	0.1	64.9	0.5	0.5	3.4	3.7	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	1.4	1.4	0.4	0.9	1.0	13.3	1.4	1.5	2.6	5.4	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.3	27.0	27.3	47.8	29.7	29.8	97.4	14.2	14.3	39.7	26.2	28.9
LnGrp LOS	F	C	C	D	C	C	F	B	B	D	C	C
Approach Vol, veh/h		290			130			640			756	
Approach Delay, s/veh		62.5			32.1			63.9			29.6	
Approach LOS		E			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	41.2	5.7	22.8	21.0	32.1	10.0	18.5
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	12.6	30.8	5.1	27.1	16.6	26.8	5.6	* 27
Max Q Clear Time (g_c+I1), s	7.8	5.7	2.8	5.8	18.6	16.1	7.5	4.4
Green Ext Time (p_c), s	0.1	2.4	0.0	1.4	0.0	4.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	47.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1983	0	0	1758	586	0	0	0	155	0	734
Future Volume (veh/h)	0	1983	0	0	1758	586	0	0	0	155	0	734
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	2066	0	0	1812	604				172	0	816
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2947	0	0	2947	1423				1109	0	895
Arrive On Green	0.00	0.58	0.00	0.00	0.58	0.58				0.32	0.00	0.32
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	2066	0	0	1812	604				172	0	816
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	39.8	0.0	0.0	32.1	8.2				4.9	0.0	39.0
Cycle Q Clear(g_c), s	0.0	39.8	0.0	0.0	32.1	8.2				4.9	0.0	39.0
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2947	0	0	2947	1423				1109	0	895
V/C Ratio(X)	0.00	0.70	0.00	0.00	0.61	0.42				0.16	0.00	0.91
Avail Cap(c_a), veh/h	0	2947	0	0	2947	1423				1327	0	1071
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.4	0.0	0.0	18.8	1.0				33.3	0.0	44.8
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	1.0	0.9				0.1	0.0	10.3
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	0.0	15.7	0.0	0.0	12.6	13.3				2.1	0.0	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.8	0.0	0.0	19.8	1.9				33.3	0.0	55.1
LnGrp LOS	A	C	A	A	B	A				C	A	E
Approach Vol, veh/h		2066			2416						988	
Approach Delay, s/veh		21.8			15.3						51.3	
Approach LOS		C			B						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		87.8		50.2		87.8						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		71.5		53.4		71.5						
Max Q Clear Time (g_c+I1), s		41.8		41.0		34.1						
Green Ext Time (p_c), s		20.5		3.6		24.4						

Intersection Summary												
HCM 6th Ctrl Delay			24.3									
HCM 6th LOS			C									

Appendix H: Cumulative Projects List

Provided on the following page

TRANSPORTATION IMPACT ANALYSIS

For

9775 TOWNE CENTRE DRIVE

Prepared for

BMR-Apex LP

5th Submittal: November 16, 2017

TRAFFIC PLANNING & ENGINEERING, MARKETING & PROJECT SUPPORT
CONSULTANTS TO INDUSTRY AND GOVERNMENT
8451 Miralani Drive, Suite A
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(858) 560-4911

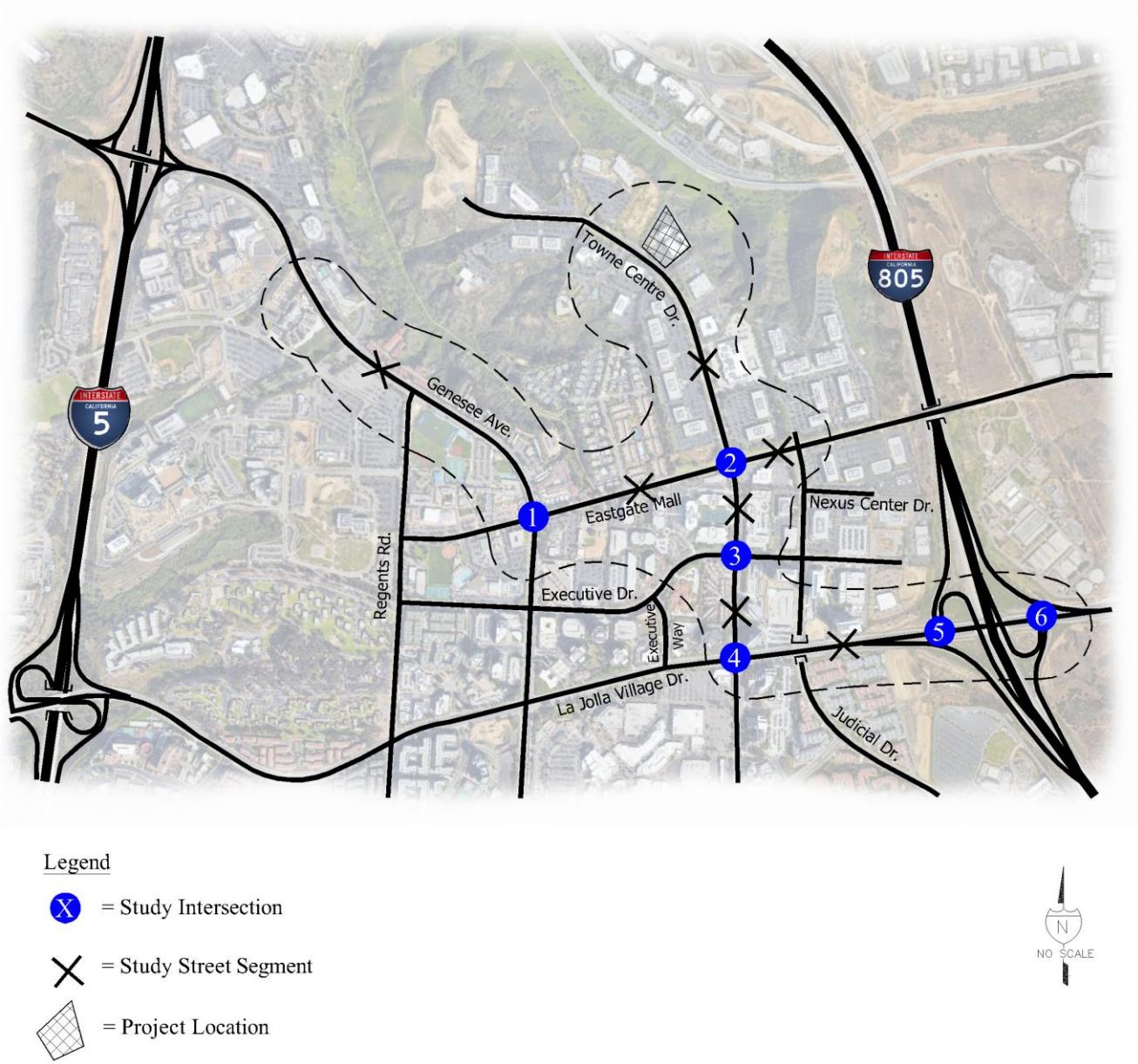


FIGURE 2-4

Study Area Boundary and Intersection Key

3. PROPOSED PROJECT

The proposed project plans to demolish the existing 100,000 square foot building and construct a new 165,000 square foot building for Scientific Research uses. This building will include approximately 8,500 SF of accessory space and 156,500 SF of trip generating space. A Community Plan Amendment is required to increase the density allocated to the project site via trip transfers from other sites outside the PID. A Planned Development Permit and Site Development Permit are also being processed to support the project and authorize the increase in density allocated to the project site via trip transfers from inside the PID. TDM measures are also a feature of the project.

3.1 TRIP GENERATION

The proposed 156,500 SF Scientific Research facility is expected to generate 1,252 average daily trips (ADT) with 200 (180 inbound / 20 outbound) trips in the AM peak hour and 175 trips (17 inbound / 158 outbound) in the PM peak hour. After accounting for the trips generated by the existing 100,000 square foot building, the proposed project is expected to generate 452 average daily trips (ADT) with 72 (65 inbound / 7 outbound) trips in the AM peak hour and 63 trips (7 inbound / 56 outbound) in the PM peak hour from its net increase of 56,500 SF of new trip generating space as shown in **Table 3-1**.

3.2 TRIP DISTRIBUTION AND ASSIGNMENT

Figure 3-1 shows the project only trip distribution percentages which were derived from a select zone analysis using SANDAG's Series 12 Traffic Model. Project only average daily traffic volumes found in **Figure 3-1** are based on the daily new traffic generation from **Table 3-1** and distribution of project only traffic. This traffic model was adjusted to include land uses for the proposed project. Due to the proposed project being on a dead end street all the project traffic is being distributed to the south. **Figure 3-2** shows the project only AM and PM peak hour traffic volumes.

TABLE 3-1

9775 Towne Centre Drive Project Trip Generation Table

Land Use	Intensity	Rate*	ADT	AM					PM					
				Rate *	Vol.	In %	Out%	In	Out	Peak Rate*	Vol.	In %	Out%	In	Out
Proposed Trips															
Scientific Research	**156,500 SF**	**8 /KSF**	**1,252**	**16%**	**200**	90% : 10%		**180**	**20**	**14%**	**175**	10% : 90%		**18**	**157**
Existing Trips															
Scientific Research	**100,000 SF**	**8 /KSF**	**800**	**16%**	**128**	90% : 10%		**115**	**13**	**14%**	**112**	10% : 90%		**11**	**101**
Net Trips															
Net Total (Proposed - Existing)	**56,500 DU**		**452**		**72**			**65**	**7**		**63**			**7**	**56**

Source:
*Rates are used from City of San Diego Trip Generation Manual 2003
.

Note:
ADT= Average Daily Trips
KSF = 1,000 Square Feet

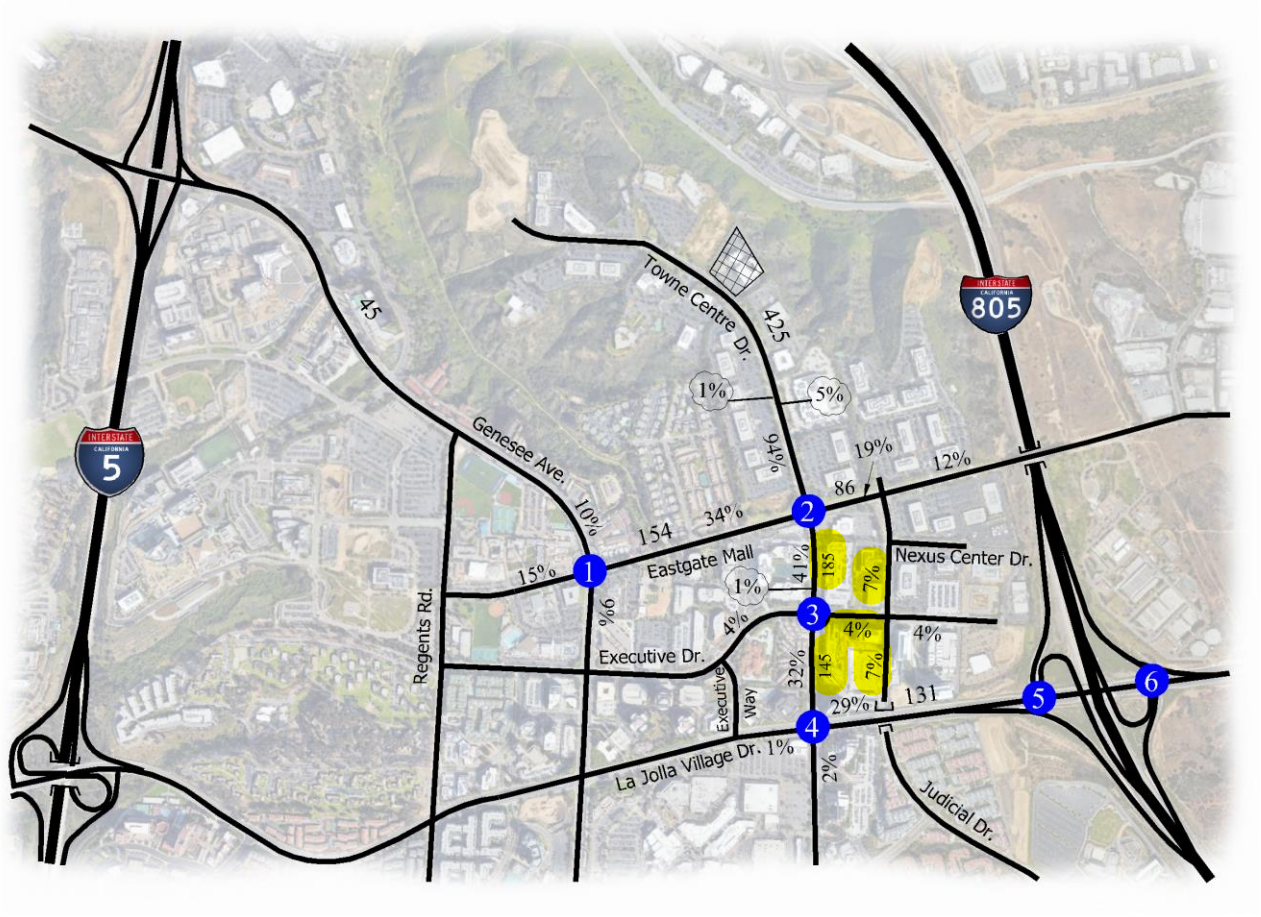
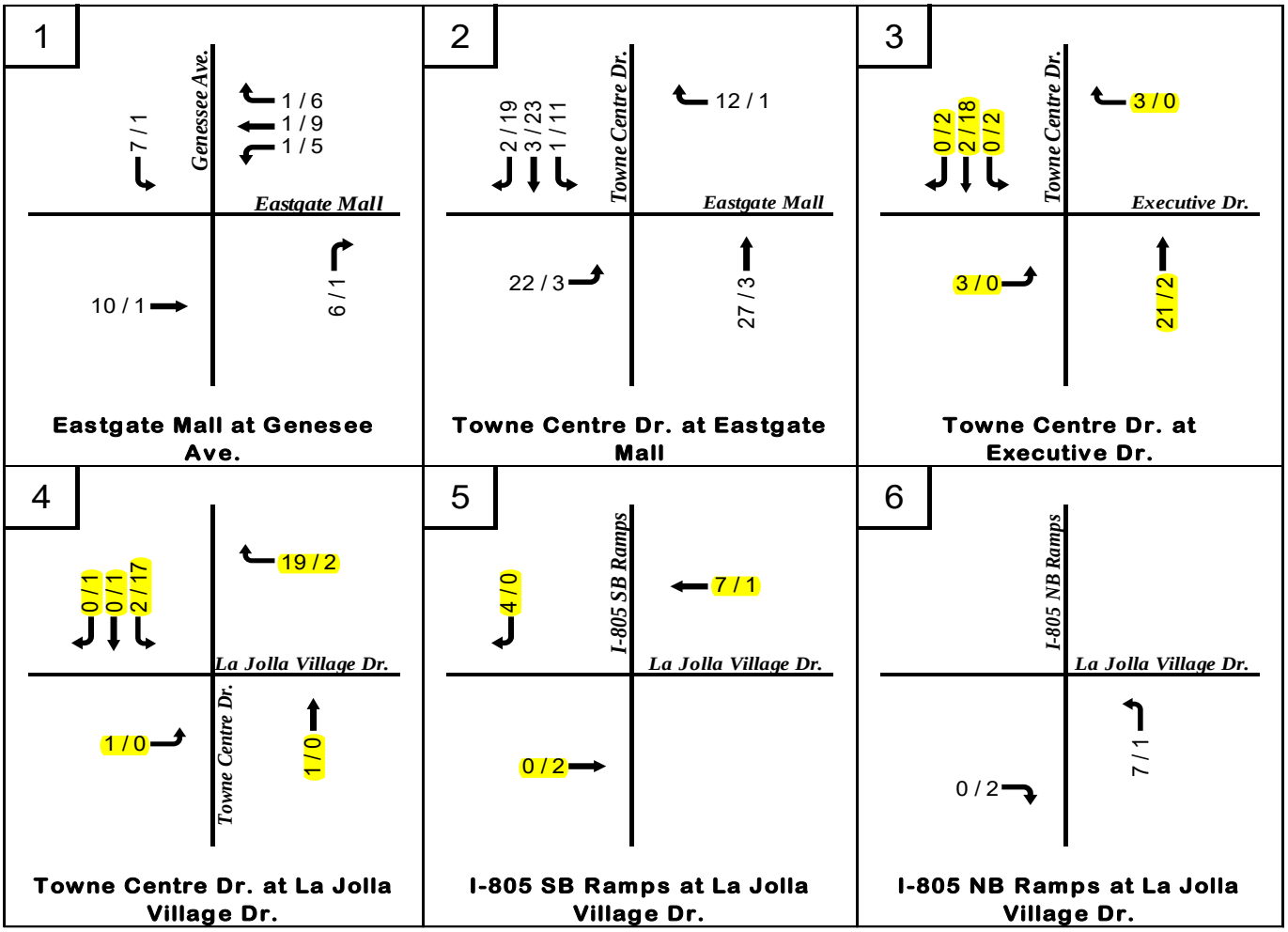


FIGURE 3-1

Project Only ADT / Project Distribution Percentages



XX / XX = AM / PM Peak hour volumes

FIGURE 3-2

Project Only AM / PM Peak Hour Traffic

TRAFFIC IMPACT ANALYSIS

For

9455 TOWNE CENTRE DRIVE

Prepared for

KILROY REALTY

Final Submittal: December 19, 2016

TRAFFIC PLANNING & ENGINEERING, MARKETING & PROJECT SUPPORT
CONSULTANTS TO INDUSTRY AND GOVERNMENT
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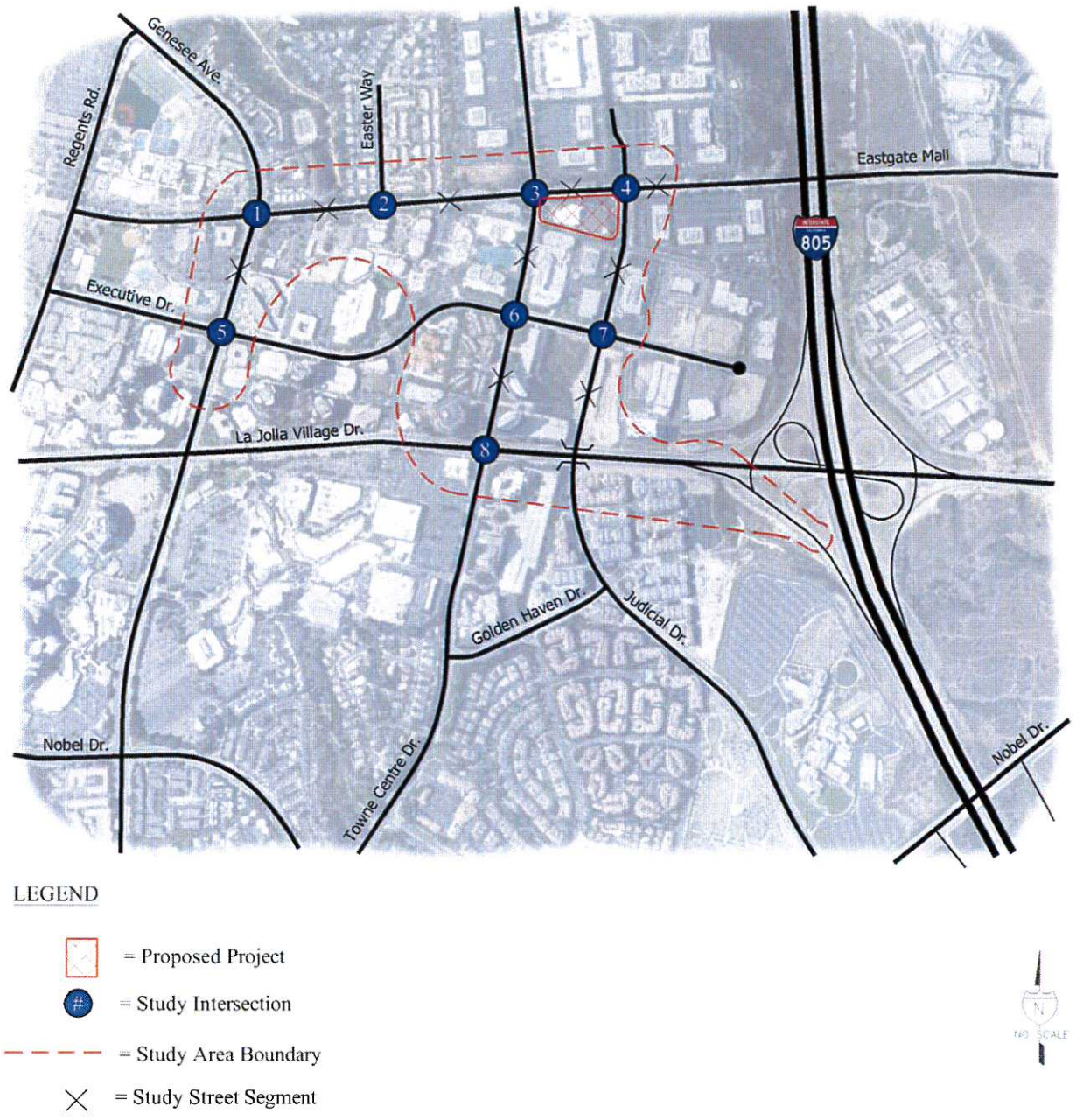

FIGURE 2-5

Study Area Boundary and Intersection Key

3. PROPOSED PROJECT

The proposed project plans to demolish the existing 47,091 square foot building vacant since April of 2009 and construct a new 150,000 square foot building for Regional and Corporate Headquarters (office) uses. A Community Plan Amendment is required to increase the density allocated to the project site. A Planned Development Permit and Site Development Permit are also being processed to support the project.

3.1 TRIP GENERATION

The proposed 150,000 SF Regional and Corporate Headquarters facility would generate 1,500 average daily trips (ADT) with 225 (203 inbound / 23 outbound) trips in the AM peak hour and 225 trips (23 inbound / 203 outbound) in the PM peak hour as shown in **Table 3-1**. No trip credit was taken for the existing building since it's been vacant for more than two years.

3.2 TRIP DISTRIBUTION AND ASSIGNMENT

Figure 3-1 shows the project only trip distribution percentages which were derived from a select zone analysis using SANDAG's Series 12 Traffic Model (TAZ 4683). Project only average daily traffic volumes found in **Figure 3-1** are based on the daily new traffic generation from **Table 3-1** and distribution of project only traffic. This traffic model was adjusted to include land uses for the proposed project. Due to access points on three different streets (Eastgate Mall, Judicial Dr., and Towne Centre Dr.), the model's distributions on these streets fronting the project were manually adjusted since the traffic model loaded all project trips to Eastgate Mall. Project traffic onto Eastgate Mall would travel 35% to the west and 10% to the east. Approximately 42.5% would travel on Judicial Drive and 34.5% on Towne Centre Drive. The adjustments due to multiple access points can be found in **Appendix A** along with the SANDAG Series 12 Select Zone plot. **Figure 3-2** shows the project's distribution at study intersections. **Figure 3-3** shows the project only AM and PM peak hour traffic volumes.

TABLE 3-1

9455 Towne Centre Drive Project Trip Generation Table

Proposed Project

Use	Amount		Trip	ADT	AM Peak Hour						PM Peak Hour					
					% *	#	In	:	Out	In	Out	% *	#	In	:	Out	In	Out
Corporate Headquarters	150,000	SF	10 /1,000 SF	1,500	15%	225	9	:	1	203	23	15%	225	1	:	9	23	203
Total				1,500		225				203	23		225				23	203

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

KSF = 1,000 Square Feet

FIGURE 3-1

Project Only Traffic Distribution & Average Daily Traffic Volumes

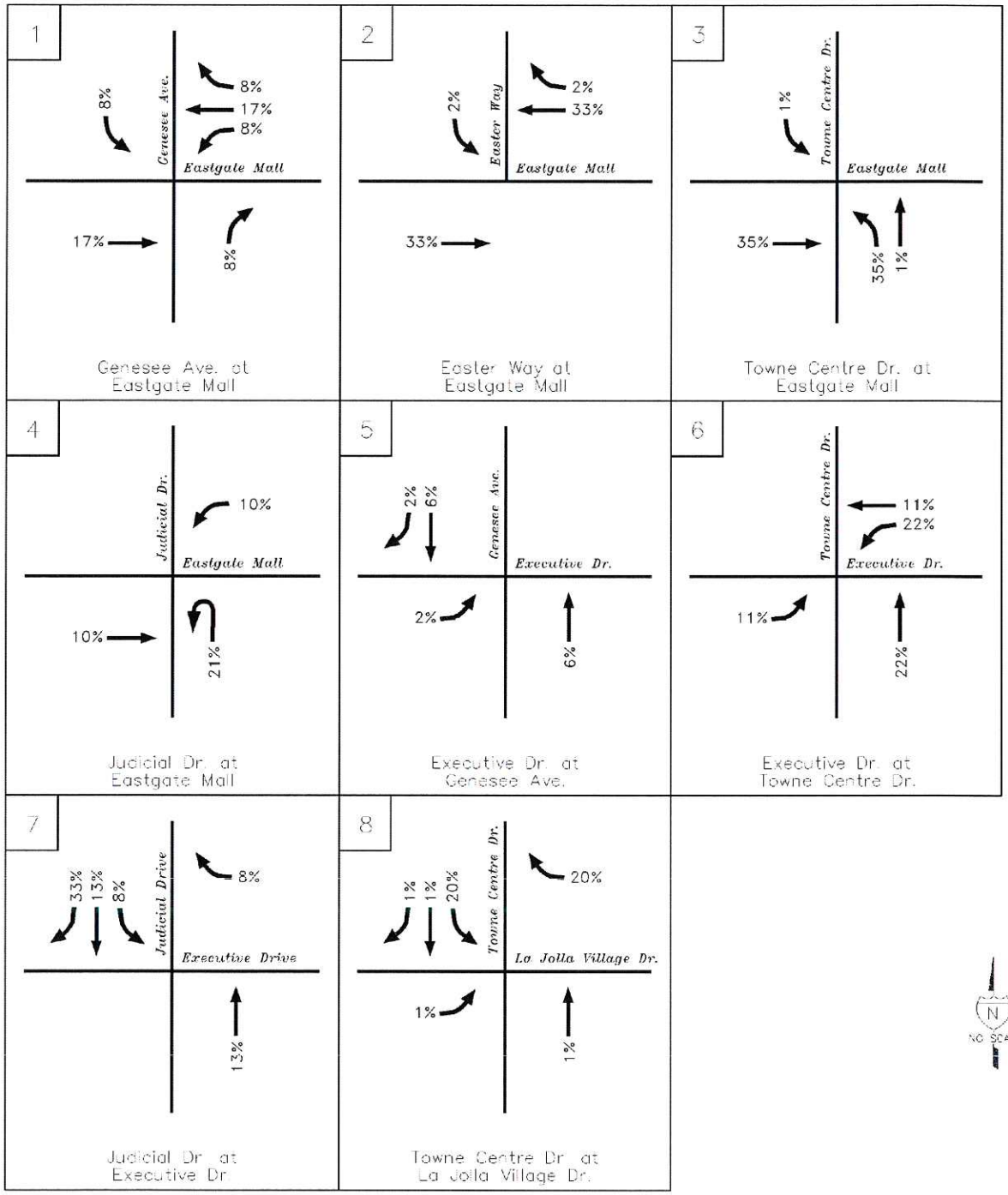

FIGURE 3-2

Project Only Traffic Distribution at Study Intersections

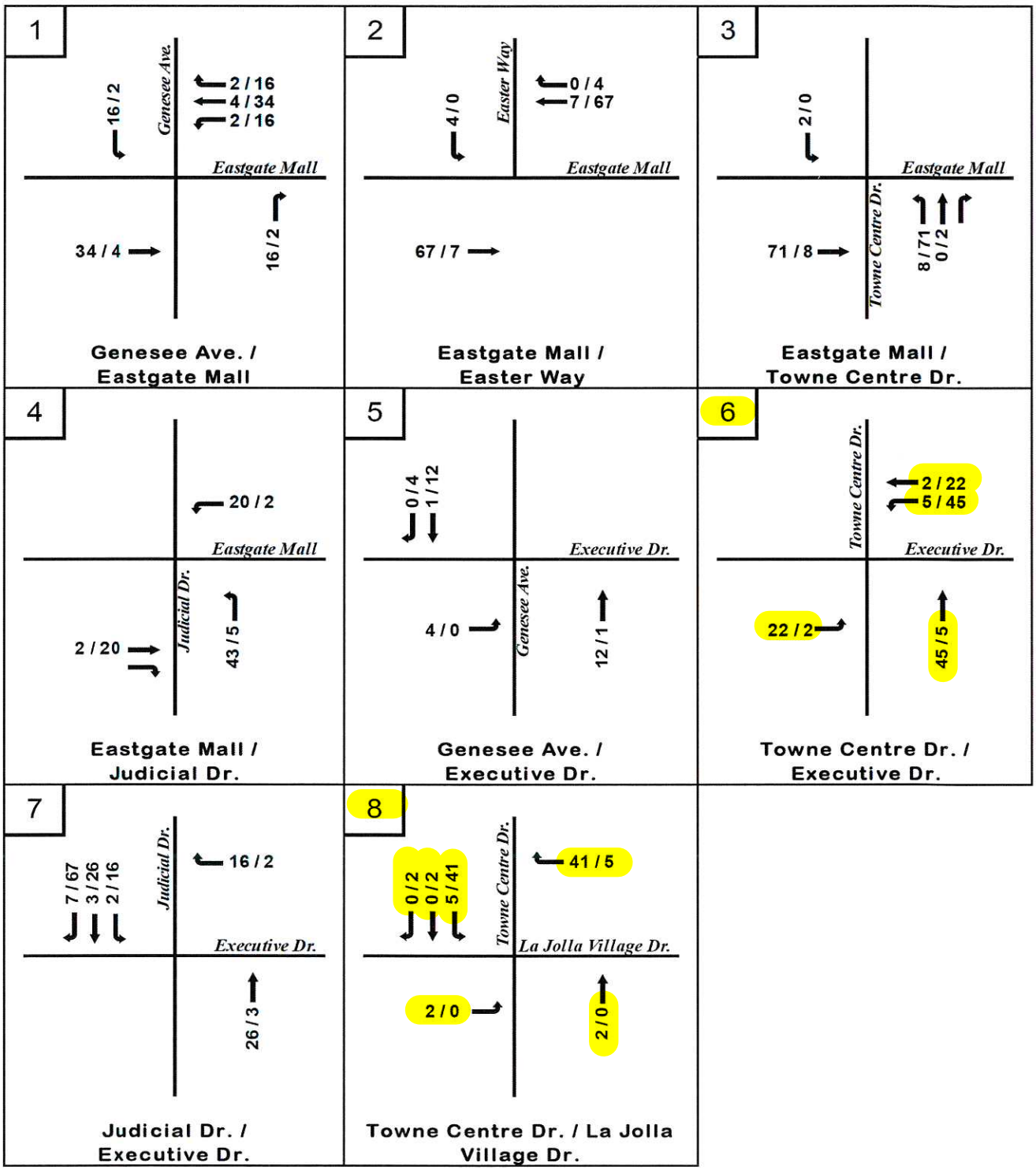

FIGURE 3-3

Project Only AM / PM Peak Hour Traffic

TRAFFIC IMPACT ANALYSIS

For

9514 TOWNE CENTRE DRIVE

Prepared for

THE CITY OF SAN DIEGO

and

Coast Income Properties

SUBMITTAL DRAFT: August 13, 2010

TRAFFIC PLANNING & ENGINEERING, MARKETING & PROJECT SUPPORT
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FIGURE 2-3

Study Area and Intersection Key

PROPOSED PROJECT

The project evaluated in this study proposes a development of 100,000 square feet of commercial office.

3.1 TRIP GENERATION

A trip generation table for the project was developed as shown in **Table 3-1**. As shown, the proposed project would generate 1,688 average daily trips (ADT). Existing entitlement includes 40,251 square feet of research and development which generates 322 ADT. After taking credit for the existing entitlement, the NET NEW trips for the development are **1,366** ADT with **168** trips in the AM peak hour and **191** trips in the PM peak hour.

3.2 PROJECT ONLY TRAFFIC

Figure 3-1 shows the project only trip distribution percentages which were derived from SANDAG Series 11 Traffic Model. The traffic model distributed project traffic 18% to the east, 49% to the west, 2% to the north, and 31% to the south. **Figure 3-2** shows the project only average daily traffic volumes which are based on the daily new traffic generation from **Table 3-1** and the distribution of project only traffic from **Figure 3-1**.

Figure 3-3 shows the AM/PM peak hour project only traffic volumes.

TABLE 3-1

Project Trip Generation

Use	Amount	Trip		ADT	AM Peak Hour						PM Peak Hour					
					% *	#	In	:	Out	In	Out	% *	#	In	:	Out	In	Out
Commercial Office	100,000 SF	Log Formula		1,688	13%	219	9	:	1	197	22	14%	236	2	:	8	47	189
Existing Entitlement per City Calculations	40,251 SF	8	/KSF	322	16%	52	9	:	1	46	5	14%	45	1	:	9	5	41
NET NEW TRIPS				1,366		168				151	17		191				43	148

Notes:

* = Source: City of San Diego Trip Generation Manual, May 2003

Log Formula: Ln(T) = 0.756Ln(x)+3.95

KSF = 1,000 square feet

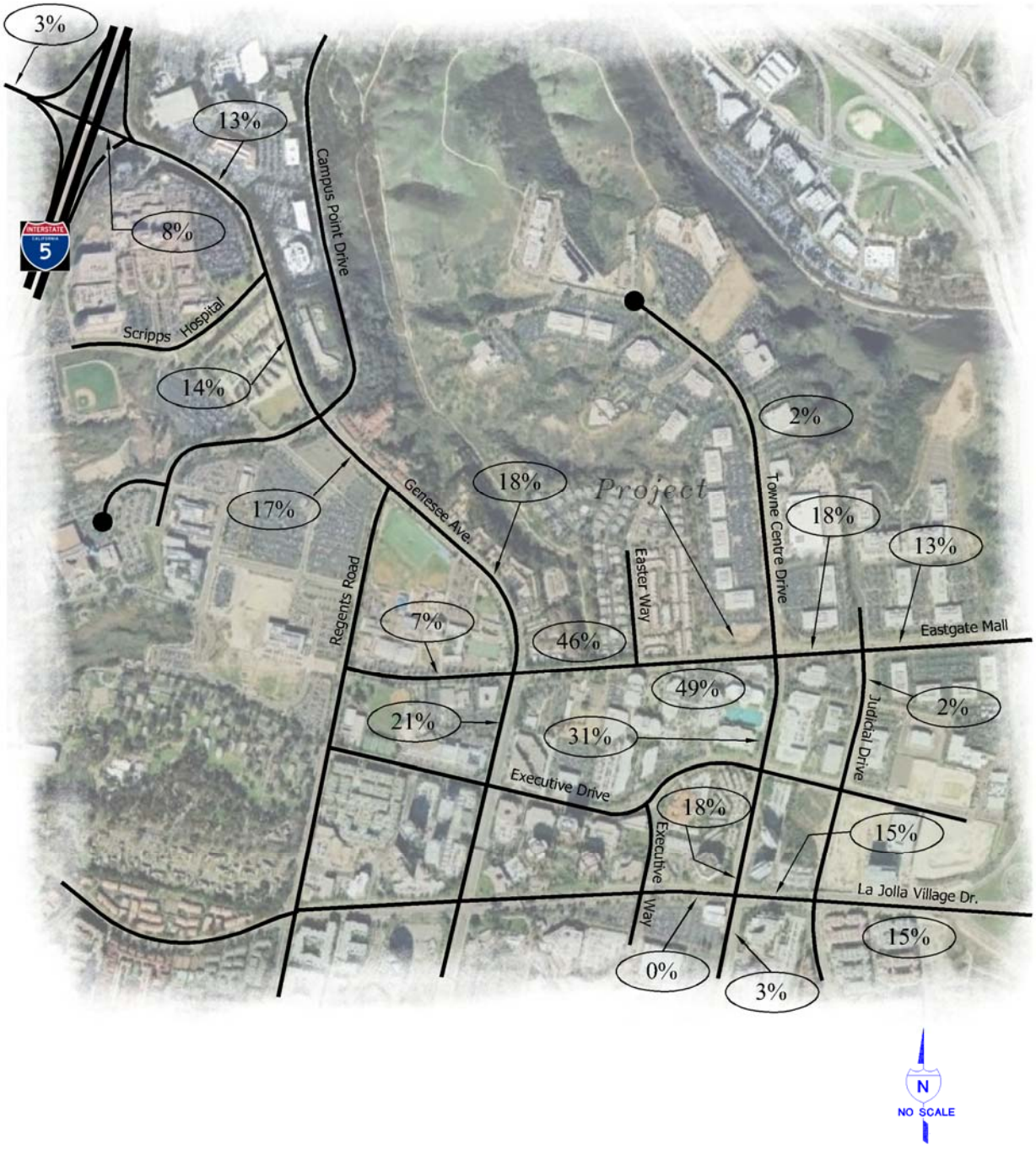


FIGURE 3-1

Project Only Traffic Distribution

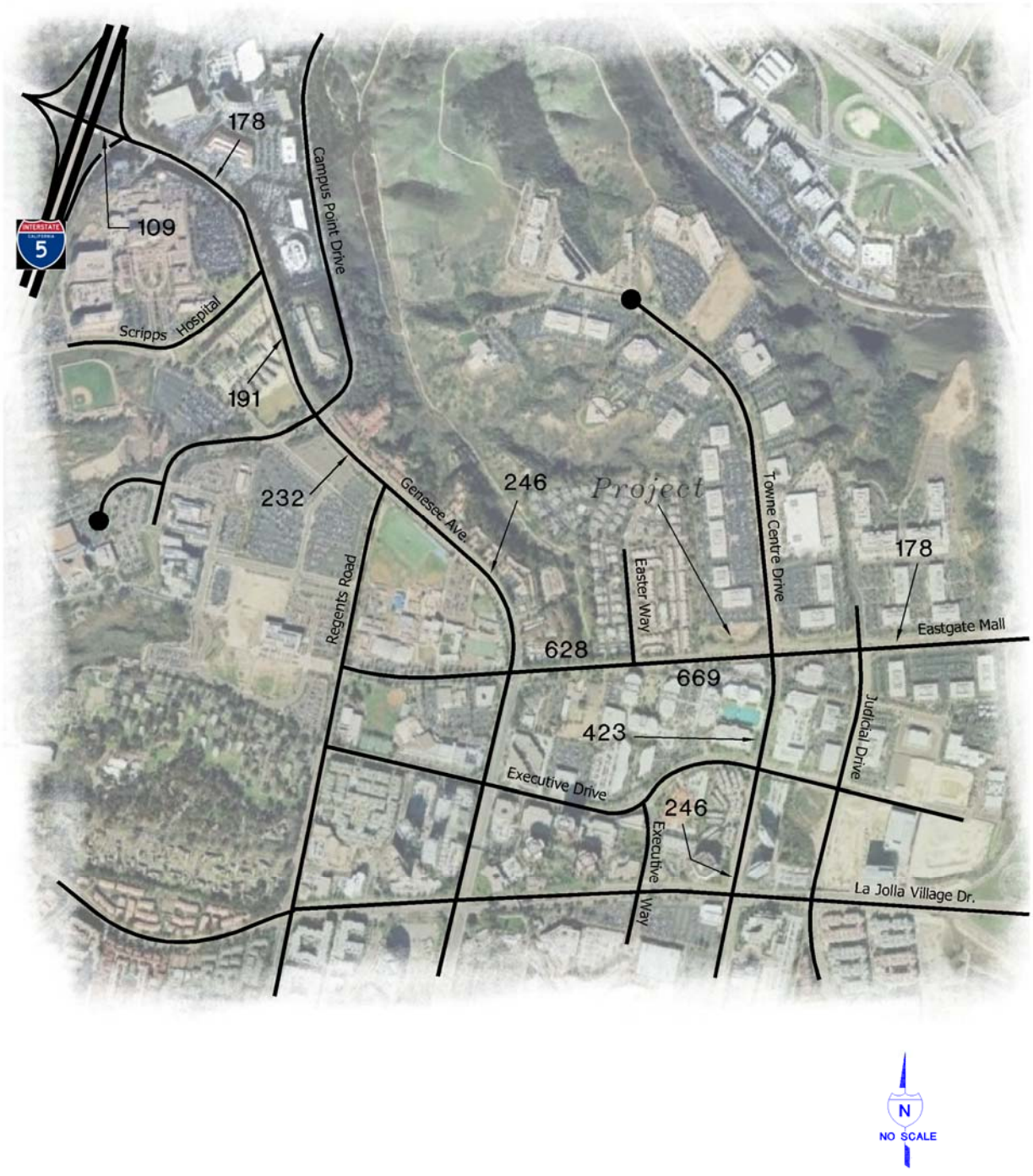


FIGURE 3-2

Project Only Average Daily Traffic

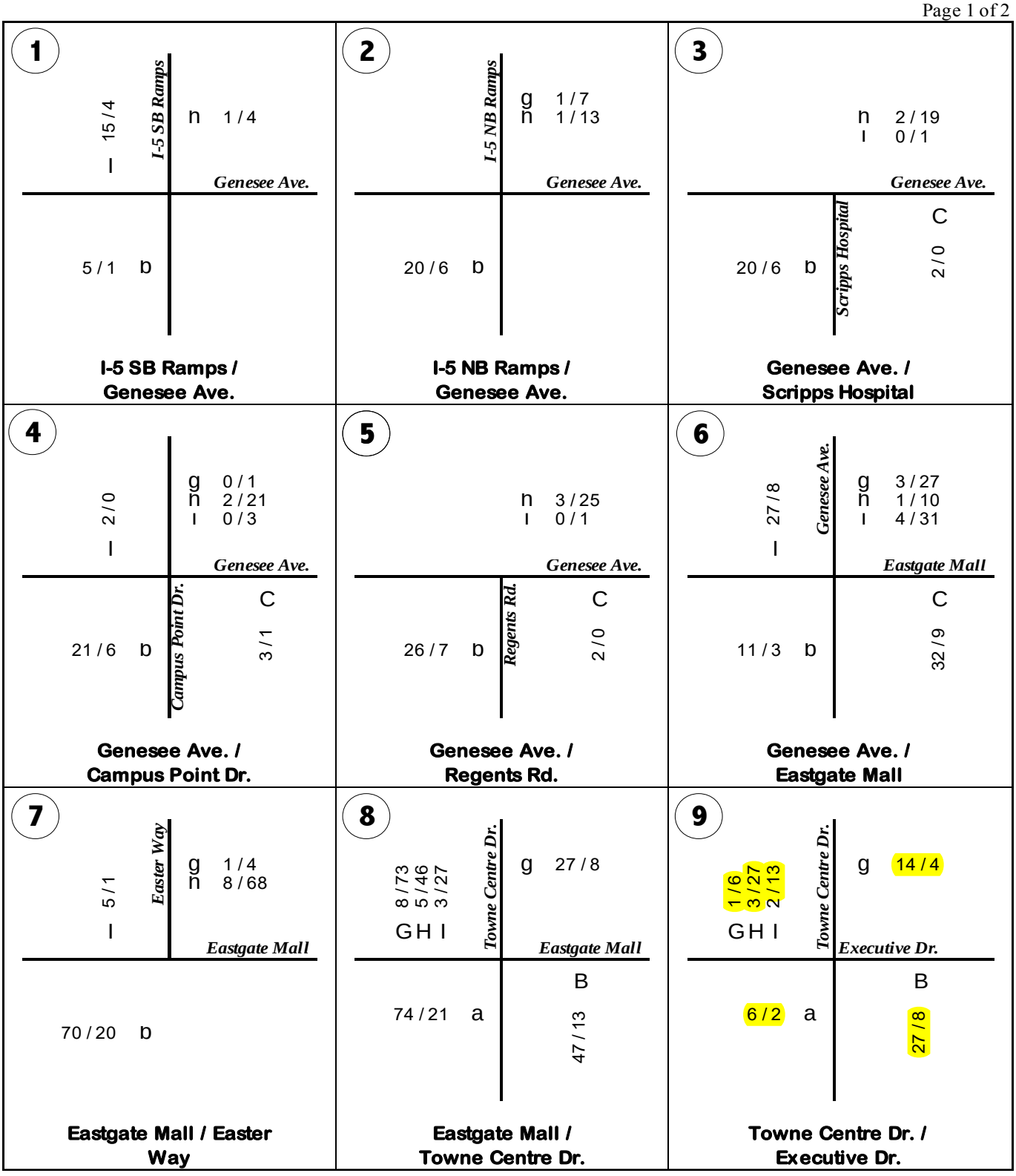


FIGURE 3-3

Project Only AM / PM Peak Hour Traffic

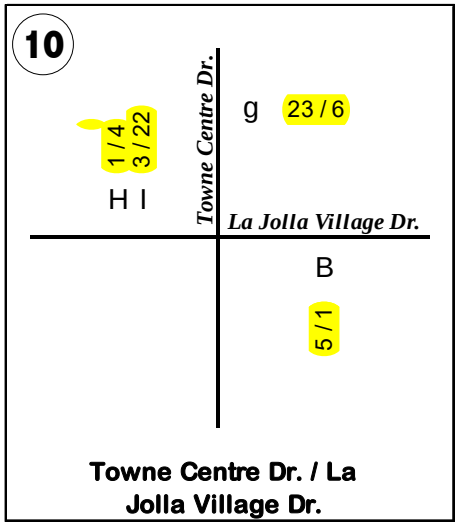


FIGURE 3-3

Project Only AM / PM Peak Hour Traffic

TABLE 8–1
PROJECT TRIP GENERATION

Land Use & Size	Daily Trip Ends (ADT) [a]		AM Peak Hour					PM Peak Hour				
	Rate	Volume	% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
					In	Out	Total			In	Out	Total
Scientific Research and Development *360,000 SF*	*Trip Rate: 8 / KSF [b]*	2,880	16%	90:10	415	46	461	14%	10:90	40	363	403
Office *40,000 SF*	*Trip Rate: Ln Formula [c]*	845	13%	90:10	99	11	110	14%	20:80	24	94	118
Hotel *200 rooms*	*Trip Rate: 10 / Room [d]*	2,000	6%	60:40	72	48	120	8%	60:40	96	64	160
	Subtotal	*5,725*			*586*	*105*	*691*			*160*	*521*	*681*
	MXD Credit [e] (13% ADT, 10% AM, 13% PM)	*744*			*59*	*11*	*70*			*21*	*68*	*89*
	Total Primary Trips	***4,981***			***527***	***94***	***621***			***139***	***453***	***592***

Footnotes:

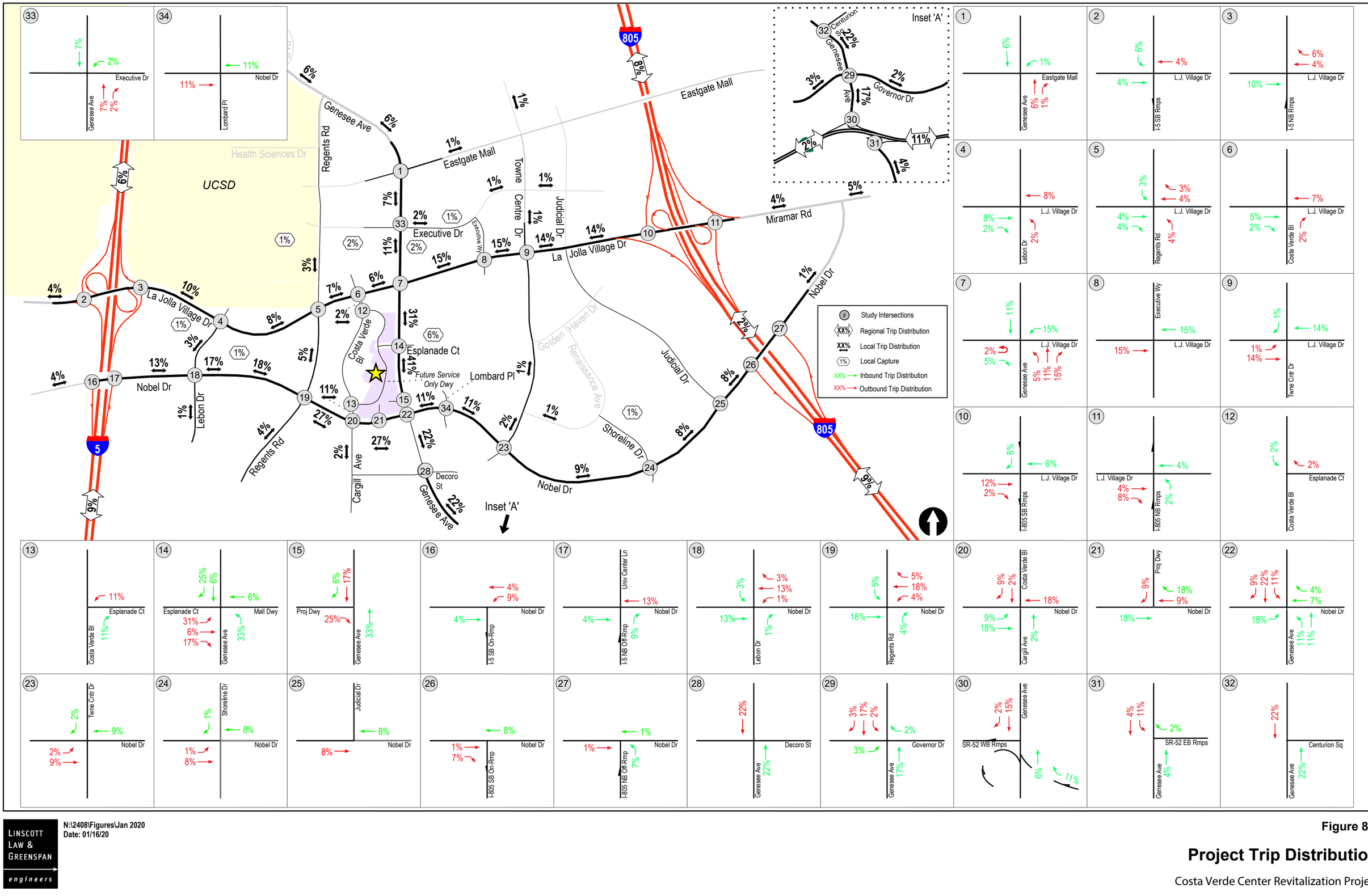
a. Trip-ends are one-way traffic movements, either entering or leaving.

b. Per the City's Trip Generation Manual, the scientific research and development trip rate of 8 weekday trips/ KSF was used.

c. Per the City's Trip Generation Manual, the commercial office ln formula of Ln(T) = 0.756 Ln(x) + 3.95 was used, where X = office KSF and T = total trips.

d. Per the City's Trip Generation Manual, the hotel trip rate of 10 weekday trips/ room was used.

e. Per SANDAG MXD Model for the project site, 13% ADT, 10% AM and 13% PM credits were taken as shown in *Appendix G*.



LINSCOTT LAW & GREENSPAN engineers

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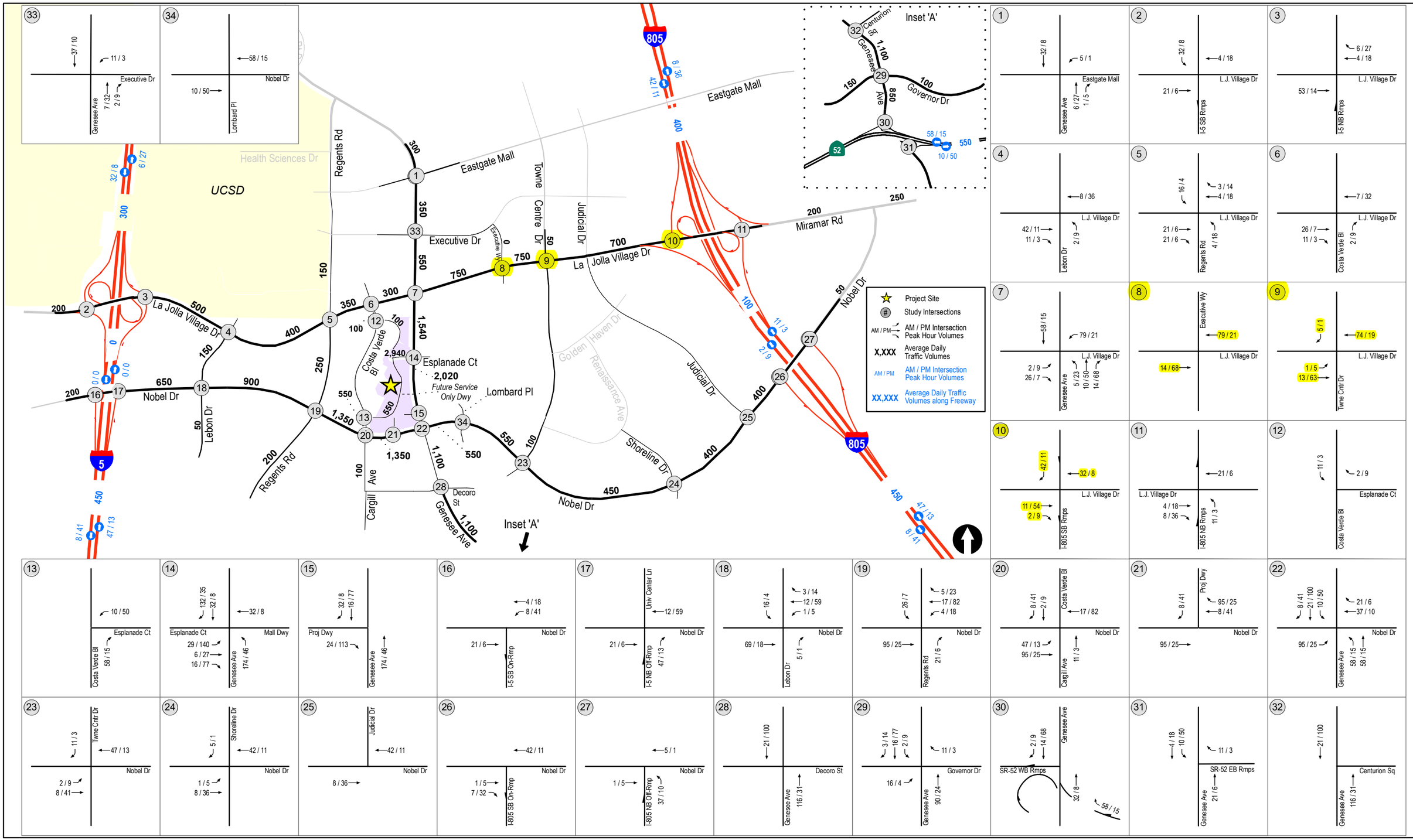
Date: 01/16/20

Figure 8-1

Project Trip Distribution

Costa Verde Center Revitalization Project



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LINSCOTT LAW & GREENSPAN engineers

Figure 8-2

Project Traffic Volumes

Costa Verde Center Revitalization Project

FINAL Traffic Impact Analysis

Monte Verde

Prepared by:
Kimley-Horn and Associates
517 Fourth Avenue, Suite 301
San Diego, CA 92101

Prepared for:
Costa Verde Hotel, LLC
8530 Costa Verde Blvd. - Office
San Diego, CA 92122

December 6, 2004

KHA NO. 095178004

1.0 INTRODUCTION

This study evaluates the traffic-related impacts associated with the *Monte Verde* multi-family residential development proposal, located within the Costa Verde Specific Plan area, in the University City community of the City of San Diego. **Figure 1-1** depicts the location of the project in a regional context. The proposed project is situated on the block bounded by La Jolla Village Drive on the north, Private Drive A on the south, Costa Verde Boulevard on the west, and Genesee Avenue on the east.

Project Description

The project involves a shift in land use type and intensity within the Costa Verde Specific Plan area. This shift will be accomplished without increasing the traffic generation above the previously approved level. The City of San Diego adopted the Costa Verde Specific Plan in 1986. The approved Specific Plan included the following land uses:

- 178,000 square feet of retail development;
- 2,600 dwelling units (these dwelling units are calculated by the average daily trips for each unit within the Costa Verde Specific Plan); and
- A hotel with 400 rooms.

Of the uses authorized in the 1986 Specific Plan, the following are neither occupied nor under construction: (1) 420 dwelling units; and (2) 400-room hotel. The retail component of the Specific Plan has been fully constructed and is open for business. Regency Center operates the retail center. Of the 2,600 dwelling units approved for the residential portion of the Specific Plan, 2,180 dwelling units have been constructed and occupied or are currently under construction, resulting in the potential for construction of an additional 420 dwelling units pursuant to the Costa Verde Specific Plan. **Table 1-1** summarizes the status of projects built within the Costa Verde Specific Plan and **Figure 1-2** shows the projects located within the Costa Verde Specific Plan. The lots that are owned by the client are highlighted below in bold text.

TABLE 1-1
COSTA VERDE DEVELOPMENT SUMMARY

Lot(s)	Description	Intensity	Status
1, 2	North Village	651 DUs	Constructed and Occupied
3, 4, 5	South Village	606 DUs	Constructed and Occupied
6, 7, 8	La Jolla Village Towers	333 EDU	Constructed and Occupied
9	Open Space/Park	–	Under Construction
10, 11	The Towers at Costa Verde	590 DUs	Permitted and Being Constructed
12	Hotel	400 Rooms	Not Constructed
13, 14	Costa Verde Retail	178 KSF	Constructed and Occupied
–	Remaining Dwelling Units	420	Not Constructed

TABLE 4-1
SUMMARY OF PROJECT TRAFFIC GENERATION

APPROVED PROJECT WEEKDAY TRAFFIC GENERATION

COSTA VERDE LAND USE*	STATUS	INTENSITY	TRIP GENERATION RATES*	DAILY TRIPS	AM PEAK HOUR TOTAL	AM PEAK HOUR IN	AM PEAK HOUR OUT	PM PEAK HOUR TOTAL	PM PEAK HOUR IN	PM PEAK HOUR OUT
Costa Verde (South Village)	Built	606 DU's	6.0 / DU	3,636	291	58	233	327	229	98
Costa Verde (North Village)	Built	651 DU's	6.0 / DU	3,906	312	62	250	352	246	105
Towers at Costa Verde	Under Construction	590 DU's	6.0 / DU	3,540	283	57	227	319	223	96
Costa Verde Hotel	Not Built	*400 Rooms*	*10.0 / ROOM*	*4,000*	*240*	*144*	*96*	*320*	*192*	*128*
*Remaing Dwelling Units***	Not Built	*420 DU's*	*6.0 / DU*	*2,520*	*202*	*40*	*161*	*227*	*159*	*68*
Total				**17,602**	**1,328**	**362**	**967**	**1,544**	**1,049**	**495**
Subtotal: Costa Verde Hotel + Remaining Dwelling Units + Units Under Construction				**10,060**	**725**	**241**	**484**	**865**	**574**	**292**
Subtotal: Costa Verde Hotel + Remaining Dwelling Units				**6,520**	**442**	**184**	**257**	**547**	**351**	**196**

PROPOSED PROJECT WEEKDAY TRAFFIC GENERATION

COSTA VERDE LAND USE	STATUS	INTENSITY	TRIP GENERATION RATES*	DAILY TRIPS	AM PEAK HOUR TOTAL	AM PEAK HOUR IN	AM PEAK HOUR OUT	PM PEAK HOUR TOTAL	PM PEAK HOUR IN	PM PEAK HOUR OUT
Costa Verde Condos and Apartments	Not Built	1,084 DU's	6.0 / DU	6,504	520	104	416	585	410	176
Costa Verde (South Village)	Built	606 DU's	6.0 / DU	3,636	291	58	233	327	229	98
Costa Verde (North Village)	Built	651 DU's	6.0 / DU	3,906	312	62	250	352	246	105
Towers at Costa Verde	Under Construction	590 DU's	6.0 / DU	3,540	283	57	227	319	223	96
Total				**17,586**	**1,407**	**281**	**1,126**	**1,583**	**1,108**	**475**

* Costa Verde Specific Plan allows for the development of 2,600 dwelling units and a 400 room hotel. The Hyatt Senior Tower has been allocated 332 equivalent dwelling units.

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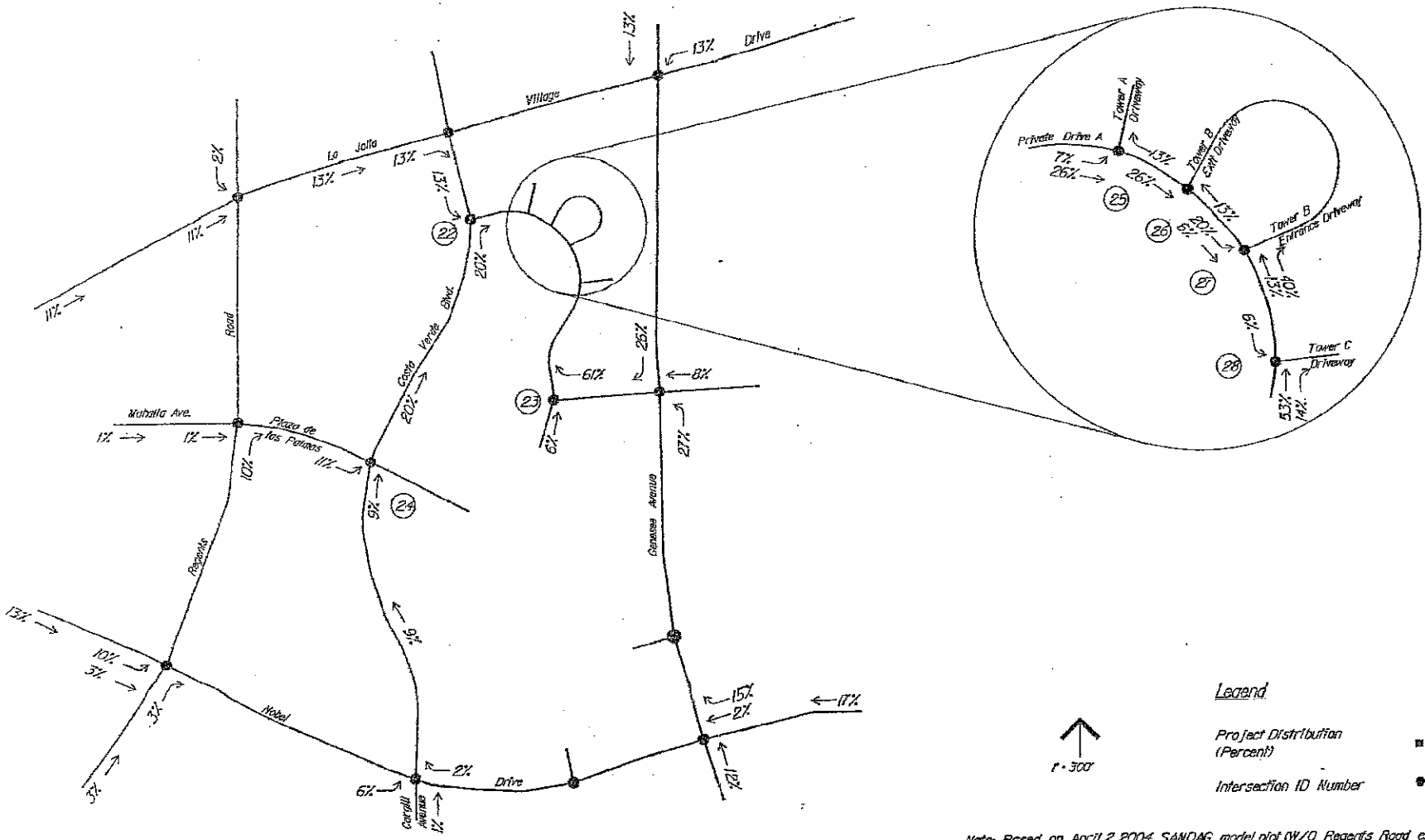
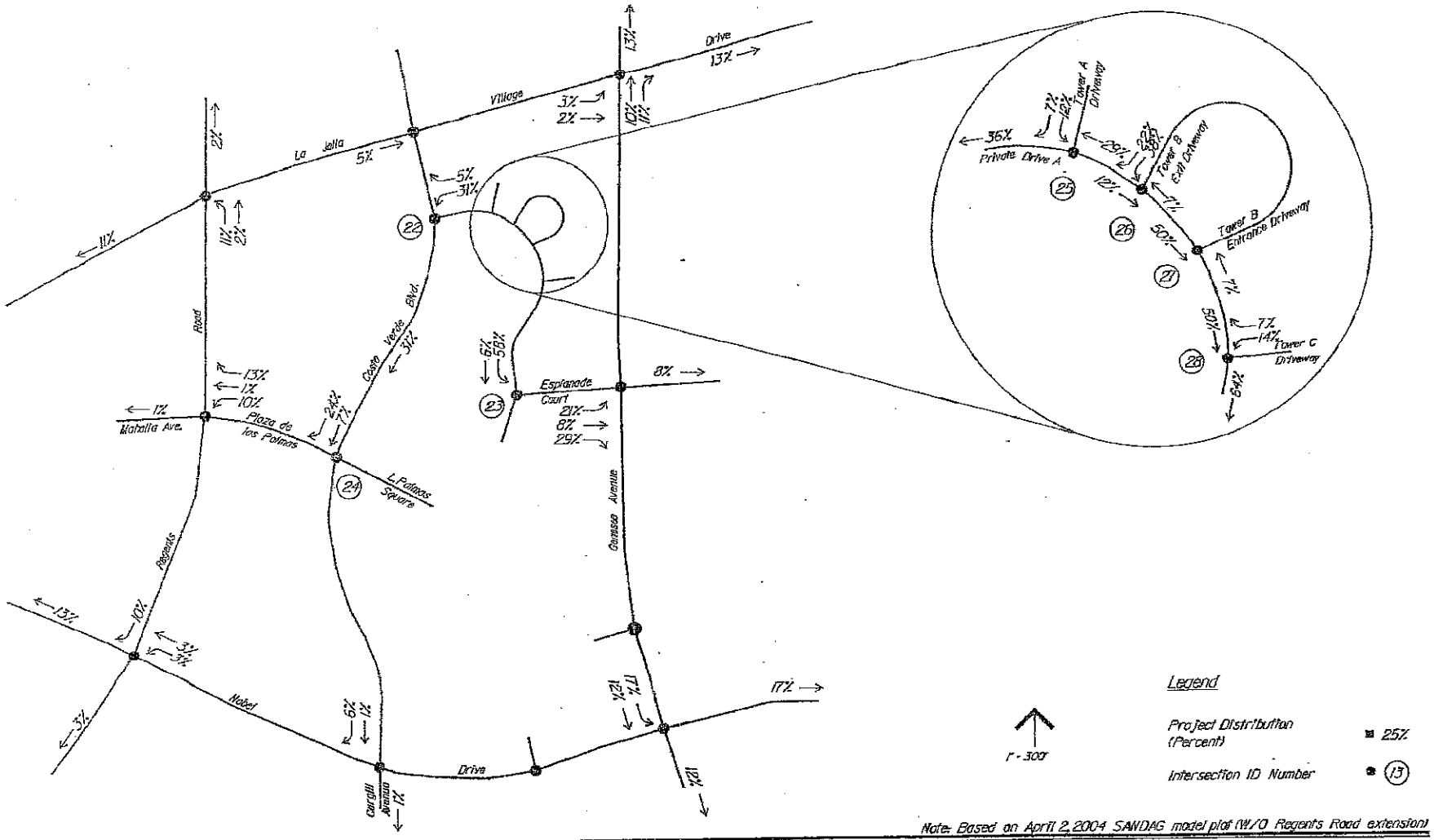


Note: Based on April 2, 2004 SANDAG model plot (W/O Regents Road extension)

Figure 4-1.1

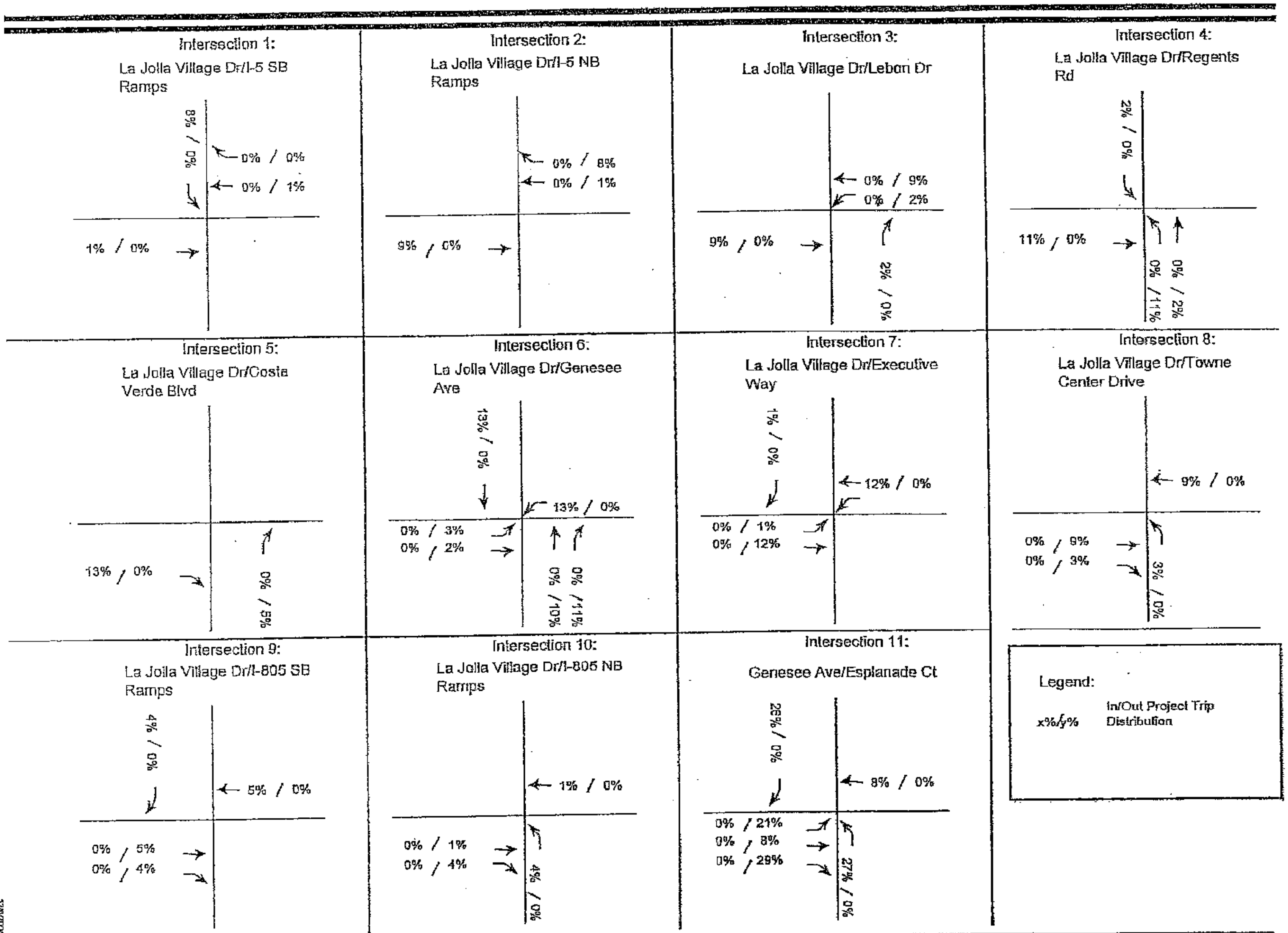
Distribution of Monte Verde Project Traffic (Entering)



Note: Based on April 2, 2004 SANDAG model plot (W/O Regents Road extension)

Figure 4-1.2

Distribution of Monte Verde Project Traffic (Exiting)

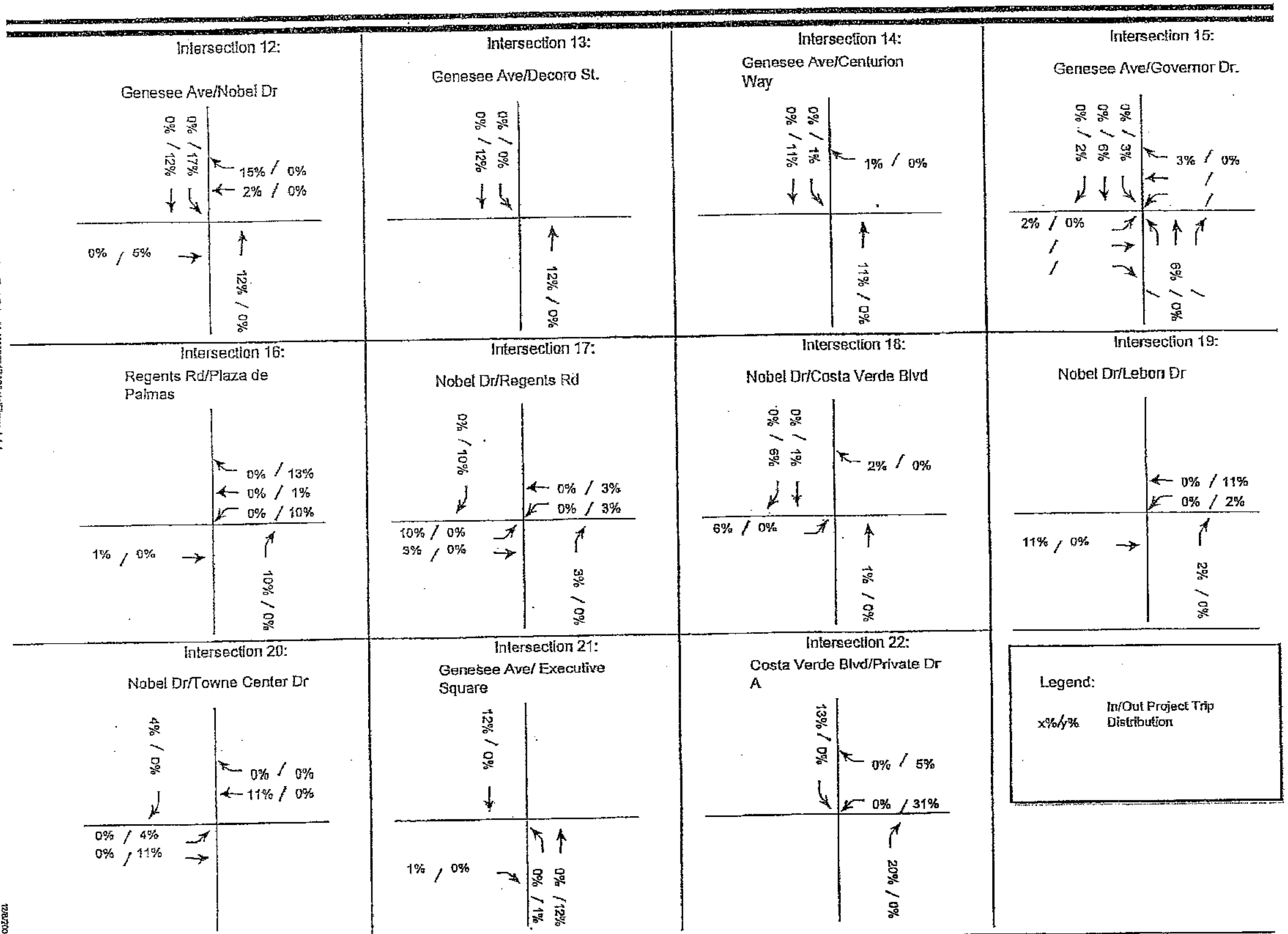


Project Trip Distribution - Study Intersections

Kimley-Horn and Associates, Inc.

Monte Verde

Figure 4-1.3

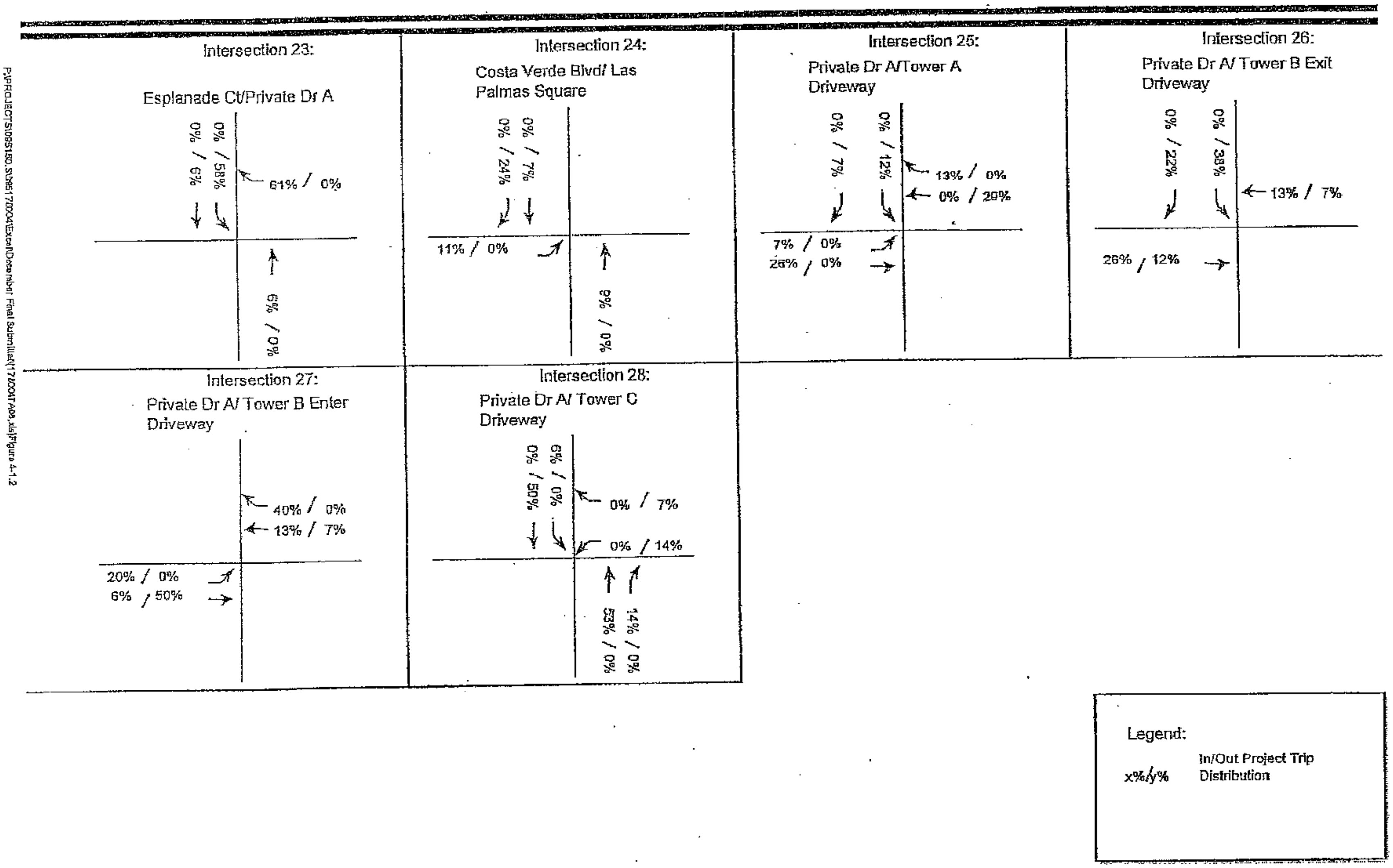


Project Trip Distribution - Study Intersections

Kimley-Horn and Associates, Inc.

Monte Verde

Figure 4-1.4

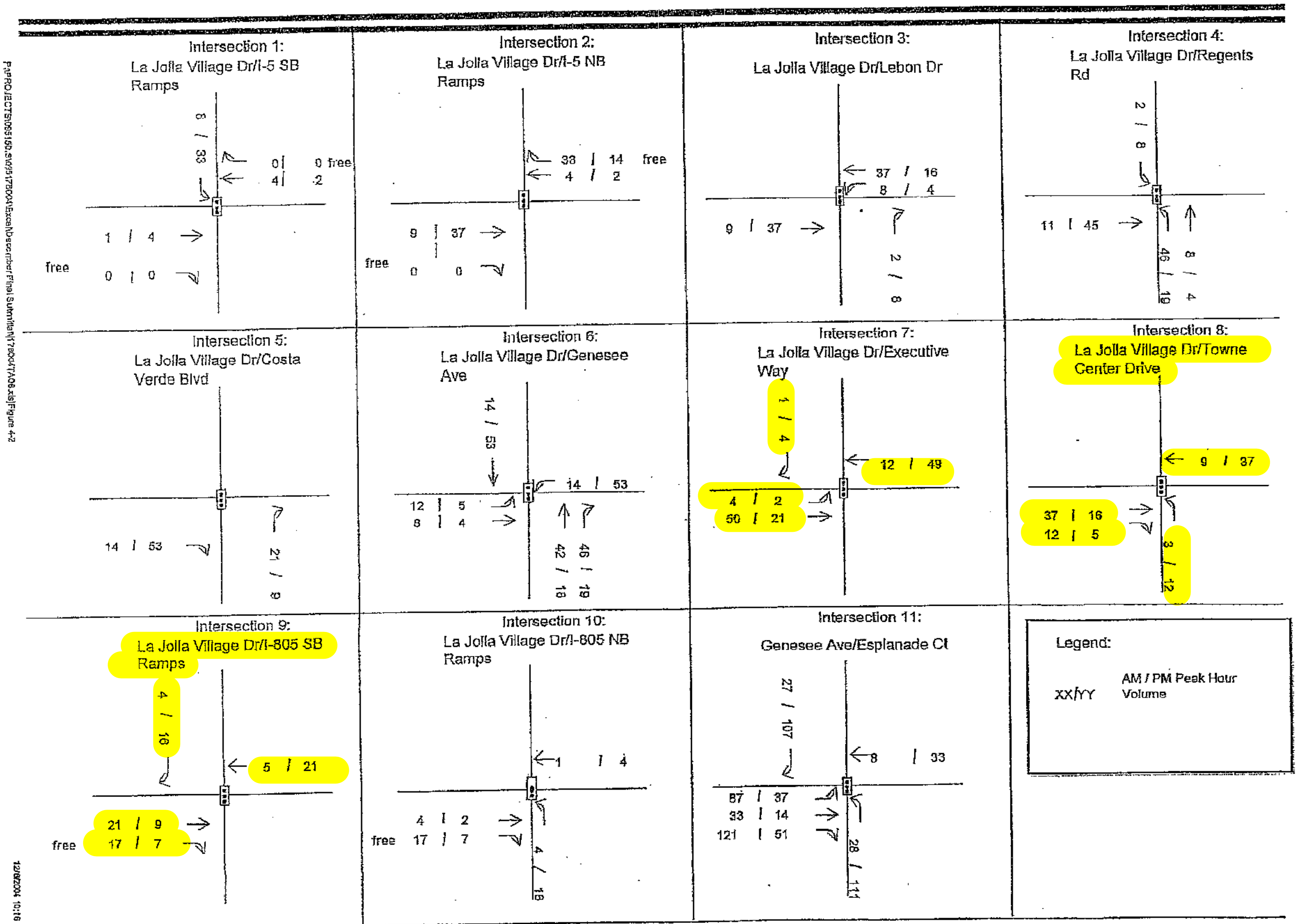


Project Trip Distribution - Study Intersections

Monte Verde

Figure 4-1.5

Kimley-Horn and Associates, Inc.

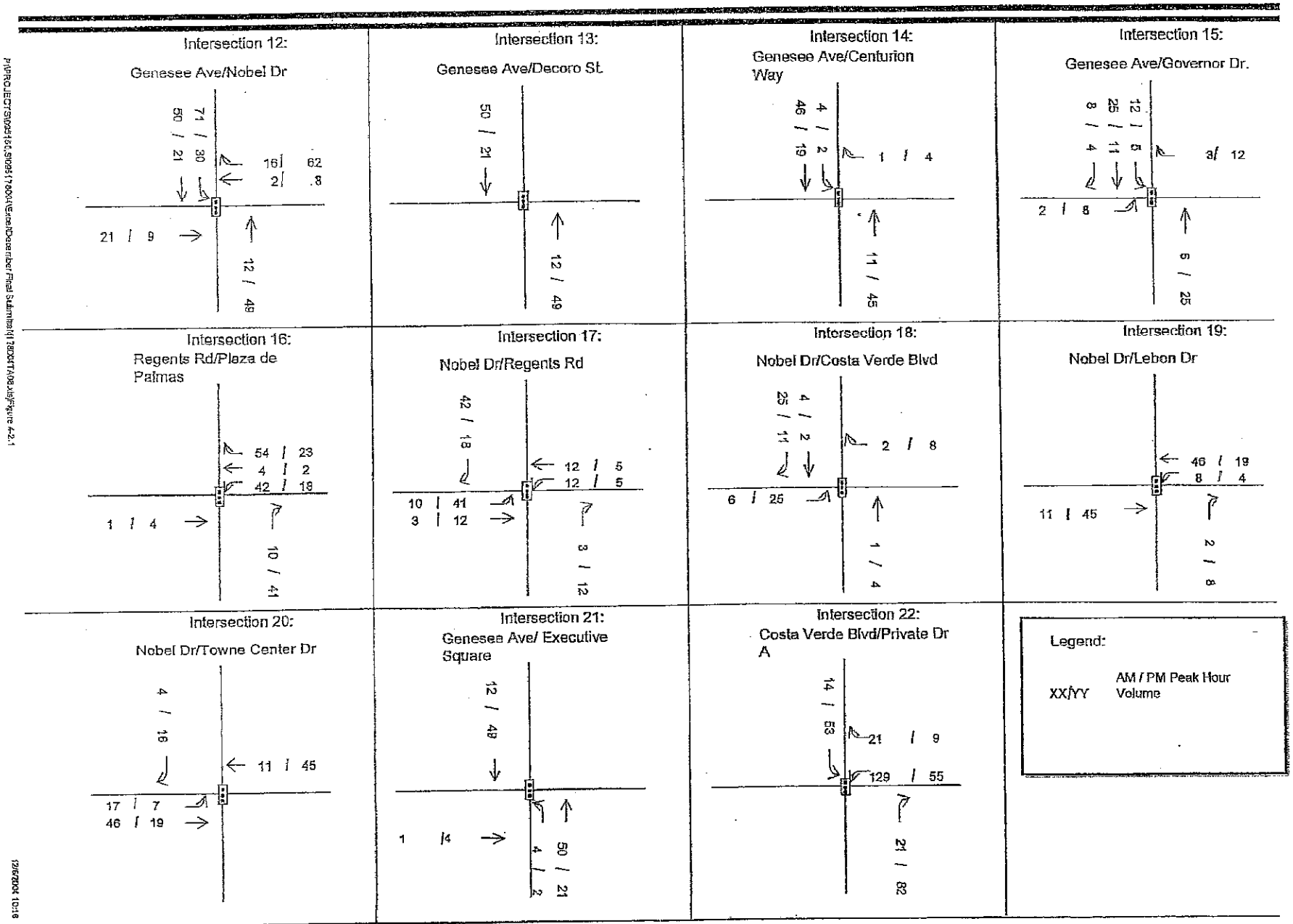


Monte Verde Project Trip Assignment

Kimley-Horn and Associates, Inc.

Monte Verde

Figure 4-2

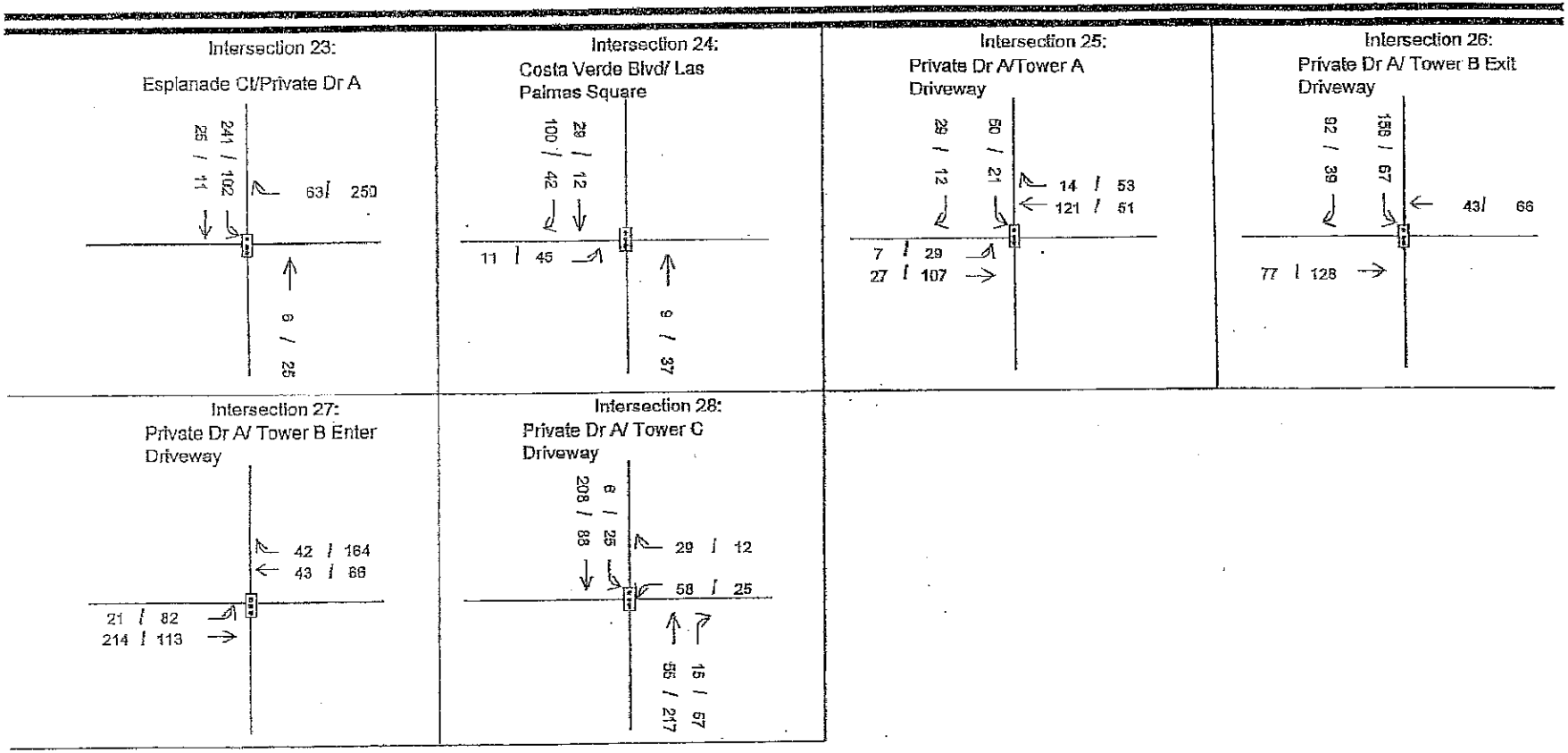


Monte Verde Project Trip Assignment

Kimley-Horn and Associates, Inc.

Monte Verde

Figure 4-2.1



Legend:

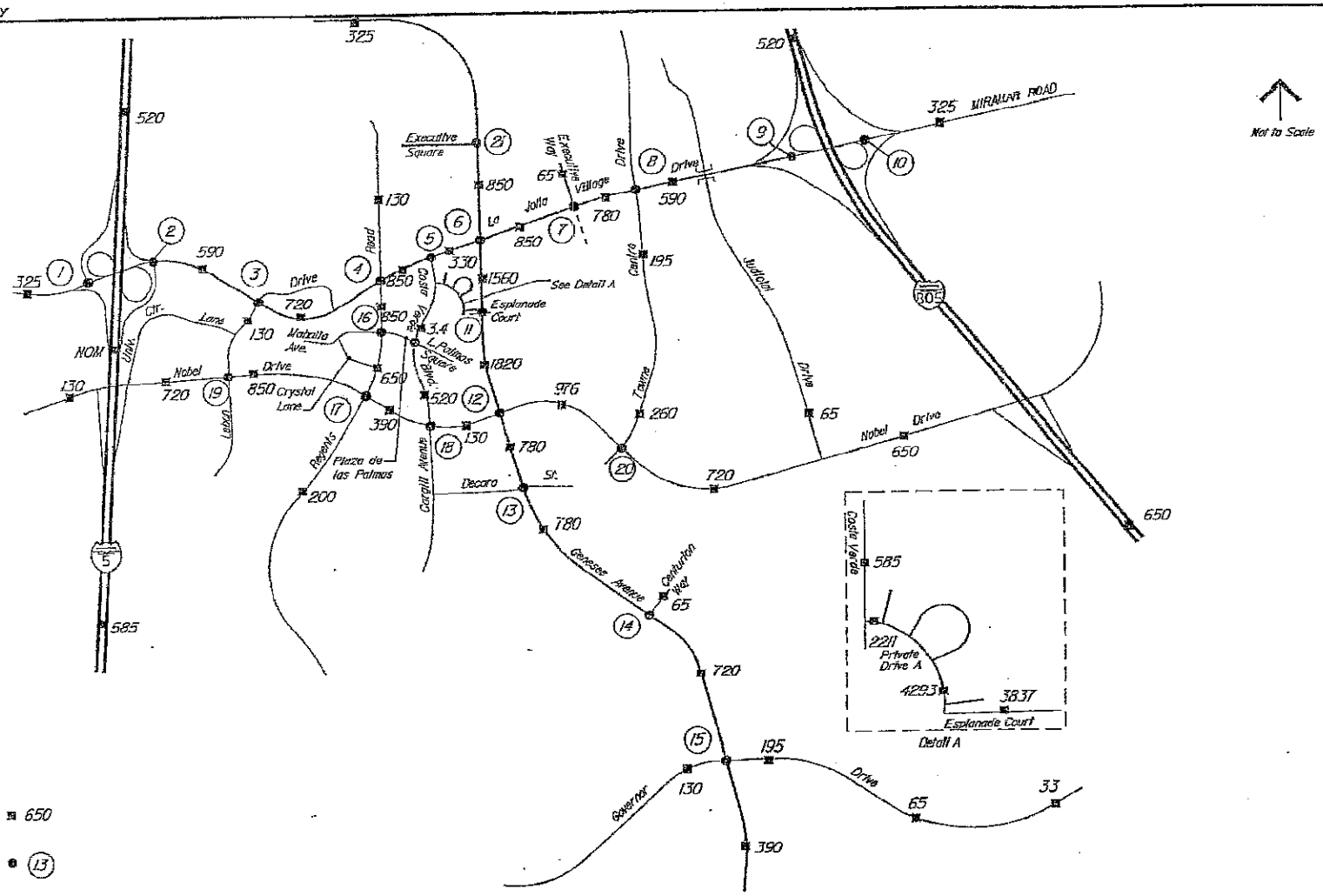
XX/YY — AM / PM Peak Hour Volume

Monte Verde Project Trip Assignment

Kimley-Horn and Associates, Inc.

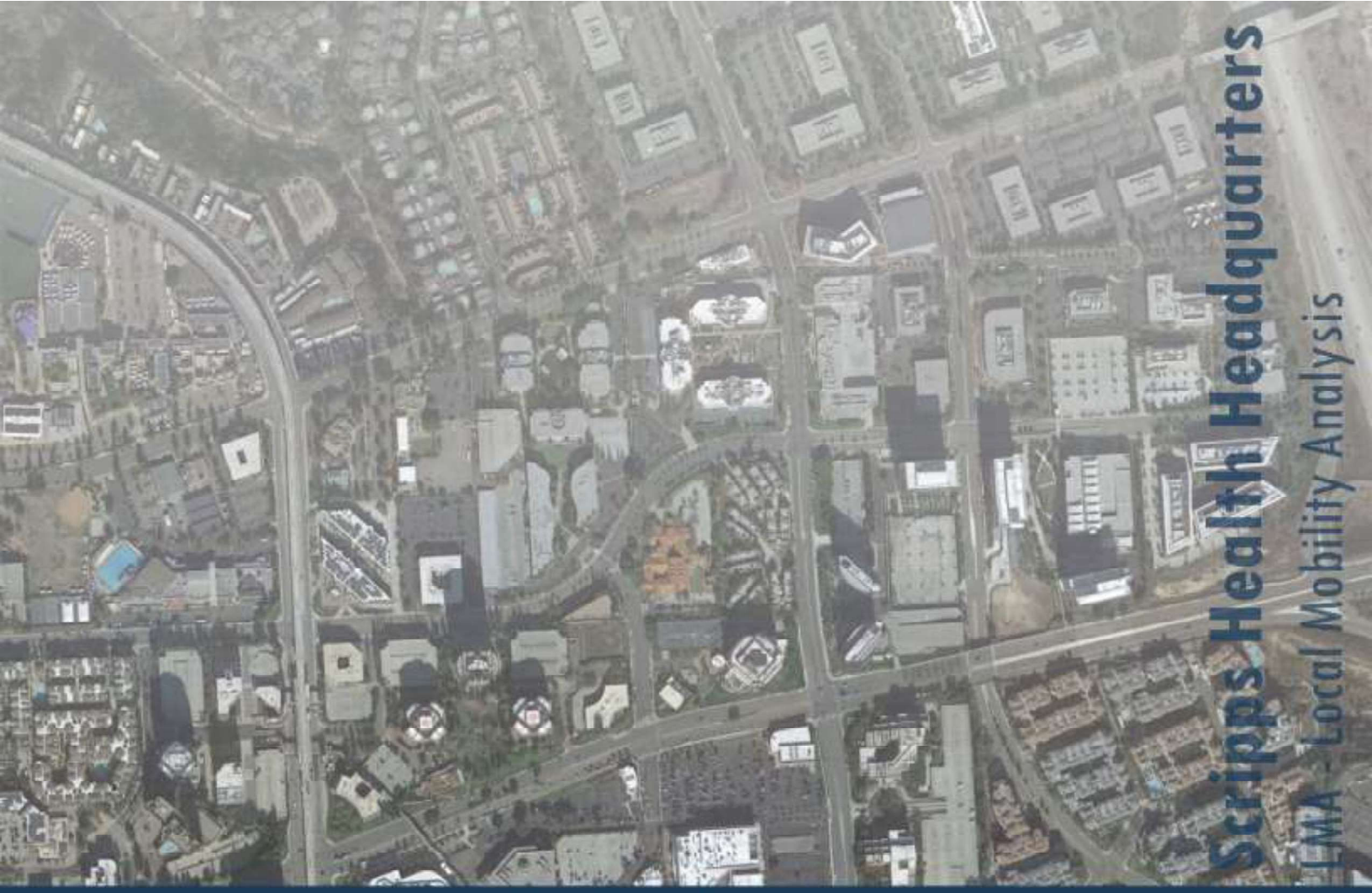
Monte Verde

Figure 4-2.2



Note: Based on April 2,2004 SANDAG model plot (W/O Regents Road extension)

Figure 4-3



Scripps Health Headquarters

LMA - Local Mobility Analysis

Prepared For: The City of San Diego and Gensler

Project Number: 001721
Date: May 23, 2022
PTS# 686158

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2.0 PROJECT DESCRIPTION

2.1 Existing Setting

The Project is located on a 3.79-acre lot consisting of two parcels that are located at 4555 Executive Drive and 9291 Executive Way in the University Community Planning Area. The project site is currently developed with one (1) building supporting the San Diego Braille Institute consisting of a building area of 30,221 SF. The Project is bound to the north by Executive Drive, to the west by Executive Way, to the south by an Embassy Suites parking structure, and to the east by a residential complex known as Devonshire Woods.

Regional access to the site is provided by the junctions of Interstate 5 with Genesee Avenue (1.5 miles path-of-travel-distance away from the project site), the junction of Interstate 805 with La Jolla Village Drive (0.6 miles path-of-travel-distance away from the project site), and the junction of Interstate 5 with La Jolla Village Drive (1.2 miles path-of-travel- distance away from the project site). Direct access to the project site would occur along Executive Drive and Executive Way.

The site is in the RS-1-14 base zone within the University Community Planning Area. Additionally, the Nexus Technology Center Specific Plan (NTCSP, 1985), overlayed the site with the SR zone, which is now the IP-1-1 base zone.

2.2 Proposed Project

The Project proposes to redevelop the site through the demolition of the Braille Institute building consisting of approximately 30,221 SF of Educational uses and the construction of one (1) five-story 131,183 SF corporate headquarters/single-tenant building with a 25,522 SF basement (non-

trip generating space that includes 10,000 SF of amenities such as a 2,005 SF fitness space, and a 500 SF locker/shower/toilet space, and 15,522 SF of parking area for 33 vehicles). The project will also construct a four-story parking structure of 131,509 SF of area. Discretionary actions associated with the proposed Project consist of a Neighborhood Development Permit (NDP). The anticipated Opening Day of the project is estimated to be during Year 2023.

Figure 2-1 includes the project site plan.

2.3 Trip Generation

Trip Generation for the proposed Project is presented below. Using the City of San Diego Trip Generation Manual (May 2003) trip generation rates, the total Project trip generation has been calculated using driveway rates as shown below and considers the existing site buildings that are proposed to be demolished and proposed to remain. To calculate the trip generation for the Existing uses, driveway counts were collected at the existing driveways on Thursday, February 18th, 2021 (included in **Appendix D**). The driveway counts result in the existing uses generating 19 average daily trips (ADT) with 5 (4 In / 1 Out) AM peak hour trips and 2 (0 In / 2 Out) PM peak hour trips. The Project is anticipated to generate approximately 1,312 daily unadjusted driveway trips with 197 (177 In / 20 Out) AM peak hour trips and 197 (20 In / 177 Out) PM peak hour trips. After transit reductions are applied to the trip generation, the Project is calculated to generate a net increase of approximately 1,240 ADT with 162 (146 In / 16 Out) AM peak hour trips and 165 (17 In / 148 Out) PM peak hour trips.

Table 2-1 includes the project trip generation.

Table 2-1: Project Trip Generation

Land Use	Intensity	Rate*	ADT	AM						PM					
				Peak%*	Vol.	In %	Out%	In	Out	Peak%*	Vol.	In %	Out%	In	Out
Existing Land Uses															
****Braille Institute	30.221 KSF	-	19	-	5	- : -		4	1	-	2	- : -		0	2
Existing Sub-Total			19		5			4	1		2			0	2
Proposed Land Uses															
Corporate Headquarters/ Single Tenant Office	131.183 KSF	10 /KSF	1,312	15%	197	90% : 10%		177	20	15%	197	10% : 90%		20	177
***Basement	26,522 KSF	Non-Trip Generating													
Parking Structure	119.500 KSF	Non-Trip Generating													
Proposed Sub-Total			1,312		197			177	20		197			20	177
**Transit Reduction to Proposed Land Uses															
Transit Reduction % (Corporate Headquarters / Single Tenant Office - Employment)			4%		15%			15%	15%		15%			15%	15%
Transit Reduction (Corporate Headquarters / Single Tenant Office - Employment)			52		30			27	3		30			3	27
Proposed Sub-Total With Transit Credit			1,259		167			150	17		167			17	150
Net Increase			1,240		162			146	16		165			17	148

Source:

*Trip Generation rates referenced from the City of San Diego Trip Generation Manual, May 2003

Note:

ADT= Average Daily Trips

KSF = 1,000 Square Feet

**Trip reduction rates based on reduction criteria within City of San Diego Draft Transportation Study Manual (*9/29/2020*)

***Basement space consists of a fitness space (2,005 SF) lockers/showers/toilets (500 SF), and parking area (15,522 SF). The corporate headquarters/single-tenant building contains within its building space a kitchen space (1,198 SF), a coffee bar (250 SF), a servery (658 SF), a dining area (2,260 SF), and a service area (21,497 SF).

****Existing ADT and peak hour volumes have been approximated by conducting driveway counts at the existing driveways on Thursday February 18th, 2021. The referenced values represent the total ADT resulting from the collected traffic count data and the peak hour trips observed during the AM peak hour (8:00 AM - 9:00 AM) and PM peak hour (4:00 PM - 5:00 PM).

4.0 PROJECT STUDY AREA, TRIP DISTRIBUTION, & TRIP ASSIGNMENT

4.1 Project Study Area

Figure 4-1 shows the study area which includes 7 intersections.

4.1.1 Intersections

As shown in the Project trip generation in **Table 2-1**, the Project is calculated to generate a net increase of approximately **1,240** average daily trips (ADT) with **162** (146 In / 16 Out) AM peak hour trips and **165** (17 In / 148 Out) PM peak hour trips.

Consistent with the City's TSM, for projects that generate less than 2,400 daily final driveway trips the typical study intersections are as follows:

- All signalized and unsignalized intersections and project driveways located within a ½-mile path of travel distance measured from the center of the intersection formed by each project driveway AND the project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the intersection.
- All freeway ramp terminal intersections where a project adds 50 or more peak hour final primary (cumulative) (AM or PM) net new trips in either direction must be analyzed regardless of their distance from the project site.

A list of the Project study intersections is included in **Table 4-1**.

As shown in **Figure 4-5**, the Project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the following intersection:

- Executive Way / Project Driveway "A"

The Project will analyze additional intersections that are adjacent to the project site and/or key for the access of Project traffic to the project site and local transportation corridors and are also locally important intersections. These intersections include the following:

- Executive Drive / Executive Way
    - *The intersection is the closest signalized intersection northwest of the project site.*
- Executive Way / La Jolla Village Drive
    - *The intersection is the closest signalized intersection southwest of the project site.*
- Executive Drive / Project Driveway "B"
    - *This intersection is an access point to the project site.*
- Executive Drive / Towne Centre Drive
    - *The intersection is the closest signalized intersection east of the project site.*
- La Jolla Village Drive / Towne Centre Drive
    - *The intersection is an important intersection of two corridors of the University Community to which the Project is anticipated to add peak hour traffic in all travel directions.*
- La Jolla Village Drive / I-805 SB Ramps
    - *The intersection is an important intersection of one main corridor and one of the most important access points to the University Community.*

4.1.2 Roadway Segments

The Project is consistent with the current University Community Plan, therefore, as stated with the City's TSM, the study area should include roadway segments where a project adds 1,000 or more daily final primary trips (cumulative trips) if consistent with the Community Plan, AND:

- Have improvements identified in the community plan; OR
- Not built to the community plan ultimate classification (including planned new circulation element roadways).

No street segments have been identified to meet the criteria above.

Figure 4-1: Project Study Area and Intersection Key

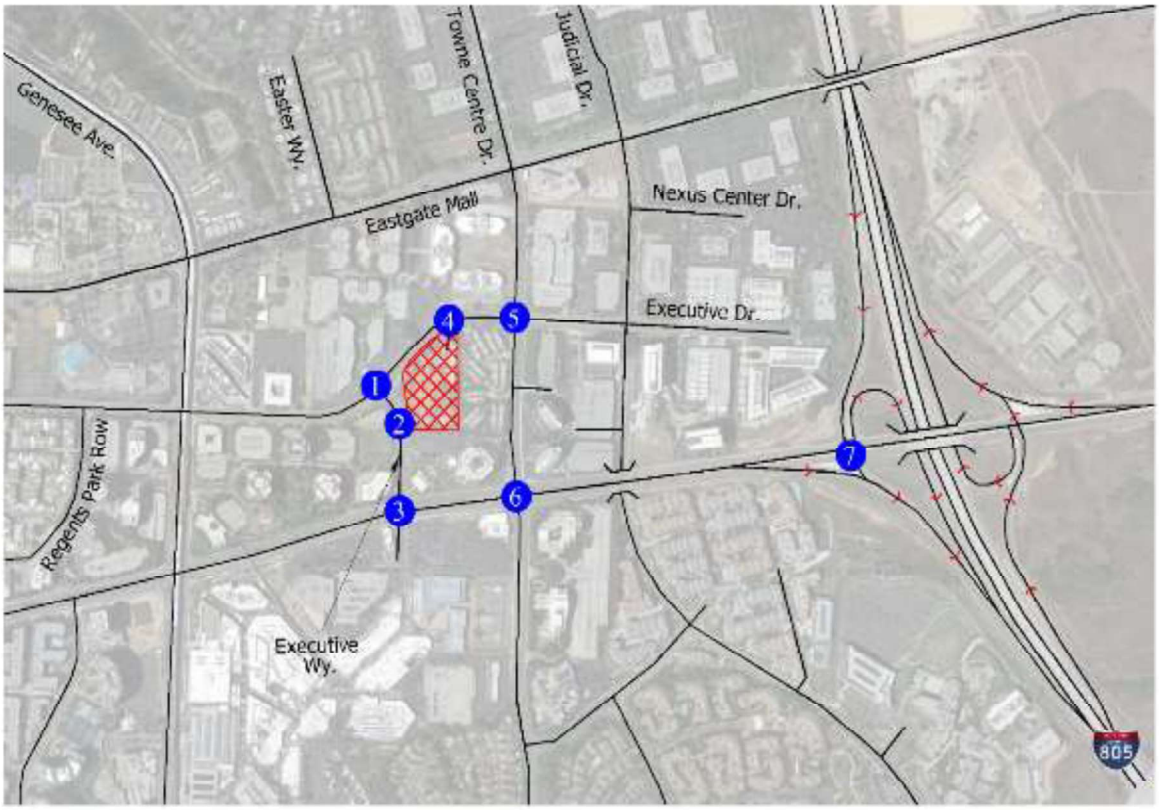


Table 4-1: Study Intersections

Number	Intersection
1	Executive Drive / Executive Way
2	Executive Way / Project Driveway "A"
3	Executive Way / La Jolla Village Drive
4	Executive Drive / Project Driveway "B"
5	Executive Drive / Towne Centre Drive
6	La Jolla Village Drive / Towne Centre Drive
7	La Jolla Village Drive / I-805 SB Ramps

4.2 Project Trip Distribution and Trip Assignment

Trip distribution of project traffic will be based on a SANDAG Series 13 Year 2050 Select Zone Forecast. As shown in the Select Zone Forecast model (refer to **Appendix B**) that was requested of SANDAG for this project, the project is located within Traffic Analysis Zone (TAZ) 2250.

The SANDAG Series 13 Year 2050 Select Zone Forecast has been used as the primary source to establish the project trip distribution.

Although a project should typically use a select zone analysis for the model forecast year closest to the project opening year, trip distribution results of the Series 13 Year 2050 Select Zone Forecast are expected to be similar to a Series 13 Year 2025 Select Zone Forecast. The roadway network in the University Community dictates the travel behavior and distribution. The roadway network within the University Community is nearly identical between the two model years even considering the currently planned roadway connections in-place for the community; in particular, the northern side of the community within which the Project is located.

Previous comparisons of select-zone results for multiple forecast years did not yield significant differences in other projects. As an example, a comparison of a Series 14 ABM 2 Year 2025 select zone analysis versus a Series 13 Year 2050 select zone analysis for TAZ 2236 for another project in the immediate vicinity (PTS# 647676) was conducted. The land uses analyzed by the two select zone analysis models consist of office-scientific research and development uses. The Series 13 Year 2050 model for PTS#647676 is based on the intensification of existing office-scientific research and development uses with associated amenity spaces. For the Series 14 Year 2025 model for PTS#647676, the model is based on the demolition of two (2) existing scientific research

and development buildings and the construction of two (2) new scientific research and development buildings including accessory/amenity space. Since both select zone runs included office–scientific research and development uses, the distribution variable is isolated and the significant difference between the two model runs is the model series year.

Table 4-2 shows a roadway segment percentage distribution comparison of the Series 13 Year 2050 and the Series 14 ABM 2 Year 2025 select zone analysis models.

Table 4-2: SANDAG Series 13 Year 2050 and Series 14 ABM 2 Year 2025 SZA Comparison

Roadway Segment	S13 Y2050 SZA	S14 ABM 2 Y2025 SZA
La Jolla Village Dr. (W/O Regents Rd.)	9%	10%
La Jolla Village Dr. (W/O Towne Centre Dr.)	5%	7%
Executive Dr. (W/O Towne Centre Dr.)	9%	11%
Genesee Ave. (N/O Eastgate Mall)	9%	8%
Genesee Ave. (S/O Nobel Dr.)	5%	4%
La Jolla Village Dr. (E/O Towne Centre Dr.)	26%	27%
Eastgate Mall (E/O I-805 Overpass)	15%	17%
Miramar Rd. (E/O Eastgate Mall)	14%	16%
I-805 (S/O Nobel Dr.)	12%	14%

As shown in **Table 4-2** model localized distortions are not present in segments that are not adjacent to the analyzed TAZ. The variance from the two models is generally within 2% and no model presents predominantly higher or lower percentages of traffic throughout the roadway segments. Therefore, it is anticipated that results between the Series 13 Year 2050 TAZ 2250 forecast used for this project and the appropriate Series 14 ABM 2 Year 2050 TAZ 2250 forecast would also be similar and no magnitude adjustments are necessary.

As shown in the forecast, three loading points connect the site to the adjacent roadway network; these loading points connect the project site to Executive Drive (loading 4% of project traffic), Executive Way (loading 38% of project traffic), and Towne Centre Drive (loading 58% of project traffic). The project is proposing two access driveways; one driveway along Executive Way and another driveway along Executive Drive, which renders the loading point connecting the project site with Towne Centre Drive as not representative of the proposed project access driveways.

An adjustment of the distribution of project traffic shown on the forecast has been made to account for the project traffic (58%) that is shown in the forecast to connect the site with Towne Centre Drive. The project traffic shown along Towne Centre Drive has been rerouted throughout the existing roadway network to distribute east of the intersection of Towne Centre Drive at La Jolla Village Drive as shown in the model, but taking into consideration the two (2) proposed project access points. Therefore, the 58% of project traffic loaded onto Towne Centre Drive has been rerouted to access and egress the site through Executive Drive (with an additional 26% of project traffic for a total of 30%) and Executive Way (with an additional 32% of project traffic for a total of 70%).

Refer to **Appendix B** for the SANDAG Series 13 Year 2050 Select Zone Analysis model for the Project, for the SANDAG Series 13 Year 2050 Select Zone Analysis model for PTS#647676, and SANDAG Series 14 ABM 2 Year 2025 Select Zone Analysis model for PTS#647676.

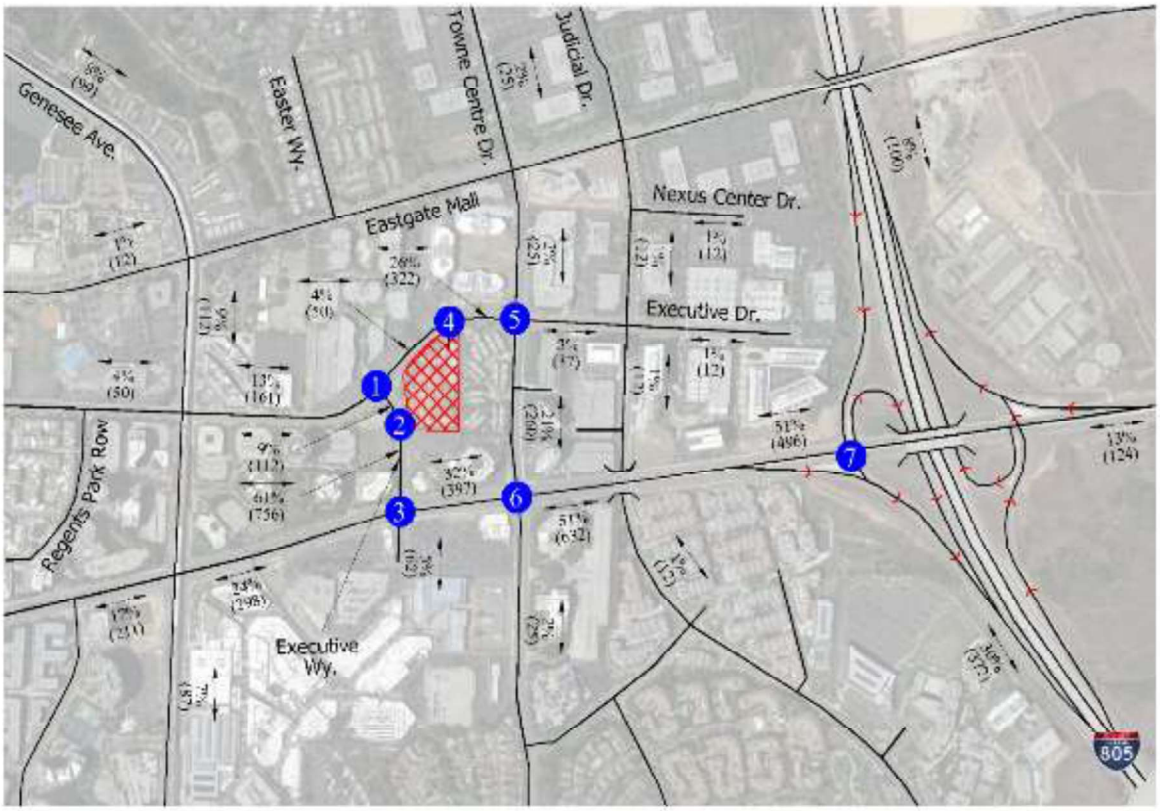
Figure 4-2 shows the Project Only trip distribution percentages and ADT.

Figure 4-3 shows the Project Only trip assignment for inbound Project traffic.

Figure 4-4 shows the Project Only trip assignment for outbound Project traffic.

Figure 4-5 shows the Project Only AM and PM peak hour traffic volumes assigned to the local street system.

Figure 4-2: Project Only Trip Distribution Percentages and ADT



Legend

= Project Location

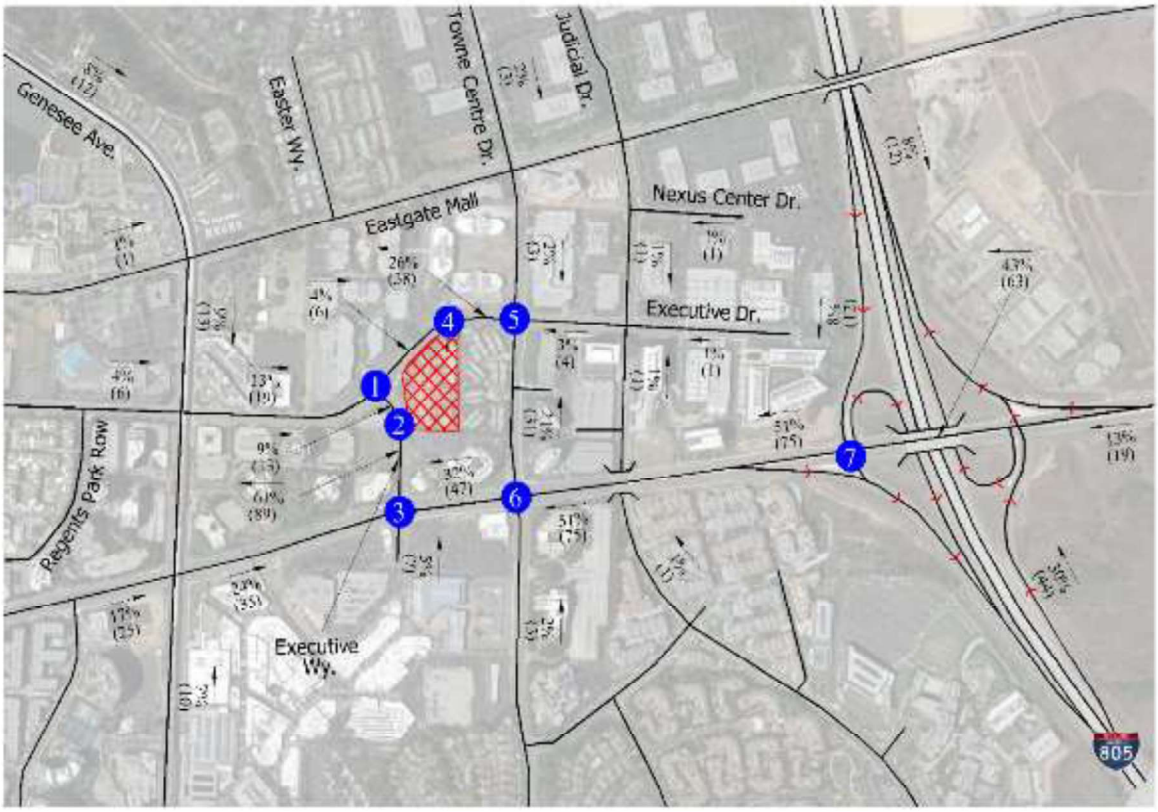
= Study Intersection

XX% = Trip Distribution Percentage

(XX,XXX) = Project Only ADT

N
NO SCALE

Figure 4-3: Project Only Inbound Trip Assignment Percentages



Legend

= Project Location

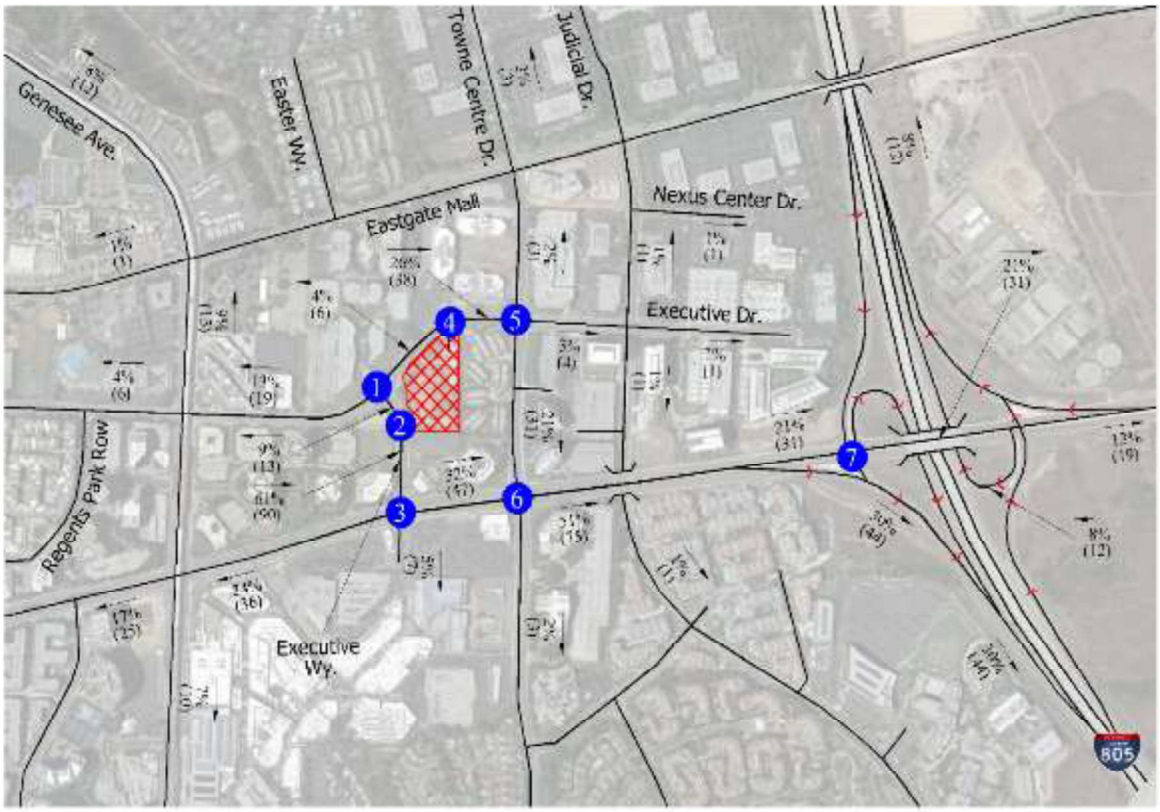
= Study Intersection

XX% = Trip Assignment (Inbound) Percentage

(XX,XXX) = Trip Assignment (Inbound) – Highest Peak Hour (AM Peak)

N
NO SCALE

Figure 4-4: Project Only Outbound Trip Assignment Percentages



Legend

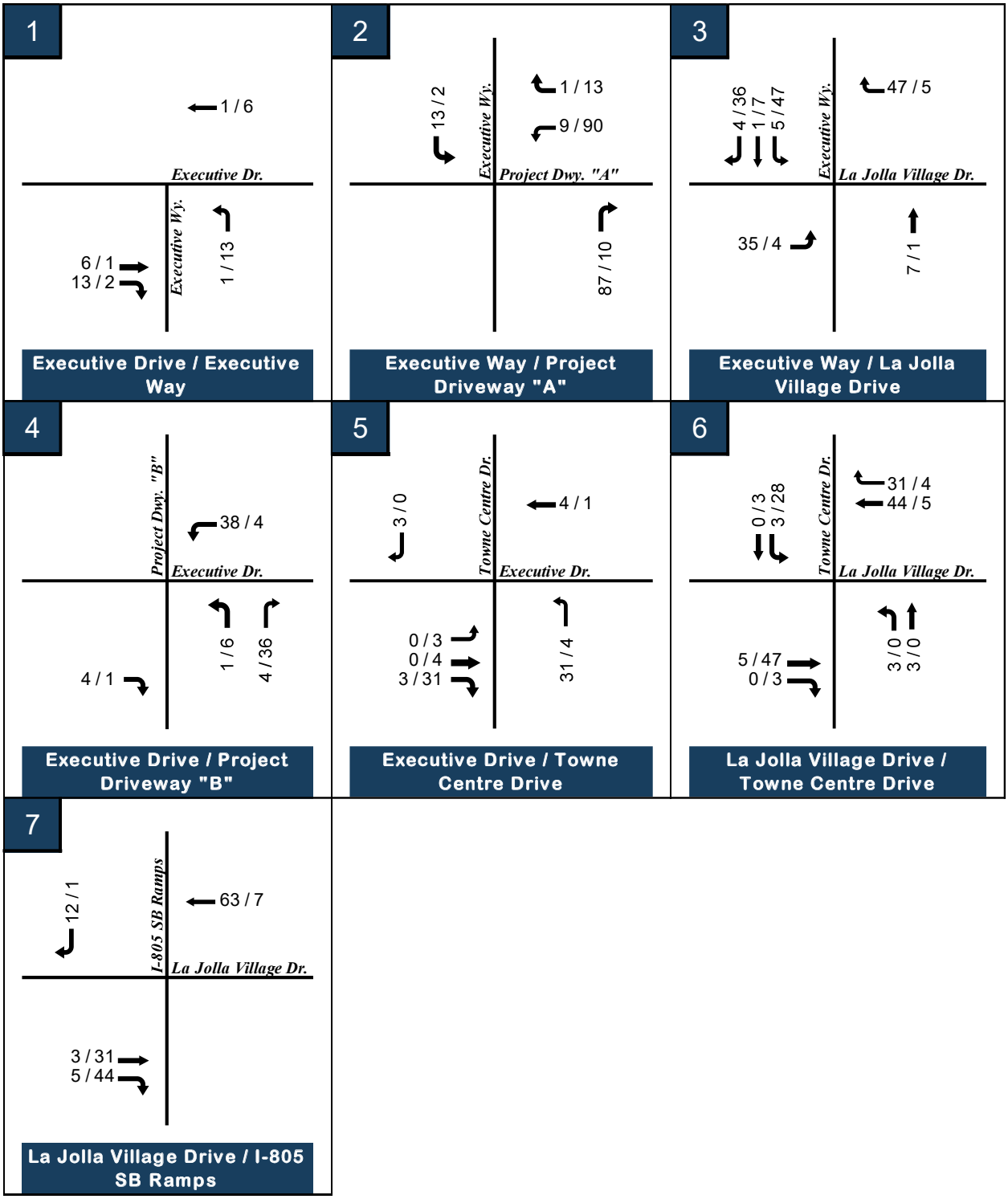
= Project Location

= Study Intersection

XX% = Trip Assignment (Outbound) Percentage

(XX,XXX) = Trip Assignment (Outbound) – Highest Peak Hour (PM Peak)

Figure 4-5: Project Only AM / PM Peak Hour Volumes



XX / XX = AM / PM Peak hour volumes

Towne Centre View

Local Mobility Analysis

Prepared For: The City of San Diego and Project Management Advisors, Inc.

Project Number: 001320
PTS# 624751
September 26, 2022

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2.0 PROJECT DESCRIPTION

2.1 Existing Setting

The Project is located on a 33.55-acre site that encompasses five (5) parcels of real property within Subarea 11 in the University Community Planning Area of the City of San Diego and a portion of Towne Centre Drive proposed to be vacated. The Project development area is limited to four lots proposed to be reconsolidated in the southern portion of the site with addresses of 9855/9865/9875 Towne Centre Drive and a portion of the Towne Center Drive right-of-way proposed to be vacated encompassing approximately 26.5-acres. The approximately 7.0-acre existing northern parcel of the Project site under separate ownership is within the City's Multi-Habitat Planning Area (MHPA) and would remain undeveloped. The project site is bound by open space to the north, 9779/9785/9791 Towne Centre Drive to the east, Towne Centre Drive to the south, and open space to the west. The project site can be accessed through Towne Centre Drive to the south.

Regional access to the project site is provided by several locations that include the junction of Interstate 5 with Genesee Avenue (2.1 miles west of the project site), the junction of Interstate 805 with La Jolla Village Drive (1.5 miles southeast of the project site), the junction of Interstate 805 with Nobel Drive (2.0 miles southeast of the project site), and the junction of Interstate 5 with La Jolla Village Drive (2.4 miles southwest of the project site). Local access to the project site is provided through the intersection of Towne Centre Drive and Eastgate Mall (0.7 miles south of the project site). Primary vehicle access to the project site will occur through three (3) proposed driveways along Towne Centre Drive.

The project site has an "Industrial Employment" land use designation in the San Diego General Plan and is designated "Scientific Research" and "Open Space" within Subarea 11 of the University Community Plan. The portion of the site designated as "Open Space" is the northern approximately 7.0-acre open space parcel under separate ownership that would remain undeveloped. The Project site is zoned IP-1-1, (Industrial Park - research and development uses are allowed with some limited manufacturing), and RS-1-7 (Residential Single Unit). The portion of the site that is zoned RS-1-7 is the northern 7.0-acre open space parcel that would remain undeveloped.

The eastern portion of the Project site (approximately 11.3 acres) is currently developed with three (3) scientific research and development buildings with approximately 192,365 SF of building area and a 7,370 SF covered courtyard. The existing buildings are owned and operated by the Project Applicant and were constructed between 2001 and 2007. The western portion of the project site (approximately 15.2 acres, excluding the approximately 7.0-acre open space parcel in the northern portion of the Project site) is entitled for 190,000 SF of regional and corporate headquarters office space (pursuant to Coastal Development Permit 117798 and Site Development Permit 2758 approved by the City of San Diego in March 2005 under PTS #1591). This area was mass graded in 2009 and building pads were established for the approved development, which consisted of three buildings: Building A (a four-story 80,500 SF building); Building B (a three-story 63,500 SF building), and Building C (a two-story 46,000 SF building). This approved development was never constructed. The area was recently used as a staging area for the Mid-Coast Trolley construction under a lease agreement with the current property owner (Cushman). The construction staging activities have been completed.

2.2 Proposed Project

The Project proposes the consolidation of these properties that will entail the demolition of a total building area of 199,735 SF, of which 192,365 SF consists of scientific research and development use and 7,370 SF consists of a courtyard that is a non-trip generating space. The Project will combine four (4) parcels proposed to be reconsolidated for the construction of 1,000,000 SF of gross floor area (GFA) of scientific research and development campus distributed in five (5) new buildings and an underground four-level podium parking structure. These five (5) new buildings will consist of the following:

- Building A: 6-levels; 254,358 SF of GFA
- Building B: 6-levels; 280,066 SF of GFA
- Building C: 6-levels; 270,932 SF of GFA
- Building D: 5-levels; 188,106 SF of GFA
- Building E: 2-levels; 5,924 SF of GFA

The Project proposes a street vacation and removal of the existing terminus of Towne Centre Drive west of Westerra Court. The public right-of-way for Towne Centre Drive would terminate at Westerrra Court. The Project would involve frontage improvements along Towne Centre Drive (north side of the street), including the construction of Project driveways, replacement of the contiguous sidewalk with a non-contiguous sidewalk, and a turnaround at the intersection of Towne Centre Drive and Westerra Court.

The anticipated Opening Day of the Project is estimated to be during Year 2027.

Figure 2-1 includes the Project site plan.

As shown in the project site plan in **Figure 2-1**, access to the project site is will be through three (3) driveways, providing access to parking structures, surface parking, and drop-off areas. Two (2) of the proposed project driveways will be located east of the intersection of Towne Centre Drive and Westerra Court, and the remaining will become the west leg of the intersection of Towne Centre Drive at Westerra Court as a result of the proposed street vacation. The public right of way of Towne Centre Drive is planned to terminate at the intersection of Towne Centre Drive at Westerra Court and the intersection is planned to be modified as needed to accommodate Project and emergency vehicle access, thus becoming one (1) of the proposed project driveways.

At full buildout of the Project, parking will consist of a total supply of 2,500 vehicle parking spaces, 49 motorcycle spaces, and 170 bicycle spaces. A detailed breakdown of the Project's parking supply and facilities is discussed under **Chapter 12.0**.

The Project will provide features supporting mobility for bicycling, walking, and transit users. These project features are based on the City of San Diego's Climate Action Plan (CAP) Consistency Checklist requirements. As shown in the project's CAP Consistency Checklist included in **Appendix B**, the project will provide the following:

A. Unbundled parking whereby parking spaces would be leased or sold separately from the rental or purchase fees for the development for the life of the development.
B. Commitment to maintaining an employer network in the SANDAG iCommute program and promoting its RideMatcher service to tenants/employees.
C. Access to services that reduce the need to drive, such as cafes, commercial stores, banks, post offices, restaurants, and gyms, either onsite or within 1,320 feet (1/4-mile) of the structure/use.

D. Subsidized transit passes.
E. More short-term bicycle parking than required.
    - *0 spaces required for industrial uses*
    - 50 spaces provided
F. More long-term bicycle parking than required.
    - *118 spaces required*
    - 120 spaces provided
G. Employee showers and lockers in accordance with the voluntary measures under the California Green Building Standards Code.
H. Designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles.
    - *At least 10% of the total number of parking spaces (233 spaces required)*
    - 233 carpool/low emission parking spaces + 75 electric vehicle supply equipment (EVSE) spaces and an additional 75 spaces dedicated for future use = 383 spaces

In addition to the measures listed as A through D above, the Project will implement a TDM Program as required mitigation for its significant VMT impact, discussed in detail in **Chapter 13.0**.

Construction of the Project would include demolition of the existing buildings and on-site improvements, grading, utility construction, building construction, paving/landscaping improvements, and architectural coatings. While demolition activities and construction of the buildings and parking structures would be phased, these activities would overlap with continuous on-site construction activities. The actual construction phasing for the Project would be based on market and tenant demand; however, it is anticipated that the phases would generally occur as follows:

- Phase 1 – Construction of Building A and podium parking structure
- Phase 2 – Construction of Building B
- Phase 3 – Demolition of existing buildings at 9865/9875/9885 Towne Centre Drive and construction of Building C and podium expansion
- Phase 4 – Demolition of the existing building at 9855 Towne Centre Drive, and construction of Buildings D and E and the parking garage

Discretionary actions required by the Project include a Planned Development Permit (PDP), Site Development Permit (SDP), Vesting Tentative Map, Street Vacation, and a Community Plan Amendment (CPA). Because the proposed uses are allowed in areas designated Scientific Research in the University Community Plan, and research and development uses are allowed in the IP-1-1 Zone, a Community Plan Amendment and zone change are not required relative to the land use designation. However, a Community Plan Amendment is required to add the proposed intensity of the Project to Table 2, Land Use and Development Intensity, of the University Community Plan, for Subarea 11. Existing development and existing entitlements for the project site collectively total 382,365 SF of building area within the Project site (190,000 SF entitled on the Cushman property and 192,365 SF entitled/developed on the Project Applicant's property). Therefore, the proposed CPA to allow up to 1,000,000 SF of Scientific Research and development uses within Subarea 11 would increase the existing entitlements by 617,635 SF.

2.3 Trip Generation

Trip Generation for the Project is presented below. Using the *City of San Diego Trip Generation Manual (May 2003)* trip generation rates, the total Project trip generation has been calculated using driveway rates as shown below. The Project is anticipated to generate approximately 8,000 daily unadjusted driveway trips with 1,280 (1,152 In / 128 Out) AM peak hour trips and 1,120 (112 In / 1,008 Out) PM peak hour trips. Since the existing scientific R&D use is the same as the proposed use for the project site, an existing credit can be applied based on trip generation rates, for analysis purposes. Existing uses onsite have been calculated to generate 1,539 daily unadjusted driveway trips with 246 (221 In / 25 Out) AM peak hour trips and 215 (22 In / 193 Out) PM peak hour trips. Therefore, the Project would result in a net increase of approximately **6,461** average daily trips (ADT) with **1,034** (931 In / 103 Out) AM peak hour trips and **905** (90 In / 815 Out) PM peak hour trips.

Table 2-1 includes the project trip generation.

Table 2-1: Project Trip Generation

Land Use	Intensity	Rate*	ADT	AM						PM					
				Peak%*	Vol.	In %	Out%	In	Out	Peak%*	Vol.	In %	Out%	In	Out
Existing Project Uses															
Scientific Research and Development	192.365 /KSF	8 /KSF	1,539	16%	246	90% : 10%		221	25	14%	215	10% : 90%		22	193
Covered Courtyard	7.370 /KSF	Non-Trip Generating Space													
Proposed Project Uses															
Scientific Research and Development	1000 /KSF	8 /KSF	8,000	16%	1,280	90% : 10%		1,152	128	14%	1,120	10% : 90%		112	1,008
Net Increase In Trip Generation			6,461		1,034			931	103		905			90	815

Source:

*Rates taken from the City of San Diego Trip Generation Manual, May 2003

Note:

ADT= Average Daily Trips

KSF = 1,000 Square Feet

4.0 PROJECT STUDY AREA, TRIP DISTRIBUTION, & TRIP ASSIGNMENT

4.1 Project Study Area

Figure 4-1 shows the study area which includes 45 intersections and 19 roadway segments. Three (3) of the study intersections consist of project driveways, of which one (1) project driveway is the intersection of Towne Centre Drive at Westerra Court, which is planned as a proposed project driveway as a result of a planned street vacation and the modification of the existing public right of way of Towne Centre Drive to terminate at the intersection.

4.1.1 Intersections

As shown in the Project trip generation in **Table 2-1**, the Project is calculated to generate a net increase of approximately **6,461** average daily trips (ADT) with **1,034** (931 In / 103 Out) AM peak hour trips and **905** (90 In / 815 Out) PM peak hour trips.

Consistent with the City's TSM projects that greater than 2,400 daily final driveway trips the typical study intersections are as follows:

- All signalized and unsignalized intersections and signalized project driveways where the project will add 50 or more peak hour final primary (cumulative) trips to any turning movement at the intersection.

A list of the Project study intersections is included in **Table 4-1** below.

4.1.2 Roadway segments

The Project is not consistent with the current University Community Plan. A Community Plan Amendment is required to add the proposed intensity of the Project to Table 2, Land Use and Development Intensity, of the University Community Plan, for Subarea 11. Existing development and existing entitlements for the project site collectively total 382,365 SF of building area within the Project site (190,000 SF entitled on the Cushman property and 192,365 SF entitled/developed on the Project Applicant's property). Therefore, the proposed CPA to allow up to 1,000,000 SF of Scientific Research uses within Subarea 11 would increase the existing entitlements by 617,635 SF.

Therefore, consistent with the City's TSM, the study area should include roadway segments where a project adds 500 or more daily final primary trips (cumulative trips) if inconsistent with the Community Plan, AND:

- Have improvements identified in the community plan; OR
- Not built to the community plan ultimate classification (including planned new circulation element roadways).

A list of the Project study roadway segments is included in **Table 4-2** below.

Figure 4-1: Project Study Area and Intersection Key

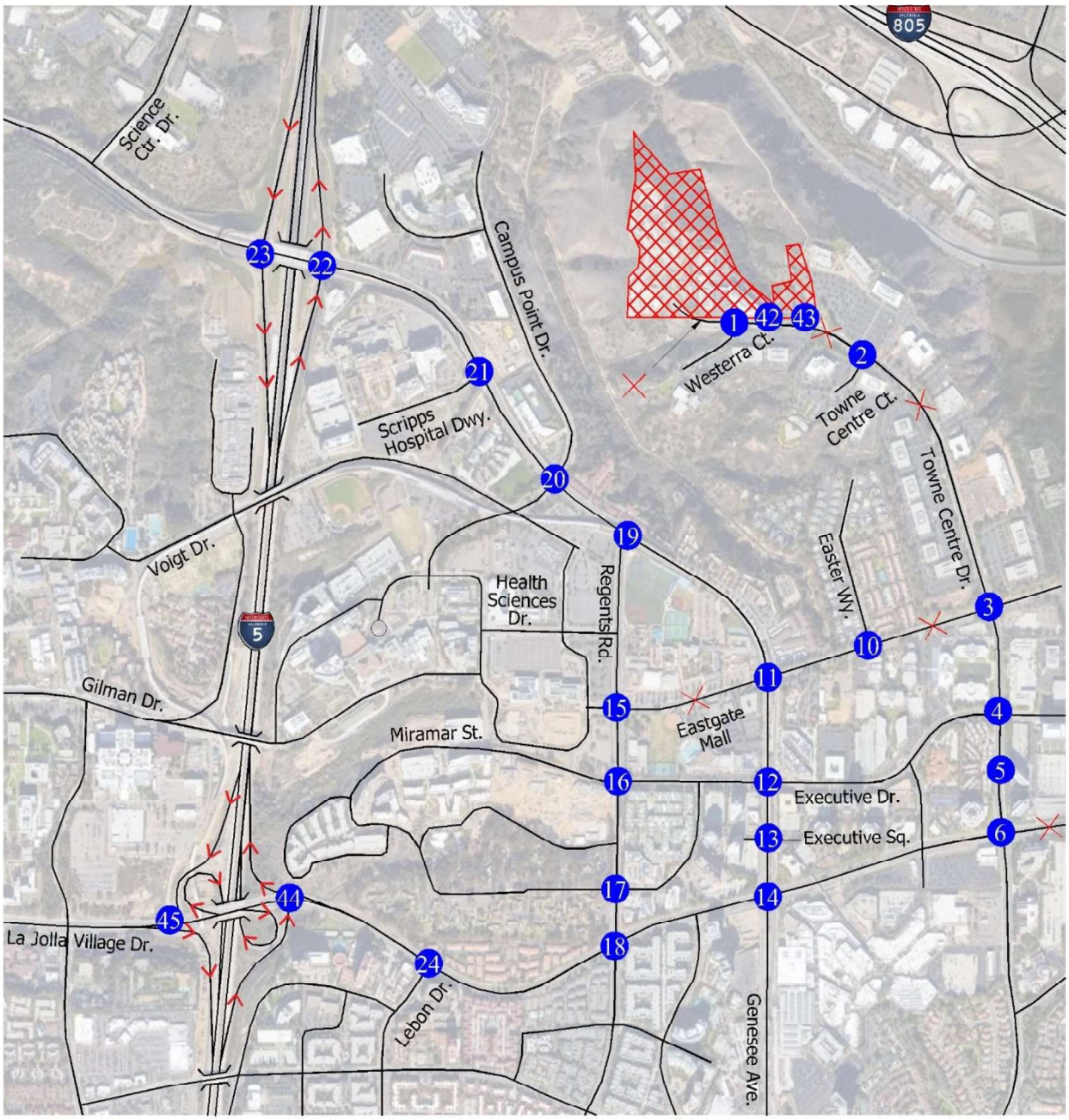
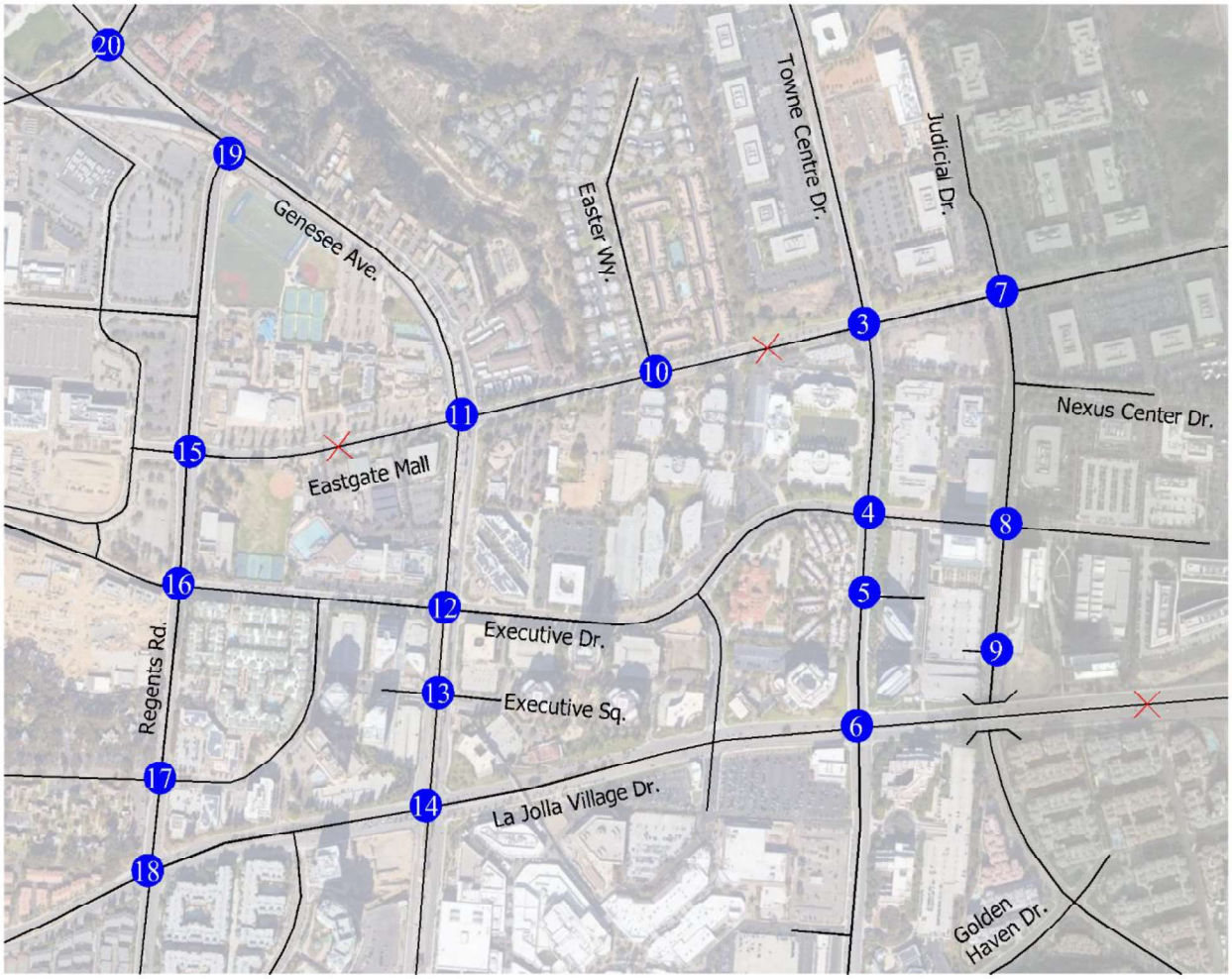


Figure 4-1: Project Study Area and Intersection Key cont'd



Legend

= Study Street Segment

= Study Intersection

N
NO SCALE

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Figure 4-1: Project Study Area and Intersection Key cont'd

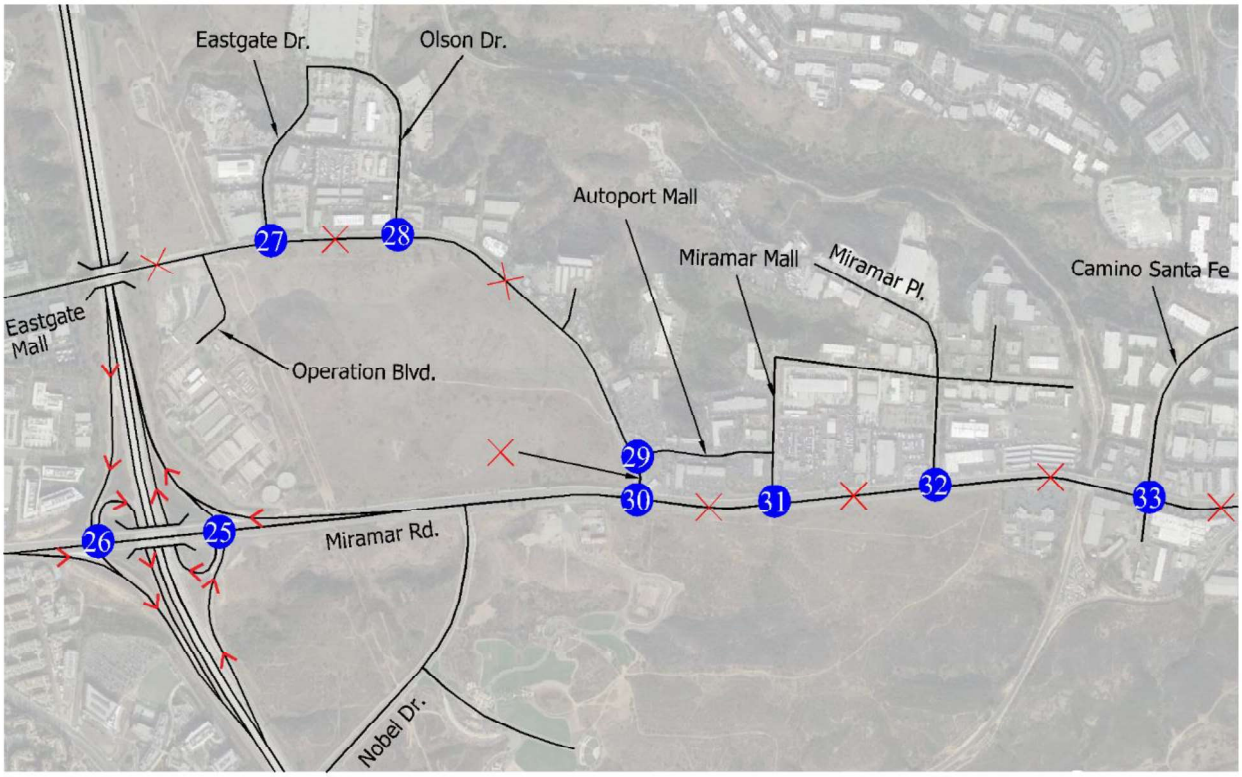
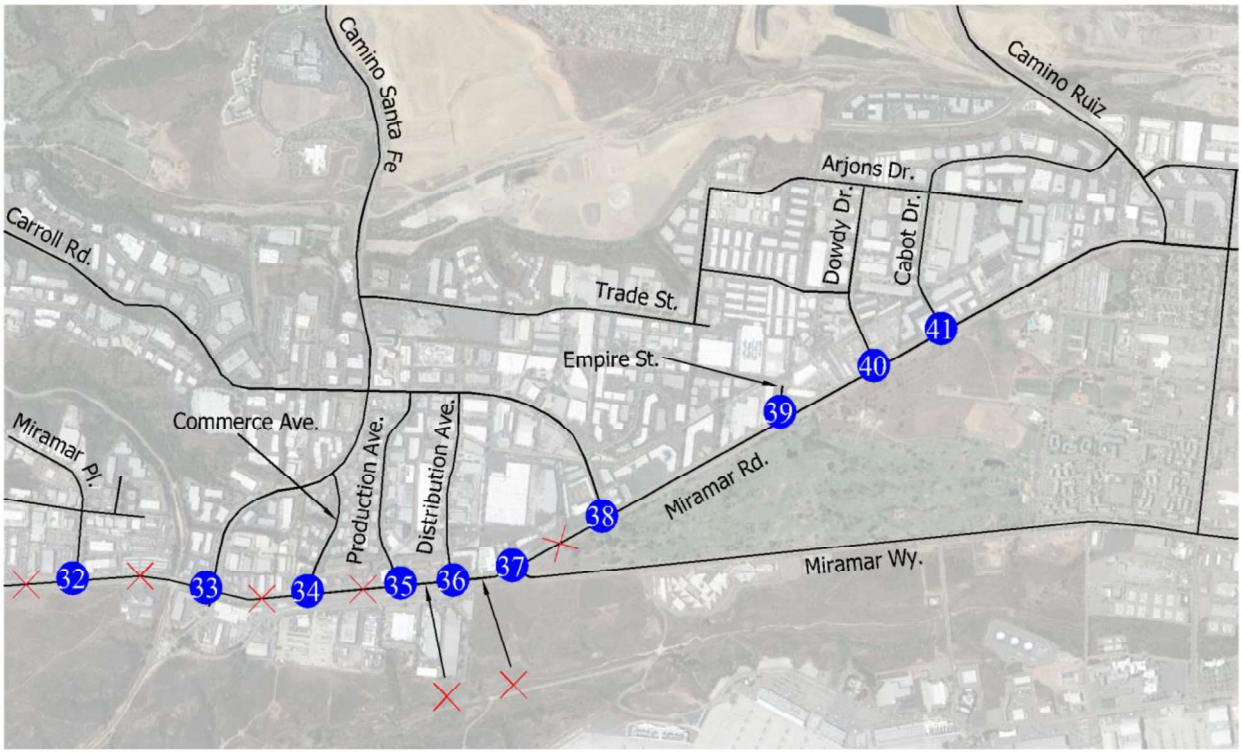


Figure 4-1: Project Study Area and Intersection Key cont'd



Legend

= Study Street Segment

= Study Intersection

N
NO SCALE

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Table 4-1: Study Intersections

Number	Intersection
1	Towne Centre Drive / Westerra Court
2	Towne Centre Drive / Towne Centre Court
3	Towne Centre Drive / Eastgate Mall
4	Towne Centre Drive / Executive Drive
5	Towne Centre Drive / Towne Centre Driveway
6	Towne Centre Drive / La Jolla Village Drive
7	Judicial Drive / Eastgate Mall
8	Judicial Drive / Executive Drive
9	Judicial Drive / Judicial Driveway
10	Eastgate Mall / Easter Way
11	Eastgate Mall / Genesee Avenue
12	Genesee Avenue / Executive Drive
13	Genesee Avenue / Executive Square
14	La Jolla Village Drive / Genesee Avenue
15	Regents Road / Eastgate Mall
16	Regents Road / Executive Drive
17	Regents Road / Regents Park Row
18	Regents Road / La Jolla Village Drive
19	Regents Road / Genesee Avenue
20	Genesee Avenue / Campus Point Drive
21	Genesee Avenue / Scripps Hospital Driveway
22	Genesee Avenue / I-5 NB Ramps
23	Genesee Avenue / I-5 SB Ramps
24	La Jolla Village Drive / Lebon Drive
25	Miramar Road / I-805 NB Ramps
26	La Jolla Village Drive / Miramar Road / I-805 SB Ramps
27	Eastgate Mall / Eastgate Drive
28	Eastgate Mall / Olson Drive
29	Eastgate Mall / Autoport Mall
30	Miramar Road / Eastgate Mall
31	Miramar Road / Miramar Mall
32	Miramar Road / Miramar Place
33	Miramar Road / Camino Santa Fe / Frost Mar Place
34	Miramar Road / Commerce Avenue
35	Miramar Road / Production Avenue
36	Miramar Road / Distribution Avenue
37	Miramar Road / Miramar Way
38	Miramar Road / Carroll Road
39	Miramar Road / Alesmith Court
40	Miramar Road / Dowdy Drive
41	Miramar Road / Cabot Drive
42	Towne Centre Drive / Project Driveway "West"
43	Towne Centre Drive / Project Driveway "East"
44	La Jolla Village Drive / I-5 NB Ramps
45	La Jolla Village Drive / I-5 SB Ramps

Table 4-2: Study Roadway Segments

Road	Segment
Towne Centre Drive	Northern Terminus - Westerra Court
Towne Centre Drive	Westerra Court - Eastgate Mini Park
Towne Centre Drive	Eastgate Mini Park - Towne Centre Court
Towne Centre Drive	Towne Centre Court - 9665 Towne Centre Drive
Eastgate Mall	Regents Road - Genesee Avenue
Eastgate Mall	Genesee Avenue - 450 feet eas of Easter Way
Eastgate Mall	I-805 Overpass - Operation Boulevard
Eastgate Mall	Operation Boulevard - Olson Drive
Eastgate Mall	Olson Drive - Autoport Mall
Eastgate Mall	Autoport Mall - Miramar Road
Miramar Road	Eastgate Mall - Miramar Mall
Miramar Road	Miramar Mall - Miramar Place
Miramar Road	Miramar Place - Camino Santa Fe / Frost Mar Place
Miramar Road	Camino Santa Fe / Frost Mar Place - Commerce Avenue
Miramar Road	Commerce Avenue - Production Avenue
Miramar Road	Production Avenue - Distribution Avenue
Miramar Road	Distribution Avenue - Miramar Way
Miramar Road	Miramar Way - Carroll Road
La Jolla Village Drive	Towne Centre Drive - I-805 SB Ramps

4.2 Project Trip Distribution and Trip Assignment

The Project's trip distribution is based primarily on a Series 14 ABM 2 Year 2025 SANDAG Select Zone Analysis (SZA) for Traffic Analysis Zone (TAZ) 2213, adjacent to where the Project is located within. However, the plotting area of the Select Zone Forecast is constrained east of Miramar Road at Eastgate Mall. No expanded plotting was available at the time of preparation of this report as the individual select zone and link assignments that were extracted from the regional model for this specific SZA were not preserved by SANDAG. The percentage of project traffic shown to extend east of this intersection amounts to 16% of the total project traffic. Considering the net increase in average daily trips and peak hour trips that are calculated to result from the project, the percentage of project traffic at this location exceeds the thresholds established in the TSM for the analysis of intersections and roadway segments.

Therefore, to account for the plotting area limitations of the Select Zone Forecast, USAI has estimated the trip distribution east of the intersection of Eastgate Mall at Miramar Road to cover the entire study area. The trip distribution estimation is based on engineering judgment, existing roadway networks, and knowledge of travel patterns. Specifically, knowing the trip distribution to Miramar Road east of the plotted area (taken from SANDAG), USAI distributed some traffic at major intersecting roads where traffic from the proposed project would match up with known existing services, retail or residential areas until the percentage of traffic fell below the study threshold. The substantial percentage of project traffic east of the intersection of Eastgate Mall and Miramar Road is assumed to travel along Miramar Road and distribute north of Miramar Road onto the residential areas of the Mira Mesa community primarily through Camino Santa Fe and Camino Ruiz.

Refer to **Appendix C** for the SANDAG Series 14 ABM 2 Year 2025 Select Zone Analysis.

Adjustments to the distribution of project traffic shown in the SANDAG Series 14 ABM 2 Year 2025 Select Zone Analysis have been conducted. These adjustments consist of the trip distribution percentages at the freeway ramps and the roadway segments in between freeway ramps.

The trip distribution and assignment adjustments at the freeway ramps are based primarily on the interpretation of the directionality of the one-way freeway ramps to simplify the percentages shown in the select zone for the analysis of Project conditions. An imbalance of percentages is shown in the select zone analysis at the freeway ramps, by which the percentages shown at a freeway on-ramp are not equal to the percentages at the freeway off-ramp in the opposite direction. Examples shown in the select zone analysis include the following:

- Genesee Avenue / I-5 Ramps
    - SB On-Ramp = 1% / NB Off-Ramp = 0%
    - NB On-Ramp = 4% / SB Off-Ramp = 1%
- La Jolla Village Drive / I-5 Ramps
    - SB On-Ramp = 13% / NB Off-Ramp = 11%
    - NB On-Ramp = 5% / SB Off-Ramp = 7%
- La Jolla Village Drive / I-805 Ramps
    - SB On-Ramp = 2% / NB Off-Ramp = 3%
    - NB On-Ramp = 0% / SB Off-Ramp = 0%

The adjustments conducted for this analysis consist of adding the percentages of the on-ramps and off-ramps in the opposing directions and applying the added percentages to each freeway on-ramp and off-ramp individually as a trip assignment. Examples of the adjusted percentages at each ramp include the following:

- Genesee Avenue / I-5 Ramps
    - SB On-Ramp (1%) + NB Off-Ramp (0%)
        - SB On-Ramp and NB Off-Ramp = **1%**
    - NB On-Ramp (4%) + SB Off-Ramp (1%)
        - NB On-Ramp and SB Off-Ramp = **5%**
- La Jolla Village Drive / I-5 Ramps
    - SB On-Ramp (13%) + NB Off-Ramp (11%)
        - SB On-Ramp and NB Off-Ramp = **24%**
    - NB On-Ramp (5%) + SB Off-Ramp (7%)
        - NB On-Ramp and SB Off-Ramp = **12%**
- La Jolla Village Drive / I-805 Ramps
    - SB On-Ramp (2%) + NB Off-Ramp (3%)
        - SB On-Ramp and NB Off-Ramp = **5%**
    - NB On-Ramp (0%) + SB Off-Ramp (0%)
        - NB On-Ramp and SB Off-Ramp = **0%**

The resulting trip assignment at the freeway interchanges consolidated by the computations noted above has been used as the basis to establish the trip distribution at the freeway interchanges. The adjusted trip assignment has been averaged to calculate an adjusted trip distribution at the freeway segments, freeway ramps, and roadway segments in between freeway ramps.

Figure 4-2 shows the Project Only trip distribution percentages.

Figure 4-3 shows the Project Only trip assignment for inbound Project traffic.

Figure 4-4 shows the Project Only trip assignment for outbound Project traffic.

Figure 4-5 shows the Project Only ADT.

Figure 4-6 shows the Project Only AM and PM peak hour traffic volumes assigned to the local street system.

Figure 4-2: Project Only Trip Distribution Percentages

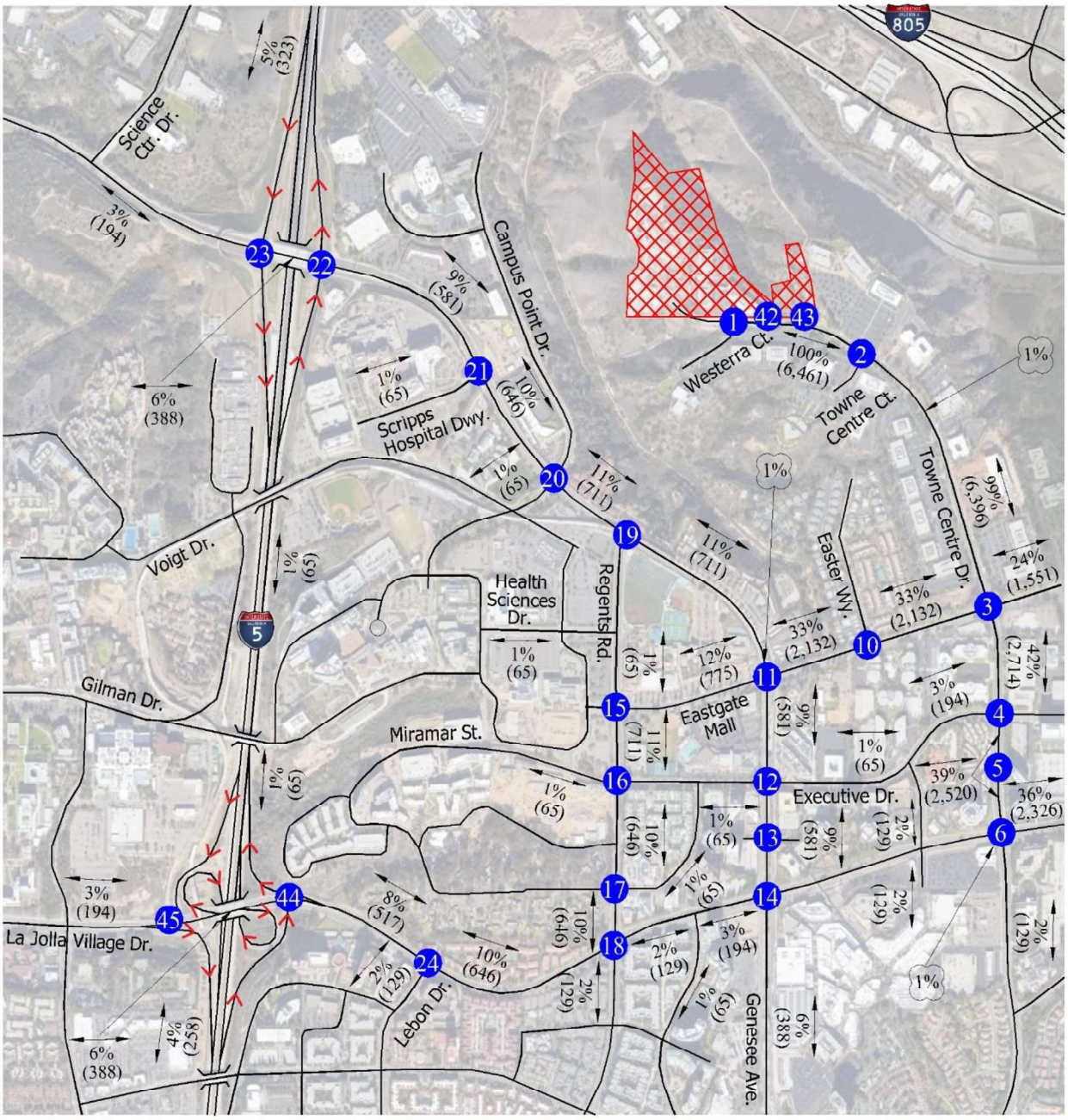
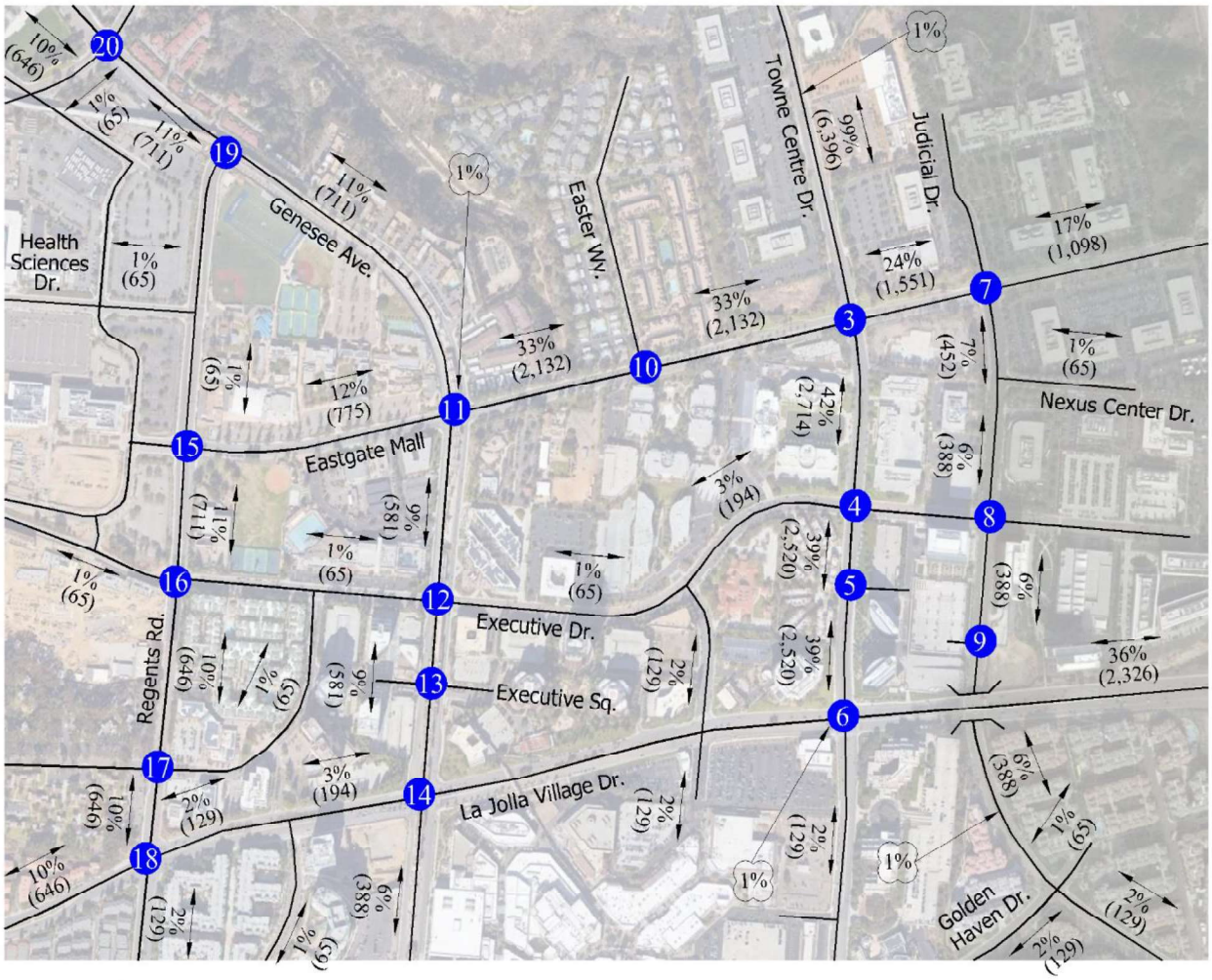


Figure 4-2: Project Only Trip Distribution Percentages cont'd



Legend

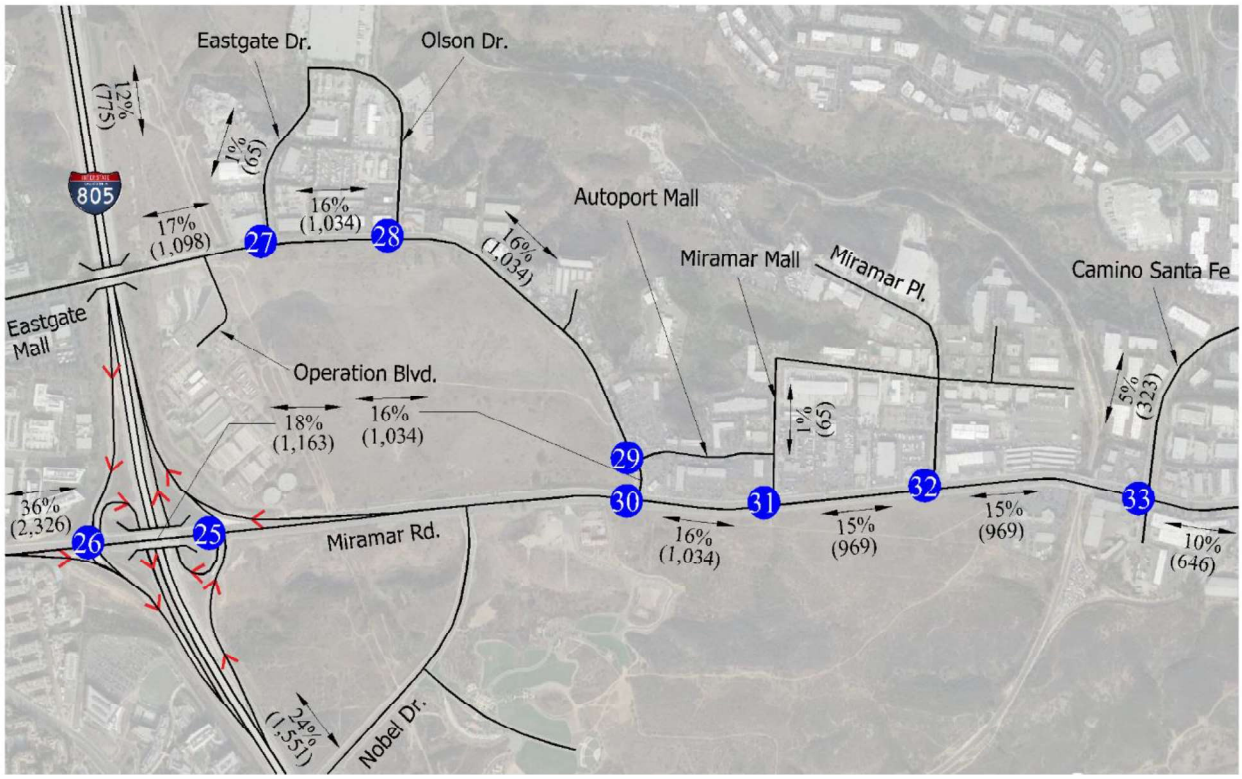
= Study Intersection

XX% = Trip Distribution Percentage

(XX,XXX) = Project Only ADT

N
NO SCALE

Figure 4-2: Project Only Trip Distribution Percentages cont'd



Legend

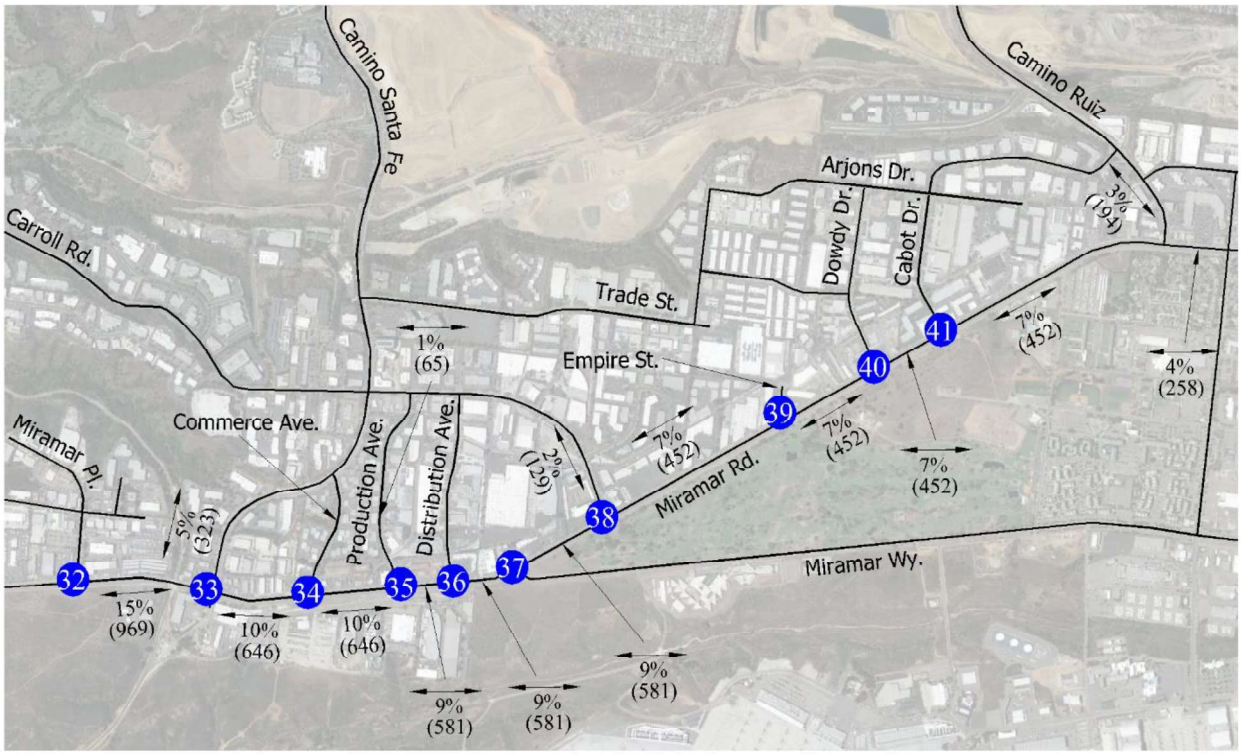
= Study Intersection

XX% = Trip Distribution Percentage

(XX,XXX) = Project Only ADT

N
NO SCALE

Figure 4-2: Project Only Trip Distribution Percentages cont'd



Legend

(#) = Study Intersection

XX% = Trip Distribution Percentage

(XX,XXX) = Project Only ADT

N
NO SCALE

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Figure 4-3: Project Only Inbound Trip Assignment Percentages

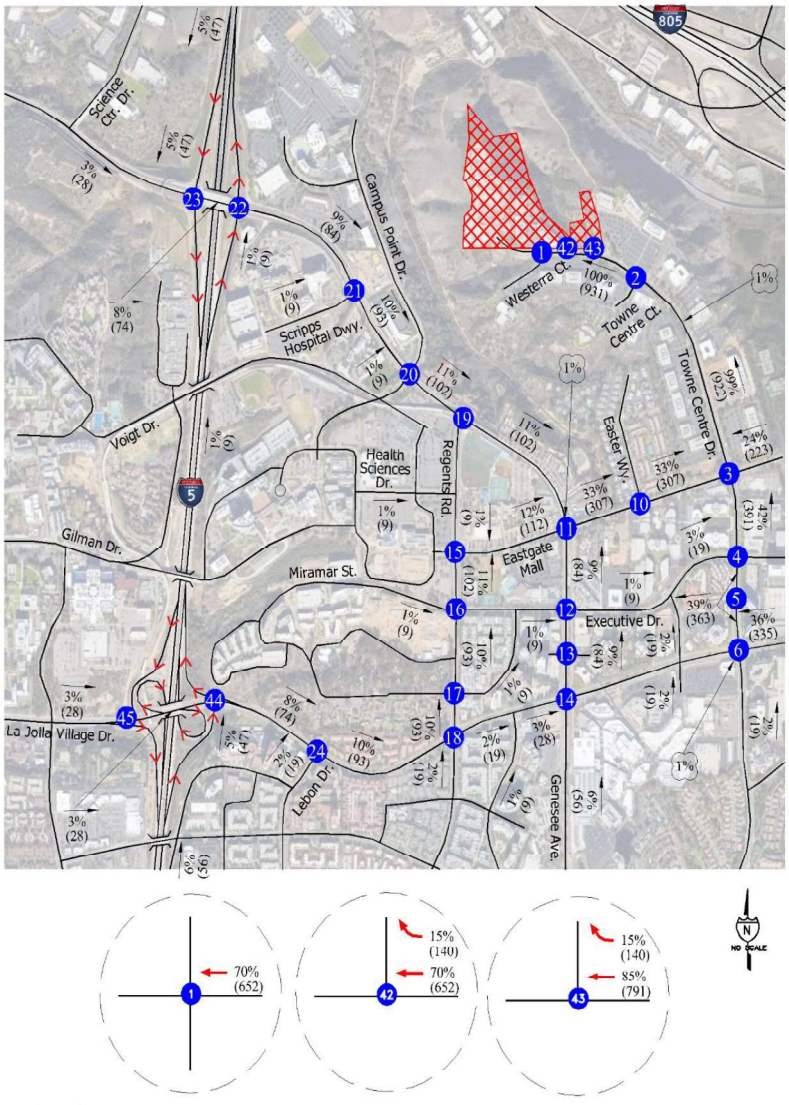
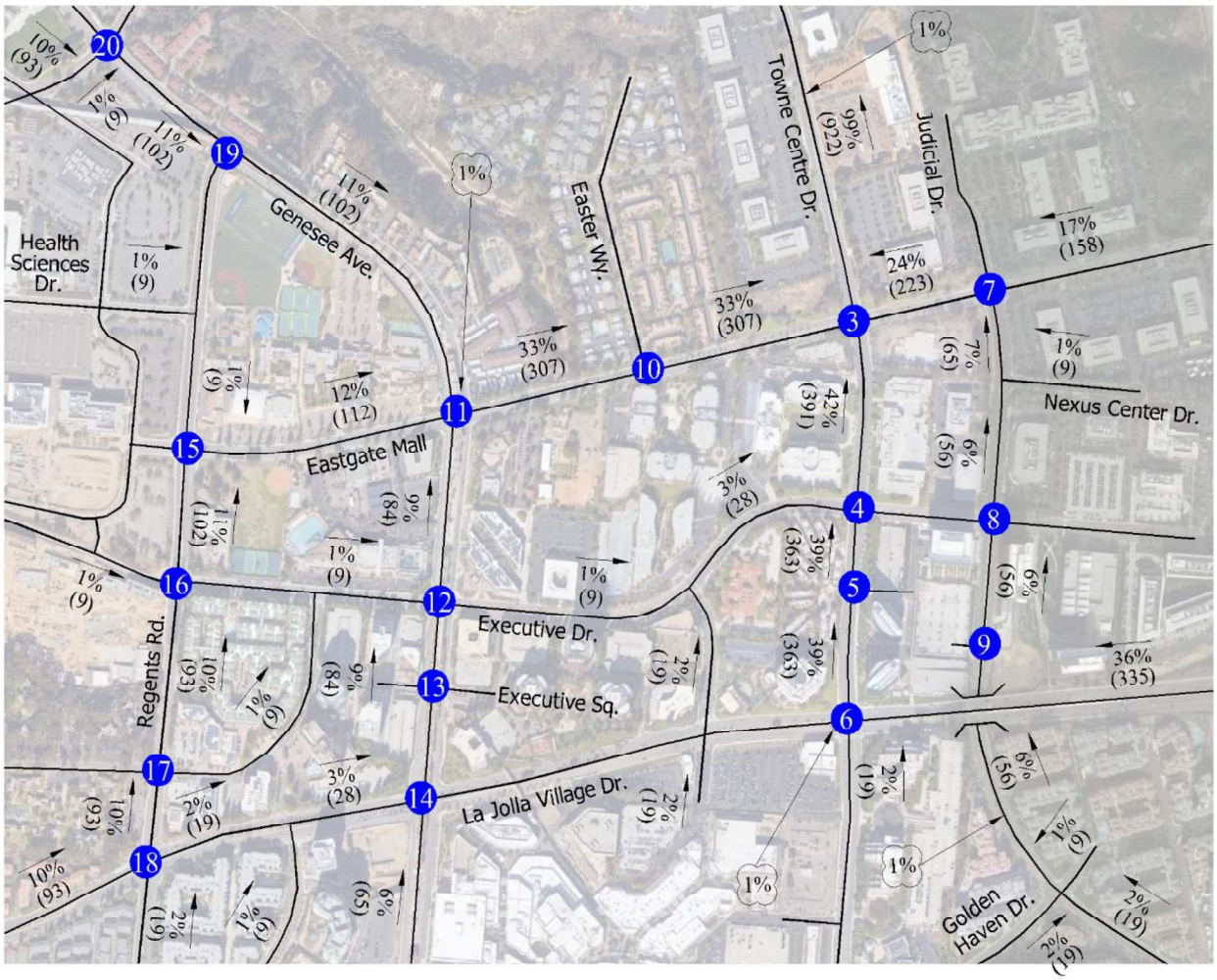


Figure 4-3: Project Only Inbound Trip Assignment Percentages cont'd



Legend

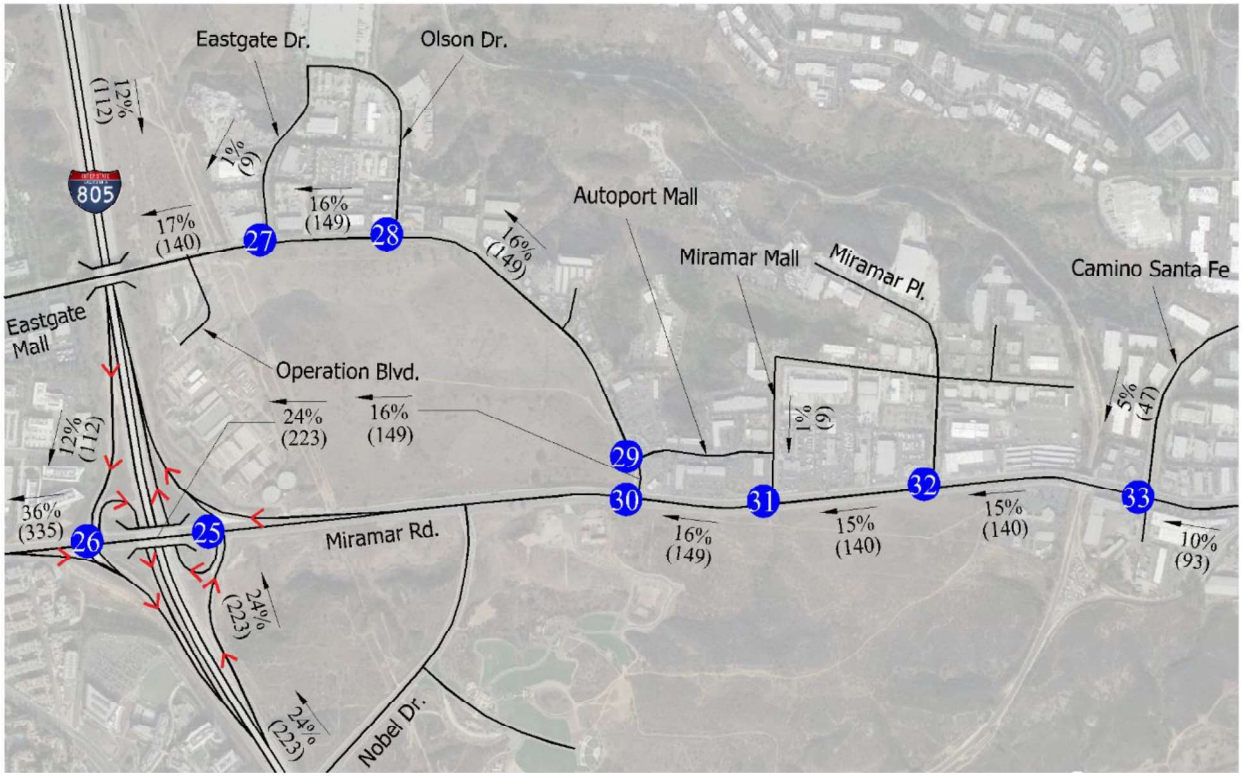
(#) = Study Intersection

XX% = Trip Assignment (Inbound) Percentage

(XX) = Trip Assignment (Inbound) – Highest Peak Hour (AM Peak)

N
NO SCALE

Figure 4-3: Project Only Inbound Trip Assignment Percentages cont'd



Legend

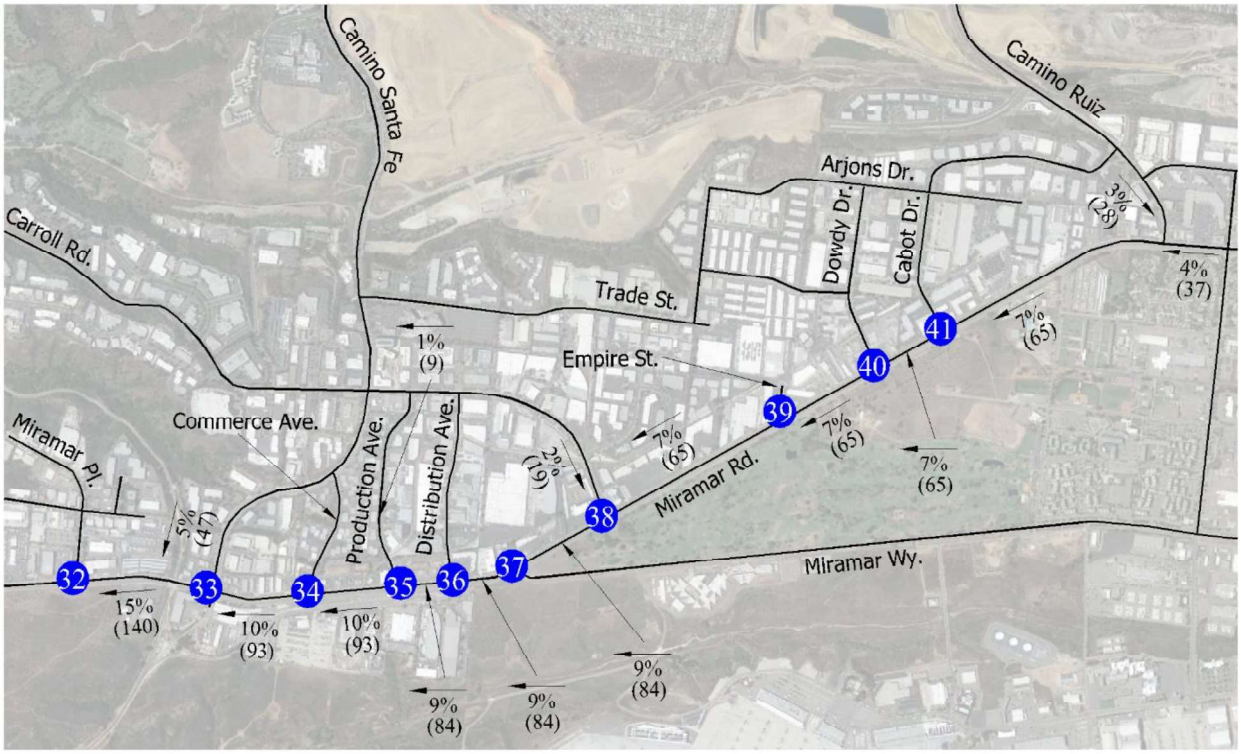
= Study Intersection

XX% = Trip Assignment (Inbound) Percentage

(XX) = Trip Assignment (Inbound) – Highest Peak Hour (AM Peak)

N
NO SCALE

Figure 4-3: Project Only Inbound Trip Assignment Percentages cont'd



Legend

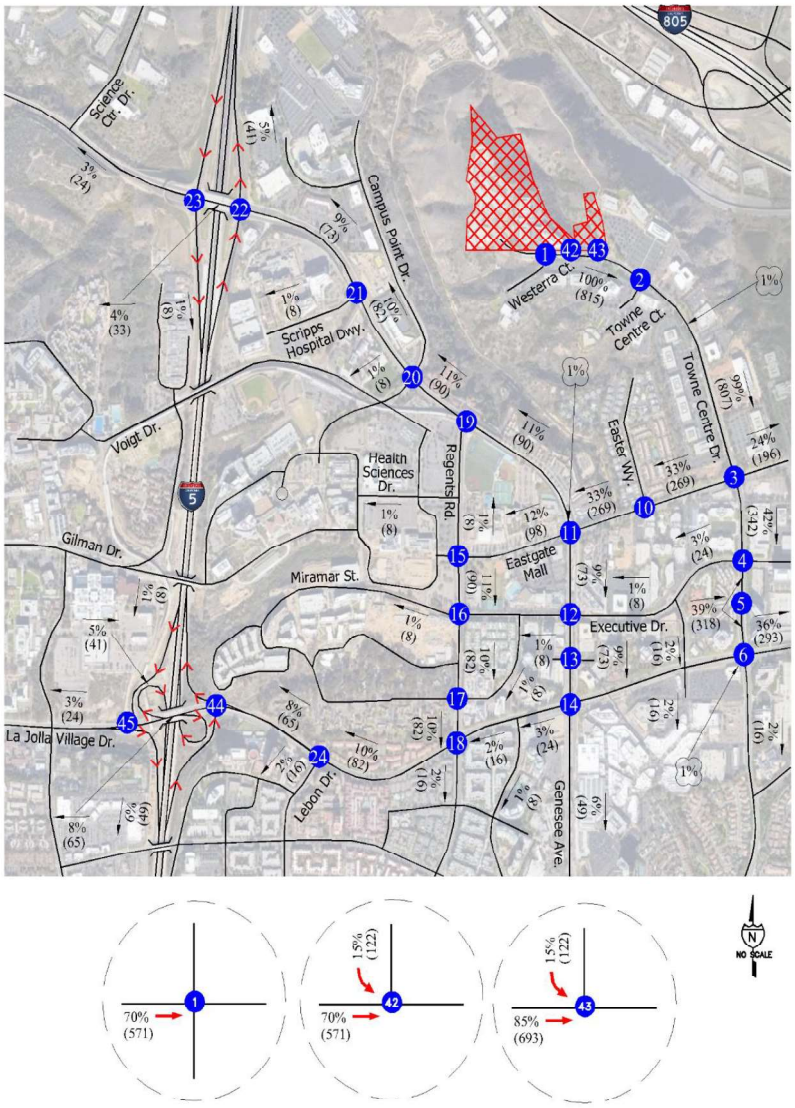
N
NO SCALE

= Study Intersection

XX% = Trip Assignment (Inbound) Percentage

(XX) = Trip Assignment (Inbound) – Highest Peak Hour (AM Peak)

Figure 4-4: Project Only Outbound Trip Assignment Percentages



Legend

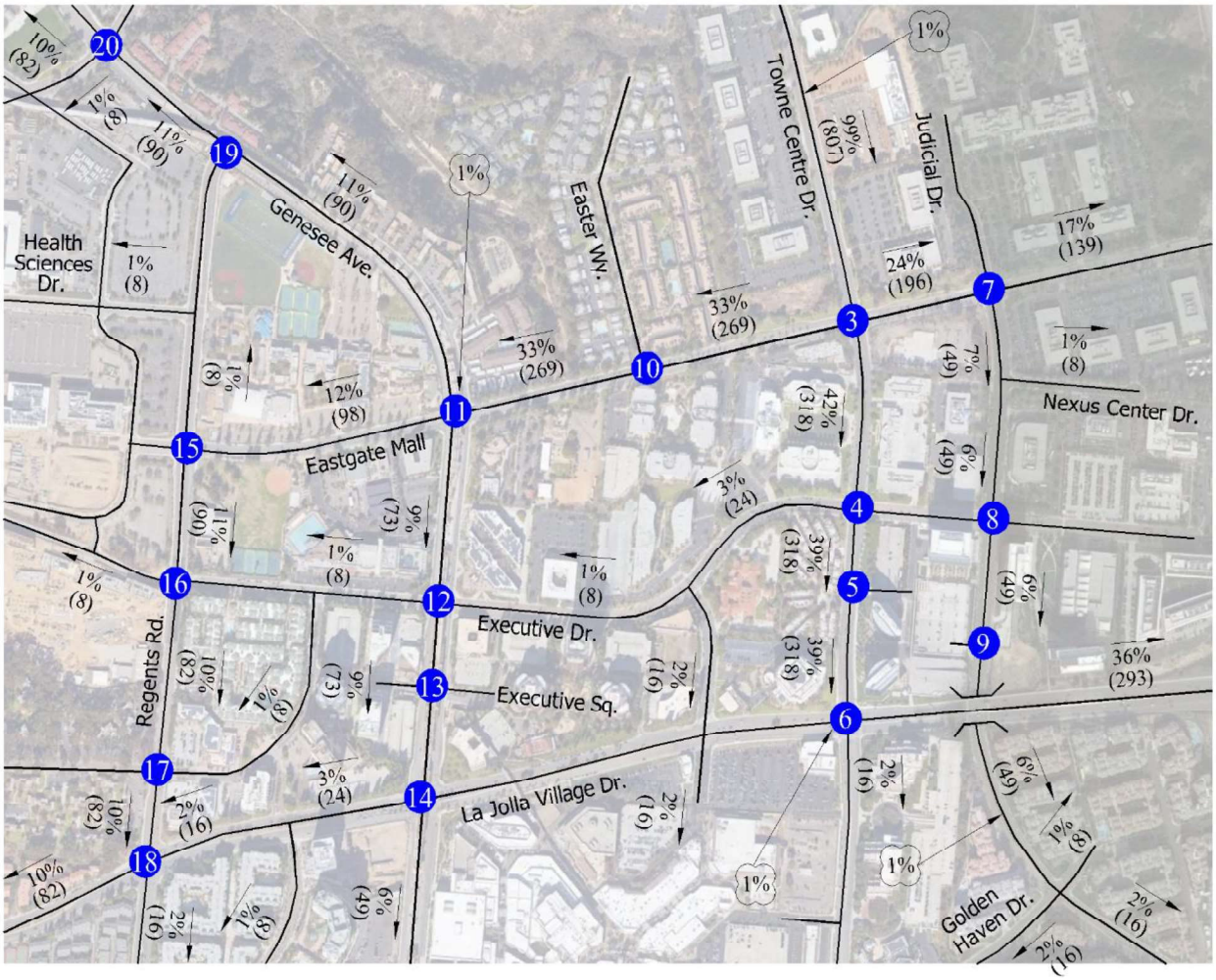
= Project Location

= Study Intersection

XX% = Trip Assignment (Outbound) Percentage

(XX) = Trip Assignment (Outbound) – Highest Peak Hour (PM Peak)

Figure 4-4: Project Only Outbound Trip Assignment Percentages cont'd



Legend

= Study Intersection

XX% = Trip Assignment (Outbound) Percentage

(XX) = Trip Assignment (Outbound) – Highest Peak Hour (PM Peak)

N
NO SCALE

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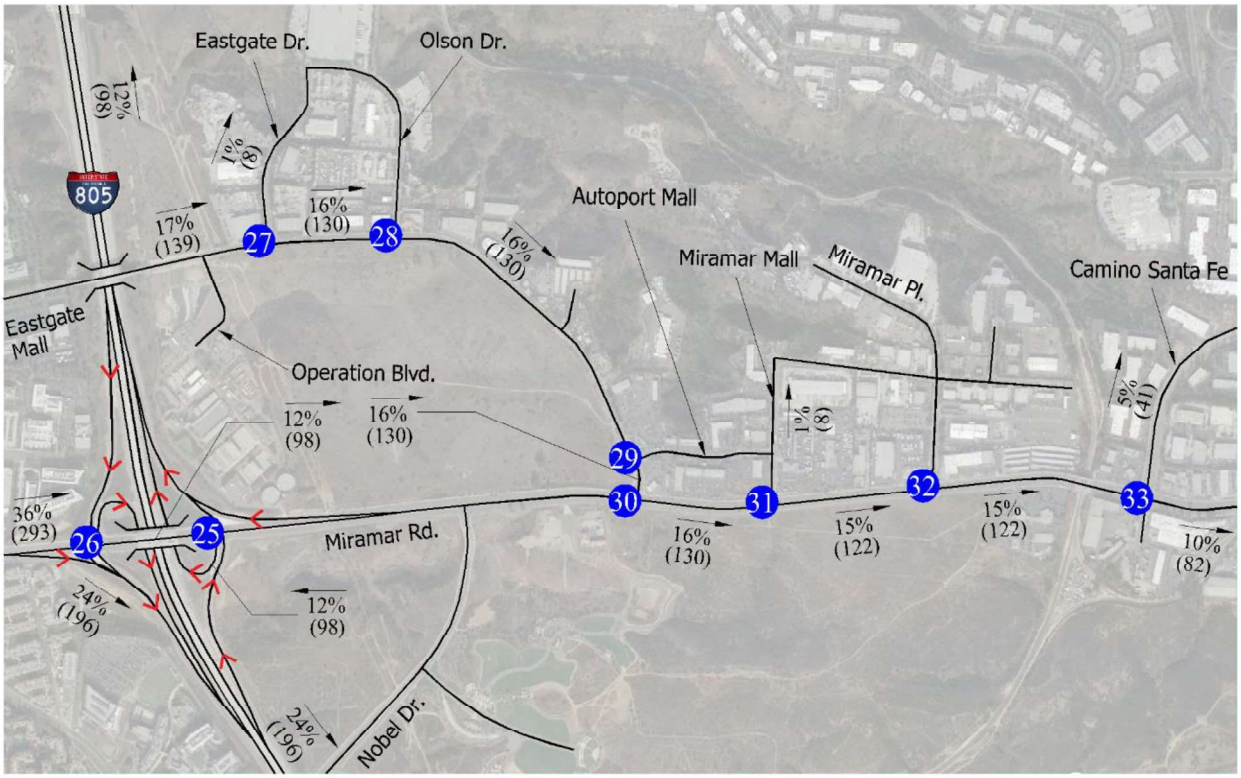
Figure 4-4: Project Only Outbound Trip Assignment Percentages cont'd



Legend

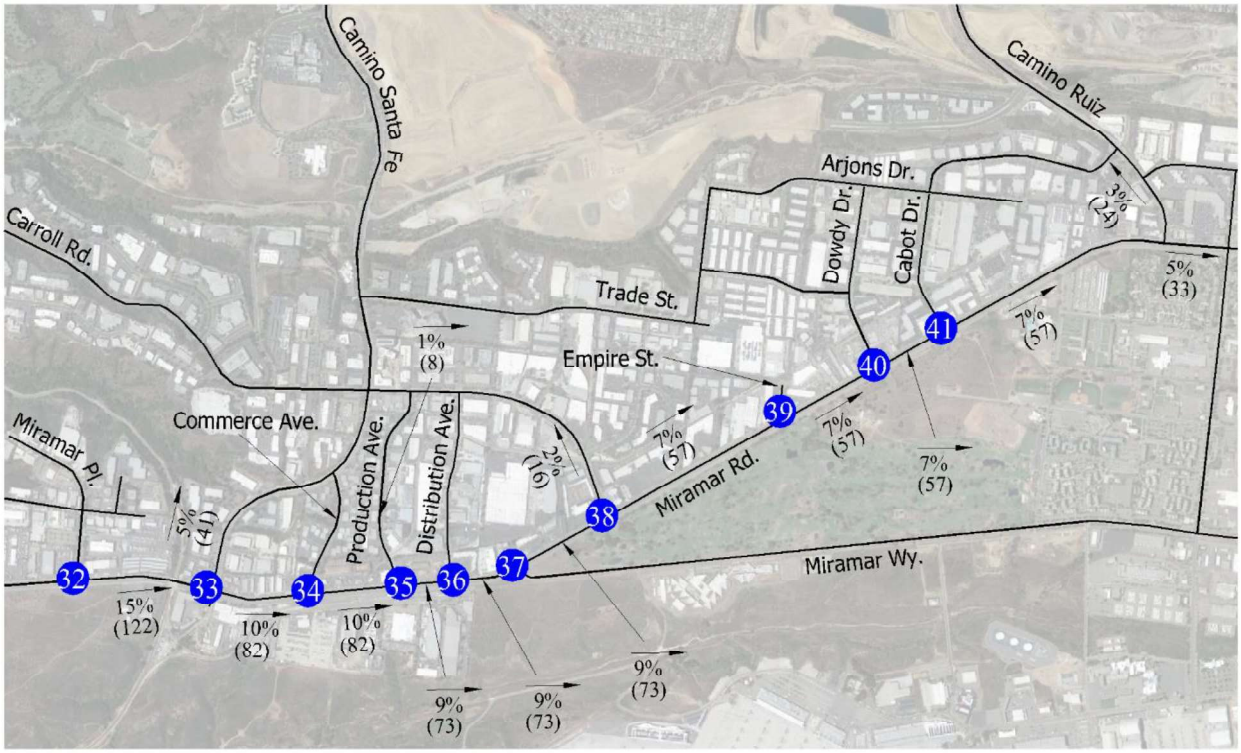
= Study Intersection

XX% = Trip Assignment (Outbound) Percentage

(XX) = Trip Assignment (Outbound) – Highest Peak Hour (PM Peak)

N
NO SCALE

Figure 4-4: Project Only Outbound Trip Assignment Percentages cont'd



Legend

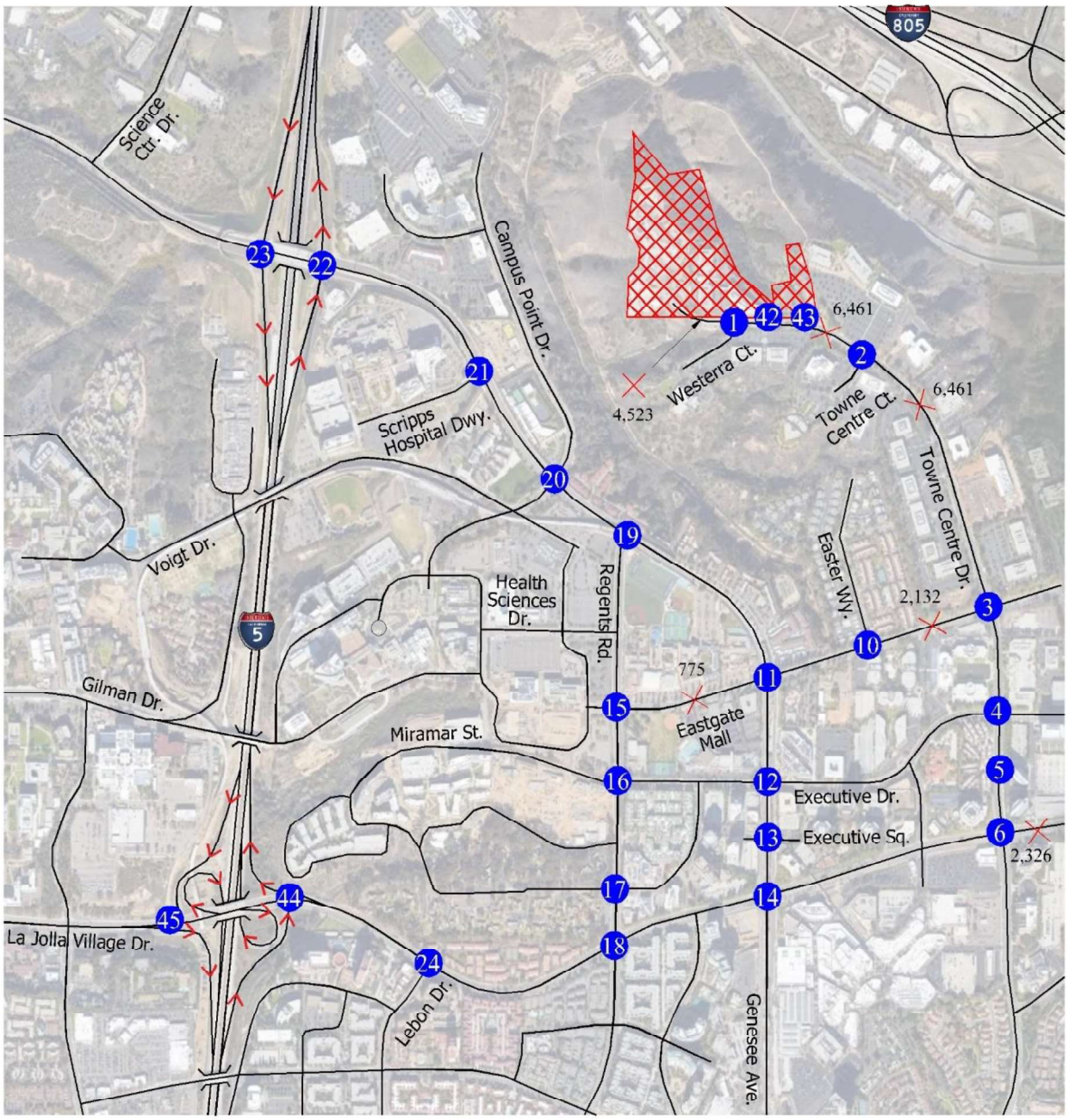
N
NO SCALE

= Study Intersection

XX% = Trip Assignment (Outbound) Percentage

(XX) = Trip Assignment (Outbound) – Highest Peak Hour (PM Peak)

Figure 4-5: Project Only Average Daily Traffic



Legend

= Project Location

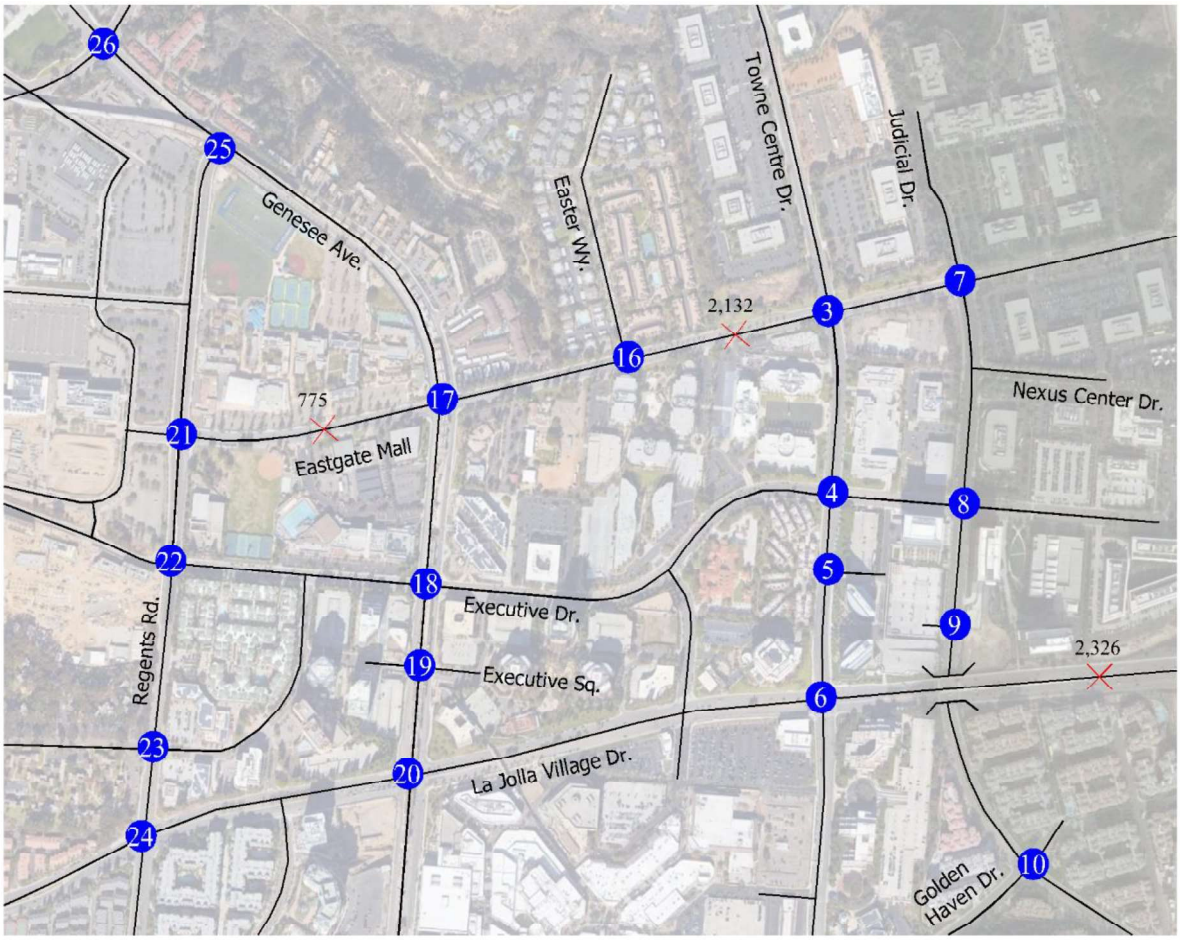
= Study Street Segment

= Study Intersection

XX,XXX = ADT Number

N
NO SCALE

Figure 4-5: Project Only Average Daily Traffic cont'd



Legend

= Study Street Segment

= Study Intersection

XX,XXX = ADT Number

N
NO SCALE

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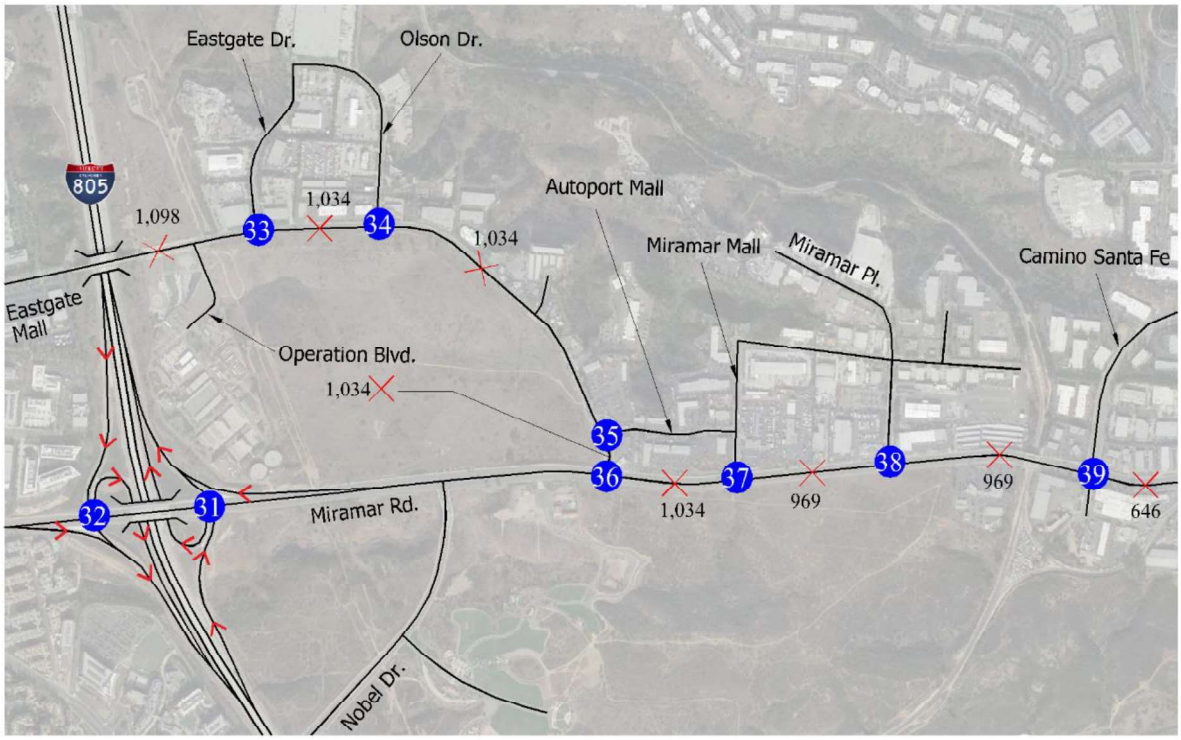
Figure 4-5: Project Only Average Daily Traffic cont'd



Legend

× = Study Street Segment

= Study Intersection

XX,XXX = ADT Number

N
NO SCALE

URBAN SYSTEMS ASSOCIATES, INC.
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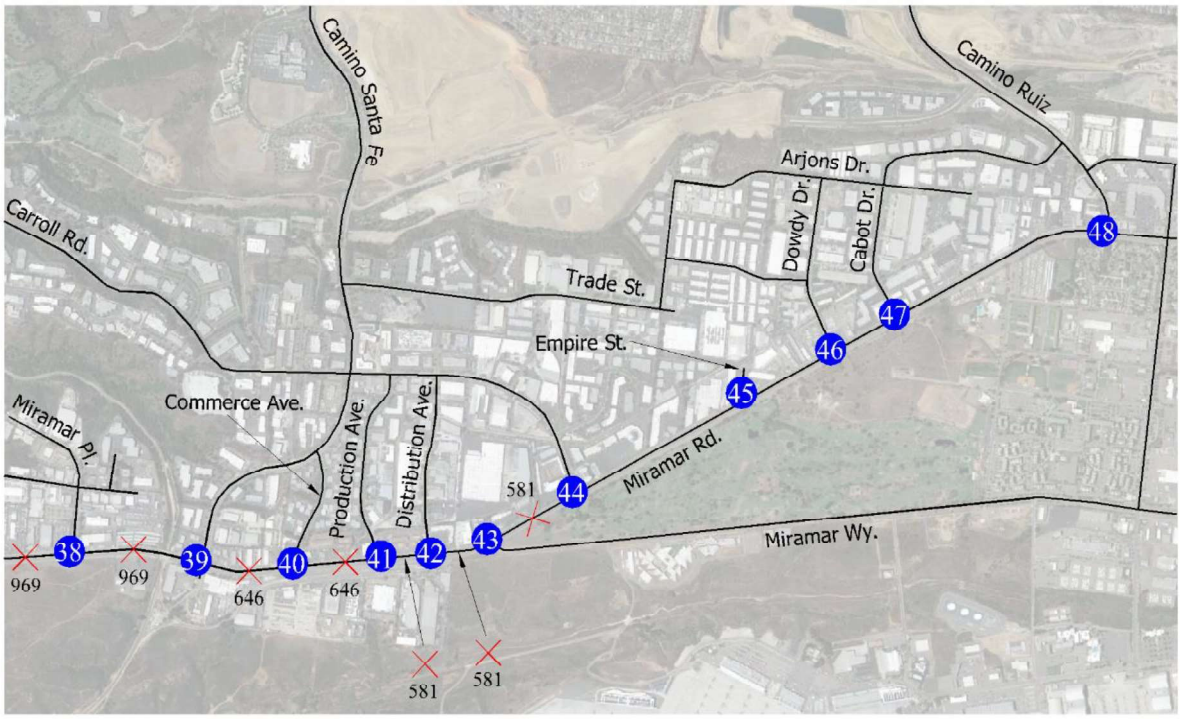
Figure 4-5: Project Only Average Daily Traffic cont'd



Legend

× = Study Street Segment

(#) = Study Intersection

XX,XXX = ADT Number

N
NO SCALE

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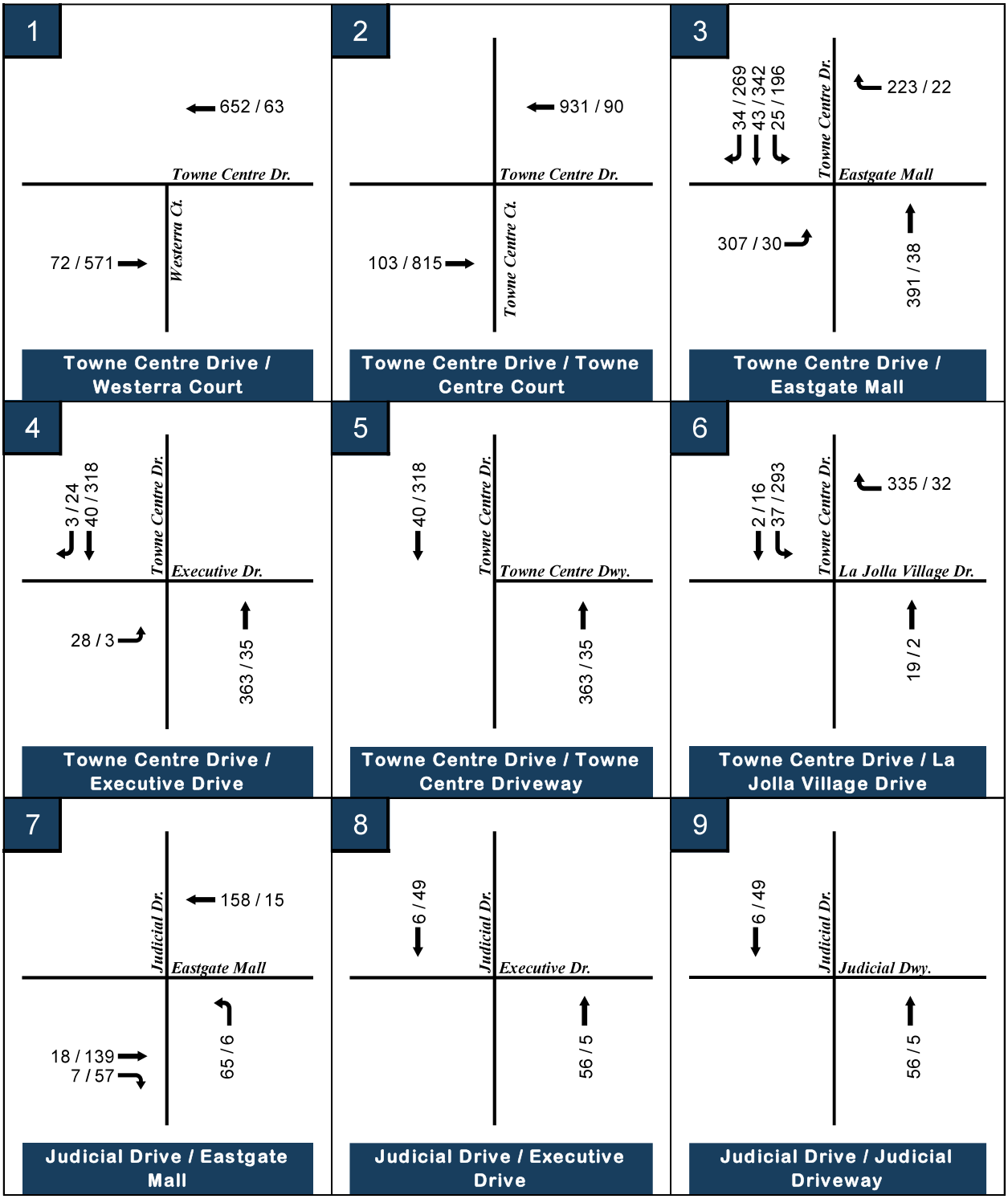
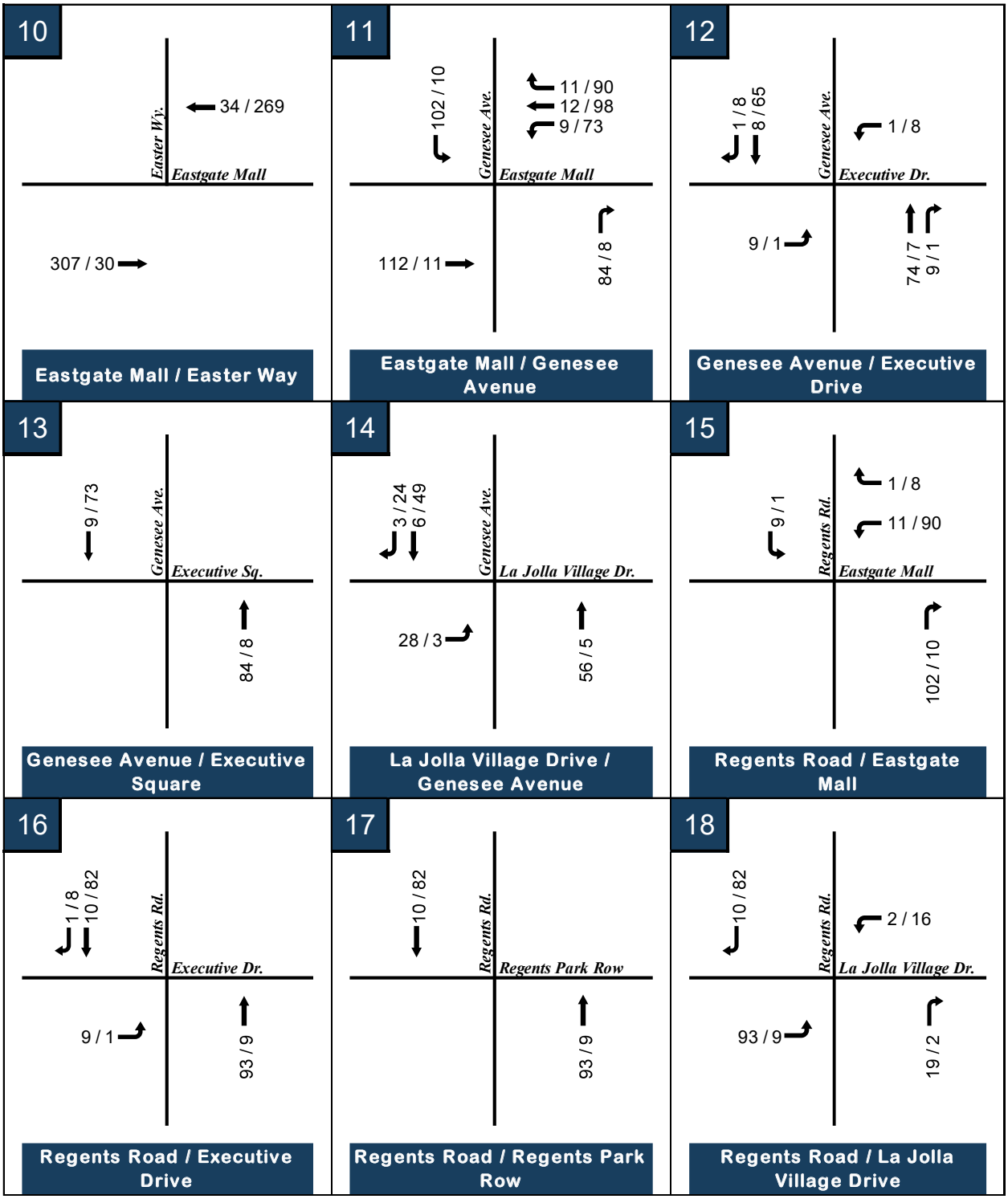
Figure 4-6: Project Only AM / PM Peak Hour Volumes



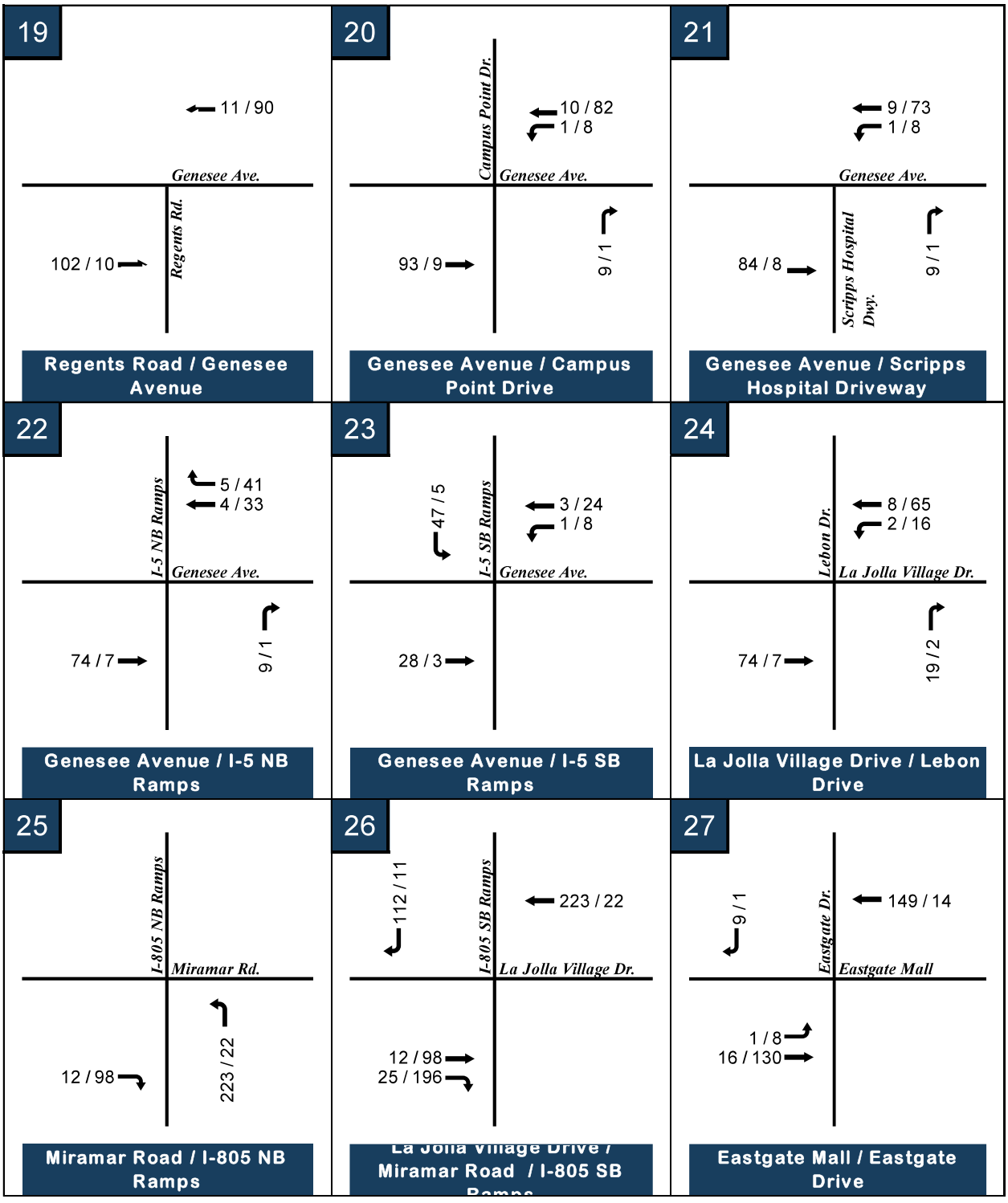
XX / XX = AM / PM Peak hour volumes

Figure 4-6: Project Only AM / PM Peak Hour Volumes (cont'd)



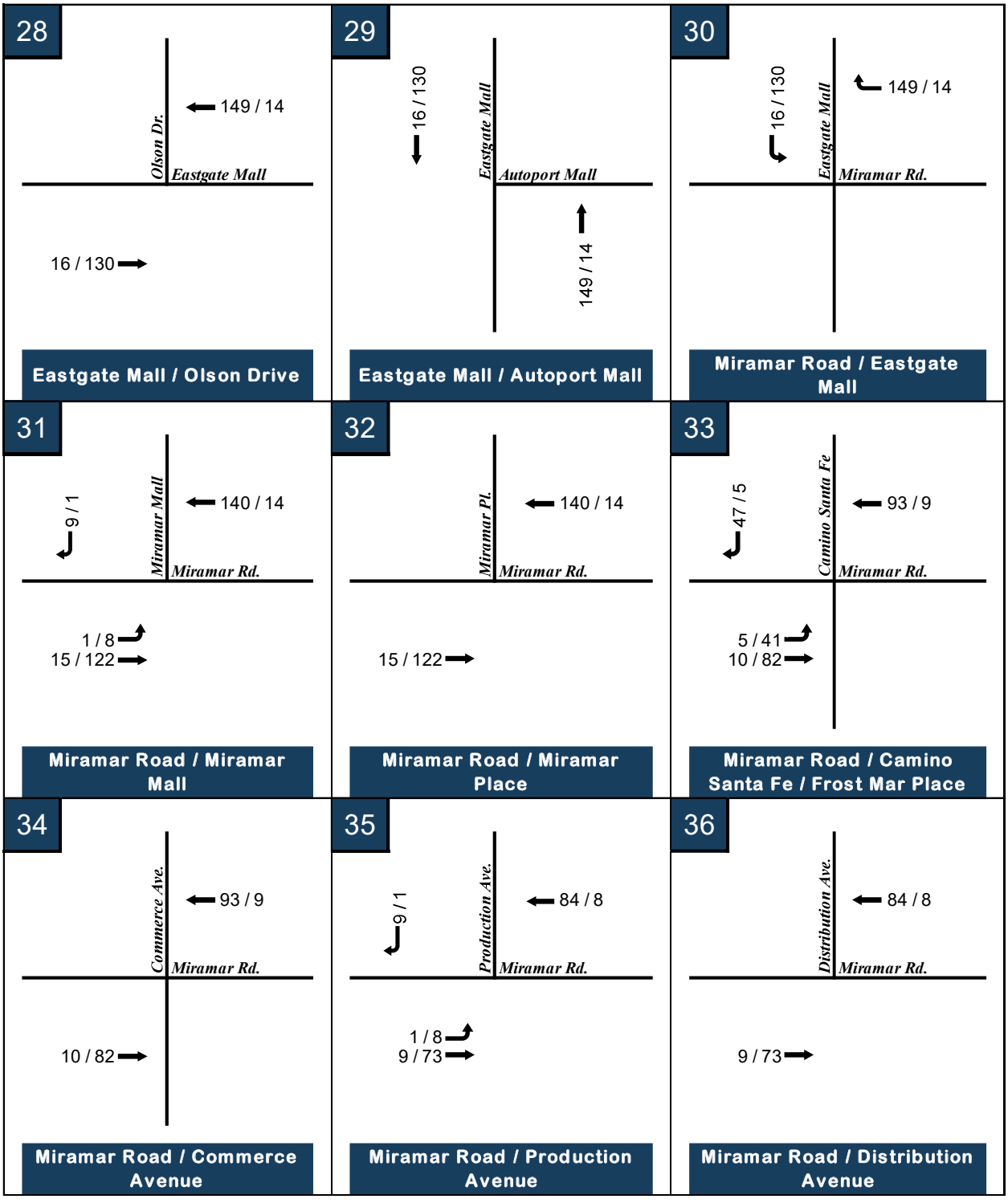
XX / XX = AM / PM Peak hour volumes

Figure 4-6: Project Only AM / PM Peak Hour Volumes (cont'd)



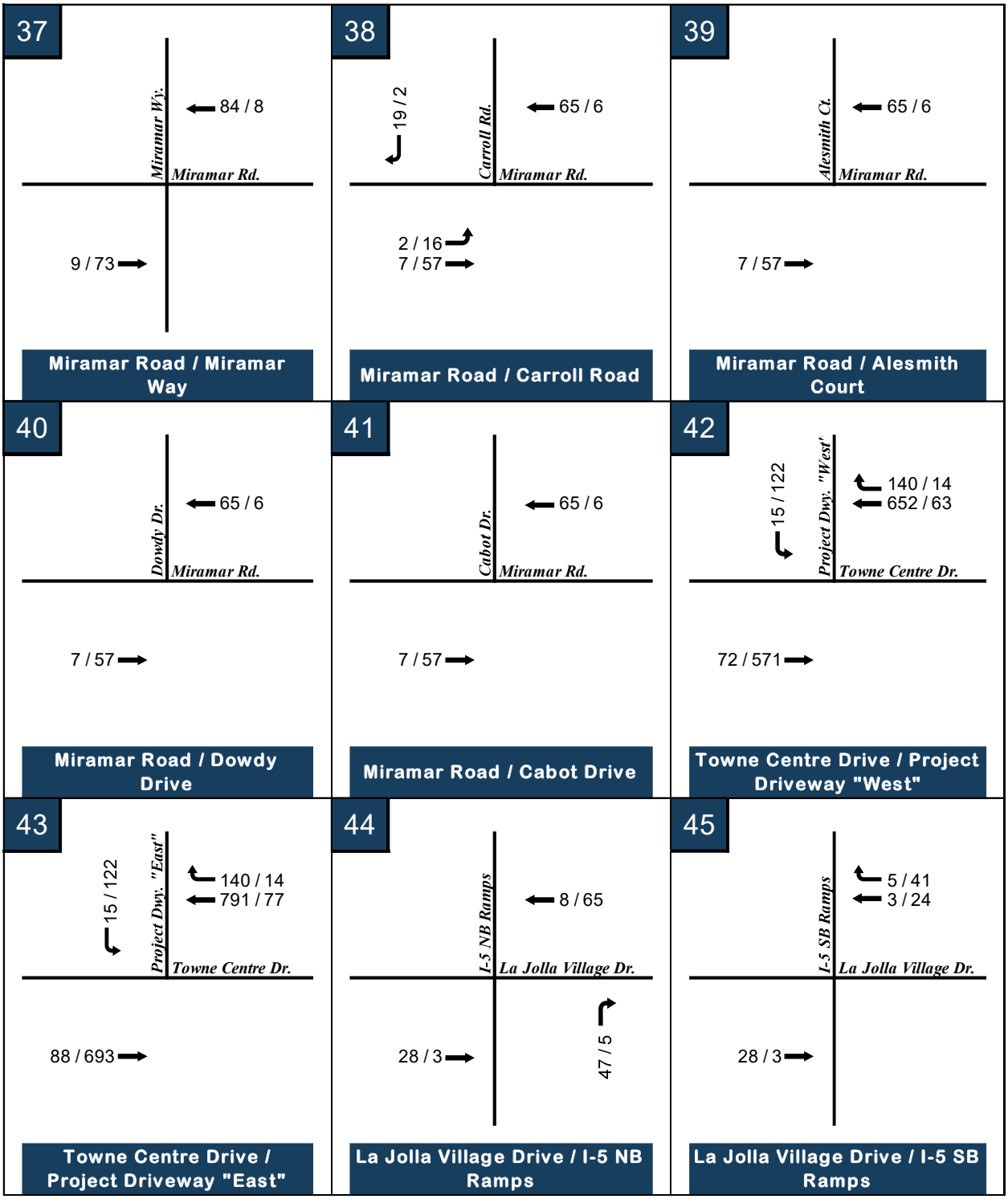
XX / XX = AM / PM Peak hour volumes

Figure 4-6: Project Only AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

Figure 4-6: Project Only AM / PM Peak Hour Volumes (cont'd)



XX / XX = AM / PM Peak hour volumes

3.0 Proposed Project

This chapter describes the Proposed Project, including the Proposed Project's trip generation, as well as specific information needed for the Local Mobility Analysis (LMA) including the trip distribution patterns, and project trip assignment.

3.1 Project Trip Generation, Distribution, and Assignment

Project Trip Generation

Project trip generation estimates were derived utilizing the trip generation rates outlined in Table 1 of the *City of San Diego Land Use Code – Trip Generation Manual, May 2003* and the *ITE Trip Generation Manual 10th Edition*. Trip generation rates utilized from the *ITE Trip Generation Manual 10th Edition* are provided in **Appendix E**. This study utilized a more conservative approach by analyzing 220 business hotel rooms and 90 dwelling units, instead of the proposed 217 room hotel room and 80 dwelling unit apartment. **Table 3.1** displays the anticipated trip generation utilizing a more conservative trip generation and **Table 3.2** displays the anticipated trip generation for the current site plan.

As shown, in Table 3.1, the Proposed Project as studied within this LMA would generate a total of 2,194 daily weekday trips, with 208 occurring in the AM peak Hour (80 inbound, 128 outbound) and 210 occurring in the PM peak hour (129 inbound, 81 outbound). Whereas the current site plan would generate 2,112 daily weekday trips, with 201 occurring in the AM peak hour (78 inbound, 123 outbound) and 201 occurring in the PM peak hour (123 inbound, 78 outbound). A net difference of 82 daily weekday trips, 7 AM peak hour trips, and 9 PM peak hour trips. Therefore, the trip generation as studied in this LMA provides a more conservative analysis from a trip generation perspective.

Table 3.1 Proposed Project Trip Generation – LMA Land Use

				AM					PM				
Land Use	Units	Trip Rate	ADT	%	Trips	Split	In	Out	%	Trips	Split	In	Out
Apartments*	90 DU	6 / DU	540	8%	43	(2:8)	9	34	9%	49	(7:3)	34	15
Business Hotel**	220 Rooms	7.52 / Rm	1,654	.75 / Rm	165	(43:57)	71	94	.73 / Rm	161	(59:41)	95	66
		Total	**2,194**		**208**		**80**	**128**		**210**		**129**	**81**

Notes:
* Trip generation rate from City of San Diego Trip Generation Manual (2003) for multi-family dwelling units (over 20 DU/ac)
** Trip generation from ITE Trip Generation Manual 10th Edition for LU Code 330 Business Hotel
Rm = Room

Table 3.2 Proposed Project Trip Generation – Current Site Plan

				AM					PM				
Land Use	Units	Trip Rate	ADT	%	Trips	Split	In	Out	%	Trips	Split	In	Out
Apartments*	80 DU	6 / DU	480	8%	38	(2:8)	8	30	9%	43	(7:3)	30	13
Business Hotel**	217 Rooms	7.52 / Rm	1,632	.75 / Rm	163	(43:57)	70	93	.73 / Rm	158	(59:41)	93	65
		Total	**2,112**		**201**		**78**	**123**		**201**		**123**	**78**

Notes:
* Trip generation rate from City of San Diego Trip Generation Manual (2003) for multi-family dwelling units (over 20 DU/ac)
** Trip generation from ITE Trip Generation Manual 10th Edition for LU Code 330 Business Hotel
Rm = Room

3.2 Project Study Area

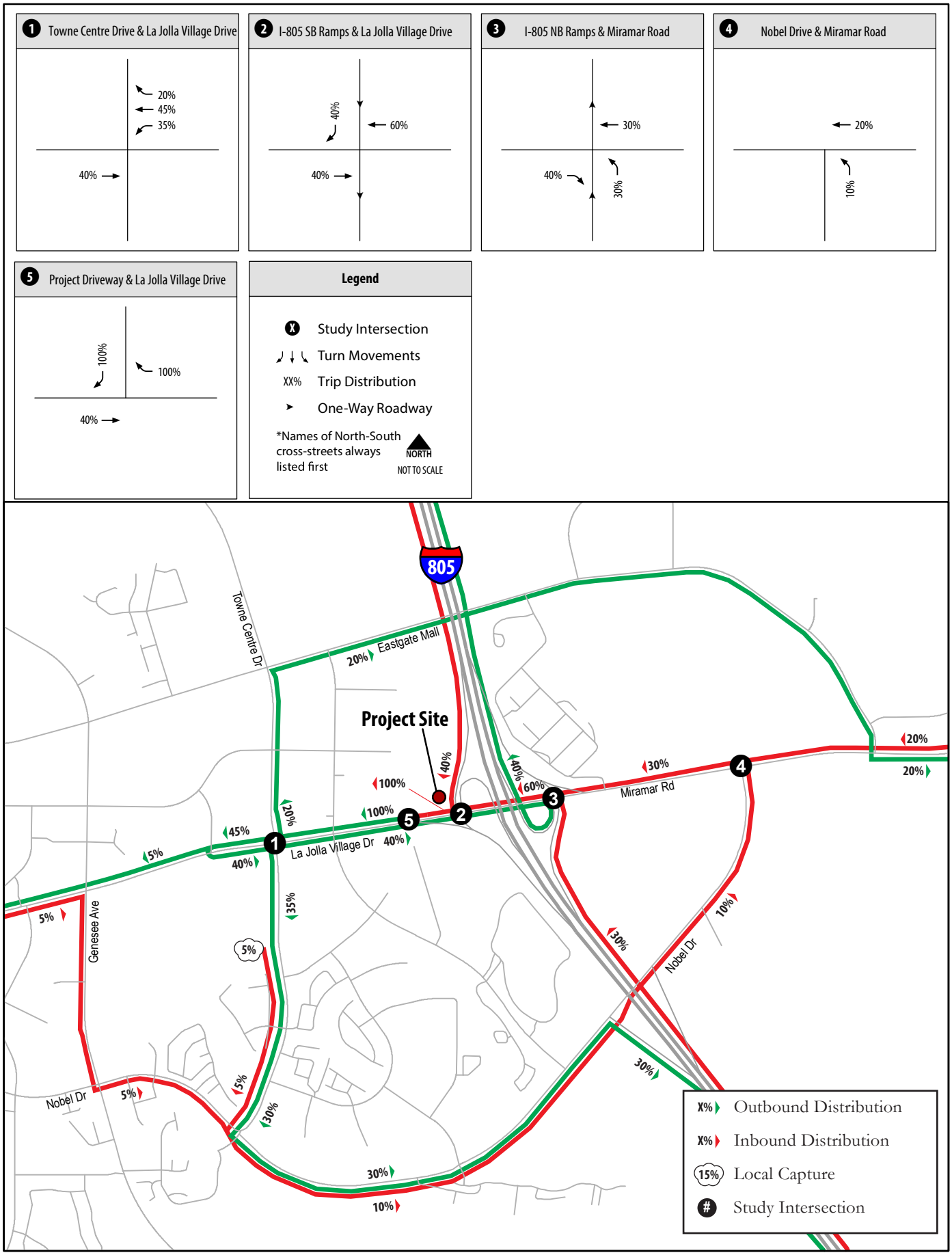
This section describes the LMA analysis requirements, including the Proposed Project trip distribution, assignment, and project study area.

Project Trip Distribution

The trip distribution for the Proposed Project was developed based on the geographical location of the project, the characteristics of the proposed land uses, and nearest freeway facilities. Since the Proposed Project features two separate land uses, separate trip distributions were developed for each land use. Figure 3.1A and Figure 3.1B display the Proposed Project trip distribution patterns for the residential and business hotel land uses, respectively.

Project Trip Assignment

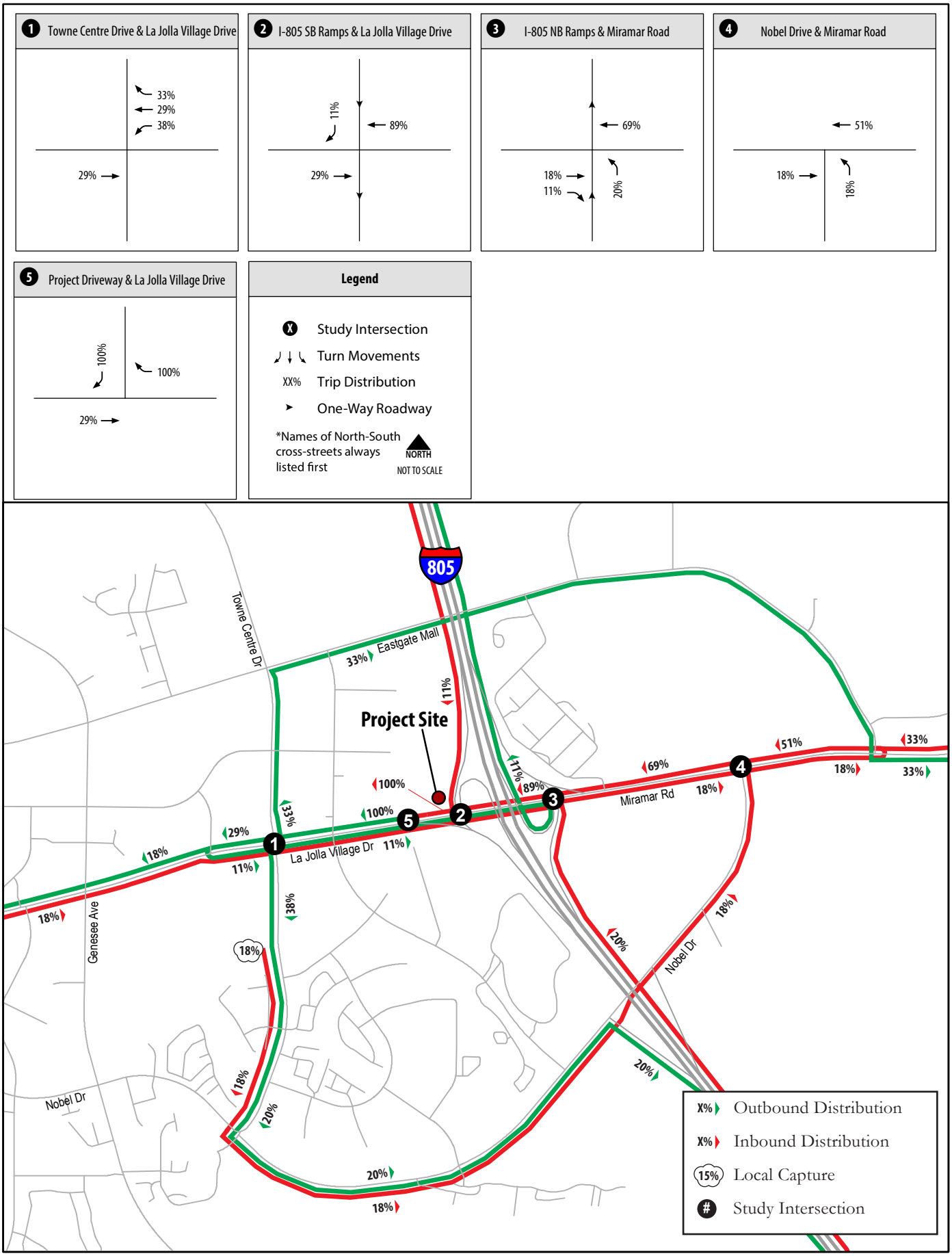
Based upon the project trip distribution patterns, daily and AM/PM peak hour project trips were assigned to the adjacent roadway network for each project land use. Figure 3.2A, Figure 3.2B, and Figure 3.2C display the Proposed Project trip assignment for residential, business hotel, and combined land uses, respectively.



UTC Hotel and Apartments
Local Mobility Analysis

CHEN RYAN

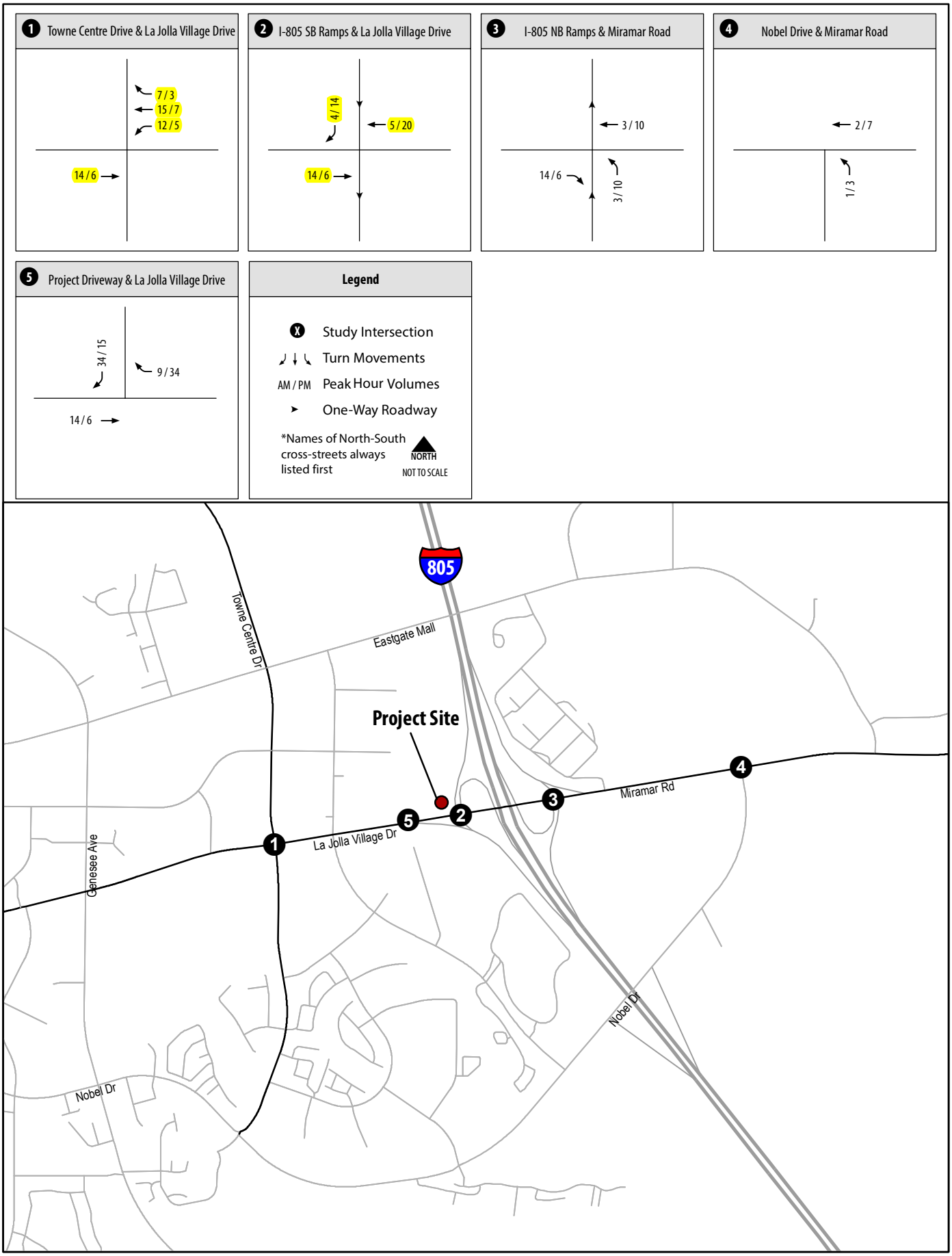
Figure 3.1A
Project Trip Distribution (Residential)



UTC Hotel and Apartments
Local Mobility Analysis

CHEN RYAN

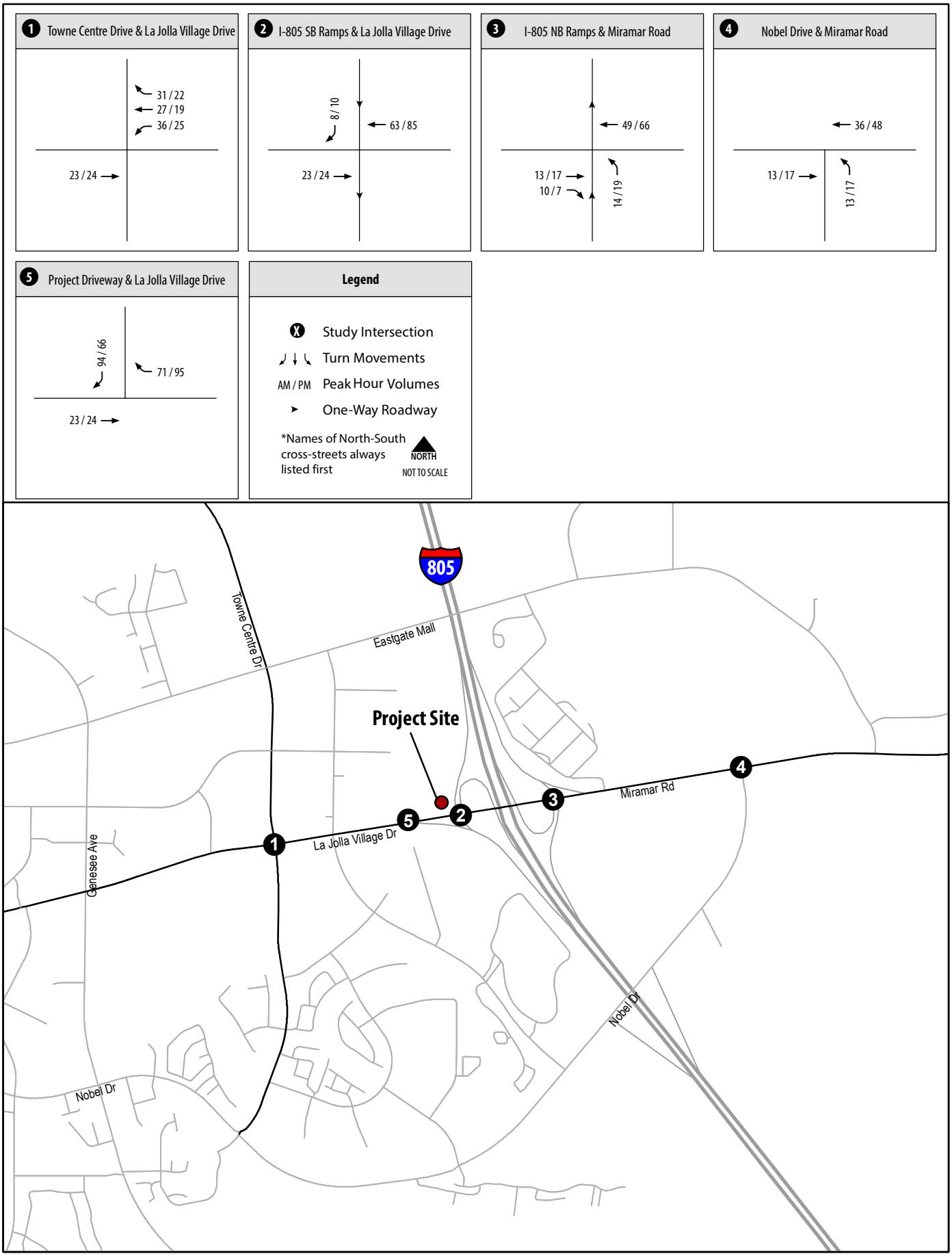
Figure 3.1B
Project Trip Distribution (Hotel)



UTC Hotel and Apartments
Local Mobility Analysis

CHEN RYAN

Figure 3.2A
Project Trip Assignment (Residential)



UTC Hotel and Apartments
Local Mobility Analysis

CHEN RYAN

Figure 3.2B
Project Trip Assignment (Hotel)

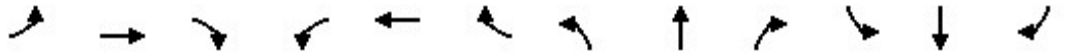
Cumulative Projects List

ID	PTS #	Project Name	Type of Development / Intensity	Project ADT	Status / Condition / Notes
1	527644	9775 Towne Centre Drive	156,500 SF of Scientific Research & Development	452	Under Construction (Opening Day Year 2021 *est.*)
2	291342	9455 Towne Centre Drive	150,000 SF of Corporate Headquarters	1,500	Under Construction (Opening Day Year 2020 *est.*)
3	218594	9514 Towne Centre Drive - Coast Income Properties	100,000 SF of Commercial Office	1,688	Approved
4	477943	Costa Verde Revitalization Project	360,000 SF of Scientific Research & Development, 40,000 SF of Office, and 200 Hotel rooms	4,981	Under Review (Opening Day Year 2023)
5	6563	Monte Verde	560 Multiple Dwelling Units	3,360	First Building Opened in Year 2018: Second Building Under Construction
6	127567	Scripps Hospital - La Jolla (Amendment 8)	115,900 SF of Medical Office	2,318	Approved
7	686158	4555 Executive Drive - ARE Scripps Health NDP	Demolition of 30,221 SF of existing building area and the construction of 131,183 SF of corporate headquarters, a 25,522 SF basement, and a 119,500 SF parking structure	1,240	Under Review (Opening Day Year 2023)
8	624751	Towne Centre View	Demolition of 199,735 SF of existing building area and the construction of 1,000,000 SF of scientific research and development, laboratory, technology, and office campus	6,461	Under Review (Opening Day Year 2027)
9	667592	UTC Hotel / Apartments	Development of a 217-room, 121,159 SF hotel and a 47,684 SF apartment building with up to 81 dwelling units, including 9 multi-family affordable housing units	2,194	Under Review (Opening Day Year 2023)

Note: a. This list of Cumulative Projects is sourced from a combination of research conducted through the City of San Diego's Open DSD Portal for projects that are reasonably foreseeable to be constructed and operating by the Opening Day Year 2023 of the Campus Point Master Plan and knowledge of projects in the area that have been recently approved and are constructed or occupied. This approach has been followed as a conservative measure for the evaluation of the Campus Point Master Plan Update due to the Year 2015 Existing baseline conditions predating the Mid-Coast Troley project and the time of preparation of this study during the Year 2021.

Appendix I: Near-Term (Opening Day Year 2023 AM/PM Synchro Worksheets

Provided on the following page



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	260	139	61	539	468	373	980	229	49	114	68
Future Volume (veh/h)	485	260	139	61	539	468	373	980	229	49	114	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	527	283	151	66	586	509	405	1065	249	56	130	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	489	931	481	84	571	494	461	982	228	95	521	287
Arrive On Green	0.14	0.42	0.42	0.05	0.32	0.32	0.13	0.35	0.35	0.03	0.24	0.24
Sat Flow, veh/h	3428	2228	1152	1767	1768	1532	3428	2828	658	3428	2168	1196
Grp Volume(v), veh/h	527	222	212	66	584	511	405	662	652	56	104	103
Grp Sat Flow(s),veh/h/ln	1714	1763	1618	1767	1763	1537	1714	1763	1723	1714	1763	1601
Q Serve(g_s), s	17.6	10.3	10.8	4.6	39.8	39.8	14.3	42.8	42.8	2.0	5.9	6.4
Cycle Q Clear(g_c), s	17.6	10.3	10.8	4.6	39.8	39.8	14.3	42.8	42.8	2.0	5.9	6.4
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.38	1.00		0.75
Lane Grp Cap(c), veh/h	489	736	676	84	569	496	461	612	598	95	424	385
V/C Ratio(X)	1.08	0.30	0.31	0.78	1.03	1.03	0.88	1.08	1.09	0.59	0.25	0.27
Avail Cap(c_a), veh/h	489	736	676	148	569	496	534	612	598	142	424	385
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	23.9	24.1	58.1	41.8	41.8	52.4	40.3	40.3	59.3	37.8	38.0
Incr Delay (d2), s/veh	63.0	1.1	1.2	5.8	44.7	48.2	12.7	60.3	64.0	2.2	1.4	1.7
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	11.8	4.5	4.4	2.2	24.1	21.5	7.0	28.5	28.5	0.9	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.8	25.0	25.3	63.9	86.5	90.0	65.1	100.6	104.2	61.4	39.2	39.7
LnGrp LOS	F	C	C	E	F	F	E	F	F	E	D	D
Approach Vol, veh/h		961			1161			1719			263	
Approach Delay, s/veh		74.9			86.7			93.6			44.1	
Approach LOS		E			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	57.2	21.0	34.8	22.0	45.5	7.8	48.0
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	10.3	* 48	19.2	28.7	17.6	39.8	5.1	42.8
Max Q Clear Time (g_c+I1), s	6.6	12.8	16.3	8.4	19.6	41.8	4.0	44.8
Green Ext Time (p_c), s	0.0	5.9	0.3	1.9	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	84.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

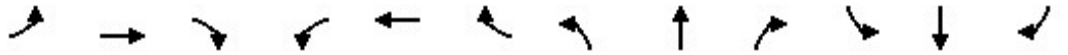
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	1618	78	0	313
Future Vol, veh/h	0	9	1618	78	0	313
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, %	2	2	2	2	2	2
Mvmt Flow	0	10	1759	85	0	340

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	922	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	272	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	272	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	272	-
HCM Lane V/C Ratio	-	-	0.036	-
HCM Control Delay (s)	-	-	18.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	110	39	57	127	40	478	1521	437	15	216	82
Future Volume (veh/h)	194	110	39	57	127	40	478	1521	437	15	216	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	237	134	48	65	144	45	503	1601	460	16	237	90
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	164	509	174	83	404	121	644	1756	775	131	976	360
Arrive On Green	0.09	0.20	0.20	0.05	0.15	0.15	0.12	0.50	0.50	0.01	0.39	0.39
Sat Flow, veh/h	1767	2558	875	1767	2645	792	1767	3526	1555	1767	2516	928
Grp Volume(v), veh/h	237	90	92	65	94	95	503	1601	460	16	164	163
Grp Sat Flow(s),veh/h/ln	1767	1763	1670	1767	1763	1674	1767	1763	1555	1767	1763	1681
Q Serve(g_s), s	7.6	3.5	3.8	3.0	3.9	4.2	10.2	34.1	17.2	0.4	5.1	5.4
Cycle Q Clear(g_c), s	7.6	3.5	3.8	3.0	3.9	4.2	10.2	34.1	17.2	0.4	5.1	5.4
Prop In Lane	1.00		0.52	1.00		0.47	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	164	351	332	83	269	256	644	1756	775	131	684	652
V/C Ratio(X)	1.44	0.26	0.28	0.78	0.35	0.37	0.78	0.91	0.59	0.12	0.24	0.25
Avail Cap(c_a), veh/h	164	703	667	125	669	635	644	1756	775	215	684	652
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	27.6	27.7	38.5	31.0	31.1	15.5	18.9	14.6	18.9	16.9	16.9
Incr Delay (d2), s/veh	229.6	0.4	0.5	8.2	1.4	1.6	5.6	8.7	3.3	0.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	1.5	1.5	1.5	1.7	1.8	3.5	14.6	6.3	0.2	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	266.7	28.1	28.2	46.7	32.3	32.7	21.1	27.6	18.0	19.0	17.7	17.9
LnGrp LOS	F	C	C	D	C	C	C	C	B	B	B	B
Approach Vol, veh/h		419			254			2564			343	
Approach Delay, s/veh		163.1			36.1			24.6			17.8	
Approach LOS		F			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	46.5	8.2	21.4	14.6	37.5	12.0	17.6
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 37	5.8	32.6	10.2	31.7	7.6	* 31
Max Q Clear Time (g_c+I1), s	2.4	36.1	5.0	5.8	12.2	7.4	9.6	6.2
Green Ext Time (p_c), s	0.0	1.2	0.0	1.2	0.0	2.1	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	40.9
HCM 6th LOS	D

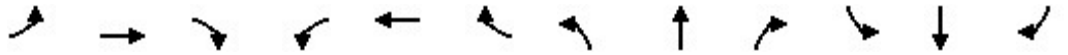
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	1	1484	63	0	316
Future Volume (veh/h)	9	1	1484	63	0	316
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	12	1	1579	67	0	385
Peak Hour Factor	0.75	0.75	0.94	0.94	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	24	22	2209	93	0	2260
Arrive On Green	0.01	0.01	0.64	0.64	0.00	0.64
Sat Flow, veh/h	1767	1572	3538	146	0	3711
Grp Volume(v), veh/h	12	1	805	841	0	385
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1828	0	1763
Q Serve(g_s), s	0.2	0.0	8.6	8.7	0.0	1.2
Cycle Q Clear(g_c), s	0.2	0.0	8.6	8.7	0.0	1.2
Prop In Lane	1.00	1.00		0.08	0.00	
Lane Grp Cap(c), veh/h	24	22	1130	1172	0	2260
V/C Ratio(X)	0.49	0.05	0.71	0.72	0.00	0.17
Avail Cap(c_a), veh/h	1369	1219	1130	1172	0	2260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	13.8	3.4	3.4	0.0	2.1
Incr Delay (d2), s/veh	5.7	0.3	3.8	3.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	1.2	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	14.1	7.2	7.2	0.0	2.2
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	13		1646			385
Approach Delay, s/veh	19.2		7.2			2.2
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		23.1				23.1	5.3
Change Period (Y+Rc), s		4.9				4.9	4.9
Max Green Setting (Gmax), s		18.2				18.2	22.0
Max Q Clear Time (g_c+I1), s		10.7				3.2	2.2
Green Ext Time (p_c), s		6.4				3.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	343	1081	123	406	1639	1715	137	222	303	242	38	36
Future Volume (veh/h)	343	1081	123	406	1639	1715	137	222	303	242	38	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	369	1162	78	432	1744	1398	154	249	250	299	47	32
Peak Hour Factor	0.93	0.93	0.93	0.94	0.94	0.94	0.89	0.89	0.89	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	426	2297	795	484	2402	1587	204	563	829	349	713	315
Arrive On Green	0.12	0.45	0.45	0.14	0.47	0.47	0.06	0.16	0.16	0.10	0.20	0.20
Sat Flow, veh/h	3428	5066	1546	3428	5066	2753	3428	3526	2742	3428	3526	1556
Grp Volume(v), veh/h	369	1162	78	432	1744	1398	154	249	250	299	47	32
Grp Sat Flow(s),veh/h/ln	1714	1689	1546	1714	1689	1376	1714	1763	1371	1714	1763	1556
Q Serve(g_s), s	14.8	22.8	3.6	17.3	38.6	61.2	6.2	8.9	9.8	12.0	1.5	2.3
Cycle Q Clear(g_c), s	14.8	22.8	3.6	17.3	38.6	61.2	6.2	8.9	9.8	12.0	1.5	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	426	2297	795	484	2402	1587	204	563	829	349	713	315
V/C Ratio(X)	0.87	0.51	0.10	0.89	0.73	0.88	0.76	0.44	0.30	0.86	0.07	0.10
Avail Cap(c_a), veh/h	700	2297	795	590	2402	1587	392	1148	1284	441	1191	526
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.2	27.1	17.5	59.1	29.5	25.6	64.8	53.2	37.6	61.9	45.2	45.5
Incr Delay (d2), s/veh	3.4	0.8	0.2	12.4	2.0	7.4	2.1	1.3	0.5	10.8	0.1	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	6.6	9.4	1.4	8.4	16.0	20.9	2.8	4.1	3.4	5.8	0.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.6	27.9	17.7	71.5	31.5	32.9	67.0	54.5	38.1	72.7	45.2	45.7
LnGrp LOS	E	C	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1609			3574			653			378	
Approach Delay, s/veh		35.6			36.9			51.1			67.0	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.7	69.0	12.7	33.6	21.8	71.9	18.7	27.7
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	24.1	32.5	16.0	47.3	28.6	* 29	18.0	* 46
Max Q Clear Time (g_c+I1), s	19.3	24.8	8.2	4.3	16.8	63.2	14.0	11.8
Green Ext Time (p_c), s	0.4	5.8	0.2	0.7	0.6	0.0	0.2	6.1

Intersection Summary	
HCM 6th Ctrl Delay	39.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

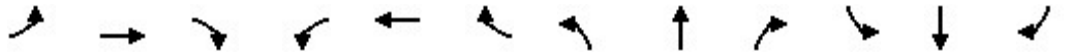
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	560	110	58	0	6
Future Vol, veh/h	0	560	110	58	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	609	120	63	0	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	92
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	947
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	947
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

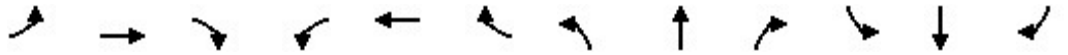
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	947
HCM Lane V/C Ratio	-	-	-	0.007
HCM Control Delay (s)	-	-	-	8.8
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	335	75	20	32	23	101	416	187	73	62	29
Future Volume (veh/h)	192	335	75	20	32	23	101	416	187	73	62	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	223	390	87	26	41	29	110	452	203	87	74	35
Peak Hour Factor	0.86	0.86	0.86	0.78	0.78	0.78	0.92	0.92	0.92	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	594	611	264	250	397	285	99	723	322	99	727	321
Arrive On Green	0.17	0.17	0.17	0.27	0.27	0.27	0.06	0.31	0.31	0.06	0.31	0.31
Sat Flow, veh/h	3428	3526	1525	928	1477	1058	1767	2351	1046	1767	2363	1042
Grp Volume(v), veh/h	223	390	87	51	0	45	110	338	317	87	54	55
Grp Sat Flow(s),veh/h/ln	1714	1763	1525	1809	0	1654	1767	1763	1633	1767	1763	1642
Q Serve(g_s), s	5.8	10.3	5.0	2.1	0.0	2.1	5.6	16.5	16.7	4.9	2.2	2.4
Cycle Q Clear(g_c), s	5.8	10.3	5.0	2.1	0.0	2.1	5.6	16.5	16.7	4.9	2.2	2.4
Prop In Lane	1.00		1.00	0.51		0.64	1.00		0.64	1.00		0.63
Lane Grp Cap(c), veh/h	594	611	264	487	0	445	99	543	503	99	543	505
V/C Ratio(X)	0.38	0.64	0.33	0.10	0.00	0.10	1.12	0.62	0.63	0.88	0.10	0.11
Avail Cap(c_a), veh/h	922	948	410	487	0	445	99	543	503	99	543	505
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	38.6	36.4	27.6	0.0	27.6	47.4	29.8	29.9	47.1	24.8	24.9
Incr Delay (d2), s/veh	0.4	1.3	0.8	0.4	0.0	0.5	125.4	5.3	5.9	53.5	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	2.4	4.5	1.9	1.0	0.0	0.9	5.9	7.7	7.3	3.6	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	39.8	37.2	28.0	0.0	28.0	172.8	35.1	35.8	100.6	25.2	25.3
LnGrp LOS	D	D	D	C	A	C	F	D	D	F	C	C
Approach Vol, veh/h		700			96			765			196	
Approach Delay, s/veh		38.6			28.0			55.2			58.7	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	36.2		22.3	10.0	36.2		31.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	5.6	30.9		27.0	5.6	30.9		27.0				
Max Q Clear Time (g_c+I1), s	6.9	18.7		12.3	7.6	4.4		4.1				
Green Ext Time (p_c), s	0.0	4.8		3.6	0.0	0.9		0.5				

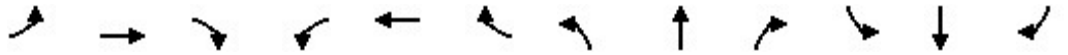
Intersection Summary												
HCM 6th Ctrl Delay			47.5									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	1	0	3	50	282	1	9	61	5
Future Volume (veh/h)	0	0	1	1	0	3	50	282	1	9	61	5
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	0.98		0.98	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	4	2	0	6	56	313	1	11	77	6
Peak Hour Factor	0.25	0.25	0.25	0.50	0.50	0.50	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	0	25	130	0	15	84	2079	7	20	1792	138
Arrive On Green	0.00	0.00	0.02	0.02	0.00	0.02	0.05	0.58	0.58	0.01	0.54	0.54
Sat Flow, veh/h	0	0	1568	316	0	948	1767	3605	12	1767	3315	255
Grp Volume(v), veh/h	0	0	4	8	0	0	56	153	161	11	41	42
Grp Sat Flow(s),veh/h/ln	0	0	1568	1264	0	0	1767	1763	1853	1767	1763	1808
Q Serve(g_s), s	0.0	0.0	0.1	0.2	0.0	0.0	1.1	1.4	1.4	0.2	0.4	0.4
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.3	0.0	0.0	1.1	1.4	1.4	0.2	0.4	0.4
Prop In Lane	0.00		1.00	0.25		0.75	1.00		0.01	1.00		0.14
Lane Grp Cap(c), veh/h	0	0	25	146	0	0	84	1017	1069	20	953	977
V/C Ratio(X)	0.00	0.00	0.16	0.05	0.00	0.00	0.66	0.15	0.15	0.54	0.04	0.04
Avail Cap(c_a), veh/h	0	0	1092	1166	0	0	325	1017	1069	251	953	977
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)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.4	17.6	0.0	0.0	16.8	3.5	3.5	17.6	3.9	3.9
Incr Delay (d2), s/veh	0.0	0.0	2.9	0.2	0.0	0.0	8.7	0.3	0.3	20.2	0.1	0.1
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	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.3	0.3	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	20.3	17.7	0.0	0.0	25.5	3.8	3.8	37.8	4.0	4.0
LnGrp LOS	A	A	C	B	A	A	C	A	A	D	A	A
Approach Vol, veh/h		4			8			370			94	
Approach Delay, s/veh		20.3			17.7			7.1			7.9	
Approach LOS		C			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	25.6		5.5	6.1	24.3		5.5				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	6.6	19.2		25.0				
Max Q Clear Time (g_c+I1), s	2.2	3.4		2.1	3.1	2.4		2.3				
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	0.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A



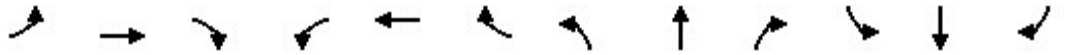
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	31	93	38	87	22	91	428	31	51	111	35
Future Volume (veh/h)	188	31	93	38	87	22	91	428	31	51	111	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	202	33	100	45	102	26	103	486	35	59	128	40
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	186	468	405	58	536	131	125	1305	94	75	965	289
Arrive On Green	0.10	0.27	0.27	0.03	0.19	0.19	0.07	0.39	0.39	0.04	0.36	0.36
Sat Flow, veh/h	1767	1763	1524	1767	2774	676	1767	3334	239	1767	2656	796
Grp Volume(v), veh/h	202	33	100	45	63	65	103	256	265	59	83	85
Grp Sat Flow(s),veh/h/ln	1767	1763	1524	1767	1763	1688	1767	1763	1811	1767	1763	1690
Q Serve(g_s), s	7.6	1.0	3.7	1.8	2.2	2.3	4.2	7.5	7.5	2.4	2.3	2.4
Cycle Q Clear(g_c), s	7.6	1.0	3.7	1.8	2.2	2.3	4.2	7.5	7.5	2.4	2.3	2.4
Prop In Lane	1.00		1.00	1.00		0.40	1.00		0.13	1.00		0.47
Lane Grp Cap(c), veh/h	186	468	405	58	341	326	125	690	709	75	640	614
V/C Ratio(X)	1.09	0.07	0.25	0.77	0.19	0.20	0.83	0.37	0.37	0.79	0.13	0.14
Avail Cap(c_a), veh/h	186	675	583	159	657	629	125	690	709	173	640	614
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	19.9	20.9	34.7	24.4	24.5	33.2	15.7	15.7	34.3	15.4	15.4
Incr Delay (d2), s/veh	91.7	0.1	0.5	7.9	0.1	0.1	33.1	1.5	1.5	6.8	0.4	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	7.9	0.4	1.3	0.9	0.9	0.9	2.9	3.1	3.2	1.1	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.1	20.0	21.4	42.6	24.5	24.6	66.3	17.2	17.2	41.1	15.8	15.9
LnGrp LOS	F	C	C	D	C	C	E	B	B	D	B	B
Approach Vol, veh/h		335			173			624			227	
Approach Delay, s/veh		83.2			29.3			25.3			22.4	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	33.6	6.8	24.5	9.5	31.6	12.0	19.3
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	7.1	24.3	6.5	27.7	5.1	26.3	7.6	* 27
Max Q Clear Time (g_c+I1), s	4.4	9.5	3.8	5.7	6.2	4.4	9.6	4.3
Green Ext Time (p_c), s	0.0	4.1	0.0	1.1	0.0	1.4	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	39.6
HCM 6th LOS	D

Notes

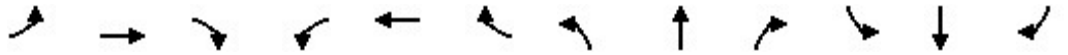
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1219	0	0	2161	503	0	0	0	642	0	1751
Future Volume (veh/h)	0	1219	0	0	2161	503	0	0	0	642	0	1751
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	1270	0	0	2349	275				669	0	1251
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2175	0	0	2175	1401				1582	0	1277
Arrive On Green	0.00	0.43	0.00	0.00	0.43	0.43				0.46	0.00	0.46
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	1270	0	0	2349	275				669	0	1251
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	22.9	0.0	0.0	51.5	2.8				15.7	0.0	53.3
Cycle Q Clear(g_c), s	0.0	22.9	0.0	0.0	51.5	2.8				15.7	0.0	53.3
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2175	0	0	2175	1401				1582	0	1277
V/C Ratio(X)	0.00	0.58	0.00	0.00	1.08	0.20				0.42	0.00	0.98
Avail Cap(c_a), veh/h	0	2175	0	0	2175	1401				1583	0	1278
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.1	0.0	0.0	34.2	0.9				21.6	0.0	31.7
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	45.0	0.3				0.2	0.0	20.3
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	0.0	9.3	0.0	0.0	29.6	5.5				6.3	0.0	20.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.2	0.0	0.0	79.2	1.2				21.8	0.0	52.1
LnGrp LOS	A	C	A	A	F	A				C	A	D
Approach Vol, veh/h		1270			2624						1920	
Approach Delay, s/veh		27.2			71.1						41.5	
Approach LOS		C			E						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		59.0		61.0		59.0						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		51.5		55.4		51.5						
Max Q Clear Time (g_c+I1), s		24.9		55.3		53.5						
Green Ext Time (p_c), s		10.8		0.1		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			51.7									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	494	200	162	285	48	244	111	57	447	983	476
Future Volume (veh/h)	74	494	200	162	285	48	244	111	57	447	983	476
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	83	555	225	171	300	51	301	137	70	588	1293	626
Peak Hour Factor	0.89	0.89	0.89	0.95	0.95	0.95	0.81	0.81	0.81	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	129	562	227	149	835	140	262	774	374	654	1065	475
Arrive On Green	0.04	0.23	0.23	0.08	0.28	0.28	0.08	0.34	0.34	0.19	0.45	0.45
Sat Flow, veh/h	3428	2429	982	1767	3006	504	3428	2298	1111	3428	2360	1053
Grp Volume(v), veh/h	83	402	378	171	174	177	301	103	104	588	938	981
Grp Sat Flow(s),veh/h/ln	1714	1763	1648	1767	1763	1748	1714	1763	1646	1714	1763	1650
Q Serve(g_s), s	3.0	28.6	28.8	10.6	10.0	10.2	9.6	5.2	5.6	21.1	56.8	56.8
Cycle Q Clear(g_c), s	3.0	28.6	28.8	10.6	10.0	10.2	9.6	5.2	5.6	21.1	56.8	56.8
Prop In Lane	1.00		0.60	1.00		0.29	1.00		0.67	1.00		0.64
Lane Grp Cap(c), veh/h	129	408	381	149	490	486	262	594	555	654	796	745
V/C Ratio(X)	0.64	0.99	0.99	1.15	0.36	0.36	1.15	0.17	0.19	0.90	1.18	1.32
Avail Cap(c_a), veh/h	188	408	381	149	490	486	262	594	555	875	796	745
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	48.2	48.2	57.6	36.4	36.5	58.1	29.4	29.5	49.7	34.5	34.5
Incr Delay (d2), s/veh	2.0	41.3	43.8	119.2	0.9	0.9	102.5	0.6	0.7	8.2	93.3	151.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	17.2	16.4	9.7	4.4	4.5	7.9	2.3	2.4	9.8	44.2	53.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	89.5	92.1	176.8	37.2	37.4	160.6	30.0	30.2	57.9	127.8	186.4
LnGrp LOS	E	F	F	F	D	D	F	C	C	E	F	F
Approach Vol, veh/h		863			522			508			2507	
Approach Delay, s/veh		87.9			83.0			107.4			134.3	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	34.8	14.0	62.0	9.1	40.7	28.4	47.6
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	10.6	* 29	9.6	56.8	6.9	32.0	32.1	34.3
Max Q Clear Time (g_c+I1), s	12.6	30.8	11.6	58.8	5.0	12.2	23.1	7.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.4	0.9	2.1

Intersection Summary	
HCM 6th Ctrl Delay	116.0
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

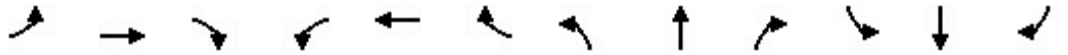
Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	70	339	7	0	1344
Future Vol, veh/h	0	70	339	7	0	1344
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, %	2	2	2	2	2	2
Mvmt Flow	0	76	368	8	0	1461

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	188	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	822	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	822	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	822	-
HCM Lane V/C Ratio	-	-	0.093	-
HCM Control Delay (s)	-	-	9.8	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	53	174	361	253	24	197	204	77	35	1171	153
Future Volume (veh/h)	53	53	174	361	253	24	197	204	77	35	1171	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	0.99		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	60	60	141	392	275	15	216	224	58	40	1331	157
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	311	269	205	848	46	196	1549	685	573	1293	152
Arrive On Green	0.04	0.18	0.18	0.12	0.25	0.25	0.06	0.44	0.44	0.03	0.41	0.41
Sat Flow, veh/h	1767	1763	1524	1767	3398	184	1767	3526	1560	1767	3177	373
Grp Volume(v), veh/h	60	60	141	392	142	148	216	224	58	40	735	753
Grp Sat Flow(s),veh/h/ln	1767	1763	1524	1767	1763	1820	1767	1763	1560	1767	1763	1787
Q Serve(g_s), s	2.8	2.4	6.9	9.6	5.4	5.5	5.1	3.1	1.8	1.1	33.6	33.6
Cycle Q Clear(g_c), s	2.8	2.4	6.9	9.6	5.4	5.5	5.1	3.1	1.8	1.1	33.6	33.6
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	77	311	269	205	440	454	196	1549	685	573	717	727
V/C Ratio(X)	0.78	0.19	0.52	1.91	0.32	0.33	1.10	0.14	0.08	0.07	1.02	1.04
Avail Cap(c_a), veh/h	193	683	590	205	700	723	196	1549	685	631	717	727
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	29.0	30.8	36.5	25.3	25.3	21.0	13.9	13.5	13.4	24.5	24.5
Incr Delay (d2), s/veh	6.4	0.3	1.8	426.4	0.8	0.7	93.6	0.2	0.2	0.0	40.1	42.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.0	2.6	28.4	2.3	2.4	7.1	1.2	0.6	0.4	20.9	21.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	29.3	32.6	462.9	26.0	26.1	114.7	14.0	13.7	13.5	64.6	67.4
LnGrp LOS	D	C	C	F	C	C	F	B	B	B	F	F
Approach Vol, veh/h		261			682			498			1528	
Approach Delay, s/veh		34.8			277.1			57.6			64.6	
Approach LOS		C			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	42.1	14.0	19.7	9.5	39.4	8.0	25.7
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 34	9.6	32.0	5.1	33.6	9.0	* 33
Max Q Clear Time (g_c+I1), s	3.1	5.1	11.6	8.9	7.1	35.6	4.8	7.5
Green Ext Time (p_c), s	0.0	1.9	0.0	1.3	0.0	0.0	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	109.7
HCM 6th LOS	F

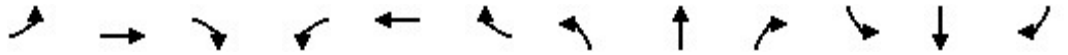
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	88	8	381	6	0	1260
Future Volume (veh/h)	88	8	381	6	0	1260
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	104	9	410	6	0	1370
Peak Hour Factor	0.85	0.85	0.93	0.93	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	143	127	2124	31	0	2106
Arrive On Green	0.08	0.08	0.60	0.60	0.00	0.60
Sat Flow, veh/h	1767	1572	3648	52	0	3711
Grp Volume(v), veh/h	104	9	203	213	0	1370
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1845	0	1763
Q Serve(g_s), s	1.8	0.2	1.6	1.6	0.0	7.8
Cycle Q Clear(g_c), s	1.8	0.2	1.6	1.6	0.0	7.8
Prop In Lane	1.00	1.00		0.03	0.00	
Lane Grp Cap(c), veh/h	143	127	1053	1102	0	2106
V/C Ratio(X)	0.73	0.07	0.19	0.19	0.00	0.65
Avail Cap(c_a), veh/h	1276	1136	1053	1102	0	2106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	12.9	2.8	2.8	0.0	4.0
Incr Delay (d2), s/veh	2.6	0.1	0.4	0.4	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2	0.2	0.0	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.3	13.0	3.2	3.2	0.0	5.6
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	113		416			1370
Approach Delay, s/veh	16.1		3.2			5.6
Approach LOS	B		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		23.1			23.1	7.4
Change Period (Y+Rc), s		4.9			4.9	4.9
Max Green Setting (Gmax), s		18.2			18.2	22.0
Max Q Clear Time (g_c+I1), s		3.6			9.8	3.8
Green Ext Time (p_c), s		2.8			6.6	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	1417	192	522	1801	357	222	63	627	1136	254	167
Future Volume (veh/h)	28	1417	192	522	1801	357	222	63	627	1136	254	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	32	1610	116	538	1857	244	236	67	614	1171	262	120
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	67	1446	576	368	1907	1664	283	832	941	814	1378	601
Arrive On Green	0.02	0.29	0.29	0.11	0.38	0.38	0.08	0.24	0.24	0.24	0.39	0.39
Sat Flow, veh/h	3428	5066	1564	3428	5066	2674	3428	3526	2732	3428	3526	1538
Grp Volume(v), veh/h	32	1610	116	538	1857	244	236	67	614	1171	262	120
Grp Sat Flow(s),veh/h/ln	1714	1689	1564	1714	1689	1337	1714	1763	1366	1714	1763	1538
Q Serve(g_s), s	1.4	42.8	7.6	16.1	54.1	5.8	10.2	2.2	28.6	35.6	7.3	7.7
Cycle Q Clear(g_c), s	1.4	42.8	7.6	16.1	54.1	5.8	10.2	2.2	28.6	35.6	7.3	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	1446	576	368	1907	1664	283	832	941	814	1378	601
V/C Ratio(X)	0.48	1.11	0.20	1.46	0.97	0.15	0.83	0.08	0.65	1.44	0.19	0.20
Avail Cap(c_a), veh/h	117	1446	576	368	1907	1664	389	917	1007	814	1378	601
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	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	72.8	53.6	32.4	66.9	46.0	12.3	67.8	44.6	41.7	57.2	30.1	30.2
Incr Delay (d2), s/veh	1.9	61.3	0.8	222.4	15.3	0.2	8.1	0.1	2.2	203.3	0.1	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	0.6	26.3	3.1	18.4	25.3	1.8	4.8	1.0	10.0	38.4	3.2	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	114.9	33.2	289.3	61.3	12.5	75.9	44.7	43.9	260.5	30.2	30.4
LnGrp LOS	E	F	C	F	E	B	E	D	D	F	C	C
Approach Vol, veh/h		1758			2639			917			1553	
Approach Delay, s/veh		108.7			103.3			52.2			203.9	
Approach LOS		F			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	48.3	16.8	63.9	7.3	62.0	40.0	40.7
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	16.1	39.5	17.0	57.3	5.1	* 51	35.6	* 39
Max Q Clear Time (g_c+I1), s	18.1	44.8	12.2	9.7	3.4	56.1	37.6	30.6
Green Ext Time (p_c), s	0.0	0.0	0.2	4.2	0.0	0.0	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	120.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

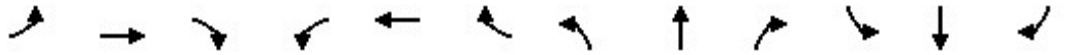
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	153	494	6	0	49
Future Vol, veh/h	0	153	494	6	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	166	537	7	0	53

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	272
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	726
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	726
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

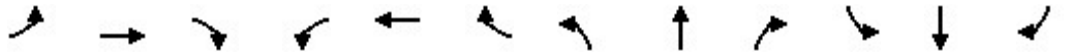
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	726
HCM Lane V/C Ratio	-	-	-	0.073
HCM Control Delay (s)	-	-	-	10.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	24	167	189	309	94	64	91	13	34	355	126
Future Volume (veh/h)	50	24	167	189	309	94	64	91	13	34	355	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	33	232	230	377	115	79	112	16	37	390	138
Peak Hour Factor	0.72	0.72	0.72	0.82	0.82	0.82	0.81	0.81	0.81	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	613	630	279	290	502	159	101	1035	145	46	772	269
Arrive On Green	0.18	0.18	0.18	0.27	0.27	0.27	0.06	0.33	0.33	0.03	0.30	0.30
Sat Flow, veh/h	3428	3526	1562	1082	1875	593	1767	3104	435	1767	2548	889
Grp Volume(v), veh/h	69	33	232	383	0	339	79	63	65	37	268	260
Grp Sat Flow(s),veh/h/ln	1714	1763	1562	1801	0	1748	1767	1763	1777	1767	1763	1675
Q Serve(g_s), s	1.7	0.8	14.4	19.9	0.0	17.7	4.4	2.5	2.6	2.1	12.6	12.9
Cycle Q Clear(g_c), s	1.7	0.8	14.4	19.9	0.0	17.7	4.4	2.5	2.6	2.1	12.6	12.9
Prop In Lane	1.00		1.00	0.60		0.34	1.00		0.25	1.00		0.53
Lane Grp Cap(c), veh/h	613	630	279	483	0	468	101	588	592	46	534	507
V/C Ratio(X)	0.11	0.05	0.83	0.79	0.00	0.72	0.78	0.11	0.11	0.80	0.50	0.51
Avail Cap(c_a), veh/h	919	945	419	483	0	468	105	588	592	116	534	507
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	34.3	39.9	34.3	0.0	33.5	46.9	23.2	23.2	48.8	28.9	29.0
Incr Delay (d2), s/veh	0.1	0.0	9.2	12.6	0.0	9.3	27.5	0.4	0.4	10.9	3.4	3.7
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	0.7	0.3	6.2	10.3	0.0	8.6	2.7	1.1	1.1	1.1	5.8	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	34.3	49.1	46.9	0.0	42.8	74.4	23.6	23.6	59.7	32.2	32.7
LnGrp LOS	C	C	D	D	A	D	E	C	C	E	C	C
Approach Vol, veh/h		334			722			207			565	
Approach Delay, s/veh		44.7			45.0			43.0			34.2	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	38.9		22.9	10.1	35.8		31.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	6.6	29.9		27.0	6.0	30.5		27.0				
Max Q Clear Time (g_c+I1), s	4.1	4.6		16.4	6.4	14.9		21.9				
Green Ext Time (p_c), s	0.0	1.0		1.0	0.0	4.4		2.2				

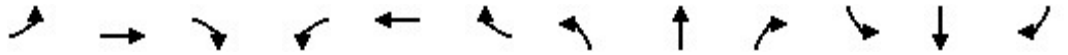
Intersection Summary												
HCM 6th Ctrl Delay			41.4									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	8	1	0	3	34	95	1	4	276	1
Future Volume (veh/h)	9	0	8	1	0	3	34	95	1	4	276	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	15	0	13	3	0	9	42	117	1	5	314	1
Peak Hour Factor	0.62	0.62	0.62	0.33	0.33	0.33	0.81	0.81	0.81	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	0	28	138	0	49	67	2044	17	10	1940	6
Arrive On Green	0.04	0.00	0.04	0.04	0.00	0.04	0.04	0.57	0.57	0.01	0.54	0.54
Sat Flow, veh/h	808	0	700	411	0	1234	1767	3582	31	1767	3605	11
Grp Volume(v), veh/h	28	0	0	12	0	0	42	58	60	5	154	161
Grp Sat Flow(s),veh/h/ln	1509	0	0	1646	0	0	1767	1763	1850	1767	1763	1853
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.5	0.1	1.6	1.6
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.2	0.0	0.0	0.9	0.5	0.5	0.1	1.6	1.6
Prop In Lane	0.54		0.46	0.25		0.75	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	210	0	0	187	0	0	67	1006	1056	10	949	998
V/C Ratio(X)	0.13	0.00	0.00	0.06	0.00	0.00	0.63	0.06	0.06	0.52	0.16	0.16
Avail Cap(c_a), veh/h	1134	0	0	1143	0	0	282	1006	1056	244	949	998
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	0.0	17.2	0.0	0.0	17.5	3.5	3.5	18.3	4.3	4.3
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.1	0.0	0.0	9.2	0.1	0.1	37.8	0.4	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	0.2	0.0	0.0	0.1	0.0	0.0	0.5	0.1	0.1	0.1	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	0.0	17.3	0.0	0.0	26.8	3.6	3.6	56.1	4.7	4.7
LnGrp LOS	B	A	A	B	A	A	C	A	A	E	A	A
Approach Vol, veh/h		28			12			160			320	
Approach Delay, s/veh		17.6			17.3			9.7			5.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	26.0		6.4	5.8	24.8		6.4				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	5.9	19.9		25.0				
Max Q Clear Time (g_c+I1), s	2.1	2.5		2.6	2.9	3.6		2.2				
Green Ext Time (p_c), s	0.0	0.5		0.1	0.0	1.6		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A



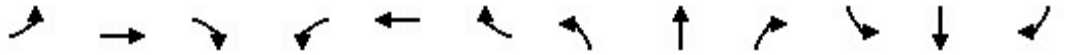
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	80	70	14	70	23	276	155	34	125	304	294
Future Volume (veh/h)	108	80	70	14	70	23	276	155	34	125	304	294
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.99	1.00		0.96
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	123	91	80	17	86	28	383	215	47	139	338	327
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.72	0.72	0.72	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	145	422	329	28	425	131	338	1212	259	173	577	492
Arrive On Green	0.08	0.23	0.23	0.02	0.16	0.16	0.19	0.42	0.42	0.10	0.33	0.33
Sat Flow, veh/h	1767	1850	1441	1767	2629	814	1767	2882	617	1767	1763	1505
Grp Volume(v), veh/h	123	86	85	17	56	58	383	130	132	139	338	327
Grp Sat Flow(s),veh/h/ln	1767	1763	1528	1767	1763	1680	1767	1763	1737	1767	1763	1505
Q Serve(g_s), s	5.6	3.2	3.7	0.8	2.3	2.4	15.6	3.8	3.9	6.3	13.0	15.2
Cycle Q Clear(g_c), s	5.6	3.2	3.7	0.8	2.3	2.4	15.6	3.8	3.9	6.3	13.0	15.2
Prop In Lane	1.00		0.94	1.00		0.48	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	145	402	348	28	285	271	338	741	730	173	577	492
V/C Ratio(X)	0.85	0.21	0.24	0.61	0.20	0.21	1.13	0.17	0.18	0.80	0.59	0.66
Avail Cap(c_a), veh/h	145	586	508	134	583	556	338	741	730	295	577	492
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	25.6	25.7	39.9	29.6	29.7	33.0	14.8	14.8	36.0	22.8	23.6
Incr Delay (d2), s/veh	33.4	0.4	0.6	7.9	0.1	0.1	90.1	0.5	0.5	3.3	4.3	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	1.4	1.4	0.4	0.9	1.0	14.9	1.5	1.6	2.8	5.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	26.0	26.3	47.8	29.7	29.8	123.1	15.3	15.4	39.3	27.2	30.5
LnGrp LOS	E	C	C	D	C	C	F	B	B	D	C	C
Approach Vol, veh/h		294			131			645			804	
Approach Delay, s/veh		44.6			32.1			79.3			30.6	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	39.6	5.7	23.9	20.0	32.0	11.1	18.5
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	13.6	28.7	6.2	27.1	15.6	26.7	6.7	* 27
Max Q Clear Time (g_c+I1), s	8.3	5.9	2.8	5.7	17.6	17.2	7.6	4.4
Green Ext Time (p_c), s	0.1	2.3	0.0	1.4	0.0	4.2	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	49.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



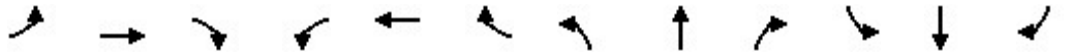
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2217	0	0	1931	589	0	0	0	156	0	801
Future Volume (veh/h)	0	2217	0	0	1931	589	0	0	0	156	0	801
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	2309	0	0	1991	607				173	0	890
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2848	0	0	2848	1423				1176	0	949
Arrive On Green	0.00	0.56	0.00	0.00	0.56	0.56				0.34	0.00	0.34
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	2309	0	0	1991	607				173	0	890
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	50.6	0.0	0.0	39.1	8.2				4.8	0.0	43.0
Cycle Q Clear(g_c), s	0.0	50.6	0.0	0.0	39.1	8.2				4.8	0.0	43.0
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2848	0	0	2848	1423				1176	0	949
V/C Ratio(X)	0.00	0.81	0.00	0.00	0.70	0.43				0.15	0.00	0.94
Avail Cap(c_a), veh/h	0	2848	0	0	2848	1423				1252	0	1011
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.3	0.0	0.0	21.8	1.0				31.4	0.0	43.9
Incr Delay (d2), s/veh	0.0	2.6	0.0	0.0	1.5	0.9				0.1	0.0	15.1
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	0.0	20.4	0.0	0.0	15.6	14.1				2.0	0.0	16.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	26.9	0.0	0.0	23.3	1.9				31.4	0.0	59.0
LnGrp LOS	A	C	A	A	C	A				C	A	E
Approach Vol, veh/h		2309			2598						1063	
Approach Delay, s/veh		26.9			18.3						54.5	
Approach LOS		C			B						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		85.1		52.9		85.1						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		74.5		50.4		74.5						
Max Q Clear Time (g_c+I1), s		52.6		45.0		41.1						
Green Ext Time (p_c), s		17.9		2.3		24.7						

Intersection Summary												
HCM 6th Ctrl Delay			28.1									
HCM 6th LOS			C									

Appendix J: Near-Term (Opening Day Year 2023) With Project AM/PM Synchro Worksheets

Provided on the following page



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	260	162	61	539	468	383	1008	234	49	114	68
Future Volume (veh/h)	485	260	162	61	539	468	383	1008	234	49	114	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	527	283	176	66	586	509	416	1096	254	56	130	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	500	835	502	85	531	460	481	1028	237	96	543	300
Arrive On Green	0.15	0.40	0.40	0.05	0.30	0.30	0.14	0.36	0.36	0.03	0.25	0.25
Sat Flow, veh/h	3428	2097	1261	1767	1767	1531	3428	2835	653	3428	2169	1196
Grp Volume(v), veh/h	527	236	223	66	584	511	416	679	671	56	104	103
Grp Sat Flow(s),veh/h/ln	1714	1763	1595	1767	1763	1536	1714	1763	1724	1714	1763	1602
Q Serve(g_s), s	17.6	11.3	11.8	4.5	36.3	36.3	14.3	43.8	43.8	1.9	5.7	6.2
Cycle Q Clear(g_c), s	17.6	11.3	11.8	4.5	36.3	36.3	14.3	43.8	43.8	1.9	5.7	6.2
Prop In Lane	1.00		0.79	1.00		1.00	1.00		0.38	1.00		0.75
Lane Grp Cap(c), veh/h	500	702	635	85	530	461	481	639	625	96	442	401
V/C Ratio(X)	1.05	0.34	0.35	0.78	1.10	1.11	0.87	1.06	1.07	0.58	0.24	0.26
Avail Cap(c_a), veh/h	500	702	635	177	530	461	707	639	625	216	442	401
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	25.2	25.4	56.9	42.2	42.2	50.8	38.5	38.5	58.0	36.1	36.3
Incr Delay (d2), s/veh	55.5	1.3	1.5	5.7	70.4	74.0	5.4	53.2	57.3	2.1	1.2	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	11.4	5.0	4.7	2.1	25.9	23.1	6.5	28.0	28.1	0.9	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	107.1	26.5	26.9	62.6	112.7	116.3	56.2	91.7	95.8	60.1	37.3	37.8
LnGrp LOS	F	C	C	E	F	F	E	F	F	E	D	D
Approach Vol, veh/h		986			1161			1766			263	
Approach Delay, s/veh		69.7			111.4			84.9			42.3	
Approach LOS		E			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	53.8	21.3	35.5	22.0	42.0	7.8	49.0
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	12.1	* 43	24.9	26.5	17.6	36.3	7.6	43.8
Max Q Clear Time (g_c+I1), s	6.5	13.8	16.3	8.2	19.6	38.3	3.9	45.8
Green Ext Time (p_c), s	0.0	5.9	0.6	1.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	86.0
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

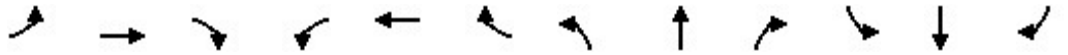
Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	24	1618	362	0	343
Future Vol, veh/h	0	24	1618	362	0	343
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, %	2	2	2	2	2	2
Mvmt Flow	0	26	1759	393	0	373

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1076	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	215	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	215	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	215	-
HCM Lane V/C Ratio	-	-	0.121	-
HCM Control Delay (s)	-	-	24	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	110	39	64	130	196	478	1600	437	38	224	82
Future Volume (veh/h)	221	110	39	64	130	196	478	1600	437	38	224	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	270	134	48	73	148	223	503	1684	460	42	246	90
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	150	661	226	93	398	344	573	1550	683	132	907	323
Arrive On Green	0.09	0.26	0.26	0.05	0.23	0.23	0.11	0.44	0.44	0.03	0.36	0.36
Sat Flow, veh/h	1767	2560	876	1767	1763	1524	1767	3526	1553	1767	2543	905
Grp Volume(v), veh/h	270	90	92	73	148	223	503	1684	460	42	168	168
Grp Sat Flow(s),veh/h/ln	1767	1763	1674	1767	1763	1524	1767	1763	1553	1767	1763	1685
Q Serve(g_s), s	7.6	3.6	3.8	3.6	6.3	11.9	10.0	39.3	21.1	1.3	6.1	6.4
Cycle Q Clear(g_c), s	7.6	3.6	3.8	3.6	6.3	11.9	10.0	39.3	21.1	1.3	6.1	6.4
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	150	455	432	93	398	344	573	1550	683	132	629	601
V/C Ratio(X)	1.80	0.20	0.21	0.78	0.37	0.65	0.88	1.09	0.67	0.32	0.27	0.28
Avail Cap(c_a), veh/h	150	653	620	105	611	528	573	1550	683	181	629	601
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	25.9	26.0	41.8	29.2	31.4	21.9	25.0	19.9	23.0	20.4	20.5
Incr Delay (d2), s/veh	384.0	0.2	0.3	24.4	1.0	3.6	13.9	50.2	5.3	0.5	1.0	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	19.3	1.5	1.5	2.2	2.7	4.6	7.2	26.0	8.2	0.5	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	424.9	26.2	26.3	66.2	30.3	35.0	35.8	75.2	25.2	23.5	21.5	21.7
LnGrp LOS	F	C	C	E	C	D	D	F	C	C	C	C
Approach Vol, veh/h		452			444			2647			378	
Approach Delay, s/veh		264.4			38.6			59.0			21.8	
Approach LOS		F			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	45.1	9.1	28.2	14.4	37.7	12.0	25.3
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 37	5.3	33.1	10.0	31.9	7.6	* 31
Max Q Clear Time (g_c+I1), s	3.3	41.3	5.6	5.8	12.0	8.4	9.6	13.9
Green Ext Time (p_c), s	0.0	0.0	0.0	1.2	0.0	2.2	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	76.8
HCM 6th LOS	E

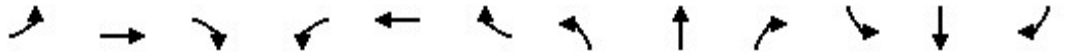
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	1	1563	63	0	325
Future Volume (veh/h)	9	1	1563	63	0	325
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	12	1	1663	67	0	396
Peak Hour Factor	0.75	0.75	0.94	0.94	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	24	22	2214	89	0	2260
Arrive On Green	0.01	0.01	0.64	0.64	0.00	0.64
Sat Flow, veh/h	1767	1572	3547	139	0	3711
Grp Volume(v), veh/h	12	1	845	885	0	396
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1830	0	1763
Q Serve(g_s), s	0.2	0.0	9.4	9.5	0.0	1.3
Cycle Q Clear(g_c), s	0.2	0.0	9.4	9.5	0.0	1.3
Prop In Lane	1.00	1.00		0.08	0.00	
Lane Grp Cap(c), veh/h	24	22	1130	1173	0	2260
V/C Ratio(X)	0.49	0.05	0.75	0.75	0.00	0.18
Avail Cap(c_a), veh/h	1369	1219	1130	1173	0	2260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	13.8	3.5	3.5	0.0	2.1
Incr Delay (d2), s/veh	5.7	0.3	4.5	4.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.4	1.5	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	14.1	8.1	8.1	0.0	2.2
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	13		1730			396
Approach Delay, s/veh	19.2		8.1			2.2
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		23.1				23.1	5.3
Change Period (Y+Rc), s		4.9				4.9	4.9
Max Green Setting (Gmax), s		18.2				18.2	22.0
Max Q Clear Time (g_c+I1), s		11.5				3.3	2.2
Green Ext Time (p_c), s		5.9				3.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.0
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	359	1081	123	406	1639	1776	137	224	303	249	38	38
Future Volume (veh/h)	359	1081	123	406	1639	1776	137	224	303	249	38	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	386	1162	78	432	1744	1463	154	252	250	307	47	35
Peak Hour Factor	0.93	0.93	0.93	0.94	0.94	0.94	0.89	0.89	0.89	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	333	2391	822	409	2521	1663	202	563	768	362	727	321
Arrive On Green	0.10	0.47	0.47	0.12	0.50	0.50	0.06	0.16	0.16	0.11	0.21	0.21
Sat Flow, veh/h	3428	5066	1546	3428	5066	2754	3428	3526	2742	3428	3526	1556
Grp Volume(v), veh/h	386	1162	78	432	1744	1463	154	252	250	307	47	35
Grp Sat Flow(s),veh/h/ln	1714	1689	1546	1714	1689	1377	1714	1763	1371	1714	1763	1556
Q Serve(g_s), s	13.6	22.0	3.5	16.7	36.9	63.0	6.2	9.1	10.1	12.3	1.5	2.6
Cycle Q Clear(g_c), s	13.6	22.0	3.5	16.7	36.9	63.0	6.2	9.1	10.1	12.3	1.5	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	333	2391	822	409	2521	1663	202	563	768	362	727	321
V/C Ratio(X)	1.16	0.49	0.09	1.06	0.69	0.88	0.76	0.45	0.33	0.85	0.06	0.11
Avail Cap(c_a), veh/h	333	2391	822	409	2521	1663	282	982	1094	627	1330	587
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	25.3	16.2	61.6	26.9	23.5	64.9	53.2	40.1	61.5	44.7	45.1
Incr Delay (d2), s/veh	99.8	0.7	0.2	60.1	1.6	7.0	4.5	1.3	0.6	2.2	0.1	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	10.6	9.0	1.3	10.7	15.1	21.2	2.8	4.1	3.5	5.5	0.7	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	163.0	26.0	16.4	121.8	28.5	30.5	69.5	54.6	40.6	63.7	44.8	45.4
LnGrp LOS	F	C	B	F	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1626			3639			656			389	
Approach Delay, s/veh		58.1			40.4			52.8			59.7	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	71.6	12.7	34.2	18.0	75.2	19.2	27.6
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	16.7	38.9	11.5	52.8	13.6	* 43	25.6	* 39
Max Q Clear Time (g_c+I1), s	18.7	24.0	8.2	4.6	15.6	65.0	14.3	12.1
Green Ext Time (p_c), s	0.0	10.0	0.1	0.7	0.0	0.0	0.5	5.7

Intersection Summary	
HCM 6th Ctrl Delay	47.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

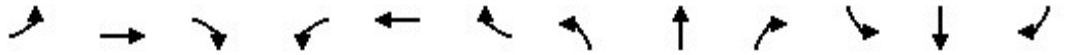
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	566	266	0	0	16
Future Vol, veh/h	0	566	266	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	615	289	0	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	145
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	876
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	876
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

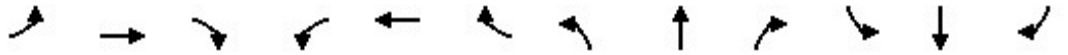
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	876
HCM Lane V/C Ratio	-	-	-	0.02
HCM Control Delay (s)	-	-	-	9.2
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	335	81	20	32	23	158	416	187	73	62	70
Future Volume (veh/h)	192	335	81	20	32	23	158	416	187	73	62	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	223	390	94	26	41	29	172	452	203	87	74	83
Peak Hour Factor	0.86	0.86	0.86	0.78	0.78	0.78	0.92	0.92	0.92	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	595	612	265	249	397	285	99	735	327	90	542	474
Arrive On Green	0.17	0.17	0.17	0.27	0.27	0.27	0.06	0.31	0.31	0.05	0.31	0.31
Sat Flow, veh/h	3428	3526	1525	928	1477	1058	1767	2351	1046	1767	1763	1540
Grp Volume(v), veh/h	223	390	94	51	0	45	172	338	317	87	74	83
Grp Sat Flow(s),veh/h/ln	1714	1763	1525	1809	0	1654	1767	1763	1634	1767	1763	1540
Q Serve(g_s), s	5.8	10.3	5.5	2.1	0.0	2.1	5.6	16.4	16.6	4.9	3.0	4.0
Cycle Q Clear(g_c), s	5.8	10.3	5.5	2.1	0.0	2.1	5.6	16.4	16.6	4.9	3.0	4.0
Prop In Lane	1.00		1.00	0.51		0.64	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	595	612	265	486	0	445	99	551	511	90	542	474
V/C Ratio(X)	0.37	0.64	0.36	0.10	0.00	0.10	1.75	0.61	0.62	0.97	0.14	0.18
Avail Cap(c_a), veh/h	922	948	410	486	0	445	99	551	511	90	542	474
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	38.6	36.6	27.6	0.0	27.6	47.4	29.3	29.4	47.6	25.1	25.4
Incr Delay (d2), s/veh	0.4	1.2	0.9	0.4	0.0	0.5	373.8	5.0	5.6	84.3	0.5	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	4.5	2.1	1.0	0.0	0.9	12.7	7.6	7.2	4.3	1.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.1	39.8	37.5	28.0	0.0	28.1	421.2	34.4	35.0	131.8	25.6	26.2
LnGrp LOS	D	D	D	C	A	C	F	C	D	F	C	C
Approach Vol, veh/h		707			96			827			244	
Approach Delay, s/veh		38.7			28.1			115.1			63.7	
Approach LOS		D			C			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	36.7		22.3	10.0	36.2		31.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	5.1	31.4		27.0	5.6	30.9		27.0				
Max Q Clear Time (g_c+I1), s	6.9	18.6		12.3	7.6	6.0		4.1				
Green Ext Time (p_c), s	0.0	5.0		3.6	0.0	1.4		0.5				

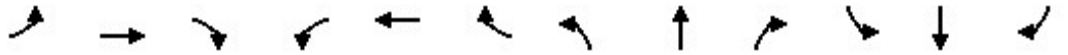
Intersection Summary												
HCM 6th Ctrl Delay			75.1									
HCM 6th LOS			E									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	1	1	0	3	50	339	1	9	67	5
Future Volume (veh/h)	0	0	1	1	0	3	50	339	1	9	67	5
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	0.98		0.98	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	4	2	0	6	56	377	1	11	85	6
Peak Hour Factor	0.25	0.25	0.25	0.50	0.50	0.50	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	0	25	130	0	15	84	2080	6	20	1806	126
Arrive On Green	0.00	0.00	0.02	0.02	0.00	0.02	0.05	0.58	0.58	0.01	0.54	0.54
Sat Flow, veh/h	0	0	1568	316	0	948	1767	3607	10	1767	3341	233
Grp Volume(v), veh/h	0	0	4	8	0	0	56	184	194	11	44	47
Grp Sat Flow(s),veh/h/ln	0	0	1568	1264	0	0	1767	1763	1854	1767	1763	1812
Q Serve(g_s), s	0.0	0.0	0.1	0.2	0.0	0.0	1.1	1.8	1.8	0.2	0.4	0.4
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.3	0.0	0.0	1.1	1.8	1.8	0.2	0.4	0.4
Prop In Lane	0.00		1.00	0.25		0.75	1.00		0.01	1.00		0.13
Lane Grp Cap(c), veh/h	0	0	25	146	0	0	84	1017	1069	20	953	980
V/C Ratio(X)	0.00	0.00	0.16	0.05	0.00	0.00	0.66	0.18	0.18	0.54	0.05	0.05
Avail Cap(c_a), veh/h	0	0	1092	1166	0	0	325	1017	1069	251	953	980
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)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.4	17.6	0.0	0.0	16.8	3.6	3.6	17.6	3.9	3.9
Incr Delay (d2), s/veh	0.0	0.0	2.9	0.2	0.0	0.0	8.7	0.4	0.4	20.2	0.1	0.1
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	0.0	0.0	0.0	0.1	0.0	0.0	0.6	0.4	0.4	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	20.3	17.7	0.0	0.0	25.5	4.0	4.0	37.8	4.0	4.0
LnGrp LOS	A	A	C	B	A	A	C	A	A	D	A	A
Approach Vol, veh/h		4			8			434			102	
Approach Delay, s/veh		20.3			17.7			6.7			7.6	
Approach LOS		C			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	25.6		5.5	6.1	24.3		5.5				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	6.6	19.2		25.0				
Max Q Clear Time (g_c+I1), s	2.2	3.8		2.1	3.1	2.4		2.3				
Green Ext Time (p_c), s	0.0	2.0		0.0	0.0	0.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A



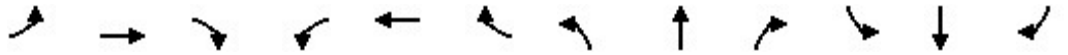
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	31	93	38	87	27	91	462	31	52	115	37
Future Volume (veh/h)	206	31	93	38	87	27	91	462	31	52	115	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	222	33	100	45	102	32	103	525	35	60	132	43
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	186	468	405	58	510	152	124	1311	87	76	955	298
Arrive On Green	0.10	0.27	0.27	0.03	0.19	0.19	0.07	0.39	0.39	0.04	0.36	0.36
Sat Flow, veh/h	1767	1763	1524	1767	2639	785	1767	3354	223	1767	2627	820
Grp Volume(v), veh/h	222	33	100	45	66	68	103	275	285	60	87	88
Grp Sat Flow(s),veh/h/ln	1767	1763	1524	1767	1763	1661	1767	1763	1814	1767	1763	1685
Q Serve(g_s), s	7.6	1.0	3.7	1.8	2.3	2.5	4.2	8.2	8.2	2.4	2.4	2.5
Cycle Q Clear(g_c), s	7.6	1.0	3.7	1.8	2.3	2.5	4.2	8.2	8.2	2.4	2.4	2.5
Prop In Lane	1.00		1.00	1.00		0.47	1.00		0.12	1.00		0.49
Lane Grp Cap(c), veh/h	186	468	405	58	341	321	124	689	709	76	640	612
V/C Ratio(X)	1.20	0.07	0.25	0.77	0.19	0.21	0.83	0.40	0.40	0.79	0.14	0.14
Avail Cap(c_a), veh/h	186	675	583	159	657	619	124	689	709	127	640	612
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	19.9	20.9	34.7	24.5	24.6	33.2	15.9	15.9	34.3	15.4	15.5
Incr Delay (d2), s/veh	129.0	0.1	0.5	7.9	0.1	0.1	33.1	1.7	1.7	6.7	0.4	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	9.8	0.4	1.3	0.9	0.9	1.0	2.9	3.4	3.5	1.2	1.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	161.4	20.0	21.4	42.6	24.6	24.7	66.3	17.7	17.6	41.0	15.9	16.0
LnGrp LOS	F	C	C	D	C	C	E	B	B	D	B	B
Approach Vol, veh/h		355			179			663			235	
Approach Delay, s/veh		108.8			29.2			25.2			22.3	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	33.6	6.8	24.5	9.5	31.6	12.0	19.3
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	5.2	26.2	6.5	27.7	5.1	26.3	7.6	* 27
Max Q Clear Time (g_c+I1), s	4.4	10.2	3.8	5.7	6.2	4.5	9.6	4.5
Green Ext Time (p_c), s	0.0	4.7	0.0	1.1	0.0	1.4	0.0	0.4

Intersection Summary		
HCM 6th Ctrl Delay		46.0
HCM 6th LOS		D

Notes

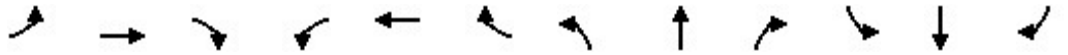
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1223	0	0	2190	503	0	0	0	642	0	1783
Future Volume (veh/h)	0	1223	0	0	2190	503	0	0	0	642	0	1783
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	1274	0	0	2380	275				669	0	1284
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2216	0	0	2216	1401				1554	0	1255
Arrive On Green	0.00	0.44	0.00	0.00	0.44	0.44				0.45	0.00	0.45
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	1274	0	0	2380	275				669	0	1284
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	22.7	0.0	0.0	52.5	2.8				15.9	0.0	54.4
Cycle Q Clear(g_c), s	0.0	22.7	0.0	0.0	52.5	2.8				15.9	0.0	54.4
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2216	0	0	2216	1401				1554	0	1255
V/C Ratio(X)	0.00	0.57	0.00	0.00	1.07	0.20				0.43	0.00	1.02
Avail Cap(c_a), veh/h	0	2216	0	0	2216	1401				1554	0	1255
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.4	0.0	0.0	33.8	0.9				22.3	0.0	32.8
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	42.5	0.3				0.2	0.0	31.5
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	0.0	9.2	0.0	0.0	29.5	5.4				6.4	0.0	23.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	26.5	0.0	0.0	76.2	1.2				22.5	0.0	64.3
LnGrp LOS	A	C	A	A	F	A				C	A	F
Approach Vol, veh/h		1274			2655						1953	
Approach Delay, s/veh		26.5			68.5						50.0	
Approach LOS		C			E						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		60.0		60.0		60.0						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		52.5		54.4		52.5						
Max Q Clear Time (g_c+I1), s		24.7		56.4		54.5						
Green Ext Time (p_c), s		11.0		0.0		0.0						

Intersection Summary		
HCM 6th Ctrl Delay	53.2	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	494	202	162	285	48	325	111	93	447	983	476
Future Volume (veh/h)	74	494	202	162	285	48	325	111	93	447	983	476
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	83	555	227	171	300	51	401	137	115	588	1293	626
Peak Hour Factor	0.89	0.89	0.89	0.95	0.95	0.95	0.81	0.81	0.81	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	129	560	228	149	835	140	316	635	492	654	1028	459
Arrive On Green	0.04	0.23	0.23	0.08	0.28	0.28	0.09	0.34	0.34	0.19	0.44	0.44
Sat Flow, veh/h	3428	2422	988	1767	3006	504	3428	1883	1460	3428	2360	1053
Grp Volume(v), veh/h	83	403	379	171	174	177	401	128	124	588	938	981
Grp Sat Flow(s),veh/h/ln	1714	1763	1647	1767	1763	1748	1714	1763	1580	1714	1763	1650
Q Serve(g_s), s	3.0	28.7	28.9	10.6	10.0	10.2	11.6	6.5	7.1	21.1	54.8	54.8
Cycle Q Clear(g_c), s	3.0	28.7	28.9	10.6	10.0	10.2	11.6	6.5	7.1	21.1	54.8	54.8
Prop In Lane	1.00		0.60	1.00		0.29	1.00		0.92	1.00		0.64
Lane Grp Cap(c), veh/h	129	408	381	149	490	486	316	594	533	654	768	719
V/C Ratio(X)	0.64	0.99	0.99	1.15	0.36	0.36	1.27	0.21	0.23	0.90	1.22	1.36
Avail Cap(c_a), veh/h	188	408	381	149	490	486	316	594	533	875	768	719
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	48.2	48.3	57.6	36.4	36.5	57.1	29.8	30.0	49.7	35.5	35.5
Incr Delay (d2), s/veh	2.0	42.0	44.6	119.2	0.9	0.9	143.5	0.8	1.0	8.2	111.4	173.1
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	1.3	17.3	16.5	9.7	4.4	4.5	11.3	2.9	2.9	9.8	46.6	56.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	90.2	92.8	176.8	37.2	37.4	200.6	30.6	31.0	57.9	146.9	208.6
LnGrp LOS	E	F	F	F	D	D	F	C	C	E	F	F
Approach Vol, veh/h		865			522			653			2507	
Approach Delay, s/veh		88.6			83.0			135.1			150.2	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	34.8	16.0	60.0	9.1	40.7	28.4	47.6
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	10.6	* 29	11.6	54.8	6.9	32.0	32.1	34.3
Max Q Clear Time (g_c+I1), s	12.6	30.9	13.6	56.8	5.0	12.2	23.1	9.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.4	0.9	2.6

Intersection Summary	
HCM 6th Ctrl Delay	128.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

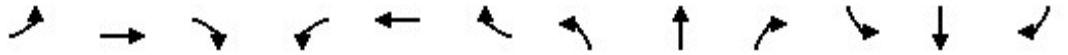
Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	187	339	35	0	1408
Future Vol, veh/h	0	187	339	35	0	1408
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, %	2	2	2	2	2	2
Mvmt Flow	0	203	368	38	0	1530

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	203	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	804	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	804	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	804	-
HCM Lane V/C Ratio	-	-	0.253	-
HCM Control Delay (s)	-	-	11	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	53	174	418	277	39	197	212	77	37	1232	153
Future Volume (veh/h)	56	53	174	418	277	39	197	212	77	37	1232	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	0.99		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	64	60	141	454	301	31	216	233	58	42	1400	157
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	82	311	269	205	795	81	196	1546	684	568	1301	145
Arrive On Green	0.05	0.18	0.18	0.12	0.25	0.25	0.06	0.44	0.44	0.03	0.41	0.41
Sat Flow, veh/h	1767	1763	1524	1767	3225	329	1767	3526	1560	1767	3197	356
Grp Volume(v), veh/h	64	60	141	454	163	169	216	233	58	42	768	789
Grp Sat Flow(s),veh/h/ln	1767	1763	1524	1767	1763	1792	1767	1763	1560	1767	1763	1790
Q Serve(g_s), s	3.0	2.4	6.9	9.6	6.4	6.5	5.1	3.3	1.8	1.1	33.6	33.6
Cycle Q Clear(g_c), s	3.0	2.4	6.9	9.6	6.4	6.5	5.1	3.3	1.8	1.1	33.6	33.6
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	82	311	269	205	434	442	196	1546	684	568	717	728
V/C Ratio(X)	0.78	0.19	0.52	2.21	0.38	0.38	1.10	0.15	0.08	0.07	1.07	1.08
Avail Cap(c_a), veh/h	193	683	590	205	700	712	196	1546	684	624	717	728
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	29.0	30.8	36.5	25.8	25.9	21.1	13.9	13.5	13.4	24.5	24.5
Incr Delay (d2), s/veh	5.9	0.3	1.8	560.1	1.0	1.0	93.6	0.2	0.2	0.0	54.0	58.4
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	1.4	1.0	2.6	36.0	2.7	2.8	7.1	1.3	0.6	0.4	23.7	25.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.9	29.3	32.6	596.6	26.8	26.9	114.7	14.1	13.8	13.4	78.5	82.9
LnGrp LOS	D	C	C	F	C	C	F	B	B	B	F	F
Approach Vol, veh/h		265			786			507			1599	
Approach Delay, s/veh		34.8			355.9			56.9			79.0	
Approach LOS		C			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	42.0	14.0	19.7	9.5	39.4	8.2	25.5
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 34	9.6	32.0	5.1	33.6	9.0	* 33
Max Q Clear Time (g_c+I1), s	3.1	5.3	11.6	8.9	7.1	35.6	5.0	8.5
Green Ext Time (p_c), s	0.0	2.0	0.0	1.3	0.0	0.0	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	140.7
HCM 6th LOS	F

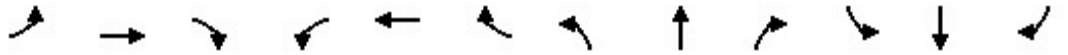
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	88	8	389	6	0	1329
Future Volume (veh/h)	88	8	389	6	0	1329
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	104	9	418	6	0	1445
Peak Hour Factor	0.85	0.85	0.93	0.93	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	143	127	2125	30	0	2106
Arrive On Green	0.08	0.08	0.60	0.60	0.00	0.60
Sat Flow, veh/h	1767	1572	3649	51	0	3711
Grp Volume(v), veh/h	104	9	207	217	0	1445
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1845	0	1763
Q Serve(g_s), s	1.8	0.2	1.6	1.6	0.0	8.5
Cycle Q Clear(g_c), s	1.8	0.2	1.6	1.6	0.0	8.5
Prop In Lane	1.00	1.00		0.03	0.00	
Lane Grp Cap(c), veh/h	143	127	1053	1102	0	2106
V/C Ratio(X)	0.73	0.07	0.20	0.20	0.00	0.69
Avail Cap(c_a), veh/h	1276	1136	1053	1102	0	2106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	12.9	2.8	2.8	0.0	4.2
Incr Delay (d2), s/veh	2.6	0.1	0.4	0.4	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2	0.2	0.0	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.3	13.0	3.2	3.2	0.0	6.0
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	113		424			1445
Approach Delay, s/veh	16.1		3.2			6.0
Approach LOS	B		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		23.1			23.1	7.4
Change Period (Y+Rc), s		4.9			4.9	4.9
Max Green Setting (Gmax), s		18.2			18.2	22.0
Max Q Clear Time (g_c+I1), s		3.6			10.5	3.8
Green Ext Time (p_c), s		2.8			6.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1417	192	522	1801	363	222	63	627	1189	256	181
Future Volume (veh/h)	30	1417	192	522	1801	363	222	63	627	1189	256	181
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		0.97	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	34	1610	218	538	1857	225	236	67	582	1226	264	74
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	69	1388	560	414	1913	1685	284	802	955	837	1370	597
Arrive On Green	0.02	0.27	0.27	0.12	0.38	0.38	0.08	0.23	0.23	0.24	0.39	0.39
Sat Flow, veh/h	3428	5066	1567	3428	5066	2675	3428	3526	2732	3428	3526	1538
Grp Volume(v), veh/h	34	1610	218	538	1857	225	236	67	582	1226	264	74
Grp Sat Flow(s),veh/h/ln	1714	1689	1567	1714	1689	1337	1714	1763	1366	1714	1763	1538
Q Serve(g_s), s	1.5	41.1	15.6	18.1	54.0	5.2	10.2	2.2	26.5	36.6	7.4	4.6
Cycle Q Clear(g_c), s	1.5	41.1	15.6	18.1	54.0	5.2	10.2	2.2	26.5	36.6	7.4	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	1388	560	414	1913	1685	284	802	955	837	1370	597
V/C Ratio(X)	0.49	1.16	0.39	1.30	0.97	0.13	0.83	0.08	0.61	1.47	0.19	0.12
Avail Cap(c_a), veh/h	174	1388	560	414	1913	1685	448	917	1044	837	1370	597
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	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	72.7	54.5	36.0	65.9	45.9	11.7	67.7	45.6	40.5	56.7	30.3	29.5
Incr Delay (d2), s/veh	2.0	80.6	2.0	152.0	14.7	0.2	3.8	0.1	1.6	214.7	0.1	0.1
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	0.7	27.8	6.4	16.7	25.1	1.6	4.6	1.0	9.2	40.8	3.2	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	135.0	38.1	217.9	60.6	11.9	71.6	45.7	42.2	271.4	30.4	29.6
LnGrp LOS	E	F	D	F	E	B	E	D	D	F	C	C
Approach Vol, veh/h		1862			2620			885			1564	
Approach Delay, s/veh		122.6			88.7			50.3			219.3	
Approach LOS		F			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	46.6	16.8	63.6	7.4	62.2	41.0	39.4
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	18.1	36.5	19.6	55.7	7.6	* 48	36.6	* 39
Max Q Clear Time (g_c+I1), s	20.1	43.1	12.2	9.4	3.5	56.0	38.6	28.5
Green Ext Time (p_c), s	0.0	0.0	0.3	3.8	0.0	0.0	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	122.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

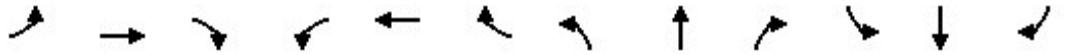
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	203	509	0	0	130
Future Vol, veh/h	0	203	509	0	0	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	221	553	0	0	141

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	277
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	720
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	720
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

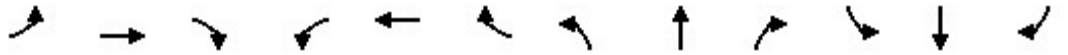
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	720
HCM Lane V/C Ratio	-	-	-	0.196
HCM Control Delay (s)	-	-	-	11.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	24	217	189	309	94	70	91	13	34	355	130
Future Volume (veh/h)	50	24	217	189	309	94	70	91	13	34	355	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	33	301	230	377	115	86	112	16	37	390	143
Peak Hour Factor	0.72	0.72	0.72	0.82	0.82	0.82	0.81	0.81	0.81	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	741	762	338	276	478	151	108	988	139	47	714	258
Arrive On Green	0.22	0.22	0.22	0.26	0.26	0.26	0.06	0.32	0.32	0.03	0.28	0.28
Sat Flow, veh/h	3428	3526	1564	1082	1875	593	1767	3104	435	1767	2521	911
Grp Volume(v), veh/h	69	33	301	383	0	339	86	63	65	37	271	262
Grp Sat Flow(s),veh/h/ln	1714	1763	1564	1801	0	1748	1767	1763	1777	1767	1763	1670
Q Serve(g_s), s	1.7	0.8	19.8	21.3	0.0	19.0	5.1	2.7	2.8	2.2	13.8	14.1
Cycle Q Clear(g_c), s	1.7	0.8	19.8	21.3	0.0	19.0	5.1	2.7	2.8	2.2	13.8	14.1
Prop In Lane	1.00		1.00	0.60		0.34	1.00		0.25	1.00		0.55
Lane Grp Cap(c), veh/h	741	762	338	459	0	446	108	561	566	47	500	473
V/C Ratio(X)	0.09	0.04	0.89	0.83	0.00	0.76	0.79	0.11	0.12	0.79	0.54	0.55
Avail Cap(c_a), veh/h	874	899	399	459	0	446	108	561	566	110	500	473
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	32.8	40.3	37.3	0.0	36.4	49.0	25.5	25.5	51.3	32.1	32.2
Incr Delay (d2), s/veh	0.1	0.0	19.6	16.2	0.0	11.6	29.7	0.4	0.4	10.7	4.2	4.6
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	0.7	0.3	9.4	11.3	0.0	9.4	3.1	1.2	1.2	1.1	6.4	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	32.9	59.9	53.5	0.0	48.0	78.8	25.9	25.9	62.0	36.3	36.9
LnGrp LOS	C	C	E	D	A	D	E	C	C	E	D	D
Approach Vol, veh/h		403			722			214			570	
Approach Delay, s/veh		53.1			50.9			47.2			38.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	39.0		27.8	10.9	35.3		31.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	6.6	29.9		27.0	6.5	30.0		27.0				
Max Q Clear Time (g_c+I1), s	4.2	4.8		21.8	7.1	16.1		23.3				
Green Ext Time (p_c), s	0.0	1.0		0.8	0.0	4.2		1.7				

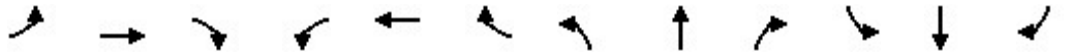
Intersection Summary												
HCM 6th Ctrl Delay			47.2									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	8	1	0	3	34	101	1	4	326	1
Future Volume (veh/h)	9	0	8	1	0	3	34	101	1	4	326	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	15	0	13	3	0	9	42	125	1	5	370	1
Peak Hour Factor	0.62	0.62	0.62	0.33	0.33	0.33	0.81	0.81	0.81	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	0	28	138	0	49	67	2046	16	10	1941	5
Arrive On Green	0.04	0.00	0.04	0.04	0.00	0.04	0.04	0.57	0.57	0.01	0.54	0.54
Sat Flow, veh/h	808	0	700	411	0	1234	1767	3584	29	1767	3607	10
Grp Volume(v), veh/h	28	0	0	12	0	0	42	61	65	5	181	190
Grp Sat Flow(s),veh/h/ln	1509	0	0	1646	0	0	1767	1763	1850	1767	1763	1854
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	0.9	0.6	0.6	0.1	2.0	2.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.2	0.0	0.0	0.9	0.6	0.6	0.1	2.0	2.0
Prop In Lane	0.54		0.46	0.25		0.75	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	210	0	0	187	0	0	67	1006	1056	10	949	998
V/C Ratio(X)	0.13	0.00	0.00	0.06	0.00	0.00	0.63	0.06	0.06	0.52	0.19	0.19
Avail Cap(c_a), veh/h	1134	0	0	1143	0	0	282	1006	1056	244	949	998
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	0.0	17.2	0.0	0.0	17.5	3.5	3.5	18.3	4.4	4.4
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.1	0.0	0.0	9.2	0.1	0.1	37.8	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	0.2	0.0	0.0	0.1	0.0	0.0	0.5	0.1	0.1	0.1	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	0.0	17.3	0.0	0.0	26.8	3.6	3.6	56.1	4.8	4.8
LnGrp LOS	B	A	A	B	A	A	C	A	A	E	A	A
Approach Vol, veh/h		28			12			168			376	
Approach Delay, s/veh		17.6			17.3			9.4			5.5	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	26.0		6.4	5.8	24.8		6.4				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	5.9	19.9		25.0				
Max Q Clear Time (g_c+I1), s	2.1	2.6		2.6	2.9	4.0		2.2				
Green Ext Time (p_c), s	0.0	0.5		0.1	0.0	1.9		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A



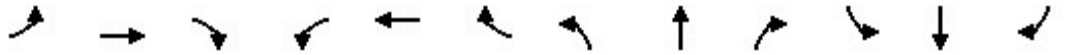
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	80	70	14	70	23	276	158	34	129	334	310
Future Volume (veh/h)	110	80	70	14	70	23	276	158	34	129	334	310
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.99	1.00		0.96
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	125	91	80	17	86	28	383	219	47	143	371	344
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.72	0.72	0.72	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	145	422	329	28	425	131	338	1209	254	178	577	492
Arrive On Green	0.08	0.23	0.23	0.02	0.16	0.16	0.19	0.42	0.42	0.10	0.33	0.33
Sat Flow, veh/h	1767	1850	1441	1767	2629	814	1767	2893	608	1767	1763	1505
Grp Volume(v), veh/h	125	86	85	17	56	58	383	132	134	143	371	344
Grp Sat Flow(s),veh/h/ln	1767	1763	1528	1767	1763	1680	1767	1763	1738	1767	1763	1505
Q Serve(g_s), s	5.7	3.2	3.7	0.8	2.3	2.4	15.6	3.8	4.0	6.5	14.6	16.3
Cycle Q Clear(g_c), s	5.7	3.2	3.7	0.8	2.3	2.4	15.6	3.8	4.0	6.5	14.6	16.3
Prop In Lane	1.00		0.94	1.00		0.48	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	145	402	348	28	285	271	338	737	726	178	577	492
V/C Ratio(X)	0.86	0.21	0.24	0.61	0.20	0.21	1.13	0.18	0.18	0.80	0.64	0.70
Avail Cap(c_a), veh/h	145	586	508	134	583	556	338	737	726	297	577	492
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	25.6	25.7	39.9	29.6	29.7	33.0	14.9	15.0	35.9	23.4	23.9
Incr Delay (d2), s/veh	36.3	0.4	0.6	7.9	0.1	0.1	90.1	0.5	0.6	3.2	5.4	8.0
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	3.9	1.4	1.4	0.4	0.9	1.0	14.9	1.6	1.6	2.9	6.7	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	26.0	26.3	47.8	29.7	29.8	123.1	15.5	15.5	39.1	28.8	31.9
LnGrp LOS	E	C	C	D	C	C	F	B	B	D	C	C
Approach Vol, veh/h		296			131			649			858	
Approach Delay, s/veh		46.0			32.1			79.0			31.8	
Approach LOS		D			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	39.4	5.7	23.9	20.0	32.0	11.1	18.5
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	13.7	28.6	6.2	27.1	15.6	26.7	6.7	* 27
Max Q Clear Time (g_c+I1), s	8.5	6.0	2.8	5.7	17.6	18.3	7.7	4.4
Green Ext Time (p_c), s	0.1	2.4	0.0	1.4	0.0	4.1	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2245	0	0	1934	589	0	0	0	156	0	804
Future Volume (veh/h)	0	2245	0	0	1934	589	0	0	0	156	0	804
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	2339	0	0	1994	607				173	0	893
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2843	0	0	2843	1423				1179	0	951
Arrive On Green	0.00	0.56	0.00	0.00	0.56	0.56				0.34	0.00	0.34
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	2339	0	0	1994	607				173	0	893
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	51.9	0.0	0.0	39.3	8.2				4.8	0.0	43.1
Cycle Q Clear(g_c), s	0.0	51.9	0.0	0.0	39.3	8.2				4.8	0.0	43.1
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2843	0	0	2843	1423				1179	0	951
V/C Ratio(X)	0.00	0.82	0.00	0.00	0.70	0.43				0.15	0.00	0.94
Avail Cap(c_a), veh/h	0	2843	0	0	2843	1423				1252	0	1011
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.7	0.0	0.0	21.9	1.0				31.3	0.0	43.9
Incr Delay (d2), s/veh	0.0	2.8	0.0	0.0	1.5	0.9				0.1	0.0	15.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.9	0.0	0.0	15.7	14.1				2.0	0.0	16.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.5	0.0	0.0	23.4	1.9				31.3	0.0	59.1
LnGrp LOS	A	C	A	A	C	A				C	A	E
Approach Vol, veh/h		2339			2601						1066	
Approach Delay, s/veh		27.5			18.4						54.6	
Approach LOS		C			B						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		85.0		53.0		85.0						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		74.5		50.4		74.5						
Max Q Clear Time (g_c+I1), s		53.9		45.1		41.3						
Green Ext Time (p_c), s		17.1		2.3		24.6						

Intersection Summary												
HCM 6th Ctrl Delay			28.4									
HCM 6th LOS			C									

Appendix K: Calculations for Horizon Year 2050 Volumes

Provided on the following page

Road	Segment	Volume (SANDAG S14 2016)	Volume (SANDAG S14 2050)	Linear Growth (2016 - 2050)	Year 2021 Volumes	Year 2050 Volumes
Towne Centre Dr.	Eastgate Mall - Project Dwy. "A"	10,400	12,900	0.71%	15,274	18,406
Towne Centre Dr.	Project Dwy. "A" - Executive Dr.	10,400	12,900	0.71%	15,274	18,406
Towne Centre Dr.	Executive Dr. - Towne Centre Dwy.	13,200	18,300	1.14%	21,886	29,098
Towne Centre Dr.	Towne Centre Dwy. - La Jolla Village Dr.	13,200	18,300	1.14%	21,886	29,098
Judicial Dr.	Executive Dr. - Judicial Dwy.	6,800	11,500	2.03%	9,028	14,350
Judicial Dr.	Judicial Dwy. - Golden Haven Dr. / Brook Ln.	8,200	13,600	1.94%	9,320	14,555
Executive Dr.	Towne Centre Dr. - Project Dwy. "B"	8,000	13,100	1.88%	8,665	13,377
Executive Dr.	Project Dwy. "B" - Judicial Dr.	8,000	13,100	1.88%	8,665	13,377
Towne Centre Dr.	N/O Eastgate Mall	8,700	8,900	0.07%	9,262	9,444
Towne Centre Dr.	S/O La Jolla Village Drive	24,100	24,700	0.07%	18,244	18,631
Eastgate Mall	W/O Towne Centre Drive	17,200	20,300	0.53%	14,981	17,284
Eastgate Mall	E/O Towne Centre Drive	10,300	12,900	0.74%	13,445	16,340
Judicial Dr.	N/O Executive Drive	5,100	6,800	0.98%	5,454	7,005
Judicial Dr.	S/O Golden Haven Drive	3,600	7,200	2.94%	9,047	16,764
Golden Haven Dr.	W/O Judicial Drive	5,200	6,900	0.96%	8,003	10,235
Brook Ln.	E/O Judicial Drive	5,300	7,400	1.17%	6,633	8,875
La Jolla Village Dr.	W/O Towne Centre Drive	37,400	40,700	0.26%	46,102	49,572
La Jolla Village Dr.	Towne Centre Drive - I-805 SB Ramps	69,300	76,300	0.30%	63,799	69,296
Miramar Rd.	I-805 SB Ramps - I-805 NB Ramps	50,100	53,000	0.17%	55,961	58,724
I-805 SB Ramps (On-Ramp)	N/O La Jolla Village Drive	3,000	3,300	0.29%	3,111	3,376
I-805 SB Ramps (On-Ramp)	S/O La Jolla Village Drive	15,500	17,200	0.32%	16,167	17,679
I-805 SB Ramps (Off-Ramp)	N/O La Jolla Village Drive	17,000	16,300	-0.12%	17,778	17,154
Executive Dr.	W/O Towne Centre Drive	3,400	5,500	1.82%	7,537	11,508
Executive Dr.	E/O Judicial Drive	3,700	7,700	3.18%	4,144	7,965

Notes:

SANDAG S14 TFIC Year 2016 Volumes
SANDAG S14 TFIC Year 2050 Volumes
Linear Growth = [(2050 ADT / 2016 ADT) - 1] / N
N = Number of Years
1 = Linear Growth (2016 -2050) was calculated by applying the growth formula, where N equals 34 years
2 = Year 2021 Volumes are based on volume projections from comparing SANDAG TFIC Series 14 Year 2016 and SANDAG TFIC Series 14 Year 2025

*Street segments highlgihted in gray represent those street segments that are not part of the Project Study Area but have been evaluated for volume projections to Year 2050 conditions in order to estimate the peak hour volumes of all of the Project Study Area intersection turning movements. Note the following:

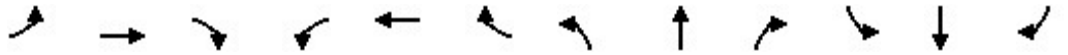
A) The source of the Existing (Year 2021) volumes is based on the projection of Existing count data dating back to Year 2015, 2016, and 2017.
B) The original counts have been sourced primarily from the USAI count database of counts collected during Year 2016 and Year 2017.
C) Street segments for which no counts were available from the USAI database have been sourced from the University CPU Existing Conditions Summary (*04/2018*).

D) Street segments for which no volumes were available from neither USAI Year 2016 and 2017 count database nor the Universiry CPU ECS (*04/2018*) have been projected through the calculation of a growth factor sourced from the comparison of the SANDAG TFIC Series 14 Year 2016 and Year 2025 models and applied directly to the sourced SANDAG TFIC Series 14 Year 2016 volumes.

E) For the full street segment volume calculations for Existing Year 2021 conditions, refer to **Appendix E**.

Appendix L: Horizon Year 2050 Synchro Worksheets

Provided on the following page



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	260	166	74	618	506	419	980	277	49	114	68
Future Volume (veh/h)	485	260	166	74	618	506	419	980	277	49	114	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	527	283	180	80	672	550	455	1065	301	56	130	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	211	796	490	101	694	562	518	1006	282	95	539	297
Arrive On Green	0.06	0.38	0.38	0.06	0.38	0.38	0.15	0.37	0.37	0.03	0.25	0.25
Sat Flow, veh/h	3428	2077	1277	1767	1830	1483	3428	2707	759	3428	2169	1196
Grp Volume(v), veh/h	527	239	224	80	647	575	455	690	676	56	104	103
Grp Sat Flow(s),veh/h/ln	1714	1763	1591	1767	1763	1550	1714	1763	1703	1714	1763	1602
Q Serve(g_s), s	7.6	11.9	12.5	5.5	44.4	45.1	16.0	45.8	45.8	2.0	5.8	6.4
Cycle Q Clear(g_c), s	7.6	11.9	12.5	5.5	44.4	45.1	16.0	45.8	45.8	2.0	5.8	6.4
Prop In Lane	1.00		0.80	1.00		0.96	1.00		0.45	1.00		0.75
Lane Grp Cap(c), veh/h	211	676	610	101	668	588	518	655	633	95	438	398
V/C Ratio(X)	2.49	0.35	0.37	0.79	0.97	0.98	0.88	1.05	1.07	0.59	0.24	0.26
Avail Cap(c_a), veh/h	211	676	610	181	668	588	696	655	633	145	438	398
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	27.1	27.3	57.4	37.5	37.8	51.2	38.7	38.7	59.2	37.0	37.2
Incr Delay (d2), s/veh	685.4	1.4	1.7	5.1	27.2	31.8	8.0	50.0	55.2	2.2	1.3	1.6
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	23.4	5.3	5.0	2.6	23.8	22.0	7.4	28.5	28.5	0.9	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	743.2	28.5	29.0	62.5	64.8	69.6	59.2	88.7	93.9	61.4	38.3	38.8
LnGrp LOS	F	C	C	E	E	E	E	F	F	E	D	D
Approach Vol, veh/h		990			1302			1821			263	
Approach Delay, s/veh		409.1			66.7			83.2			43.4	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	52.9	23.0	35.8	12.0	52.4	7.8	51.0
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	12.6	* 43	25.0	26.0	7.6	46.7	5.2	45.8
Max Q Clear Time (g_c+I1), s	7.5	14.5	18.0	8.4	9.6	47.1	4.0	47.8
Green Ext Time (p_c), s	0.0	5.9	0.6	1.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	149.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

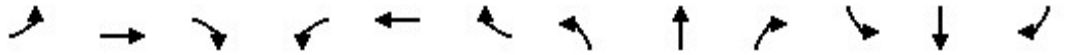
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	1618	78	0	313
Future Vol, veh/h	0	9	1618	78	0	313
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, %	2	2	2	2	2	2
Mvmt Flow	0	10	1759	85	0	340

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	922	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	272	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	272	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	272	-
HCM Lane V/C Ratio	-	-	0.036	-
HCM Control Delay (s)	-	-	18.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	168	48	69	183	40	679	1521	672	20	226	115
Future Volume (veh/h)	194	168	48	69	183	40	679	1521	672	20	226	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	237	205	59	78	208	45	715	1601	707	22	248	126
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	161	554	155	100	489	103	607	1704	752	129	858	421
Arrive On Green	0.09	0.20	0.20	0.06	0.17	0.17	0.13	0.48	0.48	0.02	0.38	0.38
Sat Flow, veh/h	1767	2704	755	1767	2875	607	1767	3526	1555	1767	2285	1122
Grp Volume(v), veh/h	237	131	133	78	125	128	715	1601	707	22	189	185
Grp Sat Flow(s),veh/h/ln	1767	1763	1696	1767	1763	1719	1767	1763	1555	1767	1763	1644
Q Serve(g_s), s	7.6	5.3	5.6	3.6	5.3	5.5	10.6	35.8	35.9	0.6	6.3	6.6
Cycle Q Clear(g_c), s	7.6	5.3	5.6	3.6	5.3	5.5	10.6	35.8	35.9	0.6	6.3	6.6
Prop In Lane	1.00		0.45	1.00		0.35	1.00		1.00	1.00		0.68
Lane Grp Cap(c), veh/h	161	361	347	100	300	292	607	1704	752	129	662	617
V/C Ratio(X)	1.47	0.36	0.38	0.78	0.42	0.44	1.18	0.94	0.94	0.17	0.29	0.30
Avail Cap(c_a), veh/h	161	696	669	117	655	639	607	1704	752	203	662	617
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	28.5	28.6	38.8	30.9	31.0	21.4	20.4	20.4	20.5	18.2	18.3
Incr Delay (d2), s/veh	242.6	0.7	0.8	20.9	1.7	1.8	96.7	11.5	21.2	0.2	1.1	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	14.1	2.3	2.3	2.1	2.3	2.4	23.4	16.0	16.2	0.3	2.7	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	280.5	29.2	29.4	59.7	32.6	32.8	118.1	31.9	41.6	20.7	19.3	19.6
LnGrp LOS	F	C	C	E	C	C	F	C	D	C	B	B
Approach Vol, veh/h		501			331			3023			396	
Approach Delay, s/veh		148.1			39.1			54.6			19.5	
Approach LOS		F			D			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	46.1	9.1	22.2	15.0	37.1	12.0	19.3
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 37	5.5	32.9	10.6	31.3	7.6	* 31
Max Q Clear Time (g_c+I1), s	2.6	37.9	5.6	7.6	12.6	8.6	9.6	7.5
Green Ext Time (p_c), s	0.0	0.0	0.0	1.7	0.0	2.4	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

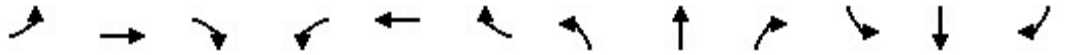
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	1	1484	63	0	348
Future Volume (veh/h)	12	1	1484	63	0	348
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	16	1	1579	67	0	424
Peak Hour Factor	0.75	0.75	0.94	0.94	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	31	28	2200	93	0	2251
Arrive On Green	0.02	0.02	0.64	0.64	0.00	0.64
Sat Flow, veh/h	1767	1572	3538	146	0	3711
Grp Volume(v), veh/h	16	1	805	841	0	424
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1828	0	1763
Q Serve(g_s), s	0.3	0.0	8.7	8.8	0.0	1.4
Cycle Q Clear(g_c), s	0.3	0.0	8.7	8.8	0.0	1.4
Prop In Lane	1.00	1.00		0.08	0.00	
Lane Grp Cap(c), veh/h	31	28	1126	1167	0	2251
V/C Ratio(X)	0.51	0.04	0.72	0.72	0.00	0.19
Avail Cap(c_a), veh/h	1364	1214	1126	1167	0	2251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	13.8	3.4	3.4	0.0	2.1
Incr Delay (d2), s/veh	4.8	0.2	3.9	3.9	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	1.2	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.6	14.0	7.3	7.3	0.0	2.3
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	17		1646			424
Approach Delay, s/veh	18.4		7.3			2.3
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		23.1				23.1	5.4
Change Period (Y+Rc), s		4.9				4.9	4.9
Max Green Setting (Gmax), s		18.2				18.2	22.0
Max Q Clear Time (g_c+I1), s		10.8				3.4	2.3
Green Ext Time (p_c), s		6.4				3.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	448	1081	123	406	1639	1715	140	254	327	242	38	36
Future Volume (veh/h)	448	1081	123	406	1639	1715	140	254	327	242	38	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	482	1162	78	432	1744	1398	157	285	277	299	47	32
Peak Hour Factor	0.93	0.93	0.93	0.94	0.94	0.94	0.89	0.89	0.89	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	382	2309	799	443	2417	1598	205	594	820	352	746	329
Arrive On Green	0.11	0.46	0.46	0.13	0.48	0.48	0.06	0.17	0.17	0.10	0.21	0.21
Sat Flow, veh/h	3428	5066	1546	3428	5066	2753	3428	3526	2743	3428	3526	1557
Grp Volume(v), veh/h	482	1162	78	432	1744	1398	157	285	277	299	47	32
Grp Sat Flow(s),veh/h/ln	1714	1689	1546	1714	1689	1377	1714	1763	1371	1714	1763	1557
Q Serve(g_s), s	15.6	22.7	3.6	17.6	38.4	60.7	6.3	10.2	11.0	12.0	1.5	2.3
Cycle Q Clear(g_c), s	15.6	22.7	3.6	17.6	38.4	60.7	6.3	10.2	11.0	12.0	1.5	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	2309	799	443	2417	1598	205	594	820	352	746	329
V/C Ratio(X)	1.26	0.50	0.10	0.97	0.72	0.87	0.77	0.48	0.34	0.85	0.06	0.10
Avail Cap(c_a), veh/h	382	2309	799	443	2417	1598	282	982	1122	553	1254	554
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	26.9	17.3	60.7	29.2	25.1	64.8	52.6	38.4	61.7	44.1	44.4
Incr Delay (d2), s/veh	137.3	0.8	0.2	35.9	1.9	7.0	5.1	1.4	0.6	4.2	0.1	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	14.1	9.3	1.4	9.9	15.9	20.6	2.9	4.7	3.8	5.4	0.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	199.5	27.7	17.5	96.6	31.1	32.1	69.9	54.1	39.0	65.9	44.2	44.7
LnGrp LOS	F	C	B	F	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1722			3574			719			378	
Approach Delay, s/veh		75.3			39.4			51.7			61.4	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	69.3	12.8	34.9	20.0	72.3	18.8	28.9
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	18.1	40.5	11.5	49.8	15.6	* 44	22.6	* 39
Max Q Clear Time (g_c+I1), s	19.6	24.7	8.3	4.3	17.6	62.7	14.0	13.0
Green Ext Time (p_c), s	0.0	10.5	0.1	0.7	0.0	0.0	0.4	6.4

Intersection Summary	
HCM 6th Ctrl Delay	51.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

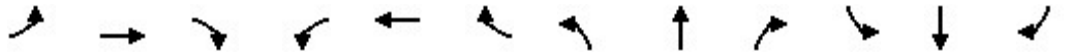
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	860	148	58	0	6
Future Vol, veh/h	0	860	148	58	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	935	161	63	0	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	112
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	920
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	920
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

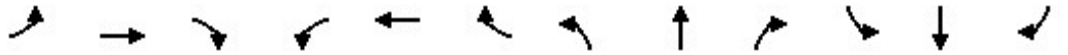
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	920
HCM Lane V/C Ratio	-	-	-	0.007
HCM Control Delay (s)	-	-	-	8.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	640	119	32	49	23	154	426	358	136	84	34
Future Volume (veh/h)	245	640	119	32	49	23	154	426	358	136	84	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	285	744	138	41	63	29	167	463	389	162	100	40
Peak Hour Factor	0.86	0.86	0.86	0.78	0.78	0.78	0.92	0.92	0.92	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	826	850	369	212	335	158	192	552	463	186	757	286
Arrive On Green	0.24	0.24	0.24	0.20	0.20	0.20	0.11	0.31	0.31	0.11	0.30	0.30
Sat Flow, veh/h	3428	3526	1533	1054	1666	786	1767	1795	1504	1767	2485	940
Grp Volume(v), veh/h	285	744	138	70	0	63	167	455	397	162	69	71
Grp Sat Flow(s),veh/h/ln	1714	1763	1533	1803	0	1703	1767	1763	1536	1767	1763	1663
Q Serve(g_s), s	9.3	27.3	10.1	4.4	0.0	4.1	12.5	32.4	32.5	12.1	3.8	4.2
Cycle Q Clear(g_c), s	9.3	27.3	10.1	4.4	0.0	4.1	12.5	32.4	32.5	12.1	3.8	4.2
Prop In Lane	1.00		1.00	0.58		0.46	1.00		0.98	1.00		0.57
Lane Grp Cap(c), veh/h	826	850	369	362	0	342	192	543	473	186	537	506
V/C Ratio(X)	0.34	0.88	0.37	0.19	0.00	0.18	0.87	0.84	0.84	0.87	0.13	0.14
Avail Cap(c_a), veh/h	879	904	393	362	0	342	294	543	473	231	537	506
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	49.1	42.6	44.7	0.0	44.6	59.0	43.4	43.5	59.2	33.8	34.0
Incr Delay (d2), s/veh	0.3	9.4	0.7	1.2	0.0	1.2	10.8	14.3	16.3	21.2	0.5	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	13.1	3.9	2.1	0.0	1.9	6.2	16.2	14.4	6.5	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.5	58.5	43.3	45.9	0.0	45.8	69.8	57.8	59.8	80.5	34.3	34.5
LnGrp LOS	D	E	D	D	A	D	E	E	E	F	C	C
Approach Vol, veh/h		1167			133			1019			302	
Approach Delay, s/veh		52.8			45.8			60.5			59.1	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.6	46.7		37.3	19.0	46.3		31.9				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	17.6	41.4		34.5	22.4	36.6		27.0				
Max Q Clear Time (g_c+I1), s	14.1	34.5		29.3	14.5	6.2		6.4				
Green Ext Time (p_c), s	0.1	4.1		3.1	0.1	1.3		0.7				

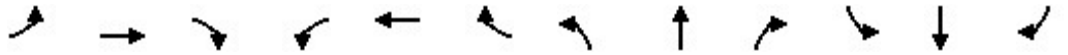
Intersection Summary												
HCM 6th Ctrl Delay			56.2									
HCM 6th LOS			E									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	2	0	5	50	358	1	9	86	5
Future Volume (veh/h)	0	0	2	2	0	5	50	358	1	9	86	5
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	0.99		0.98	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	8	4	0	10	56	398	1	11	109	6
Peak Hour Factor	0.25	0.25	0.25	0.50	0.50	0.50	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	0	40	136	0	22	84	2061	5	20	1819	99
Arrive On Green	0.00	0.00	0.03	0.03	0.00	0.03	0.05	0.57	0.57	0.01	0.54	0.54
Sat Flow, veh/h	0	0	1568	343	0	857	1767	3608	9	1767	3398	186
Grp Volume(v), veh/h	0	0	8	14	0	0	56	194	205	11	56	59
Grp Sat Flow(s),veh/h/ln	0	0	1568	1199	0	0	1767	1763	1854	1767	1763	1821
Q Serve(g_s), s	0.0	0.0	0.2	0.3	0.0	0.0	1.1	1.9	1.9	0.2	0.6	0.6
Cycle Q Clear(g_c), s	0.0	0.0	0.2	0.5	0.0	0.0	1.1	1.9	1.9	0.2	0.6	0.6
Prop In Lane	0.00		1.00	0.29		0.71	1.00		0.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	0	40	158	0	0	84	1007	1059	20	944	975
V/C Ratio(X)	0.00	0.00	0.20	0.09	0.00	0.00	0.67	0.19	0.19	0.54	0.06	0.06
Avail Cap(c_a), veh/h	0	0	1082	1151	0	0	312	1007	1059	249	944	975
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)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.3	17.6	0.0	0.0	17.0	3.7	3.7	17.8	4.0	4.0
Incr Delay (d2), s/veh	0.0	0.0	2.4	0.2	0.0	0.0	8.7	0.4	0.4	20.2	0.1	0.1
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	0.0	0.0	0.1	0.1	0.0	0.0	0.6	0.4	0.4	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	19.8	17.8	0.0	0.0	25.7	4.2	4.2	38.0	4.2	4.2
LnGrp LOS	A	A	B	B	A	A	C	A	A	D	A	A
Approach Vol, veh/h		8			14			455			126	
Approach Delay, s/veh		19.8			17.8			6.8			7.1	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	25.6		5.8	6.1	24.3		5.8				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	6.4	19.4		25.0				
Max Q Clear Time (g_c+I1), s	2.2	3.9		2.2	3.1	2.6		2.5				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	0.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A



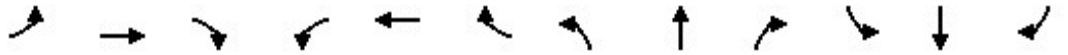
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	41	172	70	111	22	116	636	41	67	200	42
Future Volume (veh/h)	262	41	172	70	111	22	116	636	41	67	200	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		1.00	1.00		0.97
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	282	44	185	82	131	26	132	723	47	77	230	48
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	293	504	437	105	524	101	164	1215	79	99	942	192
Arrive On Green	0.17	0.29	0.29	0.06	0.18	0.18	0.09	0.36	0.36	0.06	0.32	0.32
Sat Flow, veh/h	1767	1763	1527	1767	2917	560	1767	3359	218	1767	2900	593
Grp Volume(v), veh/h	282	44	185	82	77	80	132	379	391	77	138	140
Grp Sat Flow(s),veh/h/ln	1767	1763	1527	1767	1763	1714	1767	1763	1815	1767	1763	1730
Q Serve(g_s), s	13.0	1.5	8.1	3.7	3.1	3.3	6.0	14.3	14.3	3.5	4.7	4.9
Cycle Q Clear(g_c), s	13.0	1.5	8.1	3.7	3.1	3.3	6.0	14.3	14.3	3.5	4.7	4.9
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.12	1.00		0.34
Lane Grp Cap(c), veh/h	293	504	437	105	317	308	164	638	656	99	572	562
V/C Ratio(X)	0.96	0.09	0.42	0.78	0.24	0.26	0.81	0.59	0.60	0.78	0.24	0.25
Avail Cap(c_a), veh/h	293	684	593	207	607	590	164	638	656	151	572	562
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	21.4	23.8	38.0	28.8	28.9	36.4	21.3	21.3	38.2	20.3	20.3
Incr Delay (d2), s/veh	41.7	0.1	1.1	4.6	0.1	0.2	23.0	4.1	3.9	6.0	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.6	2.9	1.7	1.3	1.3	3.6	6.3	6.5	1.7	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.6	21.5	24.8	42.6	29.0	29.1	59.5	25.3	25.2	44.2	21.3	21.4
LnGrp LOS	E	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		511			239			902			355	
Approach Delay, s/veh		52.5			33.7			30.3			26.3	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	34.9	9.3	28.7	12.0	31.9	18.0	20.0
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	7.0	27.2	9.6	31.8	7.6	26.6	13.6	* 28
Max Q Clear Time (g_c+I1), s	5.5	16.3	5.7	10.1	8.0	6.9	15.0	5.3
Green Ext Time (p_c), s	0.0	5.1	0.0	2.1	0.0	2.4	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	35.6
HCM 6th LOS	D

Notes

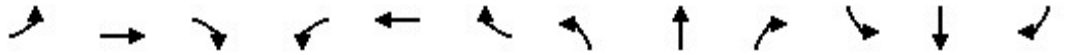
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1219	0	0	2161	543	0	0	0	671	0	1751
Future Volume (veh/h)	0	1219	0	0	2161	543	0	0	0	671	0	1751
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	1270	0	0	2349	318				699	0	1251
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2175	0	0	2175	1401				1582	0	1277
Arrive On Green	0.00	0.43	0.00	0.00	0.43	0.43				0.46	0.00	0.46
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	1270	0	0	2349	318				699	0	1251
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	22.9	0.0	0.0	51.5	3.3				16.5	0.0	53.3
Cycle Q Clear(g_c), s	0.0	22.9	0.0	0.0	51.5	3.3				16.5	0.0	53.3
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2175	0	0	2175	1401				1582	0	1277
V/C Ratio(X)	0.00	0.58	0.00	0.00	1.08	0.23				0.44	0.00	0.98
Avail Cap(c_a), veh/h	0	2175	0	0	2175	1401				1583	0	1278
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.1	0.0	0.0	34.2	0.9				21.9	0.0	31.7
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.0	45.0	0.4				0.2	0.0	20.3
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	0.0	9.3	0.0	0.0	29.6	6.6				6.7	0.0	20.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.2	0.0	0.0	79.2	1.3				22.0	0.0	52.1
LnGrp LOS	A	C	A	A	F	A				C	A	D
Approach Vol, veh/h		1270			2667						1950	
Approach Delay, s/veh		27.2			70.0						41.3	
Approach LOS		C			E						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		59.0		61.0		59.0						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		51.5		55.4		51.5						
Max Q Clear Time (g_c+I1), s		24.9		55.3		53.5						
Green Ext Time (p_c), s		10.8		0.1		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			51.2									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	588	240	194	328	48	244	111	69	447	983	476
Future Volume (veh/h)	74	588	240	194	328	48	244	111	69	447	983	476
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	83	661	270	204	345	51	301	137	85	588	1293	626
Peak Hour Factor	0.89	0.89	0.89	0.95	0.95	0.95	0.81	0.81	0.81	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	706	288	214	1145	168	272	587	341	369	714	317
Arrive On Green	0.04	0.29	0.29	0.12	0.37	0.37	0.08	0.27	0.27	0.11	0.30	0.30
Sat Flow, veh/h	3428	2423	990	1767	3074	450	3428	2138	1243	3428	2357	1049
Grp Volume(v), veh/h	83	481	450	204	196	200	301	111	111	588	938	981
Grp Sat Flow(s),veh/h/ln	1714	1763	1650	1767	1763	1762	1714	1763	1619	1714	1763	1643
Q Serve(g_s), s	2.3	25.5	25.5	11.0	7.5	7.7	7.6	4.7	5.1	10.3	29.0	29.0
Cycle Q Clear(g_c), s	2.3	25.5	25.5	11.0	7.5	7.7	7.6	4.7	5.1	10.3	29.0	29.0
Prop In Lane	1.00		0.60	1.00		0.26	1.00		0.77	1.00		0.64
Lane Grp Cap(c), veh/h	137	513	481	214	657	656	272	484	444	369	534	497
V/C Ratio(X)	0.61	0.94	0.94	0.95	0.30	0.30	1.11	0.23	0.25	1.60	1.76	1.97
Avail Cap(c_a), veh/h	183	513	481	214	657	656	272	484	444	369	534	497
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	33.1	33.1	41.8	21.2	21.3	44.1	26.9	27.1	42.8	33.4	33.4
Incr Delay (d2), s/veh	1.6	26.7	28.0	47.9	0.5	0.5	86.2	1.1	1.3	280.4	348.9	444.6
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	1.0	14.4	13.6	7.6	3.1	3.2	6.5	2.1	2.1	18.7	63.7	72.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.9	59.8	61.1	89.7	21.7	21.8	130.3	28.0	28.4	323.1	382.3	478.0
LnGrp LOS	D	E	E	F	C	C	F	C	C	F	F	F
Approach Vol, veh/h		1014			600			523			2507	
Approach Delay, s/veh		59.3			44.9			87.0			405.8	
Approach LOS		E			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	33.6	12.0	34.2	8.2	41.4	14.7	31.5
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	11.6	* 28	7.6	29.0	5.1	33.6	10.3	26.3
Max Q Clear Time (g_c+I1), s	13.0	27.5	9.6	31.0	4.3	9.7	12.3	7.1
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	4.2	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	247.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

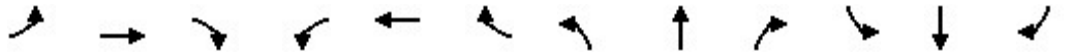
Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	70	339	7	0	1344
Future Vol, veh/h	0	70	339	7	0	1344
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, %	2	2	2	2	2	2
Mvmt Flow	0	76	368	8	0	1461

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	188	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	822	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	822	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	822	-
HCM Lane V/C Ratio	-	-	0.093	-
HCM Control Delay (s)	-	-	9.8	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	76	189	417	350	24	293	204	119	35	1171	183
Future Volume (veh/h)	53	76	189	417	350	24	293	204	119	35	1171	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	0.99		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	60	86	158	453	380	15	322	224	104	40	1331	191
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	279	240	363	1107	44	259	1644	728	482	1156	165
Arrive On Green	0.04	0.16	0.16	0.21	0.32	0.32	0.12	0.47	0.47	0.02	0.37	0.37
Sat Flow, veh/h	1767	1763	1520	1767	3456	136	1767	3526	1560	1767	3096	441
Grp Volume(v), veh/h	60	86	158	453	193	202	322	224	104	40	753	769
Grp Sat Flow(s),veh/h/ln	1767	1763	1520	1767	1763	1830	1767	1763	1560	1767	1763	1775
Q Serve(g_s), s	4.5	5.8	13.1	27.6	11.2	11.3	15.6	4.9	5.1	1.9	50.1	50.1
Cycle Q Clear(g_c), s	4.5	5.8	13.1	27.6	11.2	11.3	15.6	4.9	5.1	1.9	50.1	50.1
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	77	279	240	363	565	586	259	1644	728	482	658	662
V/C Ratio(X)	0.78	0.31	0.66	1.25	0.34	0.34	1.24	0.14	0.14	0.08	1.14	1.16
Avail Cap(c_a), veh/h	138	420	362	363	647	672	259	1644	728	509	658	662
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.6	50.0	53.1	53.3	34.8	34.8	43.9	20.4	20.5	25.0	42.1	42.1
Incr Delay (d2), s/veh	6.3	0.7	3.4	132.1	0.6	0.6	137.7	0.2	0.4	0.0	82.3	88.5
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	2.2	2.6	5.3	25.6	5.0	5.2	18.7	2.1	2.0	0.8	36.5	37.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	50.7	56.5	185.4	35.5	35.5	181.6	20.6	20.9	25.1	124.3	130.5
LnGrp LOS	E	D	E	F	D	D	F	C	C	C	F	F
Approach Vol, veh/h		304			848			650			1562	
Approach Delay, s/veh		57.5			115.6			100.4			124.8	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	68.4	32.0	26.3	20.0	55.9	10.2	48.1
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.2	* 61	27.6	32.0	15.6	50.1	10.5	* 49
Max Q Clear Time (g_c+I1), s	3.9	7.1	29.6	15.1	17.6	52.1	6.5	13.3
Green Ext Time (p_c), s	0.0	2.3	0.0	1.4	0.0	0.0	0.0	4.4

Intersection Summary	
HCM 6th Ctrl Delay	111.7
HCM 6th LOS	F

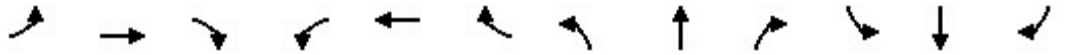
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	117	11	432	6	0	1260
Future Volume (veh/h)	117	11	432	6	0	1260
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	138	13	465	6	0	1370
Peak Hour Factor	0.85	0.85	0.93	0.93	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	188	167	2070	27	0	2048
Arrive On Green	0.11	0.11	0.58	0.58	0.00	0.58
Sat Flow, veh/h	1767	1572	3655	46	0	3711
Grp Volume(v), veh/h	138	13	230	241	0	1370
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1846	0	1763
Q Serve(g_s), s	2.4	0.2	2.0	2.0	0.0	8.3
Cycle Q Clear(g_c), s	2.4	0.2	2.0	2.0	0.0	8.3
Prop In Lane	1.00	1.00		0.02	0.00	
Lane Grp Cap(c), veh/h	188	167	1024	1072	0	2048
V/C Ratio(X)	0.74	0.08	0.22	0.22	0.00	0.67
Avail Cap(c_a), veh/h	1241	1104	1024	1072	0	2048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	12.6	3.2	3.2	0.0	4.5
Incr Delay (d2), s/veh	2.1	0.1	0.5	0.5	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1	0.3	0.4	0.0	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.7	12.7	3.7	3.6	0.0	6.3
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	151		471			1370
Approach Delay, s/veh	15.4		3.7			6.3
Approach LOS	B		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		23.1			23.1	8.2
Change Period (Y+Rc), s		4.9			4.9	4.9
Max Green Setting (Gmax), s		18.2			18.2	22.0
Max Q Clear Time (g_c+I1), s		4.0			10.3	4.4
Green Ext Time (p_c), s		3.2			6.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1417	192	522	1833	375	225	80	678	1136	254	174
Future Volume (veh/h)	31	1417	192	522	1833	375	225	80	678	1136	254	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	35	1610	116	538	1890	263	239	85	668	1171	262	127
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	70	1506	596	437	2065	1637	286	860	1019	677	1262	550
Arrive On Green	0.02	0.30	0.30	0.13	0.41	0.41	0.08	0.24	0.24	0.20	0.36	0.36
Sat Flow, veh/h	3428	5066	1565	3428	5066	2677	3428	3526	2732	3428	3526	1536
Grp Volume(v), veh/h	35	1610	116	538	1890	263	239	85	668	1171	262	127
Grp Sat Flow(s),veh/h/ln	1714	1689	1565	1714	1689	1339	1714	1763	1366	1714	1763	1536
Q Serve(g_s), s	1.5	44.6	7.4	19.1	52.9	6.5	10.3	2.8	30.5	29.6	7.7	8.7
Cycle Q Clear(g_c), s	1.5	44.6	7.4	19.1	52.9	6.5	10.3	2.8	30.5	29.6	7.7	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	1506	596	437	2065	1637	286	860	1019	677	1262	550
V/C Ratio(X)	0.50	1.07	0.19	1.23	0.92	0.16	0.84	0.10	0.66	1.73	0.21	0.23
Avail Cap(c_a), veh/h	117	1506	596	437	2065	1637	391	917	1063	677	1262	550
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	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	72.7	52.7	31.1	65.4	42.0	13.0	67.7	43.9	39.2	60.2	33.4	33.7
Incr Delay (d2), s/veh	2.0	44.0	0.7	123.2	7.8	0.2	8.3	0.1	2.1	333.9	0.1	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	0.7	25.0	3.0	15.8	23.4	2.0	4.9	1.3	10.6	44.2	3.4	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	96.7	31.8	188.6	49.8	13.2	76.0	44.0	41.4	394.1	33.5	34.0
LnGrp LOS	E	F	C	F	D	B	E	D	D	F	C	C
Approach Vol, veh/h		1761			2691			992			1560	
Approach Delay, s/veh		92.0			74.0			49.9			304.3	
Approach LOS		F			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	50.1	16.9	59.0	7.5	66.6	34.0	41.9
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	19.1	42.5	17.1	51.2	5.1	* 57	29.6	* 39
Max Q Clear Time (g_c+I1), s	21.1	46.6	12.3	10.7	3.5	54.9	31.6	32.5
Green Ext Time (p_c), s	0.0	0.0	0.2	4.2	0.0	2.2	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	126.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

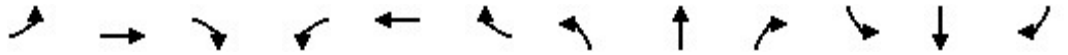
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	225	655	6	0	49
Future Vol, veh/h	0	225	655	6	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	245	712	7	0	53

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	360
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	637
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	637
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

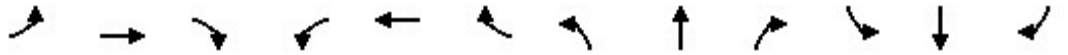
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	637
HCM Lane V/C Ratio	-	-	-	0.084
HCM Control Delay (s)	-	-	-	11.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	46	264	299	474	118	99	107	25	35	443	126
Future Volume (veh/h)	64	46	264	299	474	118	99	107	25	35	443	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	89	64	186	365	578	132	122	132	19	38	487	116
Peak Hour Factor	0.72	0.72	0.72	0.82	0.82	0.82	0.81	0.81	0.81	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	488	502	222	442	745	176	145	956	135	49	715	169
Arrive On Green	0.14	0.14	0.14	0.38	0.38	0.38	0.08	0.31	0.31	0.03	0.25	0.25
Sat Flow, veh/h	3428	3526	1559	1158	1952	460	1767	3100	439	1767	2815	666
Grp Volume(v), veh/h	89	64	186	567	0	508	122	74	77	38	304	299
Grp Sat Flow(s),veh/h/ln	1714	1763	1559	1798	0	1772	1767	1763	1776	1767	1763	1719
Q Serve(g_s), s	3.2	2.2	16.2	39.6	0.0	34.6	9.5	4.2	4.4	3.0	21.6	21.9
Cycle Q Clear(g_c), s	3.2	2.2	16.2	39.6	0.0	34.6	9.5	4.2	4.4	3.0	21.6	21.9
Prop In Lane	1.00		1.00	0.64		0.26	1.00		0.25	1.00		0.39
Lane Grp Cap(c), veh/h	488	502	222	686	0	677	145	543	547	49	447	436
V/C Ratio(X)	0.18	0.13	0.84	0.83	0.00	0.75	0.84	0.14	0.14	0.78	0.68	0.69
Avail Cap(c_a), veh/h	678	697	308	686	0	677	185	543	547	114	447	436
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	52.1	58.1	38.8	0.0	37.3	63.0	34.7	34.8	67.2	46.8	46.9
Incr Delay (d2), s/veh	0.2	0.1	14.1	10.9	0.0	7.5	19.3	0.5	0.5	9.6	8.1	8.5
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	1.4	1.0	7.3	19.4	0.0	16.4	5.0	1.9	2.0	1.5	10.5	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.7	52.2	72.2	49.7	0.0	44.8	82.2	35.3	35.3	76.8	54.8	55.4
LnGrp LOS	D	D	E	D	A	D	F	D	D	E	D	E
Approach Vol, veh/h		339			1075			273			641	
Approach Delay, s/veh		63.3			47.4			56.3			56.4	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	48.2		24.7	15.8	40.6		58.0				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	9.0	40.9		27.5	14.6	35.3		53.1				
Max Q Clear Time (g_c+I1), s	5.0	6.4		18.2	11.5	23.9		41.6				
Green Ext Time (p_c), s	0.0	1.4		1.0	0.0	4.2		5.9				

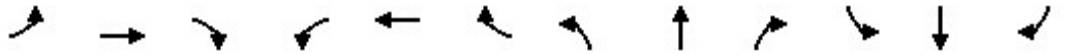
Intersection Summary			
HCM 6th Ctrl Delay		53.2	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	12	2	0	5	34	143	1	4	353	1
Future Volume (veh/h)	14	0	12	2	0	5	34	143	1	4	353	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	0	19	6	0	15	42	177	1	5	401	1
Peak Hour Factor	0.62	0.62	0.62	0.33	0.33	0.33	0.81	0.81	0.81	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	194	0	38	149	0	64	67	2020	11	10	1911	5
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.05	0.04	0.56	0.56	0.01	0.53	0.53
Sat Flow, veh/h	832	0	687	471	0	1179	1767	3594	20	1767	3608	9
Grp Volume(v), veh/h	42	0	0	21	0	0	42	87	91	5	196	206
Grp Sat Flow(s),veh/h/ln	1520	0	0	1650	0	0	1767	1763	1852	1767	1763	1854
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.1	2.2	2.2
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.4	0.0	0.0	0.9	0.9	0.9	0.1	2.2	2.2
Prop In Lane	0.55		0.45	0.29		0.71	1.00		0.01	1.00		0.00
Lane Grp Cap(c), veh/h	231	0	0	213	0	0	67	991	1041	10	934	982
V/C Ratio(X)	0.18	0.00	0.00	0.10	0.00	0.00	0.63	0.09	0.09	0.52	0.21	0.21
Avail Cap(c_a), veh/h	1116	0	0	1125	0	0	278	991	1041	240	934	982
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	17.0	0.0	0.0	17.8	3.8	3.8	18.6	4.7	4.7
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	9.4	0.2	0.2	37.8	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	0.3	0.0	0.0	0.2	0.0	0.0	0.5	0.2	0.2	0.1	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	0.0	17.2	0.0	0.0	27.2	4.0	4.0	56.5	5.2	5.2
LnGrp LOS	B	A	A	B	A	A	C	A	A	E	A	A
Approach Vol, veh/h		42			21			220			407	
Approach Delay, s/veh		17.6			17.2			8.4			5.8	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	26.0		6.9	5.8	24.8		6.9				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	5.9	19.9		25.0				
Max Q Clear Time (g_c+I1), s	2.1	2.9		3.0	2.9	4.2		2.4				
Green Ext Time (p_c), s	0.0	0.8		0.1	0.0	2.1		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A



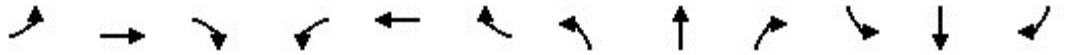
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	107	130	26	90	34	352	237	45	155	532	354
Future Volume (veh/h)	164	107	130	26	90	34	352	237	45	155	532	354
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.99	1.00		0.96
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	186	122	148	32	111	42	489	329	62	172	591	393
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.72	0.72	0.72	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	210	391	335	41	317	113	511	1472	274	198	635	422
Arrive On Green	0.12	0.22	0.22	0.02	0.13	0.13	0.29	0.50	0.50	0.11	0.32	0.32
Sat Flow, veh/h	1767	1763	1511	1767	2515	899	1767	2962	551	1767	1987	1322
Grp Volume(v), veh/h	186	122	148	32	76	77	489	194	197	172	524	460
Grp Sat Flow(s),veh/h/ln	1767	1763	1511	1767	1763	1652	1767	1763	1750	1767	1763	1546
Q Serve(g_s), s	13.7	7.7	11.2	2.4	5.2	5.7	36.0	8.2	8.4	12.7	38.1	38.1
Cycle Q Clear(g_c), s	13.7	7.7	11.2	2.4	5.2	5.7	36.0	8.2	8.4	12.7	38.1	38.1
Prop In Lane	1.00		1.00	1.00		0.54	1.00		0.32	1.00		0.85
Lane Grp Cap(c), veh/h	210	391	335	41	222	208	511	876	870	198	563	494
V/C Ratio(X)	0.89	0.31	0.44	0.79	0.34	0.37	0.96	0.22	0.23	0.87	0.93	0.93
Avail Cap(c_a), veh/h	215	476	408	93	360	337	542	876	870	318	563	494
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	43.1	44.4	64.3	52.8	53.0	46.2	18.8	18.9	57.8	43.6	43.6
Incr Delay (d2), s/veh	31.2	0.7	1.5	11.9	0.3	0.4	26.9	0.6	0.6	8.3	24.1	26.4
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	8.0	3.5	4.4	1.2	2.3	2.4	19.5	3.5	3.6	6.1	20.3	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.7	43.8	45.9	76.2	53.2	53.4	73.1	19.4	19.5	66.2	67.7	70.0
LnGrp LOS	F	D	D	E	D	D	E	B	B	E	E	E
Approach Vol, veh/h		456			185			880			1156	
Approach Delay, s/veh		62.8			57.3			49.3			68.4	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	71.1	7.4	34.6	42.7	47.6	20.1	22.0
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	23.8	59.1	7.0	35.7	40.6	42.3	16.1	* 27
Max Q Clear Time (g_c+I1), s	14.7	10.4	4.4	13.2	38.0	40.1	15.7	7.7
Green Ext Time (p_c), s	0.2	4.4	0.0	2.5	0.3	1.6	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	60.4
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



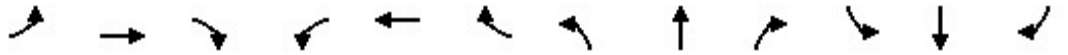
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2217	0	0	1931	636	0	0	0	163	0	801
Future Volume (veh/h)	0	2217	0	0	1931	636	0	0	0	163	0	801
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	2309	0	0	1991	656				181	0	890
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2895	0	0	2895	1423				1144	0	923
Arrive On Green	0.00	0.57	0.00	0.00	0.57	0.57				0.33	0.00	0.33
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	2309	0	0	1991	656				181	0	890
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	49.5	0.0	0.0	38.3	9.4				5.1	0.0	43.6
Cycle Q Clear(g_c), s	0.0	49.5	0.0	0.0	38.3	9.4				5.1	0.0	43.6
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2895	0	0	2895	1423				1144	0	923
V/C Ratio(X)	0.00	0.80	0.00	0.00	0.69	0.46				0.16	0.00	0.96
Avail Cap(c_a), veh/h	0	2895	0	0	2895	1423				1153	0	931
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.3	0.0	0.0	20.9	1.1				32.3	0.0	45.2
Incr Delay (d2), s/veh	0.0	2.4	0.0	0.0	1.4	1.1				0.1	0.0	21.1
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	0.0	19.8	0.0	0.0	15.2	15.7				2.2	0.0	17.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.7	0.0	0.0	22.2	2.1				32.4	0.0	66.3
LnGrp LOS	A	C	A	A	C	A				C	A	E
Approach Vol, veh/h		2309			2647						1071	
Approach Delay, s/veh		25.7			17.3						60.6	
Approach LOS		C			B						E	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		86.4		51.6		86.4						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		78.5		46.4		78.5						
Max Q Clear Time (g_c+I1), s		51.5		45.6		40.3						
Green Ext Time (p_c), s		21.2		0.4		27.6						

Intersection Summary												
HCM 6th Ctrl Delay			28.2									
HCM 6th LOS			C									

Appendix M: Horizon Year 2050 Plus Project Synchro Worksheets

Provided on the following page



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	260	189	74	618	468	429	980	282	49	114	68
Future Volume (veh/h)	485	260	189	74	618	468	429	980	282	49	114	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	527	283	205	80	672	509	466	1065	307	56	130	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	206	740	518	101	710	535	529	1017	290	95	544	300
Arrive On Green	0.06	0.38	0.38	0.06	0.37	0.37	0.15	0.38	0.38	0.03	0.25	0.25
Sat Flow, veh/h	3428	1961	1372	1767	1897	1427	3428	2694	770	3428	2169	1196
Grp Volume(v), veh/h	527	253	235	80	624	557	466	693	679	56	104	103
Grp Sat Flow(s),veh/h/ln	1714	1763	1571	1767	1763	1561	1714	1763	1701	1714	1763	1602
Q Serve(g_s), s	7.4	12.8	13.4	5.5	42.2	42.6	16.4	46.4	46.4	2.0	5.8	6.3
Cycle Q Clear(g_c), s	7.4	12.8	13.4	5.5	42.2	42.6	16.4	46.4	46.4	2.0	5.8	6.3
Prop In Lane	1.00		0.87	1.00		0.91	1.00		0.45	1.00		0.75
Lane Grp Cap(c), veh/h	206	665	593	101	660	585	529	665	642	95	442	402
V/C Ratio(X)	2.55	0.38	0.40	0.79	0.95	0.95	0.88	1.04	1.06	0.59	0.24	0.26
Avail Cap(c_a), veh/h	206	665	593	195	664	588	714	665	642	145	442	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	27.8	28.0	57.2	37.2	37.4	50.9	38.3	38.3	59.1	36.7	36.9
Incr Delay (d2), s/veh	713.5	1.7	2.0	5.1	22.8	26.1	7.9	46.4	51.6	2.2	1.2	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	23.7	5.7	5.4	2.6	22.1	20.2	7.6	28.2	28.2	0.9	2.7	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	771.2	29.5	30.0	62.3	60.0	63.4	58.8	84.7	89.9	61.2	37.9	38.4
LnGrp LOS	F	C	C	E	E	E	E	F	F	E	D	D
Approach Vol, veh/h		1015			1261			1838			263	
Approach Delay, s/veh		414.7			61.7			80.0			43.1	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	52.1	23.4	36.0	11.8	51.8	7.8	51.6
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	13.6	* 41	25.6	26.0	7.4	46.3	5.2	46.4
Max Q Clear Time (g_c+I1), s	7.5	15.4	18.4	8.3	9.4	44.6	4.0	48.4
Green Ext Time (p_c), s	0.0	6.1	0.6	1.7	0.0	1.4	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		150.1
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

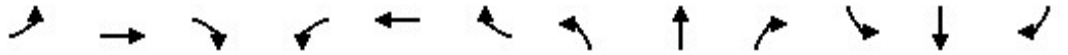
Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	24	1618	362	0	343
Future Vol, veh/h	0	24	1618	362	0	343
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, %	2	2	2	2	2	2
Mvmt Flow	0	26	1759	393	0	373

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1076	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	215	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	215	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	215	-
HCM Lane V/C Ratio	-	-	0.121	-
HCM Control Delay (s)	-	-	24	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	168	48	76	186	196	679	1600	672	43	234	115
Future Volume (veh/h)	221	168	48	76	186	196	679	1600	672	43	234	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	270	205	59	86	211	223	715	1684	707	47	257	126
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	149	684	191	110	406	351	564	1535	676	134	754	358
Arrive On Green	0.08	0.25	0.25	0.06	0.23	0.23	0.14	0.44	0.44	0.03	0.33	0.33
Sat Flow, veh/h	1767	2705	756	1767	1763	1524	1767	3526	1553	1767	2312	1098
Grp Volume(v), veh/h	270	131	133	86	211	223	715	1684	707	47	194	189
Grp Sat Flow(s),veh/h/ln	1767	1763	1698	1767	1763	1524	1767	1763	1553	1767	1763	1647
Q Serve(g_s), s	7.6	5.4	5.7	4.3	9.4	11.9	12.6	39.1	39.1	1.6	7.5	7.9
Cycle Q Clear(g_c), s	7.6	5.4	5.7	4.3	9.4	11.9	12.6	39.1	39.1	1.6	7.5	7.9
Prop In Lane	1.00		0.45	1.00		1.00	1.00		1.00	1.00		0.67
Lane Grp Cap(c), veh/h	149	445	429	110	406	351	564	1535	676	134	575	537
V/C Ratio(X)	1.81	0.29	0.31	0.78	0.52	0.64	1.27	1.10	1.05	0.35	0.34	0.35
Avail Cap(c_a), veh/h	149	633	610	120	608	526	564	1535	676	180	575	537
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	27.1	27.2	41.6	30.3	31.2	23.9	25.4	25.4	23.9	22.9	23.1
Incr Delay (d2), s/veh	388.5	0.4	0.5	23.2	1.8	3.4	134.4	54.4	47.1	0.6	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.4	2.3	2.3	2.6	4.1	4.6	27.3	26.8	22.3	0.7	3.3	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	429.6	27.5	27.7	64.7	32.1	34.6	158.3	79.7	72.5	24.5	24.5	24.9
LnGrp LOS	F	C	C	E	C	C	F	F	F	C	C	C
Approach Vol, veh/h		534			520			3106			430	
Approach Delay, s/veh		230.9			38.6			96.2			24.7	
Approach LOS		F			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	44.9	10.0	27.8	17.0	35.1	12.0	25.8
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.1	* 37	6.1	32.3	12.6	29.3	7.6	* 31
Max Q Clear Time (g_c+I1), s	3.6	41.1	6.3	7.7	14.6	9.9	9.6	13.9
Green Ext Time (p_c), s	0.0	0.0	0.0	1.7	0.0	2.4	0.0	4.0

Intersection Summary	
HCM 6th Ctrl Delay	98.6
HCM 6th LOS	F

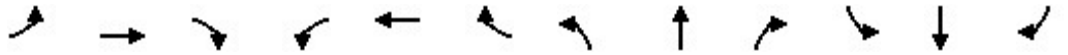
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	12	1	1563	63	0	357
Future Volume (veh/h)	12	1	1563	63	0	357
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	16	1	1663	67	0	435
Peak Hour Factor	0.75	0.75	0.94	0.94	0.82	0.82
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	31	28	2205	88	0	2251
Arrive On Green	0.02	0.02	0.64	0.64	0.00	0.64
Sat Flow, veh/h	1767	1572	3547	139	0	3711
Grp Volume(v), veh/h	16	1	845	885	0	435
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1830	0	1763
Q Serve(g_s), s	0.3	0.0	9.5	9.6	0.0	1.5
Cycle Q Clear(g_c), s	0.3	0.0	9.5	9.6	0.0	1.5
Prop In Lane	1.00	1.00		0.08	0.00	
Lane Grp Cap(c), veh/h	31	28	1126	1168	0	2251
V/C Ratio(X)	0.51	0.04	0.75	0.76	0.00	0.19
Avail Cap(c_a), veh/h	1364	1214	1126	1168	0	2251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	13.8	3.6	3.6	0.0	2.1
Incr Delay (d2), s/veh	4.8	0.2	4.6	4.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.4	1.5	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.6	14.0	8.2	8.2	0.0	2.3
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	17		1730			435
Approach Delay, s/veh	18.4		8.2			2.3
Approach LOS	B		A			A

Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		23.1				23.1	5.4
Change Period (Y+Rc), s		4.9				4.9	4.9
Max Green Setting (Gmax), s		18.2				18.2	22.0
Max Q Clear Time (g_c+I1), s		11.6				3.5	2.3
Green Ext Time (p_c), s		5.8				3.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	464	1081	123	406	1639	1776	140	256	327	249	38	38
Future Volume (veh/h)	464	1081	123	406	1639	1776	140	256	327	249	38	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	499	1162	78	432	1744	1463	157	288	277	307	47	35
Peak Hour Factor	0.93	0.93	0.93	0.94	0.94	0.94	0.89	0.89	0.89	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	407	2334	807	414	2363	1576	206	597	799	362	758	335
Arrive On Green	0.12	0.46	0.46	0.12	0.47	0.47	0.06	0.17	0.17	0.11	0.21	0.21
Sat Flow, veh/h	3428	5066	1546	3428	5066	2753	3428	3526	2743	3428	3526	1557
Grp Volume(v), veh/h	499	1162	78	432	1744	1463	157	288	277	307	47	35
Grp Sat Flow(s),veh/h/ln	1714	1689	1546	1714	1689	1376	1714	1763	1372	1714	1763	1557
Q Serve(g_s), s	16.6	22.5	3.6	16.9	39.2	65.3	6.3	10.3	11.2	12.3	1.5	2.5
Cycle Q Clear(g_c), s	16.6	22.5	3.6	16.9	39.2	65.3	6.3	10.3	11.2	12.3	1.5	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	407	2334	807	414	2363	1576	206	597	799	362	758	335
V/C Ratio(X)	1.23	0.50	0.10	1.04	0.74	0.93	0.76	0.48	0.35	0.85	0.06	0.10
Avail Cap(c_a), veh/h	407	2334	807	414	2363	1576	311	982	1098	607	1279	565
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	26.4	16.9	61.5	30.4	27.4	64.8	52.6	39.2	61.5	43.7	44.1
Incr Delay (d2), s/veh	122.4	0.8	0.2	56.1	2.1	11.0	2.5	1.4	0.6	2.4	0.1	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	14.1	9.2	1.3	10.6	16.3	23.9	2.8	4.7	3.9	5.5	0.7	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	184.1	27.2	17.2	117.7	32.5	38.4	67.3	54.0	39.8	64.0	43.8	44.4
LnGrp LOS	F	C	B	F	C	D	E	D	D	E	D	D
Approach Vol, veh/h		1739			3639			722			389	
Approach Delay, s/veh		71.7			45.0			51.5			59.8	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.8	70.0	12.8	35.4	21.0	70.8	19.2	29.0
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	16.9	39.5	12.7	50.8	16.6	* 41	24.8	* 39
Max Q Clear Time (g_c+I1), s	18.9	24.5	8.3	4.5	18.6	67.3	14.3	13.2
Green Ext Time (p_c), s	0.0	10.1	0.1	0.7	0.0	0.0	0.4	6.5

Intersection Summary	
HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

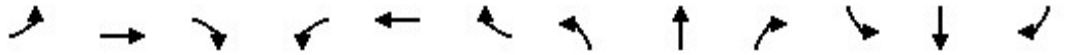
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	866	304	0	0	16
Future Vol, veh/h	0	866	304	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	941	330	0	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	165
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	850
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	850
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

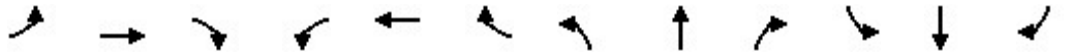
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	850
HCM Lane V/C Ratio	-	-	-	0.02
HCM Control Delay (s)	-	-	-	9.3
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	640	125	32	49	23	211	426	358	136	84	75
Future Volume (veh/h)	245	640	125	32	49	23	211	426	358	136	84	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	285	744	145	41	63	29	229	463	389	162	100	89
Peak Hour Factor	0.86	0.86	0.86	0.78	0.78	0.78	0.92	0.92	0.92	0.84	0.84	0.84
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	664	682	296	287	454	214	247	520	436	185	470	375
Arrive On Green	0.19	0.19	0.19	0.27	0.27	0.27	0.14	0.29	0.29	0.10	0.25	0.25
Sat Flow, veh/h	3428	3526	1528	1054	1668	787	1767	1794	1503	1767	1842	1472
Grp Volume(v), veh/h	285	744	145	70	0	63	229	455	397	162	95	94
Grp Sat Flow(s),veh/h/ln	1714	1763	1528	1803	0	1706	1767	1763	1534	1767	1763	1550
Q Serve(g_s), s	10.2	27.1	11.8	4.1	0.0	3.9	17.9	34.6	34.7	12.6	6.0	6.7
Cycle Q Clear(g_c), s	10.2	27.1	11.8	4.1	0.0	3.9	17.9	34.6	34.7	12.6	6.0	6.7
Prop In Lane	1.00		1.00	0.58		0.46	1.00		0.98	1.00		0.95
Lane Grp Cap(c), veh/h	664	682	296	491	0	464	247	511	445	185	450	395
V/C Ratio(X)	0.43	1.09	0.49	0.14	0.00	0.14	0.93	0.89	0.89	0.87	0.21	0.24
Avail Cap(c_a), veh/h	664	682	296	491	0	464	247	511	445	222	450	395
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	56.5	50.3	38.6	0.0	38.5	59.5	47.5	47.6	61.7	41.1	41.4
Incr Delay (d2), s/veh	0.5	61.6	1.4	0.6	0.0	0.6	37.1	20.2	22.7	23.8	1.1	1.4
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	17.9	4.7	1.9	0.0	1.7	10.6	18.0	16.0	6.9	2.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	118.0	51.7	39.2	0.0	39.1	96.6	67.7	70.3	85.6	42.1	42.8
LnGrp LOS	D	F	D	D	A	D	F	E	E	F	D	D
Approach Vol, veh/h		1174			133			1081			351	
Approach Delay, s/veh		93.4			39.2			74.8			62.4	
Approach LOS		F			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.1	45.9		32.0	24.0	41.0		43.0				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	17.6	37.7		27.1	19.6	35.7		38.1				
Max Q Clear Time (g_c+I1), s	14.6	36.7		29.1	19.9	8.7		6.1				
Green Ext Time (p_c), s	0.1	0.7		0.0	0.0	1.8		0.8				

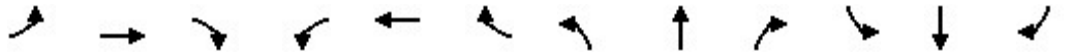
Intersection Summary												
HCM 6th Ctrl Delay			79.4									
HCM 6th LOS			E									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	2	0	5	50	415	1	9	92	5
Future Volume (veh/h)	0	0	2	2	0	5	50	415	1	9	92	5
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	0.99		0.98	1.00		0.99	1.00		0.99
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	0	0	8	4	0	10	56	461	1	11	116	6
Peak Hour Factor	0.25	0.25	0.25	0.50	0.50	0.50	0.90	0.90	0.90	0.79	0.79	0.79
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	0	0	40	136	0	22	84	2062	4	20	1826	94
Arrive On Green	0.00	0.00	0.03	0.03	0.00	0.03	0.05	0.57	0.57	0.01	0.54	0.54
Sat Flow, veh/h	0	0	1568	343	0	857	1767	3609	8	1767	3410	175
Grp Volume(v), veh/h	0	0	8	14	0	0	56	225	237	11	60	62
Grp Sat Flow(s),veh/h/ln	0	0	1568	1199	0	0	1767	1763	1854	1767	1763	1823
Q Serve(g_s), s	0.0	0.0	0.2	0.3	0.0	0.0	1.1	2.3	2.3	0.2	0.6	0.6
Cycle Q Clear(g_c), s	0.0	0.0	0.2	0.5	0.0	0.0	1.1	2.3	2.3	0.2	0.6	0.6
Prop In Lane	0.00		1.00	0.29		0.71	1.00		0.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	0	40	158	0	0	84	1007	1059	20	944	976
V/C Ratio(X)	0.00	0.00	0.20	0.09	0.00	0.00	0.67	0.22	0.22	0.54	0.06	0.06
Avail Cap(c_a), veh/h	0	0	1082	1151	0	0	312	1007	1059	249	944	976
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)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	17.3	17.6	0.0	0.0	17.0	3.8	3.8	17.8	4.1	4.1
Incr Delay (d2), s/veh	0.0	0.0	2.4	0.2	0.0	0.0	8.7	0.5	0.5	20.2	0.1	0.1
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	0.0	0.0	0.1	0.1	0.0	0.0	0.6	0.5	0.5	0.2	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	19.8	17.8	0.0	0.0	25.7	4.3	4.3	38.0	4.2	4.2
LnGrp LOS	A	A	B	B	A	A	C	A	A	D	A	A
Approach Vol, veh/h		8			14			518			133	
Approach Delay, s/veh		19.8			17.8			6.6			7.0	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	25.6		5.8	6.1	24.3		5.8				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	6.4	19.4		25.0				
Max Q Clear Time (g_c+I1), s	2.2	4.3		2.2	3.1	2.6		2.5				
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	0.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A



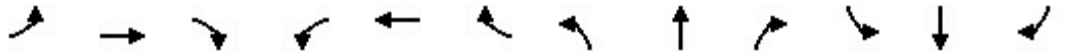
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	41	172	70	111	27	116	670	41	68	204	44
Future Volume (veh/h)	280	41	172	70	111	27	116	670	41	68	204	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.94	1.00		1.00	1.00		0.97
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	301	44	185	82	131	32	132	761	47	78	234	51
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.88	0.88	0.88	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	276	489	424	105	507	119	164	1233	76	100	947	202
Arrive On Green	0.16	0.28	0.28	0.06	0.18	0.18	0.09	0.37	0.37	0.06	0.33	0.33
Sat Flow, veh/h	1767	1763	1526	1767	2796	656	1767	3371	208	1767	2876	613
Grp Volume(v), veh/h	301	44	185	82	81	82	132	398	410	78	141	144
Grp Sat Flow(s),veh/h/ln	1767	1763	1526	1767	1763	1690	1767	1763	1817	1767	1763	1726
Q Serve(g_s), s	12.6	1.5	8.0	3.7	3.2	3.4	5.9	14.9	14.9	3.5	4.7	4.9
Cycle Q Clear(g_c), s	12.6	1.5	8.0	3.7	3.2	3.4	5.9	14.9	14.9	3.5	4.7	4.9
Prop In Lane	1.00		1.00	1.00		0.39	1.00		0.11	1.00		0.36
Lane Grp Cap(c), veh/h	276	489	424	105	319	306	164	645	665	100	581	569
V/C Ratio(X)	1.09	0.09	0.44	0.78	0.25	0.27	0.80	0.62	0.62	0.78	0.24	0.25
Avail Cap(c_a), veh/h	276	683	592	221	638	611	166	645	665	153	581	569
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	21.6	24.0	37.4	28.4	28.4	35.9	21.0	21.0	37.6	19.7	19.8
Incr Delay (d2), s/veh	80.8	0.1	1.2	4.6	0.2	0.2	22.2	4.4	4.3	5.9	1.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	0.6	2.9	1.7	1.3	1.4	3.5	6.6	6.8	1.7	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	114.8	21.7	25.1	42.0	28.5	28.6	58.1	25.3	25.2	43.4	20.7	20.9
LnGrp LOS	F	C	C	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		530			245			940			363	
Approach Delay, s/veh		75.8			33.1			29.9			25.7	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	34.8	9.2	27.7	11.9	31.9	17.0	19.9
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	7.0	27.2	10.1	31.3	7.6	26.6	12.6	* 29
Max Q Clear Time (g_c+I1), s	5.5	16.9	5.7	10.0	7.9	6.9	14.6	5.4
Green Ext Time (p_c), s	0.0	5.2	0.0	2.1	0.0	2.4	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	41.2
HCM 6th LOS	D

Notes

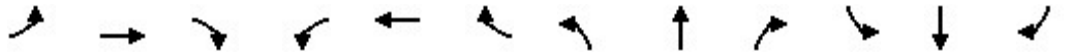
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1223	0	0	2190	543	0	0	0	671	0	1783
Future Volume (veh/h)	0	1223	0	0	2190	543	0	0	0	671	0	1783
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	1274	0	0	2380	318				699	0	1284
Peak Hour Factor	0.96	0.96	0.96	0.92	0.92	0.92				0.96	0.96	0.96
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2216	0	0	2216	1401				1554	0	1255
Arrive On Green	0.00	0.44	0.00	0.00	0.44	0.44				0.45	0.00	0.45
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	1274	0	0	2380	318				699	0	1284
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	22.7	0.0	0.0	52.5	3.3				16.8	0.0	54.4
Cycle Q Clear(g_c), s	0.0	22.7	0.0	0.0	52.5	3.3				16.8	0.0	54.4
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2216	0	0	2216	1401				1554	0	1255
V/C Ratio(X)	0.00	0.57	0.00	0.00	1.07	0.23				0.45	0.00	1.02
Avail Cap(c_a), veh/h	0	2216	0	0	2216	1401				1554	0	1255
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.4	0.0	0.0	33.8	0.9				22.5	0.0	32.8
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.0	42.5	0.4				0.2	0.0	31.5
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	0.0	9.2	0.0	0.0	29.5	6.5				6.8	0.0	23.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	26.5	0.0	0.0	76.2	1.3				22.7	0.0	64.3
LnGrp LOS	A	C	A	A	F	A				C	A	F
Approach Vol, veh/h		1274			2698						1983	
Approach Delay, s/veh		26.5			67.4						49.6	
Approach LOS		C			E						D	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		60.0		60.0		60.0						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		52.5		54.4		52.5						
Max Q Clear Time (g_c+I1), s		24.7		56.4		54.5						
Green Ext Time (p_c), s		11.0		0.0		0.0						

Intersection Summary												
HCM 6th Ctrl Delay			52.7									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	588	242	194	328	48	325	111	105	447	983	476
Future Volume (veh/h)	74	588	242	194	328	48	325	111	105	447	983	476
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	83	661	272	204	345	51	401	137	130	588	1293	626
Peak Hour Factor	0.89	0.89	0.89	0.95	0.95	0.95	0.81	0.81	0.81	0.76	0.76	0.76
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	704	290	214	1145	168	272	488	425	369	714	317
Arrive On Green	0.04	0.29	0.29	0.12	0.37	0.37	0.08	0.27	0.27	0.11	0.30	0.30
Sat Flow, veh/h	3428	2417	995	1767	3074	450	3428	1777	1547	3428	2357	1049
Grp Volume(v), veh/h	83	482	451	204	196	200	401	136	131	588	938	981
Grp Sat Flow(s),veh/h/ln	1714	1763	1649	1767	1763	1762	1714	1763	1561	1714	1763	1643
Q Serve(g_s), s	2.3	25.6	25.6	11.0	7.5	7.7	7.6	5.8	6.4	10.3	29.0	29.0
Cycle Q Clear(g_c), s	2.3	25.6	25.6	11.0	7.5	7.7	7.6	5.8	6.4	10.3	29.0	29.0
Prop In Lane	1.00		0.60	1.00		0.26	1.00		0.99	1.00		0.64
Lane Grp Cap(c), veh/h	137	513	480	214	657	656	272	484	429	369	534	497
V/C Ratio(X)	0.61	0.94	0.94	0.95	0.30	0.30	1.47	0.28	0.31	1.60	1.76	1.97
Avail Cap(c_a), veh/h	183	513	480	214	657	656	272	484	429	369	534	497
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	33.1	33.1	41.8	21.2	21.3	44.1	27.3	27.5	42.8	33.4	33.4
Incr Delay (d2), s/veh	1.6	27.1	28.4	47.9	0.5	0.5	232.4	1.4	1.8	280.4	348.9	444.6
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	1.0	14.5	13.7	7.6	3.1	3.2	12.0	2.6	2.6	18.7	63.7	72.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.9	60.2	61.5	89.7	21.7	21.8	276.5	28.8	29.4	323.1	382.3	478.0
LnGrp LOS	D	E	E	F	C	C	F	C	C	F	F	F
Approach Vol, veh/h		1016			600			668			2507	
Approach Delay, s/veh		59.7			44.9			177.6			405.8	
Approach LOS		E			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	33.6	12.0	34.2	8.2	41.4	14.7	31.5
Change Period (Y+Rc), s	4.4	* 5.7	4.4	5.2	4.4	5.7	4.4	5.2
Max Green Setting (Gmax), s	11.6	* 28	7.6	29.0	5.1	33.6	10.3	26.3
Max Q Clear Time (g_c+I1), s	13.0	27.6	9.6	31.0	4.3	9.7	12.3	8.4
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	4.2	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	255.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

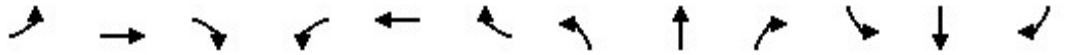
Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	187	339	35	0	1408
Future Vol, veh/h	0	187	339	35	0	1408
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, %	2	2	2	2	2	2
Mvmt Flow	0	203	368	38	0	1530

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	203	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	804	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	804	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	804	-
HCM Lane V/C Ratio	-	-	0.253	-
HCM Control Delay (s)	-	-	11	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	76	189	474	374	39	293	212	119	37	1232	183
Future Volume (veh/h)	56	76	189	474	374	39	293	212	119	37	1232	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	0.99		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	64	86	158	515	407	31	322	233	104	42	1400	191
Peak Hour Factor	0.88	0.88	0.88	0.92	0.92	0.92	0.91	0.91	0.91	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	82	279	240	454	1224	93	246	1459	645	435	1027	139
Arrive On Green	0.05	0.16	0.16	0.26	0.37	0.37	0.11	0.41	0.41	0.02	0.33	0.33
Sat Flow, veh/h	1767	1763	1520	1767	3319	252	1767	3526	1559	1767	3119	421
Grp Volume(v), veh/h	64	86	158	515	215	223	322	233	104	42	785	806
Grp Sat Flow(s),veh/h/ln	1767	1763	1520	1767	1763	1808	1767	1763	1559	1767	1763	1778
Q Serve(g_s), s	4.8	5.8	13.1	34.5	11.8	11.9	14.6	5.6	5.6	2.1	44.2	44.2
Cycle Q Clear(g_c), s	4.8	5.8	13.1	34.5	11.8	11.9	14.6	5.6	5.6	2.1	44.2	44.2
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	82	279	240	454	650	667	246	1459	645	435	580	585
V/C Ratio(X)	0.78	0.31	0.66	1.13	0.33	0.33	1.31	0.16	0.16	0.10	1.35	1.38
Avail Cap(c_a), veh/h	217	420	362	454	659	676	246	1459	645	461	580	585
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	50.0	53.1	49.9	30.5	30.5	42.2	24.7	24.7	28.7	45.0	45.0
Incr Delay (d2), s/veh	6.0	0.7	3.4	84.3	0.5	0.5	165.5	0.2	0.5	0.0	170.0	179.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.6	5.3	25.8	5.2	5.3	16.3	2.4	2.2	0.9	46.6	48.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.3	50.7	56.5	134.1	31.0	31.0	207.7	24.9	25.3	28.8	215.0	224.9
LnGrp LOS	E	D	E	F	C	C	F	C	C	C	F	F
Approach Vol, veh/h		308			953			659			1633	
Approach Delay, s/veh		57.5			86.7			114.3			215.1	
Approach LOS		E			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	61.3	38.9	26.3	19.0	50.0	10.6	54.6
Change Period (Y+Rc), s	4.4	* 5.8	4.4	5.1	4.4	5.8	4.4	* 5.1
Max Green Setting (Gmax), s	5.2	* 54	34.5	32.0	14.6	44.2	16.5	* 50
Max Q Clear Time (g_c+I1), s	4.1	7.6	36.5	15.1	16.6	46.2	6.8	13.9
Green Ext Time (p_c), s	0.0	2.4	0.0	1.4	0.0	0.0	0.0	5.0

Intersection Summary	
HCM 6th Ctrl Delay	148.3
HCM 6th LOS	F

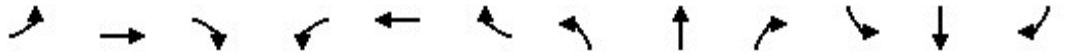
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	117	11	440	6	0	1329
Future Volume (veh/h)	117	11	440	6	0	1329
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	0	1856
Adj Flow Rate, veh/h	138	13	473	6	0	1445
Peak Hour Factor	0.85	0.85	0.93	0.93	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	0	3
Cap, veh/h	188	167	2070	26	0	2048
Arrive On Green	0.11	0.11	0.58	0.58	0.00	0.58
Sat Flow, veh/h	1767	1572	3656	45	0	3711
Grp Volume(v), veh/h	138	13	234	245	0	1445
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1846	0	1763
Q Serve(g_s), s	2.4	0.2	2.0	2.0	0.0	9.1
Cycle Q Clear(g_c), s	2.4	0.2	2.0	2.0	0.0	9.1
Prop In Lane	1.00	1.00		0.02	0.00	
Lane Grp Cap(c), veh/h	188	167	1024	1072	0	2048
V/C Ratio(X)	0.74	0.08	0.23	0.23	0.00	0.71
Avail Cap(c_a), veh/h	1241	1104	1024	1072	0	2048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.6	12.6	3.2	3.2	0.0	4.7
Incr Delay (d2), s/veh	2.1	0.1	0.5	0.5	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1	0.4	0.4	0.0	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.7	12.7	3.7	3.7	0.0	6.7
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	151		479			1445
Approach Delay, s/veh	15.4		3.7			6.7
Approach LOS	B		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		23.1			23.1	8.2
Change Period (Y+Rc), s		4.9			4.9	4.9
Max Green Setting (Gmax), s		18.2			18.2	22.0
Max Q Clear Time (g_c+I1), s		4.0			11.1	4.4
Green Ext Time (p_c), s		3.2			5.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1417	192	522	1833	381	225	80	678	1189	256	188
Future Volume (veh/h)	33	1417	192	522	1833	381	225	80	678	1189	256	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	38	1610	116	538	1890	269	239	85	668	1226	264	142
Peak Hour Factor	0.88	0.88	0.88	0.97	0.97	0.97	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	73	1473	586	437	2027	1636	286	860	1019	699	1285	560
Arrive On Green	0.02	0.29	0.29	0.13	0.40	0.40	0.08	0.24	0.24	0.20	0.36	0.36
Sat Flow, veh/h	3428	5066	1564	3428	5066	2677	3428	3526	2732	3428	3526	1537
Grp Volume(v), veh/h	38	1610	116	538	1890	269	239	85	668	1226	264	142
Grp Sat Flow(s),veh/h/ln	1714	1689	1564	1714	1689	1338	1714	1763	1366	1714	1763	1537
Q Serve(g_s), s	1.6	43.6	7.5	19.1	53.5	6.6	10.3	2.8	30.5	30.6	7.7	9.7
Cycle Q Clear(g_c), s	1.6	43.6	7.5	19.1	53.5	6.6	10.3	2.8	30.5	30.6	7.7	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	1473	586	437	2027	1636	286	860	1019	699	1285	560
V/C Ratio(X)	0.52	1.09	0.20	1.23	0.93	0.16	0.84	0.10	0.66	1.75	0.21	0.25
Avail Cap(c_a), veh/h	117	1473	586	437	2027	1636	391	917	1063	699	1285	560
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	1.00	1.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	72.7	53.2	31.7	65.4	43.0	13.1	67.7	43.9	39.2	59.7	32.7	33.4
Incr Delay (d2), s/veh	2.2	53.3	0.8	123.2	9.4	0.2	8.3	0.1	2.1	343.5	0.1	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	0.8	25.7	3.0	15.8	24.0	2.1	4.9	1.3	10.6	46.7	3.4	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.8	106.5	32.5	188.6	52.4	13.3	76.0	44.0	41.4	403.2	32.8	33.7
LnGrp LOS	E	F	C	F	D	B	E	D	D	F	C	C
Approach Vol, veh/h		1764			2697			992			1632	
Approach Delay, s/veh		100.9			75.7			49.9			311.1	
Approach LOS		F			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	49.1	16.9	60.0	7.6	65.5	35.0	41.9
Change Period (Y+Rc), s	4.9	5.5	4.4	5.3	4.4	* 5.5	4.4	* 5.3
Max Green Setting (Gmax), s	19.1	41.5	17.1	52.2	5.1	* 56	30.6	* 39
Max Q Clear Time (g_c+I1), s	21.1	45.6	12.3	11.7	3.6	55.5	32.6	32.5
Green Ext Time (p_c), s	0.0	0.0	0.2	4.3	0.0	0.6	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	132.6
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

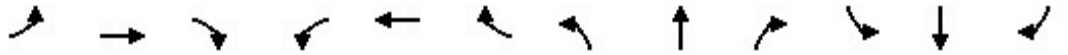
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	275	670	0	0	130
Future Vol, veh/h	0	275	670	0	0	130
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	299	728	0	0	141

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	364
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	633
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	633
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.3
HCM LOS			B

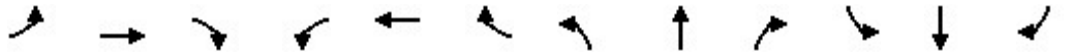
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	633
HCM Lane V/C Ratio	-	-	-	0.223
HCM Control Delay (s)	-	-	-	12.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	46	314	299	474	118	105	107	25	35	443	130
Future Volume (veh/h)	64	46	314	299	474	118	105	107	25	35	443	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	89	64	214	365	578	132	130	132	19	38	487	121
Peak Hour Factor	0.72	0.72	0.72	0.82	0.82	0.82	0.81	0.81	0.81	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	558	574	254	421	709	167	154	927	131	49	668	165
Arrive On Green	0.16	0.16	0.16	0.36	0.36	0.36	0.09	0.30	0.30	0.03	0.24	0.24
Sat Flow, veh/h	3428	3526	1561	1158	1952	460	1767	3100	439	1767	2788	688
Grp Volume(v), veh/h	89	64	214	567	0	508	130	74	77	38	307	301
Grp Sat Flow(s),veh/h/ln	1714	1763	1561	1798	0	1772	1767	1763	1776	1767	1763	1714
Q Serve(g_s), s	3.0	2.0	17.6	38.8	0.0	33.9	9.6	4.1	4.2	2.8	21.2	21.5
Cycle Q Clear(g_c), s	3.0	2.0	17.6	38.8	0.0	33.9	9.6	4.1	4.2	2.8	21.2	21.5
Prop In Lane	1.00		1.00	0.64		0.26	1.00		0.25	1.00		0.40
Lane Grp Cap(c), veh/h	558	574	254	653	0	644	154	527	531	49	422	410
V/C Ratio(X)	0.16	0.11	0.84	0.87	0.00	0.79	0.84	0.14	0.14	0.78	0.73	0.73
Avail Cap(c_a), veh/h	961	988	437	653	0	644	182	527	531	142	422	410
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	47.3	53.8	39.2	0.0	37.6	59.5	33.9	34.0	64.0	46.3	46.4
Incr Delay (d2), s/veh	0.1	0.1	8.3	14.5	0.0	9.5	22.9	0.6	0.6	9.7	10.4	11.1
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	1.3	0.9	7.5	19.6	0.0	16.3	5.3	1.9	1.9	1.4	10.5	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	47.3	62.0	53.7	0.0	47.1	82.4	34.5	34.6	73.6	56.8	57.5
LnGrp LOS	D	D	E	D	A	D	F	C	C	E	E	E
Approach Vol, veh/h		367			1075			281			646	
Approach Delay, s/veh		56.0			50.6			56.7			58.1	
Approach LOS		E			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	44.9		26.4	15.9	37.0		53.0				
Change Period (Y+Rc), s	4.4	5.3		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	10.6	34.7		37.1	13.6	31.7		48.1				
Max Q Clear Time (g_c+I1), s	4.8	6.2		19.6	11.6	23.5		40.8				
Green Ext Time (p_c), s	0.0	1.3		1.5	0.0	3.4		4.3				

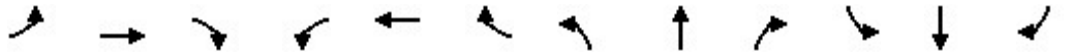
Intersection Summary												
HCM 6th Ctrl Delay			54.2									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	12	2	0	5	34	149	1	4	403	1
Future Volume (veh/h)	14	0	12	2	0	5	34	149	1	4	403	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	23	0	19	6	0	15	42	184	1	5	458	1
Peak Hour Factor	0.62	0.62	0.62	0.33	0.33	0.33	0.81	0.81	0.81	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	194	0	38	149	0	64	67	2021	11	10	1912	4
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.05	0.04	0.56	0.56	0.01	0.53	0.53
Sat Flow, veh/h	832	0	687	471	0	1179	1767	3595	20	1767	3609	8
Grp Volume(v), veh/h	42	0	0	21	0	0	42	90	95	5	224	235
Grp Sat Flow(s),veh/h/ln	1520	0	0	1650	0	0	1767	1763	1852	1767	1763	1854
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	0.1	2.6	2.6
Cycle Q Clear(g_c), s	1.0	0.0	0.0	0.4	0.0	0.0	0.9	0.9	0.9	0.1	2.6	2.6
Prop In Lane	0.55		0.45	0.29		0.71	1.00		0.01	1.00		0.00
Lane Grp Cap(c), veh/h	231	0	0	213	0	0	67	991	1041	10	934	982
V/C Ratio(X)	0.18	0.00	0.00	0.10	0.00	0.00	0.63	0.09	0.09	0.52	0.24	0.24
Avail Cap(c_a), veh/h	1116	0	0	1125	0	0	278	991	1041	240	934	982
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	17.0	0.0	0.0	17.8	3.8	3.8	18.6	4.8	4.8
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	9.4	0.2	0.2	37.8	0.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.2	0.0	0.0	0.5	0.2	0.2	0.1	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	0.0	17.2	0.0	0.0	27.2	4.0	4.0	56.5	5.4	5.3
LnGrp LOS	B	A	A	B	A	A	C	A	A	E	A	A
Approach Vol, veh/h		42			21			227			464	
Approach Delay, s/veh		17.6			17.2			8.3			5.9	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.6	26.0		6.9	5.8	24.8		6.9				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	5.1	20.7		25.0	5.9	19.9		25.0				
Max Q Clear Time (g_c+I1), s	2.1	2.9		3.0	2.9	4.6		2.4				
Green Ext Time (p_c), s	0.0	0.9		0.1	0.0	2.4		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A



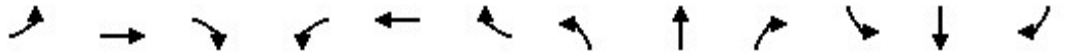
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	107	130	26	90	34	352	240	45	159	562	370
Future Volume (veh/h)	166	107	130	26	90	34	352	240	45	159	562	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.99	1.00		0.96
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	189	122	148	32	111	42	489	333	62	177	624	411
Peak Hour Factor	0.88	0.88	0.88	0.81	0.81	0.81	0.72	0.72	0.72	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	213	393	337	41	315	113	510	1468	270	202	640	421
Arrive On Green	0.12	0.22	0.22	0.02	0.13	0.13	0.29	0.49	0.49	0.11	0.32	0.32
Sat Flow, veh/h	1767	1763	1511	1767	2515	899	1767	2968	546	1767	1997	1314
Grp Volume(v), veh/h	189	122	148	32	76	77	489	196	199	177	551	484
Grp Sat Flow(s),veh/h/ln	1767	1763	1511	1767	1763	1651	1767	1763	1751	1767	1763	1548
Q Serve(g_s), s	14.1	7.7	11.3	2.4	5.3	5.7	36.3	8.5	8.6	13.2	41.2	41.3
Cycle Q Clear(g_c), s	14.1	7.7	11.3	2.4	5.3	5.7	36.3	8.5	8.6	13.2	41.2	41.3
Prop In Lane	1.00		1.00	1.00		0.54	1.00		0.31	1.00		0.85
Lane Grp Cap(c), veh/h	213	393	337	41	221	207	510	872	866	202	565	496
V/C Ratio(X)	0.89	0.31	0.44	0.79	0.34	0.37	0.96	0.23	0.23	0.87	0.98	0.98
Avail Cap(c_a), veh/h	214	473	405	93	356	334	529	872	866	316	565	496
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	43.3	44.7	64.9	53.4	53.6	46.7	19.2	19.2	58.2	44.8	44.9
Incr Delay (d2), s/veh	32.3	0.7	1.5	11.8	0.3	0.4	28.1	0.6	0.6	10.0	32.2	34.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	3.5	4.4	1.2	2.4	2.4	19.9	3.6	3.7	6.5	22.9	20.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.2	44.1	46.2	76.8	53.7	54.0	74.8	19.8	19.9	68.2	77.0	79.7
LnGrp LOS	F	D	D	E	D	D	E	B	B	E	E	E
Approach Vol, veh/h		459			185			884			1212	
Approach Delay, s/veh		63.7			57.8			50.2			76.8	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	71.3	7.5	35.0	42.9	48.1	20.5	22.0
Change Period (Y+Rc), s	4.4	5.3	4.4	5.3	4.4	5.3	4.4	* 5.3
Max Green Setting (Gmax), s	23.9	58.9	7.0	35.8	40.0	42.8	16.2	* 27
Max Q Clear Time (g_c+I1), s	15.2	10.6	4.4	13.3	38.3	43.3	16.1	7.7
Green Ext Time (p_c), s	0.2	4.4	0.0	2.5	0.2	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	64.8
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2245	0	0	1934	636	0	0	0	163	0	804
Future Volume (veh/h)	0	2245	0	0	1934	636	0	0	0	163	0	804
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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1856	1856	0	1856	1856				1856	0	1856
Adj Flow Rate, veh/h	0	2339	0	0	1994	656				181	0	893
Peak Hour Factor	0.96	0.96	0.96	0.97	0.97	0.97				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3	0	3	3				3	0	3
Cap, veh/h	0	2955	0	0	2955	1423				1103	0	890
Arrive On Green	0.00	0.58	0.00	0.00	0.58	0.58				0.32	0.00	0.32
Sat Flow, veh/h	0	5400	0	0	5233	1572				3428	0	2768
Grp Volume(v), veh/h	0	2339	0	0	1994	656				181	0	893
Grp Sat Flow(s),veh/h/ln	0	1689	0	0	1689	1572				1714	0	1384
Q Serve(g_s), s	0.0	49.3	0.0	0.0	37.3	9.4				5.2	0.0	44.4
Cycle Q Clear(g_c), s	0.0	49.3	0.0	0.0	37.3	9.4				5.2	0.0	44.4
Prop In Lane	0.00		0.00	0.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2955	0	0	2955	1423				1103	0	890
V/C Ratio(X)	0.00	0.79	0.00	0.00	0.67	0.46				0.16	0.00	1.00
Avail Cap(c_a), veh/h	0	2955	0	0	2955	1423				1103	0	890
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	1.00	0.00	0.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.3	0.0	0.0	19.8	1.1				33.5	0.0	46.8
Incr Delay (d2), s/veh	0.0	2.3	0.0	0.0	1.3	1.1				0.1	0.0	30.9
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	0.0	19.6	0.0	0.0	14.7	15.1				2.2	0.0	19.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.5	0.0	0.0	21.0	2.1				33.6	0.0	77.7
LnGrp LOS	A	C	A	A	C	A				C	A	F
Approach Vol, veh/h		2339			2650						1074	
Approach Delay, s/veh		24.5			16.3						70.2	
Approach LOS		C			B						E	

Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		88.0		50.0		88.0						
Change Period (Y+Rc), s		7.5		5.6		7.5						
Max Green Setting (Gmax), s		80.5		44.4		80.5						
Max Q Clear Time (g_c+I1), s		51.3		46.4		39.3						
Green Ext Time (p_c), s		22.8		0.0		29.2						

Intersection Summary												
HCM 6th Ctrl Delay			29.0									
HCM 6th LOS			C									

Appendix N: Queueing Analysis SimTraffic Worksheets

Provided on the following page

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	11141	11004	10987	11119	11123	11000	10998
Vehs Exited	11090	11013	10948	10995	11073	10913	10996
Starting Vehs	380	453	378	395	431	424	424
Ending Vehs	431	444	417	519	481	511	426
Travel Distance (mi)	6152	6050	6020	6061	6066	6059	6021
Travel Time (hr)	433.3	423.8	400.5	481.2	413.3	447.7	403.7
Total Delay (hr)	209.8	204.2	181.8	261.0	192.7	227.5	184.9
Total Stops	14713	13956	13316	15904	13905	15263	13651
Fuel Used (gal)	269.8	263.5	258.0	278.3	261.5	269.7	257.7

Summary of All Intervals

Run Number	9393 Towne Centre Drive (Podium)\8HCS\Synchro\9F\Existing AM				Avg
Start Time	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	11171	11025	11096	11148	11074
Vehs Exited	11161	10991	11086	11061	11028
Starting Vehs	414	411	384	405	408
Ending Vehs	424	445	394	492	448
Travel Distance (mi)	6127	6062	6090	6050	6069
Travel Time (hr)	421.1	415.6	436.9	450.5	429.8
Total Delay (hr)	198.1	195.3	215.8	230.9	209.3
Total Stops	14244	14251	14555	14993	14429
Fuel Used (gal)	265.4	263.7	268.6	270.4	266.1

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	11141	11004	10987	11119	11123	11000	10998
Vehs Exited	11090	11013	10948	10995	11073	10913	10996
Starting Vehs	380	453	378	395	431	424	424
Ending Vehs	431	444	417	519	481	511	426
Travel Distance (mi)	6152	6050	6020	6061	6066	6059	6021
Travel Time (hr)	433.3	423.8	400.5	481.2	413.3	447.7	403.7
Total Delay (hr)	209.8	204.2	181.8	261.0	192.7	227.5	184.9
Total Stops	14713	13956	13316	15904	13905	15263	13651
Fuel Used (gal)	269.8	263.5	258.0	278.3	261.5	269.7	257.7

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	9393 Towne Centre Drive (Podium)\8HCS\Synchro\9F\Existing AM				Avg
Vehs Entered	11171	11025	11096	11148	11074
Vehs Exited	11161	10991	11086	11061	11028
Starting Vehs	414	411	384	405	408
Ending Vehs	424	445	394	492	448
Travel Distance (mi)	6127	6062	6090	6050	6069
Travel Time (hr)	421.1	415.6	436.9	450.5	429.8
Total Delay (hr)	198.1	195.3	215.8	230.9	209.3
Total Stops	14244	14251	14555	14993	14429
Fuel Used (gal)	265.4	263.7	268.6	270.4	266.1

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	82	132	153	161	170	332	302	222	262	312	348	5
Average Queue (ft)	14	58	70	65	74	205	175	118	144	151	181	0
95th Queue (ft)	49	108	128	132	165	304	279	190	222	264	300	4
Link Distance (ft)			1051	1051		334	334			427	427	
Upstream Blk Time (%)						0	0				0	
Queuing Penalty (veh)						0	0				0	
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)			0		0	19		0	0	0		
Queuing Penalty (veh)			0		1	12		0	0	1		

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	60	79	90
Average Queue (ft)	18	25	29
95th Queue (ft)	48	62	67
Link Distance (ft)		439	439
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	145		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	32	3	13
Average Queue (ft)	7	0	0
95th Queue (ft)	28	3	13
Link Distance (ft)	256	405	405
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	134	228	115	98	93	93	264	354	346	115	39	151
Average Queue (ft)	81	58	37	39	37	35	177	204	209	105	11	64
95th Queue (ft)	133	143	82	80	74	73	280	319	333	142	35	118
Link Distance (ft)		509	509		323	323		397	397			405
Upstream Blk Time (%)								0	0			
Queuing Penalty (veh)								0	1			
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	8	0		0	0		3	3	22	4		0
Queuing Penalty (veh)	4	1		0	0		15	12	94	23		0

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	116
Average Queue (ft)	48
95th Queue (ft)	93
Link Distance (ft)	405
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	34	21	174	180	99	46
Average Queue (ft)	7	1	40	46	16	5
95th Queue (ft)	28	11	124	137	63	26
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	147	160	487	441	359	175	202	214	529	545	635	737
Average Queue (ft)	126	149	284	241	206	73	148	191	324	340	362	311
95th Queue (ft)	183	183	450	392	325	188	228	253	490	493	539	608
Link Distance (ft)			1092	1092	1092				1812	1812	1812	1812
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)	6	30	19		18	0	1	8	20			12
Queuing Penalty (veh)	20	98	64		20	0	5	39	71			75

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	195	143	157	202	164	149	127	148	181	48	68	58
Average Queue (ft)	176	30	87	81	51	59	27	67	91	12	16	14
95th Queue (ft)	228	106	150	154	118	118	81	126	151	37	47	40
Link Distance (ft)				722	722					548	548	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)	8	0	2	1		0	0					
Queuing Penalty (veh)	50	0	2	2		0	0					

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	SB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	7
95th Queue (ft)	27
Link Distance (ft)	157
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	120	134	176	194	154	89	60	192	321	297	147	81
Average Queue (ft)	49	73	94	109	36	26	15	123	150	145	63	28
95th Queue (ft)	103	119	156	170	93	68	45	217	317	275	127	68
Link Distance (ft)			321	321		199	199		626	626		510
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)			0	2	0			24	1		0	
Queuing Penalty (veh)			1	1	0			40	1		0	

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	82
Average Queue (ft)	19
95th Queue (ft)	59
Link Distance (ft)	510
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	20	27	76	68	85	33	33	34
Average Queue (ft)	1	3	24	8	13	8	4	5
95th Queue (ft)	10	18	54	39	52	29	22	23
Link Distance (ft)	111	134		1264	1264		626	626
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	0				
Queuing Penalty (veh)			0	0				

Intersection: 9: Judicial Dr. & Golden Haven Dr./Brook Ln.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	203	160	113	75	99	40	154	215	172	92	88	71
Average Queue (ft)	110	31	32	29	42	13	71	105	66	36	34	28
95th Queue (ft)	198	142	73	63	81	36	133	178	136	75	71	61
Link Distance (ft)		281	281		240	240		531	531		1264	1264
Upstream Blk Time (%)		2										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	7			1	3		1	0				
Queuing Penalty (veh)	1			1	1		1	0				

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	284	287	289	560	552	596	193	372	1019	1095	877	
Average Queue (ft)	196	207	211	377	352	368	36	129	428	658	575	
95th Queue (ft)	291	306	313	517	492	529	140	275	1313	1409	986	
Link Distance (ft)	267	267	267	646	646	646	646		1814	1814		
Upstream Blk Time (%)	1	2	3	0	0	0	0		2	3		
Queuing Penalty (veh)	5	7	11	0	0	0	0		0	0		
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)								0	1	4	3	
Queuing Penalty (veh)								0	2	31	25	

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	35	50	60	5	37	34
Average Queue (ft)	3	5	9	0	1	1
95th Queue (ft)	21	30	40	5	25	18
Link Distance (ft)	1812	1812	1812	267	267	267
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 739

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:45	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	10873	11055	11012	10974	10893	10644	10776
Vehs Exited	10847	10956	10892	10910	10890	10596	10795
Starting Vehs	478	494	467	490	522	548	563
Ending Vehs	504	593	587	554	525	596	544
Travel Distance (mi)	7869	8011	7916	7872	7807	7717	7820
Travel Time (hr)	628.8	662.2	534.8	519.2	587.8	692.5	667.2
Total Delay (hr)	349.2	378.5	254.0	240.0	311.1	418.9	390.0
Total Stops	14508	16052	15223	14378	14751	15025	15509
Fuel Used (gal)	342.4	353.7	323.3	318.6	333.3	351.9	351.0

Summary of All Intervals

Run Number	7	8	9	Avg
9393 Towne Centre Drive (Podium)\8HCS\Synchro\9F\Existing PM				
Start Time	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	10917	10920	11190	11104	10942
Vehs Exited	10873	10831	11112	11078	10891
Starting Vehs	501	542	478	520	507
Ending Vehs	545	631	556	546	555
Travel Distance (mi)	7937	7989	8010	8074	7911
Travel Time (hr)	553.6	667.7	531.9	614.1	605.4
Total Delay (hr)	272.0	384.8	248.3	328.3	325.0
Total Stops	14755	15780	14679	16012	15153
Fuel Used (gal)	327.7	354.8	324.7	346.8	338.9

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	10873	11055	11012	10974	10893	10644	10776
Vehs Exited	10847	10956	10892	10910	10890	10596	10795
Starting Vehs	478	494	467	490	522	548	563
Ending Vehs	504	593	587	554	525	596	544
Travel Distance (mi)	7869	8011	7916	7872	7807	7717	7820
Travel Time (hr)	628.8	662.2	534.8	519.2	587.8	692.5	667.2
Total Delay (hr)	349.2	378.5	254.0	240.0	311.1	418.9	390.0
Total Stops	14508	16052	15223	14378	14751	15025	15509
Fuel Used (gal)	342.4	353.7	323.3	318.6	333.3	351.9	351.0

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	9393 Towne Centre Drive (Podium)\8HCS\Synchro\9F\Existing PM				Avg
Vehs Entered	10917	10920	11190	11104	10942
Vehs Exited	10873	10831	11112	11078	10891
Starting Vehs	501	542	478	520	507
Ending Vehs	545	631	556	546	555
Travel Distance (mi)	7937	7989	8010	8074	7911
Travel Time (hr)	553.6	667.7	531.9	614.1	605.4
Total Delay (hr)	272.0	384.8	248.3	328.3	325.0
Total Stops	14755	15780	14679	16012	15153
Fuel Used (gal)	327.7	354.8	324.7	346.8	338.9

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	7	80	307	302	169	315	247	117	131	51	88	157
Average Queue (ft)	0	19	202	186	128	137	80	50	71	9	28	76
95th Queue (ft)	6	58	282	275	187	278	199	101	118	33	66	180
Link Distance (ft)			543	543		334	334			496	496	
Upstream Blk Time (%)						2	0					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)			2		14	1						0
Queuing Penalty (veh)			0		21	2						1

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	170	422	360
Average Queue (ft)	148	234	202
95th Queue (ft)	200	386	337
Link Distance (ft)		440	440
Upstream Blk Time (%)		3	1
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	9	23	
Queuing Penalty (veh)	24	49	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	SB	SB
Directions Served	R	TR	T	T
Maximum Queue (ft)	57	2	428	416
Average Queue (ft)	32	0	138	123
95th Queue (ft)	51	2	418	397
Link Distance (ft)	209	336	496	496
Upstream Blk Time (%)			2	1
Queuing Penalty (veh)			8	7
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	82	60	198	135	339	259	231	150	76	75	254	366
Average Queue (ft)	33	12	91	133	311	80	112	44	25	27	54	303
95th Queue (ft)	71	41	166	147	399	195	194	102	62	59	206	407
Link Distance (ft)		509	509		324	324		397	397			336
Upstream Blk Time (%)					57	0						26
Queuing Penalty (veh)					136	0						121
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	0			87	1		1		0	0	0	47
Queuing Penalty (veh)	0			99	3		0		0	0	0	9

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	376
Average Queue (ft)	295
95th Queue (ft)	410
Link Distance (ft)	336
Upstream Blk Time (%)	20
Queuing Penalty (veh)	94
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	128	30	130	81	418	410
Average Queue (ft)	53	7	45	24	307	85
95th Queue (ft)	105	26	99	64	520	259
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)	1				14	1
Queuing Penalty (veh)	0				89	5
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	61	159	656	691	759	175	202	215	736	668	623	147
Average Queue (ft)	16	19	400	436	491	124	183	203	427	384	379	32
95th Queue (ft)	45	88	650	696	755	240	234	244	722	623	578	98
Link Distance (ft)			2770	2770	2770				1812	1812	1812	1812
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)		0	52		56	0	6	30	9			
Queuing Penalty (veh)		0	12		102	1	37	171	45			

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	57	152	164	290	457	225	212	347	360	568	251	172
Average Queue (ft)	15	96	130	66	104	187	165	337	353	507	80	71
95th Queue (ft)	42	187	182	203	348	253	253	388	395	720	174	139
Link Distance (ft)				723	723					548	548	
Upstream Blk Time (%)					0					34	0	
Queuing Penalty (veh)					0					155	0	
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)		1	11	0	0	7	2	7	55	0	1	1
Queuing Penalty (veh)		0	3	0	1	2	1	7	62	0	1	1

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	324	290	190
Average Queue (ft)	199	43	106
95th Queue (ft)	420	199	220
Link Distance (ft)	320	320	180
Upstream Blk Time (%)	18	0	38
Queuing Penalty (veh)	38	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	74	65	48	46	96	237	212	165	226	181	70	192
Average Queue (ft)	21	19	14	8	49	203	101	77	55	28	19	100
95th Queue (ft)	56	51	41	32	81	251	212	169	227	130	52	163
Link Distance (ft)			320	320		199	199		626	626		510
Upstream Blk Time (%)						43	3					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)								14	0			
Queuing Penalty (veh)								6	0			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	177
Average Queue (ft)	64
95th Queue (ft)	136
Link Distance (ft)	510
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	37	25	61	39	39	26	63	130
Average Queue (ft)	11	3	18	5	4	3	14	21
95th Queue (ft)	34	17	44	25	21	17	45	96
Link Distance (ft)	111	134		1268	1268		626	626
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	0			0	
Queuing Penalty (veh)			0	0			0	

Intersection: 9: Judicial Dr. & Golden Haven Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	170	85	89	56	96	57	219	307	106	140	190	272
Average Queue (ft)	76	37	32	14	42	18	151	66	36	68	87	124
95th Queue (ft)	141	72	66	42	80	48	229	198	82	119	150	216
Link Distance (ft)		316	316		198	198		970	970		1268	1268
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	1			0	3		6	0		0	0	
Queuing Penalty (veh)	0			0	0		4	0		0	0	

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	289	297	300	406	399	356	98	103	131	276	274	
Average Queue (ft)	201	217	229	245	231	197	36	35	62	169	162	
95th Queue (ft)	322	335	342	379	368	333	79	82	110	247	250	
Link Distance (ft)	267	267	267	1642	1642	1642	1642		1813	1813		
Upstream Blk Time (%)	4	6	8									
Queuing Penalty (veh)	24	37	50									
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	EB	WB	WB
Directions Served	T	T	T	R	T	T
Maximum Queue (ft)	175	340	380	10	14	5
Average Queue (ft)	28	48	62	0	0	0
95th Queue (ft)	113	235	258	6	8	5
Link Distance (ft)	1812	1812	1812		267	267
Upstream Blk Time (%)		0	0			
Queuing Penalty (veh)		0	0			
Storage Bay Dist (ft)				800		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 1431

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	12019	11914	11891	11978	11645	11969	11808
Vehs Exited	11925	11807	11798	11962	11508	11872	11694
Starting Vehs	649	611	640	655	581	627	652
Ending Vehs	743	718	733	671	718	724	766
Travel Distance (mi)	6410	6394	6339	6386	6185	6476	6256
Travel Time (hr)	1228.5	1189.1	1313.0	1094.4	1361.3	1083.6	1214.3
Total Delay (hr)	995.6	957.0	1083.1	862.3	1136.8	848.6	987.1
Total Stops	23049	22176	22795	22615	22111	22356	22185
Fuel Used (gal)	460.6	452.9	479.8	430.0	483.5	430.9	453.9

Summary of All Intervals

Run Number	7	8	9	Term AM	Avg
Start Time	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	12093	12184	11849	11711	11912
Vehs Exited	12062	12080	11882	11676	11841
Starting Vehs	643	608	674	624	628
Ending Vehs	674	712	641	659	698
Travel Distance (mi)	6493	6506	6363	6242	6368
Travel Time (hr)	1078.1	1094.3	1223.5	1335.8	1201.4
Total Delay (hr)	842.4	857.7	992.5	1108.8	970.2
Total Stops	23039	22633	22562	21856	22490
Fuel Used (gal)	429.6	433.4	459.3	480.1	454.0

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	12019	11914	11891	11978	11645	11969	11808
Vehs Exited	11925	11807	11798	11962	11508	11872	11694
Starting Vehs	649	611	640	655	581	627	652
Ending Vehs	743	718	733	671	718	724	766
Travel Distance (mi)	6410	6394	6339	6386	6185	6476	6256
Travel Time (hr)	1228.5	1189.1	1313.0	1094.4	1361.3	1083.6	1214.3
Total Delay (hr)	995.6	957.0	1083.1	862.3	1136.8	848.6	987.1
Total Stops	23049	22176	22795	22615	22111	22356	22185
Fuel Used (gal)	460.6	452.9	479.8	430.0	483.5	430.9	453.9

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Term AM	Avg
Vehs Entered	12093	12184	11849	11711	11912
Vehs Exited	12062	12080	11882	11676	11841
Starting Vehs	643	608	674	624	628
Ending Vehs	674	712	641	659	698
Travel Distance (mi)	6493	6506	6363	6242	6368
Travel Time (hr)	1078.1	1094.3	1223.5	1335.8	1201.4
Total Delay (hr)	842.4	857.7	992.5	1108.8	970.2
Total Stops	23039	22633	22562	21856	22490
Fuel Used (gal)	429.6	433.4	459.3	480.1	454.0

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	257	270	931	854	170	364	390	224	285	452	450	42
Average Queue (ft)	243	258	530	414	76	317	348	126	222	352	367	2
95th Queue (ft)	292	298	1100	949	169	407	400	199	350	497	498	23
Link Distance (ft)			1051	1051		334	334			427	427	
Upstream Blk Time (%)			5	1		18	66			6	8	
Queuing Penalty (veh)			0	0		0	0			50	62	
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)	9	49	0		1	45		0	0	24		
Queuing Penalty (veh)	12	63	2		2	28		0	1	89		

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	112	122	142
Average Queue (ft)	45	52	56
95th Queue (ft)	92	103	114
Link Distance (ft)		439	439
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	42	324	320
Average Queue (ft)	10	70	73
95th Queue (ft)	33	254	256
Link Distance (ft)	256	405	405
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		1	1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	135	514	453	101	121	108	265	401	407	115	54	178
Average Queue (ft)	128	355	159	41	45	45	210	285	302	104	14	82
95th Queue (ft)	157	648	422	83	90	91	318	403	423	143	43	145
Link Distance (ft)		509	509		323	323		397	397			405
Upstream Blk Time (%)		33	0					1	1			
Queuing Penalty (veh)		0	0					6	10			
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	77	1		1	1		4	14	34	4		0
Queuing Penalty (veh)	42	3		0	0		28	68	150	30		0

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	140
Average Queue (ft)	52
95th Queue (ft)	106
Link Distance (ft)	405
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	32	16	197	246	148	49
Average Queue (ft)	7	1	52	62	21	6
95th Queue (ft)	29	10	154	182	85	29
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	147	160	536	482	427	175	202	215	892	1457	1804	1824
Average Queue (ft)	131	156	329	279	241	86	136	190	324	760	1374	1760
95th Queue (ft)	179	173	500	434	371	206	216	257	595	1420	1924	2001
Link Distance (ft)			1092	1092	1092				1812	1812	1812	1812
Upstream Blk Time (%)											0	10
Queuing Penalty (veh)											0	100
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)	8	36	20		22	0	0	5	20			24
Queuing Penalty (veh)	29	131	69		28	0	3	25	81			207

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	195	141	163	209	151	159	142	172	198	55	64	59
Average Queue (ft)	193	30	88	96	61	67	30	85	110	10	19	17
95th Queue (ft)	201	103	155	170	129	130	84	148	174	37	50	44
Link Distance (ft)				722	722					548	548	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)	21	0	1	2	0	0	0					
Queuing Penalty (veh)	176	0	1	3	0	0	0					

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	SB
Directions Served	R
Maximum Queue (ft)	34
Average Queue (ft)	5
95th Queue (ft)	24
Link Distance (ft)	157
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	127	134	164	168	84	76	70	186	287	293	152	80
Average Queue (ft)	46	69	88	100	31	22	23	115	159	169	66	30
95th Queue (ft)	98	115	147	155	63	59	54	205	307	294	134	68
Link Distance (ft)			321	321		199	199		626	626		510
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)		0	0	1				17	2		0	
Queuing Penalty (veh)		0	0	0				35	2		0	

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	62
Average Queue (ft)	22
95th Queue (ft)	53
Link Distance (ft)	510
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	21	25	75	67	89	36	40	47
Average Queue (ft)	1	4	24	10	14	6	5	6
95th Queue (ft)	10	18	55	41	56	27	25	27
Link Distance (ft)	111	134		1264	1264		626	626
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	0				
Queuing Penalty (veh)			1	0				

Intersection: 9: Judicial Dr. & Golden Haven Dr./Brook Ln.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	207	259	125	79	110	49	158	214	171	86	79	97
Average Queue (ft)	139	68	31	28	43	15	69	106	69	37	33	30
95th Queue (ft)	229	249	79	61	88	41	128	181	139	72	68	69
Link Distance (ft)		281	281		240	240		531	531		1264	1264
Upstream Blk Time (%)		10	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	18	0		1	4		0	0				
Queuing Penalty (veh)	3	0		1	1		0	0				

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	278	291	298	679	682	697	687	480	1870	1871	1025	
Average Queue (ft)	193	208	214	613	646	658	604	167	1835	1836	1025	
95th Queue (ft)	291	308	317	737	740	727	906	408	1938	1914	1028	
Link Distance (ft)	267	267	267	646	646	646	646		1814	1814		
Upstream Blk Time (%)	1	2	3	9	37	71	38		70	77		
Queuing Penalty (veh)	5	10	14	0	0	0	0		0	0		
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)								0	6	44	41	
Queuing Penalty (veh)								0	20	386	359	

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	68	84	110	275	342	289
Average Queue (ft)	6	11	16	69	166	188
95th Queue (ft)	38	53	69	248	379	366
Link Distance (ft)	1812	1812	1812	267	267	267
Upstream Blk Time (%)				0	1	5
Queuing Penalty (veh)				2	12	66
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 2418

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:45	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	11199	11069	11237	10804	11307	11428	11114
Vehs Exited	10968	10894	10812	10572	10974	11184	10995
Starting Vehs	681	713	602	633	617	591	612
Ending Vehs	912	888	1027	865	950	835	731
Travel Distance (mi)	8158	8124	8090	8011	8147	8285	8181
Travel Time (hr)	1567.2	1770.3	1481.1	1796.8	1523.1	1471.2	1424.7
Total Delay (hr)	1277.6	1482.4	1194.3	1513.2	1234.2	1176.7	1134.6
Total Stops	18485	18200	18737	17828	18643	18549	17062
Fuel Used (gal)	563.6	608.7	542.9	610.7	552.1	546.0	531.3

Summary of All Intervals

Run Number	7	8	9	Term PM	Avg
Start Time	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	11207	11448	11424	11133	11217
Vehs Exited	11049	11150	11151	10892	10970
Starting Vehs	681	687	694	693	654
Ending Vehs	839	985	967	934	906
Travel Distance (mi)	8274	8214	8335	8218	8185
Travel Time (hr)	1604.7	1652.5	1648.1	1646.7	1598.8
Total Delay (hr)	1311.1	1361.0	1352.3	1355.2	1308.4
Total Stops	18522	19335	19673	19117	18556
Fuel Used (gal)	575.5	584.1	586.7	583.2	571.4

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	11199	11069	11237	10804	11307	11428	11114
Vehs Exited	10968	10894	10812	10572	10974	11184	10995
Starting Vehs	681	713	602	633	617	591	612
Ending Vehs	912	888	1027	865	950	835	731
Travel Distance (mi)	8158	8124	8090	8011	8147	8285	8181
Travel Time (hr)	1567.2	1770.3	1481.1	1796.8	1523.1	1471.2	1424.7
Total Delay (hr)	1277.6	1482.4	1194.3	1513.2	1234.2	1176.7	1134.6
Total Stops	18485	18200	18737	17828	18643	18549	17062
Fuel Used (gal)	563.6	608.7	542.9	610.7	552.1	546.0	531.3

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Term PM	Avg
Vehs Entered	11207	11448	11424	11133	11217
Vehs Exited	11049	11150	11151	10892	10970
Starting Vehs	681	687	694	693	654
Ending Vehs	839	985	967	934	906
Travel Distance (mi)	8274	8214	8335	8218	8185
Travel Time (hr)	1604.7	1652.5	1648.1	1646.7	1598.8
Total Delay (hr)	1311.1	1361.0	1352.3	1355.2	1308.4
Total Stops	18522	19335	19673	19117	18556
Fuel Used (gal)	575.5	584.1	586.7	583.2	571.4

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	78	270	538	549	170	377	346	193	203	72	99	157
Average Queue (ft)	11	118	363	376	162	320	146	94	114	20	36	114
95th Queue (ft)	49	285	586	597	195	439	356	172	186	52	78	202
Link Distance (ft)			543	543		334	334			496	496	
Upstream Blk Time (%)			9	13		78	1					
Queuing Penalty (veh)			0	0		0	0					
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)		0	35		87	2		0	0			2
Queuing Penalty (veh)		0	26		123	3		0	0			8

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	170	493	479
Average Queue (ft)	160	460	449
95th Queue (ft)	216	480	492
Link Distance (ft)		440	440
Upstream Blk Time (%)		70	40
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	24	58	
Queuing Penalty (veh)	117	257	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	55	531	546
Average Queue (ft)	30	482	465
95th Queue (ft)	51	598	640
Link Distance (ft)	209	496	496
Upstream Blk Time (%)		33	20
Queuing Penalty (veh)		219	135
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	103	80	245	135	337	132	241	201	104	76	255	374
Average Queue (ft)	42	15	111	133	329	42	116	61	30	26	91	347
95th Queue (ft)	86	55	208	140	336	97	215	159	78	59	281	363
Link Distance (ft)		509	509		324	324		397	397			336
Upstream Blk Time (%)					86	0		0				67
Queuing Penalty (veh)					233	0		0				448
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	1			97	2		3	0	0	0	0	84
Queuing Penalty (veh)	0			122	6		3	0	0	0	0	29

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	391
Average Queue (ft)	340
95th Queue (ft)	415
Link Distance (ft)	336
Upstream Blk Time (%)	41
Queuing Penalty (veh)	274
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	131	32	139	85	419	423
Average Queue (ft)	50	5	51	28	389	90
95th Queue (ft)	101	24	114	67	466	288
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)	0				25	2
Queuing Penalty (veh)	0				213	13
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	57	150	1849	1853	1850	175	202	215	1279	1179	1046	446
Average Queue (ft)	14	23	1134	1159	1183	134	193	211	724	616	549	59
95th Queue (ft)	43	89	1941	1935	1921	247	223	231	1366	1180	977	281
Link Distance (ft)			2770	2770	2770				1812	1812	1812	1812
Upstream Blk Time (%)			0						1	0		
Queuing Penalty (veh)			0						4	0		
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)			70		71	0	10	50	10			
Queuing Penalty (veh)			20		136	1	59	301	51			

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	72	152	164	281	445	225	212	347	360	567	143	139
Average Queue (ft)	19	98	134	70	105	189	169	343	358	549	63	50
95th Queue (ft)	51	191	182	205	348	253	246	356	364	630	120	105
Link Distance (ft)				723	723					548	548	
Upstream Blk Time (%)										39		
Queuing Penalty (veh)										265		
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)		1	11		0	8	2	11	57	0	0	0
Queuing Penalty (veh)		0	3		1	2	1	15	73	1	0	0

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	EB	WB	WB	SB
Directions Served	T	T	TR	R
Maximum Queue (ft)	39	339	258	201
Average Queue (ft)	1	328	18	160
95th Queue (ft)	40	354	137	237
Link Distance (ft)	324	320	320	180
Upstream Blk Time (%)		73	0	73
Queuing Penalty (veh)		183	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	69	58	51	42	96	241	212	193	594	353	231	531
Average Queue (ft)	21	22	14	9	47	210	62	157	346	45	39	316
95th Queue (ft)	56	52	41	32	79	231	192	243	713	193	136	600
Link Distance (ft)			320	320		199	199		626	626		510
Upstream Blk Time (%)						93	4		13	0		21
Queuing Penalty (veh)						0	0		7	0		0
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)								74	4			6
Queuing Penalty (veh)								33	2			2

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	534
Average Queue (ft)	349
95th Queue (ft)	629
Link Distance (ft)	510
Upstream Blk Time (%)	32
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	44	20	67	105	54	27	69	265
Average Queue (ft)	14	2	17	20	6	2	14	29
95th Queue (ft)	44	13	46	106	29	15	49	167
Link Distance (ft)	111	134		1268	1268		626	626
Upstream Blk Time (%)	1							0
Queuing Penalty (veh)	0							0
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	7			0	
Queuing Penalty (veh)			0	2			0	

Intersection: 9: Judicial Dr. & Golden Haven Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	151	84	90	64	108	62	219	373	264	160	178	244
Average Queue (ft)	72	34	33	15	44	18	165	108	64	76	84	123
95th Queue (ft)	132	71	68	46	88	48	241	346	228	134	146	212
Link Distance (ft)		316	316		198	198		970	970		1268	1268
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	0			0	4		14	0		0	0	
Queuing Penalty (veh)	0			0	1		10	1		0	0	

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	289	304	300	425	409	375	114	121	131	331	328	
Average Queue (ft)	211	224	232	285	269	241	36	37	65	204	197	
95th Queue (ft)	321	331	333	409	393	363	86	86	115	299	294	
Link Distance (ft)	267	267	267	1642	1642	1642	1642		1813	1813		
Upstream Blk Time (%)	4	5	7									
Queuing Penalty (veh)	30	40	52									
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	R	T	T	T
Maximum Queue (ft)	285	293	186	8	58	98	58
Average Queue (ft)	32	41	50	0	4	5	3
95th Queue (ft)	190	206	152	6	50	63	44
Link Distance (ft)	1812	1812	1812		267	267	267
Upstream Blk Time (%)					0	0	0
Queuing Penalty (veh)					0	0	0
Storage Bay Dist (ft)				800			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Network Summary

Network wide Queuing Penalty: 3529

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	11640	11378	11705	11620	11663	11296	11738
Vehs Exited	11608	11368	11694	11584	11686	11297	11745
Starting Vehs	647	713	698	678	694	703	684
Ending Vehs	679	723	709	714	671	702	677
Travel Distance (mi)	6319	6305	6340	6301	6263	6154	6459
Travel Time (hr)	1590.5	1695.7	1425.8	1495.6	1555.6	1758.2	1454.6
Total Delay (hr)	1360.6	1466.2	1194.9	1266.4	1327.8	1534.1	1219.1
Total Stops	22520	21861	22050	22213	22598	21794	22439
Fuel Used (gal)	542.6	565.4	505.6	518.7	533.0	574.7	515.2

Summary of All Intervals

Run Number	7	8	9 Term + P AM	Avg
Start Time	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	11706	11574	11463	11684	11587
Vehs Exited	11651	11535	11460	11661	11571
Starting Vehs	658	703	668	667	685
Ending Vehs	713	742	671	690	701
Travel Distance (mi)	6461	6322	6252	6366	6322
Travel Time (hr)	1484.9	1560.9	1436.6	1522.1	1543.7
Total Delay (hr)	1249.2	1331.0	1209.1	1290.6	1313.6
Total Stops	22500	22655	21261	22032	22174
Fuel Used (gal)	519.6	534.3	503.0	526.9	530.8

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	11640	11378	11705	11620	11663	11296	11738
Vehs Exited	11608	11368	11694	11584	11686	11297	11745
Starting Vehs	647	713	698	678	694	703	684
Ending Vehs	679	723	709	714	671	702	677
Travel Distance (mi)	6319	6305	6340	6301	6263	6154	6459
Travel Time (hr)	1590.5	1695.7	1425.8	1495.6	1555.6	1758.2	1454.6
Total Delay (hr)	1360.6	1466.2	1194.9	1266.4	1327.8	1534.1	1219.1
Total Stops	22520	21861	22050	22213	22598	21794	22439
Fuel Used (gal)	542.6	565.4	505.6	518.7	533.0	574.7	515.2

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Term + P AM	Avg
Vehs Entered	11706	11574	11463	11684	11587
Vehs Exited	11651	11535	11460	11661	11571
Starting Vehs	658	703	668	667	685
Ending Vehs	713	742	671	690	701
Travel Distance (mi)	6461	6322	6252	6366	6322
Travel Time (hr)	1484.9	1560.9	1436.6	1522.1	1543.7
Total Delay (hr)	1249.2	1331.0	1209.1	1290.6	1313.6
Total Stops	22500	22655	21261	22032	22174
Fuel Used (gal)	519.6	534.3	503.0	526.9	530.8

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	257	270	608	531	170	375	385	216	285	431	447	30
Average Queue (ft)	223	242	296	237	85	331	353	107	176	284	307	2
95th Queue (ft)	298	303	764	651	180	393	378	181	310	426	435	23
Link Distance (ft)			1051	1051		334	334			427	427	
Upstream Blk Time (%)			4	1		25	75			1	1	
Queuing Penalty (veh)			0	0		0	0			7	10	
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)	5	27	1		1	52		0	0	11		0
Queuing Penalty (veh)	6	35	3		2	31		0	1	41		0

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	110	118	128
Average Queue (ft)	45	49	51
95th Queue (ft)	93	97	101
Link Distance (ft)		439	439
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	51	159	195
Average Queue (ft)	18	14	16
95th Queue (ft)	45	88	99
Link Distance (ft)	256	405	405
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	135	562	518	94	121	165	265	420	424	115	74	169
Average Queue (ft)	134	514	183	36	41	86	236	340	358	105	26	87
95th Queue (ft)	137	617	509	75	87	146	316	438	447	146	59	151
Link Distance (ft)		509	509		323	323		397	397			405
Upstream Blk Time (%)		88	3					3	4			
Queuing Penalty (veh)		0	0					20	35			
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	94	3		0	0		5	23	45	4		0
Queuing Penalty (veh)	52	7		0	0		39	109	195	32		0

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	142
Average Queue (ft)	57
95th Queue (ft)	113
Link Distance (ft)	405
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	30	26	297	328	127	53
Average Queue (ft)	6	1	77	93	21	5
95th Queue (ft)	26	11	217	248	85	27
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)			0	0		
Queuing Penalty (veh)			0	0		
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	147	160	887	861	586	175	201	215	773	1354	1806	1825
Average Queue (ft)	138	156	583	528	305	96	138	188	312	722	1388	1787
95th Queue (ft)	172	172	1042	980	494	221	217	256	575	1368	1929	1938
Link Distance (ft)			1092	1092	1092				1812	1812	1812	1812
Upstream Blk Time (%)			4	0							0	12
Queuing Penalty (veh)			0	0							0	116
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)	17	59	15		32	0	1	5	18			24
Queuing Penalty (veh)	61	211	52		39	0	5	27	75			215

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	195	145	164	212	156	162	142	168	180	47	59	56
Average Queue (ft)	193	35	93	93	63	72	36	79	101	8	17	16
95th Queue (ft)	202	117	163	171	135	132	97	141	157	30	46	43
Link Distance (ft)				722	722					548	548	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)	21	0	2	2	0	0	0					
Queuing Penalty (veh)	188	0	3	3	0	0	0					

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	SB
Directions Served	R
Maximum Queue (ft)	35
Average Queue (ft)	13
95th Queue (ft)	38
Link Distance (ft)	157
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	116	140	159	170	116	72	68	195	450	385	144	84
Average Queue (ft)	48	66	79	96	30	21	21	191	361	194	69	29
95th Queue (ft)	97	112	138	148	70	56	55	217	469	380	134	67
Link Distance (ft)			321	321		199	199		626	626		510
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)	0	0	0	1				94	3			
Queuing Penalty (veh)	0	0	0	0				195	5			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	93
Average Queue (ft)	35
95th Queue (ft)	67
Link Distance (ft)	510
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	15	25	69	84	97	31	40	36
Average Queue (ft)	1	3	24	12	16	7	6	5
95th Queue (ft)	9	16	53	48	62	28	26	24
Link Distance (ft)	111	134		1264	1264		626	626
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	0				
Queuing Penalty (veh)			0	0				

Intersection: 9: Judicial Dr. & Golden Haven Dr./Brook Ln.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	209	305	186	74	100	63	151	219	178	95	80	80
Average Queue (ft)	169	129	41	28	44	20	66	117	76	36	33	30
95th Queue (ft)	253	361	121	61	84	48	123	187	147	75	67	64
Link Distance (ft)		281	281		240	240		531	531		1264	1264
Upstream Blk Time (%)		25	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	41	1		2	4			0				
Queuing Penalty (veh)	6	1		1	1			0				

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	279	298	297	678	689	697	690	480	1874	1870	1025	
Average Queue (ft)	191	208	215	606	651	659	625	152	1842	1841	1025	
95th Queue (ft)	294	311	320	739	734	724	871	378	1865	1862	1026	
Link Distance (ft)	267	267	267	646	646	646	646		1814	1814		
Upstream Blk Time (%)	1	2	4	7	39	75	38		75	81		
Queuing Penalty (veh)	6	10	18	0	0	0	0		0	0		
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)								0	5	48	45	
Queuing Penalty (veh)								0	16	424	397	

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	72	99	129	290	345	295
Average Queue (ft)	7	12	22	78	195	217
95th Queue (ft)	42	58	85	263	385	376
Link Distance (ft)	1812	1812	1812	267	267	267
Upstream Blk Time (%)				0	1	6
Queuing Penalty (veh)				4	13	85
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 2803

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:45	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	11283	11259	11274	10946	11376	11159	11165
Vehs Exited	11015	11047	11015	10677	11075	10925	10839
Starting Vehs	724	648	649	678	647	734	610
Ending Vehs	992	860	908	947	948	968	936
Travel Distance (mi)	8182	8220	8169	7984	8244	8077	8089
Travel Time (hr)	1826.7	1818.4	1756.3	1806.2	1699.0	1857.5	1830.8
Total Delay (hr)	1536.9	1526.6	1465.8	1522.9	1406.5	1570.0	1542.9
Total Stops	19152	18443	18603	18568	18904	19210	17678
Fuel Used (gal)	622.9	621.7	606.8	612.7	595.4	627.3	620.4

Summary of All Intervals

Run Number	7	8	9 Term + P PM	Avg
Start Time	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	11429	11097	11528	11286	11256
Vehs Exited	11087	10818	11084	11013	10961
Starting Vehs	598	697	623	640	662
Ending Vehs	940	976	1067	913	949
Travel Distance (mi)	8157	8110	8297	8258	8162
Travel Time (hr)	1772.7	1853.3	1751.6	1750.3	1793.0
Total Delay (hr)	1482.5	1565.3	1456.9	1456.6	1503.0
Total Stops	18676	18353	19879	18248	18700
Fuel Used (gal)	609.6	628.0	608.9	607.9	614.7

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	11283	11259	11274	10946	11376	11159	11165
Vehs Exited	11015	11047	11015	10677	11075	10925	10839
Starting Vehs	724	648	649	678	647	734	610
Ending Vehs	992	860	908	947	948	968	936
Travel Distance (mi)	8182	8220	8169	7984	8244	8077	8089
Travel Time (hr)	1826.7	1818.4	1756.3	1806.2	1699.0	1857.5	1830.8
Total Delay (hr)	1536.9	1526.6	1465.8	1522.9	1406.5	1570.0	1542.9
Total Stops	19152	18443	18603	18568	18904	19210	17678
Fuel Used (gal)	622.9	621.7	606.8	612.7	595.4	627.3	620.4

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	7	8	9 Term + P PM	Avg
Vehs Entered	11429	11097	11528	11286	11256
Vehs Exited	11087	10818	11084	11013	10961
Starting Vehs	598	697	623	640	662
Ending Vehs	940	976	1067	913	949
Travel Distance (mi)	8157	8110	8297	8258	8162
Travel Time (hr)	1772.7	1853.3	1751.6	1750.3	1793.0
Total Delay (hr)	1482.5	1565.3	1456.9	1456.6	1503.0
Total Stops	18676	18353	19879	18248	18700
Fuel Used (gal)	609.6	628.0	608.9	607.9	614.7

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	73	270	544	556	170	376	345	249	260	215	150	157
Average Queue (ft)	10	126	366	375	166	340	158	152	170	35	45	104
95th Queue (ft)	44	300	598	606	181	407	375	252	265	163	107	192
Link Distance (ft)			543	543		334	334			496	496	
Upstream Blk Time (%)			11	14		90	0					
Queuing Penalty (veh)			0	0		0	0					
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)		0	37		94	2		0	3			1
Queuing Penalty (veh)		0	27		133	3		0	2			6

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	170	491	480
Average Queue (ft)	159	459	447
95th Queue (ft)	216	478	498
Link Distance (ft)		440	440
Upstream Blk Time (%)		71	40
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	17	65	
Queuing Penalty (veh)	86	290	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	SB	SB
Directions Served	R	TR	T	T
Maximum Queue (ft)	90	5	528	543
Average Queue (ft)	46	0	500	493
95th Queue (ft)	75	4	565	586
Link Distance (ft)	209	336	496	496
Upstream Blk Time (%)			35	23
Queuing Penalty (veh)			234	152
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	101	61	276	135	338	164	224	178	95	81	255	369
Average Queue (ft)	43	10	111	133	329	43	111	54	31	27	73	348
95th Queue (ft)	83	39	211	140	336	108	193	128	74	61	248	362
Link Distance (ft)		509	509		324	324		397	397			336
Upstream Blk Time (%)					86	0						69
Queuing Penalty (veh)					274	0						487
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	1			96	1		1		0	0	0	85
Queuing Penalty (veh)	0			133	5		1		0	0	0	32

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	390
Average Queue (ft)	346
95th Queue (ft)	401
Link Distance (ft)	336
Upstream Blk Time (%)	42
Queuing Penalty (veh)	299
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	125	30	141	92	424	440
Average Queue (ft)	52	6	51	28	396	92
95th Queue (ft)	103	25	106	70	445	304
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)	0				25	2
Queuing Penalty (veh)	0				231	18
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	52	160	2471	2441	2419	175	202	215	997	928	888	444
Average Queue (ft)	13	31	1569	1577	1591	131	191	210	583	544	522	50
95th Queue (ft)	41	116	2685	2655	2620	247	228	233	1011	937	844	234
Link Distance (ft)			2770	2770	2770				1812	1812	1812	1812
Upstream Blk Time (%)			4	4	4							
Queuing Penalty (veh)			0	0	0							
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)		0	71		73	0	7	42	13			
Queuing Penalty (veh)		0	21		139	1	42	253	65			

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	70	152	164	268	474	225	212	347	360	567	125	132
Average Queue (ft)	20	99	133	56	113	190	169	344	358	553	58	48
95th Queue (ft)	51	187	180	179	362	253	244	356	362	601	106	100
Link Distance (ft)				723	723					548	548	
Upstream Blk Time (%)										39		
Queuing Penalty (veh)										278		
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)		1	11	0	0	9	2	9	58	0	0	0
Queuing Penalty (veh)		0	3	0	2	3	1	11	74	4	0	0

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	339	268	205
Average Queue (ft)	329	17	183
95th Queue (ft)	347	130	207
Link Distance (ft)	320	320	180
Upstream Blk Time (%)	74	0	99
Queuing Penalty (veh)	190	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	68	63	46	41	106	241	203	195	629	360	130	460
Average Queue (ft)	15	24	12	7	54	210	55	174	444	47	30	253
95th Queue (ft)	49	55	38	29	88	232	177	230	783	195	81	495
Link Distance (ft)			320	320		199	199		626	626		510
Upstream Blk Time (%)						95	5		28	0		9
Queuing Penalty (veh)						0	0		16	0		0
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)								88	1			4
Queuing Penalty (veh)								40	1			1

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	482
Average Queue (ft)	294
95th Queue (ft)	541
Link Distance (ft)	510
Upstream Blk Time (%)	13
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	48	21	74	286	214	24	93	210
Average Queue (ft)	14	2	19	56	29	3	17	32
95th Queue (ft)	45	14	56	299	245	18	61	154
Link Distance (ft)	111	134		1268	1268		626	626
Upstream Blk Time (%)	1							
Queuing Penalty (veh)	0							
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	14			0	
Queuing Penalty (veh)			0	5			0	

Intersection: 9: Judicial Dr. & Golden Haven Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	156	84	88	54	98	59	219	317	179	160	189	275
Average Queue (ft)	75	34	32	12	43	18	158	88	55	76	92	133
95th Queue (ft)	132	70	64	39	82	47	235	286	193	132	161	228
Link Distance (ft)		316	316		198	198		970	970		1268	1268
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	0			0	3		11			0	0	
Queuing Penalty (veh)	0			0	0		8			0	0	

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	288	306	301	432	424	385	115	104	127	337	333	
Average Queue (ft)	201	221	230	286	274	242	36	36	64	199	193	
95th Queue (ft)	320	332	335	404	394	362	85	81	113	297	294	
Link Distance (ft)	267	267	267	1642	1642	1642	1642		1813	1813		
Upstream Blk Time (%)	4	5	6									
Queuing Penalty (veh)	26	39	49									
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	157	177	310	43	67	32
Average Queue (ft)	23	34	48	1	2	1
95th Queue (ft)	98	123	209	32	39	21
Link Distance (ft)	1812	1812	1812	267	267	267
Upstream Blk Time (%)					0	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 3687

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	12917	12872	12865	12742	13106	12748	13122
Vehs Exited	12898	12799	12860	12686	13026	12778	13082
Starting Vehs	680	710	664	745	703	737	726
Ending Vehs	699	783	669	801	783	707	766
Travel Distance (mi)	6479	6438	6488	6352	6532	6339	6516
Travel Time (hr)	1820.5	1753.2	1738.5	1906.5	1755.0	1921.3	1847.3
Total Delay (hr)	1584.5	1518.8	1502.5	1675.0	1517.0	1689.9	1610.0
Total Stops	23560	22835	22294	22823	23433	22097	23420
Fuel Used (gal)	600.1	585.1	581.8	615.9	586.6	618.8	607.4

Summary of All Intervals

Run Number	9393 Towne Centre Drive (Podium)\HCS\Synchro_FY Year 2050 AM				Avg
Start Time	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	12619	12700	12821	12895	12857
Vehs Exited	12624	12648	12793	12827	12818
Starting Vehs	730	709	726	698	709
Ending Vehs	725	761	754	766	742
Travel Distance (mi)	6262	6455	6445	6439	6431
Travel Time (hr)	2087.9	1969.2	1917.1	1929.8	1876.9
Total Delay (hr)	1859.4	1733.8	1682.0	1695.3	1642.6
Total Stops	22579	22955	22990	23538	22954
Fuel Used (gal)	654.6	631.8	622.7	625.3	611.9

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	12917	12872	12865	12742	13106	12748	13122
Vehs Exited	12898	12799	12860	12686	13026	12778	13082
Starting Vehs	680	710	664	745	703	737	726
Ending Vehs	699	783	669	801	783	707	766
Travel Distance (mi)	6479	6438	6488	6352	6532	6339	6516
Travel Time (hr)	1820.5	1753.2	1738.5	1906.5	1755.0	1921.3	1847.3
Total Delay (hr)	1584.5	1518.8	1502.5	1675.0	1517.0	1689.9	1610.0
Total Stops	23560	22835	22294	22823	23433	22097	23420
Fuel Used (gal)	600.1	585.1	581.8	615.9	586.6	618.8	607.4

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	9393 Towne Centre Drive (Podium)\HCS\Synchro_Year 2050 AM				Avg
	7	8	9		
Vehs Entered	12619	12700	12821	12895	12857
Vehs Exited	12624	12648	12793	12827	12818
Starting Vehs	730	709	726	698	709
Ending Vehs	725	761	754	766	742
Travel Distance (mi)	6262	6455	6445	6439	6431
Travel Time (hr)	2087.9	1969.2	1917.1	1929.8	1876.9
Total Delay (hr)	1859.4	1733.8	1682.0	1695.3	1642.6
Total Stops	22579	22955	22990	23538	22954
Fuel Used (gal)	654.6	631.8	622.7	625.3	611.9

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	257	270	1102	1085	170	366	388	205	285	432	432	50
Average Queue (ft)	255	269	1071	976	95	319	347	114	176	266	290	3
95th Queue (ft)	261	271	1088	1416	188	405	396	184	303	411	423	30
Link Distance (ft)			1051	1051		334	334			427	427	
Upstream Blk Time (%)			98	29		18	58			0	1	
Queuing Penalty (veh)			0	0		0	0			3	4	
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)	23	90	2		1	42		0	0	8		
Queuing Penalty (veh)	30	117	12		5	31		0	1	34		

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	101	122	132
Average Queue (ft)	43	48	59
95th Queue (ft)	87	97	117
Link Distance (ft)		439	439
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	35	95	79
Average Queue (ft)	8	6	5
95th Queue (ft)	29	47	41
Link Distance (ft)	256	405	405
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	135	555	513	122	141	136	265	409	406	115	50	142
Average Queue (ft)	133	458	242	50	57	55	245	304	295	110	13	73
95th Queue (ft)	144	672	560	100	107	114	302	420	418	135	41	131
Link Distance (ft)		509	509		323	323		397	397			405
Upstream Blk Time (%)		63	3					1	1			
Queuing Penalty (veh)		0	0					8	6			
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	88	2		2	1		18	10	31	13		
Queuing Penalty (veh)	74	4		1	1		133	65	211	97		

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	140
Average Queue (ft)	57
95th Queue (ft)	109
Link Distance (ft)	405
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	38	26	210	212	105	60
Average Queue (ft)	9	2	58	63	20	8
95th Queue (ft)	33	13	164	174	72	37
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	147	160	1064	1029	734	175	202	215	911	1416	1805	1826
Average Queue (ft)	143	159	771	702	342	87	134	189	325	834	1473	1803
95th Queue (ft)	159	163	1224	1170	656	212	208	255	576	1458	1969	1884
Link Distance (ft)			1092	1092	1092				1812	1812	1812	1812
Upstream Blk Time (%)			13	2	0						0	16
Queuing Penalty (veh)			0	0	0						0	153
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)	20	68	10		34	0	1	3	22			27
Queuing Penalty (veh)	73	246	43		42	0	3	14	89			234

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	195	146	164	215	168	169	146	158	175	42	58	49
Average Queue (ft)	193	35	96	105	75	82	40	71	93	9	15	14
95th Queue (ft)	200	115	163	180	147	148	101	130	153	31	43	38
Link Distance (ft)				722	722					548	548	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)	24	0	2	3	0	0	0					
Queuing Penalty (veh)	208	0	2	5	0	0	0					

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	17	28	31
Average Queue (ft)	1	1	7
95th Queue (ft)	13	18	27
Link Distance (ft)	323	323	157
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	135	199	308	321	180	129	88	195	356	404	218	143
Average Queue (ft)	60	109	182	196	83	52	30	135	204	260	113	42
95th Queue (ft)	113	204	276	298	200	107	68	220	331	395	193	101
Link Distance (ft)			321	321		199	199		626	626		510
Upstream Blk Time (%)			0	0		0						
Queuing Penalty (veh)			1	2		0						
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)	0	0	10	19	0			6	12		0	
Queuing Penalty (veh)	0	0	24	22	0			12	18		0	

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	106
Average Queue (ft)	33
95th Queue (ft)	77
Link Distance (ft)	510
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	23	25	60	70	102	37	52	52
Average Queue (ft)	2	5	21	13	20	9	7	8
95th Queue (ft)	15	20	47	48	70	31	32	33
Link Distance (ft)	111	134		1264	1264		626	626
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	0			0	
Queuing Penalty (veh)			0	0			0	

Intersection: 9: Judicial Dr. & Golden Haven Dr./Brook Ln.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	209	306	180	93	141	95	197	279	255	111	123	124
Average Queue (ft)	160	79	56	47	54	23	87	164	132	50	55	48
95th Queue (ft)	238	269	125	87	112	62	163	253	222	96	100	96
Link Distance (ft)		281	281		240	240		531	531		1264	1264
Upstream Blk Time (%)		6	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	17	0		6	6		0	3				
Queuing Penalty (veh)	3	0		3	4		0	4				

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB
Directions Served	T	T	TR	T	T	T	R	L	L	R	R
Maximum Queue (ft)	274	285	290	679	687	699	696	480	1869	1873	1025
Average Queue (ft)	189	204	215	612	654	663	639	166	1836	1838	1025
95th Queue (ft)	289	302	319	737	726	709	839	398	1917	1915	1032
Link Distance (ft)	267	267	267	646	646	646	646		1814	1814	
Upstream Blk Time (%)	1	2	4	8	37	76	41		73	79	
Queuing Penalty (veh)	4	6	15	0	0	0	0		0	0	
Storage Bay Dist (ft)								455			1000
Storage Blk Time (%)								0	5	46	42
Queuing Penalty (veh)								0	17	403	370

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	68	86	105	288	335	297
Average Queue (ft)	5	8	15	94	216	237
95th Queue (ft)	35	46	64	293	397	368
Link Distance (ft)	1812	1812	1812	267	267	267
Upstream Blk Time (%)				0	1	8
Queuing Penalty (veh)				4	17	111
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty: 2990

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:45	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	11761	11829	11605	11736	11176	11877	11372
Vehs Exited	11586	11557	11330	11538	10965	11679	11085
Starting Vehs	748	670	679	709	686	637	715
Ending Vehs	923	942	954	907	897	835	1002
Travel Distance (mi)	8399	8444	8273	8331	8162	8203	8229
Travel Time (hr)	2078.9	2385.8	2194.5	2105.7	2538.1	1702.6	2479.3
Total Delay (hr)	1779.2	2084.3	1899.4	1807.9	2246.8	1409.1	2185.5
Total Stops	17483	18419	17579	18045	16142	16522	17467
Fuel Used (gal)	687.3	755.8	709.5	691.6	784.0	596.0	770.6

Summary of All Intervals

Run Number	9393 Towne Centre Drive (Podium)\HCS\Synchro_Year 2050 PM	7	8	9	Avg
Start Time	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60
# of Intervals	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1
Vehs Entered	11906	12491	11878	11851	11768
Vehs Exited	11638	12043	11640	11614	11515
Starting Vehs	735	662	682	688	693
Ending Vehs	1003	1110	920	925	946
Travel Distance (mi)	8397	8548	8442	8385	8347
Travel Time (hr)	2356.8	1959.1	2375.2	2282.8	2223.5
Total Delay (hr)	2056.9	1653.7	2073.7	1984.1	1925.5
Total Stops	18349	19902	18627	18253	17887
Fuel Used (gal)	748.9	663.5	754.6	732.3	717.6

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	11761	11829	11605	11736	11176	11877	11372
Vehs Exited	11586	11557	11330	11538	10965	11679	11085
Starting Vehs	748	670	679	709	686	637	715
Ending Vehs	923	942	954	907	897	835	1002
Travel Distance (mi)	8399	8444	8273	8331	8162	8203	8229
Travel Time (hr)	2078.9	2385.8	2194.5	2105.7	2538.1	1702.6	2479.3
Total Delay (hr)	1779.2	2084.3	1899.4	1807.9	2246.8	1409.1	2185.5
Total Stops	17483	18419	17579	18045	16142	16522	17467
Fuel Used (gal)	687.3	755.8	709.5	691.6	784.0	596.0	770.6

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	9393 Towne Centre Drive (Podium)\HCS\Synchro_Year 2050 PM				Avg
Vehs Entered	11906	12491	11878	11851	11768
Vehs Exited	11638	12043	11640	11614	11515
Starting Vehs	735	662	682	688	693
Ending Vehs	1003	1110	920	925	946
Travel Distance (mi)	8397	8548	8442	8385	8347
Travel Time (hr)	2356.8	1959.1	2375.2	2282.8	2223.5
Total Delay (hr)	2056.9	1653.7	2073.7	1984.1	1925.5
Total Stops	18349	19902	18627	18253	17887
Fuel Used (gal)	748.9	663.5	754.6	732.3	717.6

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	67	257	568	580	170	372	342	147	164	68	106	156
Average Queue (ft)	7	93	362	389	163	325	133	75	93	20	37	61
95th Queue (ft)	35	252	620	641	186	433	361	132	147	51	81	150
Link Distance (ft)			543	543		334	334			496	496	
Upstream Blk Time (%)			18	27		80	1					
Queuing Penalty (veh)			0	0		0	0					
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)		0	24		89	1						0
Queuing Penalty (veh)		0	18		146	2						2

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	170	485	482
Average Queue (ft)	132	456	436
95th Queue (ft)	238	472	542
Link Distance (ft)		440	440
Upstream Blk Time (%)		82	56
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	5	83	
Queuing Penalty (veh)	27	368	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	NB	SB	SB
Directions Served	R	T	TR	T	T
Maximum Queue (ft)	65	35	34	524	538
Average Queue (ft)	33	2	2	499	488
95th Queue (ft)	55	18	18	571	602
Link Distance (ft)	209	336	336	496	496
Upstream Blk Time (%)				50	32
Queuing Penalty (veh)				357	226
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	130	537	546	135	336	230	264	381	123	96	255	371
Average Queue (ft)	52	265	425	129	327	56	206	137	35	35	53	346
95th Queue (ft)	123	672	673	141	338	158	304	346	89	74	218	362
Link Distance (ft)		509	509		324	324		397	397			336
Upstream Blk Time (%)		23	57		87	0		1				78
Queuing Penalty (veh)		0	0		305	0		2				526
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	8	0		94	1		19		1	0	0	92
Queuing Penalty (veh)	3	0		164	4		19		1	0	0	32

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	384
Average Queue (ft)	327
95th Queue (ft)	446
Link Distance (ft)	336
Upstream Blk Time (%)	50
Queuing Penalty (veh)	339
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	149	34	152	96	420	385
Average Queue (ft)	80	7	66	38	401	81
95th Queue (ft)	144	28	126	80	433	268
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)	3				43	2
Queuing Penalty (veh)	0				383	21
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	56	159	1245	1266	1293	175	202	215	1136	1076	951	424
Average Queue (ft)	16	25	762	798	842	138	193	210	683	574	508	67
95th Queue (ft)	45	102	1464	1482	1493	247	226	236	1259	1105	930	314
Link Distance (ft)			2770	2770	2770				1812	1812	1812	1812
Upstream Blk Time (%)									0	0	0	
Queuing Penalty (veh)									1	0	0	
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)		0	62		65	0	8	49	9			
Queuing Penalty (veh)		0	19		125	1	50	298	45			

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	67	152	164	299	461	225	212	347	360	567	121	143
Average Queue (ft)	21	99	133	80	129	192	175	343	358	555	56	49
95th Queue (ft)	52	192	184	219	376	254	251	356	364	567	102	107
Link Distance (ft)				723	723					548	548	
Upstream Blk Time (%)					0					50		
Queuing Penalty (veh)					0					342		
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)		1	13	0	0	9	3	12	67	0	0	0
Queuing Penalty (veh)		1	5	0	1	4	1	15	85	2	0	0

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	338	285	198
Average Queue (ft)	324	36	172
95th Queue (ft)	362	193	222
Link Distance (ft)	320	320	180
Upstream Blk Time (%)	70	0	88
Queuing Penalty (veh)	246	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	78	76	90	70	139	246	214	194	626	342	264	547
Average Queue (ft)	29	29	29	18	69	209	59	178	506	51	66	398
95th Queue (ft)	65	66	68	53	116	230	190	223	818	194	225	714
Link Distance (ft)			320	320		199	199		626	626		510
Upstream Blk Time (%)						89	4		51	0		43
Queuing Penalty (veh)						0	0		41	0		0
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)					0			90	1		0	43
Queuing Penalty (veh)					0			48	1		0	15

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	560
Average Queue (ft)	475
95th Queue (ft)	659
Link Distance (ft)	510
Upstream Blk Time (%)	73
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	96	35	93	855	802	27	102	107
Average Queue (ft)	40	6	16	388	278	3	23	33
95th Queue (ft)	106	25	60	1193	1053	16	70	85
Link Distance (ft)	111	134		1268	1268		626	626
Upstream Blk Time (%)	17			12	9			
Queuing Penalty (veh)	0			25	20			
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	47			0	
Queuing Penalty (veh)			0	16			0	

Intersection: 9: Judicial Dr. & Golden Haven Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	208	300	248	87	151	131	220	644	562	214	407	457
Average Queue (ft)	142	102	73	28	65	34	194	274	160	135	211	249
95th Queue (ft)	226	274	178	69	127	93	273	669	504	230	360	414
Link Distance (ft)		316	316		198	198		970	970		1268	1268
Upstream Blk Time (%)		11	0		0	1		4	0			
Queuing Penalty (veh)		0	0		0	0		0	0			
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	18	0		2	13		23	7		2	11	
Queuing Penalty (veh)	10	0		1	3		28	26		6	17	

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	289	301	299	413	402	380	104	119	130	336	331	
Average Queue (ft)	200	217	226	277	263	236	36	39	64	204	197	
95th Queue (ft)	314	325	326	389	378	355	82	87	110	300	296	
Link Distance (ft)	267	267	267	1642	1642	1642	1642		1813	1813		
Upstream Blk Time (%)	3	5	6									
Queuing Penalty (veh)	25	35	43									
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	R	T	T	T
Maximum Queue (ft)	136	154	174	4	8	9	17
Average Queue (ft)	21	31	40	0	1	0	1
95th Queue (ft)	86	112	131	4	11	7	9
Link Distance (ft)	1812	1812	1812		267	267	267
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				800			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Network Summary

Network wide Queuing Penalty: 4546

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:45	6:45	6:45	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	12333	12519	12261	12637	12415	12553	12660
Vehs Exited	12290	12508	12228	12600	12472	12566	12677
Starting Vehs	785	758	760	747	785	791	805
Ending Vehs	828	769	793	784	728	778	788
Travel Distance (mi)	6193	6245	6181	6332	6290	6296	6440
Travel Time (hr)	2304.8	2276.1	2415.2	2164.1	2123.2	2237.8	2111.6
Total Delay (hr)	2078.8	2048.0	2189.6	1932.7	1893.5	2007.4	1876.6
Total Stops	22079	23024	22112	23143	22417	22887	23401
Fuel Used (gal)	703.4	697.2	727.4	673.2	663.2	690.5	666.5

Summary of All Intervals

Run Number	7	8	9	Avg
9393 Towne Centre Drive (Podium)\HCS\Synchro_F\Year 2050 + P AM				
Start Time	6:45	6:45	6:45	6:45
End Time	8:00	8:00	8:00	8:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	12369	12175	12520	12385	12432
Vehs Exited	12376	12157	12534	12365	12435
Starting Vehs	758	749	818	779	768
Ending Vehs	751	767	804	799	778
Travel Distance (mi)	6272	6138	6357	6226	6270
Travel Time (hr)	2408.9	2438.6	2288.6	2236.9	2273.3
Total Delay (hr)	2179.4	2214.3	2056.0	2008.8	2044.1
Total Stops	22665	22065	23015	22221	22641
Fuel Used (gal)	729.2	730.8	703.6	688.1	697.6

Interval #0 Information Seeding

Start Time	6:45
End Time	7:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	12333	12519	12261	12637	12415	12553	12660
Vehs Exited	12290	12508	12228	12600	12472	12566	12677
Starting Vehs	785	758	760	747	785	791	805
Ending Vehs	828	769	793	784	728	778	788
Travel Distance (mi)	6193	6245	6181	6332	6290	6296	6440
Travel Time (hr)	2304.8	2276.1	2415.2	2164.1	2123.2	2237.8	2111.6
Total Delay (hr)	2078.8	2048.0	2189.6	1932.7	1893.5	2007.4	1876.6
Total Stops	22079	23024	22112	23143	22417	22887	23401
Fuel Used (gal)	703.4	697.2	727.4	673.2	663.2	690.5	666.5

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	9393 Towne Centre Drive (Podium)\HCS\Synchro_F\Year 2050 + P AM 7	8	9	Avg
Vehs Entered	12369	12175	12520	12385	12432
Vehs Exited	12376	12157	12534	12365	12435
Starting Vehs	758	749	818	779	768
Ending Vehs	751	767	804	799	778
Travel Distance (mi)	6272	6138	6357	6226	6270
Travel Time (hr)	2408.9	2438.6	2288.6	2236.9	2273.3
Total Delay (hr)	2179.4	2214.3	2056.0	2008.8	2044.1
Total Stops	22665	22065	23015	22221	22641
Fuel Used (gal)	729.2	730.8	703.6	688.1	697.6

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	257	270	1098	1083	170	365	378	214	284	405	400	49
Average Queue (ft)	255	269	1071	946	88	303	336	108	149	235	262	2
95th Queue (ft)	260	271	1086	1454	172	404	405	178	259	356	372	24
Link Distance (ft)			1051	1051		334	334			427	427	
Upstream Blk Time (%)			98	27		12	36			0	0	
Queuing Penalty (veh)			0	0		0	0			1	1	
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)	13	90	2		2	36		0	0	5		
Queuing Penalty (veh)	17	117	11		5	26		0	0	20		

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	116	123	139
Average Queue (ft)	46	52	57
95th Queue (ft)	94	104	111
Link Distance (ft)		439	439
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	46	28	78
Average Queue (ft)	17	1	4
95th Queue (ft)	42	19	32
Link Distance (ft)	256	405	405
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	135	557	519	126	170	214	265	417	416	115	68	148
Average Queue (ft)	134	520	187	54	70	117	247	322	340	110	26	72
95th Queue (ft)	137	597	510	110	136	199	301	437	446	139	59	127
Link Distance (ft)		509	509		323	323		397	397			405
Upstream Blk Time (%)		95	2					2	3			
Queuing Penalty (veh)		0	0					12	20			
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	94	3		3	3		12	16	40	11		
Queuing Penalty (veh)	79	6		3	2		96	108	266	86		

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	146
Average Queue (ft)	60
95th Queue (ft)	114
Link Distance (ft)	405
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	32	27	209	243	116	51
Average Queue (ft)	10	2	67	86	19	7
95th Queue (ft)	33	13	174	211	74	31
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	147	160	1138	1115	1074	175	200	215	976	1370	1809	1829
Average Queue (ft)	143	159	978	936	516	85	122	180	319	776	1450	1810
95th Queue (ft)	159	161	1341	1328	1058	213	200	258	615	1421	1973	1881
Link Distance (ft)			1092	1092	1092				1812	1812	1812	1812
Upstream Blk Time (%)			49	9	0						0	17
Queuing Penalty (veh)			0	0	0						0	169
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)	22	69	13		41	0	0	2	22			29
Queuing Penalty (veh)	79	250	58		50	0	1	11	88			255

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	195	150	164	220	192	184	159	141	157	44	48	52
Average Queue (ft)	194	38	100	105	77	78	42	65	87	10	12	14
95th Queue (ft)	200	126	168	188	156	147	109	123	141	32	37	38
Link Distance (ft)				722	722					548	548	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)	27	0	2	4	0	0	0					
Queuing Penalty (veh)	236	0	3	5	0	0	0					

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	14	20	37
Average Queue (ft)	1	1	12
95th Queue (ft)	10	12	37
Link Distance (ft)	323	323	157
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	150	200	303	319	180	107	85	195	416	444	227	143
Average Queue (ft)	64	106	180	194	82	43	26	173	275	302	121	46
95th Queue (ft)	127	199	268	289	198	92	64	233	416	423	206	105
Link Distance (ft)			321	321		199	199		626	626		510
Upstream Blk Time (%)			0	0								
Queuing Penalty (veh)			1	1								
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)	0	0	10	20	0			31	12		1	
Queuing Penalty (veh)	0	0	24	25	0			65	25		0	

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	122
Average Queue (ft)	44
95th Queue (ft)	90
Link Distance (ft)	510
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	24	25	75	117	138	35	48	42
Average Queue (ft)	2	4	24	19	26	7	7	8
95th Queue (ft)	13	19	54	75	90	28	29	30
Link Distance (ft)	111	134		1264	1264		626	626
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	0			0	
Queuing Penalty (veh)			0	0			0	

Intersection: 9: Judicial Dr. & Golden Haven Dr./Brook Ln.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	210	320	248	94	146	80	214	333	278	106	135	118
Average Queue (ft)	185	176	73	48	59	24	96	179	145	47	61	53
95th Queue (ft)	249	404	185	88	115	58	186	278	244	90	110	102
Link Distance (ft)		281	281		240	240		531	531		1264	1264
Upstream Blk Time (%)		33	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	48	0		6	7		1	5				
Queuing Penalty (veh)	10	1		4	5		3	5				

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB
Directions Served	T	T	TR	T	T	T	R	L	L	R	R
Maximum Queue (ft)	287	286	293	680	686	698	691	479	1871	1870	1025
Average Queue (ft)	181	196	208	602	658	665	648	151	1840	1840	1025
95th Queue (ft)	286	302	317	739	701	687	801	369	1869	1861	1025
Link Distance (ft)	267	267	267	646	646	646	646		1814	1814	
Upstream Blk Time (%)	1	2	3	6	41	82	44		76	82	
Queuing Penalty (veh)	3	7	14	0	0	0	0		0	0	
Storage Bay Dist (ft)								455			1000
Storage Blk Time (%)								0	5	50	46
Queuing Penalty (veh)								0	15	446	410

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	EB	WB	WB	WB
Directions Served	T	T	T	R	T	T	T
Maximum Queue (ft)	62	88	106	5	278	346	293
Average Queue (ft)	4	9	18	0	106	241	259
95th Queue (ft)	28	52	73	5	305	393	342
Link Distance (ft)	1812	1812	1812		267	267	267
Upstream Blk Time (%)					0	2	12
Queuing Penalty (veh)					3	22	158
Storage Bay Dist (ft)				800			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Network Summary

Network wide Queuing Penalty: 3331

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	4:45	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1	1
Vehs Entered	12329	12016	12079	11840	12042	11743	12203
Vehs Exited	12161	11824	11904	11625	11915	11695	12020
Starting Vehs	708	755	678	733	727	799	774
Ending Vehs	876	947	853	948	854	847	957
Travel Distance (mi)	8569	8519	8457	8462	8455	8322	8572
Travel Time (hr)	1987.6	2261.4	2294.7	2423.7	2235.6	2369.5	2193.8
Total Delay (hr)	1682.8	1958.2	1994.0	2122.8	1934.2	2073.4	1888.7
Total Stops	19568	18967	18129	18462	17961	18682	19843
Fuel Used (gal)	672.4	730.4	737.3	764.1	724.9	750.7	717.3

Summary of All Intervals

Run Number	7	8	9	Avg
9393 Towne Centre Drive (Podium)\HCS\Synchro_F\Year 2050 + P PM				
Start Time	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	12366	12162	11850	12061
Vehs Exited	12125	12080	11662	11897
Starting Vehs	739	773	728	732
Ending Vehs	980	855	916	896
Travel Distance (mi)	8599	8558	8343	8480
Travel Time (hr)	2202.7	2252.0	2361.9	2338.6	2265.6
Total Delay (hr)	1896.3	1947.7	2065.1	2039.4	1963.9
Total Stops	20172	20317	18926	18344	19035
Fuel Used (gal)	719.8	730.9	748.4	746.5	731.1

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	12329	12016	12079	11840	12042	11743	12203
Vehs Exited	12161	11824	11904	11625	11915	11695	12020
Starting Vehs	708	755	678	733	727	799	774
Ending Vehs	876	947	853	948	854	847	957
Travel Distance (mi)	8569	8519	8457	8462	8455	8322	8572
Travel Time (hr)	1987.6	2261.4	2294.7	2423.7	2235.6	2369.5	2193.8
Total Delay (hr)	1682.8	1958.2	1994.0	2122.8	1934.2	2073.4	1888.7
Total Stops	19568	18967	18129	18462	17961	18682	19843
Fuel Used (gal)	672.4	730.4	737.3	764.1	724.9	750.7	717.3

Interval #1 Information Recording

Start Time	5:00
End Time	6:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	9393 Towne Centre Drive (Podium)\HCS\Synchro_F\Year 2050 + P PM				Avg
Vehs Entered	12366	12162	11850	12046	12061
Vehs Exited	12125	12080	11662	11864	11897
Starting Vehs	739	773	728	670	732
Ending Vehs	980	855	916	852	896
Travel Distance (mi)	8599	8558	8343	8419	8480
Travel Time (hr)	2202.7	2252.0	2361.9	2338.6	2265.6
Total Delay (hr)	1896.3	1947.7	2065.1	2039.4	1963.9
Total Stops	20172	20317	18926	18344	19035
Fuel Used (gal)	719.8	730.9	748.4	746.5	731.1

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	T	TR	L	L	T	TR	L
Maximum Queue (ft)	54	270	584	580	170	374	349	278	281	330	278	157
Average Queue (ft)	6	101	415	441	165	335	168	194	210	152	74	55
95th Queue (ft)	32	272	662	667	183	417	398	315	324	489	236	141
Link Distance (ft)			543	543		334	334			496	496	
Upstream Blk Time (%)			25	37		85	1			9	0	
Queuing Penalty (veh)			0	0		0	0			22	0	
Storage Bay Dist (ft)	245	245			145			260	260			145
Storage Blk Time (%)		0	36		91	2		8	26	1		0
Queuing Penalty (veh)		0	26		149	3		5	14	2		2

Intersection: 1: Towne Centre Dr. & Eastgate Mall

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	170	492	486
Average Queue (ft)	136	456	446
95th Queue (ft)	239	477	514
Link Distance (ft)		440	440
Upstream Blk Time (%)		81	63
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	145		
Storage Blk Time (%)	3	85	
Queuing Penalty (veh)	16	378	

Intersection: 2: Towne Centre Dr. & Project Dwy. A

Movement	WB	NB	NB	SB	SB
Directions Served	R	T	TR	T	T
Maximum Queue (ft)	152	79	42	529	537
Average Queue (ft)	68	18	2	505	499
95th Queue (ft)	158	98	35	523	571
Link Distance (ft)	209	336	336	496	496
Upstream Blk Time (%)	6	0		50	41
Queuing Penalty (veh)	0	0		355	288
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	126	527	546	135	337	220	265	408	270	104	255	365
Average Queue (ft)	52	197	418	131	328	68	230	205	51	40	71	345
95th Queue (ft)	111	591	663	142	335	173	315	455	145	87	252	357
Link Distance (ft)		509	509		324	324		397	397			336
Upstream Blk Time (%)		14	50		82	0		5				78
Queuing Penalty (veh)		0	0		327	0		11				547
Storage Bay Dist (ft)	110			110			240			90	230	
Storage Blk Time (%)	3			90	2		38	0	2	0	0	91
Queuing Penalty (veh)	1			169	11		40	1	2	0	0	34

Intersection: 3: Towne Centre Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	384
Average Queue (ft)	341
95th Queue (ft)	401
Link Distance (ft)	336
Upstream Blk Time (%)	56
Queuing Penalty (veh)	395
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Towne Centre Dr. & Towne Centre Dwy.

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	TR	T	T
Maximum Queue (ft)	150	32	175	105	418	420
Average Queue (ft)	72	7	73	40	399	103
95th Queue (ft)	134	27	146	86	442	325
Link Distance (ft)	134	134	548	548	397	397
Upstream Blk Time (%)	2				37	3
Queuing Penalty (veh)	0				351	28
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	69	159	1382	1401	1431	175	202	215	1051	996	965	500
Average Queue (ft)	18	31	917	951	983	125	192	210	631	567	524	66
95th Queue (ft)	52	114	1532	1545	1559	246	225	234	1116	991	886	287
Link Distance (ft)			2770	2770	2770				1812	1812	1812	1812
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	135	135				150	190	190				
Storage Blk Time (%)		0	67		68	0	7	46	9			0
Queuing Penalty (veh)		0	21		131	1	44	279	49			0

Intersection: 5: Towne Centre Dr. & La Jolla Village Dr.

Movement	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	R	L	L	T	T	R
Maximum Queue (ft)	71	152	164	284	491	225	212	347	360	568	132	147
Average Queue (ft)	21	103	135	75	149	197	178	343	358	553	58	53
95th Queue (ft)	51	194	184	209	423	253	248	358	362	600	114	115
Link Distance (ft)				723	723					548	548	
Upstream Blk Time (%)					0					46		
Queuing Penalty (veh)					0					330		
Storage Bay Dist (ft)	170	140	140			200	200	335	335			160
Storage Blk Time (%)		1	12	0	0	10	3	10	63	1	0	0
Queuing Penalty (veh)		0	5	0	2	4	1	13	81	10	0	1

Intersection: 6: Executive Dr. & Project Dwy. B

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	338	302	200
Average Queue (ft)	325	28	187
95th Queue (ft)	354	161	198
Link Distance (ft)	320	320	180
Upstream Blk Time (%)	60	0	100
Queuing Penalty (veh)	212	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	EB	EB	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	R	LT	TR	L	T	TR	L	T
Maximum Queue (ft)	90	84	73	116	160	244	209	195	611	359	263	534
Average Queue (ft)	27	27	25	19	76	213	71	181	439	78	71	386
95th Queue (ft)	70	66	59	71	130	231	200	222	735	257	228	627
Link Distance (ft)			320	320		199	199		626	626		510
Upstream Blk Time (%)						88	4		19			32
Queuing Penalty (veh)						0	0		16			0
Storage Bay Dist (ft)	175	175			155			170			240	
Storage Blk Time (%)					1			89	1		0	36
Queuing Penalty (veh)					0			47	1		0	12

Intersection: 7: Judicial Dr. & Executive Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	539
Average Queue (ft)	391
95th Queue (ft)	638
Link Distance (ft)	510
Upstream Blk Time (%)	43
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Judicial Dr. & Judicial Drwy.

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	55	25	82	219	63	29	105	174
Average Queue (ft)	21	6	22	57	10	3	23	40
95th Queue (ft)	58	23	67	244	42	18	69	147
Link Distance (ft)	111	134		1268	1268		626	626
Upstream Blk Time (%)	2							0
Queuing Penalty (veh)	0							0
Storage Bay Dist (ft)			85			95		
Storage Blk Time (%)			0	15			0	
Queuing Penalty (veh)			0	5			0	

Intersection: 9: Judicial Dr. & Golden Haven Dr.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	203	214	171	91	159	103	220	449	364	214	444	516
Average Queue (ft)	134	66	66	33	71	28	203	212	98	136	225	272
95th Queue (ft)	212	156	130	78	133	65	246	446	268	232	378	445
Link Distance (ft)		316	316		198	198		970	970		1268	1268
Upstream Blk Time (%)		0			0							
Queuing Penalty (veh)		0			0							
Storage Bay Dist (ft)	185			70			195			190		
Storage Blk Time (%)	5	0		3	17		24	0		2	12	
Queuing Penalty (veh)	2	0		1	4		28	0		6	19	

Intersection: 10: La Jolla Village Dr. & I-805 SB Ramps

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB	SB	
Directions Served	T	T	TR	T	T	T	R	L	L	R	R	
Maximum Queue (ft)	286	299	300	410	398	371	116	110	126	331	320	
Average Queue (ft)	200	221	230	265	253	227	40	36	63	200	196	
95th Queue (ft)	314	323	327	376	365	336	92	81	108	296	289	
Link Distance (ft)	267	267	267	1642	1642	1642	1642		1813	1813		
Upstream Blk Time (%)	3	4	5									
Queuing Penalty (veh)	20	31	40									
Storage Bay Dist (ft)								455			1000	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 76: La Jolla Village Dr.

Movement	EB	EB	EB	EB	EB	WB	WB					
Directions Served	T	T	T	R	R	T	T					
Maximum Queue (ft)	281	149	174	4	15	47	39					
Average Queue (ft)	24	30	41	0	0	2	1					
95th Queue (ft)	199	105	129	4	9	31	27					
Link Distance (ft)	1812	1812	1812			267	267					
Upstream Blk Time (%)	0					0	0					
Queuing Penalty (veh)	0					0	0					
Storage Bay Dist (ft)				800	800							
Storage Blk Time (%)												
Queuing Penalty (veh)												

Network Summary

Network wide Queuing Penalty: 4597

URBAN SYSTEMS ASSOCIATES, INC.
PLANNING & TRAFFIC ENGINEERING, MARKETING & PROJECT SUPPORT
CONSULTANTS TO INDUSTRY AND GOVERNMENT

REGISTERED PROFESSIONAL ENGINEER
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MEMO

ATTN:	***Ann F. Gonsalves City of San Diego***		***E-Mail: AGonsalves@sandiego.gov***
FROM:	***Justin P. Schlaefli PE TE PTOE***		***TOTAL PAGES: 10***
DATE:	***September 8, 2022***	***TIME: 05:15:23 PM***	***JOB NUMBER: 002219***
SUBJECT:	***Science Village – VMT Assessment – PTS#647676***		

The purpose of this memo is to provide an assessment of Vehicle Miles Traveled (VMT) for the proposed project in accordance with the methodology provided in the City of San Diego Transportation Study Manual (September 29, 2020).

Project Description:

The project site encompasses 4 acres and is currently developed with 138,400 SF of scientific research and development uses. Situated in the northeast portion of the University Community Planning Area, the project is located in an area that is north of Executive Drive, west of Judicial Drive, east of Towne Centre Drive, and south of Eastgate Mall. Access to the project site will be provided through three (3) driveways, providing access to the below-grade parking structure. Two (2) driveways will be located along Towne Centre Drive; one 30 feet-wide two-way driveway referred to as the "northwest driveway", and one 20 feet-wide one-way right-in only driveway referred to as the "southwest driveway". The remaining 25 feet-wide one-way right-out only driveway referred to as the "southeast" driveway will be located along Executive Drive.

Regional access to the project site is provided by several locations that include the junction of Interstate 5 with Genesee Avenue (1.6 miles northwest of the project site), the junction of Interstate 805 with La Jolla Village Drive (0.6 miles southeast of the project site), the junction of Interstate 805 with Nobel Drive (1.2 miles southeast of

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the project site), and the junction of Interstate 5 with La Jolla Village Drive (1.4 miles southwest of the project site).

Local access to the project site is provided through the intersection of Towne Centre Drive and Eastgate Mall (0.2 miles north of the project site) and the intersection of Towne Centre Drive and Executive Drive (fronting the southwest corner of the project site). Primary vehicle access to the project site will occur through two (2) driveways along Towne Centre Drive and one (1) driveway along Executive Drive.

The project site is identified as a site with an industrial land use designation. The site is located in the University Community Planning Area and is zoned with one (1) zone, which consists of a Residential Base RS-1-14 zone. The San Diego Municipal Code (SDMC) defines under §131.0403 residential base zones as zones with the purpose to provide appropriate regulations for the development of single dwelling units but also intended to provide for flexibility in development regulations that allow reasonable use of the property while minimizing adverse impacts to adjacent properties. Residential Base zones are differentiated based on the minimum lot size and based on the location of the premises. An RS-1-14 zone is a zone that is located either in a Planned Urbanized

Community or a Proposition "A" Land and is characterized by a lot of minimum 5,000 square feet. The project includes a rezone that will change the existing Residential Base (RS-1-14) zoning to an Employment Mixed Use (EMX-2) zone, for which the project's scientific research and development land use is permitted.

The Project will entail the demolition of two (2) existing three-story scientific research and development buildings consisting of approximately 138,400 square feet (SF) of gross floor area (GFA) and the demolition of the partially below-grade parking structure for the construction of two (2) new four-story scientific research and development buildings that will be connected by two (2) two-level bridge connectors. These two (2) new buildings will consist of a total building area of 369,878 SF are proposed as scientific research and development uses. Within the proposed uses, accessory/amenity spaces will be built, which will consist of a 7,655 SF market, a 563 SF food

and beverage space, a 23,397 SF fitness center, and a 27,847 SF conference space. The accessory/amenity space will consist of a combination of retail, drinking, and eating areas. The Project will be constructed over a three-story below-grade parking structure.

Discretionary actions associated with the project include a Specific Plan Amendment (SPA) to the Nexus Technology Centre Specific Plan, Planned Development Permit (PDP), a Rezone, and a Community Plan Amendment (CPA). The anticipated Opening Day of the project is estimated to occur during Year 2023.

VMT Assessment:

- **Screening:**

As specified in the City of San Diego's TSM, the requirements to prepare a detailed transportation VMT analysis applies to all land development projects, except for those projects that meet at least one of the screening criteria listed below:

Residential or Commercial Project Located in a VMT Efficient Area: The project is a residential or commercial employment project located in a VMT efficient area (15% or more below the base year average VMT per Capita or VMT per Employee) based on the applicable location-based screening map produced by SANDAG.

Industrial or Agricultural Project Located in a VMT Efficient Area: The project is an industrial employment or agricultural employment project located in VMT efficient area (in an area with average or below-average base year VMT per Employee) based on the applicable location-based screening map produced by SANDAG.

Small Project: The project is a small project defined as generating less than 300 daily unadjusted driveway trips using the City of San Diego trip generation rates/procedures.

Locally Serving Retail/Recreational Project: The project is a locally serving retail/recreational project defined as having 100,000 square feet gross floor area or less and demonstrates through a market area study that the market

capture area for the project is approximately three miles (or less) and serves a population of roughly 25,000 people or less. Locally serving retail is consistent with the definitions of Neighborhood Shopping Center in the San Diego Municipal Code Land Development Code Trip Generation Manual. Locally serving recreation land uses are listed in Appendix B of the TSM, if they meet the square footage and market capture area above. Adding retail/recreation square footage (even if it is 100,000 square feet gross floor area or less) to an existing regional retail shopping area is not screened out.

Locally Serving Public Facility: The project is locally serving public facility defined as a public facility that serves the surrounding community or a public facility that is passive use. The following are considered locally serving public facilities: transit centers, public schools, libraries, post offices, park-and-ride lots, police and fire facilities, and government offices. Passive public uses include communication and utility buildings, water sanitation, and waste management.

Affordable Housing: The project has access to transit (located within a reasonable walking distance of ½ mile from the project site) and is wholly or has a portion that meets one of the following criteria: is affordable to persons with a household income equal to or less than 50% of the area median income (as defined by California Health and Safety Code Section 50093), housing for senior citizens [as defined in Section 143.0720(e)], housing for transitional foster youth, disabled veterans, or homeless persons [as identified in 143.0720(f)]. The units shall remain deed-restricted for a period of at least 55 years. The project shall provide no more than the minimum amount of parking per unit, per San Diego Municipal Code Section 143.0744. Only the portion of the project that meets the above criteria is screened out. For example, if the project is 100 units with 10 deed-restricted affordable housing units, transportation VMT analysis would not be necessary for the 10 affordable units but would be necessary for the remaining 90 units (unless they meet one of the other screening criteria). For purposes of

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applying the small project screening criteria, the applicant would only include the trip generation for the non-affordable housing portion of the project (since the affordable housing portion is screened out).

Mixed-Use Project Screening Considerations: The project's individual land uses should be compared to the screening criteria above. It is possible for some of the mixed-use project's land uses to be screened out and some to require further analysis. For purposes of applying the small project screening criteria, the applicant would only include the trip generation for portions of the project that are not screened out based on other screening criteria. For example, if a project includes residential and retail, and the retail component was screened out because it is locally serving; only the trip generation of the residential portion would be used to determine if the project meets the definition of a small project.

Redevelopment Project Screening Considerations: The project is a redevelopment project that demonstrates what the Project's total project VMT is less than the existing land use's total VMT. Exception: If a project replaces affordable housing (either deed-restricted or other types of affordable housing) with a smaller number of moderate-income or high-income residential units, the project is not screened out and must analyze VMT impacts per Table 3 of the TSM.

The screening assessment below evaluates the project with applicable screening criteria elements.

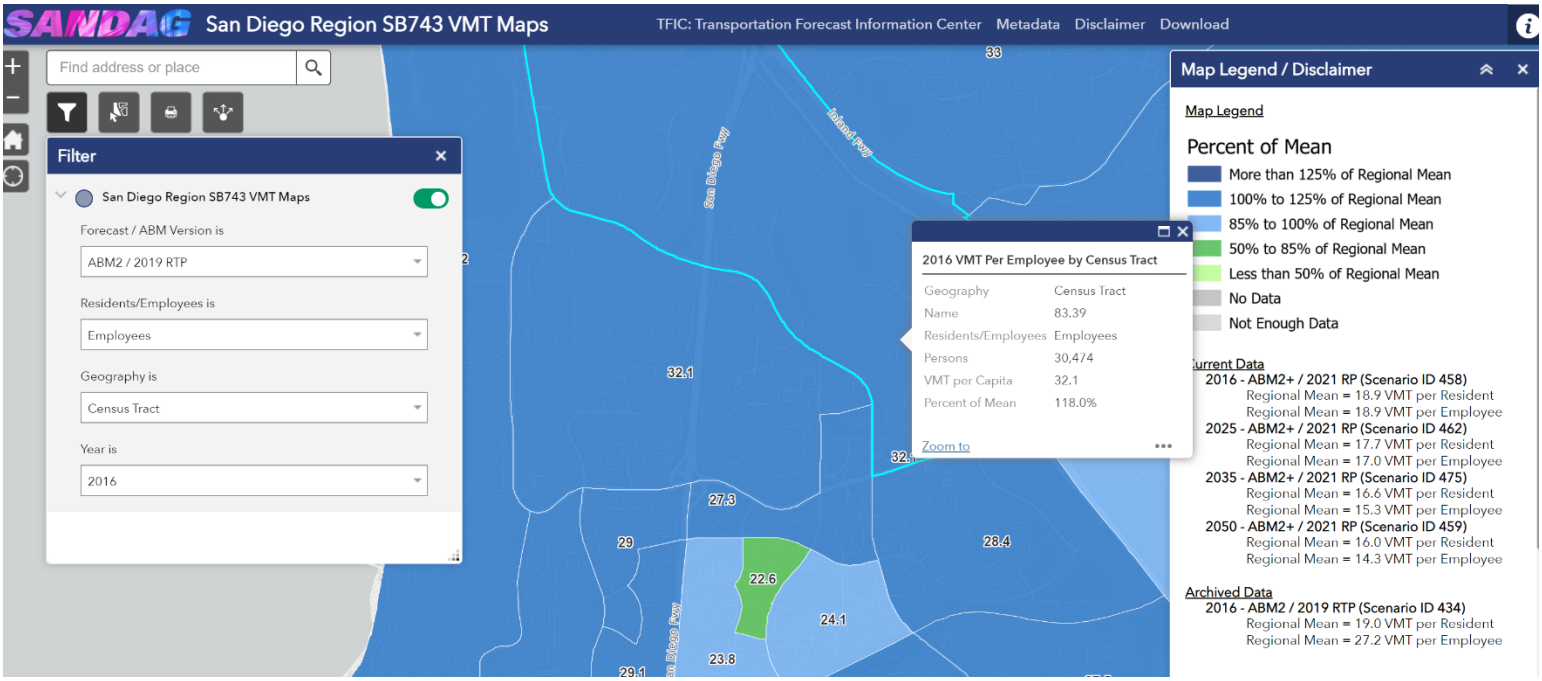
Residential or Commercial Project Located in a VMT Efficient Area: The project is a residential or commercial employment project located in a VMT efficient area (15% or more below the base year average resident VMT per Capita or employee VMT per Employee) based on the applicable location-based screening map produced by SANDAG.

Appendix B of the City of San Diego TSM provides a land-use type categorization for specific land-use designations. The proposed project's land use designation as a corporate headquarters/single tenant office is categorized as a Commercial Employment land-use type.

The project, as a Commercial Employment land use, has been evaluated using the SANDAG current base year screening map (Series 14 ABM2, Year 2016) included in the table and figure below. As shown in the screening map, the regional mean Employee VMT per employee is 27.2 miles per employee. The project is located in Census Tract 83.39 in which the Employee VMT per employee is 32.1; which is 118.0% of the regional average. Therefore, the project is located within an area that is not defined as VMT efficient and would not be screened out of having to perform a VMT analysis.

Regional Mean (*VMT / Employee*)	**Significance Threshold (*VMT / Employee*)**	**Significance Threshold *(% of Regional Mean*)**	**Project VMT Generation (*VMT / Employee*)**	**Project VMT Generation *(% of Regional Mean*)**	**Is this a Significant Impact?**
27.2	23.1	85%	32.1	118.0	**Yes**

A screen capture of the SANDAG SB743 Screening Map is shown below.



- **Significance Determination:**

Since the projects did not meet any of the screening criteria, it must evaluate the VMT produced by the project. The proposed commercial employment project is expected to generate an approximate net increase of 1,778 daily unadjusted driveway trips and therefore, the project's Employee VMT/Employee will be considered the same as the VMT per employee of the census tract it is located within. As stated above, the project is within a census tract with 32.1 Employee VMT/Employee, which is 118.0% of the regional mean. Therefore, based on the adopted VMT significance threshold for a commercial employment project of 15% below the regional mean (Significance Threshold equals 23.1 VMT per Employee), the Science Village project is found to have a significant transportation VMT impact.

- **Mitigation:**

The project is required to comply with the Complete Communities: Mobility Choices ordinance (effective January 8, 2021 outside the Coastal Zone) and will rely upon the Findings and Statement of Overriding Considerations (SOC) from the Complete Communities: Housing Solutions and Mobility Choices Final Program Environmental Impact Report (PEIR) as mitigation to the extent feasible for its significant unmitigated VMT impact.

As shown in Figure 2, the Project site is located within a Transit Priority Area (TPA). The SDMC Ordinance Number O-21274 (*12/9/2020*) provides the development regulations for the Mobility Choices portion of the Complete Communities program. As defined in SDMC Section 143.1103, a site where any of the premises is located either partially or entirely in a Transit Priority Area is defined to be a Mobility Zone 2 area. Since the project is located within a TPA as described above, the Project is defined as an area designated as Mobility Zone 2. SDMC Section 143.1103(b) indicates the requirement for the application of VMT Reduction Measures for all development located within a Mobility Zone 2 in accordance with the *Land Development Manual Appendix T*. The Land Development Manual Appendix T provides a list of VMT Reduction Measures that are split into a series of categories, which include Pedestrian Measures, Bicycle Supportive Measures, Transit Supportive Measures, and Other Measures. Each of the individual measures is given an assigned point value per unit of measure.

For development in Mobility Zone 2, SDMC Section 143.1103(b)(1) identifies the requirement to provide VMT Reduction Measures totaling at least 5 points. Alternatively, SDMC Section 143.1103(b)(5) provides the option for the applicant to pay the Active Transportation In Lieu Fee referenced in SDMC Section 143.1103(c).

The Project will provide measures as required by the ordinance that add up to at least 5 points as identified in the Land Development Manual Appendix T. Pursuant to SDMC section 143.1103(b)(6), the Project will provide more than the minimum parking required in SDMC Chapter 14, Article 2, Division 5, for a Research and Development use and is, therefore, eligible to comply with the Mobility Choices program by providing VMT Reduction Measures in section 143.1103(b)(2) equivalent to at least 5 points. The project will not be required to pay the Active Transportation In-Lieu Fee referenced in Section 143.1103(c) as it is located within Mobility Zone 2. The Project will obtain at least five (5) points through the following measures:

Description of Mobility Choices Measure	**Points Credited towards Compliance**
(S) Provide short-term bicycle parking spaces that are available, at least 10% beyond minimum requirements • Required short-term bicycle parking = 47 spaces • Provided short-term bicycle parking = 60 spaces (20% more than required)	3.0
(S) Provide long-term bicycle parking spaces that are available, at least 10% beyond minimum requirements • Required long-term bicycle parking = 47 spaces • Provided long-term bicycle parking = 61 spaces (20% more than required)	4.0
(S) Provide an on-site bicycle repair station	1.5
(S) Provide on-site multi-modal kiosks (above minimum kiosk requirement to serve a larger site)	2
Total Points for Mobility Choices Compliance	**10.5 points**

Refer to the project site plan for the Project Parking Tabulations that show the planned parking supply of the Project.

As shown above, the Project's proposed VMT reduction measures total to 10.5 points, and a minimum of 5 points is required. Therefore, the Project will be in compliance with the Mobility Choices program regulations as mitigation to the extent feasible by relying upon the Findings and SOCs from the Complete Communities: Housing Solutions and Mobility Choices Final PEIR for its significant VMT impact.

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