APPENDIX H

Transportation Assessment
(Including LADOT Approval Letter)

FORM GEN. 160A (Rev. 1/82)

CITY OF LOS ANGELES

INTER-DEPARTMENTAL CORRESPONDENCE

3701 W Stocker St
DOT Case No. CEN23-56115

Date: January 14, 2025

To: Brenda Kahinju, Administrative Clerk
Department of City Planning

Eileen Hunt Digitally signed by Eileen Hunt
Date: 2025.01.14 17:22:32 -08'00'

From: Eileen Hunt, Transportation Engineer
Department of Transportation

Subject: **TRANSPORTATION ASSESSMENT FOR THE PROPOSED STUDIO PROJECT LOCATED AT 3701 WEST STOCKER STREET (ENV-2024-326-EAF/CPC-2024-325-CU-MCUP-CUX-SPESPP-DRB-SPR-WDI)**

The Los Angeles Department of Transportation (LADOT) has reviewed the transportation assessment prepared by KOA Corporation, a Lochner Company, Inc. (KOA), dated October 8, 2024, for the proposed Stocker Street Studio project located 3701 West Stocker Street within the South Los Angeles Area Planning Commission (APC) and a Transit Oriented Community (TOC) Tier 3. In compliance with Senate Bill (SB) 743 and the California Environmental Quality Act (CEQA), a vehicle miles traveled (VMT) analysis is required to identify the project's ability to promote the reduction of green-house gas emissions, the access to diverse land uses, and the development of multi-modal networks. The significance of a project's impact in this regard is measured against the VMT thresholds established in LADOT's Transportation Assessment Guidelines (TAG), as described below.

DISCUSSION AND FINDINGS

A. Project Description

The project proposes to remove several general and medical office buildings, which are currently vacant, and construct four production sound stages totaling 256,700 square feet on the block bounded by Don Felipe Drive to the west, Santa Rosalia Drive to the east, and Stocker Street to the south. Stocker Street along the property frontage is within the County of Los Angeles (County) jurisdiction. The City of Los Angeles (City) and the County share the intersection of Santa Rosalia Drive (City)/Angeles Vista Boulevard (County) and Stocker Street. The project will provide: approximately 51,200 square feet of studio space, 57,400 square feet of production and support office space, 123,100 square feet of leasable commercial office space, 6,500 square feet of commercial retail space, and 18,500 square feet of restaurant space; 375 vehicle parking spaces within a four-story parking garage in the northwest corner of the project site with an additional five parking spaces provided in a surface parking lot in the service plaza for a total of 380 vehicle parking spaces; and 82 (50 long-term and 32 short term) bicycle parking spaces. Access to the development would be provided via a full access driveway along Santa Rosalia Drive and a right-turn ingress-only driveway that would be used for service vehicles along Stocker Street. A 122-foot-long passenger loading area will be provided along Santa Rosalia Drive, south of the project driveway. Pedestrian access would be provided via several entrance points along Stocker Street, Don Felipe Drive, and Santa Rosalia Drive as illustrated in **Attachment A**. The project is expected to be completed by 2029.

B. Freeway Safety Analysis

Per LADOT's TAG issued in August 2022 to address Caltrans safety concerns on freeways, the study addresses the project's effects on vehicle queuing on freeway off-ramps. Such an evaluation measures the project's potential to lengthen a forecasted off-ramp queue and create speed differentials between vehicles exiting the freeway off-ramps and vehicles operating on the freeway mainline. The evaluation identified the number of project trips expected to be added to nearby freeway off-ramps serving the project site. It was determined that project traffic at any freeway off-ramp will not exceed 25 peak hour trips. Therefore, a freeway ramp analysis is not required.

C. CEQA Screening Threshold

Prior to accounting for trip reductions resulting from the application of Transportation Demand Management (TDM) strategies, a trip generation analysis was conducted to determine if the project would exceed the net 250 daily vehicle trips screening threshold. Using the City of Los Angeles VMT Calculator tool, which draws upon trip rate estimates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, as well as applying trip generation adjustments when applicable, based on sociodemographic data and the built environment factors of the project's surroundings, it was determined that the project **does** exceed the net 250 daily vehicle trips threshold.

Additionally, the analysis included further discussion of the transportation impact thresholds:

T-1 Conflicting with plans, programs, ordinances, or policies
T-2.1 Causing substantial vehicle miles traveled
T-3 Substantially increasing hazards due to a geometric design feature or incompatible use.

The assessment determined that the project would **not** have a significant transportation impact under Thresholds T-1. A project's impacts per Threshold T-2.1 is determined by using the VMT calculator and is discussed further below. A copy of the VMT Calculator summary report is provided as **Attachment B** to this report. For Threshold T-3, project site access plans were reviewed to ascertain whether any deficiencies would be considered significant and is discussed further below.

D. Transportation Impacts

On July 30, 2019, pursuant to SB 743 and the recent changes to Section 15064.03 of the State's CEQA Guidelines, the City of Los Angeles adopted VMT as criteria in determining transportation impacts under CEQA. The LADOT TAG provide instructions on preparing transportation assessments for land use proposals and defines the significant impact thresholds.

T-2.1 Causing substantial vehicle miles traveled

The LADOT VMT Calculator tool measures project impact in terms of Household VMT per Capita, and Work VMT per Employee. LADOT identified distinct thresholds for significant VMT impacts for each of the seven APC areas in the City. For the South LA APC area, in which the project is located, the following thresholds have been established:

- Household VMT per Capita: 6.0
- Work VMT per Employee: 11.6

As cited in the VMT Analysis report, prepared by KOA, the project proposes to incorporate the TDM strategies of reduced supply by providing 380 of the City Code-required 598 parking spaces per AB 2097 (AB2097 is a California law that prohibits public agencies or cities from imposing a minimum automobile parking requirement on most development projects within a one-half mile radius of a major transit stop), promotions and marketing, ride-share program, include bike parking per Los Angeles Municipal Code (LAMC), include secure bike parking and showers, traffic calming improvements, and pedestrian network improvements as project design features. With the application of these TDM measures, the proposed project is projected to have no Household VMT and a Work VMT of 8.5 per employee. Therefore, it is concluded that implementation of the project would result in no significant VMT impact. A copy of the VMT Calculator summary report is provided as **Attachment B**.

T-3 Substantially increasing hazards due to a geometric design feature or incompatible use
Additional operational analyses were conducted to assess potential concerns of the project driveway and curbside passenger drop-off/pick-up along Santa Rosalia Drive that could lead to hazardous roadway conditions. The analyses included: 1) traffic signal warrant analysis at Santa Rosalia Drive and the project driveway; 2) internal queuing at the parking garage; 3) excessive queueing at Santa Rosalia Drive/Angeles Vista Boulevard and Stocker Street and Crenshaw Boulevard and Stocker Street. Mitigation measures that include TDM Measures and the implementation of intersection improvements at Santa Rosalia Drive/Angeles Vista Boulevard and Stocker Street is expected to improve the operations and reduce safety concerns at this intersection. The mitigation measure at Santa Rosalia Drive/Angeles Vista Boulevard and Stocker Street is further discussed under the Project Requirements section below.

E. Access and Circulation

Vehicle access to the development would be provided via two driveways: a primary full access driveway along Santa Rosalia Drive and a right-turn ingress-only driveway along Stocker Street for service vehicles. Pedestrian access would be provided via several entrance points along Stocker Street, Don Felipe Drive, and Santa Rosalia Drive. Additionally, the project proposes to provide pedestrian plazas at street level connecting to the existing sidewalks. Long term bicycle parking spaces would be located in the parking garage with 50 spaces, and short-term bicycle parking would be located throughout the project site with 16 spaces in the southeast corner (adjacent to the food court), six spaces next to the pedestrian entrance along Santa Rosalia Drive, eight spaces in the pedestrian plaza, and two spaces near the driveway along Stocker Street. Additionally, a 122-foot-long passenger loading area will be provided on Santa Rosalia Drive, south of the Project driveway as illustrated in **Attachment A**.

During preparation of the new CEQA guidelines, the State's Office of Planning and Research stressed that lead agencies can continue to apply traditional operational analysis requirements to inform land use decisions provided that such analyses were outside of the CEQA process. The authority for requiring non-CEQA transportation analysis and requiring improvements to address potential circulation deficiencies, lies in the City of Los Angeles' Site Plan Review authority as established in Section 16.05 of the LAMC. Therefore, LADOT continues to require and review a project's site access, circulation, and operational plan to determine if any access enhancements, transit amenities, intersection improvements, traffic signal upgrades, neighborhood traffic calming, or other improvements are needed.

In accordance with this authority, the project has completed a circulation analysis using a "level of service" screening methodology that indicates that the trips generated by the proposed development may likely result in an adverse circulation condition at the intersection of Santa Rosalia Drive/Angeles Vista Boulevard and Stocker Street. LADOT has reviewed this circulation analysis and determined that it adequately discloses operational concerns. Intersection and pedestrian improvements are discussed further under the Project Requirements section below. A copy of the circulation analysis table that summarizes these potential deficiencies is provided as **Attachment C** to this report. It should be noted that two of the study intersections in this analysis (Palmero Boulevard and Stocker Street, Angeles Vista Boulevard and Stocker Street) are within the jurisdiction of the County.

PROJECT REQUIREMENTS

CEQA-Related Requirements and Considerations

To comply with CEQA, the applicant should be required to implement the following:

T-3 Mitigation Measures

1. Intersection Improvement at Santa Rosalia Drive/Angeles Vista Boulevard and Stocker Street
   - Install a protected-only left-turn phase for the northbound Santa Rosalia Drive/Angeles Vista Boulevard at Stocker Street, which includes restriping the approach from a shared left-through and right-turn lane to a dedicated left-turn lane, a through lane, and a right-turn lane. Restriping of the approach may require the removal of existing on-street parking on both sides of the street.
   - Implement a protected-permissive left-turn phasing for the eastbound and westbound approaches of Stocker Street.
   - Install a dedicated right-turn lane for the southbound approach of Santa Rosalia Drive/Angeles Vista Boulevard.

   These modifications are in accordance with the recommendations outlined in the Traffic Control Report (TCR) issued by the LADOT Southern District office on February 12, 2020 as provided as and illustrated in **Attachment D**. The County reviewed the improvements within their jurisdiction and once more concurred with the improvement on November 21, 2024, as long as the striping modification on the northbound approach meets the County's standards and guidelines. The intersection improvements will be designed to improve safety and operations to the satisfaction of the City and County through the City's Bureau of Engineering's (BOE) B-Permit process.

2. Additional mitigation measures should include:
   - Installation of stop signs or electronic warning devices at site access points
   - Installation of stop-signs and pavement markings internal to the site
   - Installation of devices to augment driver/pedestrian sight lines

Non-CEQA-Related Requirements and Considerations

To comply with transportation and mobility goals and provisions of adopted City plans and ordinances, the applicant should be required to implement the following:

1. Intersection and Pedestrian Improvements

   a. Intersection Improvement at Santa Rosalia Drive/Angeles Vista Boulevard and Stocker Street noted in the CEQA-Related Requirements and Considerations 1a. above.

   b. Replace the existing sidewalks adjacent to the project site and establish a pedestrian plaza within the project area connecting the ground floors to the sidewalks.

   c. Provide a passenger loading zone along Santa Rosalia Drive, south of the project driveway. This zone would comply with the City's BOE's Public Right-of-Way Accessibility Guidelines (PROWAG), incorporating an accessibility ramp and aisle.

   All improvements, enhancements, and associated improvement work within the City of Los Angeles must be **guaranteed** through BOE's B-Permit process, prior to the issuance of any building permits and **completed** prior to the issuance of any certificates of occupancy. Temporary certificates of occupancy may be granted in the event of any delay through no fault of the applicant, provided that, in each case, the applicant has demonstrated reasonable efforts and due diligence to the satisfaction of LADOT. Prior to setting the bond amount, BOE shall require that the developer's engineer or contractor email LADOT's B-Permit Coordinator at ladot.planprocessing@lacity.org to arrange a pre-design meeting to finalize the proposed design needed for the project.

2. Parking Requirements

   The project would provide parking for 380 vehicles and 82 bicycles. The project is eligible for reduced parking under AB 2097. The applicant should check with the Departments of Building and Safety and City Planning on the number of parking spaces required for this project within a TOC Tier 3 and under AB 2097.

3. Highway Dedication and Street Widening Requirements

   Per the Mobility Element of the General Plan, **Stocker Street**, a Boulevard II, would require a 40-foot half-width roadway within a 55-foot half-width right-of-way; and **Santa Rosalia Drive** and **Don Felipe Drive**, both Collector Streets, would require a 20-foot half-width roadway within a 33-foot half-width right-of-way. It should be noted that the project is requesting a waiver of street dedication on Stocker Street and Don Felipe Drive. The applicant should check with the BOE's Land Development Group to determine if there are any other applicable highway dedication, street widening and/or sidewalk requirements for this project.

4. Project Access and Circulation

   The conceptual site plan for the project (see **Attachment A**) shows two driveways: a primary full access driveway along Santa Rosalia Drive and a right-turn ingress-only driveway along Stocker Street for service vehicles. Additionally, a 122-foot-long passenger loading area will be provided on Santa Rosalia Drive, south of the Project driveway. Review of this study does not constitute approval of the dimensions for any new proposed driveway. Review and approval of the driveway should be coordinated with LADOT's Citywide Planning Coordination <ladot.onestop@lacity.org>. In order to minimize and prevent last minute building design changes, the applicant should contact LADOT for driveway width and internal circulation requirements prior to the commencement of building or parking layout design. The applicant should check with City Planning regarding the project's driveway placement and design.

5. Worksite Traffic Control Requirements
LADOT recommends that a construction work site traffic control plan be submitted to LADOT's Citywide Temporary Traffic Control Section or Permit Plan Review Section for review and approval prior to the start of any construction work. Refer to https:/www.ladot.lacity.org/businesses/traffic-engineering-design-plans to determine which section to coordinate review of work site traffic control plan. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. LADOT also recommends that all construction related truck traffic be restricted to off-peak hours to the extent feasible.

6. TDM Ordinance Requirements
The TDM Ordinance (LAMC 12.26 J) is currently being updated. The updated ordinance, which is currently progressing through the City's approval process, will:

- Expand the reach and application of TDM strategies to more land uses and neighborhoods,
- Rely on a broader range of strategies that can be updated to keep pace with technology, and
- Provide flexibility for developments and communities to choose strategies that work best for their neighborhood context.

Although not yet adopted, LADOT recommends that the applicant be subject to the terms of the proposed TDM Ordinance update which is expected to be completed prior to the anticipated construction of this project, if approved.

7. Development Review Fees
Section 19.15 of the LAMC identifies specific fees for traffic study review, condition clearance, and permit issuance. The applicant shall comply with any applicable fees per this ordinance.

If you have any questions, please contact Jose Cardenas of my staff at LADOT Central Development Review <ladot.devreview.cen@lacity.org>.

Attachments

I:\Letters\2025\CEN23-56115_3701 W Stocker St_Stocker Street Creative - Studio_ltr.docx

c: Joanne Kim, Council District 8
Hokchi Chiu, Central District, BOE
Quan Tran, Southern District, DOT
Taimour Tanavoli, Case Management Office, DOT
Daniel Quintana/Stephen Dykstra /Marty Amundson/Julian Garcia/Kent Tsujii/Isuda Esmaeilpour/Mingliang Shi, LA CO DPW
Hillary Mau, KOA

ATTACHMENT A

CEN23-56115_3701 W Stocker St_ Stocker Street Creative - Studio

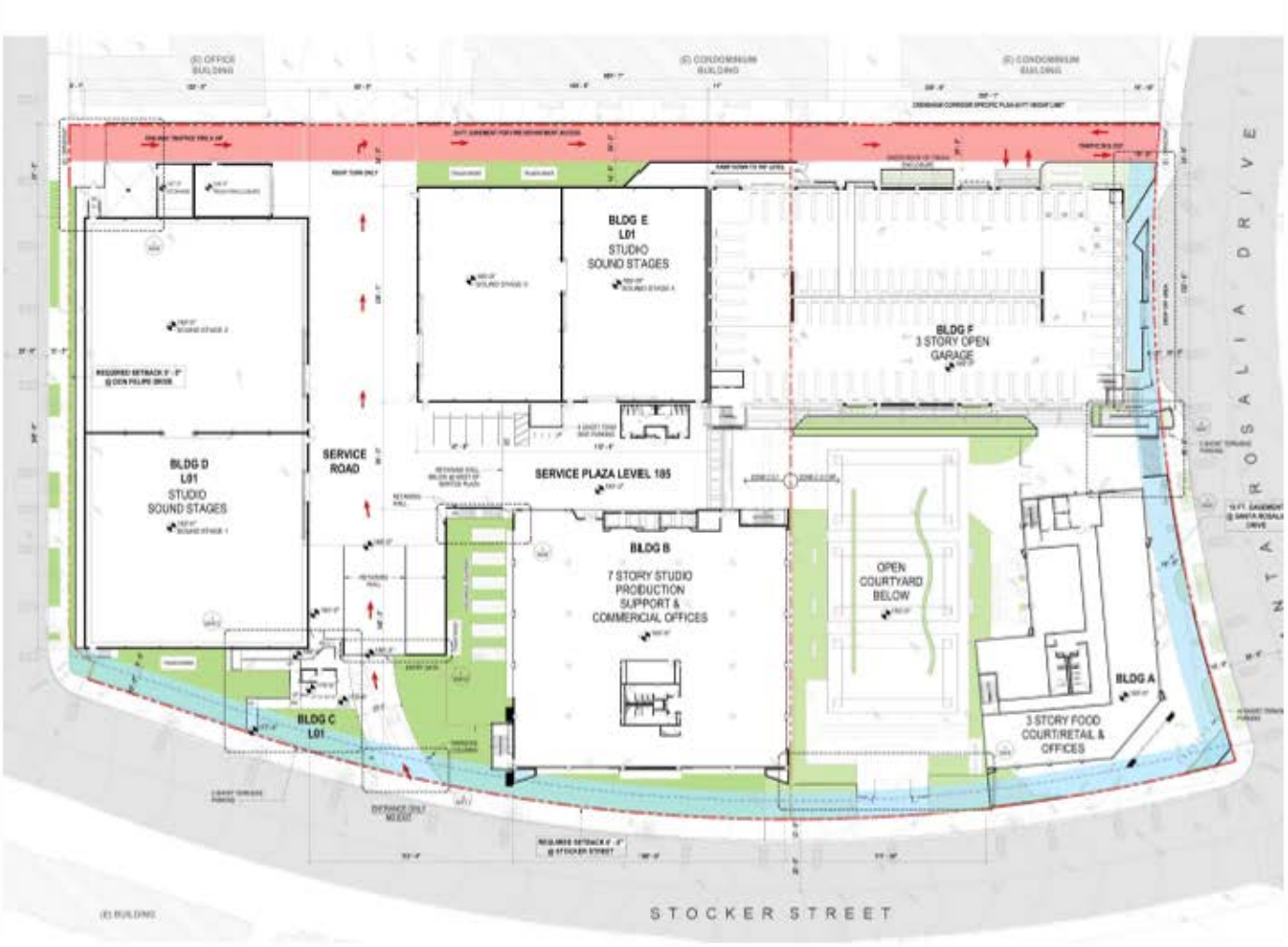


FIGURE 2

CONCEPTUAL PROJECT SITE PLAN

10/12/2023

FN: JC21049 LA 3701 Stocker Studio ⒺR\Docs\MOU\PROJ-SITE PLAN

1100 Corporate Center Dr., Suite 201
Monterey Park, California 91754
Ph (323) 260 4703
WWW.KOACORP.COM

CITY OF LOS ANGELES VMT CALCULATOR Version 1.4

Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: Stocker Street Creative
Scenario: With Project
Address: 3701 W STOCKER ST. 90008



Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

○ Yes ◉ No

Existing Land Use

Land Use Type	Value	Unit
Housing | Single Family		DU

☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Retail | General Retail	6.5	ksf
Retail | General Retail	6.5	ksf
Retail | High-Turnover Sit-Down Restaurant	9.5	ksf
Retail | Quality Restaurant	9	ksf
Office | General Office	123.1	ksf
(custom) Studio | Daily	796	Trips
(custom) Studio | HBW-Attraction Split	52	Percent
(custom) Studio | HBO-Attraction Split	24	Percent
(custom) Studio | NHB-Attraction Split	12	Percent
(custom) Studio | HBW-Production Split	0	Percent
(custom) Studio | HBO-Production Split	0	Percent
(custom) Studio | NHB-Production Split	12	Percent
(custom) Studio | Daily	0	Residents
(custom) Studio | Daily	310	Employee

☑ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
0 Daily Vehicle Trips	3,397 Daily Vehicle Trips
0 Daily VMT	25,018 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	3,397 Net Daily Trips
The net increase in daily VMT ≤ 0	25,018 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	25.000 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

CITY OF LOS ANGELES VMT CALCULATOR Version 1.4

Project Information

Project: Stocker Street Creative

Scenario: With Project

Address: 3701 W STOCKER ST, 90008



Proposed Project Land Use Type	Value	Unit
Retail | General Retail	6.5	ksf
Retail | High-Turnover Sit-Down Restaurant	9.5	ksf
Retail | Quality Restaurant	9	ksf
Office | General Office	123.1	ksf
(custom) Studio | Daily	796	Trips
(custom) Studio | HBW-Attraction Split	52	Percent
(custom) Studio | HBO-Attraction Split	24	Percent
(custom) Studio | NHB-Attraction Split	12	Percent
(custom) Studio | HBW-Production Split	0	Percent
(custom) Studio | HBO-Production Split	0	Percent
(custom) Studio | NHB-Production Split	12	Percent
(custom) Studio | Daily	0	Residents
(custom) Studio | Daily	310	Employees
(custom) Studio | Daily	Non-Retai	Retail/Non-R

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

- A Parking
- B Transit
- C Education & Encouragement
- D Commute Trip Reductions
- E Shared Mobility
- F Bicycle Infrastructure
- G Neighborhood Enhancement

Traffic Calming Improvements

☐ Proposed Prj ☑ Mitigation

25 percent of streets within project with traffic calming improvements

25 percent of intersections within project with traffic calming improvements

Pedestrian Network Improvements

☑ Proposed Prj ☐ Mitigation

within project and connecting off-site

Analysis Results

Proposed Project	With Mitigation
2,689 Daily Vehicle Trips	**2,683** Daily Vehicle Trips
19,425 Daily VMT	**19,376** Daily VMT
0.0 Household VMT per Capita	**0.0** Household VMT per Capita
8.5 Work VMT per Employee	**8.5** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 6.0 15% Below APC	**Household: No** Threshold = 6.0 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

9/27/2024

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

Project Information			
Land Use Type		**Value**	**Units**
Housing	*Single Family*	*0*	*DU*
	Multi Family	*0*	*DU*
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	6.500	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	9.500	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	9.000	ksf
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	123.100	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other	Studio	796	Trips

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

Analysis Results			
Total Employees: 889 Total Population: 0			
Proposed Project		***With Mitigation***	
2,689	**Daily Vehicle Trips**	**2,683**	**Daily Vehicle Trips**
19,425	**Daily VMT**	**19,376**	**Daily VMT**
0	**Household VMT per Capita**	**0**	**Household VMT per Capita**
8.5	**Work VMT per Employee**	**8.5**	**Work VMT per Employee**

Significant VMT Impact?			
APC: South Los Angeles			
Impact Threshold: 15% Below APC Average Household = 6.0 Work = 11.6			
Proposed Project		***With Mitigation***	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	No	Household > 6.0	No
Work > 11.6	No	Work > 11.6	No

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	598	598
		Actual parking provision (spaces)	380	380
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type	Description	Proposed Project	Mitigations
	Reduction in headways (increase in frequency) (%)	*0%*	*0%*

Transit	*Reduce transit headways*	*Existing transit mode share (as a percent of total daily trips) (%)*	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	Employees and residents participating (%)	50%	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type	Description	Proposed Project	Mitigations
Required commute trip reduction program	*Employees participating (%)*	*0%*	*0%*
Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
	Type of program	*0*	*0*

Commute Trip Reductions		*Degree of implementation (low, medium, high)*	*0*	*0*
	Employer sponsored vanpool or shuttle	*Employees eligible (%)*	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	Employees eligible (%)	100%	100%
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	Yes	Yes
	Include secure bike parking and showers	Includes indoor bike parking/lockers, showers, & repair station (Yes/No)	Yes	Yes

Neighborhood Enhancement	Traffic calming improvements	Streets with traffic calming improvements (%)	*0%*	25%
		Intersections with traffic calming improvements (%)	*0%*	25%
	Pedestrian network improvements	Included (within project and connecting off-site/within project only)	within project and connecting off-site	within project and connecting off-site

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Include secure bike parking and showers	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*17%*	*17%*	*29%*	*30%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*16%*
MAX. TDM EFFECT	*17%*	*17%*	*29%*	*30%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*

= Minimum (X%, 1-[(1-A)*(1-B)…])
where X%=

PLACE	*urban*	*75%*
TYPE	compact infill	*40%*
MAX:	*suburban center*	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,…). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	0	0.0%	0	9.0	0	0
Home Based Other Production	0	0.0%	0	5.9	0	0
Non-Home Based Other Production	669	-3.4%	646	7.9	5,285	5,103
Home-Based Work Attraction	1,254	-16.8%	1,043	10.3	12,916	10,743
Home-Based Other Attraction	1,460	-27.3%	1,062	4.5	6,570	4,779
Non-Home Based Other Attraction	669	-3.4%	646	6.8	4,549	4,393

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	-17.0%	0	0	-17.2%	0	0
Home Based Other Production	-17.0%	0	0	-17.2%	0	0
Non-Home Based Other Production	-17.0%	536	4,235	-17.2%	535	4,224
Home-Based Work Attraction	-29.5%	736	7,578	-29.6%	734	7,559
Home-Based Other Attraction	-17.0%	881	3,966	-17.2%	879	3,956
Non-Home Based Other Attraction	-17.0%	536	3,646	-17.2%	535	3,637

MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 889
APC: South Los Angeles

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**0**	**0**
Total Home Based Work Attraction VMT	**7,578**	**7,559**
Total Home Based VMT Per Capita	**0.0**	**0.0**
Total Work Based VMT Per Employee	**8.5**	**8.5**

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ride-share program	0%	0%	15%	15%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Car-share	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

	Home Based Work Production	*Home Based Work Attraction*	*Home Based Other Production*	*Home Based Other Attraction*	*Non-Home Based Other Production*	*Non-Home Based Other Attraction*	*Source*

Table 16: Existing (2024) and Future (2029)Traffic Conditions
Intersection Delay Summary – With TDM Measures + TCR Improvement

	Study Intersections	Peak Hour	Existing (2024) Conditions		Existing (2024) Plus Project Conditions		Change in Delay[3]	Existing (2024) Plus Project + TDM Measures		Change in Delay[3]	Existing (2024) Plus Project + TDM Measures + TCR Improvement		Change in Delay[3]	Future (2029) Without Project Conditions		Future (2029) With Project Conditions		Change in Delay[3]	Future (2029) With Project + TDM Measures		Change in Delay[3]	Future (2029) With Project + TDM Measures + TCR Improvement		Change in Delay[3]
			Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]	
1	Don Felipe Drive & Stocker Street	AM	6.7	A	4.9	A	-1.8	4.9	A	-1.8	-	-	-	7.7	A	5.7	A	-2.0	5.7	A	-2.0	-	-	-
		PM	11.2	B	9.8	A	-1.4	9.8	A	-1.4	-	-	-	12.1	B	10.4	B	-1.7	10.5	B	-1.6	-	-	-
2	Project Driveway & Stocker Street*	AM	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-
		PM	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-
3	Palmero Boulevard & Stocker Street*	AM	21.9	C	22.4	C	0.5	22.3	C	0.4	-	-	-	27.5	D	28.3	D	0.8	28.2	D	0.7	-	-	-
		PM	19.9	C	20.1	C	0.2	20.0	C	0.1	-	-	-	23.1	C	23.4	C	0.3	23.3	C	0.2	-	-	-
4	Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	19.0	B	20.8	C	1.8	20.2	C	1.2	26.6	C	7.6	25.6	C	35.7	D	10.1	32.8	C	7.2	30.6	C	5.0
		PM	16.0	B	18.6	B	2.6	18.2	B	2.2	23.6	C	7.6	16.7	B	21.3	C	4.6	19.7	B	3.0	25.8	C	9.1
5	Santa Rosalia Drive & Project Driveway*	AM	-	-	19.3	C	19.3	16.8	C	16.8	-	-	-	-	-	23.6	C	23.6	19.3	C	19.3	-	-	-
		PM	-	-	49.0	**E**	49.0	27.5	D	27.5	-	-	-	-	-	69.2	**F**	69.2	33.3	D	33.3	-	-	-
6	Santa Rosalia Drive & Marlton Avenue	AM	15.0	B	15.0	B	0.0	15.0	B	0.0	-	-	-	15.0	B	15.0	B	0.0	15.0	B	0.0	-	-	-
		PM	14.8	B	15.0	B	0.2	14.9	B	0.1	-	-	-	15.0	B	15.2	B	0.2	15.1	B	0.1	-	-	-
7	Crenshaw Boulevard & Stocker Street[4]	AM	30.2	C	31.6	C	1.4	30.7	C	0.5	-	-	-	52.7	D	56.6	**E**	3.9	52.9	D	0.2	-	-	-
		PM	37.2	D	40.1	D	2.9	39.1	D	1.9	-	-	-	104.7	**F**	111.9	**F**	7.2	109.8	**F**	5.1	-	-	-

*Unsignalized Intersection- Delay is based on higher delay at stop approach

[1] Delay in seconds

[2] *LOS = Level of Service*

[3] Change in delay reported in seconds

[4] HCM6th Edition methodology does not support Non-NEMA phasing, therefore, HCM2000 results reported.

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
Departmental Correspondence

TRAFFIC
CONTROL
REPORT

February 12, 2020
8 – Southern – SR 93670,
107590, 118896, 136077
Angeles Vista Bl, Santa Rosalia
Dr & Stocker St

Left Turn Phasing

DETERMINATION

1. That protected-only left-turn phasing with the appropriate signal indications be authorized for installation for northbound Angeles Vista Boulevard at the intersection of Stocker Street (LAMC Section 80.07).
2. That protected-permissive left-turn phasing with the appropriate signal indications be authorized for installation for eastbound and westbound Stocker Street at the intersection of Angeles Vista Boulevard and Santa Rosalia Drive (LAMC Section 80.07).
3. That the traffic signal modification be added to the Department's list of approved, but unfunded projects, until such time that funding for the cost of construction can be identified.

DISCUSSION

The Department of Transportation received several requests regarding signal timing, congestion, and striping at the intersection of Angeles Vista Boulevard, Santa Rosalia Drive and Stocker Street. Southbound Santa Rosalia Drive has a shared through-right lane at Stocker Street, and many requesters asked for an exclusive right-turn only lane.

A comprehensive traffic engineering study for this intersection has been completed. The study included an investigation of the physical conditions and existing traffic controls, a review of traffic volumes, an analysis of collisions reported to the Police Department for the previous five years, a review of the complaints at or near the intersection, and observations of traffic movements through the intersection.

Stocker Street is designated Boulevard II in the City of Los Angeles, and is striped with two lane of traffic in each direction, left turn channelization, and a right turn pocket for westbound Stocker Street at Santa Rosalia Drive. The County of Los Angeles has established a 40 mph speed limit on Stocker Street west of Santa Rosalia Drive. Santa Rosalia Drive is a designated Collector Street in the City of Los Angeles and changes name to Angeles Vista Boulevard at Stocker Street. Santa Rosalia Drive is striped with one northbound travel lane, two southbound left-turn lanes, and a shared through and right-turn lane. Angeles Vista Boulevard is striped with one lane in each direction. The boundary with the County of Los Angeles is at the south and west legs of the intersection. The County of Los Angeles was contacted regarding the results of the study, and concur with the recommendations.

Results of the engineering study indicate that this location satisfies the "Case A.1(c): Geometry" for protected-only left-turn phasing for northbound Angeles Vista Boulevard. Eastbound Stocker Street satisfies the "Case C.2: Traffic Volume", for protected-permissive left-turn phasing. Westbound Stocker Street satisfies the "Case C.8: Opposing Direction" for protected-permissive left-turn phasing. The installation of protected-only and protected-permissive left-turn phasing, as described in the Determination, and striping changes recommended by the District Office and Design Division are therefore recommended to improve safety and operations at the intersection.

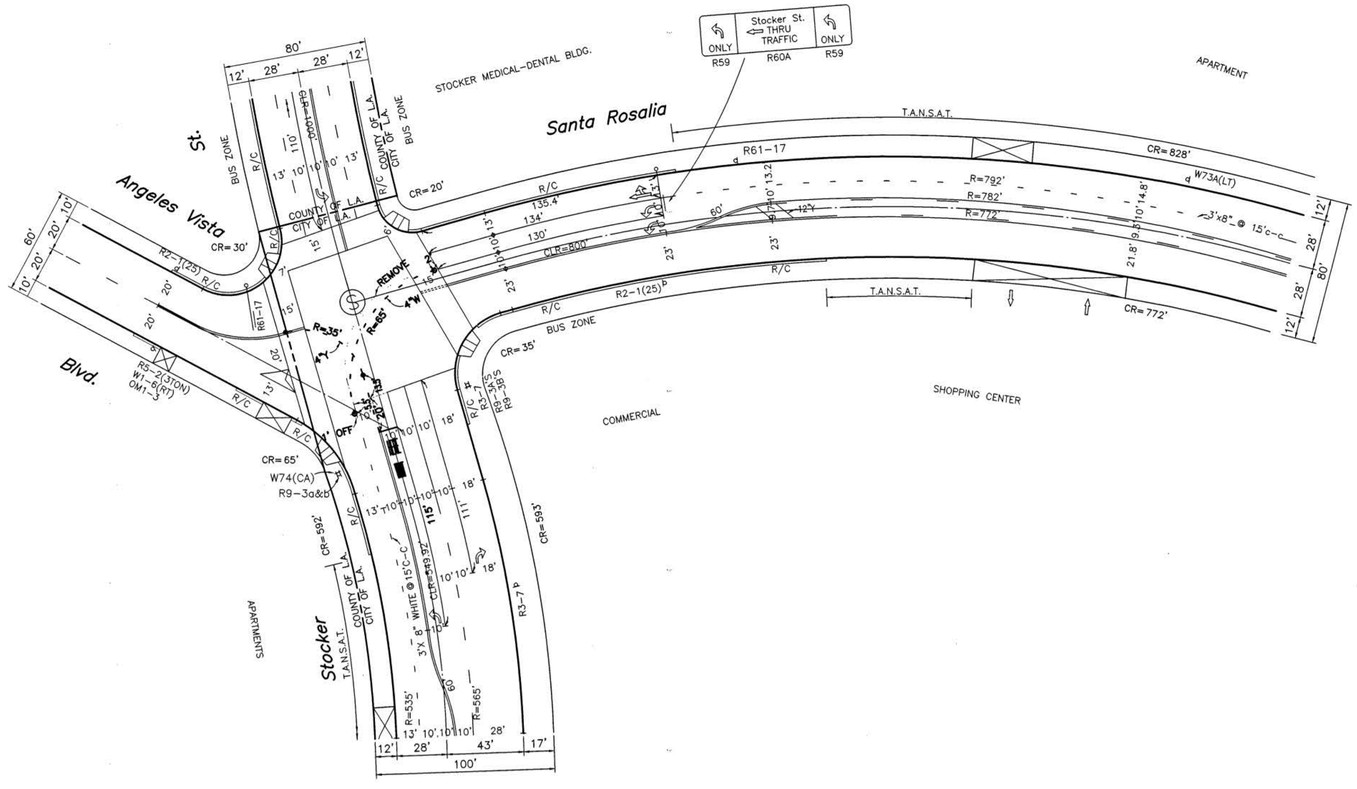
Recommended by:

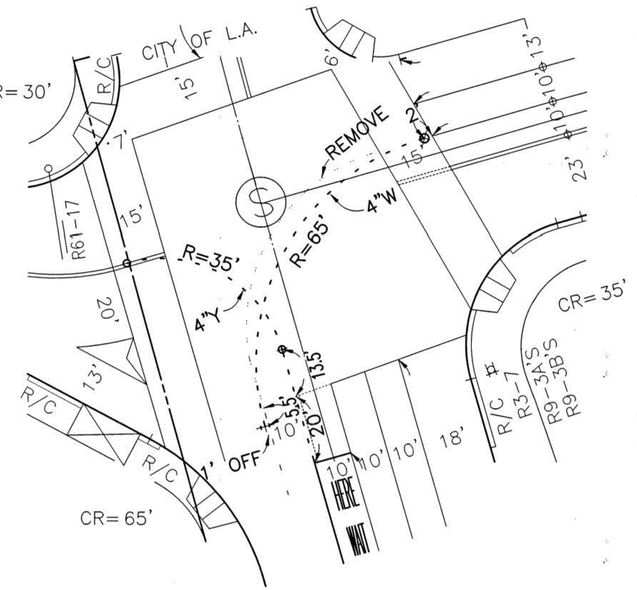
CRYSTAL KILLIAN, P.E.
Transportation Engineer
Southern District

Approved by:

ROY W. KIM, P.E.
Senior Transportation Engineer
East Area District Operations

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DETAIL

LEGEND

1. EXISTING STRIPING & MARKINGS TO REMAIN
   EXISTING STRIPING & MARKINGS TO BE REMOVED
   PROPOSED STRIPING & MARKINGS
2. P EXISTING SIGNS ▸ PROPOSED SIGNS
3. (S) SIGNALIZED INTERSECTION
4. R/C EXISTING RED CURB
   R/C PROPOSED RED CURB

NOTES

1. LENGTH OF DESIGN : 500' ±
2. PAINT REMOVAL REQUIRED.

SCALE: 1"=40'

1"=20' ORIGINAL MAP SCALE 1"=40'
20 10 0 20 40 60 80 100 FEET
40 20 0 40 80 120 160 200 FEET

DISTRICT INITIATED

SUBMITTED Dec. 4 20 13
T. Conger
Transportation Engineer

APPROVED Dec 5 20 13
Manoochehr Adhami
Senior Transportation Engineer

REGISTERED PROFESSIONAL ENGINEER MANOOCHEHR ADHAMI No. 69854 CIVIL STATE OF CALIFORNIA

INSTALLATION DATES

MARKOUT BEGAN:

MARKOUT COMPLETED:

STRIPING COMPLETED:

References:
A-2962 A-4915
A-1314 FB114-185

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
JON KIRK MUKRI, INTERIM GENERAL MANAGER

SANTA ROSALIA DRIVE
AT STOCKER STREET

Thomas Guide	District	PROJECT NO.	DRAWING NO.	
673-D2,E3	S	GFUND000	A-6260	1/1

SCALES HORIZ. 1"=
VERT. 1"=

SHEET

INDEX NUMBER

NO.	REVISION DESCRIPTION	DATE	BY
	T.E./SR. T.E. PRINCIPAL T.E.		
	DISTRICT BIKEWAYS SUPERVISOR	11/21/2013	EIF
	DESIGN CHECK BASE	12/03/2013	CK

R1-1 STOP
R2-1 SPEED LIMIT 25
R3-7 RIGHT LANE MUST TURN RIGHT
R9-3a
R61-17(CA) ONLY ONLY
R9-3b USE CROSSWALK
W1-6
W3-3
W4-2
OM1-3 (YELLOW)
S1-1
W73A(CA) LEFT LANE TURNS LEFT AHEAD
S4-3 SCHOOL
W74(CA) THRU TRAFFIC MERGE LEFT

TRANSPORTATION ASSESSMENT
City of Los Angeles

STOCKER STREET STUDIOS PROJECT

3701 STOCKER STREET
LOS ANGELES, CA 90008

October 8, 2024

Prepared For:
Pantheon Business Consulting, Inc.
9461 Charleville Road, Suite 462
Beverly Hills, CA 90212

KAJC21049

Prepared by:

A LOCHNER COMPANY
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1. INTRODUCTION

KOA Corporation has prepared this Transportation Assessment (TA) to evaluate the potential transportation impacts of the Stocker Street Studios Project (the "Project"), a proposed general office use and sound stage/studio space. The Project will consist of four production sound stages totaling 51,200 square-feet of studio space, 57,400 square-feet of production and support office space, 123,100 square-feet of leasable commercial office space, 6,500 square-feet of commercial retail space, and 18,500 square-feet of restaurant space. The Project site currently contains several general office and medical office buildings which are vacant, which will be removed in conjunction with Project development.

The Project site is located at the northwest corner of Stocker Street and Santa Rosalia Drive, at 3701 Stocker Street, within the West Adams/Baldwin Hills/Leimert Community Plan Area of the City of Los Angeles (the "City"). The site is bounded by commercial uses to the north, Stocker Street to the south, Santa Rosalia Drive to the east, and Don Felipe Drive to the west. The location of the Project site is shown in Figure 1, Project Site Vicinity and Study Intersections.

Project automobile parking will be provided via an on-site parking garage in the northwest corner of the Project site with an additional five parking spaces in the service plaza. A total of 380 automobile parking spaces will be provided, including 22 electric vehicle spaces, three van accessible spaces, and six Americans with Disability Act (ADA) spaces. Project vehicular access will be provided via two driveways. Project vehicular access will be via two driveways, one on Santa Rosalia Drive and the second driveway on Stocker Street.

This analysis was prepared in accordance with the assumptions, methodologies, and procedures outlined in the City of Los Angeles Department of Transportation (LADOT) *Transportation Assessment Guidelines* (the "TAG") adopted in August 2022. The detailed assumptions and scope of the analysis for the specific analysis that are contained in this report were presented to and approved by the Los Angeles County (the "LA County") and LADOT in a TA Memorandum of Understanding (MOU), signed and approved on March 14, 2024. The approved MOU is included in Appendix A of this report.

The MOU outlined the preparation of a detailed analysis of potential Project transportation impacts based on California Environmental Quality Act (CEQA) guidelines, as well as an evaluation of potential non-CEQA related Project transportation effects. The Project study area for the operational analysis was determined as part of the MOU and is discussed later in this report. The study area contains the following seven intersections, which are also depicted in Figure 1:

<u>Study Intersections</u>

1. Don Felipe Drive & Stocker Street (signalized)
2. Project Driveway & Stocker Street (unsignalized)
3. Palmero Boulevard & Stocker Street (unsignalized)
4. Santa Rosalia Drive & Marlton Avenue (signalized)
5. Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street (signalized)
6. Santa Rosalia Drive & Project Driveway (unsignalized)
7. Crenshaw Boulevard & Stocker Street (signalized)

These locations include key intersections along the primary access routes to and from the site and are those locations expected to be most directly affected by Project traffic. This report presents the results and conclusions of the evaluation of the CEQA transportation impacts and non-CEQA transportation effects of the Project. The operational analysis includes the following traffic conditions:

- Existing (2024) traffic volumes
- Existing (2024) Plus Project traffic volumes
- Future (2029) Without Project traffic volumes
- Future (2029) With Project traffic volumes



FIGURE 1

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PROJECT SITE VICINITY AND PROPOSED STUDY INTERSECTIONS

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2. PROJECT DESCRIPTION

Under consideration is the Stocker Street Studios Project, to be located at the northwest corner of Stocker Street and Santa Rosalia Drive in the West Adams/Baldwin Hills/Leimert Community Plan Area of the City. The site is generally bounded by commercial uses to the north, Stocker Street to the south, Santa Rosalia Drive to the east, and Don Felipe Drive to the west. Within the Project vicinity, commercial uses line Santa Rosalia Drive, Crenshaw Boulevard, and Stocker Street to the east. Single and multifamily residential buildings are located along Stocker Street to the west and along the nearby local roadways and collector streets surrounding the Project site.

The Project site contains several general office and medical office buildings which are vacant and will be removed in conjunction with Project development. The Project proposes four production sound stages totaling 51,200 square-feet of studio space, 57,000 square-feet of production and support office space, 123,100 square-feet of leasable commercial office space, 6,500 square-feet of commercial retail space, and 18,500 square-feet of restaurant space.

Figures 2 illustrates the ground floor of the Conceptual Project Site Plan. On-site automobile parking will be provided via a four-story parking garage in the northwest corner of the Project site with an additional five parking spaces provided in a surface parking lot in the service plaza. In total, the Project automobile parking will provide 380 automobile parking spaces, including 22 electric vehicle spaces, three van accessible spaces, and six ADA spaces.

The primary driveway will provide full access and serve the majority of vehicular traffic off of Santa Rosalia Drive. A service driveway will be provided on Stocker Street for service vehicles with inbound access only.

In addition, the Project will provide 50 long-term and 32 short-term bicycle parking spaces, which exceeds the Los Angeles Municipal Code (LAMC) Section 12.21.A.16 bicycle parking requirements which require 41 long-term and 27 short-term bicycle parking spaces. All 50 long-term bicycle parking will be provided in the parking garage and short term bicycle parking will be provided with 16 spaces at the southeast corner of the Project site adjacent to food court/retail/offices, 6 spaces provided next to the pedestrian entrance along Santa Rosalia Drive, 2 spaces near the driveway along Stocker Street, and 8 spaces in the service level plaza.

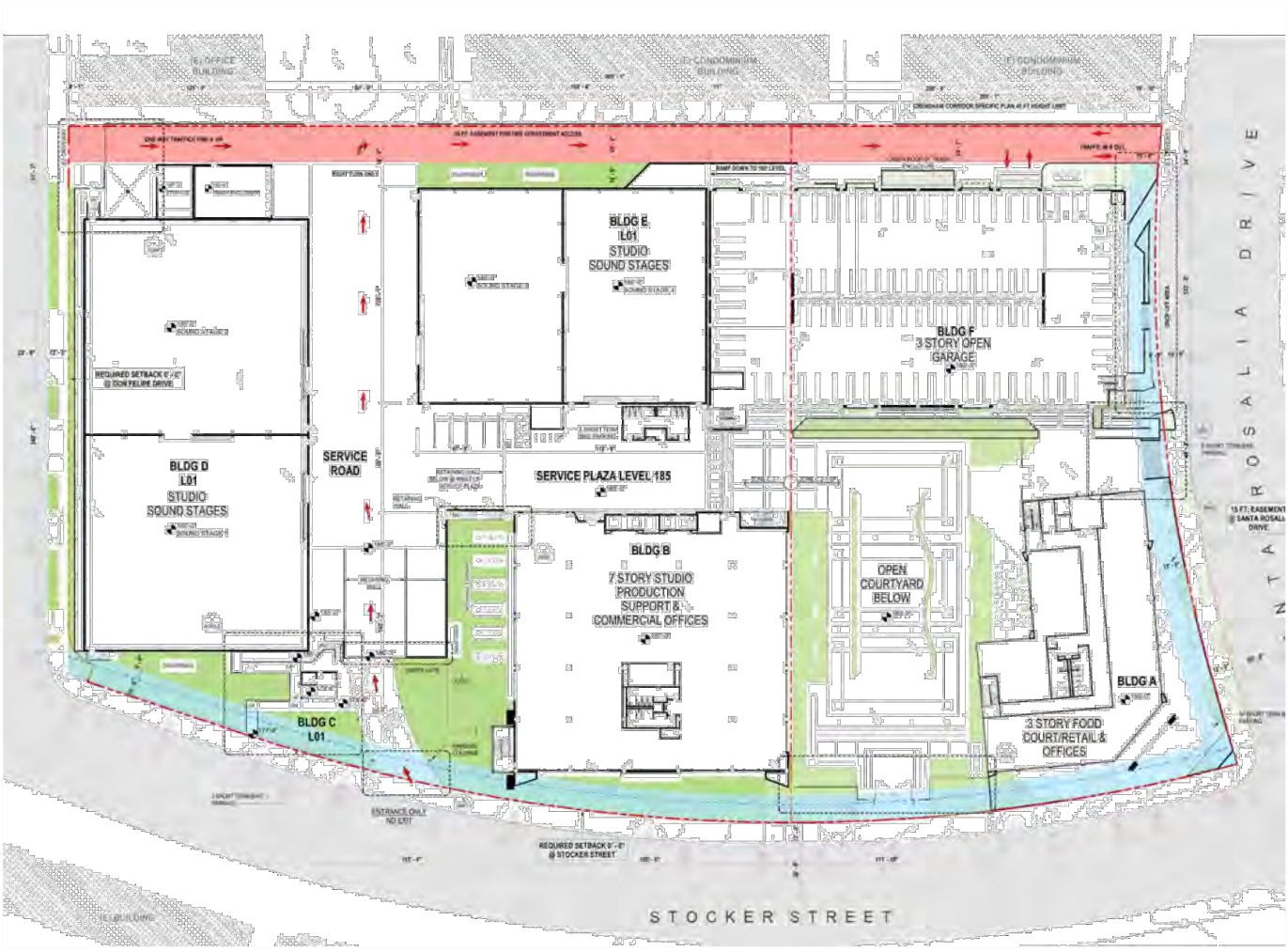


FIGURE 2

CONCEPTUAL PROJECT SITE PLAN

10/12/2023
FN: JC21049 LA 3701 Stocker Studio EIR\Docs\MOU\PROJ-SITE PLAN

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3. ENVIRONMENTAL SETTING

The Project site is surrounded by an urban area dominated by commercial uses along major arterials. Residential uses within the Project vicinity are located in all directions, along local streets and collector roadways outside of the major commercial corridors. The Baldwin Hills Crenshaw Plaza is located across Santa Rosalia Drive from the Project site. Leimert Park Plaza and Reuben Ingold Park are located approximately one-quarter mile respectively, southeast, and southwest of the Project.

The Project site and surrounding uses in the West Adams/Baldwin Hills/Leimert neighborhood are well served by Freeways, Boulevards, Avenues, Collectors and Local Streets. Freeways include the Santa Monica (Interstate 10 [I-10]) Freeway that is located approximately two miles north of the Project site, which has interchanges at South La Brea Avenue and Crenshaw Boulevard. Within the study area, the primary roadways and roadway classifications, according to the City of Los Angeles Mobility Plan 2035, include Stocker Street designated as a Boulevard II/Collector, Crenshaw Boulevard designated as a Modified Boulevard II/Avenue I, and Santa Rosalia Drive, Marlton Avenue, and Don Felipe Drive identified as Collector Streets. Primary roadways within the jurisdiction of the County of Los Angeles, Palmero Boulevard and Angeles Vista Boulevard are classified as local streets per the Los Angeles County Master Plan of Highways. The Project site is accessible via a network of sidewalks to public transportation with bus stops provided at the intersections of Stocker Street and Don Felipe Drive and Stocker Street and Santa Rosalia Drive. The Project area transportation facilities are described below in more detail.

3.1 EXISTING ROADWAY NETWORK

Regional access to the Project vicinity is provided by an extensive network that includes freeways, arterials, collectors, and local streets. The I-10 Freeway is located to the north of the Project site. This freeway provides convenient access to the larger, regional roadway network. Surface streets within the Project study area include Stocker Street, Crenshaw Boulevard, Santa Rosalia Drive, Marlton Avenue, and Don Felipe Drive. These facilities are described in greater detail below.

3.1.1 EXISTING FREEWAYS

The Santa Monica Freeway (I-10) extends eastward from its origin in the City of Santa Monica, past the Project study area and across the country as a main southern east-west interstate. The Santa Monica Freeway is located approximately two miles north of the Project site, where it generally provides four mainline travel lanes per direction, with auxiliary lanes provided between certain ramp locations. Based on the most currently available Caltrans traffic volume data, this freeway carries average daily traffic volumes of approximately 281,000 - 307,000 vehicles between its interchange with La Brea Avenue and Crenshaw Boulevard. The nearest eastbound westbound ramp connections are provided La Brea Avenue and Crenshaw Boulevard.

3.1.2 EXISTING HIGHWAYS AND STREETS

Stocker Street is an east-west roadway that forms the southern boundary of the Project site. The roadway extends between Los Angeles County to the City Baldwin Hills/Crenshaw neighborhood between La Brea Avenue and Stocker Place. The roadway is designated as a Boulevard II west of Crenshaw Boulevard and Collector Street east in the Mobility Plan 2035 along its extent within the City. Within the study area, Stocker

Street provides two travel lanes in each direction with a center left-turn lane and left-turn channelization at some intersections. On-street parking is not permitted along both sides of Stocker Street.

Crenshaw Boulevard is a north-south roadway that extends through the City continuously from its southern terminus near the Portuguese Bend Reserve in Rancho Palos Verdes to its northern terminus at Wilshire Boulevard. The roadway is designated as an Avenue I south of Stocker Street and Modified Boulevard II between Stocker and Martin Luther King Jr. Boulevard. Crenshaw Boulevard is located just east of the Project site. This roadway provides three travel lanes in each direction in the vicinity of the Project, with on-street parking generally permitted along both sides.

Santa Rosalia Drive/Angeles Vista Boulevard is a north-south roadway designated as a Collector Street north of Stocker Street in the Mobility Plan and a local street per the Los Angeles County Master Plan of Highways. This roadway extends through the neighborhood continuously from its northern terminus at Coliseum Street to its southern terminus at Slauson Avenue where the roadway connects to Buckler Avenue. Santa Rosalia Drive forms the eastern boundary of the Project site. North of Stocker Street, this roadway generally provides two travel lanes in each direction. South of Stocker Street, this roadway generally provides one travel lane in each direction. On-street parking is generally permitted along both sides, within the vicinity of the Project.

Don Felipe Drive is a generally east-west roadway designated as a Collector Street in the Mobility Plan. This roadway extends through the neighborhood parallel to Stocker Street continuously from its western terminus at Don Zaremento Drive to its eastern terminus at Stocker Street. Don Felipe Drive forms the western boundary of the Project site. This roadway provides one travel lane in each direction in the vicinity of the Project, with on-street parking generally permitted along both sides.

Marlton Avenue is a northeast-southwest roadway designated as a Collector Street in the Mobility Plan. This roadway extends through the neighborhood continuously from its southern terminus at Don Felipe Drive to its northern terminus at W. 39th Street. Marlton Avenue is located just north of the Project site. This roadway provides one travel lane in each direction in the vicinity of the Project, with on-street parking generally permitted along both sides.

Palmero Boulevard is a north-south roadway designated as a local street in the Los Angeles County Master Plan of Highways. This roadway extends through the neighborhood continuously from its northern terminus at Stocker Street to its southern terminus at Fairway Boulevard. Palmero Boulevard is located directly south of the Project site. This roadway provides one travel lane in each direction in the vicinity of the Project, with on-street parking generally permitted along both sides.

3.2 EXISTING PUBLIC TRANSIT

The roadways adjacent to the Project site are served by transit lines managed by the Los Angeles County Metropolitan Transportation Authority ("Metro") and Los Angeles Department of Transportation (LADOT) Transit. These transit lines provide a variety of bus and rail services. The Metro Line K Martin Luther King Jr. Station is located approximately 0.30-miles to the east of the Project site on Crenshaw Boulevard. When transfer opportunities are considered, the bus services outlined below provide further access to Metro rail services and numerous other bus routes served by Metro, the LADOT, and municipal bus operators. The transit services within a reasonable/comfortable walking distance (approximately one-quarter mile) of the Project site are shown in Figure 3 and described below.

METRO

K-Line provides southeast-northwest rail transit service from Downtown Los Angeles Union Station to North Hollywood. Along the route, the train travels through the Hollywood neighborhood of the City of Los Angeles with a station at N. Vermont Avenue and Sunset Boulevard near the Project. In the vicinity of the Project, Maritn Luther King Jr. Station and Leimert Park Station are provided along Crenshaw Boulevard. The B-Line generally provides daily service, with headways of approximately 10 minutes during the weekday AM and PM peak periods and 20 minutes on weekends and holidays.

Line 40 provides north-south bus service mainly along Crenshaw Boulevard, Martin Luther King Jr. Boulevard, South Broadway Street, East Florence Avenue, and Hawthorne Boulevard. Along the route, buses travel through Redondo Beach, Hawthorne, Hyde Park, Leimert Park, and the Downtown Los Angeles neighborhoods in the City. In the vicinity of the Project, buses travel north-south along Crenshaw Boulevard, with bus stops provided in both directions at the intersections with Vernon Avenue, 43rd Street, and Martin Luther King Jr. Boulevard. Line 40 generally provides daily service, with headways of approximately 10 minutes during the weekday AM and PM peak periods and 15 minutes on weekends and holidays.

Line 102 provides northeast-southwest local bus service mainly along Stocker Street and La Tijera Boulevard. Along the route, buses travel through the South Gate and Leimert Park neighborhoods of the City of Los Angeles and terminates at LAX. In the vicinity of the Project, buses travel east-west along Stocker Street, with bus stops provided in both directions at the intersection with Crenshaw Boulevard, Angeles Vista, Don Felipe Drive, and Presidio Drive. Line 102 generally provides daily service, with headways of approximately one hour during the weekday AM and PM peak periods and on weekends and holidays.

Line 105 provides east-west local bus service mainly along Vernon Avenue and north-south service mainly along La Cienega Boulevard. Along the route, buses travel through West Hollywood, Beverly Hills, Los Angeles, Leimert Park, and Vernon. In the vicinity of the Project, buses travel east-west along Martin Luther King Jr. Boulevard with bus stops at the intersections with Crenshaw Boulevard, Hillcrest Drive, Coliseum Street, Nicolet Avenue, and Obama Boulevard. In the Project vicinity, buses travel north-south along Santa Rosalia Drive as well, with bus stops at the intersections with Marlton Avenue, Buckingham Road, West Boulevard, and Hillcrest Drive. Line 105 generally provides daily service, with headways of approximately 10 minutes during the weekday AM and PM peak periods and 15 minutes on weekends and holidays.

Line 210 provides north-south local bus service mainly along Crenshaw Boulevard. Along the route, buses travel through Hollywood, Koreatown, Country Club Park, Jefferson Park, Inglewood, Hawthorne, Torrance, and Redondo Beach. In the vicinity of the Project, buses travel north-south along Crenshaw Boulevard, with bus stops provided in both directions at the intersection with 39th Street, Martin Luther King Jr. Boulevard, Homeland Drive, and Vernon Avenue. Line 210 generally provides daily service, with headways of approximately 10 minutes during the weekday AM and PM peak periods and on weekends and holidays.

LADOT

The *Crenshaw* route provides clockwise and counterclockwise local bus service mainly along Coliseum Street and Crenshaw Boulevard. Along the route, buses travel through the Crenshaw and Baldwin Hills

neighborhoods of the City of Los Angeles. In the vicinity of the Project, buses travel north-south along Santa Rosalia Drive, with bus stops provided in both directions at the intersection with Stocker Street, Medical Plaza, Marlton Avenue, and Buckingham Road. Additionally, buses travel north-south along Crenshaw Boulevard with bus stops provided in both directions at the intersections with Stocker Street, Martin Luther King Jr. Boulevard. An additional bus stop in the Project vicinity with bus stops provided in both directions is located at the intersection of Martin Luther King Jr. Boulevard and Magic Johnson Theater. This route generally provides daily service, with headways of approximately 20 minutes during the weekday AM and PM peak periods and on weekends and holidays.

The ***Leimert/Slauson*** route provides clockwise and counterclockwise bus service mainly along Martin Luther King Jr. Boulevard, Vernon Avenue, 54th Street, and Crenshaw Boulevard between the Crenshaw, Leimert Park, and Vermont Square neighborhoods of the City of Los Angeles. In the vicinity of the Project, buses run north-south along Crenshaw Boulevard, with bus stops provided in both directions at the intersections Homeland Drive, Stocker Street, and Martin Luther King Jr. Boulevard. An additional bus stop in the Project vicinity with bus stops provided in both directions is located at the intersection of Martin Luther King Jr. Boulevard and Magic Johnson Theater. This route generally provides daily service with headways of approximately 25 minutes during the weekday AM and PM peak periods and on weekends and holidays.

The ***Midtown*** route provides north-south bus service mainly along Crenshaw Boulevard, Western Avenue, West Boulevard, Adams Boulevard, and Washington Boulevard between Leimert Park and Vineyard. Along the route, buses travel through Leimert Park, Crenshaw, Jefferson Park, Western Heights, Mid City, and Vineyard neighborhoods of the City of Los Angeles. In the vicinity of the Project, buses run east-west along Crenshaw Boulevard, with bus stops provided in both directions at the intersections with Martin Luther King Jr. Boulevard and an intersection at Martin Luther King Jr. Boulevard and Magic Johnson Theater. This Route generally provides daily service 30 minutes during the weekday AM and PM peak periods and on weekends and holidays.

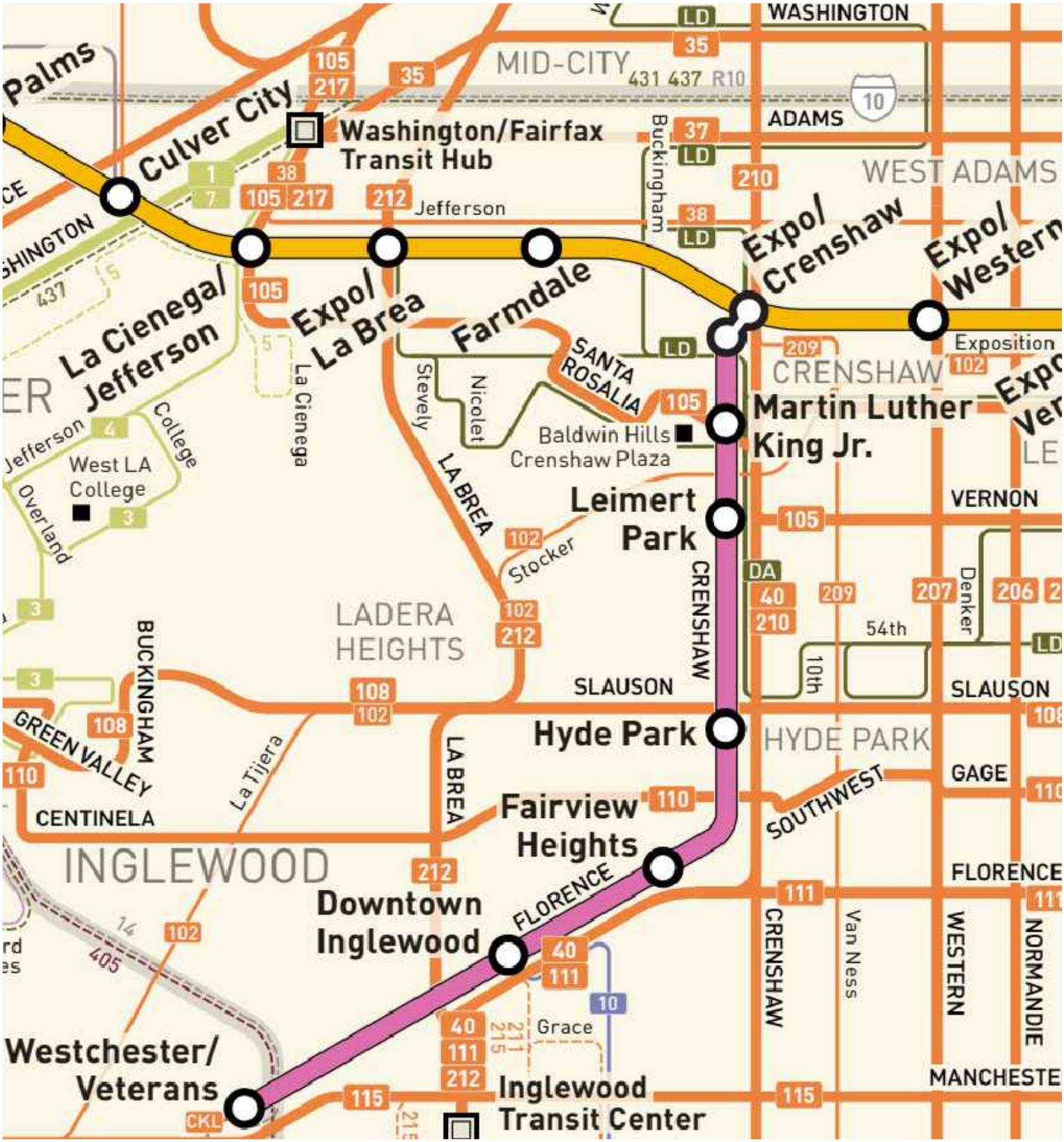


FIGURE 3

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EXISTING PUBLIC TRANSIT SERVICE

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4. CEQA ANALYSIS OF TRANSPORTATION IMPACTS

Following the passage of Senate Bill 743 (SB 743), the State of California's Governor's Office of Planning and Research (OPR) was tasked with developing new guidelines for evaluating transportation impacts under CEQA. These guidelines are intended to promote the reduction of greenhouse gas emissions and develop multimodal and diverse transportation networks by shifting the transportation performance metric from automobile delay and level of service (LOS) to vehicle miles traveled (VMT). As a result, OPR determined that under the proposed update to the CEQA guidelines, VMT would be established as the primary metric for evaluating environmental and transportation impacts.

In response to the updates to the CEQA guidelines, LADOT updated the City's TAG in July 2020 and August 2022 to conform to the requirements of SB 743. The TAG replaced the *Transportation Impact Studies Guidelines* and shifted the performance metric for evaluating transportation impacts under the CEQA from LOS to VMT for studies completed within the City. The TAG establishes thresholds to identify development projects that would conflict with the updated CEQA guidelines.

As part of the TAG update, the LADOT identified three significance thresholds to determine if a development project would result in transportation impacts under the updated CEQA guidelines. The development project would have a significant impact should any of the following be true:

1. The development project would conflict with the City's plans, programs, ordinances, or policies.
2. The development project would cause substantial VMT.
3. The development project would substantially increase hazards due to a geometric design feature or incompatible use(s).

An evaluation of the Project's potential impacts under these three metrics follows the updated TAG and is presented in the following sections.

4.1 CONFLICTING WITH PLANS, PROGRAMS, ORDINANCES, OR POLICIES (THRESHOLD T-1)

In line with the City's efforts to achieve a transportation system that meets the needs of all roadway users, the City has adopted numerous transportation-related plans and policies that promote safety for motorists, pedestrians, bicyclists, and transit riders. For the goals of these policies to be fully realized, it is paramount that development projects align with these plans and policies. For this reason, the updated TAG establishes the following threshold to ensure that proposed development projects contribute to achieving an accessible and sustainable transportation network.

> *Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?*

The TAG has also established three screening criteria for determining which development projects are required to assess compliance with the City's plans, programs, ordinances, and policies. If any of the criteria are met, a compliance assessment is required. The criteria are listed below:

1. The development project requires a discretionary action that requires the decision maker to find that the decision substantially conforms to the purpose, intent, and provisions of the General Plan.
2. The development project is known to directly conflict with a transportation plan, policy, or program adopted to support multi-modal transportation options or public safety.
3. The development project is proposing to, or is required to, make modifications to the public right-of-way (e.g., street dedications and/or improvements in the right-of-way, reconfigurations of the curb line, etc.).

Based on the above screening criteria, the Project would meet the following screening questions:

- The Project requires a discretionary action.
- The Project proposes to make modifications to the public right-of-way.

Therefore, the Project's compliance with the City's plans and policies will need to be assessed and is discussed in further detail below.

The review of the applicable plans and policies included the Mobility Plan 2035, Plan for A Healthy Los Angeles, West Adams – Baldwin Hills – Leimert Park Community Plan, Crenshaw Corridor Specific Plan, AB 2097, Los Angeles Vision Zero Plan, Citywide Design Guidelines, LAMC, Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS), and City Planning Department's Walkability Checklist. These are discussed in further detail below. Additionally, Appendix B includes the LADOT Attachment D: Plan Consistency Worksheet (the "Plan Worksheet") that outlines general questions that assist in the determination of whether or not a development project conflicts with a plan, policy, or program.

Based on the reviews, the Project will support and not preclude the implementation of the City's transportation-related goals and policies, as explained below. Therefore, the Project will not have a significant impact regarding compliance with the City's plans, programs, ordinances, or policies. The Project is also not expected to contribute to a cumulative impact related to implementation of the City's transportation-related goals and policies, as there are no related development projects in the direct Project vicinity that could affect local policy compliance.

4.1.1 MOBILITY PLAN 2035

The City's Mobility Plan 2035 identified five goals, which includes the goals and policies of the City of Los Angeles General Plan and Bicycle Plan, which include:

- *Safety First*
- *Access for All Angelenos*
- *World Class Infrastructure*
- *Collaboration, Communication and Informed Choices, and*
- *Clean Environments and Healthy Communities*

These goals contain objectives and policies to measure and achieve the goals laid out in the plan. Plan Worksheet provided in Appendix B outlines the applicable policies specific to the Mobility Plan 2035 that includes public right-of-way classification standard for dedications and improvements; project-initiated

changes to the public right-of-way dimensions; network access; parking supply and transportation demand management. The Plan Worksheet includes the following applicable policies:

Mobility Plan 2035 Policy 2.1 *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*

The Mobility Plan designates Stocker Street, the roadway bordering the Project site to the south, as a Boulevard II. This designation entails an 80-foot-wide roadway within a 110-foot-wide right-of-way. However, it should be noted that most of this roadway fronting the Project site is technically located in LA County. According to the LA County Mobility Element, Stocker Street is designated as a Major Highway which typically provides for a 100-foot-wide right-of-way. The segment of Stocker Street adjacent to the Project site presently has a 56-foot-wide roadway within an 80-foot-wide right-of-way, with a 15-foot dedication on the north side of the roadway required to meet the roadway's ultimate dimensions. The Mobility Plan indicates that Stocker Street is identified as part of the City's Pedestrian Enhanced District (PED). The Mobility Plan designates Santa Rosalia Drive, the roadway bordering the Project site to the east, as a Collector Street. This designation entails a 40-foot-wide roadway within a 66-foot-wide right-of-way. The segment of Santa Rosalia Drive adjacent to the Project site currently has a 56-foot-wide roadway within an 80-foot right-of-way. The Project is not required to make additional improvements to Santa Rosalia Drive. The Mobility Plan designates Don Felipe Drive, the roadway bordering the Project site to the east, as a Collector Street. This designation entails a 40-foot-wide roadway within a 66-foot-wide right-of-way. The segment of Don Felipe Drive adjacent to the Project site currently has a 35-foot-wide roadway within a 60-foot right-of-way, with 3-foot dedication on the west side of the roadway to achieve the roadway's ultimate dimensions.

The Project is requesting waivers for making the required dedications on Stocker Street and Don Felipe Drive to create a Project space that would allow for the optimization of buildings and facilities, open spaces and consideration of pedestrian, bicycle, and vehicular circulation on site. The Project would enhance the community with economic development opportunities, providing more services with local-serving land uses, and create public spaces (i.e., courtyard) which support other City polices and goals. The waiver is not expected to result in impacts to VMT or create substantial hazards. The Project team will coordinate with the City's Bureau of Engineering Department and other applicable departments regarding the waivers and any necessary refinements for the Project.

Mobility Plan 2035 Policy 2.10 *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*

The Project proposes to provide a new passenger curbside passenger drop-off/pick-up curb cutout on Santa Rosalia Drive. The passenger loading area will comply with the City's Bureau of Engineering's Public Right-of-Way Accessibility Guidelines (PROWAG) which requires providing an accessibility ramp and aisle. The inclusion of this passenger loading area is expected to reduce potential hazards and delays by removing these activities from the travel lane. All other loading activities are anticipated to occur on-site.

Mobility Plan 2035 Program PL.1. Driveway Access. *Require driveway access to buildings from non-arterial streets or alleys (where feasible) in order to minimize interference with pedestrian access and vehicular movement.*

In compliance with LADOT's goals and policies, the Project driveway located along Stocker Street will be right-turn only and one-way and the primary Project driveway will be located along Santa Rosalia Drive bounding the site to the east. As mentioned in the Mobility Plan policy regarding the location of driveways along non-arterial roadways, the proposed driveway has been designed in order to provide for safe and efficient operation that considers all roadway users. Sufficient sight distance will also be provided in order to identify conflicting vehicles, bicycles, and pedestrians. Thus, since the driveway along Stocker Street will serve as ingress only for service vehicles, and the primary driveway that provides egress and ingress is proposed along a collector street, the design and operation of this access point will likely provide safe operations for vehicles, pedestrians, and bicyclists, alike, while also minimizing potential conflicts with traffic along Stocker Street and Santa Rosalia Drive.

Mobility Plan 2035 Policy 2.3 *– Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*
Mobility Plan 2035 Policy 2.4 *– Neighborhood Enhanced Network – Provide a slow speed network of locally serving streets.*
Policy 2.6 Bicycle Networks *– Provide safe, convenient, and comfortable local and regional bicycling facilities for people of all types and abilities.*
Mobility Plan 2035 Policy 3.8 *– Bicycle Parking, Provide bicyclists with convenient, secure and well maintained bicycle parking facilities.*
Mobility Plan 2035 Policy 3.2 – *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*

The Project will encourage and establish a system of safe and efficient bicycle and pedestrian facilities by installing bicycle parking and maintaining spacious sidewalks adjacent to the site and provide connectivity between the Project site and external facilities. In so doing supporting local and regional policies.

Mobility Plan 2035 Policy 4.8 – *Transportation Demand Management Strategies. Encourage greater utilization of Transportation Demand Management Strategies to reduce dependence on single-occupancy vehicles.*
Mobility Plan 2035 Policy 4.13 *– Parking and Land Use Management: Balance on-street and off-street parking supply with other transportation and land use objectives.*

The Mobility Plan 2035 also includes policies related to the implementation of Transportation Demand Management (TDM) program to promote the more effective use of existing roadway facilities by reducing single-occupancy automobile travel and promoting alternative modes of transportation. The implementation of TDM strategies will help promote increased active non-motorized mode of travel by Project employees and patrons. This includes proposing to incorporate reduced and paid parking.

4.1.2 PLAN FOR A HEALTHY LOS ANGELES

The Plan for a Healthy Los Angeles, as established in March 2015, is meant to prioritize health and social equity in the City's plans for future growth and development. The Plan is guided by principles of holistic health, the link between community design and health, and active transportation, among other principles. Chapter 2 of The Plan, A City Built for Health, promotes multi-modal corridors and accessible services as features of a safe and healthy city. The development of the Project will not preclude the Plan's goals of

promoting active transportation and a healthy city. As a mixed-use project in a transit-oriented community with short-term and long-term bicycle parking, the Project will be conducive to this active mode of travel for employees and guests alike.

4.1.3 WEST ADAMS – BALDWIN HILLS - LEIMERT COMMUNITY PLAN

The West Adams – Baldwin Hills - Leimert Community Plan, as adopted in June 2016, summarizes key issues and opportunities in the area through the development of goals, objectives, policies, and programs associated with multiple land uses including residential and commercial projects that lie within its boundaries. Through a combination of Project design and programmatic decisions proposed by the Project, the Project will help realize several of the transportation programs noted within the area Community Plan. By increasing commercial density near a major transit stop which provides rail service, the Project supports the objectives of encouraging the development of transit-oriented communities and promoting access to daily needs via sustainable modes of transportation within the area. Under the Mobility (Chapter 4), transportation section, several transportation goals and policies are noted for the area. The following are policies that are applicable to the Project:

> ***M1-3 Adequate Traffic Mitigation.*** *Developments that increase density or intensity by zone change, variance, conditional use, parcel map, subdivision or other discretionary action should provide adequate traffic mitigation and ensure that mobility needs are met.*
>
> The Project with the implementation of TDM Measures will provide safer and more efficient operations of the passenger loading area, access at the Project Driveway & Santa Rosalia Drive, and queuing into the parking garage so that the Project is not expected to substantially increase hazards under CEQA. The Project team will coordinate with the City on the driveway, access and public right-of-way feature design (e.g., passenger loading zone, pedestrian, bicycle, etc.) to ensure that there will be no significant impacts to safety.
>
> ***M1-4 Private Investment for Off-site Facilities/ Amenities.*** *Encourage new developments to include bicycle and pedestrian amenities and include off-site transit and road improvements creating a circulation system that optimizes travel by all modes.*
> ***M2-1 Streetscapes.*** *Encourage and support streetscape improvements in neighborhood district commercial areas and transit-oriented development areas in order to foster the appeal of the street as a gathering place including street furniture, well-maintained street trees, publicly accessible courtyards, wide sidewalks, bicycle access and appropriate traffic control measures to reduce travel speeds.*
> ***M3-1 Pedestrian Access.*** *Encourage walking by orienting building entrances to face the streets and sidewalks when designing access to new developments and buildings.*
> ***M3-2 Priority Pedestrian Routes.*** *Streets within commercial, transit- oriented, mixed-use and employment districts should have "pedestrian priority", establishing pedestrian needs as paramount to vehicular circulation needs and encouraging investment in pedestrian improvements and programs for identified segments.*
> ***M3-3 Pedestrian Amenities.*** *Maintain sidewalks, streets and rights-of-way in good condition, free of obstructions, and with adequate lighting, trees and parkways. Streets must accommodate pedestrians comfortably through adequate sidewalks and parkway landscaping that provides shade from the hot sun, and street lighting that provides for safety during the night. (P193, P194, P195, P277)*
> ***M3-4 Minimize Pedestrian Conflicts.*** *Minimize conflicts between buses, cars, and pedestrians by designing and constructing sidewalks and crosswalks that make pedestrians feel safe and by creating well-*

marked crossings at intersections and select mid-block locations preferably within pedestrian-oriented areas and districts.
M4-3 Bicycle Amenities. *Incorporate bicycle amenities such as parking, lockers, changing rooms and showers, in public facilities, parks, commercial and multi-family residential developments, employment and transit centers, as well as park-and-ride facilities.*
M5-1 Transit Connections to Key Areas. *Increase public transit access to neighborhood districts, community and regional centers and mixed- use boulevards.*
M5-2 Development at Transit Nodes. *Facilitate development and public improvements at multimodal transit nodes, or intersections that Metro identifies as major transfer nodes to promote convenient access between new development and the transit system.*
M6-2 Pedestrian Access to Transit. *Improve pedestrian amenities and urban design along streets served by transit to create welcoming conditions for pedestrians accessing transit.*

The Project will encourage and establish a system of safe and efficient bicycle and pedestrian facilities by installing bicycle racks and maintaining spacious sidewalks adjacent to the site and provide connectivity between the Project site and external facilities that include the nearby Metro Line K Martin Luther King Jr. Station. By providing more landscaping and connecting the Project site to the public pedestrian facilities with an accessible courtyard during the day, the Project will provide an environment that supports a successful community both through design and economic development.

M7-1 Priorities for Capacity Enhancements. *Implement a safe and efficient transportation network, and increase its capacity through, in priority order, the provision of alternative transit options, transportation demand management (TDM), and traffic system management (TSM) before considering street widening and network completion.*
M9-2 Reduce Auto Trips. *Create incentives for employers, institutions, and residential neighborhoods to reduce their vehicle trips by encouraging mixed-use development at appropriate sites well served by transit in order to minimize Vehicle Miles Traveled (VMT).*
M9-3 Alternatives to the Automobile. *Reduce automobile dependency by providing a safe, convenient transit system, pedestrian linkages and a network of safe and accessible bikeways and by encouraging alternatives, including reduced emission vehicles, such as electric and neighborhood electric vehicles.*
M9-4 TDM Plans. *Encourage major developments to submit a TDM plan to the City and provide employee incentives for utilizing alternatives to the automobile (i.e., carpools, vanpools, buses, flex time, telecommuting, bicycling, and walking, etc.).*

The West Adams-Baldwin Hills - Leimert Community Plan also encourages the establishment of TDM program to promote the more effective use of existing roadway facilities by reducing single-occupancy automobile travel and promoting alternative modes of transportation. The implementation of TDM strategies will help promote increased active non-motorized mode of travel by Project employees and patrons. The Project will also fulfill this objective by providing a mix of uses close to transit facilities, which will reduce vehicular trips and provide greater accessibility to local and regional destinations.

M10-3 On-site Loading. *Ensure that all new commercial and industrial development has adequate off-street accommodations for loading and unloading of commercial vehicles.*
M11-2 Performance-based Parking Supply. *Utilize performance-based metrics that evaluate existing and projected parking needs in determining parking requirements.*
M12-1 Reduced Parking Near Transit Centers. *Consider reductions in parking requirements for projects located within designated transit- oriented development (TOD) areas or within 1,500 feet of a mass transit station or transfer center.*

M12-4 Connections for Electric Vehicles. *Encourage new construction to include vehicle access to properly wired outdoor receptacles to accommodate zero emission vehicles and plug-in electric hybrids.*

The Project will be providing a reduced parking supply with a reduction of 218 automobile parking spaces from the amount required by direct application of the LAMC. Electric vehicle charging will be provided according to Code. Commercial loading is primarily planned to occur on site.

4.1.4 CRENSHAW CORRIDOR SPECIFIC PLAN

The Crenshaw Corridor Specific Plan, as adopted in April 2017, serves as a policy and regulatory document for the development of the Specific Plan area. The Project is partially located within Subarea C which only has signage regulations on lots designated Regional Center Commercial within the Community Plan. The part of the Project site within Subarea C is zoned as Community Commercial land use, therefore, the regulations do not apply.

4.1.5 ASSEMBLY BILL 2097 (AB 2097)

AB 2097 is a California law that prohibits public agencies or cities from imposing a minimum automobile parking requirement on most development projects within a one-half mile radius of a major transit stop. Projects located with one-half mile of a major transit stop are generally eligible for the automobile parking reduction provided by AB 2097. This includes residential, commercial, and industrial projects. As a commercial mixed-use development Project within one-half mile of a major transit stop (Martin Luther King Jr. Station), the Project is eligible for this parking reduction. The Project proposes providing 380 parking spaces which falls below the standard LAMC parking requirements. Reduced parking from the amount required by direct application of the LAMC parking rates, without consideration of parking reduction mechanisms, is considered a benefit to reducing VMT. Therefore, the Project's parking reductions, if approved, are accounted for in the VMT analysis.

4.1.6 VISION ZERO LOS ANGELES

Vision Zero was launched by the Mayor of Los Angeles in August 2015 with the goal of eliminating all traffic fatalities citywide by 2025. Vision Zero specifically seeks to implement traffic safety treatments at intersections and along roadway segments to improve safety for pedestrians, bicyclists, and other vulnerable road users. The City of Los Angeles has developed a High Injury Network (HIN) that identifies roadways having a high number of traffic collisions causing serious injury and death. Development projects proposed on a roadway identified as part of the City's HIN should be designed to enhance safety for non-motorized users. No street adjacent to the Project site is classified as a HIN roadway. By maintaining the existing sidewalks and infrastructure, the Project will not negatively affect the safety of pedestrians, bicycles, and other vulnerable roadway users.

4.1.7 VISION ZERO LOS ANGELES COUNTY

Vision Zero was initiated by the County of Los Angeles Board of Supervisors in February 2017 with the goal of eliminating all traffic fatalities on unincorporated County roadways by 2035. Vision Zero specifically seeks to implement traffic safety treatments at intersections and along roadway segments to improve safety for pedestrians, bicyclists, and other vulnerable road users. The County of Los Angeles has analyzed Collision Concentration Corridors that identify half-mile roadway segments that contained three or more fatal or

severe injury collisions between January 1, 2013, and December 31, 2017. Development projects proposed on a roadway identified as the County's Collision Concentration Corridors should be designed to enhance safety for non-motorized users. Stocker Street between Santa Rosalia Drive and Presidio Drive is classified as a Collision Concentration Corridor. The Project will enhance safety for non-motorized users by implementing pedestrian plazas and bicyclist facilities to improve the existing sidewalks and infrastructure.

4.1.8 CITYWIDE DESIGN GUIDELINES

The Los Angeles Department of City Planning established *Citywide Design Guidelines* meant to promote maintaining neighborhood character, quality design, and creative development solutions. Guidelines 1-3 provide best practices in the area of Pedestrian-First Design that are as follows:

- Guideline 1 is to promote a safe, comfortable, and accessible pedestrian experience for all.
- Guideline 2 is to carefully incorporate vehicular access such that it does not degrade the pedestrian experience.
- Guideline 3 is to design projects to actively engage with streets and public space and maintain human scale.

The Project's proposed pedestrian facilities provide sufficient pedestrian access at the first-floor office and commercial entrances and along Stocker Street, Don Felipe Drive, and Santa Rosalia Drive sidewalks. In addition, the Project is proposing to provide pedestrian plazas connecting to the existing sidewalk which will activate the block as a pedestrian-friendly area. The proposed vehicular driveways are located along Stocker Street with right-turn-only access and Santa Rosalia Drive with vehicular access and egress behind the site, limiting the number of conflicting vehicles that will cross the pedestrian path of travel, providing adequate site distance to identify pedestrians, and reducing the potential for dangerous pedestrian-vehicle conflicts. The Project is designed to present a street frontage along Stocker Street and Santa Rosalia Drive that has retail store fronts, pedestrian engagement, and open spaces areas. Therefore, the Project is compliant with the *Citywide Design Guidelines*.

4.1.9 LOS ANGELES MUNICIPAL CODE

The LAMC bicycle parking ordinance § 12.21 A.16 requires the provision of short-term commercial bicycle parking spaces at a rate of 1 space per 1,000 square feet with a minimum of two spaces for office land uses; 1 space per 2,000 square feet with a minimum of two spaces for general restaurant and bar land uses; 1 space per 2,000 square feet with a minimum of two spaces for general retail store land uses; and 1 space per 10,000 square feet for other commercial land uses. The LAMC requires the provision of long-term commercial bicycle parking spaces at a rate of 1 space per 5,000 square feet with a minimum of two spaces for office land uses; 1 space per 2,000 square feet with a minimum of two spaces for general restaurant and bar land uses; 1 space per 2,000 square feet with a minimum of two spaces for general retail store land uses; and 1 per 10,000 square feet with a minimum of two spaces for other commercial land uses. Based on these rates, the Project would meet the LAMC bicycle parking requirements by providing at least 27 short-term (14 office, 5 restaurant, 2 retail, 6 studio/other commercial) and 41 long-term bicycle stalls (28 office, 5 restaurant, 2 retail, 6 studio/other commercial). The Project will provide a minimum of 32 short-term and 50 long-term bicycle spaces. The short-term bicycle parking spaces are to be located throughout the Project site with 16 spaces in the southeast corner of the Project site adjacent to food court/retail/offices, 6 spaces provided next to the pedestrian entrance along Santa Rosalia Drive, 2 spaces near the driveway along

Stocker Street, and 8 spaces in the service level plaza. All 50 long-term bicycle parking spaces are to be located in the parking garage. The Project will, therefore, provide convenient and adequate bicycle parking facilities.

The City is currently updating their TDM ordinance to better meet the changing transportation demand in a more sustainable manner. The current TDM requirements per the Transportation Demand Management and Trip Reduction Measures (LAMC **§** 12.26G) City Code outlines TDM measures that a development shall provide including:

a. ***Development in excess of 25,000 square feet of gross floor area.*** *The owner shall provide a bulletin board, display case, or kiosk (displaying transportation information) where the greatest number of employees are likely to see it. The transportation information displayed should include, but is not limited to, the following:*
   (1) *Current routes and schedules for public transit serving the site;*
   (2) *Telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency and local transit operations;*
   (3) *Ridesharing promotion material supplied by commuter-oriented organizations;*
   (4) *Regional / local bicycle route and facility information;*
   (5) *A listing of on-site services or facilities which are available for carpoolers, vanpoolers, bicyclists, and transit riders.*

b. ***Development in excess of 50,000 square feet of gross floor area.*** *The owner shall comply with Paragraph (a) above and in addition shall provide:*
   (1) *A designated parking area for employee carpools and vanpools as close as practical to the main pedestrian entrance(s) of the building(s). This area shall include at least ten percent of the parking spaces required for the site. The spaces shall be signed and striped sufficient to meet the employee demand for such spaces. The carpool / vanpool parking area shall be identified on the driveway and circulation plan upon application for a building permit;*
   (2) *One permanent, clearly identified (signed and striped) carpool / vanpool parking space for the first 50,000 to 100,000 square feet of gross floor area and one additional permanent, clearly identified (signed and striped) carpool / vanpool parking space for any development over 100,000 square feet of gross floor area;*
   (3) *Parking spaces clearly identified (signed and striped) shall be provided in the designated carpool / vanpool parking area at any time during the building's occupancy sufficient to meet employee demand for such spaces. Absent such demand, parking spaces within the designated carpool / vanpool parking area may be used by other vehicles;*
   (4) *No signed and striped parking spaces for carpool / vanpool parking shall displace any handicapped parking;*
   (5) *A statement that preferential carpool / vanpool spaces are available on- site and a description of the method for obtaining permission to use such spaces shall be included on the required transportation information board;*
   (6) *A minimum vertical clearance of 7 feet 2 inches shall be provided for all parking spaces and accessways used by vanpool vehicles when located within a parking structure;*
   (7) *Bicycle parking shall be provided in conformance with Section 12.21 A.16. of this Code.*

c. ***Development in excess of 100,000 square feet of gross floor area.*** *The owner shall comply with Paragraphs (a) and (b) above and shall provide:*
   (1) *A safe and convenient area in which carpool / vanpool vehicles may load and unload passengers other than in their assigned parking area;*

(2) *Sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development;*
(3) *If determined necessary by the City to mitigate the project impact, bus stop improvements shall be provided. The City will consult with the local bus service providers in determining appropriate improvements. When locating bus stops and/or planning building entrances, entrances shall be designed to provide safe and efficient access to nearby transit stations/stops;*
(4) *Safe and convenient access from the external circulation system to bicycle parking facilities on-site.*

The Project will be in compliance with the Code. The City allows projects to implement TDM measures that are eligible as a Project Design Feature (PDF) as they are necessary to comply with local ordinances, law, or programs. This includes measures such as reduced parking supply, bicycle parking and amenities, parking cash out, etc. Additionally, these would include measures noted above as part of the City's TDM ordinance. Therefore, these measures are not considered mitigation measures since the Project is complying with a required code, ordinance, law.

The Project does plan to implement a TDM program to address potential hazardous conditions at the Project driveway with consideration of the proximity to the parking garage as well as the proposed passenger loading area. The program includes a combination of PDFs and mitigation measures. A more comprehensive discussion on Project TDM Measures is discussed in Section 6.

In reviewing the abovementioned LAMC requirements, the Project does not conflict with the bicycle, vehicle, or TDM policies. The Project compliance with the LAMC requirements is also addressed in the Plan Worksheet Section II.D.

4.1.10 SCAG RTP/SCS

The SCAG RTP/SCS balances future mobility and housing needs with economic, environmental, and public health goals in a long-term plan that are laid out for the period from 2020-2045. The Plan Worksheet Section II.E addresses whether or not a development project is consistent with regional plans such as the SCAG RTP/SCS. The Project is consistent with the SCAG RTP/SCS because the Project would not result in a significant VMT impact as detailed further in Section 4.2.

4.1.11 WALKABILITY CHECKLIST

The Los Angeles Department of City Planning's Walkability Checklist provides design strategies and guidelines for walkable streets. These documents promote pedestrian-friendly features in the public right-of-way and on private property. The Department's Residential Citywide Design Guidelines for Multi-Family Residential & Commercial Mixed-Use Projects provide a blueprint for sustainable and aesthetically pleasing residential development. These documents promote the provision of pedestrian-friendly, street-fronting entrances to residential developments at surface grade. The Project frontage on Stocker Street and Santa Rosalia Drive will provide multiple entrances to the Project's commercial land uses for easy pedestrian-friendly access.

4.2 CAUSING SUBSTANTIAL VEHICLE MILES TRAVELED (THRESHOLD T-2.1)

As outlined in the Mobility Plan 2035, the City has a goal of reaching a 20 percent reduction in VMT by 2035. In line with these goals, the City has updated the TAG to ensure compliance with Section 15064.3,

subdivision (b)(1) of the CEQA Guidelines, which asks if a development project would result in a substantial increase in VMT. The TAG sets the following criterion for determining significant transportation impacts based on VMT:

> *For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?*

To assist in determining which development projects would conflict with CEQA Guidelines section 15064.3, subdivision (b)(1), the TAG establishes two screening criteria to evaluate whether further analysis is required of a land use project's VMT impact. Both of the following criteria must be met in order to require further analysis of a land use project's VMT contribution:

1. The land use project would generate a net increase of 250 or more daily vehicle trips.
2. The land use project would generate a net increase in daily VMT.

After the initial screening, the TAG provides guidance for further analysis of the VMT contribution of a land use project. Under the updated TAG, two forms of VMT are analyzed: (1) household VMT per capita and (2) work VMT per employee. The household VMT per capita is the home-based VMT produced by the residential component of a land use project divided by the number of residents within the development. The work VMT per employee is the home-based work VMT attracted by the non-residential uses of a land use project divided by the number of employees within the development. As outlined in the TAG, in order for a proposed land use project to have a less-than-significant VMT impact, two criteria must be met: (1) the land use project's household VMT per capita must be at least 15 percent below the average household VMT per capita, and (2) the land use project's work VMT per employee must be at least 15 percent below the average work VMT per employee. Table 1 shows the thresholds corresponding to 15 percent below the average household VMT per capita and average work VMT per employee. These thresholds have been determined individually for each of the seven Area Planning Commission (APC) areas comprising the City. The significance thresholds to be applied are determined based on the land use project's APC area, in this case the South LA APC area.

Table 1: LADOT Thresholds for Significant VMT Impacts

Area Planning Commission	Daily Household VMT per Capita	Daily Work VMT per Employee
Central	6.0	7.6
East LA	7.2	12.7
Harbor	9.2	12.3
North Valley	9.2	15.0
South LA	6.0	11.6
South Valley	9.4	11.6
West LA	7.4	11.1

Along with the updated TAG, LADOT developed the VMT Calculator, which calculates the daily vehicle trips, daily VMT, daily household VMT per capita, and daily work VMT per employee for land use projects. The VMT Calculator utilizes average daily trip generation rates from the Institute of Transportation Engineers

(ITE) *Trip Generation Manual* (9th Edition, 2012) and empirical trip generation data to determine the base daily trips associated with a land use project. The number of daily trips is further refined using data from the Environmental Protection Agency's (EPA's) Mixed-Use (MXD) Model and the City's Travel Demand Forecasting (TDF) Model.

The VMT Calculator also determines population and employment estimates for a land use project based on rates developed from U.S. Census data for the City of Los Angeles and employment data from a variety of sources, including the Los Angeles Unified School District and the San Diego Association of Governments (SANDAG). The VMT Calculator then uses trip length information from the TDF Model, in combination with the daily trips and population/employment estimates, to calculate the land use project's daily VMT, household VMT per capita, and work VMT per employee. The VMT Calculator also provides a menu of TDM strategies that can be implemented for a land use project, either as project features or mitigation measures, to reduce a project's daily vehicle trips and VMT. Further detail on the VMT Calculator can be found in the *City of Los Angeles VMT Calculator Documentation* (May 2020).

To determine whether the Project requires further VMT analysis, the Project's proposed land use data were input into the VMT Calculator. As shown in Appendix C, the proposed Project's land use components include the Retail (Multi-Family), Retail (High-Turnover Sit-Down Restaurant), Retail (Quality Restaurant), Office (General Office), and a custom land use. The VMT Calculator contains a set of land-use categories with trip generation rates and corresponding trip type data that can be chosen as best matching a land use project's characteristic. However, due to the unique nature of the studio land use, the VMT Calculator does not contain trip generation rates that correspond to the studio land use. Therefore, the custom land use feature was utilized to estimate the number of daily trips and daily VMT for the studio land use component. Data specific to the studio land use was inputted into the VMT Calculator to quantify each Project's daily VMT. This data included the number of daily trips, the anticipated number of employees, and the trip purpose splits for the studio land use. The trip purpose splits that were inputted into the VMT Calculator were taken from Appendix E of the City of Los Angeles VMT Calculator Documentation Version 1.3 (May 2020), which presents the land use trip purpose assumptions for the various land use rates within the VMT Calculator. The trip purpose splits for the studio land use were assumed to correspond with the trip purpose splits for the General Office land uses in the VMT Calculator.

As shown in Appendix C, using the VMT Calculator, Version 1.4 v143, the Project would generate 3,397 net daily vehicle trips and 25,018 net daily VMT per the screening analysis. As the Project would generate more than 250 net daily vehicle trips and would result in a net increase in daily VMT, the Project would meet both screening criteria and require further VMT analysis. It should be noted that, for the purposes of VMT screening per the TAG, PDFs that qualify as TDM measures are excluded from the calculations.

The VMT Calculator was then utilized to determine work VMT per employee. The Project proposes to incorporate some of the TDM strategies listed in the VMT Calculator (allowable per the LAMC) as part of Project development. Therefore, certain PDFs were considered in the VMT calculations for the Project. The TDM measures included for the Project are:

- Reduce Parking Supply: The LAMC, without consideration of parking reduction mechanisms, would require a total of 598 automobile parking spaces (§ 12.21 A.4). The Project proposes to provide a total of approximately 380 on-site automobile parking spaces, which represents a reduction of 218

automobile parking spaces from the amount required by direct application of the LAMC. This measure is considered a PDF.

- Include Bike Parking Per LAMC: The Project bicycle parking provisions exceed the City bicycle requirements per the LAMC (§ 12.21 A.16).
- Include Secure Bike Parking and Showers: The Project will be incorporating these features.
- Promotions & Marketing: The Project will be incorporating marketing and promotional tools to educate employees about transportation options. This measure is considered a PDF.
- Ride-Share Program: The Project will provide a program that includes ride-share matching services, designating preferred parking for ride-share participants, designing adequate passenger loading/unloading and waiting areas for ride-share vehicles, and provide a website or message board to connect riders and coordinate rides. This measure is considered a PDF.
- Traffic Calming Improvements: The Project is planning on replacing the sidewalks surrounding the Project site. This measure is proposed as a mitigation measure.
- Pedestrian Network Improvements: The Project will provide a large courtyard located between Buildings A and B with public access available during the day. This measure is considered a PDF.

With the abovementioned TDM strategies implemented as Project features, the Project is anticipated to generate fewer gross daily vehicle trips and gross daily VMT. As shown in Appendix C, the VMT Calculator determined that the Project would generate a work VMT per capita of 8.5. Since the Project is located within the South LA APC area, the appropriate threshold of significance with which to compare the Project's household VMT estimate is 11.6 daily work VMT per capita, as shown previously in Table 1. Therefore, the Project is not expected to have a significant VMT impact based on its work VMT per capita. In addition, per guidance from the TAG, as a project with less-than-significant household VMT per capita and work VMT per employee impacts, the Project can be assumed not to have a cumulative impact related to VMT.

4.3 SUBSTANTIALLY INDUCING ADDITIONAL AUTOMOBILE TRAVEL (THRESHOLD T-2.2)

Transportation projects that contribute to increased vehicular capacity may contribute to inducing vehicular travel. The City has updated the TAG to ensure compliance with Section 15064.3, subdivision (b)(2) of the CEQA Guidelines, which gives the discretion to agencies to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. The TAG sets the following criteria for determining significant transportation impacts based on VMT for transportation projects:

> *For a transportation project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(2)?*

Since the Project is not a transportation project, threshold T-2.2 does not apply.

4.4 SUBSTANTIALLY INCREASING HAZARDS DUE TO GEOMETRIC DESIGN FEATURE OR INCOMPOATIBLE USE (THRESHOLD T-3)

In line with Vision Zero policies, the TAG seeks to identify any potential impacts that could arise due to roadway modifications proposed as part of a development project. These impacts include potential conflicts between motorists, bicyclists, and pedestrians, as well as increases in operational delays and vehicle queuing at development project driveways. Potential impacts would be determined based on the location of

proposed driveways and the ability for motorists entering and exiting the project site to identify conflicting vehicular, pedestrian, and bicycle traffic. Therefore, the TAG has established the following threshold to determine if a development project would result in a significant impact based on the creation of roadway hazards:

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

The TAG also establishes two screening criteria to assist in determining which development projects would potentially result in impacts due to geometric design hazards or incompatible uses. If either of the following conditions is present for a proposed development project, then further analysis of the potential hazards is required:

1. The land use project proposes new driveways, or introduces new vehicular access to the property from the public right-of-way.
2. The land use project proposes, or is required, to make modifications to the public right-of-way (i.e., street dedications, reconfigurations of curb line, etc.).

The Project proposes installing one new right-turn only ingress driveway on Stocker Street for service studio trucks. The new driveway is expected to provide adequate sight distance to identify conflicting vehicular, pedestrian, and bicycle traffic. The Project team will coordinate with the City's Planning and LADOT departments to ensure the driveway meets City standards for design and safety. There are two existing driveways on Don Felipe Drive. The southern driveway closest to Stocker Street will be removed and the northern driveway will be restricted to ingress only for emergency vehicles. The existing driveway on Santa Rosalia Drive will experience no modifications to Stocker Street intersecting with their respective streets at right angles and providing adequate sight distance to identify conflicting traffic.

An operational analysis of the six study intersections was conducted to determine if the addition of Project trips at these intersections would contribute or lead to potential hazardous roadway conditions. Two of the study intersections (Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street and Crenshaw Boulevard & Stocker Street) are projected to experience worsening queuing conditions under existing and future conditions which could exacerbate the safety of the roadway. To address the worsening operations and potential safety concerns, the Project is planning to implement a TDM program to reduce the number of Project trips. The program consists of a combination of PDFs and a mitigation measure. Additionally, other intersection improvements are considered at the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street. The TDM Measures and intersection improvements are discussed in Section 6.

To address potential operational concerns that could lead to hazardous roadway conditions at the Project driveway on Santa Rosalia Drive, an operational analysis at the intersection was conducted to determine if a traffic signal would be warranted at this location as well as consideration of queuing into the nearby parking garage. The Project does plan to implement a TDM program that includes both PDFs and an additional mitigation measure to reduce any potential hazardous conditions as a result of the addition of Project trips to the study area. A more comprehensive discussion on Project TDM Measures are discussed in Section 6.

The Project is not expected to substantially increase hazards at the Project driveway intersection with the implementation of the mitigation measures. With the TDM program realized, the Project will not require a traffic signal. Regarding vehicle queuing into the parking garage, the parking garage will provide adequate storage for vehicles to queue at the control gate without adversely affecting nearby roadways. The results of these analyses are further described in Section 6.3.1 and Section 6.3.2, respectively.

Additionally, the Project proposes to provide a new passenger curbside passenger drop-off/pick-up curb cutout on Santa Rosalia Drive. The passenger loading area will comply with the City's Bureau of Engineering's Public Right-of-Way Accessibility Guidelines (PROWAG) which requires providing an accessibility ramp and aisle. The inclusion of this passenger loading area is expected to reduce potential hazards and delays by removing these activities from the travel lane. A passenger loading evaluation was conducted to determine if there is adequate storage for the passenger load area. The evaluation determined that the passenger load area has adequate storage and is not anticipated to adversely affect the operations of the adjacent roadways. The results of this evaluation are described in Section 6.3.1.

Based on this assessment, the Project is not anticipated to have a significant impact related to geometric design feature of incompatible use hazards at the Project driveways and passenger loading area. The Project is not expected to contribute to a significant cumulative hazard impact since the access to adjacent properties would not be altered by the construction of the Project or other developments. The Project will implement a combination of TDM Measures and intersections improvements to address increases in hazardous conditions at the intersections of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street and Crenshaw Boulevard & Stocker Street. These measures are expected to mitigate the safety impact to less than significant. The Project team will coordinate with the City on the driveway, access and public right-of-way features (e.g., passenger loading zone, pedestrian, bicycle, etc.) to ensure that there will be no significant impacts to safety.

Additionally, further analysis will be required to assess whether a project would result in impacts due to queuing from a freeway off-ramp that could lead to unsafe differential travel speeds if all criteria are met:

- Does the land use project involve a discretionary action that would be under review by the Department of City Planning?
- Would the land use project generate a net increase of 250 or more daily vehicle trips?
- Would the land use project add 25 or more trips to any off ramp in either the morning or afternoon peak hour?

The *Interim Guidance for Freeway Safety Analysis* was developed by LADOT to address Caltrans' comments regarding freeway off-ramp safety considerations, especially as they pertain to freeway off-ramp queueing and speed differentials. The analysis guidance presented in the memorandum are used to evaluate whether conditions along Caltrans off-ramp facilities resulting from a project represent a potential safety impact under CEQA.

The Project's weekday peak-hour trip generation estimates (presented in Section 5.2) indicate that the Project will generate at most 201 inbound vehicle trips during a peak hour (AM peak hour). Based on the Project trip distribution percentages once the trips are distributed to the larger surrounding roadway network, no individual freeway off-ramp will experience 25 or more vehicle trips during either peak hour. Since the Project will not add 25 or more trips to any freeway off-ramp in either the AM or PM peak period,

the Project does not require a freeway ramp analysis and is therefore not expected to cause a significant safety impact.

During construction of the Project, most construction activities for the Project are anticipated to be contained within the Project site. The temporary closure of a portion of the roadway width along Stocker Street, Santa Rosalia Drive and/or Don Felipe Drive, adjacent to the site, may be necessary for certain phases of construction. All construction activity is temporary; therefore, any disruptions would be relatively short-term in nature. The Project will implement and comply with the requirements set forth in LAMC (§ 62.61 and 62.250) to minimize the construction effects to the greatest extent possible. This will include the preparation of a Construction Staging and Traffic Management Plan, to be approved by LADOT. This plan will detail the measures enacted to mitigate negative effects on traffic during construction related to designated haul routes and staging areas, traffic control procedures, emergency access provisions, and construction crew parking. The Project shall obtain prior LADOT approval for any lane closures, detours, on-street staging areas, or other temporary changes in traffic control due to construction activities and will enact appropriate temporary traffic control procedures. Haul routes for Project construction will be coordinated with the City of Los Angeles Department of Building and Safety (LADBS) to minimize the effects of construction traffic to congested roadways and residential streets.

5. NON-CEQA TRANSPORTATION ANALYSIS

In addition to the analysis required under the revised CEQA Guidelines, LADOT has outlined four additional analysis areas that should be reviewed for proposed development projects. This section outlines the methodologies applied for and the results of these four analyses.

5.1 PEDESTRIAN, BICYCLE, AND TRANSIT ACCESS ASSESSMENT

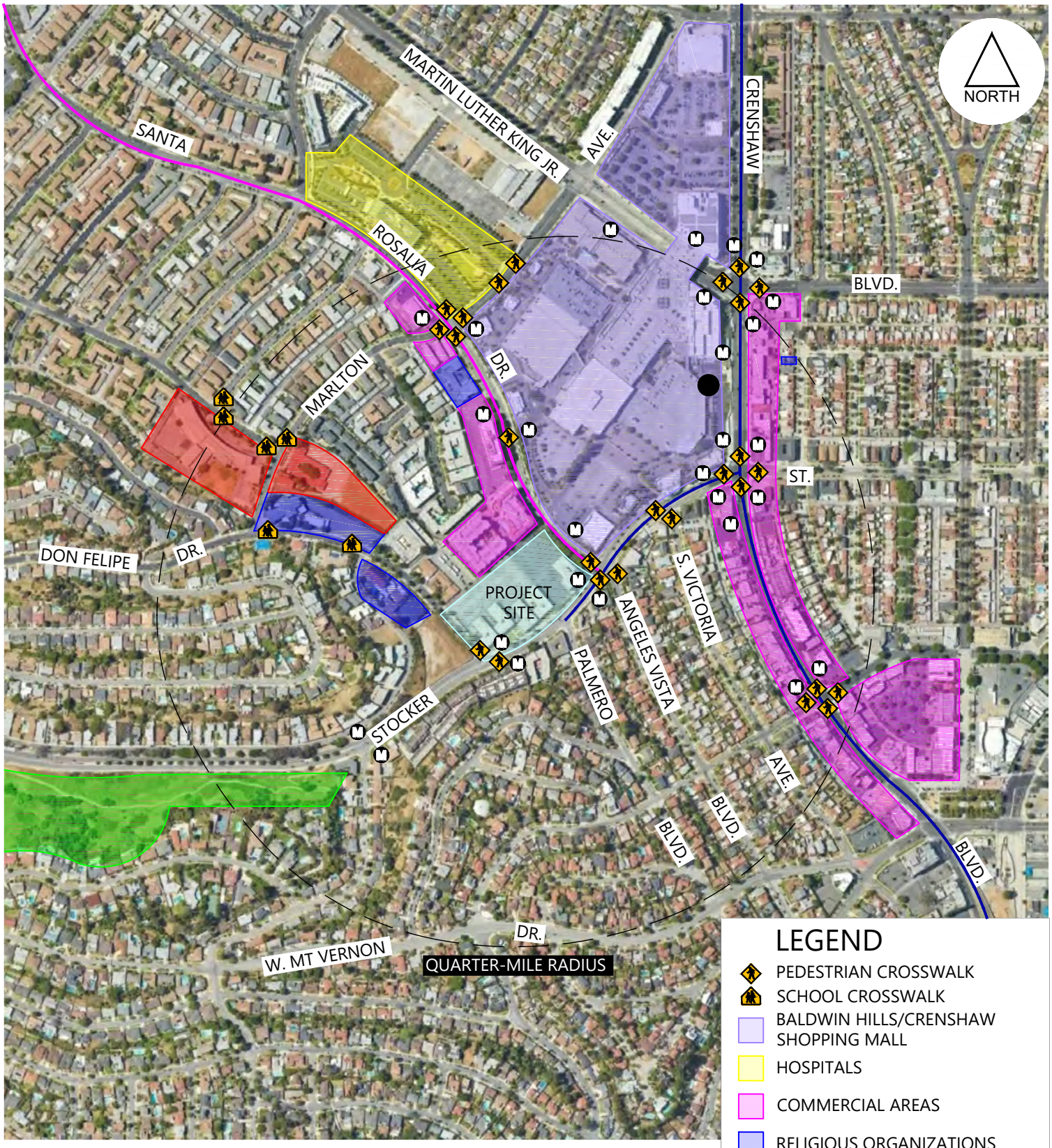
Per the updated TAG, a development project must evaluate the potential negative effects on the pedestrian, bicycle, and transit facilities that surround the site. These effects can include either the removal or degradation of existing facilities, or the increasing of demand on inadequate facilities. The TAG has established the following three screening criteria, all of which all must be met to require further analysis regarding a development project's effect on the pedestrian, bicycle, and transit networks:

1. The land use project involves a discretionary action that would be under review by the Department of City Planning.
2. The land use project would include the construction or addition of either of the following: (1) 50 or more dwelling units, guest rooms, or combination thereof; or (2) 50,000 or more square feet of non-residential space.
3. The land use project would generate a net increase of 1,000 or more daily vehicle trips; or the project has frontage along an Avenue, Boulevard, or Collector of 250 or more linear feet; or the project has frontage spanning an entire block along a roadway designated as an Avenue or Boulevard.

The Project will meet all three screening criteria requiring further analysis of pedestrian, bicycle, and transit facilities surrounding the site:

- It will require a discretionary action from the Department of City Planning.
- The Project proposes more than 50,000 square feet of non-residential uses.
- These uses will generate, per the VMT Calculator, 3,397 net daily vehicle trips without consideration of the Project features that qualify as TDM measures. Additionally, as shown in Figure 2, the Project has approximately 630 feet of frontage on Stocker Street (a Boulevard II), 320 feet of frontage on Santa Rosalia Drive (a Collector), and 270 feet of frontage on Don Felipe Drive (a Collector).

The Project vicinity features a variety of pedestrian, bicycle, and transit facilities. A survey was conducted of the pedestrian, bicycle, and transit infrastructure within an approximate one-quarter mile radius of the site. An overview of these study area facilities is geographically depicted in Figure 4. ADA compliant curb ramps are provided at most intersections in the Project vicinity, with numerous ramps featuring tactile warning strips along Stocker Street and Crenshaw Boulevard. Marked crosswalks are provided at major intersections along these roadways, as well as midblock crosswalks across Santa Rosalia Drive and Don Felipe Drive. A majority of these crosswalks have standard or continental markings which improve crosswalk visibility for motorists. Pedestrian push-buttons are provided at signalized marked crosswalks along Stocker Street and Crenshaw Boulevard. Limited bicycle facilities currently are provided in the Project vicinity, with bicycle racks provided adjacent to the Martin Luther King Jr. Station and along Stocker Street. Transit facilities near the



MOBILITY PLAN 2035 NETWORKS:

- NEIGHBORHOOD ENHANCED
- TRANSIT ENHANCED
- BICYCYLE ENHANCED/BIKE LANE
- VEHICLE ENHANCED
- PEDESTRIAN ENHANCED

LEGEND

- PEDESTRIAN CROSSWALK
- SCHOOL CROSSWALK
- BALDWIN HILLS/CRENSHAW SHOPPING MALL
- HOSPITALS
- COMMERCIAL AREAS
- RELIGIOUS ORGANIZATIONS
- EDUCATIONAL INSTITUTIONS
- OPEN/GREEN SPACE
- MARTIN LUTHER KING JR. STATION METRO K-LINE
- TRANSIT STOP

FIGURE 4

3/19/2024
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PROJECT STUDY AREA PEDESTRIAN DESTINATION MAP

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Project site include bus stops along major travel routes, located on Stocker Street, Santa Rosalia Drive, and Crenshaw Boulevard. Most bus stops in the vicinity of the Project provide benches, while some select stops also provide shade structures. The following sections evaluate the Project's effects on these various facilities.

5.1.1 REMOVAL OR DEGRADATION OF FACILITIES

The Project has frontage along Stocker Street, Santa Rosalia Drive, and Don Felipe Drive. As the Project would modify the sidewalks adjacent to the site, the bicycle, pedestrian, and transit facilities along these roadways have the potential to be removed or degraded by the construction of the Project. Approximately 122 feet of the sidewalk provided along the east side of the Project site is to be reconstructed, with the approximate width of 15 feet retained to provide a drop-off area. ADA curb ramps are provided in front of the Project site at the intersection of Stocker Street with Don Felipe Drive and Santa Rosalia Drive which provide access to eastbound transit stops. The Project will maintain these facilities in addition to maintaining some of the existing street trees and adding additional trees along the roadways which serve as a buffer between the sidewalk and adjacent vehicular traffic. The Project will replace the existing sidewalks in order to maintain pedestrian and ADA mobility and is not expected to degrade existing facilities.

Bicycle racks are provided along Stocker Street adjacent to the Project. The construction of the Project will not affect the sidewalk along Stocker Street or any of the bicycle facilities along this roadway. In fact, the Project proposes to provide short-term bicycle parking spaces within the street-level pedestrian plazas adjacent to the Project's proposed commercial uses. These bicycle facilities will improve bicycle parking options for patrons of the Project and bicyclists within the surrounding area, which currently have very limited bicycle parking options. Thus, the Project will supplement and upgrade the bicycle facilities surrounding the Project site.

Metro Line 102 runs east-west along Stocker Street adjacent to the Project site. Eastbound bus stops are located adjacent to the site along Stocker Street at the intersections with Don Felipe Drive and Santa Rosalia Drive. Westbound bus stops are located across Stocker Street. The Project will not make changes to the existing sidewalk or bus locations along Stocker Street. LADOT Crenshaw Clockwise runs north-south along Santa Rosalia Drive adjacent to the Project site. The northbound stop at Santa Rosalia Drive is located on the east side of Santa Rosalia Drive across the street from the Project site. No bus stop is located adjacent to the site, along Santa Rosalia Drive and the Project will not require changes to any bus stop locations or the rerouting of existing transit lines. Therefore, the existing transit facilities in the Project vicinity will not be degraded.

5.1.2 INTENSIFICATION OF USE

As the Project is located near the intersection of Stocker Street and Crenshaw Boulevard with convenient access to a variety of land uses and additional transit, bicycle, and pedestrian facilities, some of the Project employees and visitors are likely to arrive at and depart from the site by walking, bicycling, transit, or a combination of these modes. Therefore, the Project will likely increase demand on the transit, bicycle, and pedestrian facilities in the Project vicinity. As shown in Appendix D, the methodology from the National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Capture Estimation for Mixed-Use Developments was used to estimate the Project's weekday peak-hour trip generation, through the use of the NCHRP 684 Internal Trip Capture Estimation Tool. The peak-hour vehicular trip generations

or the proposed Project land uses were estimated using the ITE Trip Generation Manual (11th Edition, 2021) and were inputted into the NCHRP Estimation Tool, along with mode spit and average vehicle occupancy ratio (VOR) data that was estimated using the City's TDF Model. The mode split and VOR data were calculated for the Transportation Analysis Zone (TAZ) in which the Project is located for the model base year (2016) and the model future year (2040). Interpolation between these factors was used to determine the mode split and VOR factors for this study's existing (2024) and future (2029) analysis years. Using this methodology, the Project's peak-hour pedestrian trip generation was calculated for internal capture, transit, and non-motorized trips. The Project person trip generation for internal capture, transit, and non-motorized trips associated with the proposed uses are presented in Table 2. As shown, at Project completion, the site is expected to generate 802 daily external, non-vehicular person trips, with 66 external person trips during the AM peak hour and 90 external person trips during the PM peak hour. The NCHRP Internal Trip Capture Estimation Tool worksheets are provided in Appendix F.

As shown in Table 2, the majority of the external non-vehicular trips arriving to and departing from the site will occur via walking or bicycling. As the Project is surrounded by numerous residential and commercial uses along Stocker Street, Santa Rosalia Drive, Crenshaw Boulevard, and Martin Luther King Jr. Boulevard, and the connecting roadways between, there are many potential destinations to and from which non-motorized trips would be drawn. While these streets are characterized by relatively high vehicular traffic volumes and travel speeds, sidewalks are present along these roadways some with landscaping to provide a buffer between the vehicular and pedestrian paths of travel. Most intersections along these roadways provide curb ramps, with an ADA accessible route provided along at least one side of the roadway. Marked crosswalks are provided at major intersections, including Santa Rosalia Drive, Don Felipe Drive, and Crenshaw Boulevard, in the Project vicinity. In addition, marked crosswalks are provided across Stocker Street at signalized intersection in front of the Project site that provide a convenient pedestrian crossing location for Project users. These crosswalks will provide Project pedestrians with demarcated places to cross the roadways, instead of at unmarked or uncontrolled locations.

While limited dedicated bicycle facilities are currently provided in the Project area, numerous local and collector streets feature lower vehicular volumes and travel speeds. These streets connect the Project site to residential neighborhoods between major arterials. Project employees and patrons can use these shared roadways to safely travel in the Project vicinity via bicycle.

In addition, as shown in Table 2, the Project will slightly increase transit demand in the Project study area. In the Project vicinity, the intersection of Stocker Street & Crenshaw Boulevard serves as a major transit stop as it provides intersecting transit lines with peak period headways of 15 minutes or less as well as the Metro Line K Martin Luther King Jr. Station. Due to the close proximity of this intersection to the Project site, it is expected that the majority of transit demand for the Project will be drawn to and from this intersection. The wide sidewalk facilities and the marked crosswalks provide convenient pedestrian travel paths to these transit stops. All bus stops at the intersection of Stocker Street & Crenshaw Boulevard provide benches, with some providing shade structures. Thus, while the Project will increase pedestrian, bicycle, and transit demand on the facilities in the immediate Project vicinity, these facilities are ample and in good condition and can accommodate the added demands of the Project.

Table 2: Project Weekday Person Trip Generation Summary

Land Use	ITE Code/ Other[1]	Intensity[2]	Average Weekday	AM Peak Hour			PM Peak Hour		
				In	Out	Average Rate Total	In	Out	Average Rate Total
Trip Generation Rates									
General Office	710	1 ksf	10.84	88%	12%	1.52	17%	83%	1.44
Medical/Dental Office	720	1 ksf	36.00	79%	21%	3.10	30%	70%	3.93
Strip Retail Plaza (<40k)	822	1 ksf	54.45	60%	40%	2.36	50%	50%	6.59
Fine Dining Restaurant	931	1 ksf	83.84	80%	20%	0.73	67%	33%	7.80
High-Turnover (Sit-Down) Restaurant	932	1 ksf	107.20	55%	45%	9.57	61%	39%	9.05
Studio - Sound Stage	Empirical	1 ksf	5.91	63%	37%	0.20	40%	60%	0.43
Studio - Support	Empirical	1 ksf	4.14	65%	35%	0.61	45%	55%	0.57
Studio - Production Office	Empirical	1 ksf	9.34	62%	38%	0.66	45%	55%	0.63
Studio - Service Trucks	-	-	12.00	50%	50%	6.00	50%	50%	6.00
Trip Generation Summary									
Description		Size	Average Weekday[7]	AM Peak Hour			PM Peak Hour		
				In	Out	Average Rate Total	In	Out	Average Rate Total
Proposed Uses									
Studio									
Sound Stage		51.200 ksf	303	6	4	10	9	13	22
Support		13.000 ksf	54	5	3	8	3	4	7
Production Office		44.400 ksf	415	18	11	29	13	15	28
Studio Total Baseline All Vehicle Trips			796	35	24	59	31	38	69
Studio Person Trips[2]			1,359	62	42	104	54	67	121
Studio Internal Person Trips[3]			100	5	15	20	2	1	3
Studio External Trips by Transit[3]			8	0	0	0	1	0	1
Studio External Trips by Walk/Bicycle[3]			155	7	4	11	7	8	15
Commercial									
General Office Total Baseline Vehicle Trips		123.100 ksf	1,334	165	22	187	30	147	177
Office Total Person Trips[2]			2,348	290	39	329	53	259	312
Office Internal Person Trips[3]			174	21	13	34	2	5	7
Office External Trips by Transit[3]			13	2	0	2	0	2	2
Office External Trips by Walk/Bicycle[3]			269	33	3	36	6	31	37
Strip Retail Plaza (<40k)		6.500 ksf	354	9	6	15	22	21	43
Retail Total Person Trips[4]			629	16	11	27	39	37	76
Retail Total Internal Person Trips[2]			275	6	4	10	23	12	35
Retail External Trips by Transit[3]			0	0	0	0	0	0	0
Retail External Trips by Walk/Bicycle[3]			43	1	1	2	2	3	5
Fine Dining Restaurant		9.000 ksf	755	6	1	7	47	23	70
High-Turnover (Sit-Down) Restaurant		9.500 ksf	1,018	50	41	91	52	34	86
Restaurant Total Baseline Vehicle Trips		18.500 ksf	1,773	56	42	98	99	57	156
Restaurant Total Person Trips[2]			3,120	99	74	173	174	100	274
Restaurant Total Internal Person Trips[3]			593	24	24	48	14	23	37
Restaurant External Trips by Transit[3]			7	0	0	0	1	0	1
Restaurant External Trips by Walk/Bicycle[3]			307	9	6	15	20	9	29
Proposed Project Total Internal Person Trips			**1,142**	**56**	**56**	**112**	**41**	**41**	**82**
Proposed Project Total External Person Trips			**802**	**52**	**14**	**66**	**36**	**53**	**90**
Existing Project Trips			**0**	**0**	**0**	**0**	**0**	**0**	**0**
Net Project Total Internal Person Trips			**1,142**	**56**	**56**	**112**	**41**	**41**	**82**
Net Project Total External Person Trips			**802**	**52**	**14**	**66**	**36**	**53**	**90**

Notes:
1) ksf = Thousands of Square Feet of Gross Leasable Floor Area or Gross Floor Area.

2) See Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends and Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends from the NCHRP 684 Internal Trip Capture Estimation Tool for the proposed project uses in Appendix F.

3) See Table 9-A (D): Internal and External Trips Summary (Entering Trips), Table 9-A (O): Internal and External Trips Summary (Exiting Trips), Table 9-P (D): Internal and External Trips Summary (Entering Trips), and Table 9-P (O): Internal and External Trips Summary (Exiting Trips) from the NCHRP 684 Internal. Trip Capture Estimation Tool for the proposed project uses in Appendix F.

5.2 PROJECT ACCESS, SAFETY, AND CIRCULATION EVALUATION

The TAG requires development projects to evaluate potential operational and capacity constraints related to access to and egress from the project site. These constraints are typically affected by the configuration and placement of driveways, location of nearby bicycle and pedestrian facilities, and design of access points. The TAG has established the following two screening criteria, both of which must be met to require further analysis of potential operational and capacity constraints:

1. The land use project involves a discretionary action that would be under review by the Department of City Planning.
2. The land use project would generate a net increase of 500 or more daily vehicle trips.

The Project will meet both screening criteria as it will require a discretionary action under the Department of City Planning and it will generate a net increase of 500 or more daily vehicles trips (Project will generate 3,397 net daily vehicle trips). Therefore, further analysis is required to be conducted of potential access and circulation constraints of the Project site. Per the TAG, operational and passenger loading evaluations have been conducted to determine the Project's effects on adjacent roadway travel. These evaluations are detailed in the sections below.

5.2.1 OPERATIONAL EVALUATION

To determine the effects of the Project on the operation of vehicular travel within the immediate Project vicinity, an evaluation was conducted to determine the Project's contribution to delay and queuing at intersections adjacent to the Project under existing and future conditions. A Project completion year of 2029 is anticipated and is assumed in the analysis. In consultation with the LADOT and LA County, the following site-adjacent and nearby study intersections were selected for the analysis of potentially negative Project traffic effects:

1. Don Felipe Drive/Stocker Street (signalized)*
2. Project Driveway/Stocker Street (unsignalized)
3. Palmero Boulevard & Stocker Street (unsignalized)*
4. Santa Rosalia Drive/Marlton Avenue (signalized)
5. Santa Rosalia Drive/Stocker Street (signalized)*
6. Santa Rosalia Drive/Project Driveway (unsignalized)
7. Crenshaw Boulevard/Stocker Street (signalized)

** Shared intersection with LADOT and LA County.*

The study locations were shown previously in Figure 1.

5.2.2 ANALYSIS METHODOLOGY

This section outlines the results of the delay and queuing analysis for Existing (2024) and Future (2029) conditions during the weekday AM and PM peak hours. This analysis was conducted in accordance with the methodology outlined in the TAG. An analysis of existing and future weekday AM and PM peak-hour traffic conditions at the study intersections, listed above, was performed through the use of established traffic engineering techniques. Two methodologies were used to determine the traffic operations at the study intersections. The analyses for both methodologies were undertaken using Trafficware's Synchro Studio, which includes both Synchro and SimTraffic software, to model the traffic operations at the study intersections.

The first methodology used to analyze and evaluate traffic operations at the study intersections is based on procedures outlined in the *Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis* (HCM). The HCM methodology determines intersection LOS based on operational vehicle delay. For unsignalized, two-way stop-controlled intersections, the operational delay corresponds to the delay for the stop-controlled movements. The term LOS describes the quality of traffic flow. LOS values of A through C indicate excellent-to-decent traffic flow conditions. LOS D corresponds with fair conditions that may experience substantial delay during portions of the peak hours, but without excessive backups. LOS E represents poor conditions, with volumes at or near the capacity of the intersection and long lines of

vehicles that may have to wait through several signal cycles. LOS F is characteristic of failure (i.e., the intersection is overloaded, vehicular movements may be restricted or prevented, and delays and vehicle queues become increasingly longer). The LOS ranges for the HCM methodology are shown in Tables 3 and 4 for signalized and unsignalized intersections, respectively.

Table 3: HCM LOS & Delay for Signalized Intersections

LOS	Delay (seconds/vehicle)			
A	<=	10.0		
B	>	10.0	<=	20.0
C	>	20.0	<=	35.0
D	>	35.0	<=	55.0
E	>	55.0	<=	80.0
F	>	80.0		

Source: *Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis*, Exhibit 19-8 for signalized intersections.

Table 4: HCM LOS & Delay for Two-Way and All-Way Stop-Controlled Intersections

LOS	Delay (seconds/vehicle)			
A	<=	10.0		
B	>	10.0	<=	15.0
C	>	15.0	<=	25.0
D	>	25.0	<=	35.0
E	>	35.0	<=	50.0
F	>	50.0		

Source: *Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis*, Exhibit 20-2 for two-way STOP-controlled intersections and Exhibit 21-8 for all-way STOP-controlled intersections.

The second methodology consisted of a Synchro queuing analysis in order to evaluate potential issues associated with queued vehicles entering or exiting the Project site. A Synchro traffic model was constructed to model the two study intersections. Queuing conditions at the study intersections were evaluated to identify potential queuing issues associated with "gridlock" congestion. Gridlock refers to the traffic condition where queues from a congested intersection impede traffic flow through upstream intersections. Additionally, the left-turn queues at the study intersections were analyzed specifically to determine whether vehicles would spillover from the left-turn pockets or center two-way left-turn lane into adjacent through traffic lanes.

Per the TAG and LA County Transportation Impact Analysis Guidelines (July 2020), access constraints can be related to extensive queueing or operational delays. For this reason, results from the quantitative delay-based and queuing analyses were evaluated in combination to determine whether the Project would have an adverse effect on the operations of Project-adjacent vehicular facilities. Adverse impacts were determined when the results of these analyses demonstrated considerable increases in vehicular delay and queuing associated with the addition of Project traffic.

5.2.3 EXISTING (2024) TRAFFIC VOLUMES

Traffic volumes for existing conditions at the study intersections were obtained from manual traffic counts conducted on June 1, 2022, and January 31, 2024, when local schools were in session. In accordance with updated TAG, the traffic counts conducted for this study cover the weekday morning and afternoon peak commute periods. Peak-hour volumes were determined individually for each intersection based on the combined four (4) highest consecutive 15-minute volumes for all vehicular movements at the intersection. For analysis of existing conditions, an ambient traffic growth factor of 1.0 percent per year, compounded annually, was applied to the volumes collected on June 1, 2022, to develop existing (2024) baseline traffic volumes. Weekday AM and PM peak-hour volumes at the study intersections are illustrated in Figures 5(a) and 5(b), respectively. The manual intersection traffic volume count data sheets are provided in Appendix E.

A number of traffic improvements have been implemented in the study area in recent years to make more efficient and effective use of the existing street system. Many of the signalized intersections in the Project vicinity are operating under the City's Adaptive Traffic Control System (ATCS) and Automated Traffic Surveillance and Control (ATSAC) System. ATCS/ATSAC is a highly sophisticated computerized system that continually monitors traffic demand at signalized intersections within the system and modifies traffic signal timing in real time to maximize capacity and decrease overall delay. Although many surrounding signalized intersections in the Project area are ATCS/ATSAC system controlled, the study intersections consist solely of unsignalized intersections.

Information pertaining to intersection characteristics, such as geometrics, traffic signal operations, and on-street parking restrictions were obtained from field checks and City engineering plans. The existing lane configuration and traffic control conditions for seven study intersections are illustrated in Appendix F.

5.2.4 PROJECT TRAFFIC

The following section describes the methodology used to determine the Project vehicle trip generation, distribution, and assignment.

Trip Generation

Per the approved TA MOU signed by LADOT and LA County staff on March 14, 2024, and included as Appendix A to this report, the ITE *Trip Generation Manual* (11th Edition, 2021) was used to develop the traffic characteristics of the Project's proposed uses. The trip generation equations, rates, and directional distributions in the ITE manual are nationally recognized and are used as the basis for most transportation-related studies conducted in the City and the surrounding region. Information was obtained from the *Trip Generation Manual* for ITE Land Use Code (LUC) 710 – General Office, LUC 822 – Strip Retail Plaza (<40k), LUC 931 – Fine Dining, and LUC 932 – High-Turnover (Sit-Down) Restaurant. The studio land use trip generation rates were based on empirical rates from the *Paramount Picture Master Plan* (2015) prepared by Gibson Transportation and attached in Appendix G. The studio service trucks were conservatively based on a maximum number of six large trucks assumed per day with access to the site during AM and PM peak hours. This estimate is based on the size of the studio and expected operations. Rates from these sources were applied to develop the Project's trip generation estimates. Table 5 presents the trip generation rates used to generate the weekday peak-hour traffic volumes for the Project.

For this analysis, since the VMT Calculator does not calculate weekday AM or PM peak-hour trip generation estimates, the ITE *Trip Generation Manual* and LADOT survey-based trip generation rates provided in Table 5 were used to determine the weekday AM peak-hour and PM peak-hour vehicle trips anticipated for the Project. As these rates do not account for such trip-reducing factors as significant transit usage and/or walk-trip potential, the baseline vehicle trip estimates reflect a conservative condition. These trip-reducing factors are important considerations in determining the actual traffic-generating characteristics of a development project and, therefore, adjustments were made to the baseline trip generation estimates to develop the Project's vehicle trips. All adjustments have been approved by LADOT and LA County staff in the MOU signed on March 14, 2024, and included as Appendix A of this report.

Given the mix of proposed uses on the Project site, it is expected that there would be trip interactions between individual uses that would not require the use of a vehicle. It is generally recognized that visitors, employees, and patrons of a site will utilize other on-site uses if they are conveniently located and/or provide useful services or amenities, with the level of interaction dependent upon the number of residents, visitors, employees, and patrons; service providers; accessibility; and other factors. For the Project, some of the residents would be expected to patronize the on-site commercial retail and restaurant uses. Thus, a reduction in trips between the residential and commercial use components would be expected. As recommended in the ITE *Trip Generation Handbook* (3rd Edition, 2017) and the TAG, the methodology outlined in the NCHRP Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments was used to estimate internal trip capture between Project land use components. The internal capture methodology and calculations are included as Appendix F of this report.

The use of public transportation is an important consideration in the evaluation of a project's trip-generating potential. As noted previously in the Existing Public Transit section of this report, the Project is well served by multiple bus lines. These local and regional routes are readily accessible to Project employees and visitors. Significant transit use is not accounted for in the ITE *Trip Generation Manual* General Urban/Suburban setting trip rates and equations. Because the trip rates for the General Urban/Suburban setting do not consider significant transit connectivity, adjustments were made to the Project trip generation to account for transit usage associated with the proposed land uses. The NCHRP Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments was also used to estimate the transit and non-motorized trip generation for each of the proposed Project land uses. The transit and non-motorized mode split assumptions were obtained from the LADOT TDF model.

Trip reduction factors for the Project also account for the presence of "pass-by" trips. As some motorists pass by the Project, the specific convenient facilities provided by the Project (or other factors) produce a stop at the site. Such activity is considered to be an interim stop along a trip which existed irrespective of the development of the Project and, therefore, vehicles making these stops are not considered to be newly generated Project-related traffic. LADOT has developed a series of recommended pass-by trip reduction percentages for various development types and sizes. In line with these guidelines, pass-by trip reductions were applied to the Project's proposed commercial retail and restaurant uses.

The trip generation rates and aforementioned adjustment factors were employed to derive Project vehicle trip projections. Table 5 summarizes the trip generation estimates for the Project. As shown in Table 4, once completed and occupied, the Project is anticipated to generate a total of 254 net vehicle trips during the

AM peak hour (201 inbound, 53 outbound) and 332 net trips during the PM peak hour (127 inbound, 205 outbound). These peak-hour trips were distributed to the study intersections for the Project impact analysis.

Table 5: Project Weekday Trip Generation Summary

Land Use	ITE Code/ Other[1]	Intensity[2]	Average Weekday	AM Peak Hour			PM Peak Hour		
				In	Out	Average Rate Total	In	Out	Average Rate Total
Trip Generation Rates									
General Office	710	1 ksf	10.84	88%	12%	1.52	17%	83%	1.44
Strip Retail Plaza (<40k)	822	1 ksf	54.45	60%	40%	2.36	50%	50%	6.59
Fine Dining Restaurant	931	1 ksf	83.84	80%	20%	0.73	67%	33%	7.80
High-Turnover (Sit-Down) Restaurant	932	1 ksf	107.20	55%	45%	9.57	61%	39%	9.05
Studio - Sound Stage	Empirical	1 ksf	5.91	63%	37%	0.20	40%	60%	0.43
Studio - Support	Empirical	1 ksf	4.14	65%	35%	0.61	45%	55%	0.57
Studio - Production Office	Empirical	1 ksf	9.34	62%	38%	0.66	45%	55%	0.63
Studio - Service Trucks	-	-	12.00	50%	50%	6.00	50%	50%	6.00
Trip Generation Summary									
Description		Size	Average Weekday[7]	AM Peak Hour			PM Peak Hour		
				In	Out	Average Rate Total	In	Out	Average Rate Total
Proposed Uses									
Studio									
Sound Stage		51.200 ksf	303	6	4	10	9	13	22
Support		13.000 ksf	54	5	3	8	3	4	7
Production Office		44.400 ksf	415	18	11	29	13	15	28
Studio Service Truck Vehicle Trips[3]		108.600 ksf	24	6	6	12	6	6	12
Studio Vehicle Trips			772	29	18	47	25	32	57
Studio Total Baseline All Vehicle Trips			796	35	24	59	31	38	69
Studio Person Trips[4]			1,359	62	42	104	54	67	121
Studio Internal Person Trips[5]			100	5	15	20	2	1	3
Studio External Person Trips[5]			1,258	57	28	85	52	66	118
Studio External Trips by Vehicle[5,6]			623	28	14	42	26	33	59
Studio External Trips by Transit[5]			8	0	0	0	1	0	1
Studio External Trips by Walk/Bicycle[5]			155	7	4	11	7	8	15
Commercial									
General Office Total Baseline Vehicle Trips		123.100 ksf	1,334	165	22	187	30	147	177
Office Total Person Trips[4]			2,348	290	39	329	53	259	312
Office Internal Person Trips[5]			174	21	13	34	2	5	7
Office Total External Person Trips[5]			2,175	269	25	294	51	254	305
Office External Trips by Vehicle[5,6]			1,076	133	12	145	25	126	151
Office External Trips by Transit[5]			13	2	0	2	0	2	2
Office External Trips by Walk/Bicycle[5]			269	33	3	36	6	31	37
Strip Retail Plaza (<40k)		6.500 ksf	354	9	6	15	22	21	43
Retail Total Person Trips[4]			629	16	11	27	39	37	76
Retail Total Internal Person Trips[5]			275	6	4	10	23	12	35
Retail Total External Person Trips[5]			354	10	7	17	16	25	41
Retail External Trips by Vehicle (including pass-by trips)[5]			177	5	3	8	8	13	21
Retail External Trips by Transit[5]			0	0	0	0	0	0	0
Retail External Trips by Walk/Bicycle[5]			43	1	1	2	2	3	5
Retail External Trips by Vehicle (with pass-by trip adjustment)[7]			89	3	1	4	4	7	11
Fine Dining Restaurant		9.000 ksf	755	6	1	7	47	23	70
High-Turnover (Sit-Down) Restaurant		9.500 ksf	1,018	50	41	91	52	34	86
Restaurant Total Baseline Vehicle Trips		18.500 ksf	1,773	56	42	98	99	57	156
Restaurant Total Person Trips[4]			3,120	99	74	173	174	100	274
Restaurant Total Internal Person Trips[5]			593	24	24	48	14	23	37
Restaurant Total External Person Trips[5]			2,527	75	50	125	160	77	237
Restaurant External Trips by Vehicle (including pass-by trips)[5]			1,263	38	25	63	79	39	118
Restaurant External Trips by Transit[5]			7	0	0	0	1	0	1
Restaurant External Trips by Walk/Bicycle[5]			307	9	6	15	20	9	29
Restaurant External Trips by Vehicle (with pass-by trip adjustment)[7]			1,061	31	20	51	66	33	99
Net Project Total External Trips by Vehicle (including Pass-By Trips)			**3,163**	**210**	**60**	**270**	**144**	**217**	**361**
Net Project Total External Trips by Vehicle			**2,873**	**201**	**53**	**254**	**127**	**205**	**332**

Table 5: Project Weekday Trip Generation Summary (continued)

Notes:

1) ITE *Trip Generation Manual* (11th Edition, 2021) trip generation rates and directional distributions applied for Land Use Codes (LUC) 710 (General Office), 822 (Strip Retail Plaza [<40K]), 931 (Fine Dining Restaurant), 932 (High-Turnover [Sit-Down] Restaurant) to develop baseline vehicle trips for each land use associated with the commercial components. LUC 931 does not include directional distribution for the AM peak hour of adjacent street traffic; the directional distribution for the AM peak hour of the generator was assumed. The General Urban/Suburban setting was used as it best represents the project location.

   The studio trip generation rates were based on empirical rates from the *Paramount Picture Master Plan* (2015) prepared by Gibson Transportation and are attached on the following pages.

   The ITE *Trip Generation Handbook* (3rd Edition, 2017) recommended methodology for estimating the trip generation of a mixed-use development was utilized for the project. The ITE methodology follows the recommended procedures from the National Cooperative Highway Research Program (NCHRP) Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* (Transportation Research Board, 2011). The NCHRP 684 Internal Trip Capture Estimation Tool spreadsheet provided on the ITE website was used, with worksheets attached on the following pages for the Project and existing uses. The internal trips for the Studio uses were combined with the Office uses it was the most comparable land use. Internal calculations for these office-related trips are attached on the following pages.

   The studio service trucks were conservatively based on a maximum number of 6 large trucks assumed per day. All of these larger production trucks were assumed to access the site during the AM and PM peak hours. The truck estimate is based on the size of the studio and expected operations.

2) ksf = Thousands of Square Feet of Gross Leasable Floor Area or Gross Floor Area.

3) A passenger car equivalent (PCE) of 2.0 was applied to the the number of service truck trips.

4) See attached Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends and Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends from the NCHRP 684 Internal Trip Capture Estimation Tool for the proposed project uses.

5) See attached Table 9-A (D): Internal and External Trips Summary (Entering Trips), Table 9-A (O): Internal and External Trips Summary (Exiting Trips), Table 9-P (D): Internal and External Trips Summary (Entering Trips), and Table 9-P (O): Internal and External Trips Summary (Exiting Trips) from the NCHRP 684 Internal Trip Capture Estimation Tool for the proposed project uses.

6) No pass-by trips assumed for the general office land and studio uses.

7) Per Attachment J of the LADOT *Transportation Assessment Guidelines* (August 2022), an average pass-by trip discount rate of 50 percent was applied for the proposed retail component (as it is less than 50,000 square feet). For the proposed fine dining and high-turnover (sit-down) restaurant components, Attachment J recommends pass-by trip discounts of 10 percent and 20 percent, respectively. As the trips associated with the two restaurant uses were combined as part of the internal trip capture estimation, the pass-by trip discount rates were blended for each analysis time period based on the proportion of trips from each component restaurant use. For example, in the AM peak hour, with 91 high-turnover (sit-down) trips (at 20 percent) and 7 fine dining trips (at 10 percent) summing to 98 baseline restaurant vehicle trips, the blended average is approximately 19 percent. The blended pass-by discount rates were 16 percent for the weekday daily and PM peak-hour periods, respectively.

8) The ITE *Trip Generation Handbook* provides no guidance for estimating daily trips for mixed-use developments. Therefore, daily trips for each land use's subcategory (person trips, internal person trips, external person trips, external trips by mode) were estimated by developing a Daily-to-(AM+PM peak hour) factor using the land use's baseline vehicle trips and then applying this factor to each subcategory's combined (AM+PM) peak-hour trips. For commercial land uses with pass-by adjustments, the daily external trips by vehicle (with pass-by trip adjustment) were determined by applying the appropriate pass-by adjustment to the daily external trips by vehicle (including pass-by trips).

Trip Distribution and Assignment

Estimation of the directional distribution of Project trips was the next step in the analytical process. The primary factors affecting the trip distribution patterns are the nature of the Project uses, existing traffic patterns, characteristics of the surrounding roadway system, geographic location of the Project site and its proximity to freeways and major travel routes, residential areas from which employees would likely be drawn, and other various regions generating visitors and patrons. Based on these factors, the overall Project directional trip distribution percentages were determined and are summarized in Table 6.

The general distribution percentages shown in Table 5 were then disaggregated and assigned to specific routes and intersections within the study area (and the Project driveway) that are expected to be used for Project access/egress. The Project's trip distribution percentages for the Project's studio and commercial uses and the service studio trucks are in Figures 6(a) and 6(b), respectively.

Applying these inbound and outbound percentages to the non-pass-by Project trip generation estimates calculated in Table 6, the Project's traffic volumes at the study intersections were determined for the weekday AM and PM peak hours. The Project studio and commercial uses weekday AM and PM peak-hour traffic volumes are depicted in Figures 7(a) and 7(b), respectively. The Project service studio truck weekday AM and PM peak-hour traffic volumes are illustrated in Figures 8(a) and 8(b), respectively.

Table 6: Project Directional Trip Distribution Percentages

STUDIO/COMMERCIAL USES:

Direction	Precentage
North	20%
South	15%
East	40%
West	25%

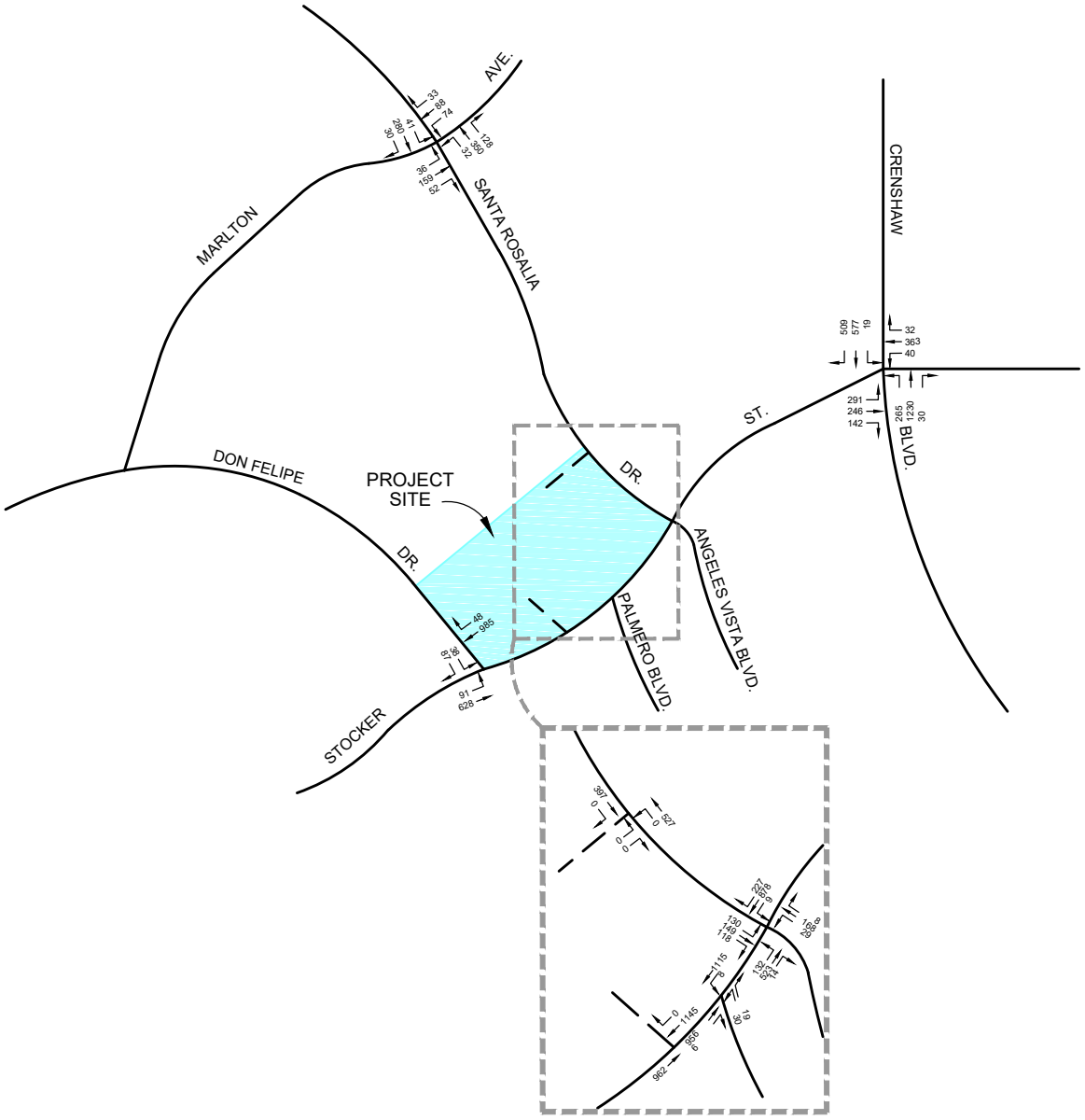


FIGURE 5(a)

EXISTING (2024) TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR

3/21/2024
FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\Existing_AM

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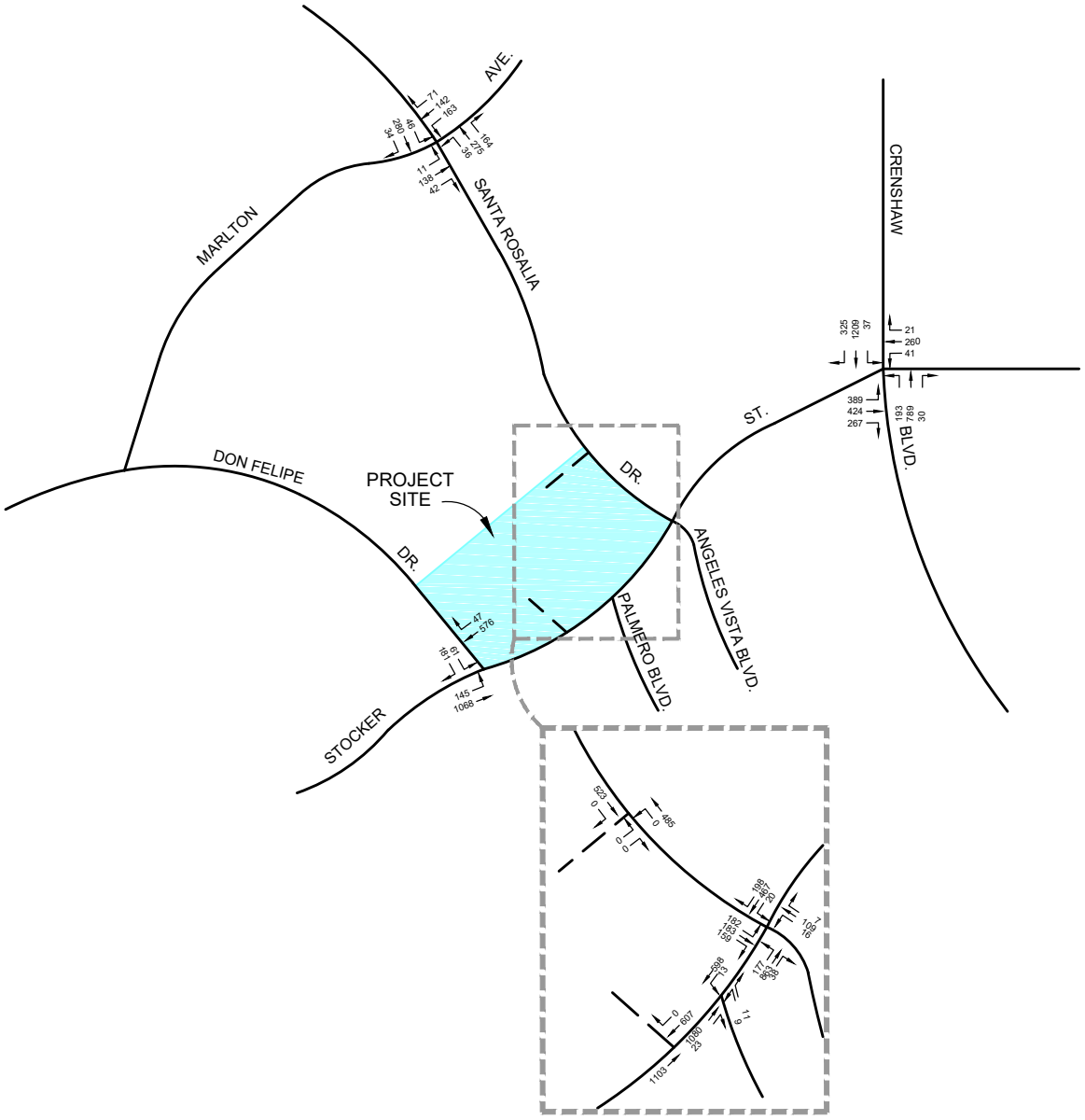


FIGURE 5(b)

3/21/2024

FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\Existing_PM

EXISTING (2024) TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

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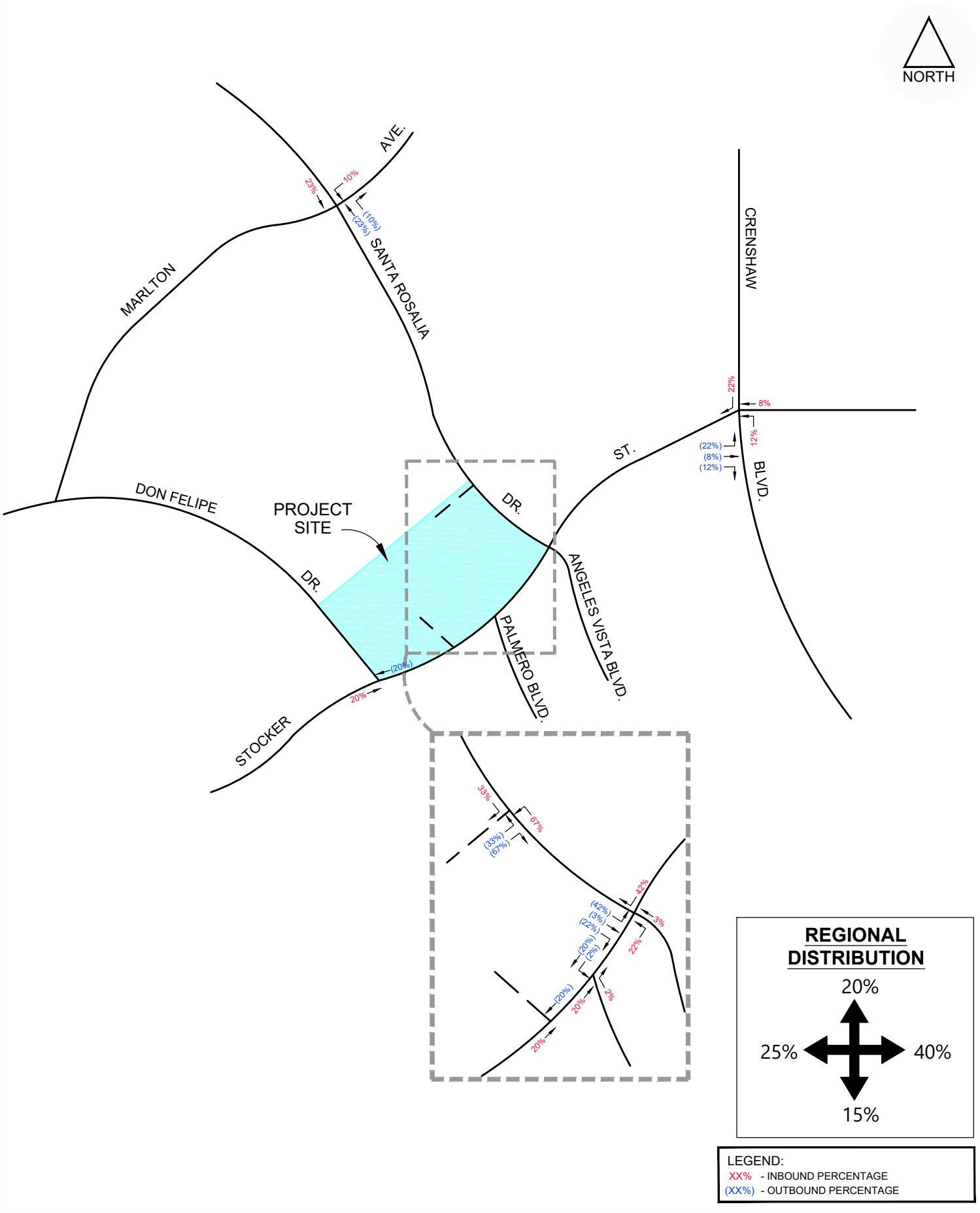


FIGURE 6(a)

10/26/2023
FN:2022\JC21049 LA 3701 Stocker Studio EIR\Docs\Figs\COMMERCIAL_ProjDis

PROJECT TRIP DISTRIBUTION PERCENTAGES - STUDIO AND COMMERCIAL USES

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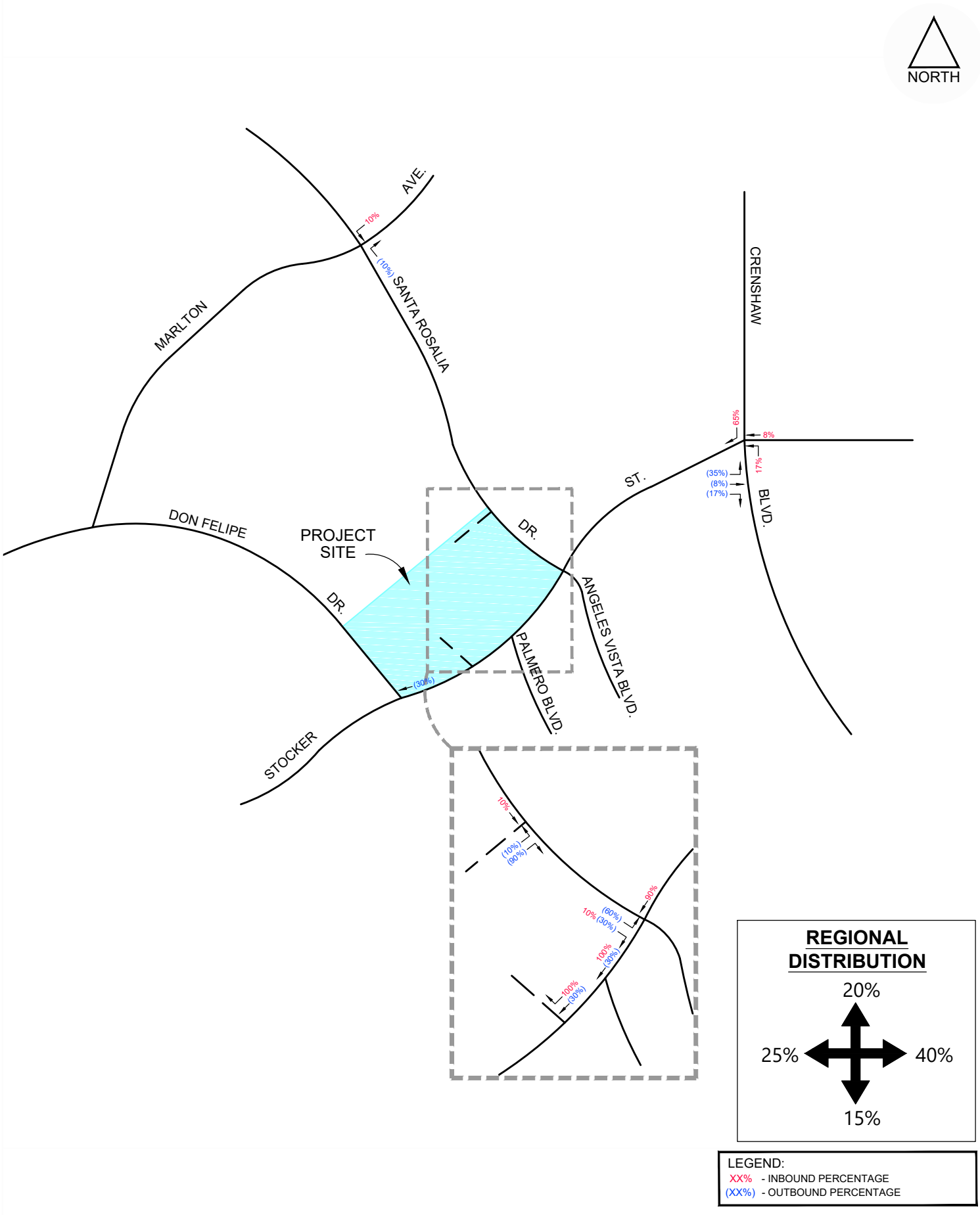


FIGURE 6(b)

10/26/2023
FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Docs\Figs\STUDIO_ProjDist

PROJECT TRIP DISTRIBUTION PERCENTAGES - SERVICE STUDIO TRUCKS

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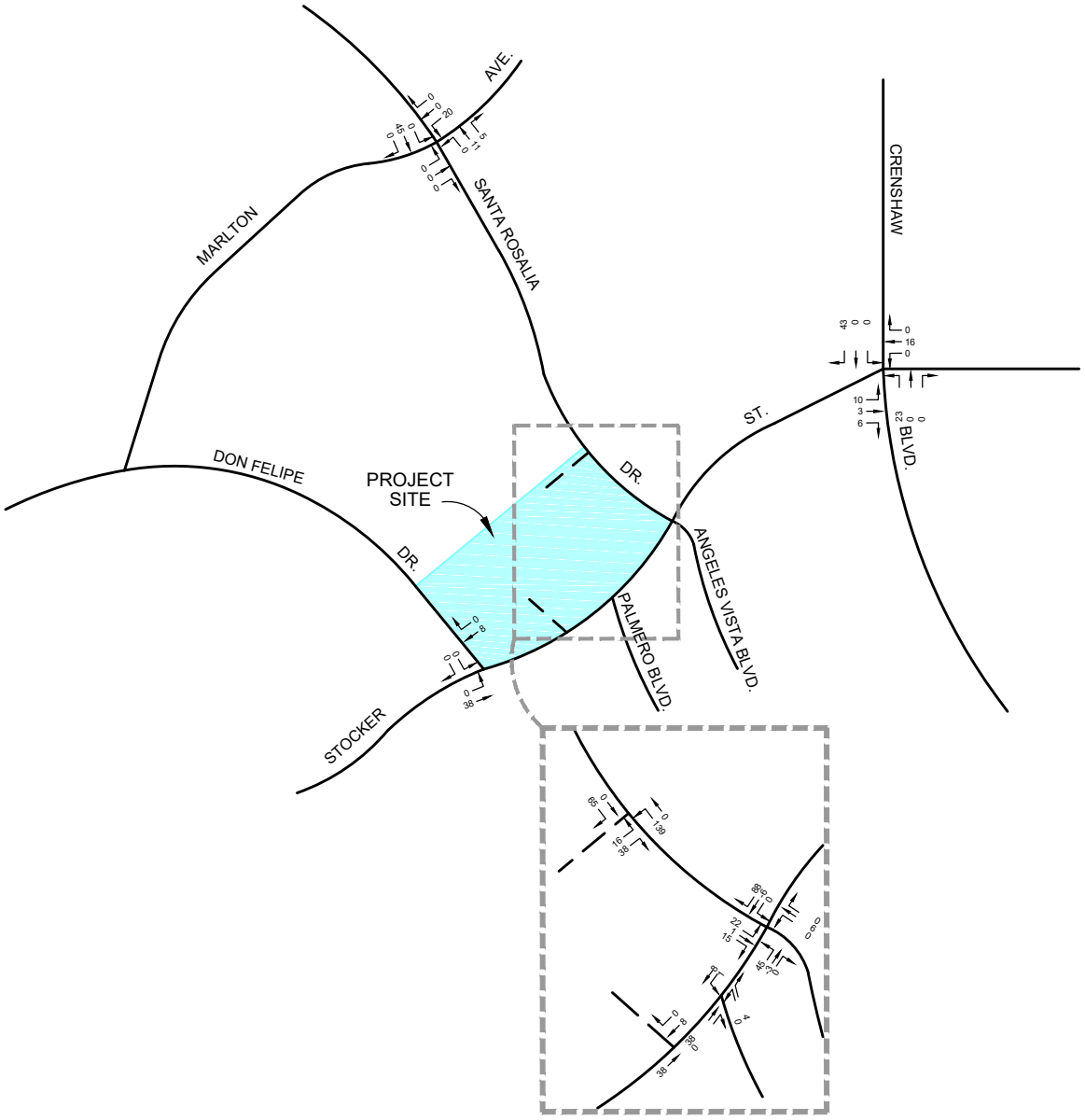


FIGURE 7(a)

3/22/2024
FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\PrjVol_StudioComm_AM_20240322

PROJECT STUDIO AND COMMERCIAL USES VEHICLE TRIPS
AM PEAK HOUR

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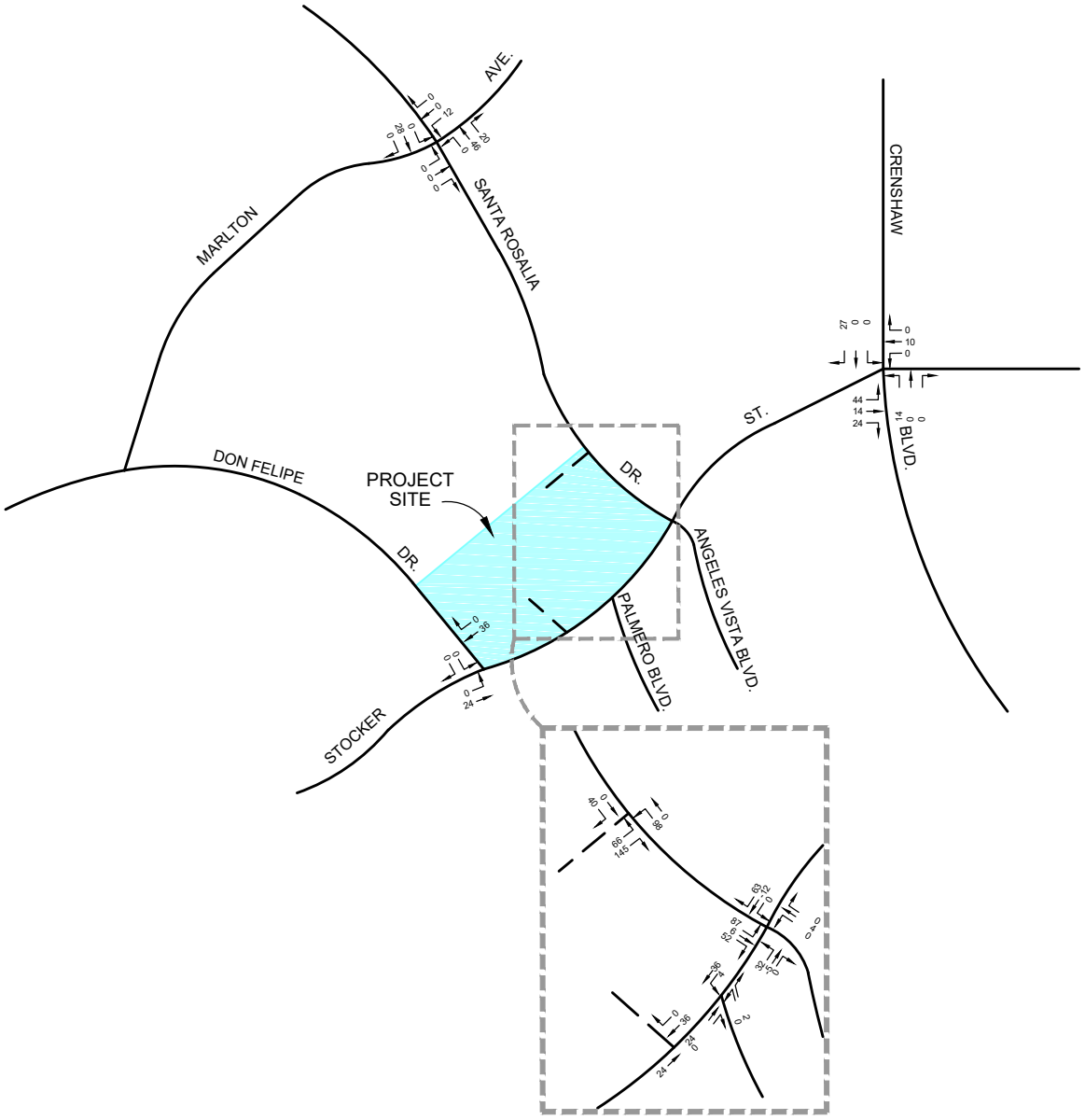


FIGURE 7(b)

3/22/2024
FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\PrjVol_StudioComm_PM_20240322

PROJECT STUDIO AND COMMERCIAL USES VEHICLE TRIPS
PM PEAK HOUR

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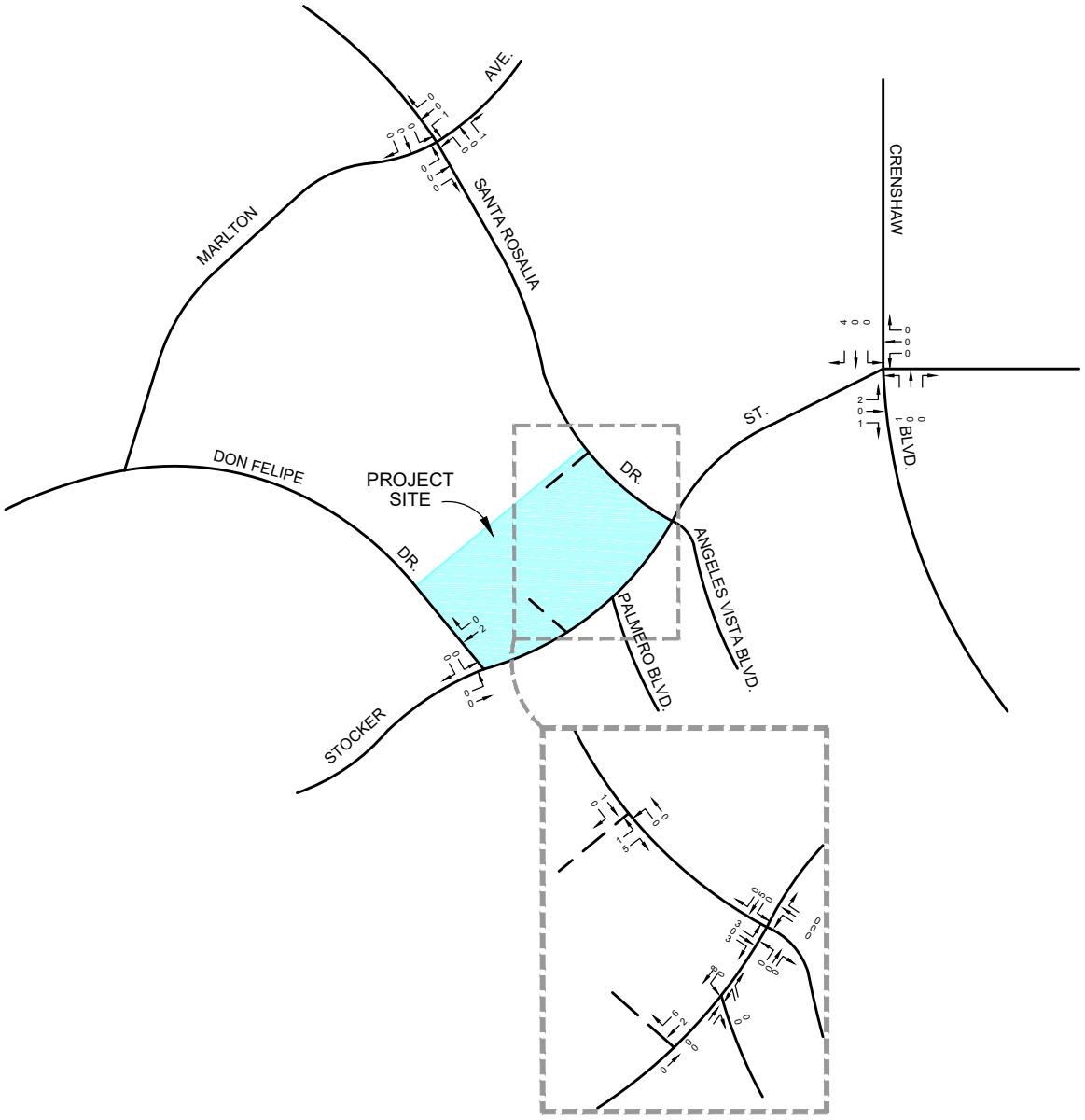


FIGURE 8(a)

3/22/2024
FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\Prj\Vol_Trucks_AM_20240322

PROJECT SERVICE STUDIO TRUCK TRIPS
AM PEAK HOUR

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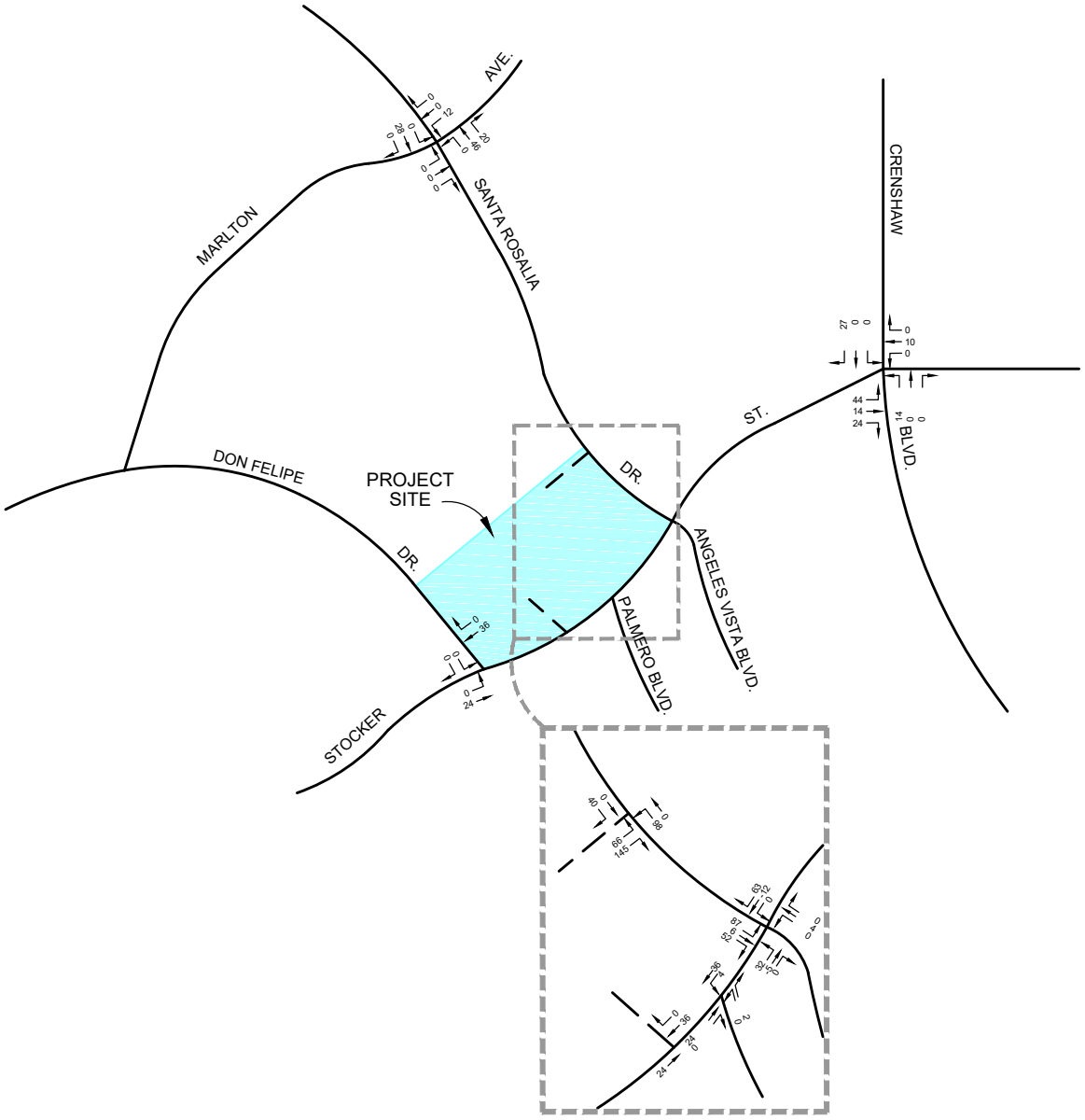


FIGURE 8(b)

2/1/2024
FN: JC21049 LA 3701 Stocker Studio EIR\Analysis\lcap7\STICK\PrjVol_StudioComm_PM

PROJECT VEHICLE TRIPS - STUDIO AND COMMERCIAL USE
PM PEAK HOUR

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5.2.5 EXISTING (2024) AND EXISTING (2024) PLUS PROJECT CONDITIONS

The analysis of existing traffic conditions at the study intersections for existing year (2024) was performed using the two methodologies described previously. The Existing (2024) intersection traffic volumes for the weekday AM and PM peak hours were shown previously in Figures 5(a) and 5(b), respectively. These estimates are the "benchmark" volumes used in determining the Project effects on queuing and delay conditions for the surrounding roadway system.

The Existing (2024) Plus Project traffic volumes were determined by superimposing the Project traffic volumes onto the Existing (2024) traffic volumes. The Existing (2024) Plus Project traffic volumes at the study intersections are shown in Figures 9(a) and 9(b) for the weekday AM and PM peak hours, respectively. These volumes were used to create a Synchro traffic model for the "Existing Plus Project" scenario to determine changes to vehicle queuing and delay conditions directly attributable to the Project using the previously described methodologies. The Synchro delay and queue calculation worksheets are included in Appendix G.

Table 7 presents the results of the delay-based quantitative analysis of Existing (2024) and Existing (2024) Plus Project conditions. The Existing (2024) conditions are as follows:

- Don Felipe Drive & Stocker Street, Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street, and Santa Rosalia Drive & Marlton Avenue all operate at LOS B or better during the AM and/or PM peak hours.
- The stop-controlled approach of Palermo Boulevard & Stocker Street currently operates at LOS C during both peak hours.
- The signalized intersection at Crenshaw Boulevard & Stocker Street currently operates at LOS C during the AM peak hour and LOS D during the PM peak hour.

Following the addition of Project traffic, the following conditions are expected for the Existing (2024) Plus Project:

- The intersections of Palmero Boulevard & Stocker Street, Santa Rosalia Drive & Marlton Avenue, and Crenshaw Boulevard & Stocker Street would continue to operate at the same LOS during both peak hours as the existing conditions.
- Operations at the signalized intersection of Don Felipe Drive & Stocker Street would improve from LOS B to LOS A during the PM peak hour.
- The intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street would worsen from LOS B to LOS C during the AM peak hour while continuing to operate at LOS B during the PM peak hour.
- The Project driveway on Santa Rosalia Drive would operate at LOS C during the AM peak hour and LOS E during the PM peak hour.

Overall vehicle delay changes at the signalized study intersections will range from -1.8 to 2.9 seconds. The stop-controlled approaches will experience delay increases between 0.2 and 49.0 seconds. The Project is not expected to substantially increase delays at any of the study intersections with the exception of the Project driveway along Santa Rosalia Avenue. The delay at this Project driveway is related to vehicles exiting the Project driveway internal to the Project site.

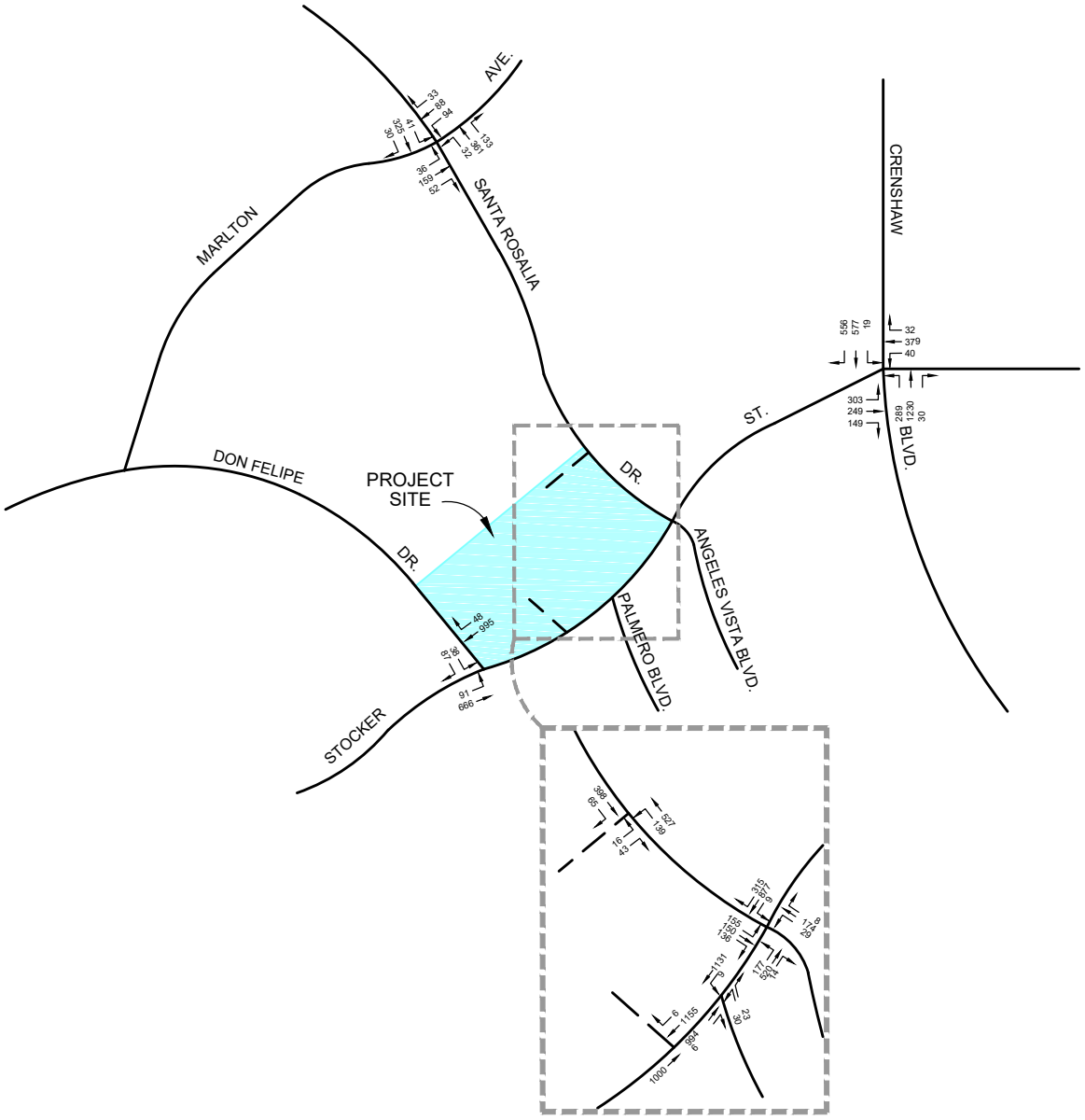


FIGURE 9(a)

3/22/2024

FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\Existing_withProj_AM

EXISTING (2024) PLUS PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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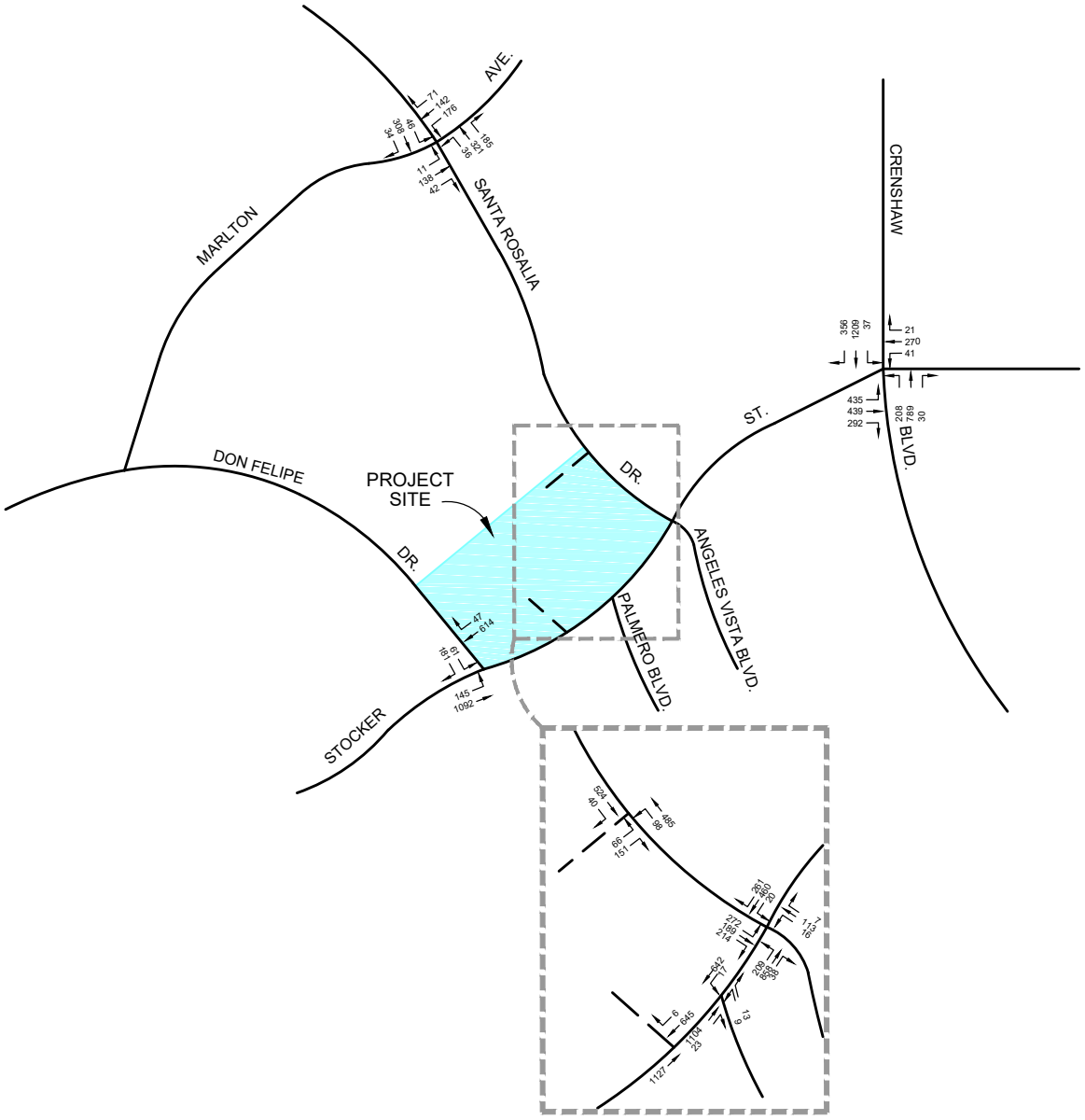


FIGURE 9(b)

3/22/2024
FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\Existing_withProj_PM

EXISTING (2024) PLUS PROJECT TRAFFIC VOLUMES
PM PEAK HOUR

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Table 7: Existing (2024) Traffic Conditions
Intersection Delay Summary

Study Intersections		Peak Hour	Existing (2024) Conditions		Existing (2024) Plus Project Conditions		Change in Delay[3]
			Delay[1]	LOS[2]	Delay[1]	LOS[2]	
1	Don Felipe Drive & Stocker Street	AM	6.7	A	4.9	A	-1.8
		PM	11.2	B	9.8	A	-1.4
2	Project Driveway & Stocker Street*	AM	-	-	0.0	A	0.0
		PM	-	-	0.0	A	0.0
3	Palmero Boulevard & Stocker Street*	AM	21.9	C	22.4	C	0.5
		PM	19.9	C	20.1	C	0.2
4	Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	19.0	B	20.8	C	1.8
		PM	16.0	B	18.6	B	2.6
5	Santa Rosalia Drive & Project Driveway*	AM	-	-	19.3	C	19.3
		PM	-	-	49.0	**E**	49.0
6	Santa Rosalia Drive & Marlton Avenue	AM	15.0	B	15.0	B	0.0
		PM	14.8	B	15.0	B	0.2
7	Crenshaw Boulevard & Stocker Street[4]	AM	30.2	C	31.6	C	1.4
		PM	37.2	D	40.1	D	2.9

*Unsignalized Intersection- Delay is based on higher delay at stop approach
1. Delay in seconds
2. *LOS = Level of Service*
3. Change in delay reported in seconds
4. HCM6th Edition methodology does not support Non-NEMA phasing, therefore, HCM2000 results reported.

Queuing conditions were analyzed at the study intersections. The queue lengths, measured in number of feet for the 95th percentile back-of-queue length, are shown in Table 8 for Existing (2024) and Existing (2024) Plus Project conditions. As shown in Table 8, several intersections are experiencing instances of spillover either during Existing (2024) and/or Existing (2024) Plus Project conditions including:

- Don Felipe Drive & Stocker Street during the PM peak hour with the southbound left-turn lane exceeding the storage capacity by 20 feet. The Project will not contribute to the vehicle queues.
- Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street experiences spillover conditions in the eastbound left-turn lane in the Existing (2024) condition by 36 feet or approximately 1.44 vehicle lengths during the AM peak hour. The Project will contribute to the queue with the addition of Project trips which is projected to increase the existing queue another 78 feet or 3.12 vehicle lengths. During the PM peak hour, the Project will contribute to both the southbound and eastbound left-turn lanes by adding 67 feet or 2.68 vehicle lengths and by 106 feet or 4.24 vehicle lengths, respectively. The addition of these vehicles will cause these lanes to spillover by 28 feet or approximately 1.12 vehicle lengths and by 33 feet or 1.32 vehicle lengths, respectively.
- Santa Rosalia Drive & Marlton Avenue is expected to experience vehicle queues that exceed the existing storage capacity for the northbound right-turn lane by eight feet or approximately 0.32

vehicle length. It should be noted there is sufficient capacity to accommodate the additional vehicles since the red curb extends further south.

- Crenshaw Boulevard & Stocker Street experiences extensive vehicle queueing during the peak hours notably with queues extending past existing storage capacity at left-turn movements and along several movements at the intersection. During the AM peak hour, the northbound and eastbound left-turn lanes experience extended queuing and spillover of 66 feet or approximately 2.64 vehicle lengths and 19 feet or 0.76 vehicle length, respectively. The Project will increase these queues by 25 feet or one vehicle length and seven feet or 0.28 vehicle length, respectively. The southbound right-turn lane experiences 148 feet or 5.92 vehicle lengths spilling over into through lanes, and with the Project will increase another 87 feet or 3.48 vehicle lengths. During the PM peak hour, the northbound and eastbound left-turn lanes experience extended queuing and spillover of 60 feet or approximately 2.4 vehicle lengths and 90 feet or 3.6 vehicle lengths, respectively. The Project will increase these queues by 19 feet or 0.76 vehicle lengths and 45 feet or 1.8 vehicle lengths, respectively. The eastbound through lane experiences queues that exceed the available capacity by over 140 feet or 5.6 vehicle lengths. The Project will increase the queue by 19 feet or 0.76 vehicle lengths.
- At the Project Driveway & Santa Rosalia Drive intersection, after completion of the Project, intersection approaches are expected to experience nominal increases of 0 to 25 feet or up to one vehicle length (vehicle length is equivalent to 25 feet), with the exception of the Project driveway along Santa Rosalia Drive which is anticipated to experience queue lengths of 153 feet (approximately six vehicle lengths) during the PM peak hour for the eastbound approach exiting the Project site.

There are instances where existing spillover and extensive queues are experienced at the study intersections, specifically at Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street and Crenshaw Boulevard & Stocker Street. With the addition of Project trips, the Project is expected to contribute to worsening queuing conditions as noted above. To address the worsening operations and potential safety concerns, mitigation measures and intersection improvements were developed. The CEQA mitigation measures are discussed in Section 6 along with the non-CEQA recommended actions in Section 7.

Table 8: Existing (2024) Traffic Conditions Intersection Queuing Summary

Study Intersections	Peak Hour	Approach	Storage Capacity (ft)	Existing (2024) Conditions	Existing (2024) Plus Project Conditions	
				Queue Length[1]	Queue Length[1]	Change[2]
1 Don Felipe Drive & Stocker Street	AM	SBL	50	48	48	0
		SBR	735	120	120	0
		EBL	150	23	10	-13
		EBT	650	38	40	3
		WBT	370	83	13	-70
		WBR	370	83	13	-70
	PM	SBL	50	***70***	***70***	0
		SBR	735	250	250	0
		EBL	150	53	43	-10
		EBT	650	163	168	5
		WBT	370	83	23	-60
		WBR	370	85	25	-60
2 Project Driveway & Stocker Street*	AM	EBT	125	-	0	0
		WBT	220	-	0	0
		WBR	220	-	0	0
	PM	EBT	125	-	0	0
		WBT	220	-	0	0
		WBR	220	-	0	0
3 Palmero Boulevard & Stocker Steet*	AM	NBL/R	950	23	25	3
		EBT	370	-	-	-
		EBR	370	-	-	-
		WBL	45	0	0	0
		WBT	230	-	-	-
	PM	NBL/R	950	10	13	3
		EBT	370	-	-	-
		EBR	370	-	-	-
		WBL	45	3	3	0
		WBT	230	-	-	-
4 Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	NBL	20	-	-	-
		NBT	1050	177	181	4
		NBR	20	0	0	0
		SBL	130	69	79	10
		SBT	285	161	170	9
		SBR	134	-	-	-
		EBL	130	***166***	***244***	78
		EBT	230	147	147	0
		WBL	115	11	11	0
		WBT	330	256	258	2
		WBR	110	31	38	7
	PM	NBL	20	-	-	-
		NBT	1050	124	124	0
		NBR	20	0	0	0
		SBL	130	91	***158***	67
		SBT	285	242	278	36
		SBR	134	-	-	-
		EBL	130	57	***163***	106
		EBT	230	113	122	9
		WBL	115	19	20	1
		WBT	330	109	155	46
		WBR	110	18	23	5
5 Santa Rosalia Drive & Project Driveway*	AM	NBL	285	-	13	13
		NBT	285	-	-	-
		SBT	650	-	-	-
		SBR	650	-	-	-
		EBL/R	230	-	18	18
	PM	NBL	285	-	10	10
		NBT	285	-	-	-
		SBT	650	-	-	-
		SBR	650	-	-	-
		EBL/R	230	-	153	153

Table 8: Existing (2024) Traffic Conditions Intersection Queuing Summary (continued)

Study Intersections	Peak Hour	Approach	Storage Capacity (ft)	Existing (2024) Conditions	Existing (2024) Plus Project Conditions	
				Queue Length[1]	Queue Length[1]	Change[2]
6 Santa Rosalia Drive & Marlton Avenue	AM	NBL	100	18	18	0
		NBT	300	203	205	2
		NBR	100	65	65	0
		SBL	60	30	30	0
		SBT	500	85	98	13
		SBR	500	88	100	13
		EBL	55	13	15	3
		EBT	330	0	0	0
		EBR	330	83	85	3
		WBL	130	33	45	13
		WBT	260	30	30	0
		WBR	130	10	13	3
	PM	NBL	100	20	20	0
		NBT	300	165	190	25
		NBR	100	95	***103***	7
		SBL	60	30	30	0
		SBT	500	85	88	3
		SBR	500	85	90	5
		EBL	55	3	5	3
		EBT	330	0	0	0
		EBR	330	60	65	5
		WBL	130	63	73	10
		WBT	260	40	43	3
		WBR	130	20	20	0
7 Crenshaw Boulevard & Stocker Street[4]	AM	NBL	145	***211***	***236***	25
		NBT	1100	337	341	4
		SBL	200	43	43	0
		SBT	790	208	208	0
		SBR	200	***348***	***435***	87
		EBL	150	***169***	***176***	7
		EBT	275	269	272	3
		EBR	170	19	19	0
		WBL	55	***58***	***57***	-1
		WBT	200	***211***	***218***	7
	PM	NBL	145	***205***	***224***	19
		NBT	1100	217	217	0
		SBL	200	64	64	0
		SBT	790	537	537	0
		SBR	200	114	150	36
		EBL	150	***240***	***285***	45
		EBT	275	***415***	***434***	19
		EBR	170	32	40	8
		WBL	55	55	55	0
		WBT	200	137	142	5

Notes:

* Unsignalized Intersections

[1] 95th percentile vehicle queue length in number of feet (Synchro software assumes 25 feet per vehicle).

[2] Change in vehicle queue length reported in number of feet.

[3] Storage capacities and queue lengths for movements with dual-lane turn pockets reported based on the average of the two lane

[4] Future condition includes a signal improvement to the northbound/southbound approaches as part of HSIP 7

XX ***Bolded/italicized*** vehicle queue length indicates that the queue exceeds turn-pocket capacity or distance in through lane to upstream intersection.

NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound; L = Left-turn; T = Through; R = Right-turn.

5.2.6 FUTURE (2029) WITHOUT AND WITH PROJECT CONDITIONS

There are several other projects either under construction or planned for development in the surrounding area that may contribute future traffic volumes to the study locations. For this reason, the analysis of future traffic conditions was expanded to include potential traffic volume increases expected to be generated by these other projects. In order to evaluate future traffic conditions in the Project area, an analysis of Existing (2024) traffic volumes was first conducted, as described previously. For the analysis of future conditions, an ambient traffic growth factor of 1.0 percent per year, compounded annually, was applied to these existing volumes at the seven study intersections to develop future year (2029) baseline traffic volumes.

The inclusion of the annual growth factor generally accounts for area-wide traffic volume increases. To ensure a conservative estimate of cumulative traffic conditions, the traffic volumes generated by "related projects" in the study area were also added to the future baseline traffic volumes. The total future volumes, including those due to related projects, formed the basis for the Future (2029) Without Project condition. Finally, the traffic expected to be generated by the Project was analyzed as an incremental addition to the Future (2029) Without Project condition, resulting in the Future (2029) With Project condition.

Ambient Traffic Growth

Based on an analysis of traffic growth projections in the West Adams/Baldwin Hills/Leimert Plan Area, the LADOT recommended the application of an ambient traffic growth factor of 1.0 percent per year for future traffic growth. This growth factor was used to account for increases in traffic volumes due to potential development projects not yet proposed or outside the study area. Compounded annually, the ambient traffic growth factor was applied to the Existing (2024) traffic volumes to develop the estimated baseline volumes for the future study year of 2029.

Related Projects

In addition to the use of the ambient growth rate, listings of potential projects located in the surrounding area ("related projects") that might be developed within the study time frame were obtained from the LADOT, Department of City Planning, and Los Angeles County. Recently published transportation impact studies and environmental reports for development projects in the area were also reviewed. Per the TAG, the related projects from these sources and within an approximate one-mile radius of the Project site were included. Refinement of the information resulted in a total of 16 related projects in the surrounding area that could add traffic to the study intersections.

The locations of the related projects are shown in Figure 10, Related Project Location Map. The related project locations, descriptions, and trip generation estimates are summarized in Table 9. The number of vehicle trips expected to be generated by the related projects were obtained from information provided by public agencies and environmental reports to the extent available.

For the analysis of Future (2029) Without Project traffic conditions, each related project's generated vehicle trips were distributed and assigned to the study area circulation system, using methodologies similar to those previously described for the Project trip distribution and assignment. Summing the individual related project traffic volume assignments, the total related project traffic volumes at the study intersections were calculated and are shown in Figures 11(a) and 11(b) for the weekday AM and PM peak hours, respectively.

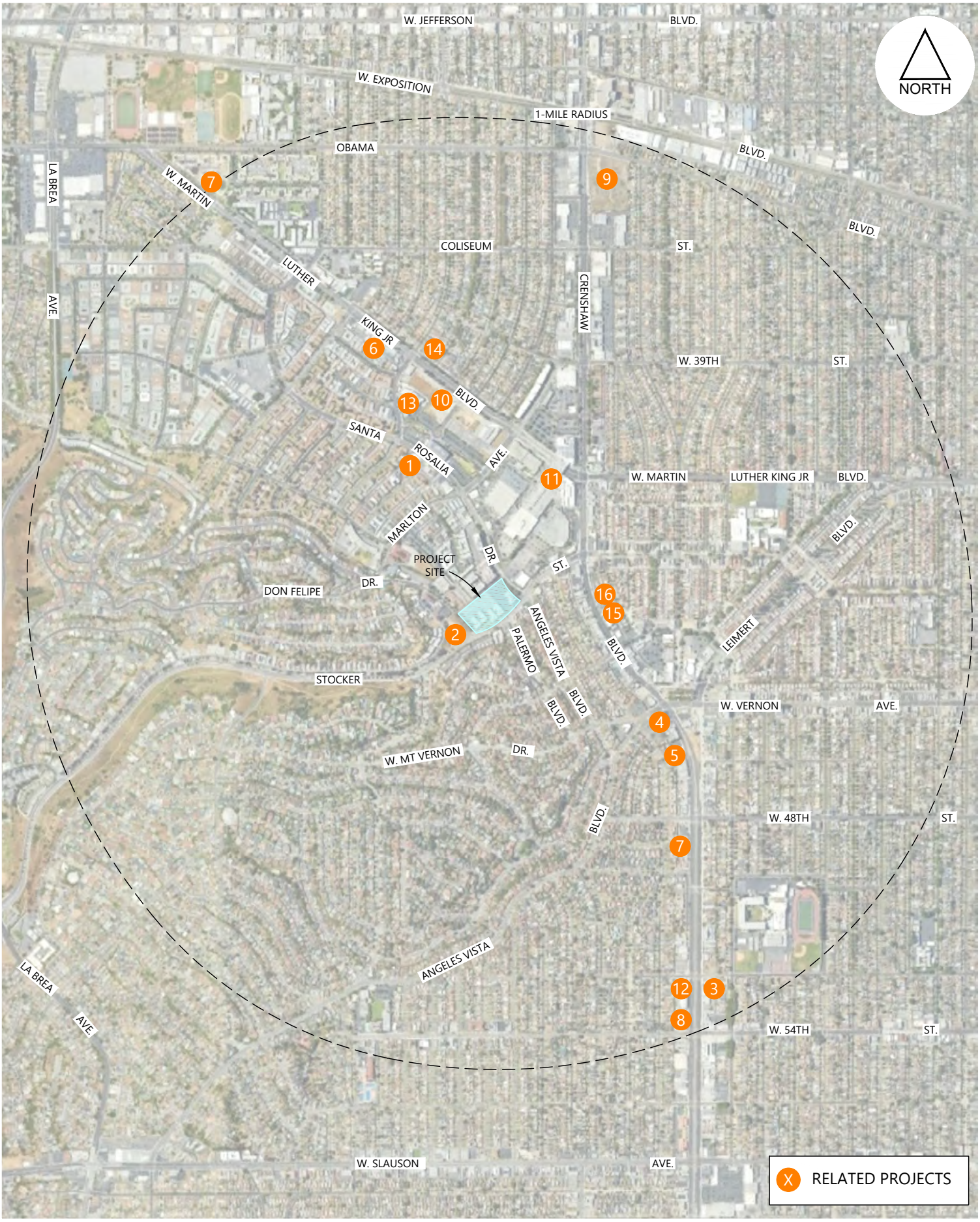


FIGURE 10

10/2/2023
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RELATED PROJECT LOCATION MAP

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Table 9: Related Project Locations, Descriptions, and Trip Generation Estimates

CITY OF LOS ANGELES

No.	Address/Location	Size	Project Description	ITE Code	Daily	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
1.	4101 S. Somerset Drive[4]	36 du	Residential - Multifamily Housing (Mid-Rise)	221	171	4	8	12	7	4	10
2.	3831 W. Stocker Street[1]	127 du	Apartments *(Credit for existing use & transit trips applied)*	-	710	4	48	52	50	19	69
3.	5300 S. Crenshaw Boulevard[1]		Crenshaw Apartments		412	7	19	26	19	14	33
		73 du	Apartments	-							
		9 du	Affordable Housing	-							
		1.847 du	Retail	-							
4.	4421 S. Crenshaw Boulevard[4,5,7,9]		Treehouse Leimert Park		1,211	39	43	81	61	46	107
		90 du	Apartments	221	428	10	19	29	17	9	26
		11 du	Affordable Housing	TAG	46	2	3	5	2	2	4
		7.295 ksf	Retail	822	397	10	7	17	24	24	48
		3.173 ksf	Restaurant	932	340	17	14	30	18	11	29
5.	4605 S. Crenshaw Boulevard[3,4,5]		4611 Crenshaw		895	23	41	64	36	21	56
		173 du	Residential - Multifamily Housing (Mid-Rise, Close to Rail Transit)	221	822	20	35	55	33	18	50
		22 du	Residential - Affordable Housing (Inside TPA Area)	TAG	92	4	7	11	4	4	8
		(4) du	*Residential - Multifamily Housing (Low-Rise, Close to Rail Transit)*	*220*	*(19)*	*(1)*	*(1)*	*(2)*	*(1)*	*(1)*	*(2)*
6.	4008 W. Martin Luther King Jr. Boulevard[1]		4008 W. Martin Luther King Jr. Boulevard		343	8	19	27	19	20	33
		63 du	Apartments	-							
		7 du	Affordable Housing	-							
		0.437 ksf	Retail	-							
7.	4827 Crenshaw Boulevard[4,5]		4827 Crenshaw Boulevard		149	4	7	11	6	4	10
		27 du	Residential - Multifamily Housing (Mid-Rise, Close to Rail Transit)	221	128	3	6	9	5	3	8
		5 du	Residential - Affordable Housing (Inside TPA Area)	TAG	21	1	1	2	1	1	2
8.	5365 S. Crenshaw Boulevard[4,5,7]		5365 Crenshaw		(246)	(6)	2	(4)	(20)	(24)	(43)
		42 du	Residential - Multifamily Housing (Mid-Rise, Close to Rail Transit)	221	200	5	8	13	8	4	12
		6 du	Residential - Affordable Housing (Inside TPA Area)	TAG	25	1	2	3	1	1	2
		1.224 ksf	Commercial - Strip Retail Plaza	822	67	2	1	3	4	4	8
		(9.878) ksf	*Commercial - Strip Retail Plaza*	*822*	*(538)*	*(14)*	*(9)*	*(23)*	*(33)*	*(33)*	*(65)*
9.	3650 Crenshaw Boulevard[1]	298.800 ksf	Retail (*Total reflects credit for exisitng shopping center 85.1 KSF*)	-	4,750	62	40	102	214	232	446
10.	3900 W. Martin Luther King Jr. Boulevard[2,6,8]		Marlton Square Redevelopment		5,084	439	78	517	159	450	609
		300 ksf	Commercial - General Office	710	3,252	401	55	456	73	359	432
		19.000 ksf	Retail - Supermarket	850	1,783	32	22	54	85	85	170
		10.000 ksf	Industrial - General Light Industrial	110	49	6	1	7	1	6	7
11.	3650 W. Martin Luther King Jr. Boulevard[1]		Baldwin Hills/Crenshaw Plaza Mixed-Use Development		13,512	447	428	875	665	668	1,333
		410 du	Apartments	-							
		551 du	Condominiums	-							
		400 rooms	Other	-							
		148.000 ksf	Office	-							
		50.000 ksf	Other	-							
		2,823 seats	Other	-							
		978.251 ksf	Retail	-							
		44.052 ksf	Other	-							
12.	5311 S. Crenshaw Boulevard[1]		Charter School		0	62	57	119	0	0	0
		990 stu	School	-							
13.	4018 S. Buckingham Road[1]		The Metro at Buckingham		447	10	16	26	18	15	33
		130 du	Senior Housing	-							
14.	4115 W. Martin Luther King Jr. Boulevard[1]		MLK Jr. Charter Middle School		1,054	210	134	344	31	42	72
		500 stu	School *(Total includes transit trip credits)*	-							
15.	4252 S. Crenshaw Boulevard[1]	110 du	Residential - Apartments	-	372	(1)	20	19	16	4	20
16.	4242 S. Crenshaw Boulevard[1]		4242 Crenshaw Mixed-Use		578	3	25	28	23	11	34
		113 du	Apartments	-							
		11 du	Affordable Housing	-							
		5.750 ksf	Retail	-							

Notes:

du = Dwelling Units; ksf = 1,000 Square Feet

Unless otherwise noted, trip generation and peak-hour directional distribution of trips based on data for the appropriate Land Use Code (LUC), per the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition).

[1] Net trip generation and peak-hour directional distributions provided by the LADOT Case Logging and Tracking System (CLATS) related projects database (accessed September 13, 2023).

[2] Trip generation and peak-hour directional distribution of trips based on ITE LUC 110 for General Light Industrial with the setting General Urban/Suburban.

[3] Trip generation and peak-hour directional distribution of trips based on ITE LUC 220 for Multifamily Housing (Low-Rise) with the subcategory Close to Rail Transit and setting General Urban/Suburban

[4] Trip generation and peak-hour directional distribution of trips based on ITE LUC 221 for Multifamily Housing (Mid-Rise) with the subcategory Close to Rail Transit and setting General Urban/Suburban.

[5] Trip generation and peak-hour directional distribution of trips based on information provided in Table 3.3-2 of the LADOT Transportation Assessment Guidelines.

[6] Trip generation and peak-hour directional distribution of trips based on ITE LUC 710 for General Office Building with the setting General Urban/Suburban.

[7] Trip generation and peak-hour directional distribution of trips based on ITE LUC 822 for Strip Retail Plaza with the setting General Urban/Suburban.

[8] Trip generation and peak-hour directional distribution of trips based on ITE LUC 850 for Retail Supermarket with the setting General Urban/Suburban.

[9] Trip generation and peak-hour directional distribution of trips based on ITE LUC 932 for High-Turnover (Sit-Down) Restaurants with the setting General Urban/Suburban.

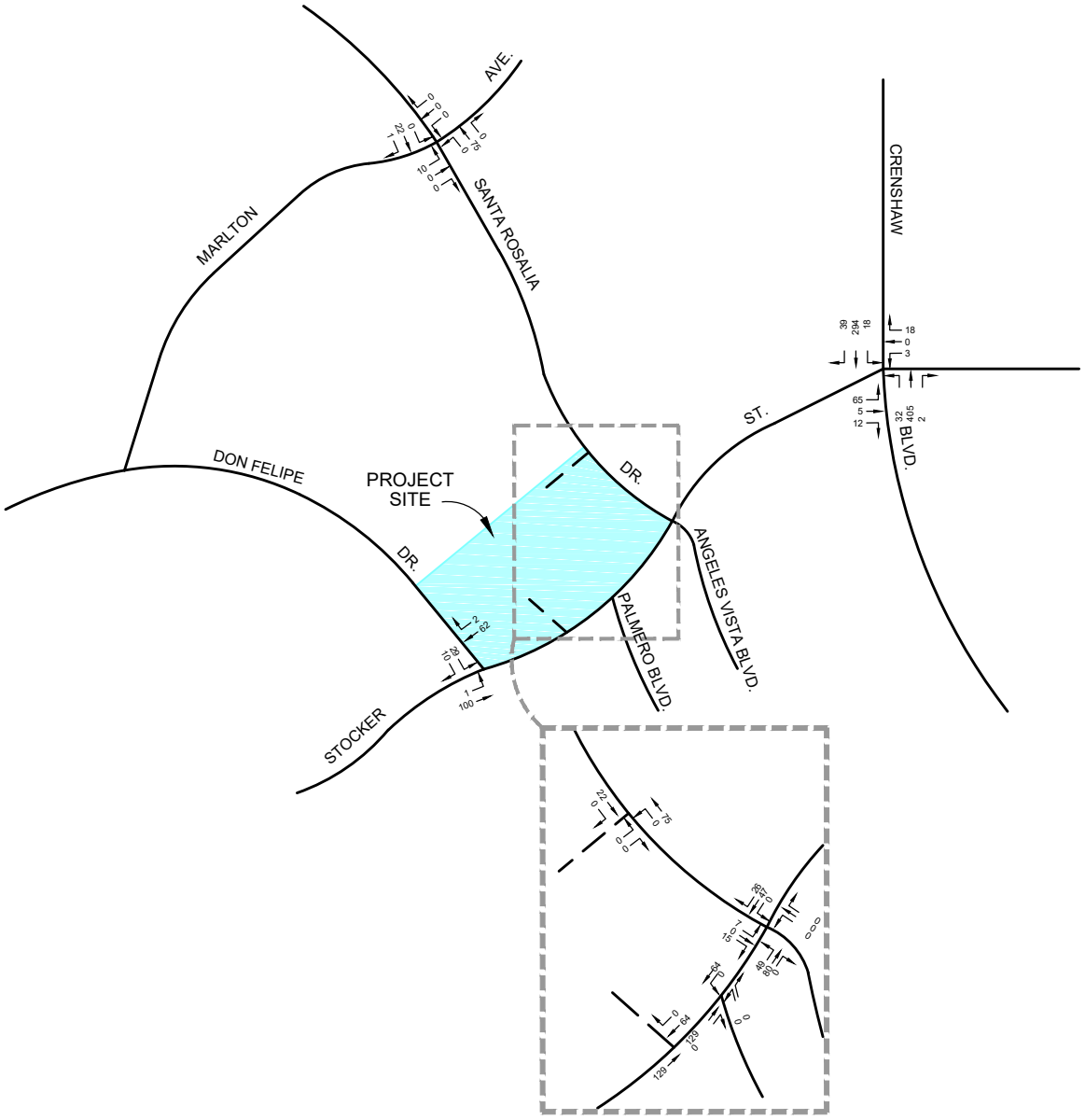


FIGURE 11(a)

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RELATED PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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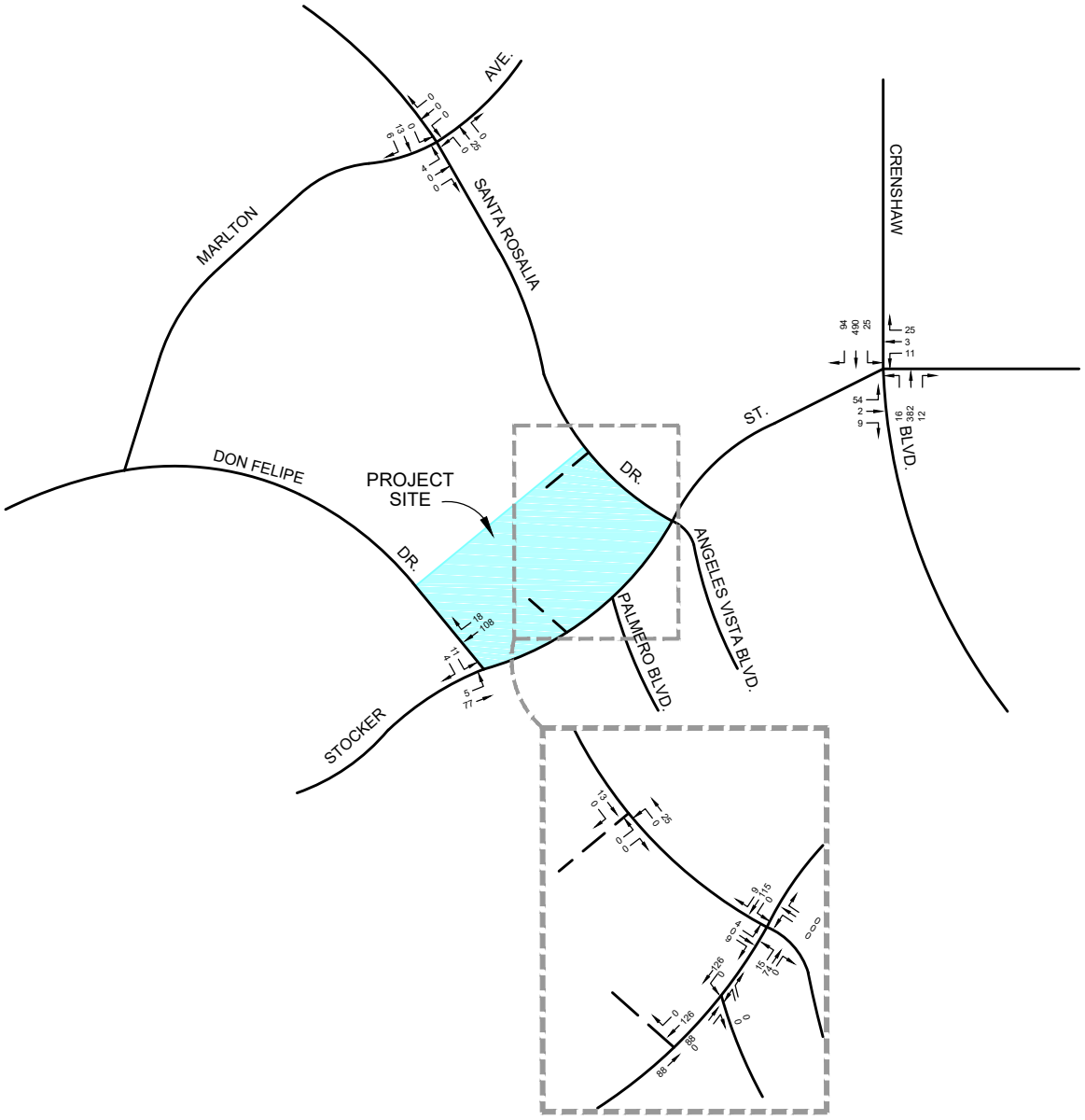


FIGURE 11(b)

3/22/2024
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RELATED PROJECT TRAFFIC VOLUMES
PM PEAK HOUR

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Highway System Improvements

In order to analyze properly future traffic conditions, an investigation was conducted regarding relevant future transportation improvements to the roadway system infrastructure in the Project study area. No traffic improvements were identified as scheduled for implementation that would affect use of the existing street system.

The goals and policies of the City's 2010 Bicycle Plan (City of Los Angeles Department of Planning, adopted March 1, 2011) have been folded into the Mobility Plan 2035. It is a Mobility Plan 2035 objective to complete the proposed bicycle paths, protected cycle tracks, bicycle lanes, routes, and priority Neighborhood Enhanced Network roadway segments by 2035. While some of these improvements have already been realized, the following improvements are scheduled for implementation within the Project study area:

- Stocker Street between Palmero Drive and Crenshaw Boulevard will add pedestrian enhanced districts per the LADOT 2035 Mobility Plan.
- Santa Rosalia Drive between Stocker Street and Coliseum Drive will add neighborhood enhanced networks.

Per information reviewed of the LADOT website, the abovementioned improvements are not currently in the planning, design, or construction phases. Therefore, these improvements are unlikely to be installed between now and the Project buildout year of 2029. As such, no changes to the future (2029) study intersection geometrics and/or traffic control conditions due to pedestrian or neighborhood improvements have been assumed in the operational analysis.

A review of the LADOT Capital Improvement Projects and Bureau of Engineering Street Improvement Master Schedule revealed no projects that would affect operations at any of the study locations. As no highway system improvements were identified, the existing and future intersection geometrics and traffic control conditions are assumed to be the same, as illustrated in Appendix E.

Analysis of Future (2029) Traffic Conditions, Without and With Project

The analysis of future traffic conditions at the study intersections was performed using the analysis procedures described previously in this report. Future (2029) baseline traffic volumes for the Without Project condition were determined by superimposing area-wide ambient traffic growth and the total related projects traffic volumes onto Existing (2024) traffic volumes. The Future (2029) Without Project traffic volumes are illustrated in Figures 12(a) and 12(b) for the weekday AM and PM peak hours, respectively.

Project traffic volumes, Figures 7(a) and 7(b), 8(a) and 8(b), were then added to the Future (2029) Without Project traffic volumes to develop the Future (2029) With Project traffic volumes. The Future (2029) With Project weekday AM and PM peak-hour traffic volumes are shown in Figures 13(a) and 13(b), respectively. The Future (2029) With Project traffic volumes were incorporated into the Synchro model to determine the future delay and queuing conditions at the study intersections after Project completion and the results are included in Appendix G.

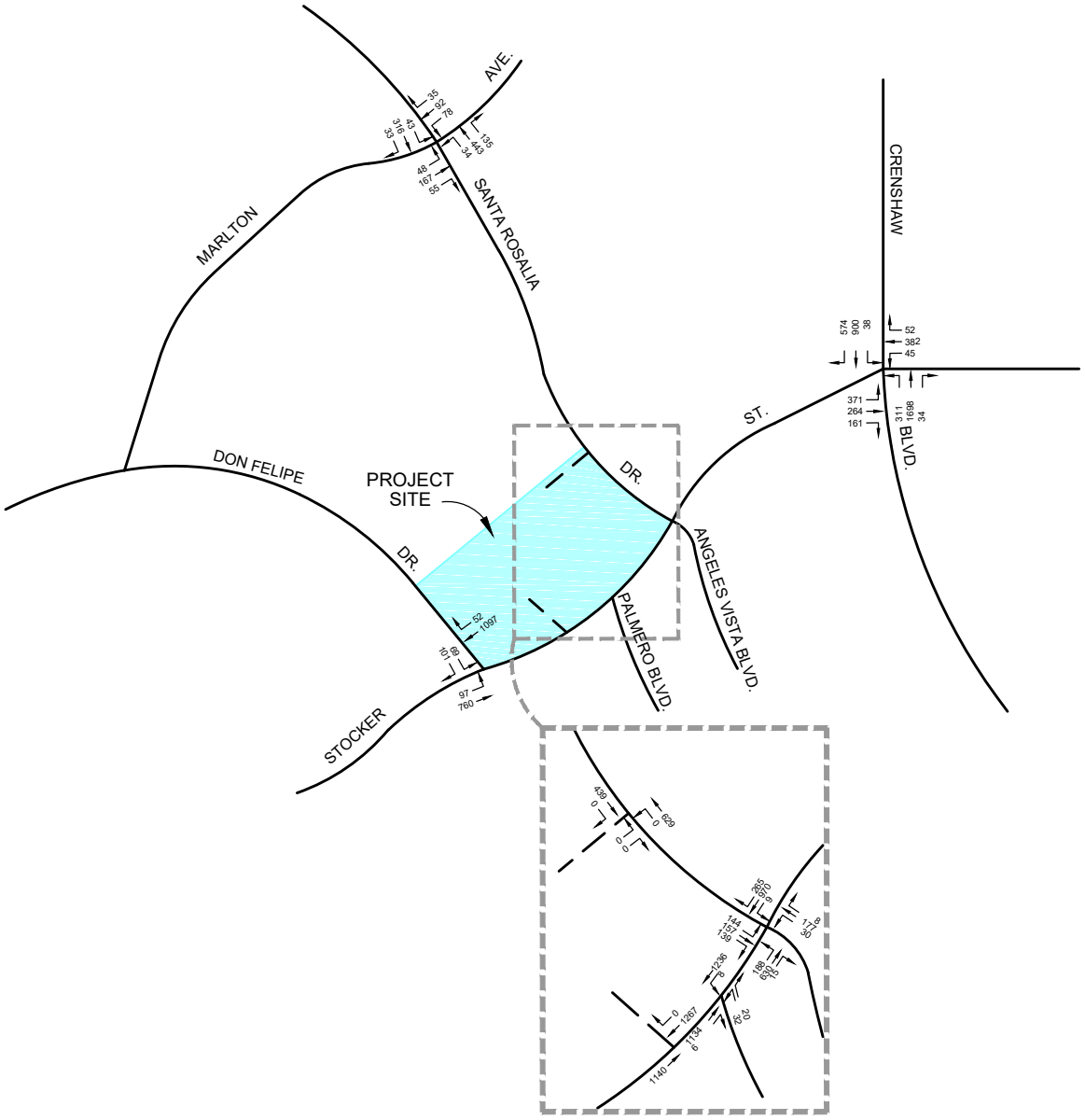


FIGURE 12(a)

3/22/2024
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FUTURE (2029) WITHOUT PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR

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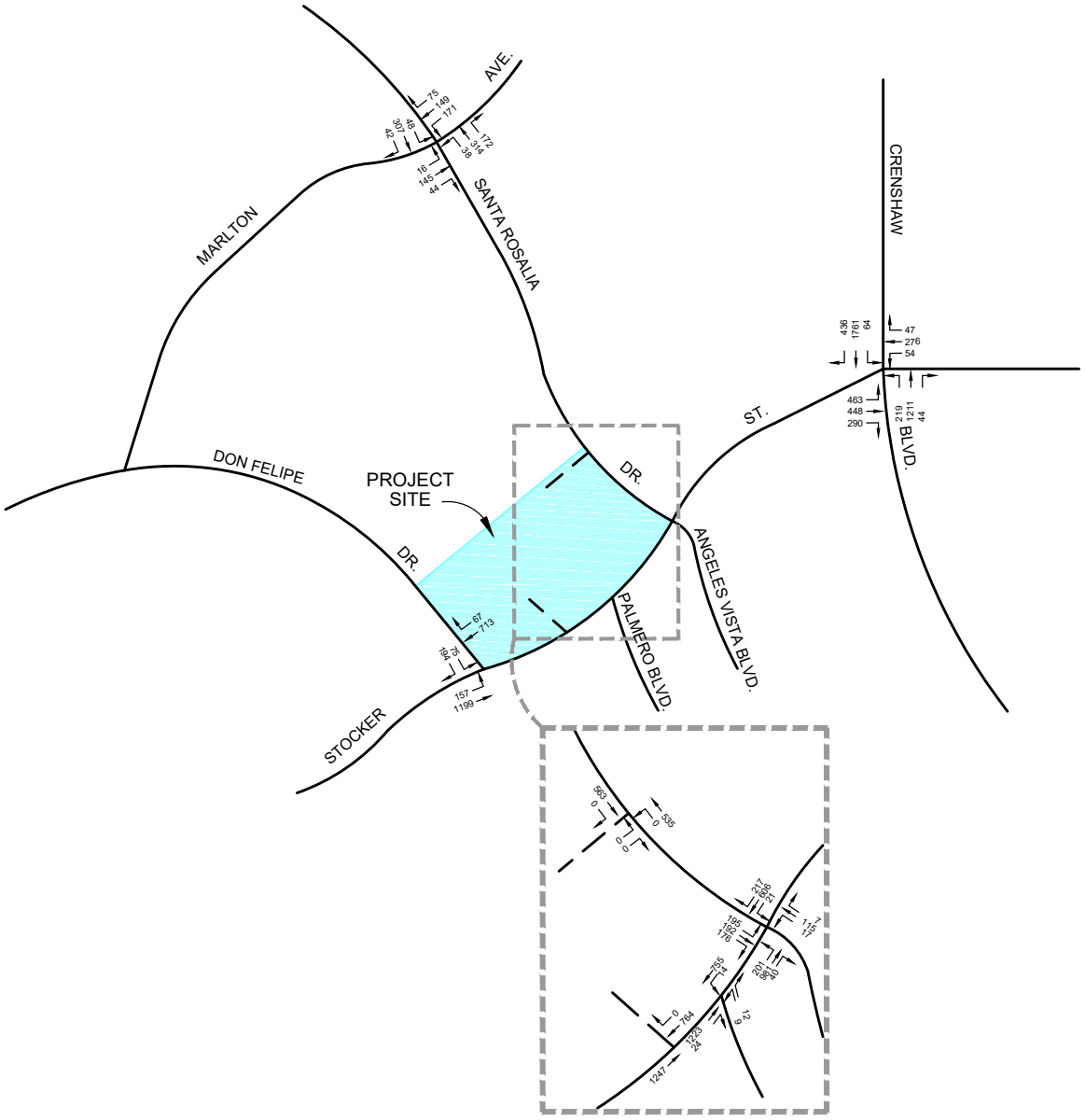


FIGURE 12(b)

3/22/2024
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FUTURE (2029) WITHOUT PROJECT TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

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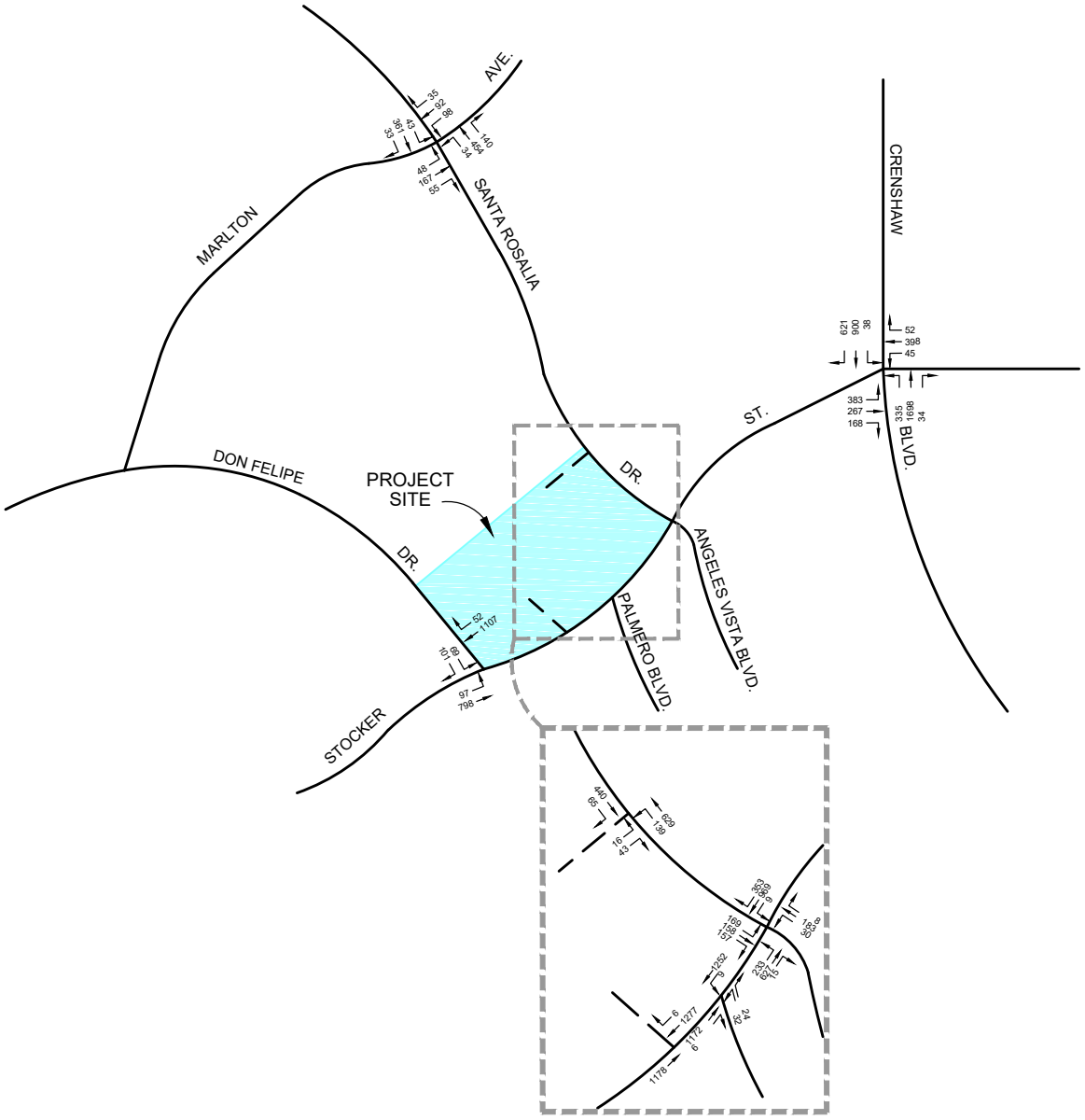


FIGURE 13(a)

3/22/2024
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FUTURE (2029) WITH PROJECT TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR

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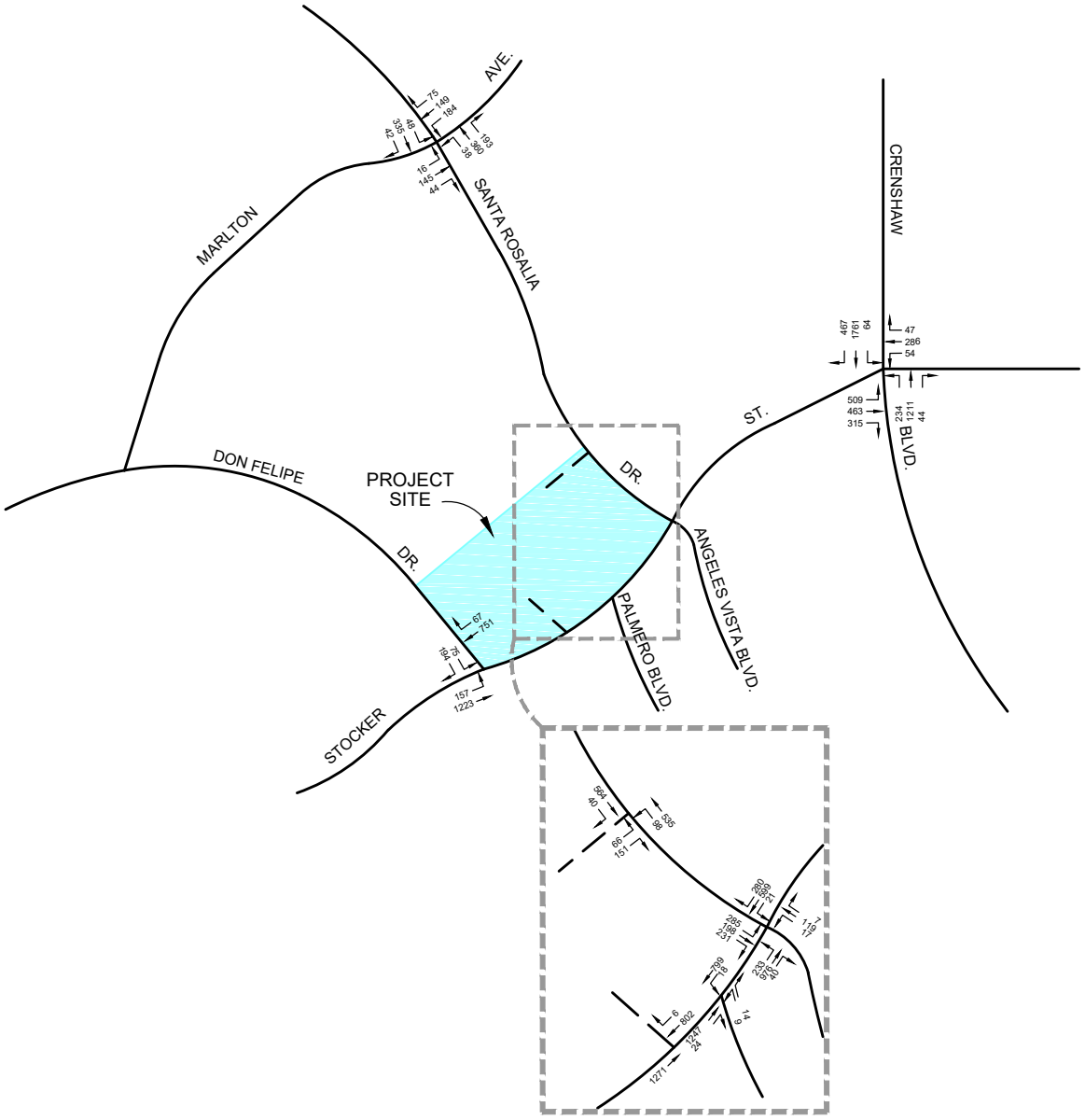


FIGURE 13(b)

3/22/2024

FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Analysis\Icap7\STICK\PM2029WP

FUTURE (2029) WITH PROJECT TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR

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The results of the delay-based quantitative analysis of future traffic conditions at the study intersections are summarized in Table 10. Under Future (2029) Without Project conditions, traffic operations are expected to degrade when compared with Existing (2024) conditions:

- The stop-controlled approaches of Palermo Boulevard & Stocker Street degrade from LOS C to LOS D during the AM peak hour.
- The signalized intersection at Santa Rosalia Drive/Angeles Vista Boulevard Street & Stocker Street degrades from LOS B to LOS C during the AM peak hour.
- The signalized intersection at Crenshaw Boulevard & Stocker Street deteriorates from LOS C to LOS D during the AM peak hour and LOS D to LOS F during the PM peak hour.

Following the addition of Project traffic, the level of service at the intersections under the Future (2029) With Project conditions are expected to operate as follows:

- The intersections of Don Felipe Drive & Stocker Street, Palmero Boulevard & Stocker Street, and Santa Rosalia Drive & Marlton Avenue would continue to operate at the same LOS during both AM and PM peak hours.
- The intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street would deteriorate from LOS C to LOS D during the AM peak hour and LOS B to LOS C during the PM peak hour.
- The signalized intersection at Crenshaw Boulevard & Stocker Street worsens from LOS D to LOS E during the AM peak hour and remains at LOS F during the PM peak hour.
- Lastly, the Project driveway on Santa Rosalia Drive would operate at LOS C during the AM peak hour and LOS F during the PM peak hour. The poor level of service during the PM peak hour is attributed to the outbound trips at the Project driveway.

Vehicle delay changes at the signalized study intersections will range from -2.0 to 10.1 seconds. The stop-controlled approaches will experience delay increases between 0.3 and 69.2 seconds. Overall, and similar to the existing conditions scenario, the Project is not expected to substantially increase delays at any of the study intersections with the possible exception of the Project driveway.

Table 10: Future (2029) Traffic Conditions
Intersection Delay Summary

	Study Intersections	Peak Hour	Future (2029) Without Project Conditions		Future (2029) With Project Conditions		Change in Delay[3]
			Delay[1]	LOS[2]	Delay[1]	LOS[2]	
1	Don Felipe Drive & Stocker Street	AM	7.7	A	5.7	A	-2.0
		PM	12.1	B	10.4	B	-1.7
2	Project Driveway & Stocker Street*	AM	-	-	0.0	A	0.0
		PM	-	-	0.0	A	0.0
3	Palmero Boulevard & Stocker Street*	AM	27.5	D	28.3	D	0.8
		PM	23.1	C	23.4	C	0.3
4	Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	25.6	C	35.7	D	10.1
		PM	16.7	B	21.3	C	4.6
5	Santa Rosalia Drive & Project Driveway*	AM	-	-	23.6	C	23.6
		PM	-	-	69.2	**F**	69.2
6	Santa Rosalia Drive & Marlton Avenue	AM	15.0	B	15.0	B	0.0
		PM	15.0	B	15.2	B	0.2
7	Crenshaw Boulevard & Stocker Street[4]	AM	52.7	D	56.6	**E**	3.9
		PM	104.7	**F**	111.9	**F**	7.2

*Unsignalized Intersection- Delay is based on higher delay at stop approach

1. Delay in seconds

2. *LOS = Level of Service*

3. Change in delay reported in seconds

4. HCM6th Edition methodology does not support Non-NEMA phasing, therefore, HCM2000 results reported.

The queue lengths are shown in Table 11 for Future (2029) Without Project and With Project conditions. Compared to Existing (2024) conditions, the signalized intersections will experience more vehicle queueing during the peak hours. The following intersections are expected to experience instances of spillover either during Future (2029) Without and/or With Project conditions:

- Don Felipe Drive & Stocker Street during the AM and PM peak hour with the southbound left-turn lane exceeding the storage capacity by 35 feet and 38 feet, respectively. The Project will not increase vehicles to these queues.
- Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street will experience spillover conditions in the eastbound left-turn lane by 150 feet or approximately 6 vehicle lengths during the AM peak hour. The Project will contribute to the queue with the addition of Project trips which is anticipated to increase the queue an additional 78 feet or 3.12 vehicle lengths. During the PM peak hour, the Project will contribute to the southbound and eastbound left-turn lanes 71 feet or 2.84 vehicle lengths and 145 feet or 58 vehicle lengths, respectively. The addition of these trips will cause queues to spillover by 38 feet or approximately 1.52 vehicle lengths and by 107 feet or 4.28 vehicle lengths, respectively. Additionally, the Project will add 37 feet or 1.48 vehicle lengths to the southbound through lane causing the lane to exceed the capacity by 12 feet or 0.48 vehicle lengths.

- Santa Rosalia Drive & Marlton Avenue is expected to experience vehicle queues that exceed the existing storage capacity for the northbound right-turn lane by 10 feet or approximately 0.40 vehicle length. It should be noted there is sufficient capacity to accommodate the additional vehicles since the red curb extends further south.
- Crenshaw Boulevard & Stocker Street experiences extensive vehicle queueing during the peak hours notably with queues extending past existing storage capacity at left-turn movements and along several movements at the intersection in both Without and With Project scenarios. During the AM peak hour, the northbound and eastbound left-turn lanes will experience extended queuing and spillover of 289 feet or approximately 11.56 vehicle lengths and 141 feet or 5.64 vehicle lengths, respectively. The Project will increase these queues by 53 feet or 2.12 vehicle lengths and 12 feet or 0.48 vehicle length, respectively. The eastbound and westbound through lanes will experience 12 feet or 0.48 vehicle length and 26 feet or 1.04 vehicle lengths, respectively. With the Project trips, queues will increase another 2 feet or 0.08 vehicle lengths and 7 feet or 0.28 vehicle lengths, respectively. Additionally, the southbound right-turn lane is projected to exceed the capacity 326 feet or 13.04 vehicle lengths. With the Project, the queues will be reduced by 55 feet or 2.2 vehicle lengths. During the PM peak hour, the northbound and eastbound left-turn lanes experience extended queuing and spillover of 245 feet or approximately 9.8 vehicle lengths and 217 feet or 8.68 vehicle lengths, respectively. The Project will increase these queues by 29 feet or 1.16 vehicle lengths and 44 feet or 1.76 vehicle lengths, respectively. Additionally, the southbound right-turn lane and eastbound through lane are projected to exceed the capacity of the lanes by 12 feet or 0.48 vehicle lengths and 238 feet or 9.52 vehicle lengths, respectively. With the Project, the queues will extend another 28 feet or 1.12 vehicle lengths and 25 feet or 1 vehicle length, respectively.
- The Project driveway along Santa Rosalia Drive is anticipated to experience queue lengths at the eastbound approach of 190 feet (approximately eight vehicle lengths) during the PM peak hour.

Under future conditions, there are instances where spillover and extensive queues are experienced at the study intersections prior to the inclusion of the Project trips, namely at the intersections of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street and Crenshaw Boulevard & Stocker Street. With the Project, the additional trips are expected to contribute to worsening queuing conditions and have the potential to cause hazardous roadway conditions. To address the worsening operations and potential safety concerns, mitigation measures and intersection improvements were developed. The CEQA mitigation measures are discussed in Section 6 along with the non-CEQA recommended actions in Section 7.

Table 11: Future (2029) Traffic Conditions Intersection Queuing Summary

Study Intersections	Peak Hour	Approach	Storage Capacity (ft)	Future (2029) Conditions	Future (2029) with Project Conditions	
				Queue Length[1]	Queue Length[1]	Change[2]
1 Don Felipe Drive & Stocker Street	AM	SBL	50	***85***	***85***	0
		SBR	735	135	135	0
		EBL	150	30	15	-15
		EBT	650	55	58	2
		WBT	370	108	18	-90
		WBR	370	113	18	-95
	PM	SBL	50	***88***	***88***	0
		SBR	735	275	275	0
		EBL	150	70	55	-15
		EBT	650	203	208	5
		WBT	370	115	35	-80
		WBR	370	118	35	-83
2 Project Driveway & Stocker Street*	AM	EBT	125	-	0	0
		WBT	220	-	0	0
		WBR	220	-	0	0
	PM	EBT	125	-	0	0
		WBT	220	-	0	0
		WBR	220	-	0	0
3 Palmero Boulevard & Stocker Steet*	AM	NBL/R	950	33	35	3
		EBT	370	-	-	-
		EBR	370	-	-	-
		WBL	45	0	3	3
		WBT	230	-	-	-
	PM	NBL/R	950	15	15	0
		EBT	370	-	-	-
		EBR	370	-	-	-
		WBL	45	3	3	0
		WBT	230	-	-	-
4 Santa Rosalia Drive/Angeles Vista Beoulvard & Stocker Street[4]	AM	NBL	50	-	-	-
		NBT	1050	183	184	1
		NBR	20	0	0	0
		SBL	130	74	86	12
		SBT	285	176	183	7
		EBL	130	***280***	***358***	78
		EBT	230	187	190	3
		WBL	115	11	12	1
		WBT	330	302	309	7
		WBR	110	41	51	10
	PM	NBL	50	-	-	-
		NBT	1050	129	127	-2
		NBR	20	0	0	0
		SBL	130	97	***168***	71
		SBT	285	260	***297***	37
		EBL	130	92	***237***	145
		EBT	230	184	221	37
		WBL	115	21	22	1
		WBT	330	148	157	9
		WBR	110	19	24	5
5 Santa Rosalia Drive & Project Driveway*	AM	NBL	285	-	13	13
		NBT	285	-	-	-
		SBT	650	-	-	-
		SBR	650	-	-	-
		EBL/R	230	-	25	25
	PM	NBL	285	-	10	10
		NBT	285	-	-	-
		SBT	650	-	-	-
		SBR	650	-	-	-
		EBL/R	230	-	190	190

Table 11: Future (2029) Traffic Conditions Intersection Queuing Summary (continued)

Study Intersections	Peak Hour	Approach	Storage Capacity (ft)	Future (2029) Conditions	Future (2029) with Project Conditions	
				Queue Length[1]	Queue Length[1]	Change[2]
6 Santa Rosalia Drive & Marlton Avenue	AM	NBL	100	18	18	0
		NBT	300	243	245	3
		NBR	100	60	63	3
		SBL	60	33	33	0
		SBT	500	88	98	10
		SBR	500	90	103	13
		EBL	55	20	23	3
		EBT	330	0	0	0
		EBR	330	100	103	2
		WBL	130	40	53	13
		WBT	260	35	38	3
		WBR	130	13	15	3
	PM	NBL	100	23	20	-3
		NBT	300	188	210	23
		NBR	100	95	***105***	10
		SBL	60	33	33	0
		SBT	500	90	95	5
		SBR	500	93	98	5
		EBL	55	5	8	3
		EBT	330	0	0	0
		EBR	330	68	73	5
		WBL	130	70	83	13
		WBT	260	45	48	3
		WBR	130	23	23	0
7 Crenshaw Boulevard & Stocker Street[4]	AM	NBL	145	***434***	***487***	53
		NBT	1100	685	695	10
		SBL	200	35	35	0
		SBT	790	356	356	0
		SBR	200	***526***	***471***	-55
		EBL	150	***291***	***303***	12
		EBT	275	***287***	***289***	2
		EBR	170	21	22	1
		WBL	55	***63***	***62***	-1
		WBT	200	***226***	***233***	7
	PM	NBL	145	***390***	***419***	29
		NBT	1100	404	404	0
		SBL	200	53	53	0
		SBT	790	743	743	0
		SBR	200	***211***	***239***	28
		EBL	150	***367***	***411***	44
		EBT	275	***513***	***538***	25
		EBR	170	85	100	15
		WBL	55	***67***	***67***	0
		WBT	200	154	159	5

Notes:

* Unsignalized Intersections

[1] 95th percentile vehicle queue length in number of feet (Synchro software assumes 25 feet per vehicle).

[2] Change in vehicle queue length reported in number of feet.

[3] Storage capacities and queue lengths for movements with dual-lane turn pockets reported based on the average of the two lanes.

[4] Future condition includes a signal improvement to the northbound/southbound approaches as part of HSIP 7

XX ***Bolded/italicized*** vehicle queue length indicates that the queue exceeds turn-pocket capacity or distance in through lane to upstream intersection.

NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound; L = Left-turn; T = Through; R = Right-turn.

5.3 PROJECT CONSTRUCTION

The TAG requires an evaluation of potential effects to pedestrian, bicycle, transit, and vehicle circulation resulting from the construction activities of development projects. In order to assist in determining whether further analysis of these construction-related effects is required, the TAG establishes seven screening criteria to identify development projects that may reduce the functionality of nearby transportation facilities. Further analysis of construction activities is required if any of the following screening criteria are met:

1. The development project requires construction activities to take place within the right-of-way of a Boulevard or Avenue, which would necessitate temporary, lane, alley, or street closures for more than one day (including day and evening hours, and overnight closures if on a residential street).
2. The development project requires construction activities to take place within the right-of-way of a Collector or Local Street, which would necessitate temporary lane, alley, or street closures for more than seven days (including day and evening hours, and overnight closures if on a residential street).
3. In-street construction activities would result in the loss of regular vehicle, bicycle, or pedestrian access, including loss of bicycle parking to an existing land use for more than one day (including day and evening hours and overnight closures if access is lost to residential uses).
4. In-street construction activities would result in the loss of regular ADA pedestrian access to an existing transit station, stop, or facility (e.g., layover zone) during revenue hours.
5. In-street construction activities would result in the temporary loss, for more than one day, of an existing bus stop or the rerouting of a bus route that serves the development project site.
6. Construction activities would result in the temporary removal and/or loss of on-street metered parking for more than 30 days.
7. The development project would involve a discretionary action to construct new buildings or additions of more than 1,000 square feet that require access for hauling construction materials and equipment from streets of less than 24 feet wide in a hillside area.

Most construction activities for the Project are anticipated to be contained within the Project site. The temporary closure of a portion of the roadway width along Stocker Street, Santa Rosalia Drive and/or Don Felipe Drive, adjacent to the site, may be necessary for certain phases of construction. All construction activity is temporary; therefore, any disruptions would be relatively short-term in nature.

In addition, the Project will prepare a Construction Staging and Traffic Management Plan, to be approved by the LADOT. This plan will detail the measures enacted to mitigate negative effects on traffic during construction related to designated haul routes and staging areas, traffic control procedures, emergency access provisions, and construction crew parking. The Project shall obtain prior LADOT approval for any lane closures, detours, on-street staging areas, or other temporary changes in traffic control due to construction activities and will enact appropriate temporary traffic control procedures. Haul routes for Project construction will be coordinated with the City of Los Angeles Department of Building and Safety (LADBS) to minimize the effects of construction traffic to congested roadways and residential streets. With the implementation of these measures, the Project construction would not adversely affect the pedestrian, bicycle, transit, and vehicular circulation around the Project site and no further analysis is required.

5.4 RESIDENTIAL STREET CUT-THROUGH ANALYSIS

The TAG seeks to identify whether cut-through traffic resulting from a development project would considerably increase average daily traffic (ADT) along residential Local Streets near the development site. Cut-through trips result from the traffic diverting from congested arterial streets to roadways with residential use frontage that are designated as Local Streets. The TAG establishes preliminary screening criteria to identify development projects that may contribute a significant amount of cut-through traffic to nearby residential streets. Further analysis may be required if both of the following screening criteria are met:

1. The development project would generate a net increase of 250 or more daily vehicle trips.
2. The development project includes a discretionary action that would be under review by the Department of City Planning.

Per the VMT Calculator, the Project is projected to generate 3,397 net daily vehicle trips without consideration of the Project's proposed TDM features. The Project also requires review by the Department of City Planning. Therefore, an assessment of the roadways in the vicinity of the Project area must be conducted to determine whether Project traffic is likely to be shifted from the arterial roadways to residential Local Streets. The following three conditions must be present when selecting residential street segments for analysis:

- The development project is located along a currently congested Boulevard or Avenue and adds trips that may lead to trip diversion to parallel routes along residential Local Streets.
- The development project is projected to add a substantial amount of traffic to the congested Boulevard(s), Avenue(s), or Collector(s) that could potentially cause a shift to alternative route(s).
- Nearby local residential street(s) provide motorists with a viable alternative route.

The Project is located on the north side of Stocker Street, which is classified as a Boulevard II per the Mobility Plan 2035. Vehicular access is proposed via the existing driveway on Santa Rosalia Drive for studio and commercial users, and on Stocker Street for service studio trucks. The Project is not expected to contribute extensively to residential Local Street traffic volumes based on the trip distribution.

6. CEQA MITIGATION MEASURES

The Project is expected to contribute to worsening operations with the potential contribution to hazardous conditions at the Project driveway and at the passenger loading area due to the addition of Project trips. Both of the driveway and loading area are located on the northeastern side of the Project site on Santa Rosalia Drive. Due to these potential impacts, mitigation measures were developed to reduce the number of Project trips that will be utilizing the site and therefore, reducing the concentration of activity surrounding the Project access area. Additionally, the addition to the Project trips to adjacent intersection have the potential to exacerbate and cause potential safety conditions. Therefore, mitigation measures were developed to improve access and circulation constraints associated to the Project. These actions include:

- Shifting service truck deliveries to off-peak hours
- The implementation of an extensive TDM program
- Intersection improvements at the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street

To address the worsening operations which could contribute to potential safety concerns, mitigation measures were developed in consultation with LADOT for the TDM Measures and LADOT and LA County for the Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street intersection improvement. The following sections describe the mitigation measures in further details as well as the post mitigation results of the various analyses conducted.

6.1 PROJECT TDM MEASURES

The TDM Measures noted below were coordinated and approved with LADOT. These strategies include a combination of PDFs, which are required to comply with existing codes, ordinances, programs measures, and mitigation measures. Based on literature from the Federal Highway Administration (FHWA) publication *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (August 2012), a vehicle trip reduction of 25% was applied based on a comprehensive program with a paid parking requirement.

- *Reduce Parking Supply* – This is a strategy that includes providing less on-site parking than required under the City Municipal Code parking requirement. The Project will be providing less parking than required by the City by providing a total of approximately 380 on-site automobile parking spaces, which represents a reduction of 218 automobile parking spaces from the amount required by direct application of the LAMC. This measure is considered a PDF.
- *Include Bike Parking Per LAMC* – This includes providing short- and long-term bicycle parking per City Code. The Project will be complying with the Code and will actually exceed the required bicycle parking by providing 50 long-term and 32 short-term bicycle parking spaces (41 long-term and 27 short-term required). This measure is considered a PDF.
- *Include Secure Bike Parking and Showers* – This strategy involves providing bicycle facilities that include secure bike parking (e.g., bike lockers, rooms, or cages) and showers. The Project will be providing a large bicycle parking area in the Building F (parking garage) with showers for bike riders being provided in Buildings A and B, which are adjacent to Building F. This measure is considered a PDF.
- *Promotions & Marketing* – Is strategy using marketing and promotional tools to educate employees about transportation options. This is a passive strategy that uses posters, information boards or a website to inform travelers. This measure is considered a PDF.

- *Ride-Share Program* – This program provides ride-share matching services, designating preferred parking for ride-share participants, designing adequate passenger loading/unloading and waiting areas for ride-share vehicles, and providing a website or message board to connect riders and coordinate rides. This measure is considered a PDF.
- *Traffic Calming Improvements* – Implementation of traffic calming measures throughout the perimeter of the project site that encourages people to walk, bike or take transit. This may include enhanced crossings, curb extensions, correcting a substandard sidewalk width. The Project is planning on replacing the sidewalks surrounding the Project site. This measure is proposed as a mitigation measure.
- *Pedestrian Network Improvements* - This strategy involves implementation of pedestrian network improvements throughout and around the project site that encourage people to walk. This includes internally linking all uses within the project site with pedestrian facilities such as sidewalks and connecting the project site to the surrounding pedestrian network. It also includes the elimination of barriers such as walls, landscaping, and slopes that impede pedestrian circulation. The Project will provide a large courtyard located between Buildings A and B with public access available during the day. This measure is considered a PDF.

Table 12 summarized the trip generation estimates for the Project with the TDM Measure reduction of 25%. As shown, the Project is anticipated to generate a total of 191 net vehicle trips during the AM peak hour (151 inbound, 40 outbound) and 249 net trips during the PM peak hour (95 inbound, 154 outbound). These peak-hour trips were distributed to the study intersections for the Project impact analysis.

Table 12: Project Weekday Trip Generation Summary – With TDM Measures

Land Use	ITE Code/ Other[1]	Intensity[2]	Average Weekday	AM Peak Hour			PM Peak Hour		
				In	Out	Average Rate Total	In	Out	Average Rate Total
Trip Generation Rates									
General Office	710	1 ksf	10.84	88%	12%	1.52	17%	83%	1.44
Strip Retail Plaza (<40k)	822	1 ksf	54.45	60%	40%	2.36	50%	50%	6.59
Fine Dining Restaurant	931	1 ksf	83.84	80%	20%	0.73	67%	33%	7.80
High-Turnover (Sit-Down) Restaurant	932	1 ksf	107.20	55%	45%	9.57	61%	39%	9.05
Studio - Sound Stage	Empirical	1 ksf	5.91	63%	37%	0.20	40%	60%	0.43
Studio - Support	Empirical	1 ksf	4.14	65%	35%	0.61	45%	55%	0.57
Studio - Production Office	Empirical	1 ksf	9.34	62%	38%	0.66	45%	55%	0.63
Studio - Service Trucks	-	-	12.00	50%	50%	6.00	50%	50%	6.00
Trip Generation Summary									
Description		**Size**	**Average Weekday[8]**	**AM Peak Hour**			**PM Peak Hour**		
				In	Out	Average Rate Total	In	Out	Average Rate Total
Proposed Uses									
Studio									
Sound Stage		51.200 ksf	303	6	4	10	9	13	22
Support		13.000 ksf	54	5	3	8	3	4	7
Production Office		44.400 ksf	415	18	11	29	13	15	28
Studio Service Truck Vehicle Trips[3]		108.600 ksf	24	6	6	12	6	6	12
Studio Vehicle Trips			772	29	18	47	25	32	57
Studio Total Baseline All Vehicle Trips			796	35	24	59	31	38	69
Studio Person Trips[4]			1,359	62	42	104	54	67	121
Studio Internal Person Trips[5]			100	5	15	20	2	1	3
Studio External Person Trips[5]			1,258	57	28	85	52	66	118
Studio External Trips by Vehicle[5,6]			623	28	14	42	26	33	59
Studio External Trips by Transit[5]			8	0	0	0	1	0	1
Studio External Trips by Walk/Bicycle[5]			155	7	4	11	7	8	15
Commercial									
General Office Total Baseline Vehicle Trips		123.100 ksf	1,334	165	22	187	30	147	177
Office Total Person Trips[4]			2,348	290	39	329	53	259	312
Office Internal Person Trips[5]			174	21	13	34	2	5	7
Office Total External Person Trips[5]			2,175	269	25	294	51	254	305
Office External Trips by Vehicle[5,6]			1,076	133	12	145	25	126	151
Office External Trips by Transit[5]			13	2	0	2	0	2	2
Office External Trips by Walk/Bicycle[5]			269	33	3	36	6	31	37
Strip Retail Plaza (<40k)		6.500 ksf	354	9	6	15	22	21	43
Retail Total Person Trips[4]			629	16	11	27	39	37	76
Retail Total Internal Person Trips[5]			275	6	4	10	23	12	35
Retail Total External Person Trips[5]			354	10	7	17	16	25	41
Retail External Trips by Vehicle (including pass-by trips)[5]			177	5	3	8	8	13	21
Retail External Trips by Transit[5]			0	0	0	0	0	0	0
Retail External Trips by Walk/Bicycle[5]			43	1	1	2	2	3	5
Retail External Trips by Vehicle (with pass-by trip adjustment)[7]			89	3	1	4	4	7	11
Fine Dining Restaurant		9.000 ksf	755	6	1	7	47	23	70
High-Turnover (Sit-Down) Restaurant		9.500 ksf	1,018	50	41	91	52	34	86
Restaurant Total Baseline Vehicle Trips		18.500 ksf	1,773	56	42	98	99	57	156
Restaurant Total Person Trips[4]			3,120	99	74	173	174	100	274
Restaurant Total Internal Person Trips[5]			593	24	24	48	14	23	37
Restaurant Total External Person Trips[5]			2,527	75	50	125	160	77	237
Restaurant External Trips by Vehicle (including pass-by trips)[5]			1,263	38	25	63	79	39	118
Restaurant External Trips by Transit[5]			7	0	0	0	1	0	1
Restaurant External Trips by Walk/Bicycle[5]			307	9	6	15	20	9	29
Restaurant External Trips by Vehicle (with pass-by trip adjustment)[7]			1,061	31	20	51	66	33	99
Net Project Total External Trips by Vehicle (including Pass-By Trips)			**3,163**	**210**	**60**	**270**	**144**	**217**	**361**
Net Project Total External Trips by Vehicle			**2,873**	**201**	**53**	**254**	**127**	**205**	**332**
TDM Strategy Trip Reduction (25%) (including Pass-By Trips)[9]			**(791)**	**(53)**	**(15)**	**(68)**	**(36)**	**(54)**	**(90)**
TDM Strategy Trip Reduction (25%) (with Pass-By Trip Adjustement)[9]			**(718)**	**(50)**	**(13)**	**(64)**	**(32)**	**(51)**	**(83)**
Net Project Total External Trips by Vehicle with TDM Reduction (including Pass-By Trips)			**2,372**	**158**	**45**	**203**	**108**	**163**	**271**
Net Project Total External Trips by Vehicle with TDM Reduction			**2,155**	**151**	**40**	**191**	**95**	**154**	**249**

Table 12: Project Weekday Trip Generation Summary – With TDM Measure Reductions (continued)

Notes:

1) ITE *Trip Generation Manual* (11th Edition, 2021) trip generation rates and directional distributions applied for Land Use Codes (LUC) 710 (General Office), 822 (Strip Retail Plaza [<40K]), 931 (Fine Dining Restaurant), 932 (High-Turnover [Sit-Down] Restaurant) to develop baseline vehicle trips for each land use associated with the commercial components. LUC 931 does not include directional distribution for the AM peak hour of adjacent street traffic; the directional distribution for the AM peak hour of the generator was assumed. The General Urban/Suburban setting was used as it best represents the project location.

   The studio trip generation rates were based on empirical rates from the *Paramount Picture Master Plan* (2015) prepared by Gibson Transportation and are attached on the following pages.

   The ITE *Trip Generation Handbook* (3rd Edition, 2017) recommended methodology for estimating the trip generation of a mixed-use development was utilized for the project. The ITE methodology follows the recommended procedures from the National Cooperative Highway Research Program (NCHRP) Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* (Transportation Research Board, 2011). The NCHRP 684 Internal Trip Capture Estimation Tool spreadsheet provided on the ITE website was used, with worksheets attached on the following pages for the Project and existing uses. The internal trips for the Studio uses were combined with the Office uses it was the most comparable land use. Internal calculations for these office-related trips are attached on the following pages.

   The studio service trucks were conservatively based on a maximum number of 6 large trucks assumed per day. All of these larger production trucks were assumed to access the site during the AM and PM peak hours. The truck estimate is based on the size of the studio and expected operations.

2) ksf = Thousands of Square Feet of Gross Leasable Floor Area or Gross Floor Area.

3) A passenger car equivalent (PCE) of 2.0 was applied to the the number of service truck trips.

4) See attached Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends and Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends from the NCHRP 684 Internal Trip Capture Estimation Tool for the proposed project uses.

5) See attached Table 9-A (D): Internal and External Trips Summary (Entering Trips), Table 9-A (O): Internal and External Trips Summary (Exiting Trips), Table 9-P (D): Internal and External Trips Summary (Entering Trips), and Table 9-P (O): Internal and External Trips Summary (Exiting Trips) from the NCHRP 684 Internal Trip Capture Estimation Tool for the proposed project uses.

6) No pass-by trips assumed for the general office land and studio uses.

7) Per Attachment J of the LADOT *Transportation Assessment Guidelines* (August 2022), an average pass-by trip discount rate of 50 percent was applied for the proposed retail component (as it is less than 50,000 square feet). For the proposed fine dining and high-turnover (sit-down) restaurant components, Attachment J recommends pass-by trip discounts of 10 percent and 20 percent, respectively. As the trips associated with the two restaurant uses were combined as part of the internal trip capture estimation, the pass-by trip discount rates were blended for each analysis time period based on the proportion of trips from each component restaurant use. For example, in the AM peak hour, with 91 high-turnover (sit-down) trips (at 20 percent) and 7 fine dining trips (at 10 percent) summing to 98 baseline restaurant vehicle trips, the blended average is approximately 19 percent. The blended pass-by discount rates were 16 percent for the weekday daily and PM peak-hour periods, respectively.

8) The ITE *Trip Generation Handbook* provides no guidance for estimating daily trips for mixed-use developments. Therefore, daily trips for each land use's subcategory (person trips, internal person trips, external person trips, external trips by mode) were estimated by developing a Daily-to-(AM+PM peak hour) factor using the land use's baseline vehicle trips and then applying this factor to each subcategory's combined (AM+PM) peak-hour trips. For commercial land uses with pass-by adjustments, the daily external trips by vehicle (with pass-by trip adjustment) were determined by applying the appropriate pass-by adjustment to the daily external trips by vehicle (including pass-by trips).

9) Based on literature from the Federal Highway Administration (FHWA) publication *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (August 2012), a vehicle trip reduction of 25% was applied based on a comprehensive program with a paid parking requirement.

6.2 INTERSECTION IMPROVEMENT - SANTA ROSALIA DRIVE/ANGELES VISTA BOULEVARD & STOCKER STREET

At the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street, additional mitigation measures were evaluated to reduce the Project's potential contribution to substantial hazardous roadway conditions. This included coordinating with LADOT to evaluate lane geometrics and signal timing improvements. LADOT identified improvements at the intersection which were approved in a Traffic Control Report (TCR) dated February 12, 2020. A traffic engineering study was conducted to respond to several requests to evaluate the signal timing, congestion, and striping at the intersection. Based on this analysis, the TCR was prepared and approved by both LADOT and LA County with the following determinations (the "TCR Improvement"):

- Northbound approach at Angeles Vista Boulevard be improved with a protected-only left-turn phase which includes restriping the approach from a shared left-through and right-turn lane to a dedicated left-, through-, and right-turn lane;
- Eastbound and westbound approaches on Stocker Street be improved with protected-permissive left-turn phasing; and
- Southbound approach at Santa Rosalia Drive be improved with a dedicated right-turn lane.

The TCR report and corresponding conceptual signing & striping plan prepared by LADOT is provided in Appendix I.

6.3 POST MITIGATION ANALYSES

The post mitigation analysis included an assessment of the Project driveway and passenger loading area operations since the Project will introducing new design features which may cause hazardous conditions that may include vehicles queuing and spilling over into the public right-of-way and/or travel lanes. The analysis included shifting the service truck deliveries to off-peak hours (thereby removing the trips from the

roadway during the peak hours) and the implementation of TDM Measures as described in Section 6.1. The following sections provide the results of these analyses for the following:

- Traffic Signal Warrant Analysis at the Project Driveway & Santa Rosalia Drive Intersection (CEQA Threshold T-3)
- Parking Structure Queuing Analysis (CEQA Threshold T-3)
- Passenger Loading Zone Evaluation (CEQA Threshold T-3)
- Intersection Operations at Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street and Crenshaw Boulevard & Stocker Street. (CEQA Threshold T-3)

6.3.1 TRAFFIC SIGNAL WARRANT ANALYSIS – PROJECT DRIVEWAY & SANTA ROSALIA DRIVE

A full traffic signal warrant analysis (TSWA) was conducted at the request of LADOT to determine if a traffic signal should be considered since this driveway is the primary access point to the site and for consideration of hazardous conditions. The TSWA was prepared based on the latest version of the LADOT Traffic Signal Warrants Worksheet (version rev. 8-10-2020). The analysis utilized 2022 Streetlight data at the intersection. To account for future year 2029 conditions, a growth factor of 1% over a 7-year period was applied to develop the future baseline volumes at the intersection. The Project trips with the inclusion of the TDM Measures were then added to the intersection to evaluate if a traffic signal would be warranted under Future (2029) With Project conditions when the project is anticipated to be completed and in operation. The analysis determined that a traffic signal is not warranted at this location as summarized in Table 13 and described below.

Table 13: Future (2029) With Project + TDM Measures
Traffic Signal Warrant Analysis Summary

Warrant	Description	Warrant Satisfied?
CA MUTCD Traffic Signal Warrants		
Warrant 1	Eight-Hour Vehicular Volume	No
Warrant 2	Four-Hour Vehicular Volume	No
Warrant 3[1]	Peak Hour	N/A
Warrant 4[2]	Pedestrian Volume	N/A
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	N/A
Warrant 7	Crash Experience Warrant	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No
Warrant 10[2]	Bicycles (Optional)	N/A
Warrant 11	Pedestrian Activated Yellow Flashing Beacons (Optional)	N/A

[1] The peak hour warrant typically applies only in unusual cases and was not evaluated for this analysis.

[2] Pedestrian and bicycle volumes were not available and therefore not evaluated for this analysis.

Warrant 1 – Eight-Hour Vehicular Volume

The Eight-Hour Vehicular Volume (Warrant 1) warrant is intended for application at intersections where a large amount of intersecting traffic is the primary reason to consider providing a traffic control signal. Based on the criteria for an intersection in an urban setting with one travel lane along all analyzed approaches to the intersection, the minimum hourly volumes of 500 vehicles on both major street approaches and 150 vehicles on the higher of the minor street approaches are required for all eight hours to meet Condition A (Minimum Vehicular Volume) of the warrant. Based on the volumes projected, the two major street approaches will not serve 500 or more vehicles per hour and the highest minor street approach will not service 150 or more vehicles per hour during all eight identified hours. Therefore, Part A of the Eight-Hour Vehicular Volume warrant is not satisfied.

For Condition B (Interruption of Continuous Traffic) of the warrant, the minimum approach volumes required to meet the warrant for an urban intersection are 630 vehicles per hour on both major street approaches and 70 vehicles on the higher of the minor street approaches. The intersection will not meet the minimum requirements. Thus, the intersection volumes do not meet Part B of the Eight-Hour Vehicular Volume warrant. The intersection also does not meet the warrant based on the Combination of Conditions A & B.

Therefore, Warrant 1 is not satisfied under typical weekday traffic conditions for the study intersection based on the Future (2029) With Project traffic volumes.

Warrant 2 – Four-Hour Vehicular Volume

Warrant 2, the Four-Hour Vehicular Volume warrant, is also intended for locations where the volume of intersecting traffic is the primary reason for considering the installation of a traffic control signal. Based on the criteria for an intersection in an urban setting, the plotted points for the four hours of vehicular volumes must fall above the corresponding curve in Figure 4C-1. Three of the four hours fall above the plotted points along the curve. Since the Figure (2029) With Project traffic volumes do not meet all four hours, Warrant 2 is not satisfied.

Warrant 3 – Peak-Hour

The Peak Hour warrant, Warrant 3, is meant for intersections at which, for at least one hour of an average day, minor-street traffic suffers lengthy delays entering or crossing the major street. The warrant requires that either Part A or Part B be satisfied. Since this warrant is intended for use only in unusual cases, the Peak Hour warrant was not conducted. As such, Warrant 3 is not satisfied.

Warrant 4 – Pedestrian Volume

Warrant 4, the Pedestrian Volume warrant, is intended for application where major street traffic volumes are so high that pedestrians suffer undue delays in crossing the major street. Pedestrian volumes were not available at this location. Warrant 4 was not applicable and therefore not satisfied.

Warrant 5 – School Crossing

The School Crossing warrant (Warrant 5) is intended for application at locations where the presence of schoolchildren (defined as elementary through high school students) crossing the major street is the primary reason for providing a traffic control signal. As no schools are located within walking distance of the Project Driveway & Santa Rosalia Drive intersection, Warrant 5 is not satisfied for the study intersection.

Warrant 6 – Coordinated Signal System

Warrant 6, the Coordinated Signal System warrant, is intended for application at intersections where the installation of a traffic control signal would allow for better progressive traffic flow and platooning of vehicles and where the spacing of traffic signals is more than 1,000 feet. The intersection is located approximately 350 feet for an existing traffic signal. Therefore, the installation of a traffic control signal at the study intersection is not applicable and Warrant 6 is not satisfied.

Warrant 7 – Crash Experience

Warrant 7, the Crash Experience warrant, is meant for intersections where the frequency and severity of motor vehicle collisions are the main reasons for providing traffic signal control. In order to be satisfied, this warrant requires among its criteria that an intersection has experienced five or more reported crashes of types susceptible to correction through the installation of a traffic signal, within a 12-month period.

A five-year collision history (2019-2023) was requested from the Statewide Integrated Traffic Records System (SWITRS) to determine the highest number of collisions during a 12-month period. Of the collisions identified over a 12-month period, no collisions would be susceptible to correction through the installation of a traffic signal. As such, the intersection does not meet the Crash Experience warrant and is not satisfied.

Warrant 8 – Roadway Network

Warrant 8, the Roadway Network warrant, is intended for application at locations in order to promote concentration and organization of traffic flow on a roadway network. In order for this warrant to be satisfied, both the major and minor streets must meet certain "major route" characteristics, and the intersection must meet certain minimum traffic volume requirements. The intersection meets the minimum peak-hour traffic volume requirements for a typical weekday with a total entering volume of 1,161 vehicles during the peak hour. However, the intersection does not satisfy the definition of two major routes. Therefore, Warrant 8 is not satisfied.

Warrant 9 – Intersection Near a Grade Crossing

The intersection of the Project Driveway & Santa Rosalia Drive is not located near a grade crossing, therefore Warrant 9 is not satisfied.

The TSWA analysis including the TSWA worksheet, counts, and collision data are provided in Appendix I.

6.3.2 PARKING STRUCTURE QUEUING EVALUATION

A queuing analysis was conducted to determine if there is adequate storage for vehicles to queue at the gated parking garage without spilling over into the public right-of-way. The Project's peak-hour trip generation with the implementation of the TDM Measures for inbound vehicles was utilized for this queuing analysis which will occur during the AM peak hour with a peak inbound vehicle trips of 152 vehicles (the maximum vehicle arrival rate minus the studio service truck trips). The service rate assumptions were based on information from the Parking Structure, Third Edition (2001), Table 4-4 which summarizes the service rates for various parking access and revenue control (PARC) systems. Conservatively, the service rate was blended based on the insertion card entry (435 vehicles/hour) and push button ticket entry (400 vehicle/hour) to account for frequent parkers versus per use parkers, respectively. Based on this blended service rate, the parking system with one control gate entry can service a total of 417 vehicles per hour. A M/M/1 single-server model that assumes a Poisson distribution of vehicle arrivals was conducted to

evaluate the anticipated vehicle queues for vehicles arriving at the site during the peak hour. The 95th percentile vehicle queue length would be approximately two (2) vehicles. The maximum queue length is anticipated to reach four (4) vehicles. The parking garage has a storage capacity for up to six (6) vehicles. Therefore, it is expected that the number of vehicles arriving during the peak hour of business operations can be accommodated within the proposed storage area provided on site and vehicles are not anticipated to spillover onto Santa Rosalia Drive.

The parking structure queuing analysis is provided in Appendix J.

6.3.3 PASSENGER LOADING EVALUATION

The TAG requires an evaluation of passenger loading areas for development projects. Because the Project is proposing to provide an approximately 122-foot-long passenger loading area (capacity of four-five vehicles) south of the Project driveway on Santa Rosalia Drive, an assessment was conducted to determine if the curb cutout provides adequate storage for the anticipated passenger drop-off/pick-up activity of the site. It has been assumed that 10% of the Project trips have been assumed to utilize the passenger loading area (excluding studio service trucks), but they have not been removed at the Project driveway to provide a conservative analysis.

Utilizing the Project trips with the TDM Measure reduction. the highest peak period for Project trips is expected to occur in the PM peak hour with 26 vehicles using the passenger loading area. It is assumed that each vehicle will average three minutes or 180 seconds in the loading area with a safety factor of two over the course of one hour or 3600 seconds. Based on these assumptions the loading area would need the capacity to provide approximately three (3) vehicles (180 X 26 = 4680 seconds/3600 seconds = 1.3 X 2 = 2.6 vehicles). Therefore, the passenger load area with a capacity of between four and five vehicles is expected to provide adequate storage and is not anticipated to adversely affect the operations of the adjacent roadways.

The traffic conditions for the Future (2029) With Project + TDM Measures are summarized below along with the additional recommended improvements at Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street.

6.3.4 INTERSECTION OPERATIONS EVALUATION – HAZARDOUS CONDITIONS

There are instances where spillover and extensive queues are experienced at the study intersections prior to the inclusion of the Project trips under the existing and future year traffic conditions. With the Project, the additional trips are expected to contribute to worsening queuing conditions which contribute or may cause hazardous conditions. These conditions are at the intersections of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street and Crenshaw Boulevard & Stocker Street. The following sections describe the results associated with the implementation of the various mitigation measures that were described earlier in Sections 6.1 (Project TDM Measures) and 6.2 (Intersection Improvement – Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street).

TDM Measures

Existing (2024) Plus Project + TDM Measures Traffic Conditions

The level of service at the two intersections under the Existing (2024) Plus Project + TDM Measures traffic conditions are expected to deteriorate compared to the without Project conditions in the AM peak hour from LOS B to LOS C and will remain the same during the PM peak hour. There will be slight improvements

to vehicle delays when compared to the traffic conditions without the TDM Measures. The implementation of the TDM Measures are anticipated to reduce vehicle queueing at most approaches during the peak hours as follows:

- Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street queues will be reduced compared to pre-TDM Measures, including the eastbound left-turn lane with a reduction in the Project added queue by 19 feet or 0.76 vehicle lengths during the AM peak hour. It should be noted that the queue at the eastbound left-turn lane is anticipated to exceed the available storage capacity prior to the addition of Project trips. The Existing (2024) traffic conditions experience a queue of 166 feet or 6.64 vehicles which means that approximately 36 feet or 1.44 vehicles currently experience spillover. During the PM peak hour, the Project queue at the eastbound left-turn lane will reduce by 32 feet or 1.28 vehicle lengths with the TDM Measures. With this reduction, the Project is expected to experience queues that extend past the storage capacity of the left-turn lane by 28 feet or 1.12 vehicle lengths. At the southbound approach, queues for the left-turn lane will experience spillover by 28 feet or 1.12.
- Crenshaw Boulevard & Stocker Street with the reduction of Project trips is expected to experience less queuing at select approaches. Several of the approaches including the northbound left-turn lane, southbound right-turn lane, eastbound left- and through lanes, and westbound left- and through lanes experience queues that already spillover without the addition of Project trips. The addition of Project trips with TDM Measure reductions are expected to generate nominal increases at these lanes between 5 foot or 0.2 vehicle lengths and 19 feet or 0.76 vehicle lengths during the AM peak hour and between 13 feet or 0.52 vehicle lengths and 33 feet or 1.32 vehicle lengths during the PM peak hour compared to the Existing (2024) traffic conditions.

Future (2029) With Project + TDM Measures Traffic Conditions

Under the Future (2029) With Project + TDM Measures, traffic conditions are expected to maintain the same level of service as the without Project conditions with slight improvements when compared to the conditions without the TDM Measures. Compared to Future (2029) With Project conditions, the Future (2029) With Project + TDM Measures conditions will experience reduced vehicle queueing during the peak hours as follows:

- Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street queues will reduce at the lanes where Project trips will be contributing to, including the eastbound left-turn lane with a reduction in the Project added queue by 18 feet or 0.72 vehicle lengths during the AM peak hour. The queue at the eastbound left-turn lane already experiences spillover queuing under the Future (2029) Without Project conditions by 150 feet or 6 vehicles. The Project will contribute to the anticipated spillover by an additional 60 feet or 2.4 vehicles. During the PM peak hour, the Project queue at the eastbound left-turn lane will reduce by 13 feet or 0.52 vehicle lengths with the addition of the TDM Measures. However, the Project will still cause vehicles to spillover in the left-turn lane by 94 feet or 3.76 vehicle lengths. At the southbound approach, queues will extend past the storage lanes by 22 feet or 0.88 vehicle lengths for the left-turn lane and 2 feet or 0.08 vehicle lengths for the through lane.
- Crenshaw Boulevard & Stocker Street, similar to the Existing (2024) Plus Project + TDM Measures traffic conditions, with the reduction of Project trips is expected to experience less queuing at select approaches. Several of the approaches including the northbound left-turn lane, southbound right-turn lane, eastbound left- and through lanes, and westbound left- and through lanes experience queues that already spillover without the addition of Project trips. The addition of Project trips with

TDM Measure reductions are expected to generate nominal increases between 1 foot or 0.04 vehicle lengths and 39 feet or 1.56 vehicle lengths during the AM peak hour and between 3 feet or 0.12 vehicle lengths and 32 feet or 1.28 vehicle lengths during the PM peak hour compared to the Future (2029) Without Project conditions.

For both Existing (2024) and Future (2029) with Project trips and the implementation of the TDM Measures as mitigation, the Project's level of queuing at the study intersections is expected to decrease thus reducing the potential hazardous conditions. At Crenshaw Boulevard & Stocker Street, the Project trips represent an incremental change and are not expected to be substantial in nature. Therefore, this intersection would be mitigated to a less than significant impact. At the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street, this intersection is the primary intersection for accessing the Project's driveway on Santa Rosalia Drive. The intersection will continue to experience spillover queues particularly in the eastbound left-turn lane with the Project contributing to existing spillover conditions during the AM peak hour and causing queues to spillover into adjacent travel lanes during the PM peak hour. Therefore, additional intersection improvements (i.e., TCR Improvement) were evaluated to determine the effects to the intersection. The results with the TCR Improvement are described below.

TDM Measures + TCR Improvement

Existing (2024) Plus Project + TDM Measures + TCR Improvement Traffic Conditions

With the addition of the TCR Improvement and the TDM Measures as mitigation, the overall intersection operations are expected to improve for the Existing (2024) Plus Project traffic conditions. The Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street level of service would remain at LOS C in the AM peak hour and would worsen from LOS B to LOS C in the PM peak hour, still acceptable level of service operations. The queues are projected to experience the following:

- At the eastbound left-turn lane, the queues during the AM peak hour will increase by 11 feet or 0.52 vehicle lengths compared to the Existing (2024) traffic conditions. Vehicles would continue to spillover over by 47 feet or 1.88 vehicle lengths. During the PM peak hour, the Project will add 77 feet or 3.08 vehicle lengths causing vehicles to exceed the available storage for the left-turn lane by 4 feet or 0.16 vehicle lengths. This will be a minimal increase and is not expected to cause a hazardous roadway situation.
- At the southbound approach, queues are no longer expected to extend past the Project driveway with the addition of the southbound approach right-turn lane for the PM peak hour. The additional capacity will improve queuing for all southbound approach turning movements. During the AM peak hour, queues will be reduced between 53 feet or 2.12 vehicle lengths and 145 feet or 5.8 vehicle lengths. During the PM peak hour, queues will decrease between 6 feet or 0.24 vehicle lengths and 115 feet or 4.6 vehicle lengths. All spillover occurrences are projected to no longer occur during the PM peak hour.
- This improvement will reduce queues on the westbound between 9 feet or 0.36 vehicles lengths and 102 feet or 4.08 vehicle lengths in the AM peak hour and between 72 feet or 2.88 vehicle lengths and 153 feet or 6.12 vehicle lengths in the PM peak hour.
- For the northbound approach, the left-turn queue is projected to extend past the new striped left-turn lane that provides a storage capacity of approximately 20 feet by approximately 26 feet or 1.04 vehicle lengths in the AM peak hour and 11 feet or 0.44 vehicle lengths in the PM peak hour. The lane would experience nominal spillover and is not expected to cause a hazardous condition at this approach.

Future (2029) With Project + TDM Measures + TCR Improvement Traffic Conditions

Under the Future (2029) With Project traffic conditions, with the addition of the TCR Improvement and the TDM Measures as mitigation, the overall intersection operations are expected to improve. The Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street level of service would remain at LOS C in the AM peak hour and would worsen from LOS B to LOS C in the PM peak hour, which is still an acceptable level of service. The queues are projected to experience the following:

- At the eastbound left-turn lane, the queues during the AM peak hour will improve by 13 feet or 0.52 vehicle lengths compared to the Future (2029) Without Project conditions. However, vehicles would continue to spillover over by 137 feet or 5.48 vehicle lengths. During the PM peak hour, the Project queues will be reduced with the TCR Improvement, however, it will add 94 feet or 3.76 vehicle lengths causing spillover to occur by approximately 56 feet or 2.24 vehicle lengths. The analysis is conservative in nature and the spillover is not anticipated to occur during every signal cycle. The addition of these vehicles is not anticipated to cause a substantial hazardous roadway situation. It should be noted that the intersection already experiences spillover conditions during the AM peak hour.
- During the PM peak hour, the eastbound through movements are anticipated to increase, exceeding the available storage for that approach by 94 feet or 3.76 vehicle lengths. It should be noted there are "Keep Clear" pavement markings at the unsignalized intersection of Palmero Boulevard & Stocker Street which will reduce the likelihood of queues blocking Palmero Boulevard.
- This improvement will increase queues at the westbound through lane causing spillover conditions in the AM peak hour of approximately 24 feet or 0.96 vehicle lengths. The addition of approximately 1 vehicle is not anticipated to create hazardous roadway conditions.
- At the southbound approach, queues are no longer expected to extend past the Project driveway with the addition of the southbound approach right-turn lane. The additional capacity will improve queuing for all southbound approach turning movements. During the AM peak hour, queues will be reduced between 48 feet or 1.19 vehicle lengths and 139 feet or 5.6 vehicle lengths. During the PM peak hour, queues will decrease between 8 feet or 0.3 vehicle lengths and 106 feet or 4.2 vehicle lengths. All spillover occurrences are projected to no longer occur.
- For the northbound approach, the left-turn queue is projected to extend past the new striped left-turn lane by approximately 28 feet or 1.12 vehicle lengths in the AM peak hour and 12 feet or 0.48 vehicle lengths in the PM peak hour. The lane would experience occurrences when there could be minor spillover, however, it is not expected to cause a hazardous condition at this approach.

For both Existing (2024) and Future (2029) with Project trips and the implementation of the TDM Measures + TCR Improvement as mitigation, the Project is expected to reduce the level of queuing at the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street. The intersection will continue to experience spillover queues particularly in the eastbound left-turn lane with the Project contributing to existing spillover conditions during the AM peak hour and causing minimal spillover during the PM peak hour. These conditions are not anticipated to be substantial in nature and are therefore not expected to cause a hazardous roadway condition.

Tables 14 and 15 summarize the level of service and queuing with the addition of the TDM Measures + TCR Improvement.

Table 14: Existing (2024) and Future (2029) Traffic Conditions
Intersection Delay Summary – With TDM Measures + TCR Improvement

	Study Intersections	Peak Hour	Existing (2024) Conditions		Existing (2024) Plus Project Conditions		Change in Delay[3]	Existing (2024) Plus Project + TDM Measures		Change in Delay[3]	Existing (2024) Plus Project + TDM Measures + TCR Improvement		Change in Delay[3]	Future (2029) Without Project Conditions		Future (2029) With Project Conditions		Change in Delay[3]	Future (2029) With Project + TDM Measures		Change in Delay[3]	Future (2029) With Project + TDM Measures + TCR Improvement		Change in Delay[3]
			Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]	
4	Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	19.0	B	20.8	C	1.8	20.2	C	1.2	26.6	C	7.6	25.6	C	35.7	D	10.1	32.8	C	7.2	30.6	C	5.0
		PM	16.0	B	18.6	B	2.6	18.2	B	2.2	23.6	C	7.6	16.7	B	21.3	C	4.6	19.7	B	3.0	25.8	C	9.1
7	Crenshaw Boulevard & Stocker Street[4]	AM	30.2	C	31.6	C	1.4	30.7	C	0.5	-	-	-	52.7	D	56.6	**E**	3.9	52.9	D	0.2	-	-	-
		PM	37.2	D	40.1	D	2.9	39.1	D	1.9	-	-	-	104.7	**F**	111.9	**F**	7.2	109.8	**F**	5.1	-	-	-

[1] Delay in seconds

[2] *LOS = Level of Service*

[3] Change in delay reported in seconds

[4] HCM6th Edition methodology does not support Non-NEMA phasing, therefore, HCM2000 results reported.

Table 15: Existing (2024) and Future (2029) Traffic Conditions Intersection Queuing Summary – With TDM Measures + TCR Improvement

Study Intersections	Peak Hour	Approach	Storage Capacity (ft)	Existing (2024) Conditions	Existing (2024) Plus Project Conditions		Existing (2024) Plus Project + TDM Measures		Existing (2024) Plus Project + TDM Measures + TCR Improvement		Future (2029) Conditions	Future (2029) with Project Conditions		Future (2029) with Project + TDM Measures		Future (2029) with Project + TDM Measures + TCR Improvement	
				Queue Length[1]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]
4 Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	NBL	20	-	-	-	-	-	***46***	46	-	-	-	-	-	***48***	48
		NBT	1050	177	181	4	180	3	167	-10	183	184	1	184	1	177	-6
		NBR	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		SBL	130	69	79	10	78	9	77	8	74	86	12	84	10	82	8
		SBT	285	161	170	9	169	8	140	-21	176	183	7	181	5	146	-30
		SBR	134	-	-	-	-	-	7	7	-	-	-	-	-	19	19
		EBL	130	***166***	***244***	78	***225***	59	***177***	11	***280***	***358***	78	***340***	60	***267***	-13
		EBT	230	147	147	0	147	0	195	48	187	190	3	189	2	224	37
		WBL	115	11	11	0	11	0	13	2	11	12	1	12	1	13	2
		WBT	330	256	258	2	257	1	321	65	302	309	7	306	4	***354***	52
		WBR	110	31	38	7	36	5	57	26	41	51	10	48	7	97	56
	PM	NBL	20	-	-	-	-	-	***31***	***31***	-	-	-	-	-	***32***	32
		NBT	1050	124	124	0	123	-1	118	-6	129	127	-2	127	-2	123	-6
		NBR	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		SBL	130	91	***158***	67	***158***	67	124	33	97	***168***	71	***152***	55	122	25
		SBT	285	242	278	36	270	28	170	-72	260	***297***	37	***287***	27	179	-81
		SBR	134	-	-	-	-	-	51	51	-	-	-	-	-	58	58
		EBL	130	57	***163***	106	***131***	74	***134***	77	92	***237***	145	***224***	132	***186***	94
		EBT	230	113	122	9	122	9	201	88	184	221	37	205	21	***324***	140
		WBL	115	19	20	1	20	1	28	9	21	22	1	22	1	25	4
		WBT	330	109	155	46	113	4	177	68	148	157	9	155	7	205	57
		WBR	110	18	23	5	22	4	38	20	19	24	5	23	4	45	26
7 Crenshaw Boulevard & Stocker Street[4]	AM	NBL	145	***211***	***236***	25	***230***	19			***434***	***487***	53	***473***	39		
		NBT	1100	337	341	4	340	3			685	695	10	691	6		
		SBL	200	43	43	0	43	0			35	35	0	35	0		
		SBT	790	208	208	0	208	0			356	356	0	356	0		
		SBR	200	***348***	***435***	87	***244***	-104			***526***	***471***	-55	***290***	-236		
		EBL	150	***169***	***176***	7	***175***	6			***291***	***303***	12	***299***	8		
		EBT	275	269	272	3	272	3			***287***	***289***	2	***289***	2		
		EBR	170	19	19	0	19	0			21	22	1	22	1		
		WBL	55	***58***	***57***	-1	***58***	0			***63***	***62***	-1	***62***	-1		
		WBT	200	***211***	***218***	7	***216***	5			***226***	***233***	7	***232***	6		
	PM	NBL	145	***205***	***224***	19	***218***	13			***390***	***419***	29	***411***	21		
		NBT	1100	217	217	0	217	0			404	404	0	404	0		
		SBL	200	64	64	0	64	0			53	53	0	53	0		
		SBT	790	537	537	0	537	0			743	743	0	743	0		
		SBR	200	114	150	36	143	29			***211***	***239***	28	172	-39		
		EBL	150	***240***	***285***	45	***273***	33			***367***	***411***	44	***399***	32		
		EBT	275	***415***	***434***	19	***430***	15			***513***	***538***	25	***532***	19		
		EBR	170	32	40	8	38	6			85	100	15	96	11		
		WBL	55	55	55	0	55	0			***67***	***67***	0	***67***	0		
		WBT	200	137	142	5	141	4			154	159	5	157	3		

Notes:

* Unsignalized Intersections

[1] 95th percentile vehicle queue length in number of feet (Synchro software assumes 25 feet per vehicle).

[2] Change in vehicle queue length reported in number of feet.

[3] Storage capacities and queue lengths for movements with dual-lane turn pockets reported based on the average of the two lanes.

[4] Future condition includes a signal improvement to the northbound/southbound approaches as part of HSIP 7

XX ***Bolded/italicized*** vehicle queue length indicates that the queue exceeds turn-pocket capacity or distance in through lane to upstream intersection.

NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound; L = Left-turn; T = Through; R = Right-turn.

7. NON-CEQA RECOMMENDED ACTIONS

The Project is expected to contribute to worsening intersection operations with increases to delays and queues. A combination of PDFs and mitigation measures will be required to improve access and circulation constraints resulting from the Project under the non-CEQA assessment. Because of the overlap between the CEQA and non-CEQA analysis, the TDM Measures and TCR Improvement identified in Section 6.1 and Section 6.2, respectively, would also address non-CEQA access and circulation constraints. These actions include shifting service truck deliveries to off-peak hours and the implementation of the TDM program which will reduce the Project's contribution to deteriorating operations in the study area, and the TCR Improvement at Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street. The results of this analysis are discussed in Section 6.3.4 for the Existing (2024) Plus Project and Future (2029) With Project traffic conditions. With the implementation of the TDM Measures and the TCR Improvement at Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street, the intersection operations are not expected to contribute to access or circulation constraints in either Existing (2024) Plus Project or Future (2029) With Project traffic conditions.

Tables 16 and 17 summarize the level of service and queuing with the addition of the TDM Measures + TCR Improvement.

Table 16: Existing (2024) and Future (2029)Traffic Conditions
Intersection Delay Summary – With TDM Measures + TCR Improvement

	Study Intersections	Peak Hour	Existing (2024) Conditions		Existing (2024) Plus Project Conditions		Change in Delay[3]	Existing (2024) Plus Project + TDM Measures		Change in Delay[3]	Existing (2024) Plus Project + TDM Measures + TCR Improvement		Change in Delay[3]	Future (2029) Without Project Conditions		Future (2029) With Project Conditions		Change in Delay[3]	Future (2029) With Project + TDM Measures		Change in Delay[3]	Future (2029) With Project + TDM Measures + TCR Improvement		Change in Delay[3]
			Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]	Delay[1]	LOS[2]		Delay[1]	LOS[2]		Delay[1]	LOS[2]	
1	Don Felipe Drive & Stocker Street	AM	6.7	A	4.9	A	-1.8	4.9	A	-1.8	-	-	-	7.7	A	5.7	A	-2.0	5.7	A	-2.0	-	-	-
		PM	11.2	B	9.8	A	-1.4	9.8	A	-1.4	-	-	-	12.1	B	10.4	B	-1.7	10.5	B	-1.6	-	-	-
2	Project Driveway & Stocker Street*	AM	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-
		PM	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-	-	-	0.0	A	0.0	0.0	A	0.0	-	-	-
3	Palmero Boulevard & Stocker Street*	AM	21.9	C	22.4	C	0.5	22.3	C	0.4	-	-	-	27.5	D	28.3	D	0.8	28.2	D	0.7	-	-	-
		PM	19.9	C	20.1	C	0.2	20.0	C	0.1	-	-	-	23.1	C	23.4	C	0.3	23.3	C	0.2	-	-	-
4	Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	19.0	B	20.8	C	1.8	20.2	C	1.2	26.6	C	7.6	25.6	C	35.7	D	10.1	32.8	C	7.2	30.6	C	5.0
		PM	16.0	B	18.6	B	2.6	18.2	B	2.2	23.6	C	7.6	16.7	B	21.3	C	4.6	19.7	B	3.0	25.8	C	9.1
5	Santa Rosalia Drive & Project Driveway*	AM	-	-	19.3	C	19.3	16.8	C	16.8	-	-	-	-	-	23.6	C	23.6	19.3	C	19.3	-	-	-
		PM	-	-	49.0	**E**	49.0	27.5	D	27.5	-	-	-	-	-	69.2	**F**	69.2	33.3	D	33.3	-	-	-
6	Santa Rosalia Drive & Marlton Avenue	AM	15.0	B	15.0	B	0.0	15.0	B	0.0	-	-	-	15.0	B	15.0	B	0.0	15.0	B	0.0	-	-	-
		PM	14.8	B	15.0	B	0.2	14.9	B	0.1	-	-	-	15.0	B	15.2	B	0.2	15.1	B	0.1	-	-	-
7	Crenshaw Boulevard & Stocker Street[4]	AM	30.2	C	31.6	C	1.4	30.7	C	0.5	-	-	-	52.7	D	56.6	**E**	3.9	52.9	D	0.2	-	-	-
		PM	37.2	D	40.1	D	2.9	39.1	D	1.9	-	-	-	104.7	**F**	111.9	**F**	7.2	109.8	**F**	5.1	-	-	-

*Unsignalized Intersection- Delay is based on higher delay at stop approach

[1] Delay in seconds

[2] *LOS = Level of Service*

[3] Change in delay reported in seconds

[4] HCM6th Edition methodology does not support Non-NEMA phasing, therefore, HCM2000 results reported.

Table 17: Existing (2024) and Future (2029) Traffic Conditions Intersection Queuing Summary With TDM Measures + TCR Improvement

Study Intersections	Peak Hour	Approach	Storage Capacity (ft)	Existing (2024) Conditions	Existing (2024) Plus Project Conditions		Existing (2024) Plus Project + TDM Measures		Existing (2024) Plus Project + TDM Measures + TCR Improvement		Future (2029) Conditions	Future (2029) with Project Conditions		Future (2029) with Project + TDM Measures		Future (2029) with Project + TDM Measures + TCR Improvement	
				Queue Length[1]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]
1 Don Felipe Drive & Stocker Street	AM	SBL	50	48	48	0					***85***	***85***	0				
		SBR	735	120	120	0					135	135	0				
		EBL	150	23	10	-13					30	15	-15				
		EBT	650	38	40	3					55	58	2				
		WBT	370	83	13	-70					108	18	-90				
		WBR	370	83	13	-70					113	18	-95				
	PM	SBL	50	***70***	***70***	0					***88***	***88***	0				
		SBR	735	250	250	0					275	275	0				
		EBL	150	53	43	-10					70	55	-15				
		EBT	650	163	168	5					203	208	5				
		WBT	370	83	23	-60					115	35	-80				
		WBR	370	85	25	-60					118	35	-83				
2 Project Driveway & Stocker Street*	AM	EBT	125	-	0	0					-	0	0				
		WBT	220	-	0	0					-	0	0				
		WBR	220	-	0	0					-	0	0				
	PM	EBT	125	-	0	0					-	0	0				
		WBT	220	-	0	0					-	0	0				
		WBR	220	-	0	0					-	0	0				
3 Palmero Boulevard & Stocker Steet*	AM	NBL/R	950	23	25	3					33	35	3				
		EBT	370	-	-	-					-	-	-				
		EBR	370	-	-	-					-	-	-				
		WBL	45	0	0	0					0	3	3				
		WBT	230	-	-	-					-	-	-				
	PM	NBL/R	950	10	13	3					15	15	0				
		EBT	370	-	-	-					-	-	-				
		EBR	370	-	-	-					-	-	-				
		WBL	45	3	3	0					3	3	0				
		WBT	230	-	-	-					-	-	-				
4 Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street[4]	AM	NBL	20	-	-	-	-	-	***46***	46	-	-	-	-	-	***48***	48
		NBT	1050	177	181	4	180	3	167	-10	183	184	1	184	1	177	-6
		NBR	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		SBL	130	69	79	10	78	9	77	8	74	86	12	84	10	82	8
		SBT	285	161	170	9	169	8	140	-21	176	183	7	181	5	146	-30
		SBR	134	-	-	-	-	-	7	7	-	-	-	-	-	19	19
		EBL	130	***166***	***244***	78	***225***	59	***177***	11	***280***	***358***	78	***340***	60	***267***	-13
		EBT	230	147	147	0	147	0	195	48	187	190	3	189	2	224	37
		WBL	115	11	11	0	11	0	13	2	11	12	1	12	1	13	2
		WBT	330	256	258	2	257	1	321	65	302	309	7	306	4	***354***	52
		WBR	110	31	38	7	36	5	57	26	41	51	10	48	7	97	56
	PM	NBL	20	-	-	-	-	-	***31***	***31***	-	-	-	-	-	***32***	32
		NBT	1050	124	124	0	123	-1	118	-6	129	127	-2	127	-2	123	-6
		NBR	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		SBL	130	91	***158***	67	***158***	67	124	33	97	***168***	71	***152***	55	122	25
		SBT	285	242	278	36	270	28	170	-72	260	***297***	37	***287***	27	179	-81
		SBR	134	-	-	-	-	-	51	51	-	-	-	-	-	58	58
		EBL	130	57	***163***	106	***131***	74	***134***	77	92	***237***	145	***224***	132	***186***	94
		EBT	230	113	122	9	122	9	201	88	184	221	37	205	21	***324***	140
		WBL	115	19	20	1	20	1	28	9	21	22	1	22	1	25	4
		WBT	330	109	155	46	113	4	177	68	148	157	9	155	7	205	57
		WBR	110	18	23	5	22	4	38	20	19	24	5	23	4	45	26
5 Santa Rosalia Drive & Project Driveway*	AM	NBL	285	-	13	13	10	10			-	13	13	10	10		
		NBT	285	-	-	-	-	-			-	-	-	-	-		
		SBT	650	-	-	-	-	-			-	-	-	-	-		
		SBR	650	-	-	-	-	-			-	-	-	-	-		
		EBL/R	230	-	18	18	13	13			-	25	25	15	15		
	PM	NBL	285	-	10	10	8	8			-	10	10	8	8		
		NBT	285	-	-	-	-	-			-	-	-	-	-		
		SBT	650	-	-	-	-	-			-	-	-	-	-		
		SBR	650	-	-	-	-	-			-	-	-	-	-		
		EBL/R	230	-	153	153	75	75			-	190	190	90	90		

Table 17: Existing (2024) and Future (2029) Traffic Conditions Intersection Queuing Summary With TDM Measures + TCR Improvement (continued)

Study Intersections	Peak Hour	Approach	Storage Capacity (ft)	Existing (2024) Conditions	Existing (2024) Plus Project Conditions		Existing (2024) Plus Project + TDM Measures		Existing (2024) Plus Project + TDM Measures + TCR Improvement		Future (2029) Conditions	Future (2029) with Project Conditions		Future (2029) with Project + TDM Measures		Future (2029) with Project + TDM Measures + TCR Improvement	
				Queue Length[1]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]	Queue Length[1]	Change[2]
6 Santa Rosalia Drive & Marlton Avenue	AM	NBL	100	18	18	0					18	18	0				
		NBT	300	203	205	2					243	245	3				
		NBR	100	65	65	0					60	63	3				
		SBL	60	30	30	0					33	33	0				
		SBT	500	85	98	13					88	98	10				
		SBR	500	88	100	13					90	103	13				
		EBL	55	13	15	3					20	23	3				
		EBT	330	0	0	0					0	0	0				
		EBR	330	83	85	3					100	103	2				
		WBL	130	33	45	13					40	53	13				
		WBT	260	30	30	0					35	38	3				
		WBR	130	10	13	3					13	15	3				
	PM	NBL	100	20	20	0					23	20	-3				
		NBT	300	165	190	25					188	210	23				
		NBR	100	95	***103***	7					95	***105***	10				
		SBL	60	30	30	0					33	33	0				
		SBT	500	85	88	3					90	95	5				
		SBR	500	85	90	5					93	98	5				
		EBL	55	3	5	3					5	8	3				
		EBT	330	0	0	0					0	0	0				
		EBR	330	60	65	5					68	73	5				
		WBL	130	63	73	10					70	83	13				
		WBT	260	40	43	3					45	48	3				
		WBR	130	20	20	0					23	23	0				
7 Crenshaw Boulevard & Stocker Street[4]	AM	NBL	145	***211***	***236***	25	***230***	19			***434***	***487***	53	***473***	39		
		NBT	1100	337	341	4	340	3			685	695	10	691	6		
		SBL	200	43	43	0	43	0			35	35	0	35	0		
		SBT	790	208	208	0	208	0			356	356	0	356	0		
		SBR	200	***348***	***435***	87	***244***	-104			***526***	***471***	-55	***290***	-236		
		EBL	150	***169***	***176***	7	***175***	6			***291***	***303***	12	***299***	8		
		EBT	275	269	272	3	272	3			***287***	***289***	2	***289***	2		
		EBR	170	19	19	0	19	0			21	22	1	22	1		
		WBL	55	***58***	***57***	-1	***58***	0			***63***	***62***	-1	***62***	-1		
		WBT	200	***211***	***218***	7	***216***	5			***226***	***233***	7	***232***	6		
	PM	NBL	145	***205***	***224***	19	***218***	13			***390***	***419***	29	***411***	21		
		NBT	1100	217	217	0	217	0			404	404	0	404	0		
		SBL	200	64	64	0	64	0			53	53	0	53	0		
		SBT	790	537	537	0	537	0			743	743	0	743	0		
		SBR	200	114	150	36	143	29			***211***	***239***	28	172	-39		
		EBL	150	***240***	***285***	45	***273***	33			***367***	***411***	44	***399***	32		
		EBT	275	***415***	***434***	19	***430***	15			***513***	***538***	25	***532***	19		
		EBR	170	32	40	8	38	6			85	100	15	96	11		
		WBL	55	55	55	0	55	0			***67***	***67***	0	***67***	0		
		WBT	200	137	142	5	141	4			154	159	5	157	3		

Notes:

* Unsignalized Intersections

[1] 95th percentile vehicle queue length in number of feet (Synchro software assumes 25 feet per vehicle).

[2] Change in vehicle queue length reported in number of feet.

[3] Storage capacities and queue lengths for movements with dual-lane turn pockets reported based on the average of the two lanes.

[4] Future condition includes a signal improvement to the northbound/southbound approaches as part of HSIP 7

XX ***Bolded/italicized*** vehicle queue length indicates that the queue exceeds turn-pocket capacity or distance in through lane to upstream intersection.

NB = Northbound; SB = Southbound; WB = Westbound; EB = Eastbound; L = Left-turn; T = Through; R = Right-turn.

8. CONCLUSIONS

Project transportation impacts were analyzed for CEQA and non-CEQA related issues in this transportation assessment report. As indicated in the preceding analyses, the Project is not expected to conflict with City plans, programs, ordinances, or policies; cause substantial VMT; or substantially increase hazards with the inclusion of an extensive TDM program and intersection improvements as mitigation measures as detailed in Sections 6.1 and 6.2. Additionally, the Project is not anticipated to adversely affect pedestrian, bicycle, and transit access; generate substantial construction interference to pedestrian, bicycle, transit, and vehicle circulation; result in residential street cut-through burdens; or cause freeway off-ramp safety concerns. Project access or circulation constraints were identified as a result of intersection operation deteriorations. To evaluate potentially hazardous conditions that may result with the construction of the Project, an analysis of the Project driveway, parking structure, passenger loading area, and intersection queues were analyzed. To ensure that the Project would not cause safety issues, mitigation measures that included the TDM Measures were implemented. Additionally, intersection improvements at the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street were recommended to address residual deficiencies in the circulation system surrounding the Project site that could cause hazardous conditions. Overall, the measures the Project proposes to apply include:

- Shifting service truck deliveries to off-peak hours,
- The implementation of an extensive TDM program, and
- Intersection improvements at Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street.

For the CEQA analysis, described in Section 6.3, it was determined that the implementation of the TDM Measures will provide safer and more efficient operations of the passenger loading area, access at the Project Driveway & Santa Rosalia Drive, and queuing into the parking garage so that the Project is not expected to substantially increase hazards. The Project team will coordinate with the City on the driveway, access, and public right-of-way feature design (e.g., passenger loading zone, pedestrian, bicycle, etc.) to ensure that there will be no significant impacts to safety. To address intersection hazards due to the addition of Project trips that may cause queues to spillover into adjacent travel lanes, additional mitigation measures were considered at the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street. It should be noted that this intersection has been identified by LADOT and the County for signal and striping improvements to include the following:

- Northbound approach at Angeles Vista Boulevard be improved with a protected-only left-turn phase which includes restriping the approach from a shared left-through and right-turn lane to a dedicated left-, through-, and right-turn lane;
- Eastbound and westbound approaches on Stocker Street be improved with protected-permissive left-turn phasing; and
- Southbound approach at Santa Rosalia Drive be improved with a dedicated right-turn lane.

The Project will be responsible for the construction of the signal and striping improvements through the B-permit process.

For non-CEQA related issues, summarized in Section 7, it was determined that the TDM Measures will reduce many of the operational delays and queues. The additional improvement at the intersection of Santa Rosalia Drive/Angeles Vista Boulevard & Stocker Street is expected to improve the operations.

APPENDIX A

TRANSPORTATION ASSESSMENT MEMORANDUM OF UNDERSTANDING (SIGNED MARCH 14, 2024)

LADOT

Attachment C

Transportation Assessment Memorandum of Understanding (MOU)

This MOU acknowledges that the Transportation Assessment for the following Project will be prepared in accordance with the latest version of LADOT's Transportation Assessment Guidelines:

I. PROJECT INFORMATION

Project Name: Stocker Street Creative

Project Address: 3701-3761 Stocker Street, Los Angeles, CA 90008

Project Description: A creative development consisting of production studio uses (51,200 square feet of sound stages, 13,000 square feet of support space, and 44,400 square feet of production office space) and commercial uses (123,100 square feet of office space, 6,500 square feet of retail space, and 18,500 square feet of restaurant uses).

LADOT Project Case Number: CEN23-56115 Project Site Plan attached? *(Required)* ☑ Yes ☐ No

II. TRANSPORTATION DEMAND MANAGEMENT (TDM) MEASURES

Select any of the following TDM measures, which may be eligible as a Project Design Feature[1], that are being considered for this project:

✓	Reduced Parking Supply[2]	✓	Bicycle Parking and Amenities		Parking Cash Out

List any other TDM measures (e.g. bike share kiosks, unbundled parking, microtransit service, etc) below that are also being considered and would require LADOT staff's determination of its eligibility as a TDM measure. LADOT staff will make the final determination of the TDM measure's eligibility for this project.

1 _____ 3 _____

2 _____ 4 _____

III. TRIP GENERATION

Trip Generation Rate(s) Source: ITE 10th Edition / Other ITE 11th Edition, Empirical Rates

Trip Generation Adjustment *(Exact amount of credit subject to approval by LADOT)*	Yes	No
Transit Usage	☑	☐
Existing Active or Previous Land Use	☐	☑
Internal Trip	☑	☐
Pass-By Trip	☑	☐
Transportation Demand Management (See above)	☐	☑

Trip generation table including a description of the existing and proposed land uses, rates, estimated morning and afternoon peak hour volumes (ins/outs/totals), proposed trip credits, etc. attached? *(Required)* ☐ Yes ☐ No

	IN	OUT	TOTAL
AM Trips	201	53	254
PM Trips	127	205	332

NET Daily Vehicle Trips (DVT)

2,873 DVT (ITE 11 ed.)

3,397 DVT (VMT Calculator ver. 1.4)

[1] At this time Project Design Features are only those measures that are also shown to be needed to comply with a local ordinance, affordable housing incentive program, or State law.

[2] Select if reduced parking supply is pursued as a result of a parking incentive as permitted by the City's Bicycle Parking Ordinance, State Density Bonus Law, or the City's Transit Oriented Community Guidelines.

IV. STUDY AREA AND ASSUMPTIONS

Project Buildout Year: 2029 Ambient Growth Rate: 1 % Per Yr.

Related Projects List, researched by the consultant and approved by LADOT, attached? *(Required)* ☐ Yes ☑ No

STUDY INTERSECTIONS and/or STREET SEGMENTS:
(May be subject to LADOT revision after access, safety, and circulation evaluation.)

1. Don Felipe Drive & Stocker Street
2. Project Driveway & Stocker Street
3. Palmero Boulevard & Stocker Street
4. Santa Rosalia Drive & Stocker Street
5. Santa Rosalia Drive & Project Drive
6. Santa Rosalia Drive & Marlton Avenue

Refer to Attachment 2 for complete list of study intersections.

Provide a separate list if more than six study intersections and/or street segments.

Is this Project located on a street within the High Injury Network? ☑ Yes ☐ No Per LA County's Vision Zero Collision Concentration Corridor

If a study intersection is located within a ¼-mile of an adjacent municipality's jurisdiction, signature approval from said municipality is required prior to MOU approval.

V. ACCESS ASSESSMENT

a. Does the project exceed 1,000 net DVT? ☑ Yes ☐ No
b. Is the project's frontage 250 linear feet or more along an Avenue or Boulevard as classified by the City's General Plan? ☑ Yes ☐ No
c. Is the project's building frontage encompassing an entire block along an Avenue or Boulevard as classified by the City's General Plan? ☑ Yes ☐ No

VI. ACCESS ASSESSMENT CRITERIA

If Yes to any of the above questions a., b., or c., the Transportation Assessment must assess the project's potential effect on pedestrian, bicycle, and transit facilities in the vicinity of the proposed project. Complete **Attachment C.1: Access Assessment Criteria** and attach to the draft Transportation Assessment to support the analysis. For the full scope of analysis, see Section 3.2 of the Transportation Assessment Guidelines.

VII. SITE PLAN AND MAP OF STUDY AREA

Please note that the site plan should be submitted to the Department of City Planning for cursory review.

Does the attached site plan and/or map of study area show	Yes	No	Not Applicable
Each study intersection and/or street segment	☑	☐	☐
*Project Vehicle Peak Hour trips at each study intersection	☑	☐	☐
*Project Vehicle Peak Hour trips at each project access point	☑	☐	☐
*Project trip distribution percentages at each study intersection	☑	☐	☐
Project driveways designed per LADOT MPP 321 (show widths and directions or lane assignment)	☑	☐	☐
Pedestrian access points and any pedestrian paths	☑	☐	☐
Pedestrian loading zones	☑	☐	☐
Delivery loading zone or area	☑	☐	☐
Bicycle parking onsite	☑	☐	☐
Bicycle parking offsite (in public right-of-way)	☑	☐	☐

*For mixed-use projects, also show the project trips and project trip distribution by land use category.

VIII. FREEWAY SAFETY ANALYSIS SCREENING

Will the project add 25 or more trips to any freeway off-ramp in either the AM or PM peak hour? ☐ Yes ☑ No
Provide a brief explanation or graphic identifying the number of project trips expected to be added to the nearby freeway off-ramps serving the project site. If Yes to the question above, a freeway ramp analysis is required.

IX. CONTACT INFORMATION

	CONSULTANT	DEVELOPER
Name:	Hilary Mau, HW Lochner	Pantheon Business Consulting, Inc.
Address:	300 Corporate Pointe, Suite 470, Culver City, CA 90230	9461 Charleville Road, Suite 462, Beverly Hills, CA 90212
Phone Number:	(310) 473-6508	(714) 935-20645
E-Mail:	hmau@hwlochner.com	

Approved by:	x				x	Jose Cardenas		3/14/2024	
		Consultant's Representative		Date		LADOT Representative		**Date	
Adjacent Municipality:		Ruben Cruz		Approved by:					
3/14/2024		LACO, Public Works. Traffic Safety & Mobility Division		(If applicable)		Representative		Date	

**MOUs are generally valid for two years after signing. If after two years a transportation assessment has not been submitted to LADOT, the developer's representative shall check with the appropriate LADOT office to determine if the terms of this MOU are still valid or if a new MOU is needed.

Attachment C.1: Access Assessment Worksheet

LADOT

Access Assessment Worksheet

This Worksheet supports the analysis needed to assess the project's potential effect on pedestrian, bicycle, and transit facilities in the vicinity of the proposed project. If the project exceeds the screening criteria in Section V of the MOU, complete and attach to the draft Transportation Assessment to support the analysis. For the full scope of analysis, see Section 3.2 of the Transportation Assessment Guidelines.:

I. PROJECT INFORMATION

Project Name: Stocker Street Creative

Project Address: 3701-3761 Stocker Street, Los Angeles, CA 90008

Project Description: A creative development consisting of production studio uses (51,200 square feet of sound stages, 13,000 square feet of support space, and 44,400 square feet of production office space) and commercial uses (123,100 square feet of office space, 6,500 square feet of retail space, and 18,500 square feet of restaurant uses).

LADOT Project Case Number: _____

II. PEDESTRIAN/ PERSON TRIP GENERATION

Source of Pedestrian/Person Trip Generation Rate(s)? ▫ ITE 10th Edition ▫ Other:

	Land Use	Size/Unit	Daily Person Trips
Proposed	Studio/Office	231,700 sf	419
	Retail	6,500 sf	43
	Restaurant	18,500 sf	307
	Total new trips:		769

Pedestrian/Person trip generation table including a description of the proposed land uses, trip credits, person trip assumptions, comparison studies used for reference, etc. attached? ▫ Yes ▫ No

III. PEDESTRIAN ATTRACTORS INVENTORY

Attach Pedestrian Map for the area (1,320 foot radius from edge of the project site) depicting:

- site pedestrian entrance(s)
- Existing or proposed passenger loading zones
- pedestrian generation/distribution values
  - Geographic Distribution: N 40 % S 5 % E 50 % W 5 %
- transit boarding and alighting of transit stops (should include Metro rail stations; Metro, DASH, and other municipal bus stops)

- Key pedestrian destinations with hours of operation:
  - schools (school times)
  - government offices with a public counter or meeting room
  - senior citizen centers
  - recreation centers or playgrounds
  - public libraries
  - medical centers or clinics
  - child care facilities
  - post offices
  - places of worship
  - grocery stores
  - other facilities that attract pedestrian trips
- pedestrian walking routes to key destinations from project site

Note: Pedestrian Count Summary, Bicycle Count Summary, Manual Traffic Count Summary will need to be attached to the Transportation Assessment

IV. FACILITIES INVENTORY

Is a High Injury Network street located within 1,320 foot radius from the edge of the project site? ☒ Yes ☐ No

If yes, list streets and include distance from the project:

Martin Luther King Jr. Boulevard at 530 (feet)

Crenshaw Boulevard at 350 (feet)

_____ at _____ (feet)

_____ at _____ (feet)

Attach Radius Map for the area (1,320 foot radius from edge of the project site) depicting the following existing and proposed facilities:

- transit stops
- bike facilities
- traffic control devices for controlled crossings
- uncontrolled crosswalks
- location of any missing, damaged or substandard sidewalks

For a reference of planned facilities, see the Transportation Assessment Support Map

Crossing Distances

LADOT City of Los Angeles Transportation Assessment MOU

Does the project property have frontage along an arterial street (designated as either an Avenue or Boulevard?)

▫ Yes ▫ No

If yes, provide the distance between the crossing control devices (e.g. signalized crosswalk, or controlled mid-block crossing) along any arterial within 1,320 feet of the property.

350 (feet) at Stocker Street (Dan Felipe Dr. to Santa Rosalia Dr.)		_____ (feet) at _____	
430 (feet) at Stocker Street (Santa Rosalia Dr. to Victoria Ave.)		_____ (feet) at _____	
400 (feet) at Stocker Street (Victoria Ave. to Crenshaw Blvd.)		_____ (feet) at _____	
350 (feet) at Crenshaw Boulevard (Stocker St. to Martin Luther King Jr. St.)		_____ (feet) at _____	
350 (feet) at Crenshaw Boulevard (Stocker St. to 43rd St.)		_____ (feet) at _____	
_____ (feet) at _____		_____ (feet) at _____	

For each street along the property frontage, provide:

the roadway configuration:

- **2-Lane**
- **3-Lane w/ striped median**
- **3-Lane w/ raised median**
- **4-Lane** (circled)
- **5-Lane w/ striped median**
- **5-Lane w/ raised median**
- **6-Lane**
- **Other:_____**

and crossing distance: 58 ft total _____ ft to median _____ ft to median

V. Project Construction

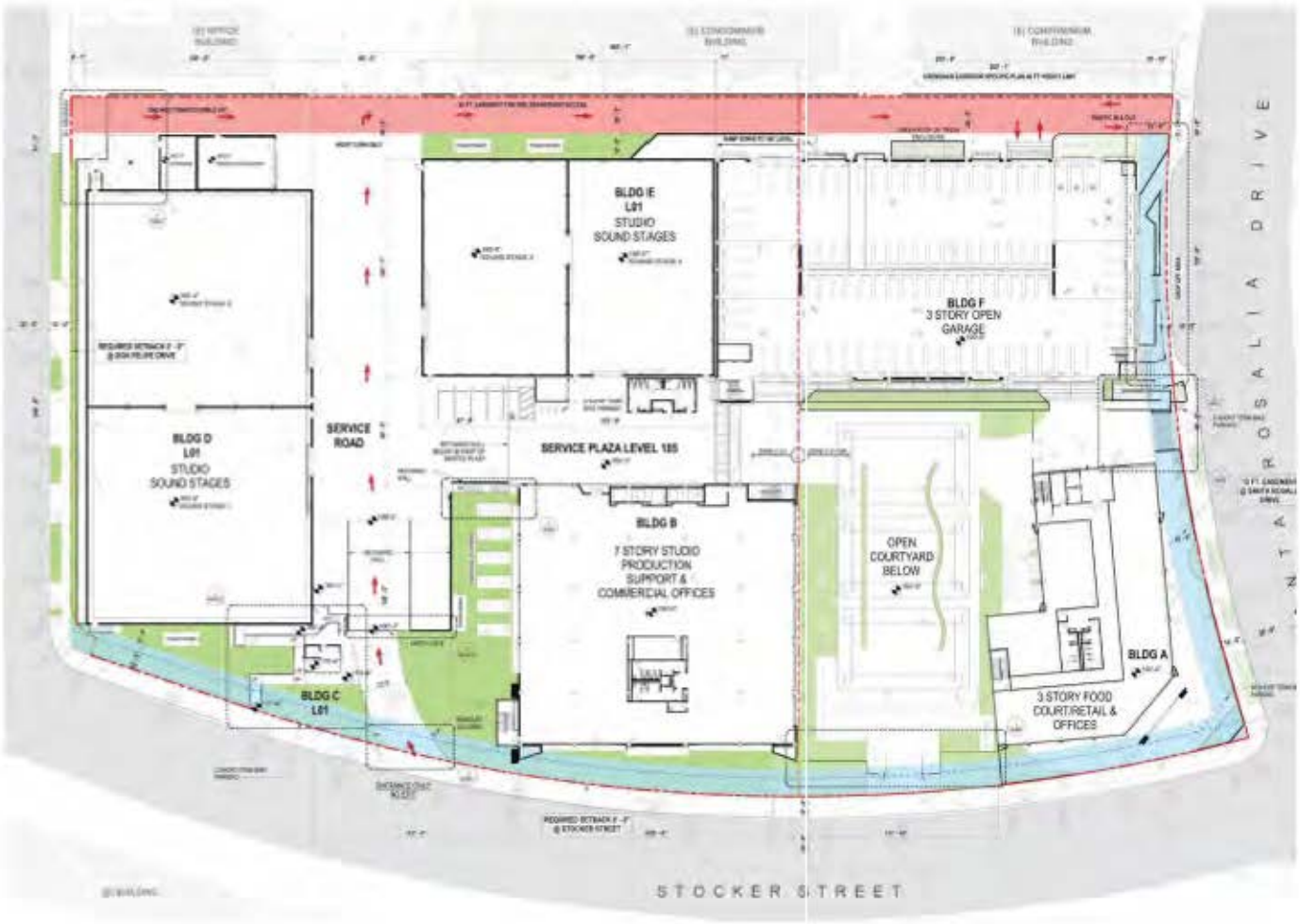
Will the project require any construction activity within the city right-of-way? ▫ Yes ▫ No

If yes, will the project require temporary closure of any of the following city facilities?

- sidewalk
- bike lane
- parking lane
- travel lane
- bus stop
- bicycle parking (racks or corrals)
- bike share or other micro-mobility station
- car share station
- parklet
- other: _____

ATTACHMENT 1(a)

CONCEPTUAL SITE PLAN



ATTACHMENT 1(a)

10/12/2023
FN: JC21049 LA 3701 Stocker Studio EIR\Docs\MOU\PROJ-SITE PLAN

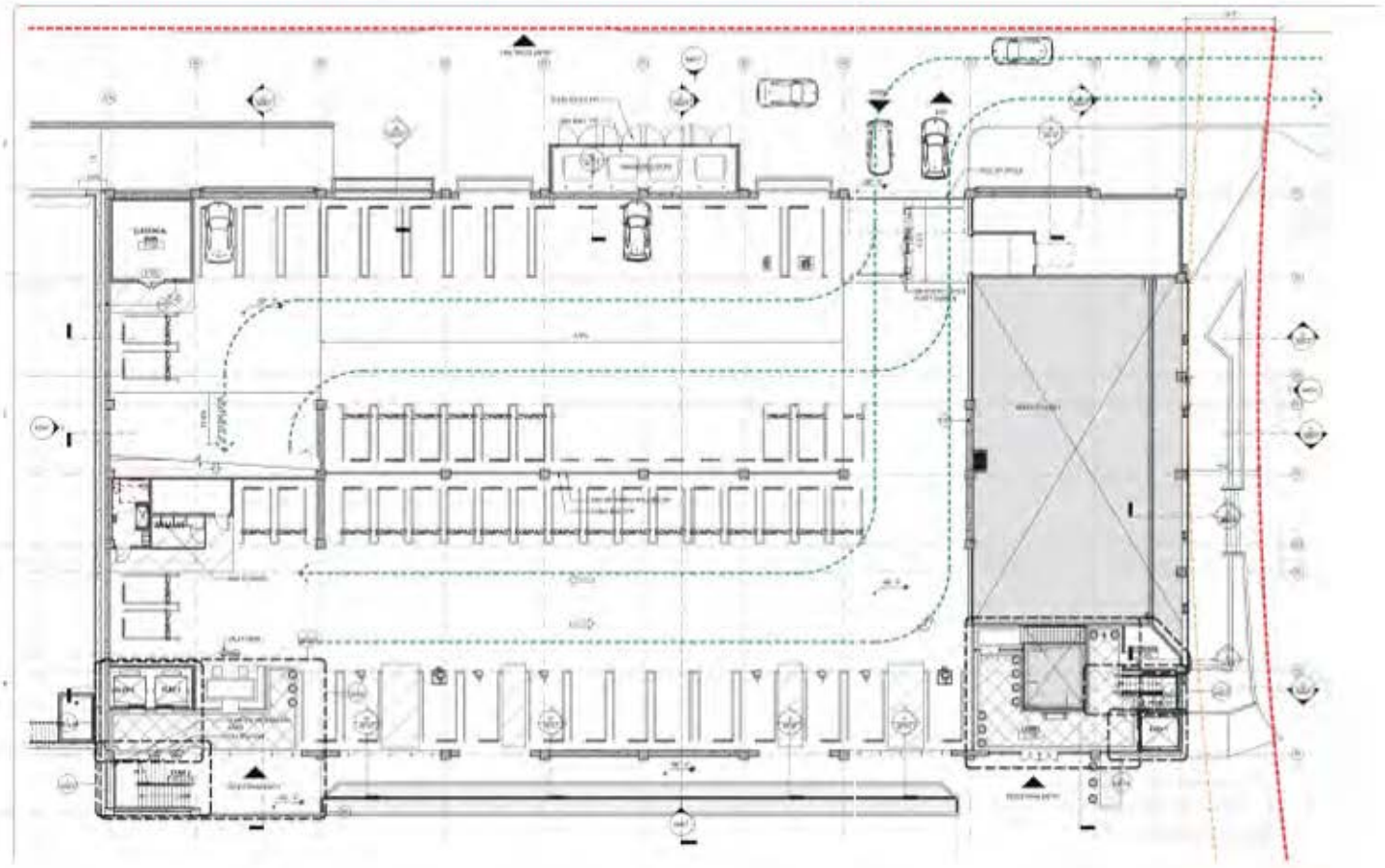
CONCEPTUAL SITE PLAN

300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
WWW.KOACORP.COM

ATTACHMENT 1(b)

CONCEPTUAL SITE PLAN – PARKING

NORTH



ATTACHMENT 1(b)

CONCEPTUAL SITE PLAN - PARKING

10/12/2023
P:\...\C21048 LA 3701 Stocker Studio EIR\Docs\MDU\PROJ-SITE PLAN

KOA
300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
WWW.KOACORP.COM

ATTACHMENT 2

STUDY INTERSECTIONS

1. Don Felipe Drive & Stocker Street
2. Project Driveway & Stocker Street
3. Palmero Boulevard & Stocker Street
4. Santa Rosalia Drive & Stocker Street
5. Santa Rosalia Drive & Project Drive
6. Santa Rosalia Drive & Marlton Avenue
7. Crenshaw Boulevard & Stocker Street

ATTACHMENT 3

PROJECT WEEKDAY TRIP GENERATION SUMMARY

Stocker Street Creative Project - Weekday Trip Generation Summary (Empirical and ITE Rates)

Land Use	ITE Code/ Other[1]	Intensity[2]	Average Weekday	AM Peak Hour			PM Peak Hour		
				In	Out	Average Rate Total	In	Out	Average Rate Total
Trip Generation Rates									
General Office	710	1 ksf	10.84	88%	12%	1.52	17%	83%	1.44
Strip Retail Plaza (<40k)	822	1 ksf	54.45	60%	40%	2.36	50%	50%	6.59
Fine Dining Restaurant	931	1 ksf	83.84	80%	20%	0.73	67%	33%	7.80
High-Turnover (Sit-Down) Restaurant	932	1 ksf	107.20	55%	45%	9.57	61%	39%	9.05
Studio - Sound Stage	Empirical	1 ksf	5.91	63%	37%	0.20	40%	60%	0.41
Studio - Support	Empirical	1 ksf	4.14	65%	35%	0.61	45%	55%	0.57
Studio - Production Office	Empirical	1 ksf	9.34	62%	38%	0.66	45%	55%	0.83
Studio - Service Trucks	-	-	12.00	50%	50%	6.00	50%	50%	6.00

Trip Generation Summary

Description	Size	Average Weekday	AM Peak Hour			PM Peak Hour		
			In	Out	Average Rate Total	In	Out	Average Rate Total
Proposed Uses								
Studio								
Sound Stage	51.200 ksf	303	6	4	10	9	13	22
Support	13.000 ksf	54	5	3	8	3	4	7
Production Office	44.400 ksf	415	18	11	29	13	15	28
Studio Service Truck Vehicle Trips[3]	108.600 ksf	24	6	6	12	6	6	12
Studio Vehicle Trips		772	29	18	47	25	32	57
Studio Total Baseline All Vehicle Trips		798	35	24	59	31	38	69
Studio Person Trips[4]		1,359	62	42	104	54	67	121
Studio Internal Person Trips[5]		100	5	15	20	2	1	3
Studio External Person Trips[6]		1,258	57	28	85	52	66	118
Studio External Trips by Vehicle[7,8]		623	28	14	42	26	33	59
Studio External Trips by Transit[7]		8	0	0	0	1	0	1
Studio External Trips by Walk/Bicycle[7]		155	7	4	11	7	8	15
Commercial								
General Office Total Baseline Vehicle Trips	123.100 ksf	1,334	165	22	187	30	147	177
Office Total Person Trips[4]		2,348	290	39	329	53	259	312
Office Internal Person Trips[5]		174	21	13	34	2	5	7
Office Total External Person Trips[6]		2,175	269	25	294	51	254	305
Office External Trips by Vehicle[7,8]		1,076	133	12	145	25	126	151
Office External Trips by Transit[7]		13	2	0	2	0	2	2
Office External Trips by Walk/Bicycle[7]		289	33	3	36	6	31	37
Strip Retail Plaza (<40k)	6.500 ksf	354	9	6	15	22	21	43
Retail Total Person Trips[4]		629	16	11	27	39	37	76
Retail Total Internal Person Trips[5]		275	6	4	10	23	12	35
Retail Total External Person Trips[6]		354	10	7	17	16	25	41
Retail External Trips by Vehicle (including pass-by trips)[7]		177	5	3	8	8	13	21
Retail External Trips by Transit[7]		0	0	0	0	0	0	0
Retail External Trips by Walk/Bicycle[7]		43	1	1	2	2	3	5
Retail External Trips by Vehicle (with pass-by trip adjustment)[7]		89	3	1	4	4	7	11
Fine Dining Restaurant	9.000 ksf	755	8	1	7	47	23	70
High-Turnover (Sit-Down) Restaurant	9.500 ksf	1,018	50	41	91	52	34	86
Restaurant Total Baseline Vehicle Trips	18.500 ksf	1,773	56	42	98	99	57	156
Restaurant Total Person Trips[4]		3,120	99	74	173	174	100	274
Restaurant Total Internal Person Trips[5]		593	24	24	48	14	23	37
Restaurant Total External Person Trips[6]		2,527	75	50	125	160	77	237
Restaurant External Trips by Vehicle (including pass-by trips)[7]		1,263	38	25	63	79	39	118
Restaurant External Trips by Transit[7]		7	0	0	0	1	0	1
Restaurant External Trips by Walk/Bicycle[7]		307	9	6	15	20	9	29
Restaurant External Trips by Vehicle (with pass-by trip adjustment)[7]		1,061	31	20	51	66	33	99
Net Project Total External Trips by Vehicle (Including Pass-By Trips)		**3,163**	**210**	**60**	**270**	**144**	**217**	**361**
Net Project Total External Trips by Vehicle		**2,873**	**201**	**53**	**254**	**127**	**205**	**332**

Notes:

1) ITE *Trip Generation Manual* (11th Edition, 2021) trip generation rates and directional distributions applied for Land Use Codes (LUC) 710 (General Office), 822 (Strip Retail Plaza (<40k)), 931 (Fine Dining Restaurant), 932 (High-Turnover (Sit-Down) Restaurant) to develop baseline vehicle trips for each land use associated with the commercial components. LUC 931 does not include directional distribution for the AM peak hour of adjacent street traffic; the directional distribution for this AM peak hour of the generator was assumed. The General Urban/Suburban setting was used as it best represents the project location.

The studio trip generation rates were based on empirical rates from the *Paramount Picture Master Plan* (2015) prepared by Gibson Transportation and are attached on the following pages.

The ITE *Trip Generation Handbook* (3rd Edition, 2017) recommended methodology for estimating the trip generation of a mixed-use development was utilized for the project. The ITE methodology follows the recommended procedures from the National Cooperative Highway Research Program (NCHRP) Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments* (Transportation Research Board, 2011). The NCHRP 684 Internal Trip Capture Estimation Tool spreadsheet provided on the ITE website was used, with worksheets attached on the following pages for the Project and existing uses. The internal trips for the Studio uses were combined with the Office uses as it was the most comparable land use. Internal calculations for these office-related trips are attached on the following pages.

The studio service trucks were conservatively based on a maximum number of 6 large trucks assumed per day. All of these large production trucks were assumed to access the site during the AM and PM peak hours. The truck estimate is based on the size of the studio and expected operations.

2) ksf = Thousands of Square Feet of Gross Leasable Floor Area or Gross Floor Area.

3) A passenger car equivalent (PCE) of 2.0 was applied to the the number of service truck trips.

4) See attached Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends and Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends from the NCHRP 684 Internal Trip Capture Estimation Tool for the proposed project uses.

5) See attached Table 9-A (D): Internal and External Trips Summary (Entering Trips), Table 9-A (D): Internal and External Trips Summary (Exiting Trips), Table 9-P (D): Internal and External Trips Summary (Entering Trips), and Table 9-P (D): Internal and External Trips Summary (Exiting Trips) from the NCHRP 684 Internal Trip Capture Estimation Tool for the proposed project uses.

6) No pass-by trips assumed for the general office land and studio uses.

7) Per Attachment J of the LADOT *Transportation Assessment Guidelines* (August 2022), an average pass-by trip discount rate of 50 percent was applied for the proposed retail component as it is less than 50,000 square feet. For the proposed fine-dining and high-turnover (sit-down) restaurant components, Attachment J recommends pass-by trip discounts of 10 percent and 20 percent, respectively. As the trips associated with the two restaurant uses were combined as part of the internal trip capture estimation, the pass-by trip discount rates were blended for each analysis time period based on the proportion of trips from each component restaurant use. For example, in the AM peak hour, with 91 high-turnover (sit-down) trips (at 20 percent) and 7 fine dining trips (at 10 percent) summing to 98 baseline restaurant vehicle trips, the blended average is approximately 19 percent. The blended pass-by discount rates were 16 percent for the weekday daily and PM peak-hour periods, respectively.

8) The ITE *Trip Generation Handbook* provides no guidance for estimating daily trips for mixed-use developments. Therefore, daily trips for each land use's subcategory (person-trips, internal person trips, external person trips, external trips by mode) were estimated by developing a Daily-to-(AM+PM peak hour) factor using the land use's baseline vehicle trips and then applying this factor to each subcategory's combined (AM+PM) peak-hour trips. For commercial land uses with pass-by adjustments, the daily external trips by vehicle (with pass-by trip adjustment) were determined by applying the appropriate pass-by adjustment to the daily external trips by vehicle (including pass-by trips).

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Stocker Street Creative Project	**Organization:**	KOA
Project Location:	Los Angeles	**Performed By:**	1/29/2024
Scenario Description:	With Project	**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[2]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710	231,700	sf	246	200	46
Retail	822	6,500	sf	15	9	6
Restaurant	931, 933	18,500	sf	98	56	42
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
				359	265	94

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.76	1%	12%	1.76	1%	12%
Retail	1.76	1%	12%	1.76	1%	12%
Restaurant	1.76	1%	12%	1.76	1%	12%
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix[*]

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	23	0	0	0
Retail	3		1	0	0	0
Restaurant	23	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	633	467	166
Internal Capture Percentage	18%	12%	34%
External Vehicle-Trips[5]	258	204	54
External Transit-Trips[6]	2	2	0
External Non-Motorized Trips[6]	64	50	14

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	7%	35%
Retail	38%	36%
Restaurant	24%	32%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1] Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2] Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3] Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4] Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5] Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6] Person-Trips

[*] Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Stocker Street Creative Project
Analysis Period:	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.76	200	352	1.76	46	81
Retail	1.76	9	16	1.76	6	11
Restaurant	1.76	56	99	1.76	42	74
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		23	51	0	1	0
Retail	3		1	0	2	0
Restaurant	23	10		0	3	2
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	23	0	0	0
Retail	14		50	0	0	0
Restaurant	49	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	11	3	20	0		0
Hotel	11	1	6	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	26	326	352	161	2	40
Retail	6	10	16	5	0	1
Restaurant	24	75	99	38	0	9
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	28	53	81	26	0	7
Retail	4	7	11	3	0	1
Restaurant	24	50	74	25	0	6
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Stocker Street Creative Project	**Organization:**	KOA
Project Location:	Los Angeles	**Performed By:**	1/29/2024
Scenario Description:	With Project	**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	PM Street Peak Hour	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710	231.700	sf	246	61	185
Retail	822	6,500	sf	43	22	21
Restaurant	931, 933	18,500	sf	156	99	57
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
				445	182	263

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.76	1%	12%	1.76	1%	12%
Retail	1.76	1%	12%	1.76	1%	12%
Restaurant	1.76	1%	12%	1.76	1%	12%
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix[5]

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	3	0	0	0
Retail	1		11	0	0	0
Restaurant	3	20		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	783	320	463
Internal Capture Percentage	10%	13%	9%
External Vehicle-Trips[3]	349	138	211
External Transit-Trips[6]	4	2	2
External Non-Motorized Trips[6]	86	35	51

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	4%	2%
Retail	59%	32%
Restaurant	8%	23%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).
[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be
[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[6]Person-Trips
*Indicates computation that has been rounded to the nearest whole number.

Project Name:	Stocker Street Creative Project
Analysis Period:	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.76	61	107	1.76	185	326
Retail	1.76	22	39	1.76	21	37
Restaurant	1.76	99	174	1.76	57	100
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		65	13	0	7	0
Retail	1		11	1	10	2
Restaurant	3	41		8	18	7
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	3	0	0	0
Retail	33		50	0	0	0
Restaurant	32	20		0	0	0
Cinema/Entertainment	6	2	5		0	0
Residential	61	4	24	0		0
Hotel	0	1	9	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	4	103	107	51	1	13
Retail	23	16	39	8	0	2
Restaurant	14	160	174	79	1	20
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	6	320	326	159	2	39
Retail	12	25	37	13	0	3
Restaurant	23	77	100	39	0	9
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	20.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	26.0%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	42.0%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	8.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	10.0%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%

Office/Studio Person Trips

	Office Tota	2,106	200	46	246	61	185	246
	Studio	772	35	24	59	31	38	69
	Office	1,334	165	22	187	30	147	177
	Studio %	37%	18%	52%	24%	51%	21%	28%
	Office %	63%	83%	48%	76%	49%	79%	72%
		100%	100%	100%	100%	100%	100%	100%
Office Total Person Trips		3,707	352	81	433	107	326	433
Office Internal Person Trips[4]		274	26	28	54	4	6	10
Office Total External Person Trips[4]		3,433	326	53	379	103	320	423
Office External Trips by Vehicle[5]		1,699	161	26	187	51	159	210
Office External Trips by Transit[4]		21	2	0	2	1	2	3
Office External Trips by Walk/Bicycle[4]		424	40	7	47	13	39	52

Office Total Person Trips		3,707	352	81	433	107	326	433
Office Internal Person Trips[4]		274	26	28	54	4	6	10
Office Total External Person Trips[4]		3,433	326	53	379	103	320	423
Office External Trips by Vehicle[5]		1,699	161	26	187	51	159	210
Office External Trips by Transit[4]		21	2	0	2	1	2	3
Office External Trips by Walk/Bicycle[4]		424	40	7	47	13	39	52

Table IV.K-8
Project Trip-Generation Estimates

Trip-Generation Rates[a]									
Land Use	ITE Land Use	Rate	Daily	A.M. Peak Hour			P.M. Peak Hour		
				In	Out	Total	In	Out	Total
Stage	[b]	per ksf	5.91	63%	37%	0.20	40%	60%	0.43
Support	[b]	per ksf	4.14	65%	35%	0.61	45%	55%	0.57
Production Office	[b]	per ksf	9.34	62%	38%	0.66	45%	55%	0.63
Office	710	per ksf	[c]	88%	12%	[c]	17%	83%	[c]
Retail[d]	814	per ksf	44.32	61%	39%	1.03	44%	56%	2.71

Trip-Generation Estimates									
Land Use	ITE Land Use	Size	Daily	A.M. Peak Hour			P.M. Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Project									
Stage	[b]	383.100 ksf	2,264	49	28	77	66	99	165
Support	[b]	587.900 ksf	2,434	233	126	359	151	184	335
Production Office	[b]	967.800 ksf	9,039	396	243	639	275	335	610
Transit Adjustment	*15%*		*-1,356*	*-60*	*-36*	*-96*	*-41*	*-51*	*-92*
Office	710	1,184.400 ksf	8,949	1,192	163	1,355	239	1,166	1,405
Transit Adjustment	*15%*		*-1,342*	*-179*	*-24*	*-203*	*-36*	*-175*	*-211*
Retail (South Side of Melrose)	814	31.000 ksf	1,374	20	12	32	37	47	84
Pass-By Adjustment	*50%*		*-687*	*-10*	*-6*	*-16*	*-18*	*-24*	*-42*
Retail (North Side of Melrose)	814	33.200 ksf	1,471	21	13	34	40	50	90
Pass-By Adjustment	*50%*		*-736*	*-10*	*-7*	*-17*	*-20*	*-25*	*-45*
Internal Capture	*25%*		*-184*	*-2*	*-2*	*-4*	*-5*	*-6*	*-11*
Retail (Main Lot)	814	47.000 ksf	2,083	29	19	48	56	71	127
Internal Capture	*100%*		*-2,083*	*-29*	*-19*	*-48*	*-56*	*-71*	*-127*
Total Proposed Project			**21,226**	**1,650**	**510**	**2,160**	**688**	**1,600**	**2,288**
Existing Site									
Stage	[b]	382.100 ksf	2,140	45	27	72	62	94	156
Support	[b]	586.000 ksf	2,426	232	125	357	150	184	334
Production Office	[b]	332.300 ksf	3,104	136	83	219	94	115	209
Transit Adjustment	*15%*		*-466*	*-20*	*-13*	*-33*	*-14*	*-17*	*-31*
Office	710	546.300 ksf	4,932	642	88	730	117	574	691
Transit Adjustment	*15%*		*-740*	*-97*	*-13*	*-110*	*-18*	*-86*	*-104*
Retail (Along Melrose)	814	0.000 ksf	0	0	0	0	0	0	0
Pass-By Adjustment	*50%*		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Retail (Main Lot)	814	22.000 ksf	975	14	9	23	26	34	60
Internal Capture	*100%*		*-975*	*-14*	*-9*	*-23*	*-26*	*-34*	*-60*
Total Existing Site			**11,396**	**938**	**297**	**1,235**	**391**	**864**	**1,255**
Net Project Development									
Stage		21.000 ksf	124	4	1	5	4	5	9
Support		1.900 ksf	8	1	1	2	1	0	1
Production Office		635.500 ksf	5,045	220	137	357	154	186	340
Office		638.100 ksf	3,415	468	64	532	104	503	607
Retail (Along Melrose)		64.200 ksf	1,238	19	10	29	34	42	76
Retail (Main Lot)		25.000 ksf	0	0	0	0	0	0	0
Net New Trips			**9,830**	**712**	**213**	**925**	**297**	**736**	**1,033**

ksf = 1,000 square feet

[a] *Source: Trip Generation, 8th Edition, Institute of Transportation Engineers, 2008, except as noted.*

[b] *Rate based on empirical rate from Transportation Study for the NBC Universal Evolution Plan Environmental Impact Report, Gibson Transportation Consulting, Inc. and Raju Associates, Inc., March 2010.*

[c] *Trip-generation rate based on the best-fit curve formula for the Office land use (ITE 710).*

Daily = Ln(T) = 0.77 Ln(X) + 3.65 *T = Average Vehicle Trips*

A.M. Peak Hour = Ln(T) = 0.8 Ln(X) + 1.55 *X = Gross Leasable Area (ksf)*

P.M. Peak Hour = T = 1.12 (X) + 78.81

[d] *A.M. peak-hour trip-generation rate is that of Shopping Center, ITE 820.*

Source: Gibson Transportation Consulting, Inc., 2015.

ATTACHMENT 4

VMT CALCULATOR SCREENING ANALYSIS RESULTS

CITY OF LOS ANGELES VMT CALCULATOR Version 1.4

Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project:

Scenario:

Address:



Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

● Yes ○ No

Existing Land Use

Land Use Type	Value	Unit
		DU

☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
		ksf
Retail | General Retail	6.5	ksf
Retail | High-Turnover Sit-Down Restaurant	9.5	ksf
Retail | Quality Restaurant	9	ksf
Office | General Office	123.1	ksf
(custom) Studio | Retail/Non-Retail	Non-Retai	LU type
(custom) Studio | Residents	0	Person
(custom) Studio | Employees	310	Person
(custom) Studio | Daily	796	Trips
(custom) Studio | HBW-Attraction Split	52	Percent
(custom) Studio | HBO-Attraction Split	24	Percent
(custom) Studio | NHB-Attraction Split	12	Percent
(custom) Studio | HBW-Production Split	0	Percent
(custom) Studio | HBO-Production Split	0	Percent

☑ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
0 Daily Vehicle Trips	3,397 Daily Vehicle Trips
0 Daily VMT	25,018 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	3,397 Net Daily Trips
The net increase in daily VMT ≤ 0	25,018 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	25.000 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

10/27/2023

CITY OF LOS ANGELES VMT CALCULATOR Version 1.4

Project Information

Project:

Scenario:

Address:



Proposed Project Land Use Type	Value	Unit
Retail | General Retail	6.5	ksf
Retail | High-Turnover Sit-Down Restaurant	9.5	ksf
Retail | Quality Restaurant	9	ksf
Office | General Office	123.1	ksf
(custom) Studio | Retail/Non-Retail	Non-Retai	LU type
(custom) Studio | Residents	0	Person
(custom) Studio | Employees	310	Person
(custom) Studio | Daily	796	Trips
(custom) Studio | HBW-Attraction Split	52	Percent
(custom) Studio | HBO-Attraction Split	24	Percent
(custom) Studio | NHB-Attraction Split	12	Percent
(custom) Studio | HBW-Production Split	0	Percent
(custom) Studio | HBO-Production Split	0	Percent
(custom) Studio | NHB-Production Split	12	Percent

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

A Parking

Reduce Parking Supply
☑ Proposed Prj ☐ Mitigation
598 city code parking provision for the project site
380 actual parking provision for the project site

Unbundle Parking
☐ Proposed Prj ☐ Mitigation
175 monthly parking cost (dollar) for the project site

Parking Cash-Out
☐ Proposed Prj ☐ Mitigation
45 percent of employees eligible

Price Workplace Parking
☐ Proposed Prj ☐ Mitigation
6.00 daily parking charge (dollar)
50 percent of employees subject to priced parking

Residential Area Parking Permits
☐ Proposed Prj ☐ Mitigation
200 cost (dollar) of annual permit

B Transit

C Education & Encouragement

D Commute Trip Reductions

E Shared Mobility

F Bicycle Infrastructure

G Neighborhood Enhancement

Analysis Results

Proposed Project	With Mitigation
2,935 Daily Vehicle Trips	**2,935** Daily Vehicle Trips
21,618 Daily VMT	**21,618** Daily VMT
0.0 Household VMT per Capita	**0.0** Household VMT per Capita
10.4 Work VMT per Employee	**10.4** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 6.0 15% Below APC	**Household: No** Threshold = 6.0 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

10/27/2023

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: October 27, 2023
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

Project Information

Land Use Type		Value	Units
Housing	Single Family	0	DU
	Multi Family	0	DU
	Townhouse	0	DU
	Hotel	0	Rooms
	Motel	0	Rooms
Affordable Housing	Family	0	DU
	Senior	0	DU
	Special Needs	0	DU
	Permanent Supportive	0	DU
Retail	General Retail	6.500	ksf
	Furniture Store	0.000	ksf
	Pharmacy/Drugstore	0.000	ksf
	Supermarket	0.000	ksf
	Bank	0.000	ksf
	Health Club	0.000	ksf
	High-Turnover Sit-Down Restaurant	9.500	ksf
	Fast-Food Restaurant	0.000	ksf
	Quality Restaurant	9.000	ksf
	Auto Repair	0.000	ksf
	Home Improvement	0.000	ksf
	Free-Standing Discount	0.000	ksf
	Movie Theater	0	Seats
Office	General Office	123.100	ksf
	Medical Office	0.000	ksf
Industrial	Light Industrial	0.000	ksf
	Manufacturing	0.000	ksf
	Warehousing/Self-Storage	0.000	ksf
School	University	0	Students
	High School	0	Students
	Middle School	0	Students
	Elementary	0	Students
	Private School (K-12)	0	Students
Other	Studio	796	Trips

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: October 27, 2023
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

Analysis Results			
Total Employees: 889 Total Population: 0			
Proposed Project		***With Mitigation***	
2,935	Daily Vehicle Trips	2,935	Daily Vehicle Trips
21,618	Daily VMT	21,618	Daily VMT
0	Household VMT per Capita	0	Household VMT per Capita
10.4	Work VMT per Employee	10.4	Work VMT per Employee

Significant VMT Impact?			
APC: South Los Angeles			
Impact Threshold: 15% Below APC Average Household = 6.0 Work = 11.6			
Proposed Project		***With Mitigation***	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	No	Household > 6.0	No
Work > 11.6	No	Work > 11.6	No

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: October 27, 2023
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	598	598
		Actual parking provision (spaces)	380	380
	Unbundle parking	Monthly cost for parking ($)	50	50
	Parking cash-out	Employees eligible (%)	0%	0%
	Price workplace parking	Daily parking charge ($)	20.00	20.00
		Employees subject to priced parking (%)	0%	0%
	Residential area parking permits	Cost of annual permit ($)	50	50

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type	Description	Proposed Project	Mitigations
	Reduction in headway (increase in frequency) (%)	0%	0%

Transit	Increase transit frequency/ headways	Existing transit mode share (as a percent of total daily trips) (%)	0%	0%
		Lines within project site improved (-15% <=x<=0%)	0	0
	Implement neighborhood shuttle	Degree of implementation (low, medium, high)	0	0
		Employees and residents eligible (%)	0%	0%
	Transit subsidies	Employees and residents eligible (%)	0%	0%
		Amount of transit subsidy per passenger (daily equivalent) ($)	$0.00	$0.00
Education & Encouragement	Voluntary travel behavior change program	Employees and residents participating (%)	0%	0%
	Promotions and marketing	Employees and residents participating (%)	0%	0%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
	Required commute trip reduction program	Employees participating (%)	0%	0%
	Alternative Work Schedules and Telecommute	Employees participating (%)	0%	0%
		Type of program	0	0

Commute Trip Reductions				
Shared Mobility				

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	Yes	Yes
	Include secure bike parking and showers	Includes indoor bike parking/lockers, showers, & repair station (Yes/No)	Yes	Yes

Neighborhood Enhancement	Traffic calming improvements	Streets with traffic calming improvements (%)	0%	0%
		Intersections with traffic calming improvements (%)	0%	0%
	Pedestrian network improvements	Is the project within one mile of and connecting to a pedestrian network that meets the guidelines?	No	No

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: October 27, 2023
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Parking cash-out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Price workplace parking	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Residential area parking permits	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Transit	Reduce transit headways	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Transit sections 1 - 3
	Improve transit neighborhood shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Transit subsidies	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Education & Encouragement	Voluntary travel behavior change program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Commute Trip Reductions	Required commute trip reduction program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Employer-sponsored vanpool or shuttle	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Ridesharing program	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Shared Mobility	Carshare	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bikeshare	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	School carpool program	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

	Home Based Work Production	*Home Based Work Attraction*	*Home Based Other Production*	*Home Based Other Attraction*	*Non-Home Based Other Production*	*Non-Home Based Other Attraction*	*Source*

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: October 27, 2023
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement bicycle network and bicycle lanes	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Include secure bike parking and showers	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
Neighborhood Enhancement	Traffic calming improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*
MAX. TDM EFFECT	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*	*14%*

= Minimum (X%, 1-[(1-A)*(1-B)…])
where X%=

PLACE TYPE MAX:	*urban*	*75%*
	compact infill	*40%*
	suburban center	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,…). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: October 27, 2023
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	0	0%	0	9.0	0	0
Home Based Other Production	0	0.0%	0	5.9	0	0
Non-Home Based Other Production	669	-3.4%	646	7.9	5,285	5,103
Home-Based Work Attraction	1,254	-16.8%	1,043	10.3	12,916	10,743
Home-Based Other Attraction	1,460	-27.3%	1,062	4.5	6,570	4,779
Non-Home Based Other Attraction	669	-3.4%	646	6.8	4,549	4,393

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	-13.6%			-13.6%		
Home Based Other Production	-13.6%			-13.6%		
Non-Home Based Other Production	-13.6%	558	4,409	-13.6%	558	4,409
Home-Based Work Attraction	-13.6%	901	9,283	-13.6%	901	9,283
Home-Based Other Attraction	-13.6%	918	4,130	-13.6%	918	4,130
Non-Home Based Other Attraction	-13.6%	558	3,796	-13.6%	558	3,796

MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 889
APC: South Los Angeles

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**0**	**0**
Total Home Based Work Attraction VMT	**9,283**	**9,283**
Total Home Based VMT Per Capita	**0.0**	**0.0**
Total Work Based VMT Per Employee	**10.4**	**10.4**

ATTACHMENT 5

RELATED PROJECTS LIST

The LADOT related projects including development projects within a 1.0-mile radius of the project site was requested and is being reviewed. City Planning projects within the West Adams – Baldwin Hills - Leimert Community Plan Area will also be reviewed to supplement the LADOT list. Related project will also be requested from Los Angeles County.

ATTACHMENT 6

PROJECT SITE VICINITY AND PROPOSED STUDY INTERSECTIONS



ATTACHMENT 6

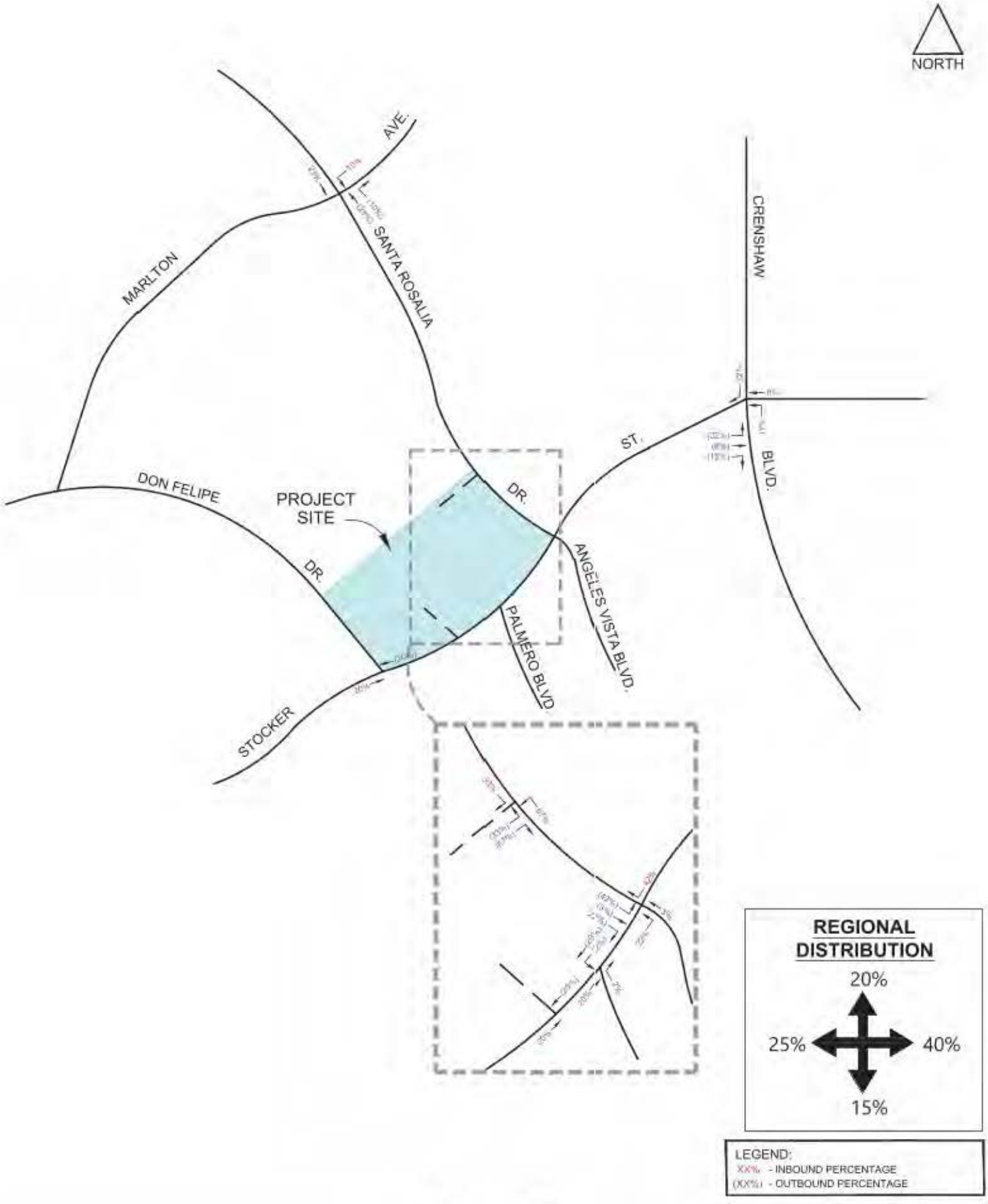
2/1/2024
FN: "//Koampfs1.KOACORP.LOCAL\shares\Projects\2022\JC21049 LA 3701 Stocker Studio EIR\Docs\Fig\STUDY-INTS

PROJECT SITE VICINITY AND PROPOSED STUDY INTERSECTIONS

KOA
300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
WWW.KOACORP.COM

ATTACHMENT 7(a)

PROJECT TRIP DISTRIBUTION PERCENTAGES
STUDIO USES



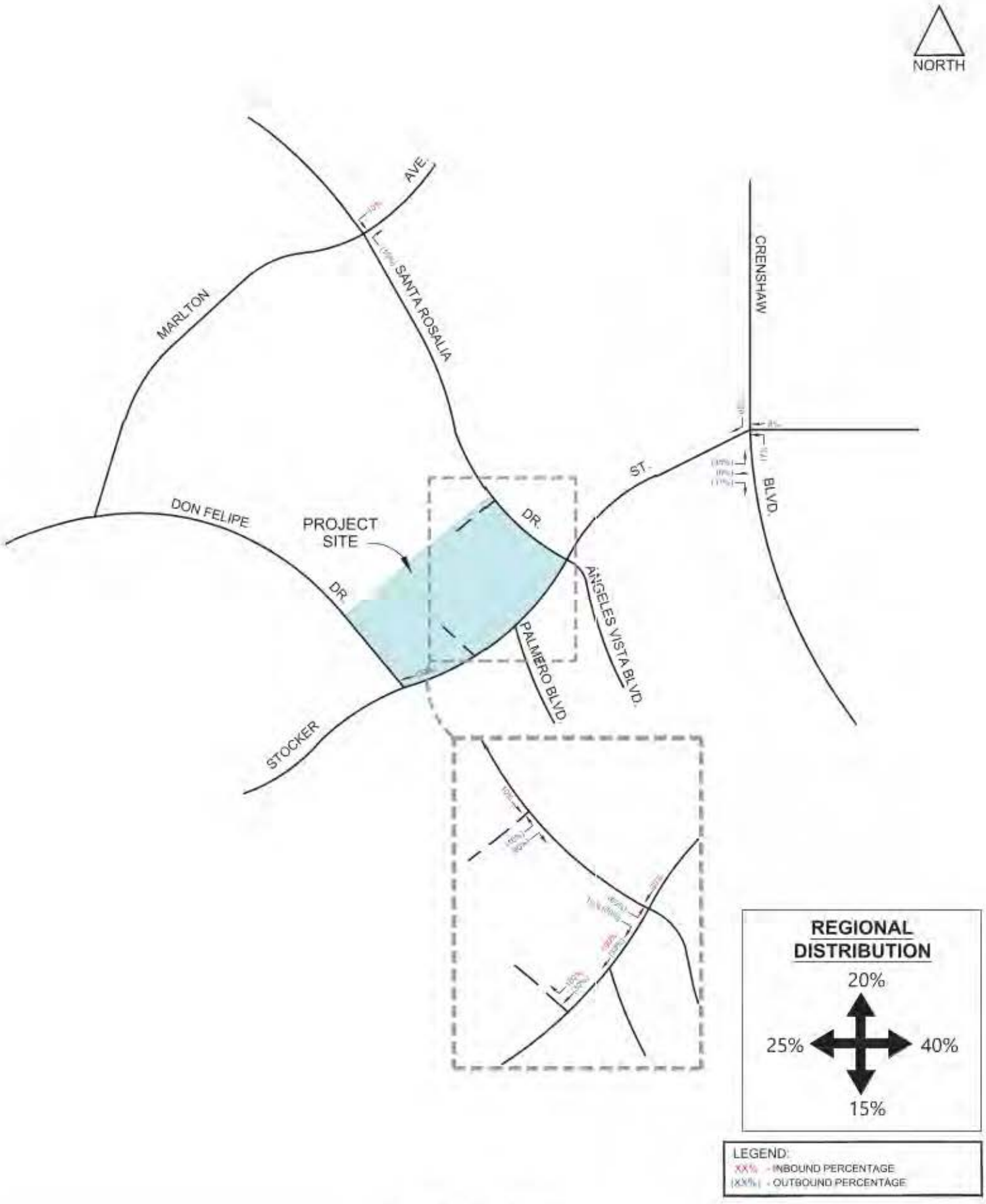
ATTACHMENT 7(a)

PROJECT TRIP DISTRIBUTION PERCENTAGES - STUDIO AND COMMERCIAL USES

300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
WWW.KOACORP.COM

ATTACHMENT 7(b)

PROJECT TRIP DISTRIBUTION PERCENTAGES
COMMERCIAL USES



ATTACHMENT 7(b)

PROJECT TRIP DISTRIBUTION PERCENTAGES - SERVICE STUDIO TRUCKS

300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
WWW.KOACORP.COM

ATTACHMENT 8(a)

PROJECT VEHICLE TRIPS
STUDIO USES AM PEAK HOUR

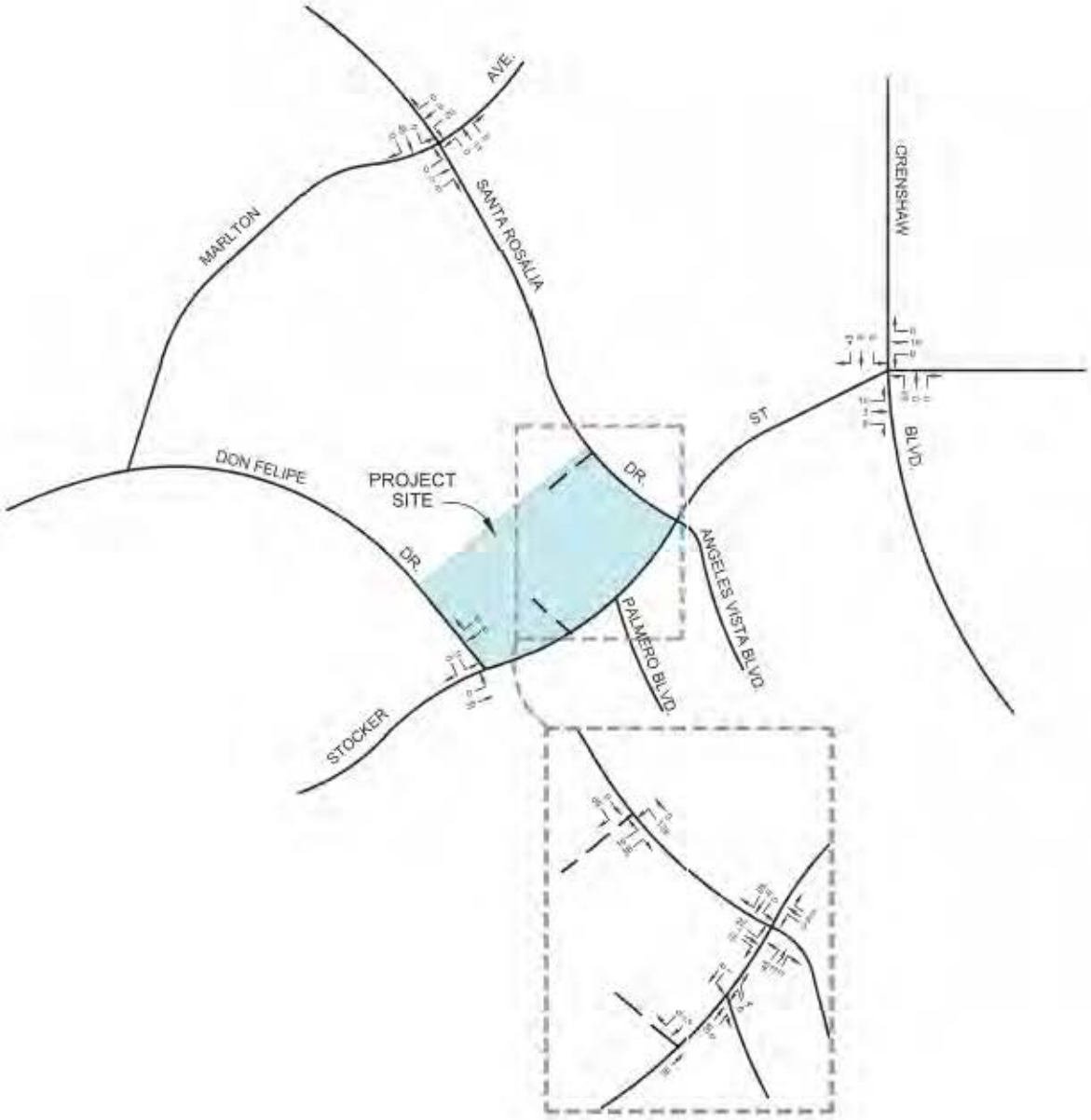


FIGURE 8(a)

PROJECT VEHICLE TRIPS - STUDIO AND COMMERCIAL USE
AM PEAK HOUR

300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
WWW.KOACORP.COM

ATTACHMENT 8(b)

PROJECT VEHICLE TRIPS
STUDIO USES PM PEAK HOUR

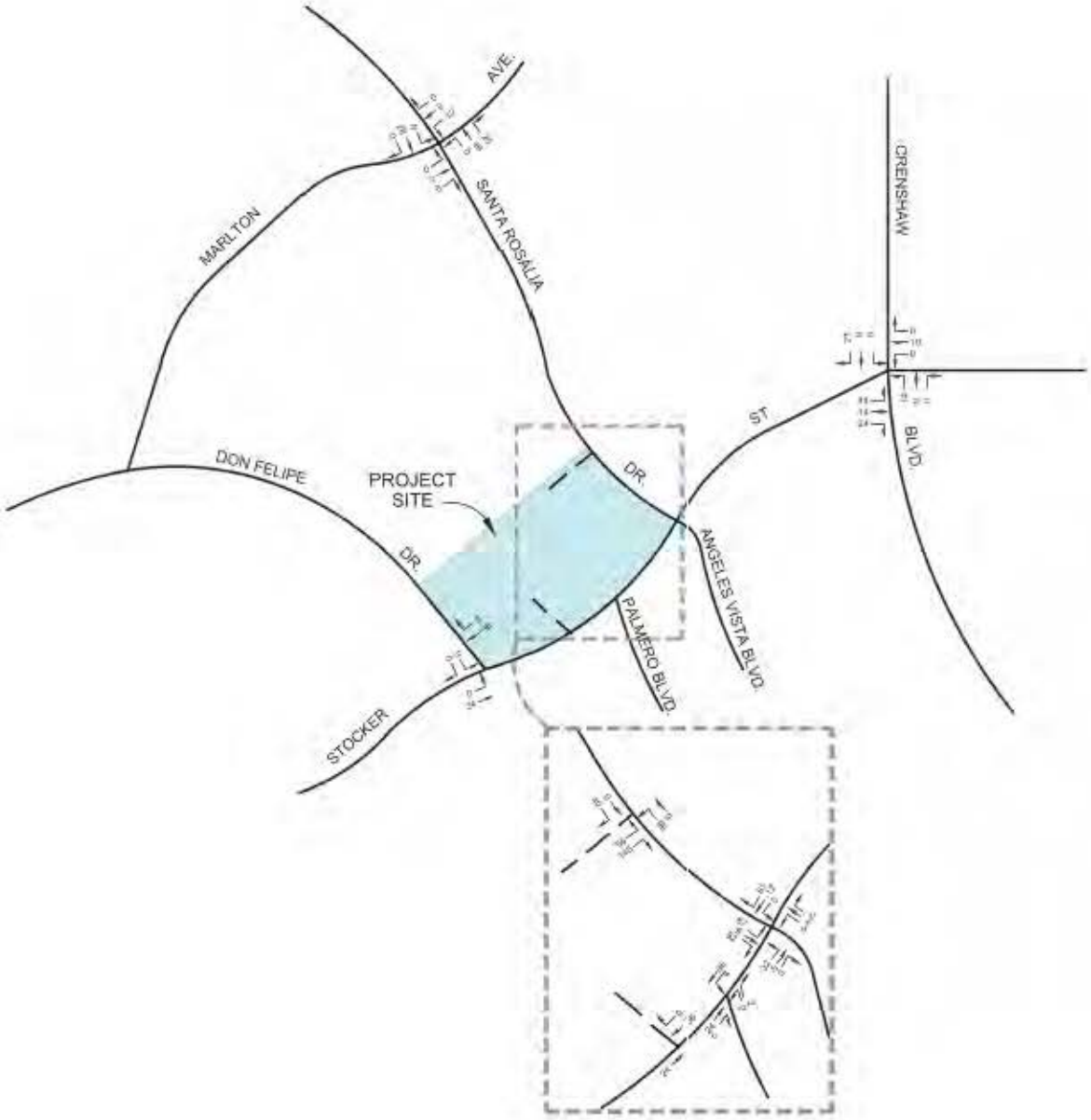


FIGURE 8(b)

PROJECT VEHICLE TRIPS - STUDIO AND COMMERCIAL USE
PM PEAK HOUR

300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
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ATTACHMENT 8(c)

PROJECT VEHICLE TRIPS
COMMERCIAL USES AM PEAK HOUR

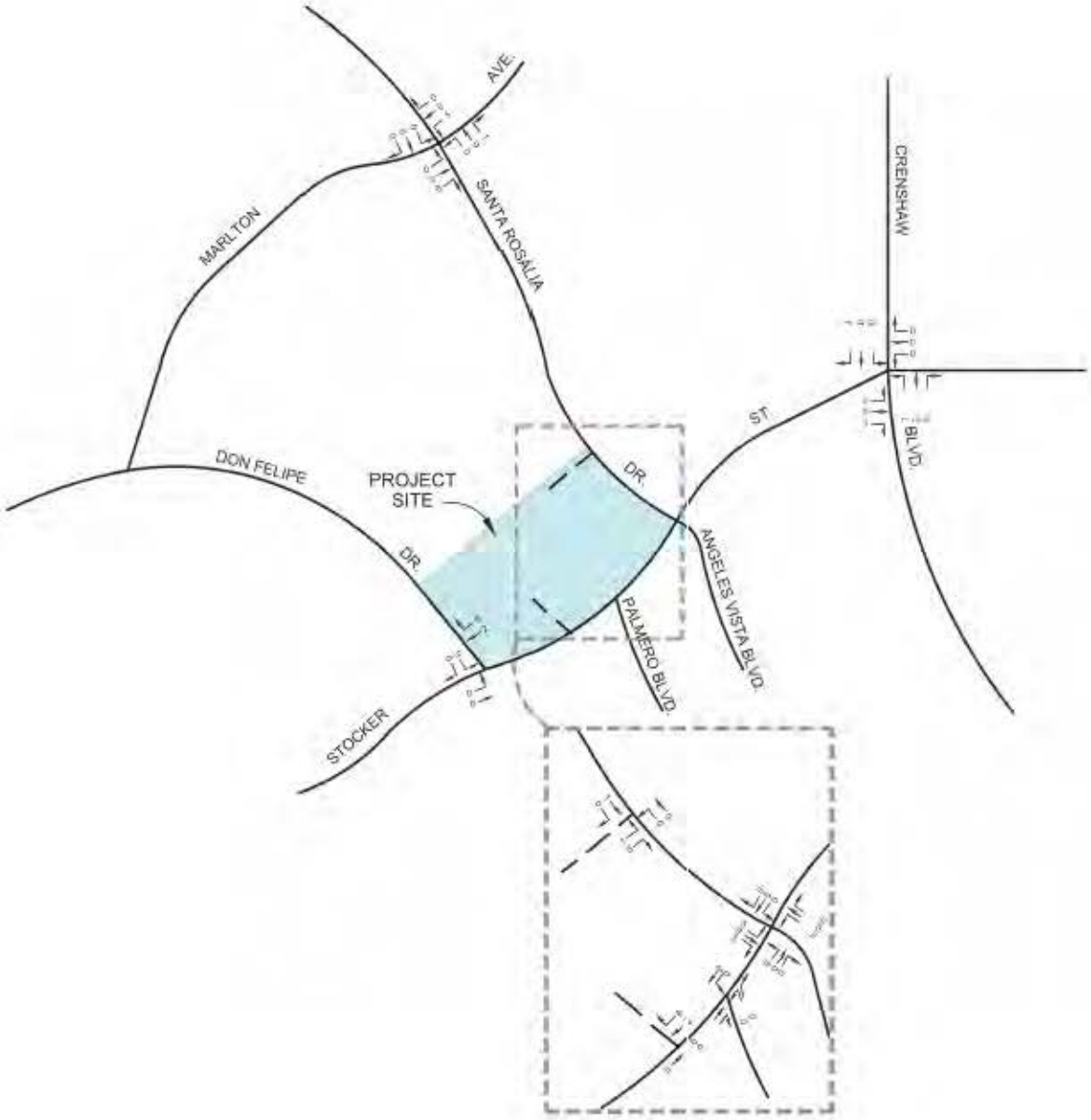


FIGURE 8(c)

PROJECT VEHICLE TRIPS - STUDIO SERVICE TRUCK
AM PEAK HOUR

300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
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ATTACHMENT 8(d)

PROJECT VEHICLE TRIPS
COMMERCIAL USES PM PEAK HOUR

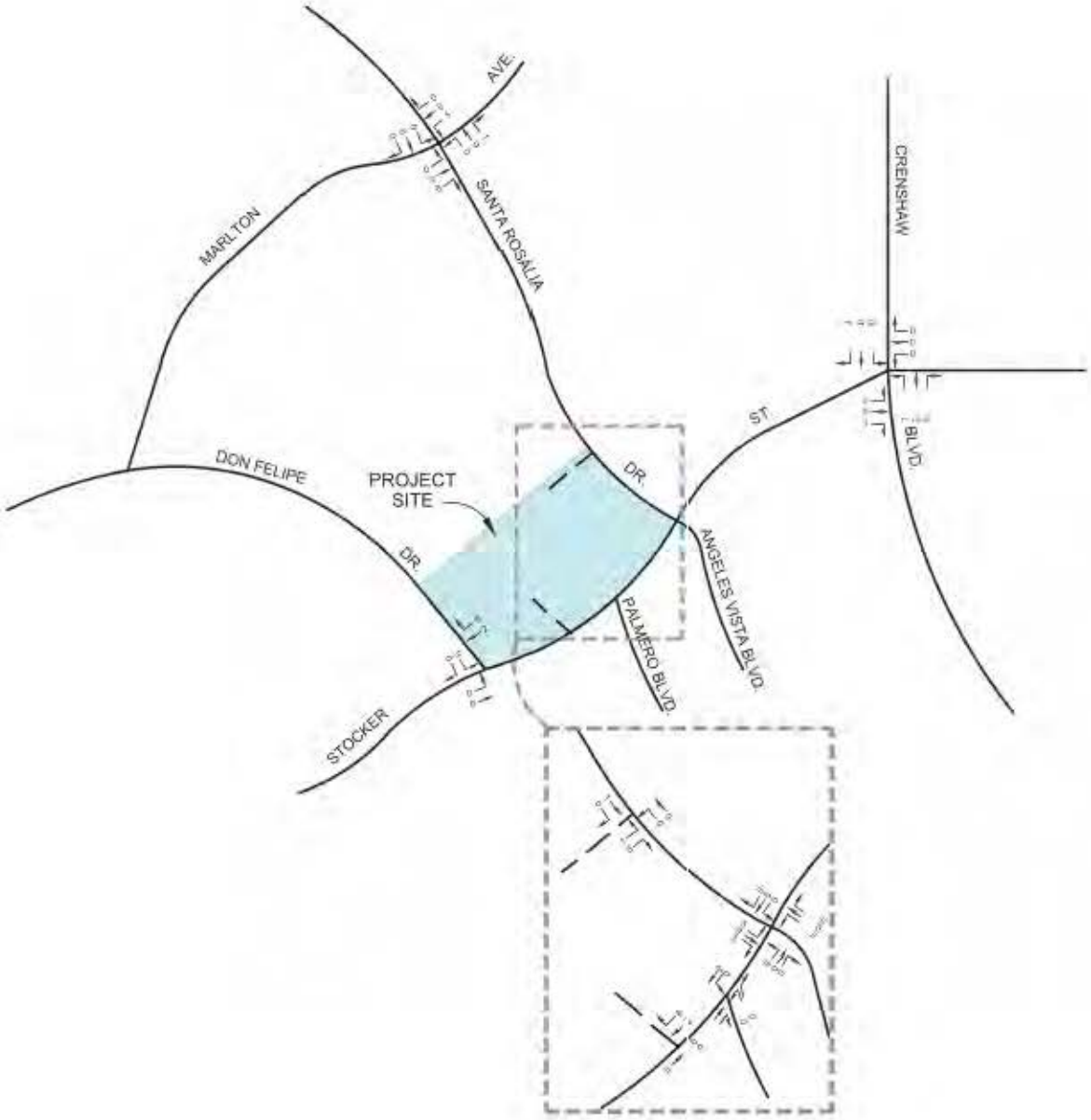


FIGURE 8(d)

PROJECT VEHICLE TRIPS - STUDIO SERVICE TRUCKS
PM PEAK HOUR

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ATTACHMENT 9

PROJECT STUDY AREA
PEDESTRIAN ATTRACTORS MAP



ATTACHMENT 9

10/10/2023
P:\N: \\Koampfs1.KOACORP.LOCAL\shares\Projects\2022\JC21049 LA 3701 Stocker Studio EIR\Docs\Figs\PED-ATT

PEDESTRIAN ATTRACTORS MAP

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APPENDIX B

LADOT ATTACHMENT D: PLAN CONSISTENCY WORKSHEET

LADOT **Attachment D: Plan, Policy, and Program Consistency Worksheet**

Plans, Policies and Programs Consistency Worksheet

The worksheet provides a structured approach to evaluate the threshold T-1 question below, that asks whether a project conflicts with a program, plan, ordinance or policy addressing the circulation system. The intention of the worksheet is to streamline the project review by highlighting the most relevant plans, policies and programs when assessing potential impacts to the City's circulation system.

> ***Threshold T-1***: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

This worksheet does not include an exhaustive list of City policies, and does not include community plans, specific plans, or any area-specific regulatory overlays. The Department of City Planning project planner will need to be consulted to determine if the project would obstruct the City from carrying out a policy or program in a community plan, specific plan, streetscape plan, or regulatory overlay that was adopted to support multimodal transportation options or public safety. LADOT staff should be consulted if a project would lead to a conflict with a mobility investment in the Public Right of Way (PROW) that is currently undergoing planning, design, or delivery. This worksheet must be completed for all projects that meet the Section I. Screening Criteria. For description of the relevant planning documents, **see Attachment D.1.**

For any response to the following questions that checks the box in **bold text** ((i.e.□ **Yes** or □ **No**), further analysis is needed to demonstrate that the project does not conflict with a plan, policy, or program.

I. SCREENING CRITERIA FOR POLICY ANALYSIS

If the answer is 'yes' to any of the following questions, further analysis will be required:

Does the project require a discretionary action that requires the decision maker to find that the project would substantially conform to the purpose, intent and provisions of the General Plan?

☑ Yes □ No

Is the project known to directly conflict with a transportation plan, policy, or program adopted to support multimodal transportation options or public safety?

□ Yes ☑ No

Is the project required to or proposing to make any voluntary modifications to the public right-of-way (i.e., dedications and/or improvements in the right-of-way, reconfigurations of curb line, etc.)?

☑ Yes □ No

II. PLAN CONSISTENCY ANALYSIS

A. Mobility Plan 2035 PROW Classification Standards for Dedications and Improvements

These questions address potential conflict with:

LADOT

Plan, Policy, and Program Consistency Worksheet

Mobility Plan 2035 Policy 2.1 *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*

Mobility Plan 2035 Policy 2.3 *– Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*

Mobility Plan 2035 Policy 3.2 – *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

A.1 Does the project include additions or new construction along a street designated as a Boulevard I, and II, and/or Avenue I, II, or III on property zoned for R3 or less restrictive zone? ☑ Yes ☐ No

A.2 If **A.1 is yes**, is the project required to make additional dedications or improvements to the Public Right of Way as demonstrated by the street designation. ☑ Yes ☐ No ☐ N/A

A.3 If **A.2 is yes**, is the project making the dedications and improvements as necessary to meet the designated dimensions of the fronting street (Boulevard I, and II, or Avenue I, II, or III)?

☐ Yes ☑ No ☐ N/A

If the answer is to **A.1 or A.2 is NO, or to A.1, A.2 and A.3. is YES**, then the project does not conflict with the dedication and improvement requirements that are needed to comply with the Mobility Plan 2035 Street Designations and Standard Roadway Dimensions.

A.4 If the answer to **A.3. is NO**, is the project applicant asking to waive from the dedication standards?

☑ **Yes** ☐ **No** ☐ N/A

Lists any streets subject to dedications or voluntary dedications and include existing roadway and sidewalk widths, required roadway and sidewalk widths, and proposed roadway and sidewalk width or waivers.

Stocker St. Frontage 1 Existing PROW'/Curb' : Existing 80'/59' Required 110'/80' Proposed N/A

Don Felipe Dr. Frontage 2 Existing PROW'/Curb' : Existing 60'/35' Required 66'/40' Proposed N/A

Frontage 3 Existing PROW'/Curb' : Existing _____ Required _____ Proposed _____

Frontage 4 Existing PROW'/Curb' : Existing _____ Required _____ Proposed _____

If the answer to **A.4 is NO**, the project is inconsistent with Mobility Plan 2035 street designations and must file for a waiver of street dedication and improvement.

If the answer to **A.4 is YES**, additional analysis is necessary to determine if the dedication and/or improvements are necessary to meet the City's mobility needs for the next 20 years. The following factors may contribute to determine if the dedication or improvement is necessary:

Is the project site along any of the following networks identified in the City's Mobility Plan?

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network

Yes. Stocker St. between Palmero Dr. & Crenshaw Blvd. is a Pedestrian Enhanced District. Santa Rosalia Dr. between Stocker St. and Coliseum Dr. is a Neighborhood Enhanced Network.

To see the location of the above networks, see **Transportation Assessment Support Map**.[1]

Is the project within the service area of Metro Bike Share, or is there demonstrated demand for micro-mobility services? No

If the project dedications and improvements asking to be waived are necessary to meet the City's mobility needs, the project may be found to conflict with a plan that is adopted to protect the environment.

B. Mobility Plan 2035 PROW Policy Alignment with Project-Initiated Changes

B.1 Project-Initiated Changes to the PROW Dimensions

These questions address potential conflict with:

Mobility Plan 2035 Policy 2.1 *– Adaptive Reuse of Streets. Design, plan, and operate streets to serve multiple purposes and provide flexibility in design to adapt to future demands.*

Mobility Plan 2035 Policy 2.3 *– Pedestrian Infrastructure. Recognize walking as a component of every trip, and ensure high quality pedestrian access in all site planning and public right-of-way modifications to provide a safe and comfortable walking environment.*

Mobility Plan 2035 Policy 3.2 – *People with Disabilities. Accommodate the needs of people with disabilities when modifying or installing infrastructure in the public right-of-way.*

Mobility Plan 2035 Policy 2.10 *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*

Mobility Plan 2035 Street Designations and Standard Roadway Dimensions

B.1 Does the project propose, above and beyond any PROW changes needed to comply with Section 12.37 of the LAMC as discussed in Section II.A, physically modify the curb placement or turning radius and/or physically alter the sidewalk and parkways space that changes how people access a property?

Examples of developer-initiated physical changes to the public right-of-way include:

- widening the roadway,
- narrowing the sidewalk,
- adding space for vehicle turn outs or loading areas,
- removing bicycle lanes, bike share stations, or bicycle parking

[1] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

- modifying existing bus stop, transit shelter, or other street furniture
- paving, narrowing, shifting or removing an existing parkway or tree well

☑ Yes ☐ No

B.2 Driveway Access

These questions address potential conflict with:

Mobility Plan 2035 Policy 2.10 *– Loading Areas. Facilitate the provision of adequate on and off-site street loading areas.*

Mobility Plan 2035 Program PL.1. Driveway Access. *Require driveway access to buildings from non-arterial streets or alleys (where feasible) in order to minimize interference with pedestrian access and vehicular movement.*

Citywide Design Guidelines - Guideline 2*: Carefully incorporate vehicular access such that it does not degrade the pedestrian experience.*

Site Planning Best Practices:

- *Prioritize pedestrian access first and automobile access second. Orient parking and driveways toward the rear or side of buildings and away from the public right-of-way. On corner lots, parking should be oriented as far from the corner as possible.*
- *Minimize both the number of driveway entrances and overall driveway widths.*
- *Do not locate drop-off/pick-up areas between principal building entrances and the adjoining sidewalks.*
- *Orient vehicular access as far from street intersections as possible.*
- *Place drive-thru elements away from intersections and avoid placing them so that they create a barrier between the sidewalk and building entrance(s).*
- *Ensure that loading areas do not interfere with on-site pedestrian and vehicular circulation by separating loading areas and larger commercial vehicles from areas that are used for public parking and public entrances.*

B.2 Does the project add new driveways along a street designated as an Avenue or a Boulevard that conflict with LADOT's Driveway Design Guidelines (See Sec. 321 in the Manual of Policies and Procedures) by any of the following:

- locating new driveways for residential properties on an Avenue or Boulevard, and access is otherwise possible using an alley or a collector/local street, or
- locating new driveways for industrial or commercial properties on an Avenue or Boulevard and access is possible along a collector/local street, or
- the total number of new driveways exceeds 1 driveway per every 200 feet[2] along on the Avenue or Boulevard frontage, or
- locating new driveways on an Avenue or Boulevard within 150 feet from the intersecting street, or
- locating new driveways on a collector or local street within 75 feet from the intersecting street, or

[2] for a project frontage that exceeds 400 feet along an Avenue or Boulevard, the incremental additional driveway above 2 is more than 1 driveway for every 400 additional feet.

- locating new driveways near mid-block crosswalks, requiring relocation of the mid-block crosswalk

☑ **Yes** □ No

If the answer to **B.1 and B.2 are both NO**, then the project would not conflict with a plan or policies that govern the PROW as a result of the project-initiated changes to the PROW.

Impact Analysis

If the answer to either **B.1 or B.2 are YES**, City plans and policies should be reviewed in light of the proposed physical changes to determine if the City would be obstructed from carrying out the plans and policies. The analysis should pay special consideration to substantial changes to the Public Right of Way that may either degrade existing facilities for people walking and bicycling (e.g., removing a bicycle lane), or preclude the City from completing complete street infrastructure as identified in the Mobility Plan 2035, especially if the physical changes are along streets that are on the High Injury Network (HIN). The analysis should also consider if the project is in a Transit Oriented Community (TOC) area, and would degrade or inhibit trips made by biking, walking and/ or transit ridership. The streets that need special consideration are those that are included on the following networks identified in the Mobility Plan 2035, or the HIN:

- Transit Enhanced Network
- Bicycle Enhanced Network
- Bicycle Lane Network
- Pedestrian Enhanced District
- Neighborhood Enhanced Network
- High Injury Network

To see the location of the above networks, see **Transportation Assessment Support Map**.[3]

Once the project is reviewed relevant to plans and policies, and existing facilities that may be impacted by the project, the analysis will need to answer the following two questions in concluding if there is an impact due to plan inconsistency.

B.2.1 Would the physical changes in the public right of way or new driveways that conflict with LADOT's Driveway Design Guidelines degrade the experience of vulnerable roadway users such as modify, remove, or otherwise negatively impact existing bicycle, transit, and/or pedestrian infrastructure?

□ **Yes** ☑ No □ N/A

B.2.2 Would the physical modifications or new driveways that conflict with LADOT's Driveway Design Guidelines preclude the City from advancing the safety of vulnerable roadway users?

□ **Yes** ☑ No □ N/A

If either of the answers to either **B.2.1 or B.2.2 are YES**, the project may conflict with the Mobility Plan 2035, and therefore conflict with a plan that is adopted to protect the

[3] LADOT Transportation Assessment Support Map https://arcg.is/fubbD

environment. If either of the answers to both **B.2.1. or B.2.2. are NO**, then the project would not be shown to conflict with plans or policies that govern the Public Right-of-Way.

C. Network Access

C. 1 Alley, Street and Stairway Access

These questions address potential conflict with:

Mobility Plan Policy 3.9 *Increased Network Access: Discourage the vacation of public rights-of-way.*

C.1.1 Does the project propose to vacate or otherwise restrict public access to a street, alley, or public stairway?

□ Yes ☑ No

C.1.2 If the answer to C.1.1 is Yes, will the project provide or maintain public access to people walking and biking on the street, alley or stairway?

□ Yes □ **No** ☑ N/A

C.2 New Cul-de-sacs

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.10 *Cul-de-sacs: Discourage the use of cul-de-sacs that do not provide access for active transportation options.*

C.2.1 Does the project create a cul-de-sac or is the project located adjacent to an existing cul-de-sac?

□ Yes ☑ No

C.2.2 If yes, will the cul-de-sac maintain convenient and direct public access to people walking and biking to the adjoining street network?

□ Yes □ **No** ☑ N/A

If the answers to either C.1.2 or C.2.2 are YES, then the project would not conflict with a plan or policies that ensures access for all modes of travel. If the answer to either **C.1.2 or C.2.2 are NO**, the project may conflict with a plan or policies that governs multimodal access to a property. Further analysis must assess to the degree that pedestrians and bicyclists have sufficient public access to the transportation network.

D. Parking Supply and Transportation Demand Management

These questions address potential conflict with:

Mobility Plan 2035 Policy 3.8 *– Bicycle Parking, Provide bicyclists with convenient, secure and well maintained bicycle parking facilities.*

Mobility Plan 2035 Policy 4.8 *– Transportation Demand Management Strategies. Encourage greater utilization of Transportation Demand Management Strategies to reduce dependence on single-occupancy vehicles.*

LADOT

Plan, Policy, and Program Consistency Worksheet

Mobility Plan 2035 Policy 4.13 *– Parking and Land Use Management: Balance on-street and off-street parking supply with other transportation and land use objectives.*

D.1 Would the project propose a supply of onsite parking that exceeds the baseline amount[4] as required in the Los Angeles Municipal Code or a Specific plan, whichever requirement prevails?

□ Yes ☑ No

D.2 If the answer to D.1. is YES, would the project propose to actively manage the demand of parking by independently pricing the supply to all users (e.g. parking cash-out), or for residential properties, unbundle the supply from the lease or sale of residential units?

□ Yes □ **No** ☑ N/A

If the answer to **D.2. is NO** the project may conflict with parking management policies. Further analysis is needed to demonstrate how the supply of parking above city requirements will not result in additional (induced) drive-alone trips as compared to an alternative that provided no more parking than the baseline required by the LAMC or Specific Plan. If there is potential for the supply of parking to result in induced demand for drive-alone trips, the project should further explore transportation demand management (TDM) measures to further off-set the induced demands of driving and vehicle miles travelled (VMT) that may result from higher amounts of on-site parking. The TDM measures should specifically focus on strategies that encourage dynamic and context-sensitive pricing solutions and ensure the parking is efficiently allocated, such as providing real time information. Research has demonstrated that charging a user cost for parking or providing a 'cash-out' option in return for not using it is the most effective strategy to reduce the instances of drive-alone trips and increase non-auto mode share to further reduce VMT. To ensure the parking is efficiently managed and reduce the need to build parking for future uses, further strategies should include sharing parking with other properties and/or the general public.

D.3. Would the project provide the minimum on and off-site bicycle parking spaces as required by Section 12.21 A.16 of the LAMC?

☑ Yes □ **No**

D.4. Does the Project include more than 25,000 square feet of gross floor area construction of new non-residential gross floor?

☑ Yes □ No

D.5 If the answer to D.4. is YES, does the project comply with the City's TDM Ordinance in Section 12.26 J of the LAMC?

☑ Yes □ **No** □ N/A

If the answer to **D.3. or D.5. is NO** the project conflicts with LAMC code requirements of bicycle parking and TDM measures. If the project includes uses that require bicycle parking (Section 12.21 A.16) or TDM (Section 12.26 J), and the project does not comply with those Sections of the LAMC, further analysis is required to ensure that the project supports the intent of the two LAMC sections. To meet the intent of

[4] The baseline parking is defined here as the default parking requirements in section 12.21 A.4 of the Los Angeles Municipal Code or any applicable Specific Plan, whichever prevails, for each applicable use not taking into consideration other parking incentives to reduce the amount of required parking.

bicycle parking requirements, the analysis should identify how the project commits to providing safe access to those traveling by bicycle and accommodates storing their bicycle in locations that demonstrates priority over vehicle access.

Similarly, to meet the intent of the TDM requirements of Section 12.26 J of the LAMC, the analysis should identify how the project commits to providing effective strategies in either physical facilities or programs that encourage non-drive alone trips to and from the project site and changes in work schedule that move trips out of the peak period or eliminate them altogether (as in the case in telecommuting or compressed work weeks).

E. Consistency with Regional Plans

This section addresses potential inconsistencies with greenhouse gas (GHG) reduction targets forecasted in the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS).

E.1 Does the Project or Plan apply one the City's efficiency-based impact thresholds (i.e. VMT per capita, VMT per employee, or VMT per service population) as discussed in **Section 2.2.3** of the TAG?

☑ Yes ☐ No

E.2 If the Answer to **E.1 is YES**, does the Project or Plan result in a significant VMT impact?

☐ **Yes** ☑ No ☐ N/A

E.3 If the Answer to **E.1 is NO**, does the Project result in a net increase in VMT?

☑ **Yes** ☐ No ☐ N/A

If the Answer to **E.2 or E.3 is NO**, then the Project or Plan is shown to align with the long-term VMT and GHG reduction goals of SCAG's RTP/SCS.

E.4 If the Answer to **E.2 or E.3 is YES**, then further evaluation would be necessary to determine whether such a project or land use plan would be shown to be consistent with VMT and GHG reduction goals of the SCAG RTP/SCS. For the purpose of making a finding that a project is consistent with the GHG reduction targets forecasted in the SCAG RTP/SCS, the project analyst should consult **Section 2.2.4** of the Transportation Assessment Guidelines (TAG). **Section 2.2.4** provides the methodology for evaluating a land use project's cumulative impacts to VMT, and the appropriate reliance on SCAG's most recently adopted RTP/SCS in reaching that conclusion.

The analysis methods therein can further support findings that the project is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy for which the State Air Resources Board, pursuant to Section 65080(b)(2)(H) of the Government Code, has accepted a metropolitan planning organization's determination that the sustainable communities strategy or the alternative planning strategy would, if implemented, achieve the greenhouse gas emission reduction targets.

References

BOE Street Standard Dimensions S-470-1
http://eng2.lacity.org/techdocs/stdplans/s-400/S-470-1_20151021_150849.pdf

LADCP Citywide Design Guidelines.
https://planning.lacity.org/odocument/f6608be7-d5fe-4187-bea6-20618eec5049/Citywide_Design_Guidelines.pdf

LADOT Transportation Assessment Support Map https://arcg.is/fubbD

Mobility Plan 2035
https://planning.lacity.org/odocument/523f2a95-9d72-41d7-aba5-1972f84c1d36/Mobility_Plan_2035.pdf

SCAG. Connect SoCal, 2020-2045 RTP/SCS, https://www.connectsocal.org/Pages/default.aspx

ATTACHMENT D.1: CITY PLAN, POLICIES AND GUIDELINES

The Transportation Element of the City's General Plan, Mobility Plan 2035, established the "Complete Streets Design Guide" as the City's document to guide the operations and design of streets and other public rights-of-way. It lays out a vision for designing safer, more vibrant streets that are accessible to people, no matter what their mode choice. As a living document, it is intended to be frequently updated as City departments identify and implement street standards and experiment with different configurations to promote complete streets. The guide is meant to be a toolkit that provides numerous examples of what is possible in the public right-of-way and that provides guidance on context-sensitive design.

The Plan for A Healthy Los Angeles (March 2015) includes policies directing several City departments to develop plans that promote active transportation and safety.

The City of Los Angeles Community Plans, which make up the Land Use Element of the City's General Plan, guide the physical development of neighborhoods by establishing the goals and policies for land use. The 35 Community Plans provide specific, neighborhood-level detail for land uses and the transportation network, relevant policies, and implementation strategies necessary to achieve General Plan and community-specific objectives.

The stated goal of Vision Zero is to eliminate traffic-related deaths in Los Angeles by 2025 through a number of strategies, including modifying the design of streets to increase the safety of vulnerable road users. Extensive crash data analysis is conducted on an ongoing basis to prioritize intersections and corridors for implementation of projects that will have the greatest effect on overall fatality reduction. The City designs and deploys Vision Zero Corridor Plans as part of the implementation of Vision Zero. If a project is proposed whose site lies on the High Injury Network (HIN), the applicant should consult with LADOT to inform the project's site plan and to determine appropriate improvements, whether by funding their implementation in full or by making a contribution toward their implementation.

The Citywide Design Guidelines (October 24, 2019) includes sections relevant to development projects where improvements are proposed within the public realm. Specifically, Guidelines one through three provide building design strategies that support the pedestrian experience. The Guidelines provide best practices in designing that apply in three spatial categories of site planning, building design and public right of way. The Guidelines should be followed to ensure that the project design supports pedestrian safety, access and comfort as they access to and from the building and the immediate public right of way.

The City's Transportation Demand Management (TDM) Ordinance (LA Municipal Code 12.26.J) requires certain projects to incorporate strategies that reduce drive-alone vehicle trips and improve access to destinations and services. The ordinance is revised and updated periodically and should be reviewed for application to specific projects as they are reviewed.

The City's LAMC Section 12.37 (Waivers of Dedication and Improvement) requires certain projects to dedicate and/or implement improvements within the public right-of-way to meet the street designation standards of the Mobility Plan 2035.

The Bureau of Engineering (BOE) Street Standard Dimensions S-470-1 provides the specific street widths and public right of way dimensions associated with the City's street standards.

APPENDIX C

LADOT VMT CALCULATOR OUTPUT REPORTS

CITY OF LOS ANGELES VMT CALCULATOR Version 1.4

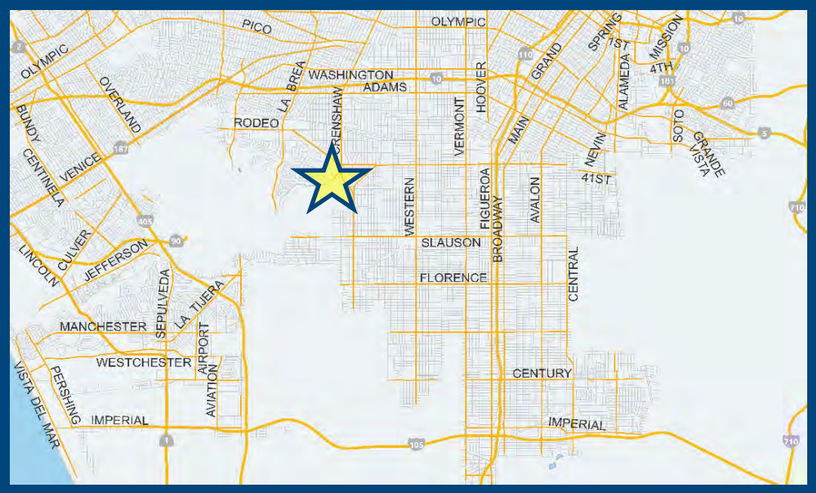
Project Screening Criteria: Is this project required to conduct a vehicle miles traveled analysis?

Project Information

Project: Stocker Street Creative

Scenario: With Project

Address: 3701 W STOCKER ST, 90008



Is the project replacing an existing number of residential units with a smaller number of residential units AND is located within one-half mile of a fixed-rail or fixed-guideway transit station?

○ Yes ◉ No

Existing Land Use

Land Use Type	Value	Unit
Housing | Single Family		DU

☐ Click here to add a single custom land use type (will be included in the above list)

Proposed Project Land Use

Land Use Type	Value	Unit
Retail | General Retail	6.5	ksf
Retail | General Retail	6.5	ksf
Retail | High-Turnover Sit-Down Restaurant	9.5	ksf
Retail | Quality Restaurant	9	ksf
Office | General Office	123.1	ksf
(custom) Studio | Daily	796	Trips
(custom) Studio | HBW-Attraction Split	52	Percent
(custom) Studio | HBO-Attraction Split	24	Percent
(custom) Studio | NHB-Attraction Split	12	Percent
(custom) Studio | HBW-Production Split	0	Percent
(custom) Studio | HBO-Production Split	0	Percent
(custom) Studio | NHB-Production Split	12	Percent
(custom) Studio | Daily	0	Residents
(custom) Studio | Daily	310	Employees

☑ Click here to add a single custom land use type (will be included in the above list)

Project Screening Summary

Existing Land Use	Proposed Project
0 Daily Vehicle Trips	3,397 Daily Vehicle Trips
0 Daily VMT	25,018 Daily VMT

Tier 1 Screening Criteria

Project will have less residential units compared to existing residential units & is within one-half mile of a fixed-rail station. ☐

Tier 2 Screening Criteria

The net increase in daily trips < 250 trips	3,397 Net Daily Trips
The net increase in daily VMT ≤ 0	25,018 Net Daily VMT
The proposed project consists of only retail land uses ≤ 50,000 square feet total.	25.000 ksf

The proposed project is required to perform VMT analysis.

Measuring the Miles

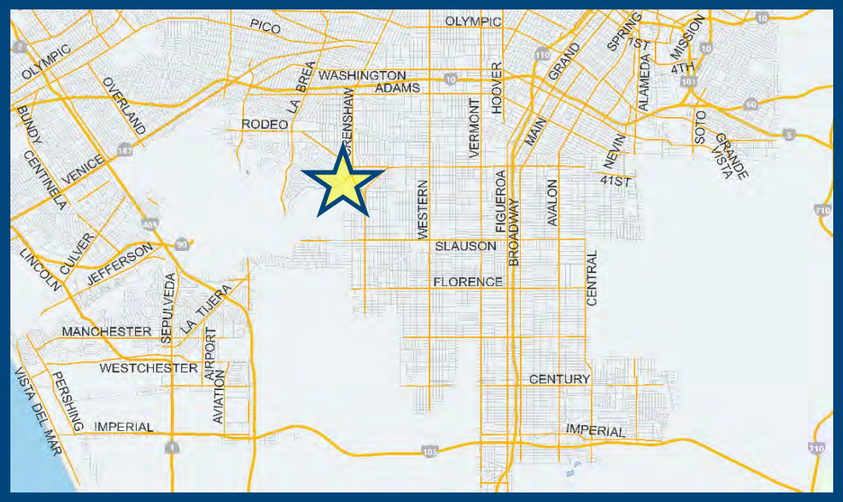
CITY OF LOS ANGELES VMT CALCULATOR Version 1.4

Project Information

Project: Stocker Street Creative

Scenario: With Project

Address: 3701 W STOCKER ST, 90008



Proposed Project Land Use Type	Value	Unit
Retail | General Retail	6.5	ksf
Retail | High-Turnover Sit-Down Restaurant	9.5	ksf
Retail | Quality Restaurant	9	ksf
Office | General Office	123.1	ksf
(custom) Studio | Daily	796	Trips
(custom) Studio | HBW-Attraction Split	52	Percent
(custom) Studio | HBO-Attraction Split	24	Percent
(custom) Studio | NHB-Attraction Split	12	Percent
(custom) Studio | HBW-Production Split	0	Percent
(custom) Studio | HBO-Production Split	0	Percent
(custom) Studio | NHB-Production Split	12	Percent
(custom) Studio | Daily	0	Residents
(custom) Studio | Daily	310	Employees
(custom) Studio | Daily	Non-Retai	Retail/Non-R

TDM Strategies

Select each section to show individual strategies
Use ☑ to denote if the TDM strategy is part of the proposed project or is a mitigation strategy

	Proposed Project	With Mitigation
Max Home Based TDM Achieved?	**No**	**No**
Max Work Based TDM Achieved?	**No**	**No**

- A Parking
- B Transit
- C Education & Encouragement
- D Commute Trip Reductions
- E Shared Mobility
- F Bicycle Infrastructure
- G Neighborhood Enhancement

Traffic Calming Improvements

☐ Proposed Prj ☑ Mitigation

25 percent of streets within project with traffic calming improvements

25 percent of intersections within project with traffic calming improvements

Pedestrian Network Improvements

☑ Proposed Prj ☐ Mitigation

within project and connecting off-site

Analysis Results

Proposed Project	With Mitigation
2,689 Daily Vehicle Trips	**2,683** Daily Vehicle Trips
19,425 Daily VMT	**19,376** Daily VMT
0.0 Household VMT per Capita	**0.0** Household VMT per Capita
8.5 Work VMT per Employee	**8.5** Work VMT per Employee

Significant VMT Impact?

Proposed Project	With Mitigation
Household: No Threshold = 6.0 15% Below APC	**Household: No** Threshold = 6.0 15% Below APC
Work: No Threshold = 11.6 15% Below APC	**Work: No** Threshold = 11.6 15% Below APC

Measuring the Miles

9/27/2024

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

Project Information			
Land Use Type		**Value**	**Units**
Housing	*Single Family*	*0*	*DU*
	Multi Family	*0*	*DU*
	Townhouse	*0*	*DU*
	Hotel	*0*	*Rooms*
	Motel	*0*	*Rooms*
Affordable Housing	*Family*	*0*	*DU*
	Senior	*0*	*DU*
	Special Needs	*0*	*DU*
	Permanent Supportive	*0*	*DU*
Retail	General Retail	6.500	ksf
	Furniture Store	*0.000*	*ksf*
	Pharmacy/Drugstore	*0.000*	*ksf*
	Supermarket	*0.000*	*ksf*
	Bank	*0.000*	*ksf*
	Health Club	*0.000*	*ksf*
	High-Turnover Sit-Down Restaurant	9.500	ksf
	Fast-Food Restaurant	*0.000*	*ksf*
	Quality Restaurant	9.000	ksf
	Auto Repair	*0.000*	*ksf*
	Home Improvement	*0.000*	*ksf*
	Free-Standing Discount	*0.000*	*ksf*
	Movie Theater	*0*	*Seats*
Office	General Office	123.100	ksf
	Medical Office	*0.000*	*ksf*
Industrial	*Light Industrial*	*0.000*	*ksf*
	Manufacturing	*0.000*	*ksf*
	Warehousing/Self-Storage	*0.000*	*ksf*
School	*University*	*0*	*Students*
	High School	*0*	*Students*
	Middle School	*0*	*Students*
	Elementary	*0*	*Students*
	Private School (K-12)	*0*	*Students*
Other	Studio	796	Trips

CITY OF LOS ANGELES VMT CALCULATOR

Report 1: Project & Analysis Overview

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

Analysis Results

Total Employees: 889
Total Population: 0

Proposed Project		*With Mitigation*	
2,689	**Daily Vehicle Trips**	**2,683**	**Daily Vehicle Trips**
19,425	**Daily VMT**	**19,376**	**Daily VMT**
0	**Household VMT per Capita**	**0**	**Household VMT per Capita**
8.5	**Work VMT per Employee**	**8.5**	**Work VMT per Employee**

Significant VMT Impact?

APC: South Los Angeles

Impact Threshold: 15% Below APC Average
Household = 6.0
Work = 11.6

Proposed Project		*With Mitigation*	
VMT Threshold	**Impact**	**VMT Threshold**	**Impact**
Household > 6.0	No	Household > 6.0	No
Work > 11.6	No	Work > 11.6	No

CITY OF LOS ANGELES VMT CALCULATOR

Report 2: TDM Inputs

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

TDM Strategy Inputs

Strategy Type		Description	Proposed Project	Mitigations
Parking	Reduce parking supply	City code parking provision (spaces)	598	598
		Actual parking provision (spaces)	380	380
	Unbundle parking	*Monthly cost for parking ($)*	*$0*	*$0*
	Parking cash-out	*Employees eligible (%)*	*0%*	*0%*
	Price workplace parking	*Daily parking charge ($)*	*$0.00*	*$0.00*
		Employees subject to priced parking (%)	*0%*	*0%*
	Residential area parking permits	*Cost of annual permit ($)*	*$0*	*$0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type	Description	Proposed Project	Mitigations
	Reduction in headways (increase in frequency) (%)	*0%*	*0%*

Transit	*Reduce transit headways*	*Existing transit mode share (as a percent of total daily trips) (%)*	*0%*	*0%*
		Lines within project site improved (<50%, >=50%)	*0*	*0*
	Implement neighborhood shuttle	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees and residents eligible (%)	*0%*	*0%*
	Transit subsidies	*Employees and residents eligible (%)*	*0%*	*0%*
		Amount of transit subsidy per passenger (daily equivalent) ($)	*$0.00*	*$0.00*
Education & Encouragement	*Voluntary travel behavior change program*	*Employees and residents participating (%)*	*0%*	*0%*
	Promotions and marketing	Employees and residents participating (%)	50%	50%

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
	Required commute trip reduction program	*Employees participating (%)*	*0%*	*0%*
	Alternative Work Schedules and Telecommute	*Employees participating (%)*	*0%*	*0%*
		Type of program	*0*	*0*

Commute Trip Reductions	*Employer sponsored vanpool or shuttle*	*Degree of implementation (low, medium, high)*	*0*	*0*
		Employees eligible (%)	*0%*	*0%*
		Employer size (small, medium, large)	*0*	*0*
	Ride-share program	Employees eligible (%)	100%	100%
Shared Mobility	*Car share*	*Car share project setting (Urban, Suburban, All Other)*	*0*	*0*
	Bike share	*Within 600 feet of existing bike share station - OR- implementing new bike share station (Yes/No)*	*0*	*0*
	School carpool program	*Level of implementation (Low, Medium, High)*	*0*	*0*

(cont. on following page)

TDM Strategy Inputs, Cont.

Strategy Type		Description	Proposed Project	Mitigations
Bicycle Infrastructure	*Implement/Improve on-street bicycle facility*	*Provide bicycle facility along site (Yes/No)*	*0*	*0*
	Include Bike parking per LAMC	Meets City Bike Parking Code (Yes/No)	Yes	Yes
	Include secure bike parking and showers	Includes indoor bike parking/lockers, showers, & repair station (Yes/No)	Yes	Yes

Neighborhood Enhancement	Traffic calming improvements	Streets with traffic calming improvements (%)	*0%*	25%
		Intersections with traffic calming improvements (%)	*0%*	25%
	Pedestrian network improvements	Included (within project and connecting off-site/within project only)	within project and connecting off-site	within project and connecting off-site

CITY OF LOS ANGELES VMT CALCULATOR

Report 3: TDM Outputs

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

TDM Adjustments by Trip Purpose & Strategy

Place type: Compact Infill

		Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*		*Source*
		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Parking	Reduce parking supply	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	TDM Strategy Appendix, Parking sections 1 - 5
	Unbundle parking	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Parking cash-out	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Price workplace parking	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Residential area parking permits	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	
Transit	Reduce transit headways	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	TDM Strategy Appendix, Transit sections 1 - 3
	Implement neighborhood shuttle	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Transit subsidies	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
Education & Encouragement	Voluntary travel behavior change program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	TDM Strategy Appendix, Education & Encouragement sections 1 - 2
	Promotions and marketing	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	*0%*	
Commute Trip Reductions	Required commute trip reduction program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	TDM Strategy Appendix, Commute Trip Reductions sections 1 - 4
	Alternative Work Schedules and Telecommute Program	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Employer sponsored vanpool or shuttle	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
	Ride-share program	*0%*	*0%*	15%	15%	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	
Shared Mobility	Car-share	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Shared Mobility sections 1 - 3
	Bike share	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	
	School carpool program	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	

TDM Adjustments by Trip Purpose & Strategy, Cont.

Place type: Compact Infill

	Home Based Work Production	*Home Based Work Attraction*	*Home Based Other Production*	*Home Based Other Attraction*	*Non-Home Based Other Production*	*Non-Home Based Other Attraction*	*Source*

		Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	
Bicycle Infrastructure	Implement/ Improve on-street bicycle facility	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	TDM Strategy Appendix, Bicycle Infrastructure sections 1 - 3
	Include Bike parking per LAMC	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Include secure bike parking and showers	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
Neighborhood Enhancement	Traffic calming improvements	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	*0.0%*	0.3%	TDM Strategy Appendix, Neighborhood Enhancement sections 1 - 2
	Pedestrian network improvements	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	

Final Combined & Maximum TDM Effect

	Home Based Work Production		*Home Based Work Attraction*		*Home Based Other Production*		*Home Based Other Attraction*		*Non-Home Based Other Production*		*Non-Home Based Other Attraction*	
	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated	Proposed	Mitigated
COMBINED TOTAL	*17%*	*17%*	*29%*	*30%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*16%*
MAX. TDM EFFECT	*17%*	*17%*	*29%*	*30%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*	*17%*

= Minimum (X%, 1-[(1-A)*(1-B)…])
where X%=

PLACE	*urban*	*75%*
TYPE	compact infill	*40%*
MAX:	*suburban center*	*20%*
	suburban	*15%*

Note: (1-[(1-A)*(1-B)…]) reflects the dampened combined effectiveness of TDM Strategies (e.g., A, B,…). See the TDM Strategy Appendix (*Transportation Assessment Guidelines Attachment G)* for further discussion of dampening.

CITY OF LOS ANGELES VMT CALCULATOR

Report 4: MXD Methodology

Date: September 27, 2024
Project Name: Stocker Street Creative
Project Scenario: With Project
Project Address: 3701 W STOCKER ST, 90008

Version 1.4

MXD Methodology - Project Without TDM

	Unadjusted Trips	MXD Adjustment	MXD Trips	Average Trip Length	Unadjusted VMT	MXD VMT
Home Based Work Production	0	0.0%	0	9.0	0	0
Home Based Other Production	0	0.0%	0	5.9	0	0
Non-Home Based Other Production	669	-3.4%	646	7.9	5,285	5,103
Home-Based Work Attraction	1,254	-16.8%	1,043	10.3	12,916	10,743
Home-Based Other Attraction	1,460	-27.3%	1,062	4.5	6,570	4,779
Non-Home Based Other Attraction	669	-3.4%	646	6.8	4,549	4,393

MXD Methodology with TDM Measures

	Proposed Project			*Project with Mitigation Measures*		
	TDM Adjustment	Project Trips	Project VMT	TDM Adjustment	Mitigated Trips	Mitigated VMT
Home Based Work Production	-17.0%	0	0	-17.2%	0	0
Home Based Other Production	-17.0%	0	0	-17.2%	0	0
Non-Home Based Other Production	-17.0%	536	4,235	-17.2%	535	4,224
Home-Based Work Attraction	-29.5%	736	7,578	-29.6%	734	7,559
Home-Based Other Attraction	-17.0%	881	3,966	-17.2%	879	3,956
Non-Home Based Other Attraction	-17.0%	536	3,646	-17.2%	535	3,637

MXD VMT Methodology Per Capita & Per Employee

Total Population: 0
Total Employees: 889
APC: South Los Angeles

	Proposed Project	*Project with Mitigation Measures*
Total Home Based Production VMT	**0**	**0**
Total Home Based Work Attraction VMT	**7,578**	**7,559**
Total Home Based VMT Per Capita	**0.0**	**0.0**
Total Work Based VMT Per Employee	**8.5**	**8.5**

APPENDIX D

TRAFFIC COUNT DATA SHEETS

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

City of Los Angeles
N/S: Don Felipe Drive
E/W: Stocker Street
Weather: Clear

File Name : 04_LAC_Don F_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

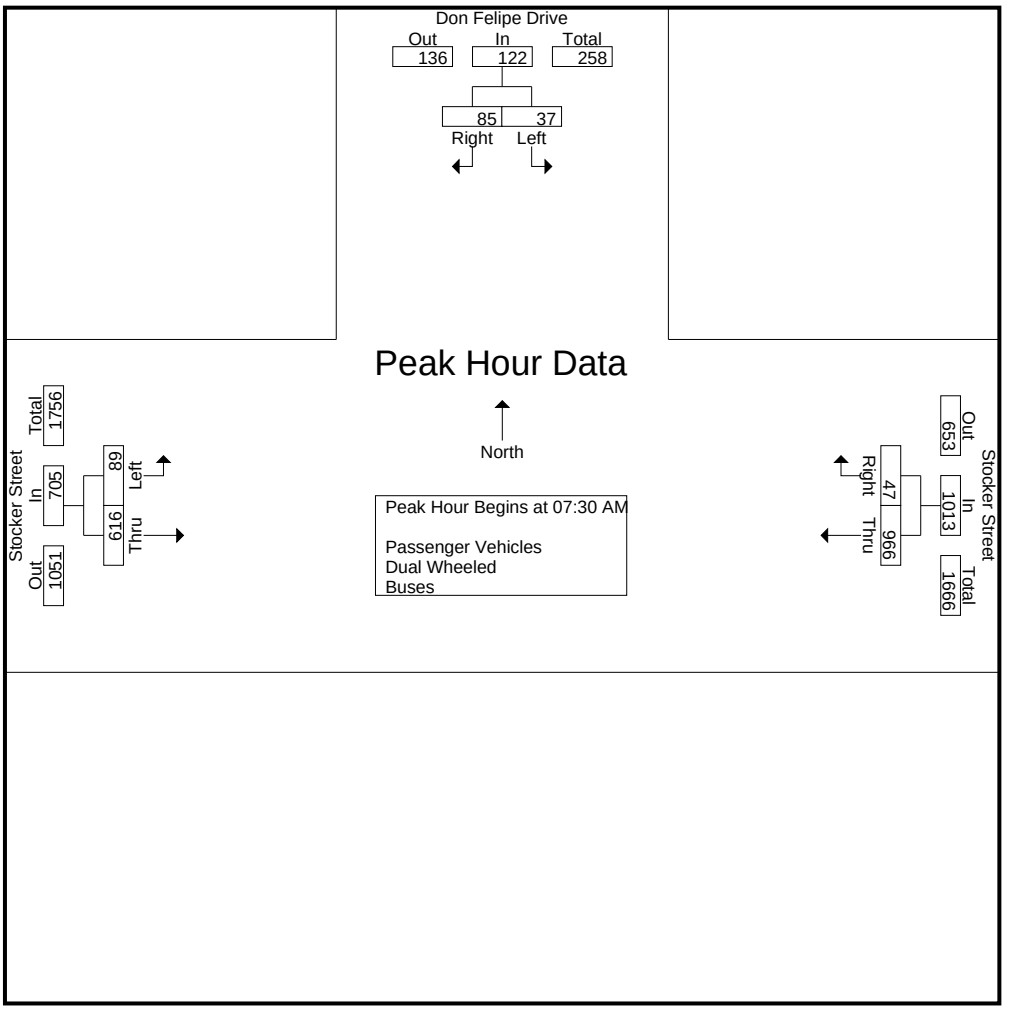
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	8	19	27	200	11	211	11	91	102	340
07:15 AM	14	20	34	222	14	236	12	119	131	401
07:30 AM	15	23	38	251	9	260	23	158	181	479
07:45 AM	7	23	30	247	14	261	18	154	172	463
Total	44	85	129	920	48	968	64	522	586	1683
08:00 AM	7	20	27	227	15	242	26	147	173	442
08:15 AM	8	19	27	241	9	250	22	157	179	456
08:30 AM	13	14	27	229	14	243	17	143	160	430
08:45 AM	12	20	32	178	5	183	19	160	179	394
Total	40	73	113	875	43	918	84	607	691	1722
09:00 AM	9	7	16	130	14	144	9	146	155	315
09:15 AM	8	16	24	133	9	142	10	125	135	301
09:30 AM	10	19	29	140	15	155	17	131	148	332
09:45 AM	10	18	28	129	15	144	14	100	114	286
Total	37	60	97	532	53	585	50	502	552	1234
Grand Total	121	218	339	2327	144	2471	198	1631	1829	4639
Apprch %	35.7	64.3		94.2	5.8		10.8	89.2		
Total %	2.6	4.7	7.3	50.2	3.1	53.3	4.3	35.2	39.4	
Passenger Vehicles	114	213	327	2284	140	2424	194	1612	1806	4557
% Passenger Vehicles	94.2	97.7	96.5	98.2	97.2	98.1	98	98.8	98.7	98.2
Dual Wheeled	0	2	2	35	4	39	2	13	15	56
% Dual Wheeled	0	0.9	0.6	1.5	2.8	1.6	1	0.8	0.8	1.2
Buses	7	3	10	8	0	8	2	6	8	26
% Buses	5.8	1.4	2.9	0.3	0	0.3	1	0.4	0.4	0.6

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**15**	**23**	**38**	**251**	9	260	23	**158**	**181**	**479**
07:45 AM	7	23	30	247	14	**261**	18	154	172	463
08:00 AM	7	20	27	227	**15**	242	**26**	147	173	442
08:15 AM	8	19	27	241	9	250	22	157	179	456
Total Volume	37	85	122	966	47	1013	89	616	705	1840
% App. Total	30.3	69.7		95.4	4.6		12.6	87.4		
PHF	.617	.924	.803	.962	.783	.970	.856	.975	.974	.960

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

City of Los Angeles
N/S: Don Felipe Drive
E/W: Stocker Street
Weather: Clear

File Name : 04_LAC_Don F_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:30 AM			07:30 AM		
+0 mins.	8	19	27	**251**	9	260	23	**158**	**181**
+15 mins.	14	20	34	247	14	**261**	18	154	172
+30 mins.	**15**	**23**	**38**	227	**15**	242	**26**	147	173
+45 mins.	7	23	30	241	9	250	22	157	179
Total Volume	44	85	129	966	47	1013	89	616	705
% App. Total	34.1	65.9		95.4	4.6		12.6	87.4	
PHF	.733	.924	.849	.962	.783	.970	.856	.975	.974

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

City of Los Angeles
N/S: Don Felipe Drive
E/W: Stocker Street
Weather: Clear

File Name : 04_LAC_Don F_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Passenger Vehicles

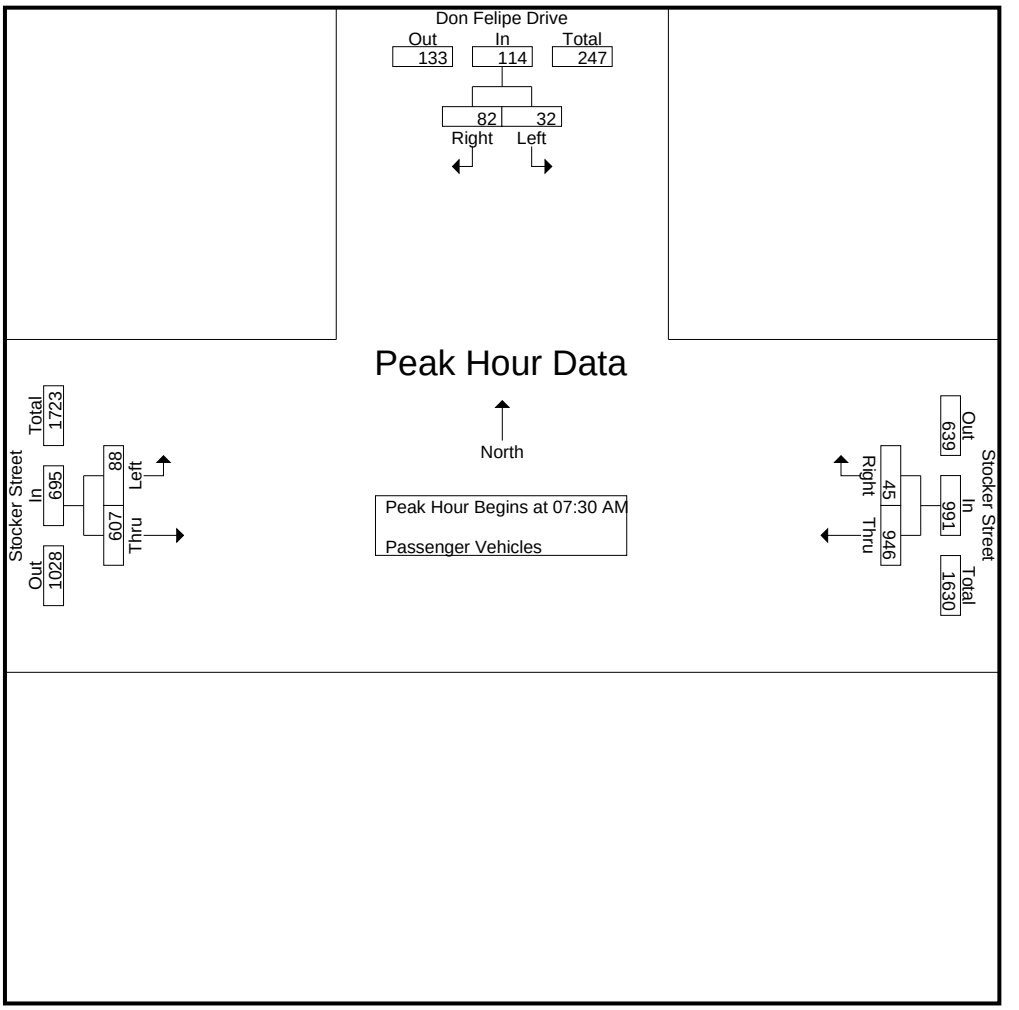
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	8	18	26	198	11	209	11	90	101	336
07:15 AM	14	19	33	219	13	232	11	119	130	395
07:30 AM	15	22	37	247	8	255	22	157	179	471
07:45 AM	7	23	30	243	14	257	18	150	168	455
Total	44	82	126	907	46	953	62	516	578	1657
08:00 AM	4	20	24	222	14	236	26	143	169	429
08:15 AM	6	17	23	234	9	243	22	157	179	445
08:30 AM	11	14	25	223	14	237	17	142	159	421
08:45 AM	12	20	32	176	5	181	18	156	174	387
Total	33	71	104	855	42	897	83	598	681	1682
09:00 AM	9	7	16	127	13	140	9	144	153	309
09:15 AM	8	16	24	132	9	141	10	124	134	299
09:30 AM	10	19	29	137	15	152	16	130	146	327
09:45 AM	10	18	28	126	15	141	14	100	114	283
Total	37	60	97	522	52	574	49	498	547	1218
Grand Total	114	213	327	2284	140	2424	194	1612	1806	4557
Apprch %	34.9	65.1		94.2	5.8		10.7	89.3		
Total %	2.5	4.7	7.2	50.1	3.1	53.2	4.3	35.4	39.6	

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**15**	22	**37**	**247**	8	255	22	**157**	**179**	**471**
07:45 AM	7	**23**	30	243	**14**	**257**	18	150	168	455
08:00 AM	4	20	24	222	14	236	**26**	143	169	429
08:15 AM	6	17	23	234	9	243	22	157	179	445
Total Volume	32	82	114	946	45	991	88	607	695	1800
% App. Total	28.1	71.9		95.5	4.5		12.7	87.3		
PHF	.533	.891	.770	.957	.804	.964	.846	.967	.971	.955

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City of Los Angeles
N/S: Don Felipe Drive
E/W: Stocker Street
Weather: Clear

File Name : 04_LAC_Don F_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	**15**	22	**37**	**247**	8	255	22	**157**	**179**
+15 mins.	7	**23**	30	243	**14**	**257**	18	150	168
+30 mins.	4	20	24	222	14	236	**26**	143	169
+45 mins.	6	17	23	234	9	243	22	157	179
Total Volume	32	82	114	946	45	991	88	607	695
% App. Total	28.1	71.9		95.5	4.5		12.7	87.3	
PHF	.533	.891	.770	.957	.804	.964	.846	.967	.971

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City of Los Angeles
N/S: Don Felipe Drive
E/W: Stocker Street
Weather: Clear

File Name : 04_LAC_Don F_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
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Groups Printed- Dual Wheeled

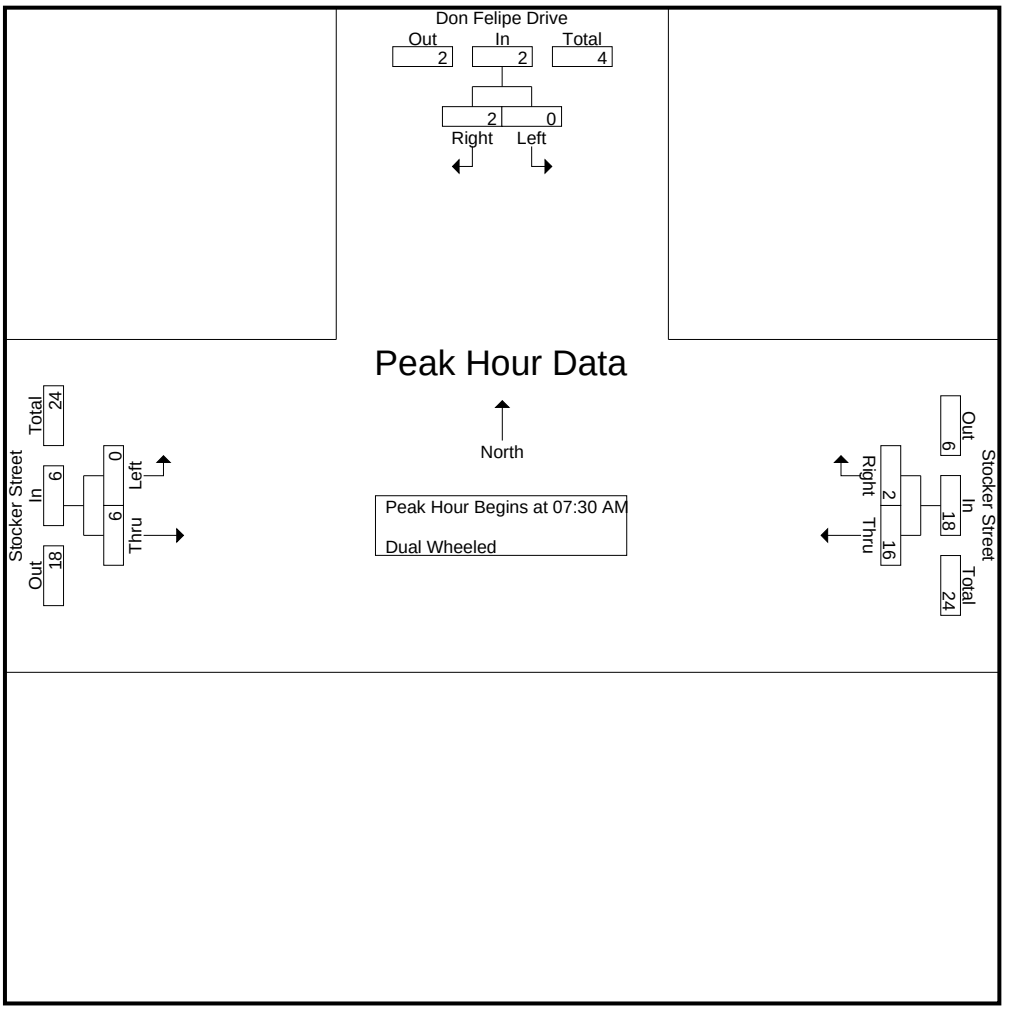
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	2	0	2	0	0	0	2
07:15 AM	0	0	0	1	1	2	0	0	0	2
07:30 AM	0	1	1	1	1	2	0	1	1	4
07:45 AM	0	0	0	4	0	4	0	2	2	6
Total	0	1	1	8	2	10	0	3	3	14
08:00 AM	0	0	0	5	1	6	0	3	3	9
08:15 AM	0	1	1	6	0	6	0	0	0	7
08:30 AM	0	0	0	6	0	6	0	1	1	7
08:45 AM	0	0	0	1	0	1	1	3	4	5
Total	0	1	1	18	1	19	1	7	8	28
09:00 AM	0	0	0	3	1	4	0	1	1	5
09:15 AM	0	0	0	1	0	1	0	1	1	2
09:30 AM	0	0	0	2	0	2	1	1	2	4
09:45 AM	0	0	0	3	0	3	0	0	0	3
Total	0	0	0	9	1	10	1	3	4	14
Grand Total	0	2	2	35	4	39	2	13	15	56
Apprch %	0	100		89.7	10.3		13.3	86.7		
Total %	0	3.6	3.6	62.5	7.1	69.6	3.6	23.2	26.8	

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	**1**	**1**	1	**1**	2	0	1	1	4
07:45 AM	0	0	0	4	0	4	0	2	2	6
08:00 AM	0	0	0	5	1	**6**	0	**3**	**3**	**9**
08:15 AM	0	1	1	**6**	0	6	0	0	0	7
Total Volume	0	2	2	16	2	18	0	6	6	26
% App. Total	0	100		88.9	11.1		0	100		
PHF	.000	.500	.500	.667	.500	.750	.000	.500	.500	.722

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City of Los Angeles
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File Name : 04_LAC_Don F_Stoc AM
Site Code : 04122535
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	**1**	**1**	1	**1**	2	0	1	1
+15 mins.	0	0	0	4	0	4	0	2	2
+30 mins.	0	0	0	5	1	**6**	0	**3**	**3**
+45 mins.	0	1	1	**6**	0	6	0	0	0
Total Volume	0	2	2	16	2	18	0	6	6
% App. Total	0	100		88.9	11.1		0	100	
PHF	.000	.500	.500	.667	.500	.750	.000	.500	.500

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City of Los Angeles
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File Name : 04_LAC_Don F_Stoc AM
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Groups Printed- Buses

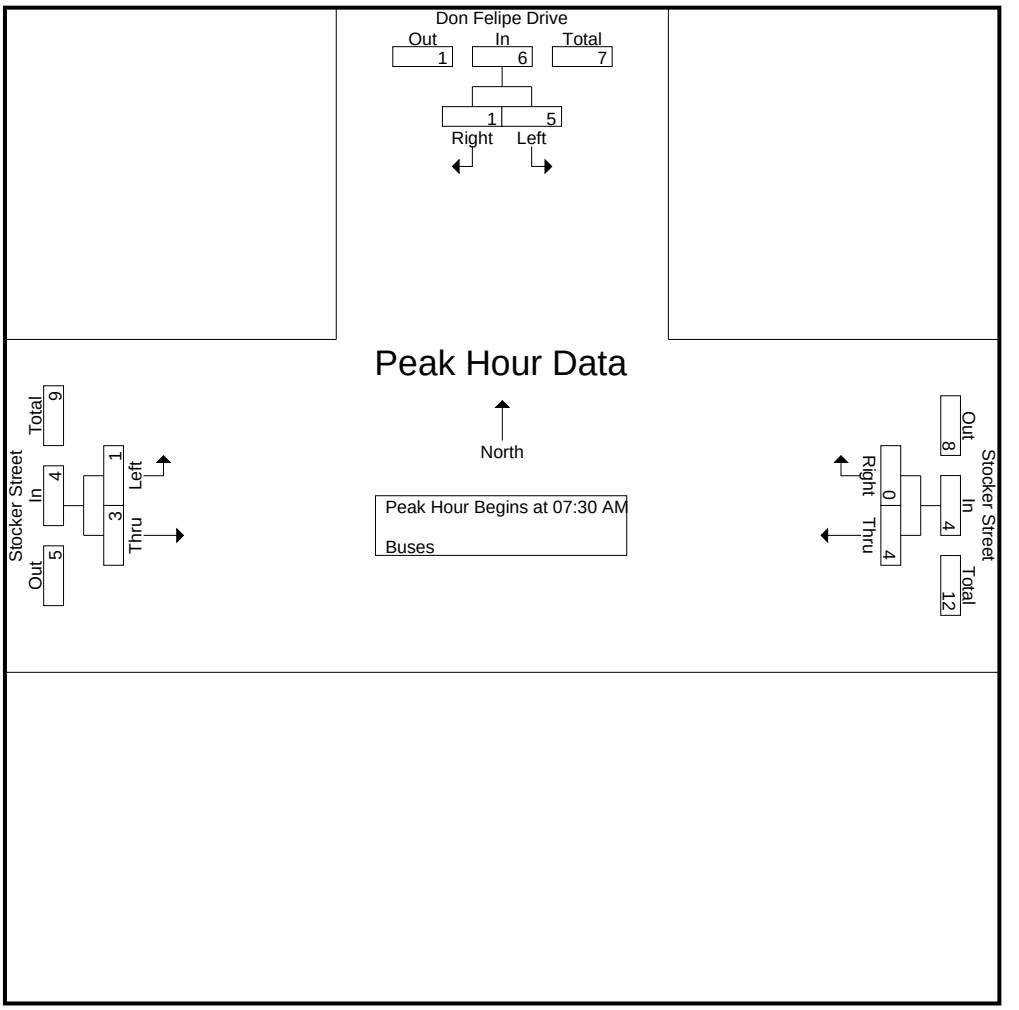
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	0	1	1	2
07:15 AM	0	1	1	2	0	2	1	0	1	4
07:30 AM	0	0	0	3	0	3	1	0	1	4
07:45 AM	0	0	0	0	0	0	0	2	2	2
Total	0	2	2	5	0	5	2	3	5	12
08:00 AM	3	0	3	0	0	0	0	1	1	4
08:15 AM	2	1	3	1	0	1	0	0	0	4
08:30 AM	2	0	2	0	0	0	0	0	0	2
08:45 AM	0	0	0	1	0	1	0	1	1	2
Total	7	1	8	2	0	2	0	2	2	12
09:00 AM	0	0	0	0	0	0	0	1	1	1
09:15 AM	0	0	0	0	0	0	0	0	0	0
09:30 AM	0	0	0	1	0	1	0	0	0	1
09:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	1	1	2
Grand Total	7	3	10	8	0	8	2	6	8	26
Apprch %	70	30		100	0		25	75		
Total %	26.9	11.5	38.5	30.8	0	30.8	7.7	23.1	30.8	

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	**3**	0	**3**	**1**	0	1	**4**
07:45 AM	0	0	0	0	0	0	0	**2**	**2**	2
08:00 AM	**3**	0	**3**	0	0	0	0	1	1	4
08:15 AM	2	**1**	3	1	0	1	0	0	0	4
Total Volume	5	1	6	4	0	4	1	3	4	14
% App. Total	83.3	16.7		100	0		25	75		
PHF	.417	.250	.500	.333	.000	.333	.250	.375	.500	.875

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City of Los Angeles
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File Name : 04_LAC_Don F_Stoc AM
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	0	0	**3**	0	**3**	**1**	0	1
+15 mins.	0	0	0	0	0	0	0	**2**	**2**
+30 mins.	**3**	0	**3**	0	0	0	0	1	1
+45 mins.	2	**1**	3	1	0	1	0	0	0
Total Volume	5	1	6	4	0	4	1	3	4
% App. Total	83.3	16.7		100	0		25	75	
PHF	.417	.250	.500	.333	.000	.333	.250	.375	.500

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City of Los Angeles
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File Name : 04_LAC_Don F_Stoc PM
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

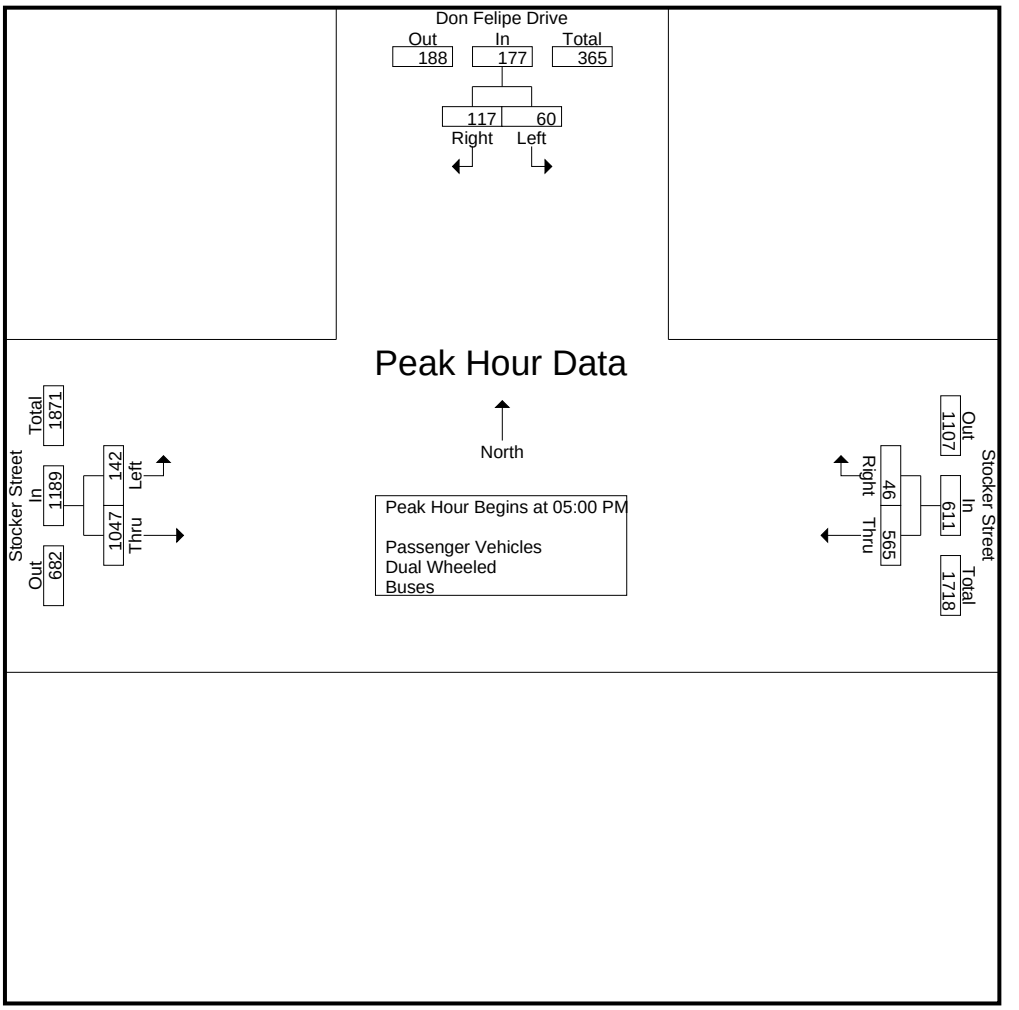
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	19	36	55	137	15	152	14	236	250	457
03:15 PM	16	21	37	135	8	143	27	251	278	458
03:30 PM	13	24	37	164	12	176	32	200	232	445
03:45 PM	16	26	42	140	13	153	26	221	247	442
Total	64	107	171	576	48	624	99	908	1007	1802
04:00 PM	10	25	35	144	15	159	24	245	269	463
04:15 PM	15	22	37	133	13	146	32	279	311	494
04:30 PM	15	24	39	150	10	160	28	231	259	458
04:45 PM	12	20	32	141	10	151	27	248	275	458
Total	52	91	143	568	48	616	111	1003	1114	1873
05:00 PM	24	35	59	153	9	162	35	238	273	494
05:15 PM	10	30	40	146	13	159	32	253	285	484
05:30 PM	12	26	38	148	13	161	38	289	327	526
05:45 PM	14	26	40	118	11	129	37	267	304	473
Total	60	117	177	565	46	611	142	1047	1189	1977
Grand Total	176	315	491	1709	142	1851	352	2958	3310	5652
Apprch %	35.8	64.2		92.3	7.7		10.6	89.4		
Total %	3.1	5.6	8.7	30.2	2.5	32.7	6.2	52.3	58.6	
Passenger Vehicles	171	312	483	1694	141	1835	352	2926	3278	5596
% Passenger Vehicles	97.2	99	98.4	99.1	99.3	99.1	100	98.9	99	99
Dual Wheeled	5	2	7	8	1	9	0	21	21	37
% Dual Wheeled	2.8	0.6	1.4	0.5	0.7	0.5	0	0.7	0.6	0.7
Buses	0	1	1	7	0	7	0	11	11	19
% Buses	0	0.3	0.2	0.4	0	0.4	0	0.4	0.3	0.3

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**24**	**35**	**59**	**153**	9	**162**	35	238	273	494
05:15 PM	10	30	40	146	**13**	159	32	253	285	484
05:30 PM	12	26	38	148	13	161	**38**	**289**	**327**	**526**
05:45 PM	14	26	40	118	11	129	37	267	304	473
Total Volume	60	117	177	565	46	611	142	1047	1189	1977
% App. Total	33.9	66.1		92.5	7.5		11.9	88.1		
PHF	.625	.836	.750	.923	.885	.943	.934	.906	.909	.940

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City of Los Angeles
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File Name : 04_LAC_Don F_Stoc PM
Site Code : 04122535
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Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			03:30 PM			05:00 PM		
+0 mins.	**24**	**35**	**59**	**164**	12	**176**	35	238	273
+15 mins.	10	30	40	140	13	153	32	253	285
+30 mins.	12	26	38	144	**15**	159	**38**	**289**	**327**
+45 mins.	14	26	40	133	13	146	37	267	304
Total Volume	60	117	177	581	53	634	142	1047	1189
% App. Total	33.9	66.1		91.6	8.4		11.9	88.1	
PHF	.625	.836	.750	.886	.883	.901	.934	.906	.909

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City of Los Angeles
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File Name : 04_LAC_Don F_Stoc PM
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Groups Printed- Passenger Vehicles

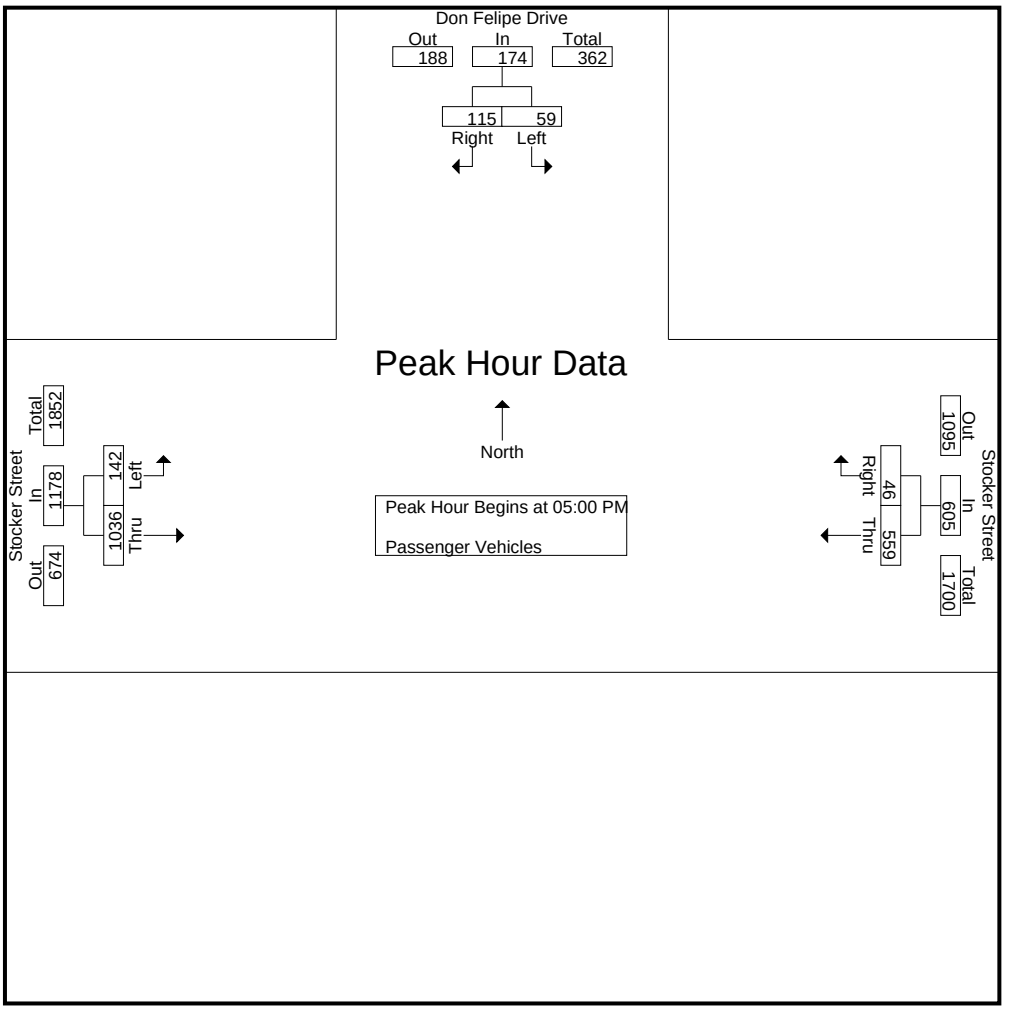
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	18	35	53	137	15	152	14	233	247	452
03:15 PM	16	21	37	134	8	142	27	248	275	454
03:30 PM	12	24	36	164	12	176	32	197	229	441
03:45 PM	16	26	42	138	13	151	26	215	241	434
Total	62	106	168	573	48	621	99	893	992	1781
04:00 PM	10	25	35	142	15	157	24	243	267	459
04:15 PM	14	22	36	132	13	145	32	276	308	489
04:30 PM	14	24	38	148	9	157	28	230	258	453
04:45 PM	12	20	32	140	10	150	27	248	275	457
Total	50	91	141	562	47	609	111	997	1108	1858
05:00 PM	23	33	56	153	9	162	35	234	269	487
05:15 PM	10	30	40	144	13	157	32	251	283	480
05:30 PM	12	26	38	147	13	160	38	286	324	522
05:45 PM	14	26	40	115	11	126	37	265	302	468
Total	59	115	174	559	46	605	142	1036	1178	1957
Grand Total	171	312	483	1694	141	1835	352	2926	3278	5596
Apprch %	35.4	64.6		92.3	7.7		10.7	89.3		
Total %	3.1	5.6	8.6	30.3	2.5	32.8	6.3	52.3	58.6	

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**23**	**33**	**56**	**153**	9	**162**	35	234	269	487
05:15 PM	10	30	40	144	**13**	157	32	251	283	480
05:30 PM	12	26	38	147	13	160	**38**	**286**	**324**	**522**
05:45 PM	14	26	40	115	11	126	37	265	302	468
Total Volume	59	115	174	559	46	605	142	1036	1178	1957
% App. Total	33.9	66.1		92.4	7.6		12.1	87.9		
PHF	.641	.871	.777	.913	.885	.934	.934	.906	.909	.937

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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	**23**	**33**	**56**	**153**	9	**162**	35	234	269
+15 mins.	10	30	40	144	**13**	157	32	251	283
+30 mins.	12	26	38	147	13	160	**38**	**286**	**324**
+45 mins.	14	26	40	115	11	126	37	265	302
Total Volume	59	115	174	559	46	605	142	1036	1178
% App. Total	33.9	66.1		92.4	7.6		12.1	87.9	
PHF	.641	.871	.777	.913	.885	.934	.934	.906	.909

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Groups Printed- Dual Wheeled

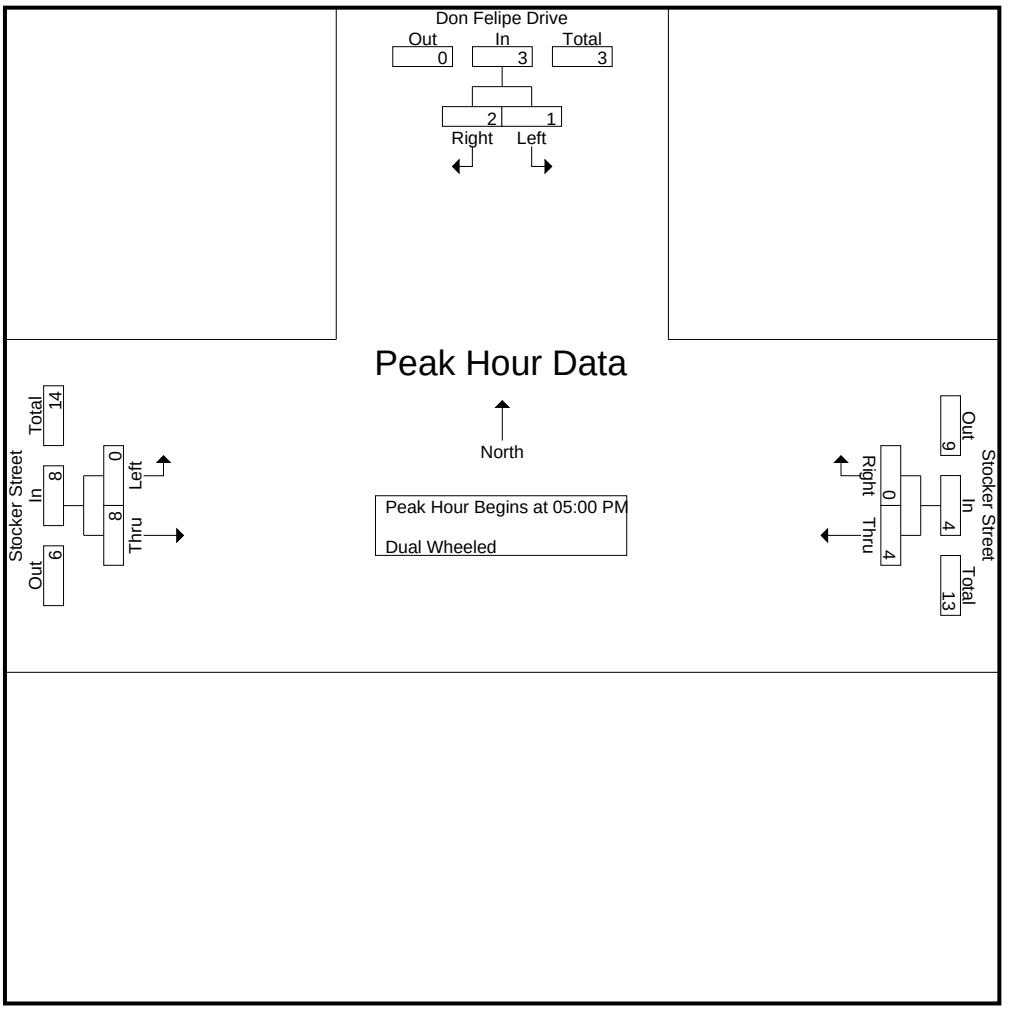
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	1	0	1	0	0	0	0	2	2	3
03:15 PM	0	0	0	0	0	0	0	2	2	2
03:30 PM	1	0	1	0	0	0	0	2	2	3
03:45 PM	0	0	0	1	0	1	0	4	4	5
Total	2	0	2	1	0	1	0	10	10	13
04:00 PM	0	0	0	1	0	1	0	1	1	2
04:15 PM	1	0	1	1	0	1	0	1	1	3
04:30 PM	1	0	1	0	1	1	0	1	1	3
04:45 PM	0	0	0	1	0	1	0	0	0	1
Total	2	0	2	3	1	4	0	3	3	9
05:00 PM	1	2	3	0	0	0	0	2	2	5
05:15 PM	0	0	0	2	0	2	0	2	2	4
05:30 PM	0	0	0	0	0	0	0	3	3	3
05:45 PM	0	0	0	2	0	2	0	1	1	3
Total	1	2	3	4	0	4	0	8	8	15
Grand Total	5	2	7	8	1	9	0	21	21	37
Apprch %	71.4	28.6		88.9	11.1		0	100		
Total %	13.5	5.4	18.9	21.6	2.7	24.3	0	56.8	56.8	

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	**1**	**2**	**3**	0	0	0	0	2	2	**5**
05:15 PM	0	0	0	**2**	0	**2**	0	2	2	4
05:30 PM	0	0	0	0	0	0	0	**3**	**3**	3
05:45 PM	0	0	0	2	0	2	0	1	1	3
Total Volume	1	2	3	4	0	4	0	8	8	15
% App. Total	33.3	66.7		100	0		0	100		
PHF	.250	.250	.250	.500	.000	.500	.000	.667	.667	.750

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Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	**1**	**2**	**3**	0	0	0	0	2	2
+15 mins.	0	0	0	**2**	0	**2**	0	2	2
+30 mins.	0	0	0	0	0	0	0	**3**	**3**
+45 mins.	0	0	0	2	0	2	0	1	1
Total Volume	1	2	3	4	0	4	0	8	8
% App. Total	33.3	66.7		100	0		0	100	
PHF	.250	.250	.250	.500	.000	.500	.000	.667	.667

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Groups Printed- Buses

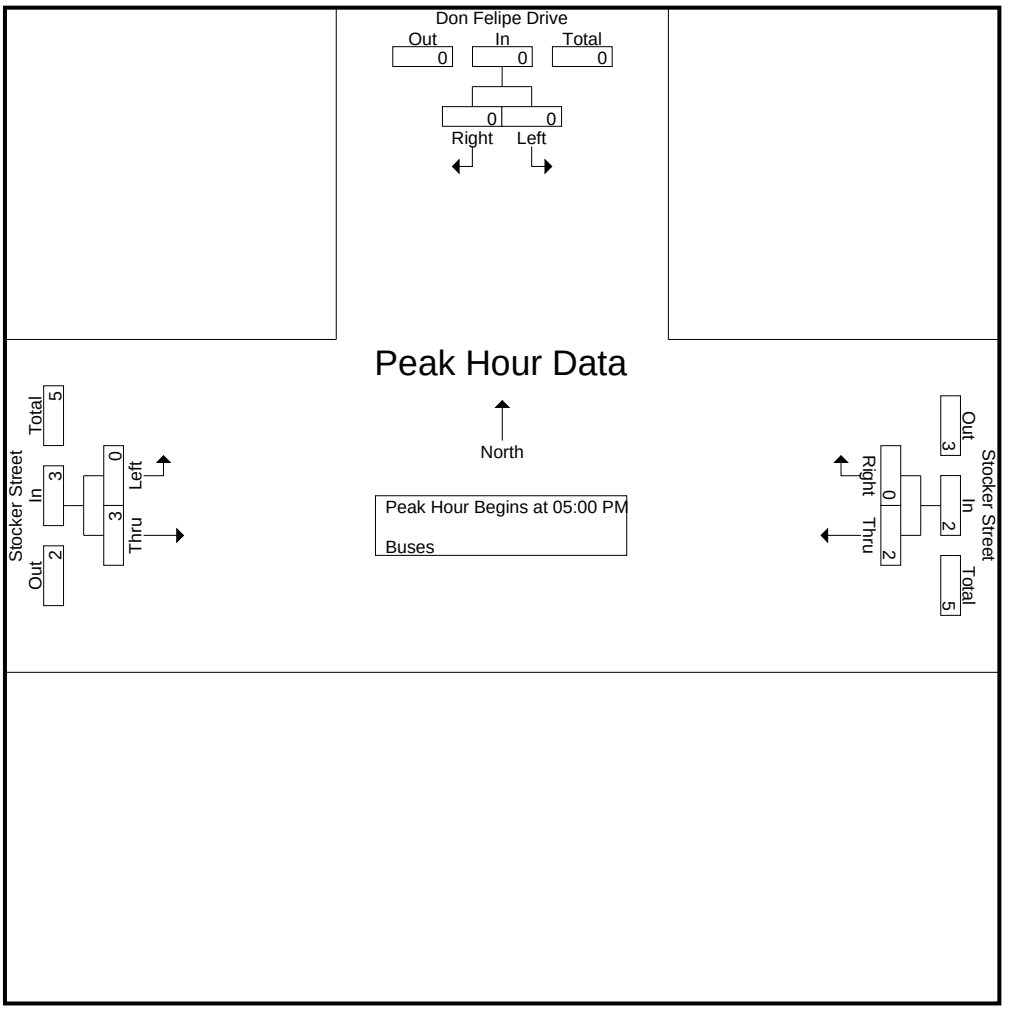
	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
03:00 PM	0	1	1	0	0	0	0	1	1	2
03:15 PM	0	0	0	1	0	1	0	1	1	2
03:30 PM	0	0	0	0	0	0	0	1	1	1
03:45 PM	0	0	0	1	0	1	0	2	2	3
Total	0	1	1	2	0	2	0	5	5	8
04:00 PM	0	0	0	1	0	1	0	1	1	2
04:15 PM	0	0	0	0	0	0	0	2	2	2
04:30 PM	0	0	0	2	0	2	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	3	0	3	0	3	3	6
05:00 PM	0	0	0	0	0	0	0	2	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	1	0	1	0	0	0	1
05:45 PM	0	0	0	1	0	1	0	1	1	2
Total	0	0	0	2	0	2	0	3	3	5
Grand Total	0	1	1	7	0	7	0	11	11	19
Apprch %	0	100		100	0		0	100		
Total %	0	5.3	5.3	36.8	0	36.8	0	57.9	57.9	

	Don Felipe Drive Southbound			Stocker Street Westbound			Stocker Street Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	0	0	0	**2**	**2**	**2**
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	**1**	0	**1**	0	0	0	1
05:45 PM	0	0	0	1	0	1	0	1	1	2
Total Volume	0	0	0	2	0	2	0	3	3	5
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.375	.375	.625

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City of Los Angeles
N/S: Don Felipe Drive
E/W: Stocker Street
Weather: Clear

File Name : 04_LAC_Don F_Stoc PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			05:00 PM			05:00 PM		
+0 mins.	0	0	0	0	0	0	0	**2**	**2**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	**1**	0	**1**	0	0	0
+45 mins.	0	0	0	1	0	1	0	1	1
Total Volume	0	0	0	2	0	2	0	3	3
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.500	.000	.500	.000	.375	.375

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Don Felipe Drive

East/West Stocker Street

Day: Tuesday **Date:** June 7, 2022 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Southern I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	0	9	36	48
BIKES	0	3	4	4
BUSES	0	11	19	15

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7.00	38	7.30	181	7.30	261	7.45
PM PK 15 MIN	0	3.00	59	5.00	327	5.30	176	3.30
AM PK HOUR	0	7.00	129	7.00	705	7.30	1013	7.30
PM PK HOUR	0	3.00	177	5.00	1189	5.00	634	3.30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	44	0	85	129
8-9	40	0	73	113
9-10	37	0	60	97
3-4	64	0	107	171
4-5	52	0	91	143
5-6	60	0	117	177
TOTAL	297	0	533	830

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
129	0	0	4	0
113	0	0	2	0
97	0	0	0	0
171	0	0	2	0
143	0	0	2	0
177	0	0	0	0
830	0	0	10	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	64	522	0	586
8-9	84	607	0	691
9-10	50	502	0	552
3-4	99	908	0	1007
4-5	111	1003	0	1114
5-6	142	1047	0	1189
TOTAL	550	4589	0	5139

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	920	48	968
8-9	0	875	43	918
9-10	0	532	53	585
3-4	0	576	48	624
4-5	0	568	48	616
5-6	0	565	46	611
TOTAL	0	4036	286	4322

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1554	0	0	5	0
1609	0	0	4	0
1137	1	0	7	0
1631	0	0	4	0
1730	0	0	6	0
1800	0	0	3	0
9461	1	0	29	0

(Rev Oct 06)

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:

North/South:	Don Felipe Drive				
East/West:	Stocker Street				
Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	Yes	District:	Southern	I/S Code:	0
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	1	0	0	1
8-9	0	0	0	0
9-10	1	0	0	1
3-4	0	0	0	0
4-5	0	0	0	0
5-6	1	0	0	1
TOTAL	3	0	0	3

TOTAL

Hours	N-S
7-8	1
8-9	0
9-10	1
3-4	0
4-5	0
5-6	1
TOTAL	3

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	2	0	2
3-4	0	0	0	0
4-5	1	1	0	2
5-6	0	0	0	0
TOTAL	1	3	0	4

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	1	0	0	1
9-10	0	0	1	1
3-4	0	0	0	0
4-5	0	1	0	1
5-6	0	0	1	1
TOTAL	1	1	2	4

TOTAL

Hours	E-W
7-8	0
8-9	1
9-10	3
3-4	0
4-5	3
5-6	1
TOTAL	8

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female Riders	0	1	0	1	2
- No helmet riders	0	3	4	4	11
- Sidewalk Riding	0	2	3	4	9
- Wrong way riding	0	1	0	0	1

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: CUI

LADOT 2015 CMP

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:					
North/South:	Don Felipe Drive				
East/West:	Stocker Street				
Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	YES	District:	Southern	I/S Code:	0
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

AM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00-7:15	0	0	1	0	1
7:15-7:30	0	0	1	0	1
7:30-7:45	1	0	2	0	3
7:45-8:00	3	0	1	0	4
8:00-8:15	1	0	1	0	2
8:15-8:30	0	0	2	0	2
8:30-8:45	1	0	0	0	1
8:45-9:00	0	0	1	0	1
9:00-9:15	0	0	2	0	2
9:15-9:30	0	0	1	0	1
9:30-9:45	0	0	1	1	2
9:45-10:00	0	0	3	0	3
Hours					
7 - 8	4	0	5	0	9
8 - 9	2	0	4	0	6
9 - 10	0	0	7	1	8
TOTAL	6	0	16	1	23

PM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00-3:15	0	0	2	0	2
3:15-3:30	2	0	2	0	4
3:30-3:45	0	0	0	0	0
3:45-4:00	0	0	0	0	0
4:00-4:15	2	0	4	0	6
4:15-4:30	0	0	1	0	1
4:30-4:45	0	0	1	0	1
4:45-5:00	0	0	0	0	0
5:00-5:15	0	0	1	0	1
5:15-5:30	0	0	2	0	2
5:30-5:45	0	0	0	0	0
5:45-6:00	0	0	0	0	0
Hours					
3 - 4	2	0	4	0	6
4 - 5	2	0	6	0	8
5 - 6	0	0	3	0	3
	4	0	13	0	17

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	1	0	0	1

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2015 CMP

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(951) 268-6268

City of Los Angeles
N/S: Palmero Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 01_LAC_Pal_Sto AM
Site Code : 16616351
Start Date : 1/31/2024
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

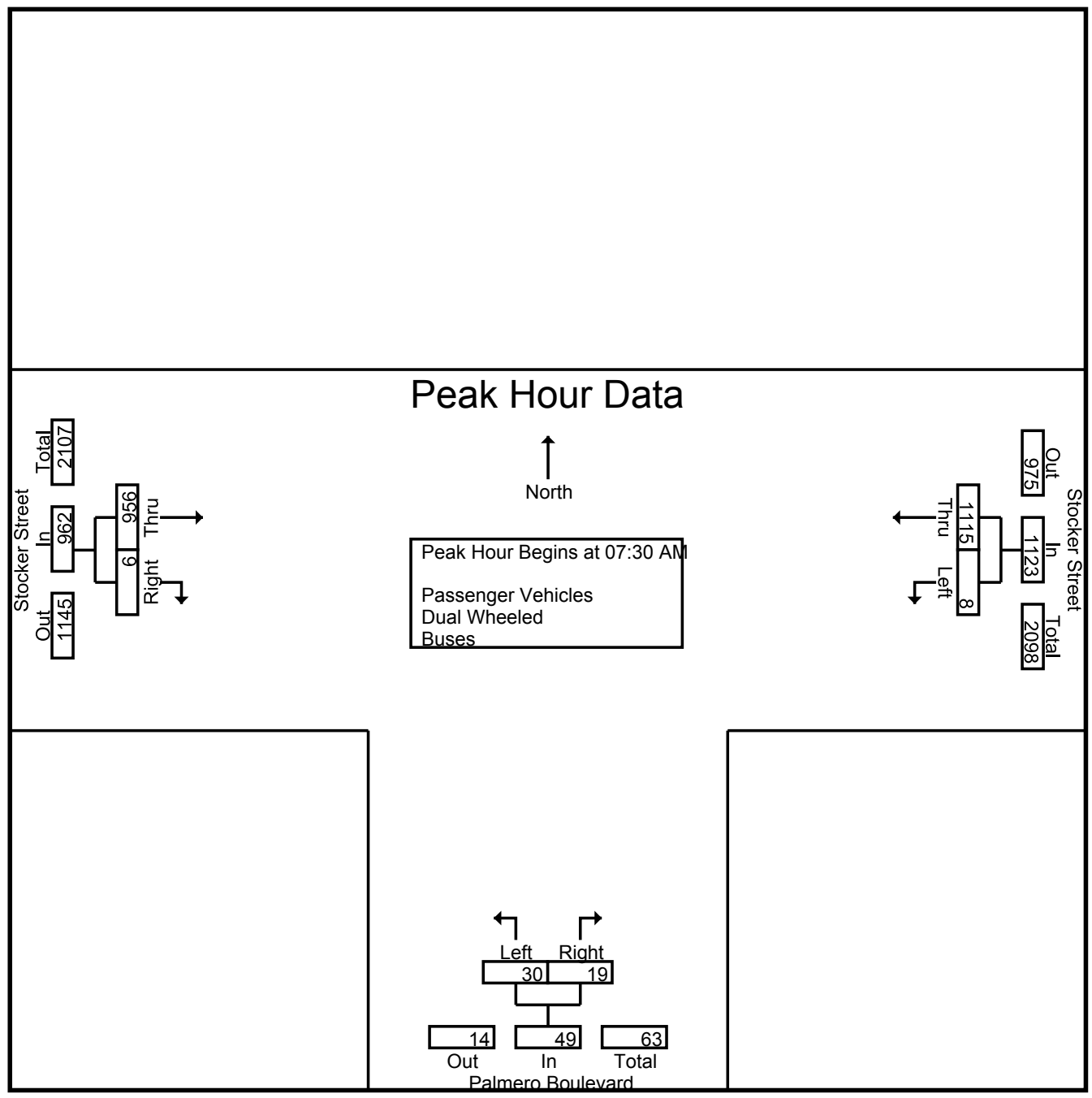
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	243	244	4	8	12	130	2	132	388
07:15 AM	3	291	294	3	2	5	194	1	195	494
07:30 AM	3	270	273	13	4	17	242	0	242	532
07:45 AM	1	284	285	4	6	10	233	1	234	529
Total	8	1088	1096	24	20	44	799	4	803	1943
08:00 AM	1	307	308	6	3	9	246	1	247	564
08:15 AM	3	254	257	7	6	13	235	4	239	509
08:30 AM	2	241	243	1	5	6	257	1	258	507
08:45 AM	2	249	251	4	4	8	193	4	197	456
Total	8	1051	1059	18	18	36	931	10	941	2036
09:00 AM	4	313	317	8	5	13	200	4	204	534
09:15 AM	3	257	260	3	8	11	162	2	164	435
09:30 AM	3	177	180	3	4	7	162	2	164	351
09:45 AM	1	163	164	2	4	6	154	3	157	327
Total	11	910	921	16	21	37	678	11	689	1647
Grand Total	27	3049	3076	58	59	117	2408	25	2433	5626
Apprch %	0.9	99.1		49.6	50.4		99	1		
Total %	0.5	54.2	54.7	1	1	2.1	42.8	0.4	43.2	
Passenger Vehicles	26	3003	3029	57	59	116	2364	24	2388	5533
% Passenger Vehicles	96.3	98.5	98.5	98.3	100	99.1	98.2	96	98.2	98.3
Dual Wheeled	1	30	31	1	0	1	25	0	25	57
% Dual Wheeled	3.7	1	1	1.7	0	0.9	1	0	1	1
Buses	0	16	16	0	0	0	19	1	20	36
% Buses	0	0.5	0.5	0	0	0	0.8	4	0.8	0.6

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**3**	270	273	**13**	4	**17**	242	0	242	532
07:45 AM	1	284	285	4	**6**	10	233	1	234	529
08:00 AM	1	**307**	**308**	6	3	9	**246**	1	**247**	**564**
08:15 AM	3	254	257	7	6	13	235	**4**	239	509
Total Volume	8	1115	1123	30	19	49	956	6	962	2134
% App. Total	0.7	99.3		61.2	38.8		99.4	0.6		
PHF	.667	.908	.912	.577	.792	.721	.972	.375	.974	.946

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City of Los Angeles
N/S: Palmero Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 01_LAC_Pal_Sto AM
Site Code : 16616351
Start Date : 1/31/2024
Page No : 2



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:30 AM			07:45 AM		
+0 mins.	**3**	291	294	**13**	4	**17**	233	1	234
+15 mins.	3	270	273	4	**6**	10	246	1	247
+30 mins.	1	284	285	6	3	9	235	**4**	239
+45 mins.	1	**307**	**308**	7	6	13	**257**	1	**258**
Total Volume	8	1152	1160	30	19	49	971	7	978
% App. Total	0.7	99.3		61.2	38.8		99.3	0.7	
PHF	.667	.938	.942	.577	.792	.721	.945	.438	.948

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City of Los Angeles
N/S: Palmero Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 01_LAC_Pal_Sto AM
Site Code : 16616351
Start Date : 1/31/2024
Page No : 1

Groups Printed- Passenger Vehicles

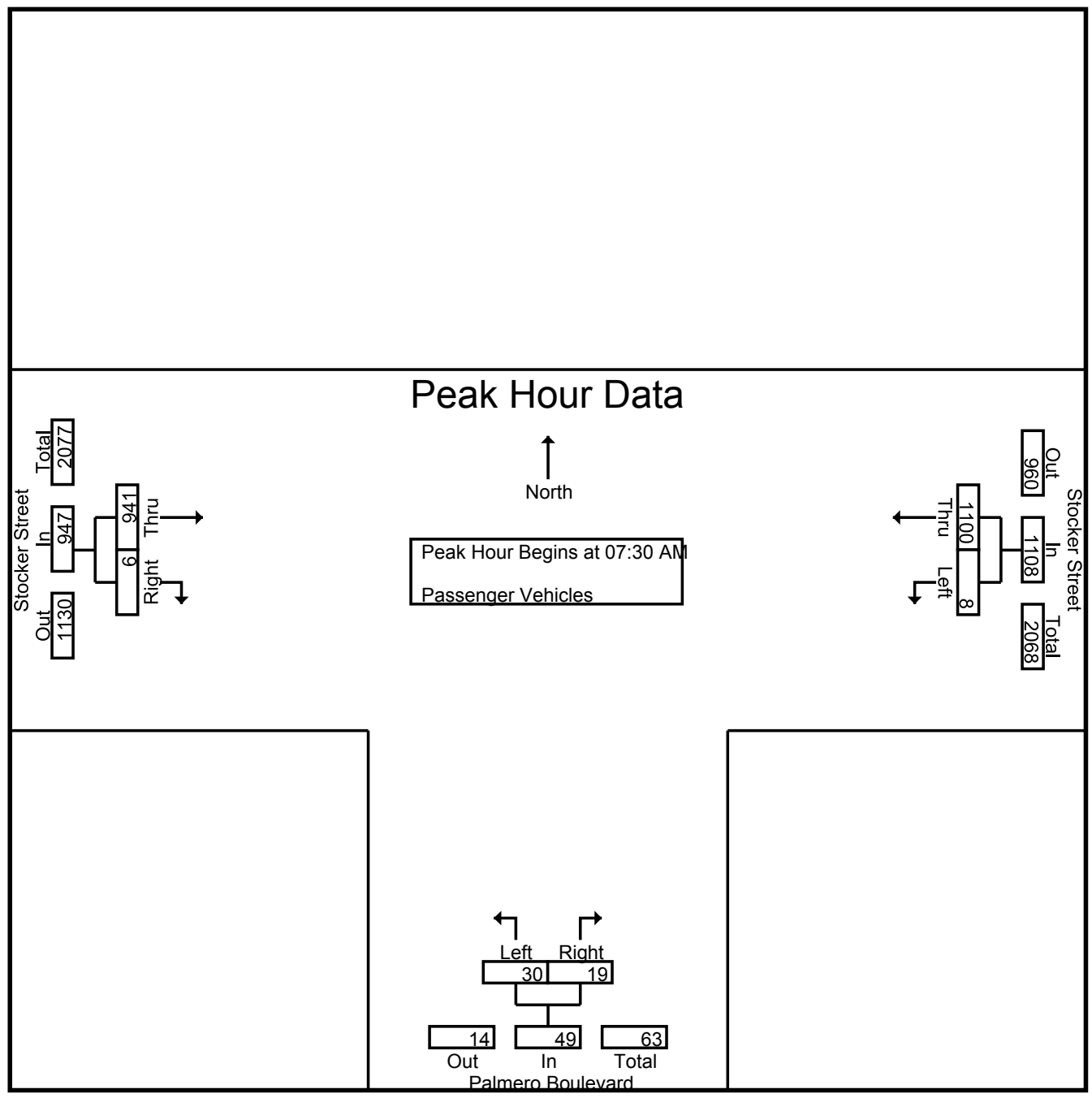
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	237	238	4	8	12	127	2	129	379
07:15 AM	3	288	291	3	2	5	194	0	194	490
07:30 AM	3	264	267	13	4	17	240	0	240	524
07:45 AM	1	283	284	4	6	10	230	1	231	525
Total	8	1072	1080	24	20	44	791	3	794	1918
08:00 AM	1	303	304	6	3	9	241	1	242	555
08:15 AM	3	250	253	7	6	13	230	4	234	500
08:30 AM	2	241	243	1	5	6	254	1	255	504
08:45 AM	2	245	247	4	4	8	185	4	189	444
Total	8	1039	1047	18	18	36	910	10	920	2003
09:00 AM	4	308	312	8	5	13	195	4	199	524
09:15 AM	3	253	256	3	8	11	158	2	160	427
09:30 AM	3	173	176	3	4	7	158	2	160	343
09:45 AM	0	158	158	1	4	5	152	3	155	318
Total	10	892	902	15	21	36	663	11	674	1612
Grand Total	26	3003	3029	57	59	116	2364	24	2388	5533
Apprch %	0.9	99.1		49.1	50.9		99	1		
Total %	0.5	54.3	54.7	1	1.1	2.1	42.7	0.4	43.2	

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**3**	264	267	**13**	4	**17**	240	0	240	524
07:45 AM	1	283	284	4	**6**	10	230	1	231	525
08:00 AM	1	**303**	**304**	6	3	9	**241**	1	**242**	**555**
08:15 AM	3	250	253	7	6	13	230	**4**	234	500
Total Volume	8	1100	1108	30	19	49	941	6	947	2104
% App. Total	0.7	99.3		61.2	38.8		99.4	0.6		
PHF	.667	.908	.911	.577	.792	.721	.976	.375	.978	.948

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City of Los Angeles
N/S: Palmero Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 01_LAC_Pal_Sto AM
Site Code : 16616351
Start Date : 1/31/2024



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	**3**	264	267	**13**	4	**17**	240	0	240
+15 mins.	1	283	284	4	**6**	10	230	1	231
+30 mins.	1	**303**	**304**	6	3	9	**241**	1	**242**
+45 mins.	3	250	253	7	6	13	230	**4**	234
Total Volume	8	1100	1108	30	19	49	941	6	947
% App. Total	0.7	99.3		61.2	38.8		99.4	0.6	
PHF	.667	.908	.911	.577	.792	.721	.976	.375	.978

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City of Los Angeles
N/S: Palmero Boulevard
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Weather: Clear

File Name : 01_LAC_Pal_Sto AM
Site Code : 16616351
Start Date : 1/31/2024
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Groups Printed- Dual Wheeled

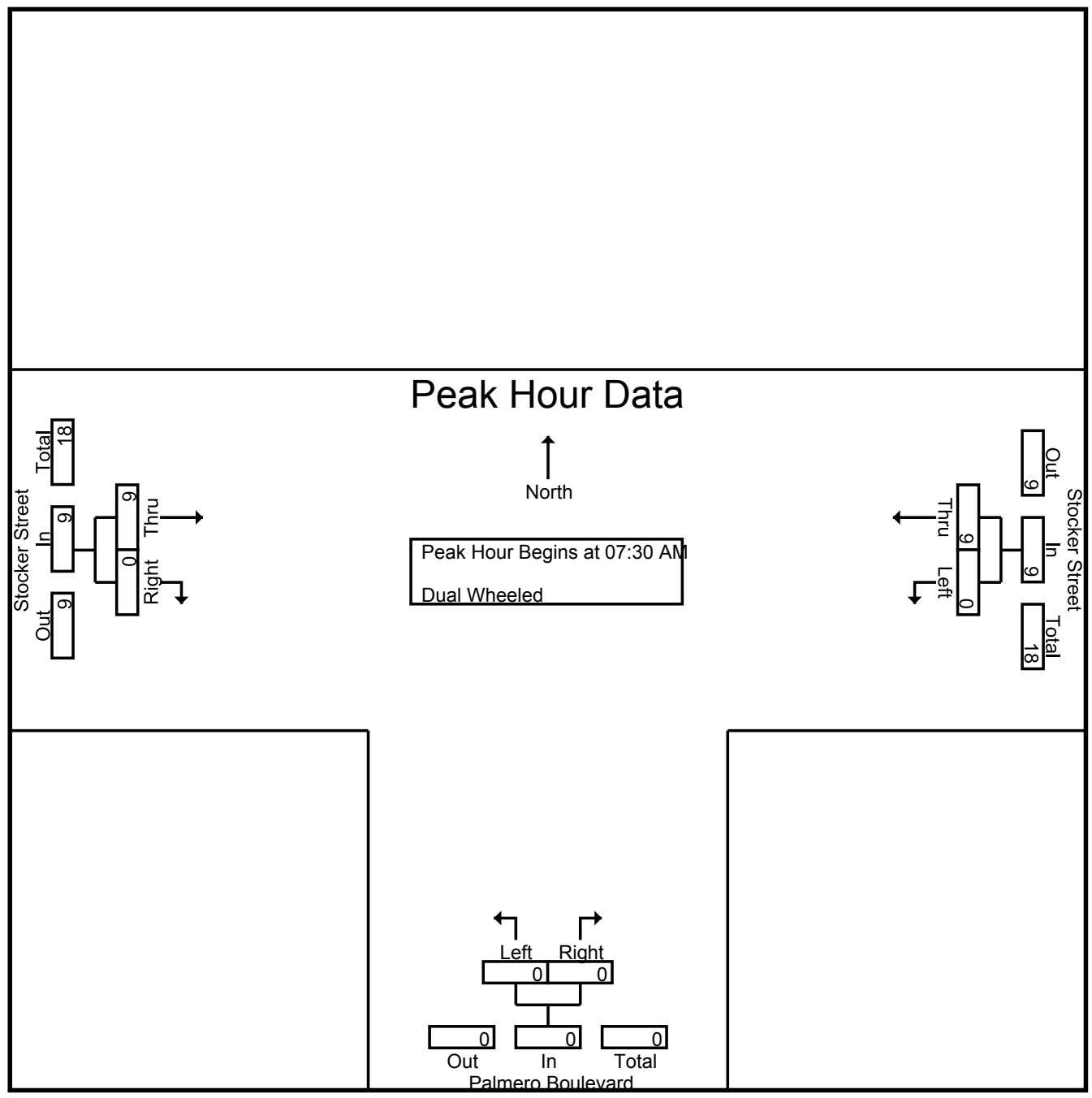
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	2	0	0	0	1	0	1	3
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	2	2	0	0	0	2	0	2	4
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	5	5	0	0	0	4	0	4	9
08:00 AM	0	3	3	0	0	0	4	0	4	7
08:15 AM	0	4	4	0	0	0	2	0	2	6
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	4	4	0	0	0	3	0	3	7
Total	0	11	11	0	0	0	10	0	10	21
09:00 AM	0	4	4	0	0	0	2	0	2	6
09:15 AM	0	3	3	0	0	0	4	0	4	7
09:30 AM	0	2	2	0	0	0	3	0	3	5
09:45 AM	1	5	6	1	0	1	2	0	2	9
Total	1	14	15	1	0	1	11	0	11	27
Grand Total	1	30	31	1	0	1	25	0	25	57
Apprch %	3.2	96.8		100	0		100	0		
Total %	1.8	52.6	54.4	1.8	0	1.8	43.9	0	43.9	

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	2	2	0	0	0	2	0	2	4
07:45 AM	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	3	3	0	0	0	**4**	0	**4**	**7**
08:15 AM	0	**4**	**4**	0	0	0	2	0	2	6
Total Volume	0	9	9	0	0	0	9	0	9	18
% App. Total	0	100		0	0		100	0		
PHF	.000	.563	.563	.000	.000	.000	.563	.000	.563	.643

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City of Los Angeles
N/S: Palmero Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 01_LAC_Pal_Sto AM
Site Code : 16616351
Start Date : 1/31/2024



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	2	2	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	3	3	0	0	0	**4**	0	**4**
+45 mins.	0	**4**	**4**	0	0	0	2	0	2
Total Volume	0	9	9	0	0	0	9	0	9
% App. Total	0	100		0	0		100	0	
PHF	.000	.563	.563	.000	.000	.000	.563	.000	.563

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City of Los Angeles
N/S: Palmero Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 01_LAC_Pal_Sto AM
Site Code : 16616351
Start Date : 1/31/2024
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Groups Printed- Buses

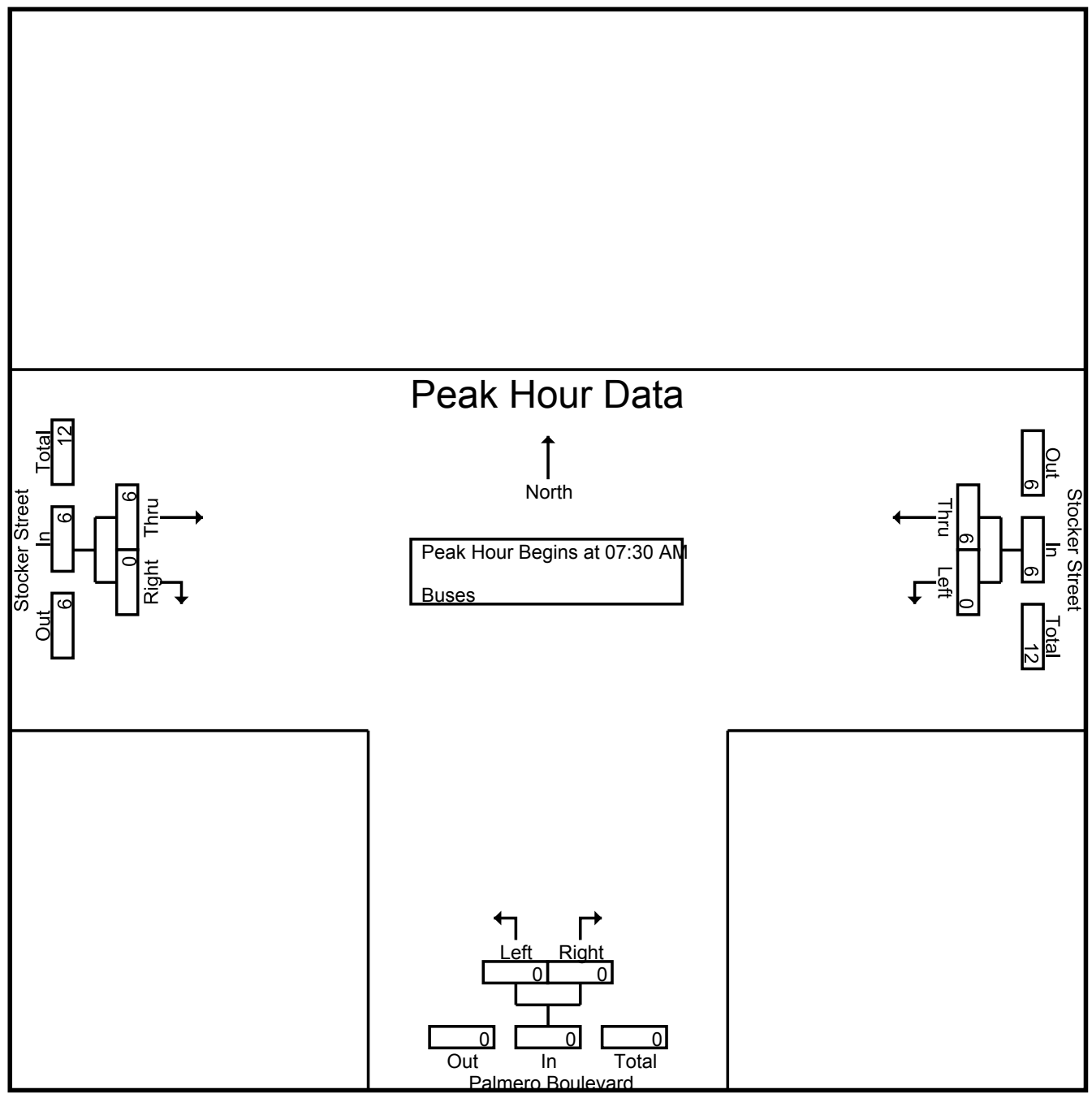
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	4	4	0	0	0	2	0	2	6
07:15 AM	0	2	2	0	0	0	0	1	1	3
07:30 AM	0	4	4	0	0	0	0	0	0	4
07:45 AM	0	1	1	0	0	0	2	0	2	3
Total	0	11	11	0	0	0	4	1	5	16
08:00 AM	0	1	1	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	0	3	0	3	3
08:30 AM	0	0	0	0	0	0	2	0	2	2
08:45 AM	0	0	0	0	0	0	5	0	5	5
Total	0	1	1	0	0	0	11	0	11	12
09:00 AM	0	1	1	0	0	0	3	0	3	4
09:15 AM	0	1	1	0	0	0	0	0	0	1
09:30 AM	0	2	2	0	0	0	1	0	1	3
09:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	4	4	0	0	0	4	0	4	8
Grand Total	0	16	16	0	0	0	19	1	20	36
Apprch %	0	100		0	0		95	5		
Total %	0	44.4	44.4	0	0	0	52.8	2.8	55.6	

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	**4**	**4**	0	0	0	0	0	0	**4**
07:45 AM	0	1	1	0	0	0	2	0	2	3
08:00 AM	0	1	1	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	0	**3**	0	**3**	3
Total Volume	0	6	6	0	0	0	6	0	6	12
% App. Total	0	100		0	0		100	0		
PHF	.000	.375	.375	.000	.000	.000	.500	.000	.500	.750

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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	**4**	**4**	0	0	0	0	0	0
+15 mins.	0	1	1	0	0	0	2	0	2
+30 mins.	0	1	1	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	**3**	0	**3**
Total Volume	0	6	6	0	0	0	6	0	6
% App. Total	0	100		0	0		100	0	
PHF	.000	.375	.375	.000	.000	.000	.500	.000	.500

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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

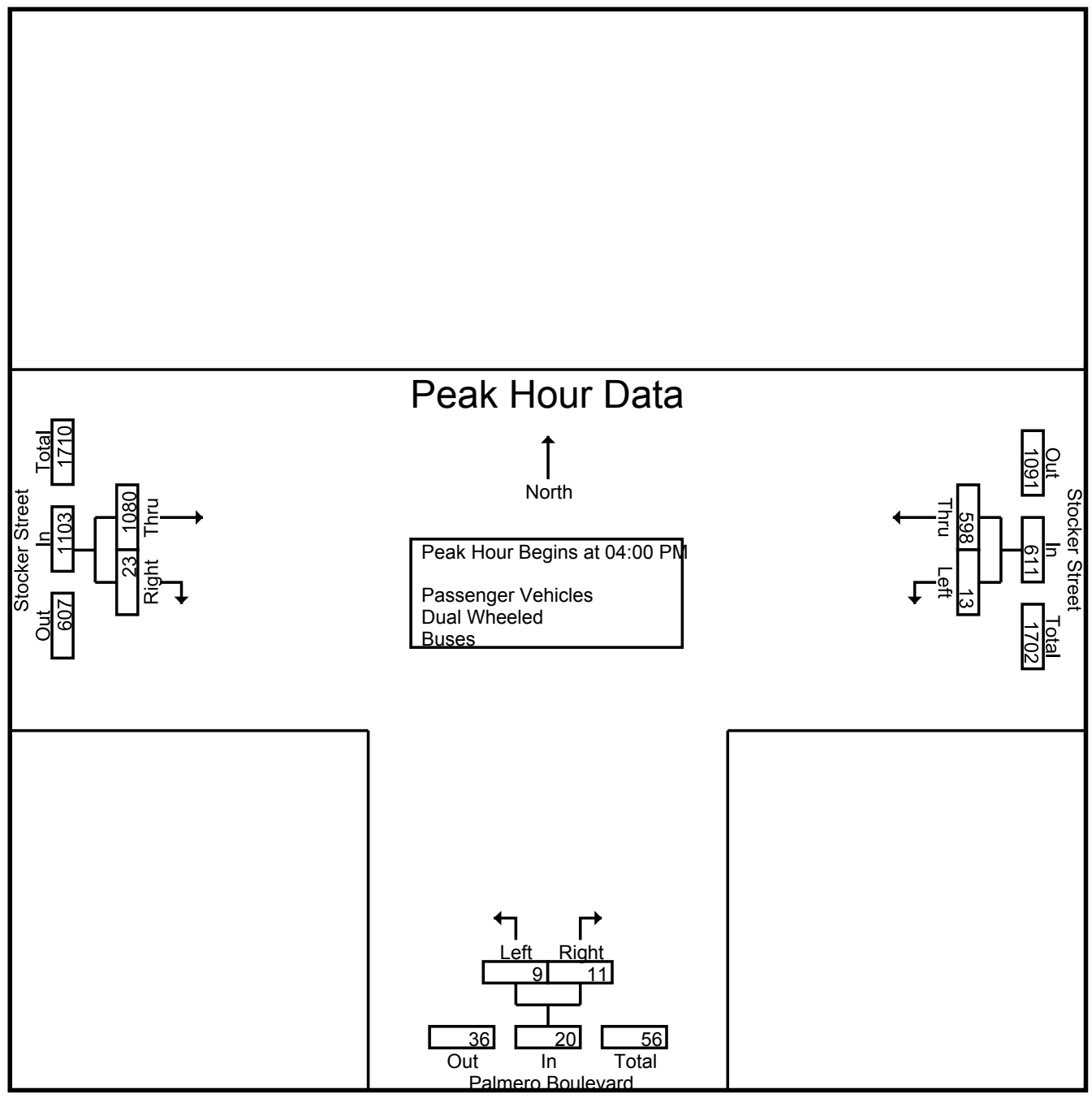
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:00 PM	3	133	136	3	3	6	261	4	265	407
03:15 PM	2	161	163	1	3	4	250	6	256	423
03:30 PM	5	140	145	0	5	5	226	4	230	380
03:45 PM	5	150	155	4	2	6	265	3	268	429
Total	15	584	599	8	13	21	1002	17	1019	1639
04:00 PM	1	141	142	4	5	9	301	8	309	460
04:15 PM	3	152	155	2	4	6	268	5	273	434
04:30 PM	4	136	140	1	0	1	247	6	253	394
04:45 PM	5	169	174	2	2	4	264	4	268	446
Total	13	598	611	9	11	20	1080	23	1103	1734
05:00 PM	4	145	149	1	5	6	253	5	258	413
05:15 PM	3	152	155	5	0	5	272	8	280	440
05:30 PM	3	138	141	3	4	7	231	4	235	383
05:45 PM	9	176	185	2	2	4	259	5	264	453
Total	19	611	630	11	11	22	1015	22	1037	1689
Grand Total	47	1793	1840	28	35	63	3097	62	3159	5062
Apprch %	2.6	97.4		44.4	55.6		98	2		
Total %	0.9	35.4	36.3	0.6	0.7	1.2	61.2	1.2	62.4	
Passenger Vehicles	46	1780	1826	28	34	62	3058	62	3120	5008
% Passenger Vehicles	97.9	99.3	99.2	100	97.1	98.4	98.7	100	98.8	98.9
Dual Wheeled	0	7	7	0	1	1	21	0	21	29
% Dual Wheeled	0	0.4	0.4	0	2.9	1.6	0.7	0	0.7	0.6
Buses	1	6	7	0	0	0	18	0	18	25
% Buses	2.1	0.3	0.4	0	0	0	0.6	0	0.6	0.5

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	141	142	**4**	**5**	**9**	**301**	**8**	**309**	**460**
04:15 PM	3	152	155	2	4	6	268	5	273	434
04:30 PM	4	136	140	1	0	1	247	6	253	394
04:45 PM	**5**	**169**	**174**	2	2	4	264	4	268	446
Total Volume	13	598	611	9	11	20	1080	23	1103	1734
% App. Total	2.1	97.9		45	55		97.9	2.1		
PHF	.650	.885	.878	.563	.550	.556	.897	.719	.892	.942

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Site Code : 16616351
Start Date : 1/31/2024



Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			03:30 PM			03:45 PM		
+0 mins.	4	145	149	0	**5**	5	265	3	268
+15 mins.	3	152	155	**4**	2	6	**301**	**8**	**309**
+30 mins.	3	138	141	4	5	**9**	268	5	273
+45 mins.	**9**	**176**	**185**	2	4	6	247	6	253
Total Volume	19	611	630	10	16	26	1081	22	1103
% App. Total	3	97		38.5	61.5		98	2	
PHF	.528	.868	.851	.625	.800	.722	.898	.688	.892

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File Name : 01_LAC_Pal_Sto PM
Site Code : 16616351
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Groups Printed- Passenger Vehicles

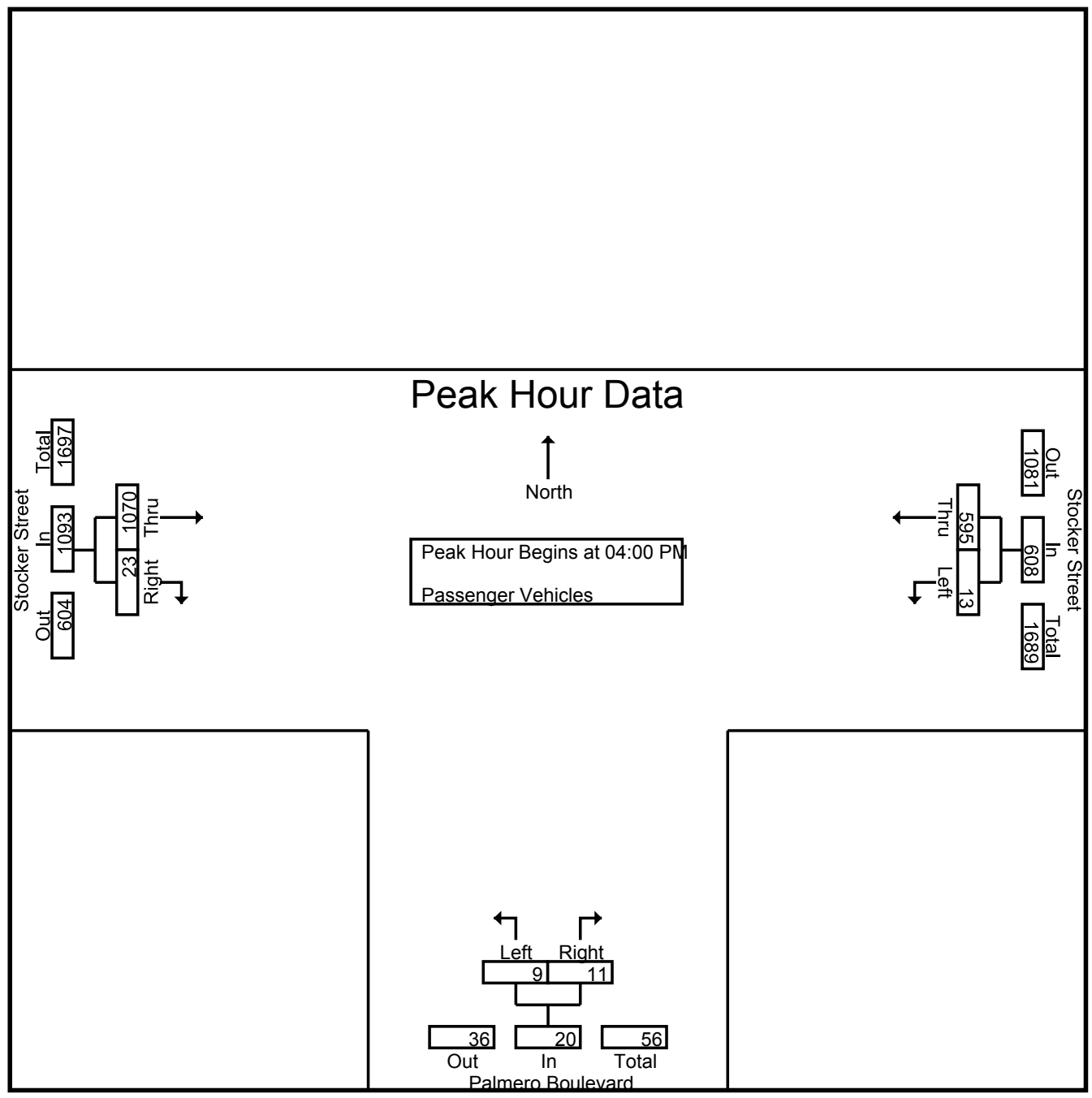
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:00 PM	3	131	134	3	3	6	253	4	257	397
03:15 PM	2	161	163	1	3	4	247	6	253	420
03:30 PM	5	138	143	0	4	4	223	4	227	374
03:45 PM	4	147	151	4	2	6	259	3	262	419
Total	14	577	591	8	12	20	982	17	999	1610
04:00 PM	1	140	141	4	5	9	297	8	305	455
04:15 PM	3	151	154	2	4	6	268	5	273	433
04:30 PM	4	135	139	1	0	1	243	6	249	389
04:45 PM	5	169	174	2	2	4	262	4	266	444
Total	13	595	608	9	11	20	1070	23	1093	1721
05:00 PM	4	144	148	1	5	6	250	5	255	409
05:15 PM	3	152	155	5	0	5	271	8	279	439
05:30 PM	3	136	139	3	4	7	230	4	234	380
05:45 PM	9	176	185	2	2	4	255	5	260	449
Total	19	608	627	11	11	22	1006	22	1028	1677
Grand Total	46	1780	1826	28	34	62	3058	62	3120	5008
Apprch %	2.5	97.5		45.2	54.8		98	2		
Total %	0.9	35.5	36.5	0.6	0.7	1.2	61.1	1.2	62.3	

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	140	141	**4**	**5**	**9**	**297**	**8**	**305**	**455**
04:15 PM	3	151	154	2	4	6	268	5	273	433
04:30 PM	4	135	139	1	0	1	243	6	249	389
04:45 PM	**5**	**169**	**174**	2	2	4	262	4	266	444
Total Volume	13	595	608	9	11	20	1070	23	1093	1721
% App. Total	2.1	97.9		45	55		97.9	2.1		
PHF	.650	.880	.874	.563	.550	.556	.901	.719	.896	.946

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File Name : 01_LAC_Pal_Sto PM
Site Code : 16616351
Start Date : 1/31/2024



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	1	140	141	**4**	**5**	**9**	**297**	**8**	**305**
+15 mins.	3	151	154	2	4	6	268	5	273
+30 mins.	4	135	139	1	0	1	243	6	249
+45 mins.	**5**	**169**	**174**	2	2	4	262	4	266
Total Volume	13	595	608	9	11	20	1070	23	1093
% App. Total	2.1	97.9		45	55		97.9	2.1	
PHF	.650	.880	.874	.563	.550	.556	.901	.719	.896

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Groups Printed- Dual Wheeled

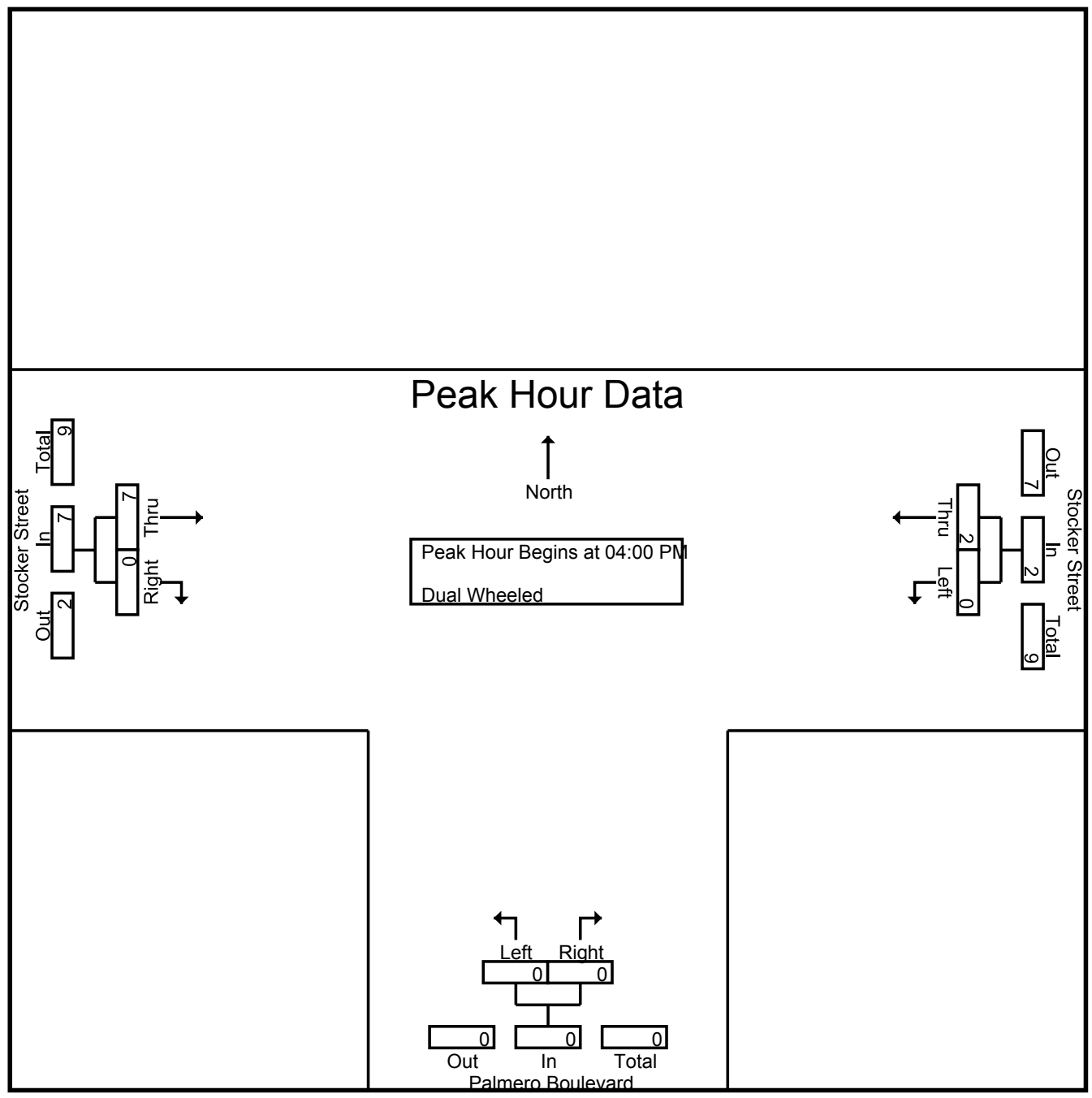
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:00 PM	0	1	1	0	0	0	6	0	6	7
03:15 PM	0	0	0	0	0	0	2	0	2	2
03:30 PM	0	2	2	0	1	1	0	0	0	3
03:45 PM	0	1	1	0	0	0	2	0	2	3
Total	0	4	4	0	1	1	10	0	10	15
04:00 PM	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	1	1	0	0	0	0	0	0	1
04:30 PM	0	1	1	0	0	0	4	0	4	5
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	2	2	0	0	0	7	0	7	9
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	0	2	0	2	2
Total	0	1	1	0	0	0	4	0	4	5
Grand Total	0	7	7	0	1	1	21	0	21	29
Apprch %	0	100		0	100		100	0		
Total %	0	24.1	24.1	0	3.4	3.4	72.4	0	72.4	

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	**1**	**1**	0	0	0	0	0	0	1
04:30 PM	0	1	1	0	0	0	**4**	0	**4**	**5**
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	2	2	0	0	0	7	0	7	9
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.438	.000	.438	.450

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Site Code : 16616351
Start Date : 1/31/2024



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	2	0	2
+15 mins.	0	**1**	**1**	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	**4**	0	**4**
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	2	2	0	0	0	7	0	7
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.438	.000	.438

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Groups Printed- Buses

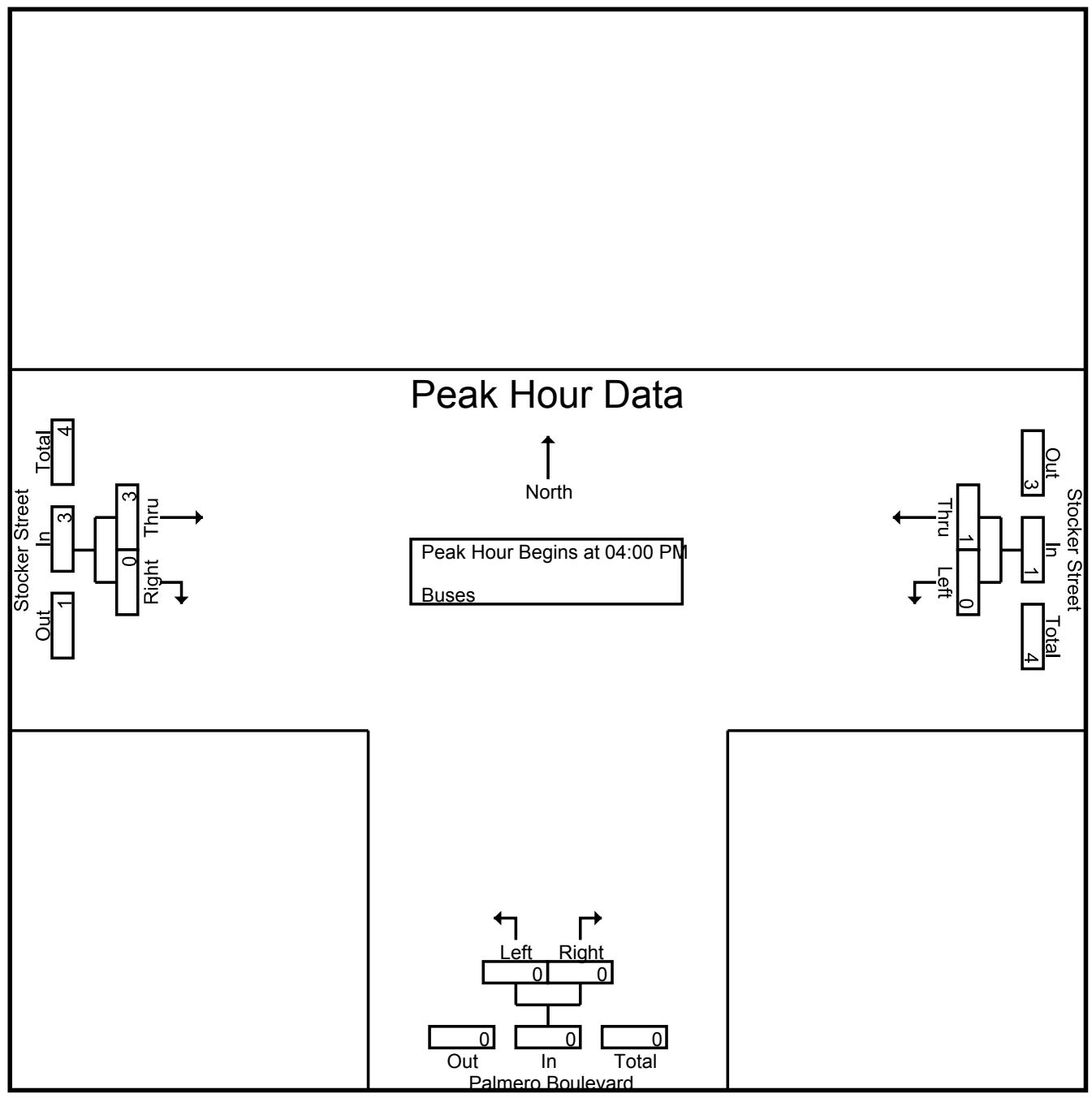
	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:00 PM	0	1	1	0	0	0	2	0	2	3
03:15 PM	0	0	0	0	0	0	1	0	1	1
03:30 PM	0	0	0	0	0	0	3	0	3	3
03:45 PM	1	2	3	0	0	0	4	0	4	7
Total	1	3	4	0	0	0	10	0	10	14
04:00 PM	0	1	1	0	0	0	2	0	2	3
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	1	1	0	0	0	3	0	3	4
05:00 PM	0	1	1	0	0	0	2	0	2	3
05:15 PM	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	2	0	2	2
Total	0	2	2	0	0	0	5	0	5	7
Grand Total	1	6	7	0	0	0	18	0	18	25
Apprch %	14.3	85.7		0	0		100	0		
Total %	4	24	28	0	0	0	72	0	72	

	Stocker Street Westbound			Palmero Boulevard Northbound			Stocker Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	**1**	**1**	0	0	0	**2**	0	**2**	**3**
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	1	1	0	0	0	3	0	3	4
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.375	.000	.375	.333

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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	**1**	**1**	0	0	0	**2**	0	**2**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	1	1	0	0	0	3	0	3
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.375	.000	.375

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Palmero Boulevard

East/West Stocker Street

Day: Wednesday **Date:** January 31, 2024 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Southern I/S CODE 0

	N/B	S/B	E/B	W/B
DUAL-WHEELED	2	0	46	38
BIKES	0	0	4	6
BUSES	0	0	38	23

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	17	7.30	0	7.00	258	8.30	317	9.00
PM PK 15 MIN	9	4.00	0	3.00	309	4.00	185	5.45
AM PK HOUR	49	7.30	0	7.00	978	7.45	1160	7.15
PM PK HOUR	26	3.30	0	3.00	1103	3.45	630	5.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	24	0	20	44
8-9	18	0	18	36
9-10	16	0	21	37
3-4	8	0	13	21
4-5	9	0	11	20
5-6	11	0	11	22
TOTAL	86	0	94	180

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
44	2	0	0	0
36	3	0	0	0
37	7	0	0	0
21	2	0	0	0
20	3	1	0	0
22	14	1	0	0
180	31	2	0	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	799	4	803
8-9	0	931	10	941
9-10	0	678	11	689
3-4	0	1002	17	1019
4-5	0	1080	23	1103
5-6	0	1015	22	1037
TOTAL	0	5505	87	5592

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	8	1088	0	1096
8-9	8	1051	0	1059
9-10	11	910	0	921
3-4	15	584	0	599
4-5	13	598	0	611
5-6	19	611	0	630
TOTAL	74	4842	0	4916

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1899	0	0	0	0
2000	0	0	1	0
1610	0	0	0	0
1618	0	0	0	0
1714	0	0	0	0
1667	0	0	0	0
10508	0	0	1	0

(Rev Oct 06)

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:

North/South:	Palmero Boulevard				
East/West:	Stocker Street				
Day:	Wednesday	Date:	1/31/2024	Weather:	CLEAR
School Day:	Yes	District:	Southern	I/S Code:	0
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	0	0	0
TOTAL	0	0	0	0

TOTAL

N-S
0
0
0
0
0
0
0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	2	0	2
8-9	0	0	0	0
9-10	0	1	0	1
3-4	0	0	0	0
4-5	0	1	0	1
5-6	0	0	0	0
TOTAL	0	4	0	4

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	2	0	2
9-10	0	0	0	0
3-4	0	1	0	1
4-5	0	3	0	3
5-6	0	0	0	0
TOTAL	0	6	0	6

TOTAL

E-W
2
2
1
1
4
0
10

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female Riders	0	0	0	0	0
- No helmet riders	0	0	2	5	7
- Sidewalk Riding	0	0	1	5	6
- Wrong way riding	0	0	0	4	4

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: CUI

LADOT 2015 CMP

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:

North/South:	Palmero Boulevard				
East/West:	Stocker Street				
Day:	Wednesday	Date:	1/31/2024	Weather:	CLEAR
School Day:	YES	District:	Southern	I/S Code:	0
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

AM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00-7:15	0	1	0	0	1
7:15-7:30	0	0	0	0	0
7:30-7:45	0	1	0	0	1
7:45-8:00	0	0	0	0	0
8:00-8:15	0	1	0	0	1
8:15-8:30	0	1	1	0	2
8:30-8:45	0	1	0	0	1
8:45-9:00	0	0	0	0	0
9:00-9:15	0	1	0	0	1
9:15-9:30	0	1	0	0	1
9:30-9:45	0	2	0	0	2
9:45-10:00	0	3	0	0	3
Hours					
7 - 8	0	2	0	0	2
8 - 9	0	3	1	0	4
9 - 10	0	7	0	0	7
TOTAL	0	12	1	0	13

PM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00-3:15	0	1	0	0	1
3:15-3:30	0	0	0	0	0
3:30-3:45	0	1	0	0	1
3:45-4:00	0	0	0	0	0
4:00-4:15	0	1	0	0	1
4:15-4:30	0	0	0	0	0
4:30-4:45	0	2	0	0	2
4:45-5:00	0	1	0	0	1
5:00-5:15	0	5	0	0	5
5:15-5:30	0	5	0	0	5
5:30-5:45	0	3	0	0	3
5:45-6:00	0	2	0	0	2
Hours					
3 - 4	0	2	0	0	2
4 - 5	0	4	0	0	4
5 - 6	0	15	0	0	15
	0	21	0	0	21

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	0	0	1	1

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2015 CMP

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

City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

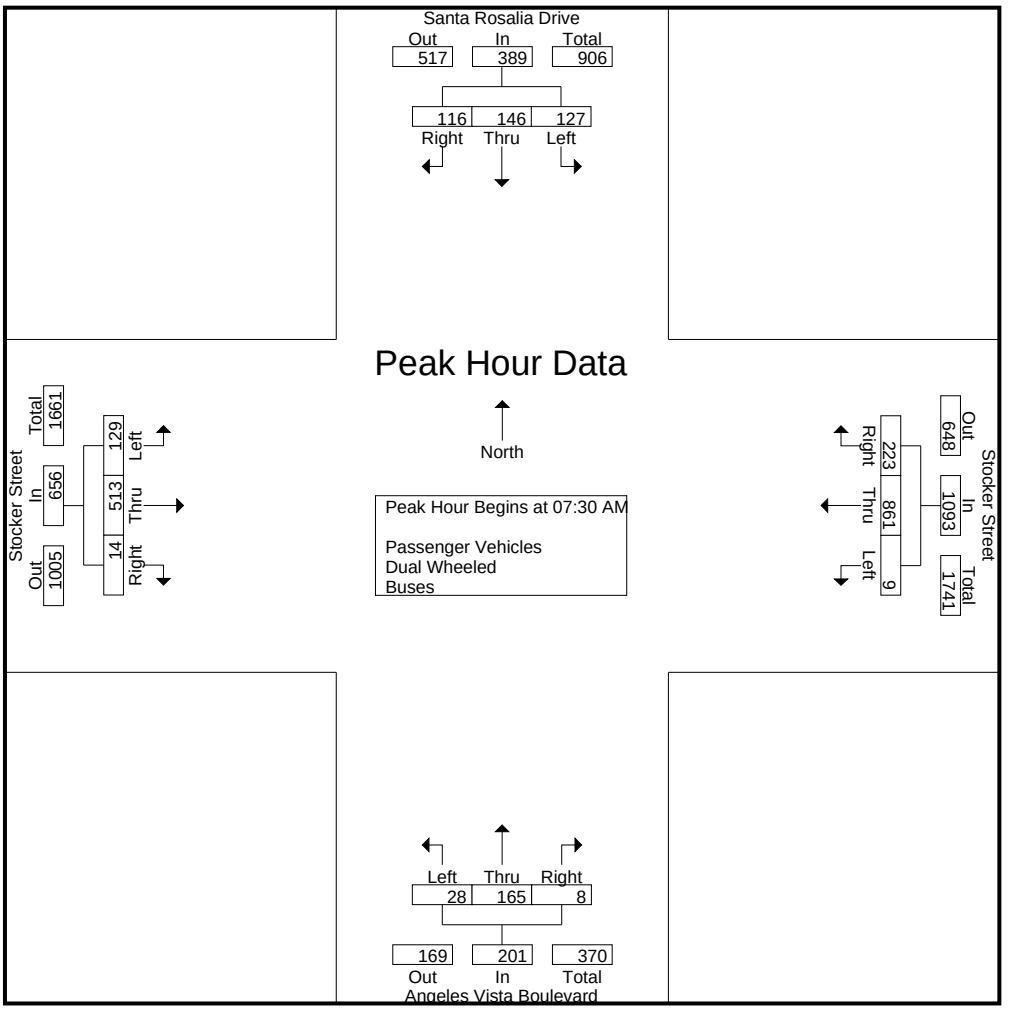
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	19	22	26	67	1	169	25	195	7	24	2	33	25	68	2	95	390
07:15 AM	26	35	24	85	1	203	49	253	7	28	4	39	22	109	6	137	514
07:30 AM	24	27	30	81	4	219	55	278	5	42	2	49	22	142	2	166	574
07:45 AM	38	47	28	113	1	227	61	289	7	35	4	46	33	139	2	174	622
Total	107	131	108	346	7	818	190	1015	26	129	12	167	102	458	12	572	2100
08:00 AM	37	47	29	113	2	201	57	260	9	45	1	55	35	111	1	147	575
08:15 AM	28	25	29	82	2	214	50	266	7	43	1	51	39	121	9	169	568
08:30 AM	24	35	23	82	1	204	44	249	6	24	3	33	27	120	9	156	520
08:45 AM	20	38	29	87	2	154	35	191	2	27	1	30	35	136	4	175	483
Total	109	145	110	364	7	773	186	966	24	139	6	169	136	488	23	647	2146
09:00 AM	25	19	20	64	2	117	52	171	5	25	2	32	34	113	8	155	422
09:15 AM	33	26	20	79	5	120	37	162	6	16	2	24	23	108	4	135	400
09:30 AM	21	24	30	75	0	122	42	164	2	16	2	20	28	113	2	143	402
09:45 AM	37	26	23	86	0	117	29	146	5	7	1	13	32	72	3	107	352
Total	116	95	93	304	7	476	160	643	18	64	7	89	117	406	17	540	1576
Grand Total	332	371	311	1014	21	2067	536	2624	68	332	25	425	355	1352	52	1759	5822
Apprch %	32.7	36.6	30.7		0.8	78.8	20.4		16	78.1	5.9		20.2	76.9	3		
Total %	5.7	6.4	5.3	17.4	0.4	35.5	9.2	45.1	1.2	5.7	0.4	7.3	6.1	23.2	0.9	30.2	
Passenger Vehicles	319	368	303	990	20	2033	516	2569	67	331	25	423	353	1329	50	1732	5714
% Passenger Vehicles	96.1	99.2	97.4	97.6	95.2	98.4	96.3	97.9	98.5	99.7	100	99.5	99.4	98.3	96.2	98.5	98.1
Dual Wheeled	1	0	7	8	0	27	4	31	1	1	0	2	1	12	1	14	55
% Dual Wheeled	0.3	0	2.3	0.8	0	1.3	0.7	1.2	1.5	0.3	0	0.5	0.3	0.9	1.9	0.8	0.9
Buses	12	3	1	16	1	7	16	24	0	0	0	0	1	11	1	13	53
% Buses	3.6	0.8	0.3	1.6	4.8	0.3	3	0.9	0	0	0	0	0.3	0.8	1.9	0.7	0.9

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	24	27	**30**	81	**4**	219	55	278	5	42	2	49	22	**142**	2	166	574
07:45 AM	**38**	**47**	28	**113**	1	**227**	**61**	**289**	7	35	**4**	46	33	139	2	**174**	**622**
08:00 AM	37	47	29	113	2	201	57	260	**9**	**45**	1	**55**	35	111	1	147	575
08:15 AM	28	25	29	82	2	214	50	266	7	43	1	51	**39**	121	**9**	169	568
Total Volume	127	146	116	389	9	861	223	1093	28	165	8	201	129	513	14	656	2339
% App. Total	32.6	37.5	29.8		0.8	78.8	20.4		13.9	82.1	4		19.7	78.2	2.1		
PHF	.836	.777	.967	.861	.563	.948	.914	.946	.778	.917	.500	.914	.827	.903	.389	.943	.940

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

City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022



Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	26	35	24	85	**4**	219	55	278	5	42	2	49	22	**142**	2	166
+15 mins.	24	27	**30**	81	1	**227**	**61**	**289**	7	35	**4**	46	33	139	2	**174**
+30 mins.	**38**	**47**	28	**113**	2	201	57	260	**9**	**45**	1	**55**	35	111	1	147
+45 mins.	37	47	29	113	2	214	50	266	7	43	1	51	**39**	121	**9**	169
Total Volume	125	156	111	392	9	861	223	1093	28	165	8	201	129	513	14	656
% App. Total	31.9	39.8	28.3		0.8	78.8	20.4		13.9	82.1	4		19.7	78.2	2.1	
PHF	.822	.830	.925	.867	.563	.948	.914	.946	.778	.917	.500	.914	.827	.903	.389	.943

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City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Passenger Vehicles

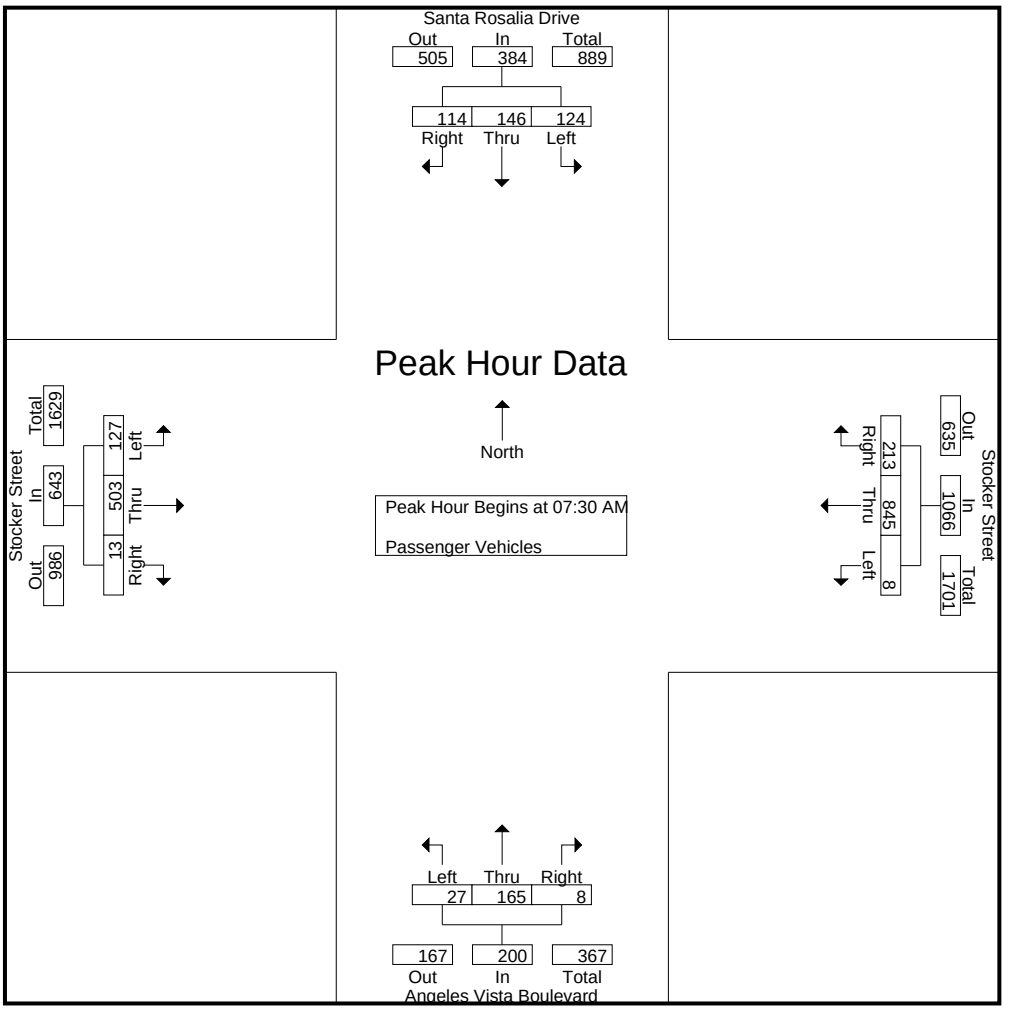
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	18	21	26	65	1	167	23	191	7	24	2	33	25	67	2	94	383
07:15 AM	23	35	23	81	1	199	47	247	7	28	4	39	22	108	6	136	503
07:30 AM	24	27	29	80	3	216	53	272	5	42	2	49	21	142	2	165	566
07:45 AM	37	47	28	112	1	223	55	279	7	35	4	46	32	136	2	170	607
Total	102	130	106	338	6	805	178	989	26	129	12	167	100	453	12	565	2059
08:00 AM	35	47	29	111	2	197	56	255	9	45	1	55	35	105	1	141	562
08:15 AM	28	25	28	81	2	209	49	260	6	43	1	50	39	120	8	167	558
08:30 AM	24	34	23	81	1	198	44	243	6	23	3	32	27	117	8	152	508
08:45 AM	18	38	29	85	2	152	33	187	2	27	1	30	35	133	4	172	474
Total	105	144	109	358	7	756	182	945	23	138	6	167	136	475	21	632	2102
09:00 AM	24	18	19	61	2	115	50	167	5	25	2	32	34	111	8	153	413
09:15 AM	31	26	19	76	5	120	36	161	6	16	2	24	23	106	4	133	394
09:30 AM	21	24	28	73	0	121	42	163	2	16	2	20	28	112	2	142	398
09:45 AM	36	26	22	84	0	116	28	144	5	7	1	13	32	72	3	107	348
Total	112	94	88	294	7	472	156	635	18	64	7	89	117	401	17	535	1553
Grand Total	319	368	303	990	20	2033	516	2569	67	331	25	423	353	1329	50	1732	5714
Apprch %	32.2	37.2	30.6		0.8	79.1	20.1		15.8	78.3	5.9		20.4	76.7	2.9		
Total %	5.6	6.4	5.3	17.3	0.4	35.6	9	45	1.2	5.8	0.4	7.4	6.2	23.3	0.9	30.3	

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	24	27	**29**	80	**3**	216	53	272	5	42	2	49	21	**142**	2	165	566
07:45 AM	**37**	**47**	28	**112**	1	**223**	55	**279**	7	35	**4**	46	32	136	2	**170**	**607**
08:00 AM	35	47	29	111	2	197	**56**	255	**9**	**45**	1	**55**	35	105	1	141	562
08:15 AM	28	25	28	81	2	209	49	260	6	43	1	50	**39**	120	**8**	167	558
Total Volume	124	146	114	384	8	845	213	1066	27	165	8	200	127	503	13	643	2293
% App. Total	32.3	38	29.7		0.8	79.3	20		13.5	82.5	4		19.8	78.2	2		
PHF	.838	.777	.983	.857	.667	.947	.951	.955	.750	.917	.500	.909	.814	.886	.406	.946	.944

Counts Unlimited, Inc.
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City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	24	27	**29**	80	**3**	216	53	272	5	42	2	49	21	**142**	2	165
+15 mins.	**37**	**47**	28	**112**	1	**223**	55	**279**	7	35	**4**	46	32	136	2	**170**
+30 mins.	35	47	29	111	2	197	**56**	255	**9**	**45**	1	**55**	35	105	1	141
+45 mins.	28	25	28	81	2	209	49	260	6	43	1	50	**39**	120	**8**	167
Total Volume	124	146	114	384	8	845	213	1066	27	165	8	200	127	503	13	643
% App. Total	32.3	38	29.7		0.8	79.3	20		13.5	82.5	4		19.8	78.2	2	
PHF	.838	.777	.983	.857	.667	.947	.951	.955	.750	.917	.500	.909	.814	.886	.406	.946

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City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Dual Wheeled

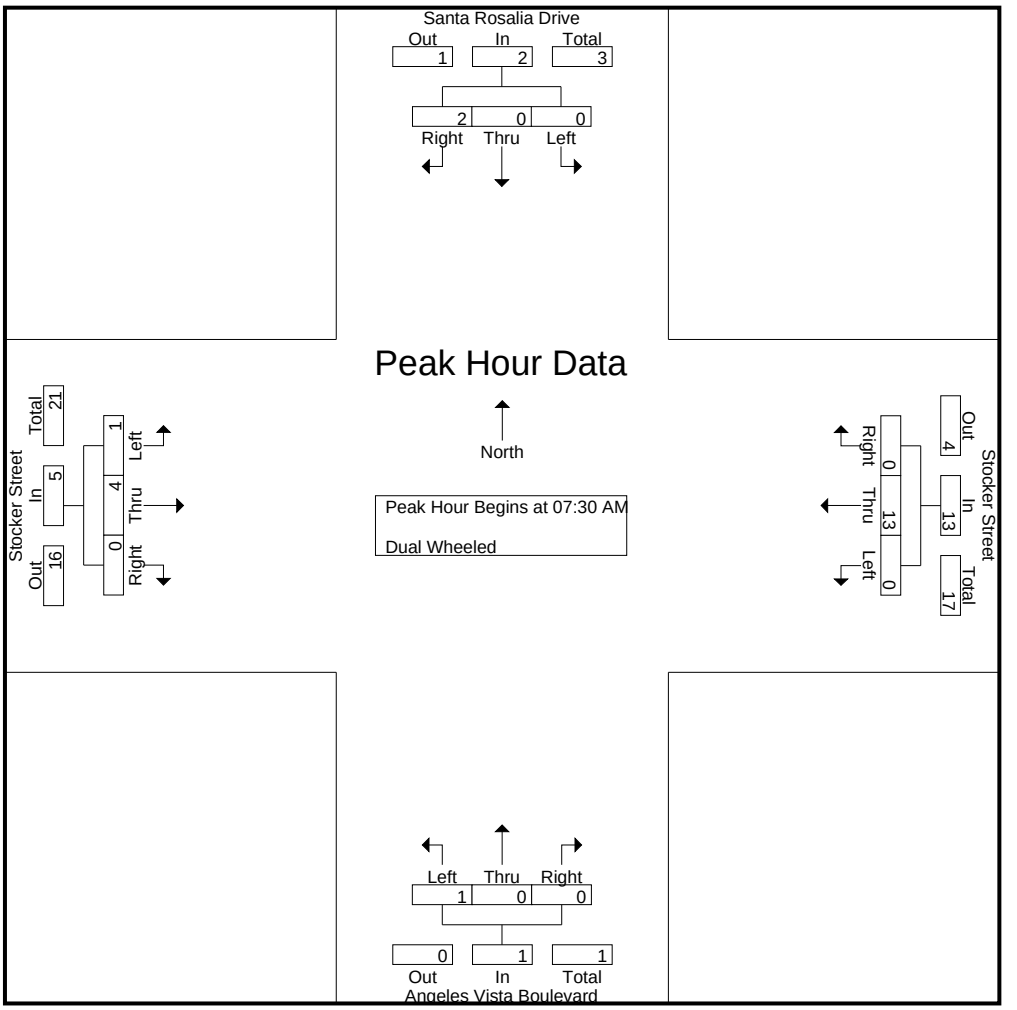
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	1	0	1	4
07:30 AM	0	0	1	1	0	1	0	1	0	0	0	0	1	0	0	1	3
07:45 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
Total	0	0	1	1	0	9	2	11	0	0	0	0	1	3	0	4	16
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:15 AM	0	0	1	1	0	4	0	4	1	0	0	1	0	0	0	0	6
08:30 AM	0	0	0	0	0	6	0	6	0	1	0	1	0	1	1	2	9
08:45 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	2	0	2	4
Total	0	0	1	1	0	15	1	16	1	1	0	2	0	5	1	6	25
09:00 AM	1	0	1	2	0	2	1	3	0	0	0	0	0	1	0	1	6
09:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	2	3
09:30 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	1	3
09:45 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	1	0	5	6	0	3	1	4	0	0	0	0	0	4	0	4	14
Grand Total	1	0	7	8	0	27	4	31	1	1	0	2	1	12	1	14	55
Apprch %	12.5	0	87.5		0	87.1	12.9		50	50	0		7.1	85.7	7.1		
Total %	1.8	0	12.7	14.5	0	49.1	7.3	56.4	1.8	1.8	0	3.6	1.8	21.8	1.8	25.5	

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	**1**	**1**	0	1	0	1	0	0	0	0	**1**	0	0	1	3
07:45 AM	0	0	0	0	0	**4**	0	**4**	0	0	0	0	0	**2**	0	**2**	**6**
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:15 AM	0	0	1	1	0	4	0	4	**1**	0	0	**1**	0	0	0	0	6
Total Volume	0	0	2	2	0	13	0	13	1	0	0	1	1	4	0	5	21
% App. Total	0	0	100		0	100	0		100	0	0		20	80	0		
PHF	.000	.000	.500	.500	.000	.813	.000	.813	.250	.000	.000	.250	.250	.500	.000	.625	.875

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City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	**1**	**1**	0	1	0	1	0	0	0	0	**1**	0	0	1
+15 mins.	0	0	0	0	0	**4**	0	**4**	0	0	0	0	0	**2**	0	**2**
+30 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2
+45 mins.	0	0	1	1	0	4	0	4	**1**	0	0	**1**	0	0	0	0
Total Volume	0	0	2	2	0	13	0	13	1	0	0	1	1	4	0	5
% App. Total	0	0	100		0	100	0		100	0	0		20	80	0	
PHF	.000	.000	.500	.500	.000	.813	.000	.813	.250	.000	.000	.250	.250	.500	.000	.625

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City of Los Angeles
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E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
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Groups Printed- Buses

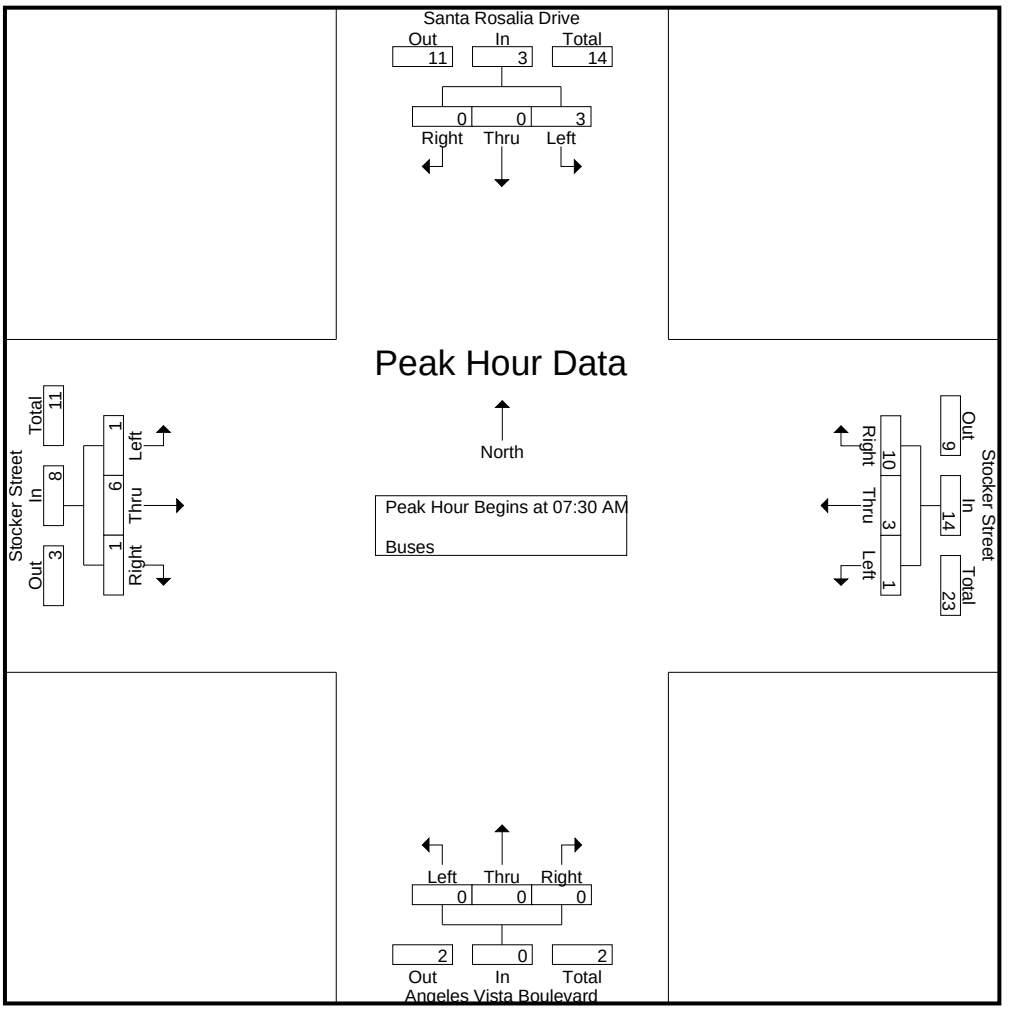
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	1	0	2	0	0	1	1	0	0	0	0	0	1	0	1	4
07:15 AM	3	0	1	4	0	2	1	3	0	0	0	0	0	0	0	0	7
07:30 AM	0	0	0	0	1	2	2	5	0	0	0	0	0	0	0	0	5
07:45 AM	1	0	0	1	0	0	6	6	0	0	0	0	1	1	0	2	9
Total	5	1	1	7	1	4	10	15	0	0	0	0	1	2	0	3	25
08:00 AM	2	0	0	2	0	0	1	1	0	0	0	0	0	4	0	4	7
08:15 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	1	2	4
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	3
08:45 AM	2	0	0	2	0	1	1	2	0	0	0	0	0	1	0	1	5
Total	4	1	0	5	0	2	3	5	0	0	0	0	0	8	1	9	19
09:00 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	1	0	1	3
09:15 AM	2	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	3
09:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
09:45 AM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
Total	3	1	0	4	0	1	3	4	0	0	0	0	0	1	0	1	9
Grand Total	12	3	1	16	1	7	16	24	0	0	0	0	1	11	1	13	53
Apprch %	75	18.8	6.2		4.2	29.2	66.7		0	0	0		7.7	84.6	7.7		
Total %	22.6	5.7	1.9	30.2	1.9	13.2	30.2	45.3	0	0	0	0	1.9	20.8	1.9	24.5	

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**1**	**2**	2	5	0	0	0	0	0	0	0	0	5
07:45 AM	1	0	0	1	0	0	**6**	**6**	0	0	0	0	**1**	1	0	2	**9**
08:00 AM	**2**	0	0	**2**	0	0	1	1	0	0	0	0	0	**4**	0	**4**	7
08:15 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	**1**	2	4
Total Volume	3	0	0	3	1	3	10	14	0	0	0	0	1	6	1	8	25
% App. Total	100	0	0		7.1	21.4	71.4		0	0	0		12.5	75	12.5		
PHF	.375	.000	.000	.375	.250	.375	.417	.583	.000	.000	.000	.000	.250	.375	.250	.500	.694

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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	**1**	**2**	2	5	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	0	0	**6**	**6**	0	0	0	0	**1**	1	0	2
+30 mins.	**2**	0	0	**2**	0	0	1	1	0	0	0	0	0	**4**	0	**4**
+45 mins.	0	0	0	0	0	1	1	2	0	0	0	0	0	1	**1**	2
Total Volume	3	0	0	3	1	3	10	14	0	0	0	0	1	6	1	8
% App. Total	100	0	0		7.1	21.4	71.4		0	0	0		12.5	75	12.5	
PHF	.375	.000	.000	.375	.250	.375	.417	.583	.000	.000	.000	.000	.250	.375	.250	.500

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File Name : 03_LAC_SR_Stoc PM
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

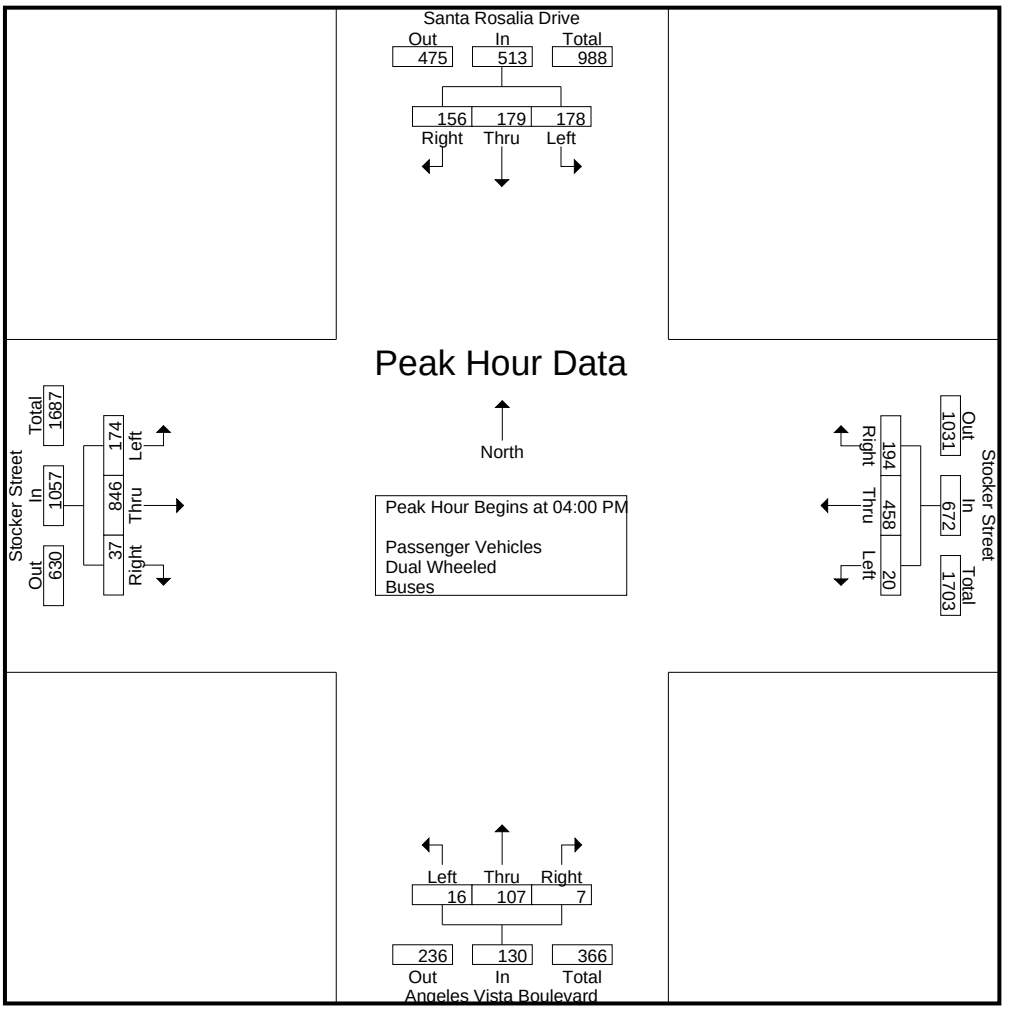
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	44	57	28	129	1	117	55	173	5	42	1	48	34	186	8	228	578
03:15 PM	40	52	48	140	2	97	56	155	5	32	1	38	48	222	8	278	611
03:30 PM	45	46	47	138	6	130	48	184	2	15	3	20	34	191	8	233	575
03:45 PM	31	44	37	112	6	109	44	159	6	22	1	29	36	171	9	216	516
Total	160	199	160	519	15	453	203	671	18	111	6	135	152	770	33	955	2280
04:00 PM	43	55	43	141	3	119	58	180	4	22	2	28	39	212	11	262	611
04:15 PM	49	45	35	129	3	107	46	156	4	30	1	35	44	230	3	277	597
04:30 PM	47	38	43	128	3	111	46	160	4	28	3	35	55	197	15	267	590
04:45 PM	39	41	35	115	11	121	44	176	4	27	1	32	36	207	8	251	574
Total	178	179	156	513	20	458	194	672	16	107	7	130	174	846	37	1057	2372
05:00 PM	41	50	35	126	7	117	46	170	2	29	2	33	33	208	7	248	577
05:15 PM	38	54	37	129	8	120	40	168	4	18	1	23	44	215	5	264	584
05:30 PM	47	52	40	139	6	122	40	168	8	32	1	41	43	228	10	281	629
05:45 PM	37	41	37	115	2	88	47	137	5	29	0	34	35	236	8	279	565
Total	163	197	149	509	23	447	173	643	19	108	4	131	155	887	30	1072	2355
Grand Total	501	575	465	1541	58	1358	570	1986	53	326	17	396	481	2503	100	3084	7007
Apprch %	32.5	37.3	30.2		2.9	68.4	28.7		13.4	82.3	4.3		15.6	81.2	3.2		
Total %	7.1	8.2	6.6	22	0.8	19.4	8.1	28.3	0.8	4.7	0.2	5.7	6.9	35.7	1.4	44	
Passenger Vehicles	487	573	461	1521	58	1344	559	1961	53	325	16	394	477	2469	98	3044	6920
% Passenger Vehicles	97.2	99.7	99.1	98.7	100	99	98.1	98.7	100	99.7	94.1	99.5	99.2	98.6	98	98.7	98.8
Dual Wheeled	3	2	3	8	0	8	3	11	0	1	0	1	4	24	2	30	50
% Dual Wheeled	0.6	0.3	0.6	0.5	0	0.6	0.5	0.6	0	0.3	0	0.3	0.8	1	2	1	0.7
Buses	11	0	1	12	0	6	8	14	0	0	1	1	0	10	0	10	37
% Buses	2.2	0	0.2	0.8	0	0.4	1.4	0.7	0	0	5.9	0.3	0	0.4	0	0.3	0.5

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	43	**55**	**43**	**141**	3	119	**58**	**180**	**4**	22	2	28	39	212	11	262	**611**
04:15 PM	**49**	45	35	129	3	107	46	156	4	**30**	1	**35**	44	**230**	3	**277**	597
04:30 PM	47	38	43	128	3	111	46	160	4	28	**3**	35	**55**	197	**15**	267	590
04:45 PM	39	41	35	115	**11**	**121**	44	176	4	27	1	32	36	207	8	251	574
Total Volume	178	179	156	513	20	458	194	672	16	107	7	130	174	846	37	1057	2372
% App. Total	34.7	34.9	30.4		3	68.2	28.9		12.3	82.3	5.4		16.5	80	3.5		
PHF	.908	.814	.907	.910	.455	.946	.836	.933	1.00	.892	.583	.929	.791	.920	.617	.954	.971

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File Name : 03_LAC_SR_Stoc PM
Site Code : 04122535
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Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:15 PM				04:45 PM				03:00 PM				05:00 PM			
+0 mins.	40	52	**48**	140	**11**	121	44	**176**	5	**42**	1	**48**	33	208	7	248
+15 mins.	**45**	46	47	138	7	117	**46**	170	5	32	1	38	**44**	215	5	264
+30 mins.	31	44	37	112	8	120	40	168	2	15	**3**	20	43	228	**10**	**281**
+45 mins.	43	**55**	43	**141**	6	**122**	40	168	**6**	22	1	29	35	**236**	8	279
Total Volume	159	197	175	531	32	480	170	682	18	111	6	135	155	887	30	1072
% App. Total	29.9	37.1	33		4.7	70.4	24.9		13.3	82.2	4.4		14.5	82.7	2.8	
PHF	.883	.895	.911	.941	.727	.984	.924	.969	.750	.661	.500	.703	.881	.940	.750	.954

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File Name : 03_LAC_SR_Stoc PM
Site Code : 04122535
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Groups Printed- Passenger Vehicles

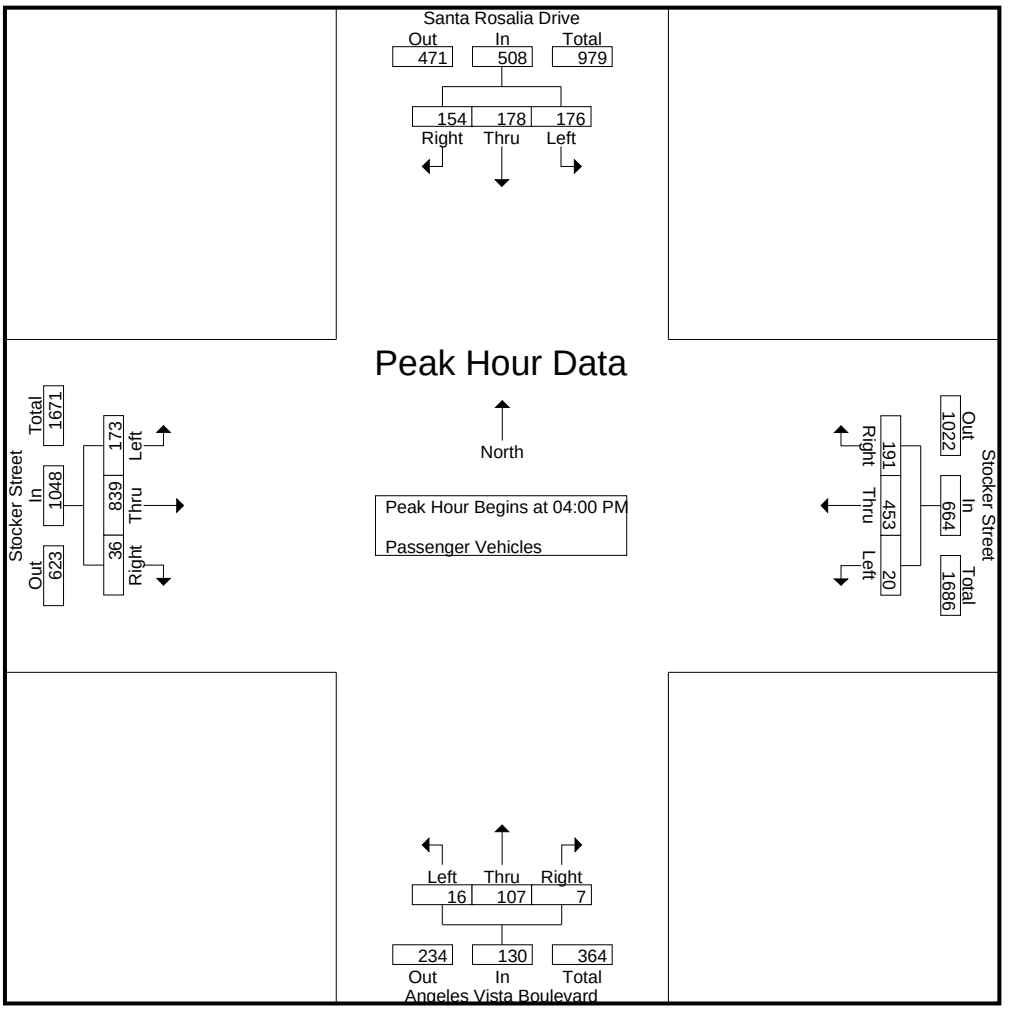
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	38	57	28	123	1	116	54	171	5	42	1	48	34	182	8	224	566
03:15 PM	39	52	48	139	2	96	56	154	5	31	1	37	48	220	7	275	605
03:30 PM	43	46	47	136	6	130	46	182	2	15	2	19	33	187	8	228	565
03:45 PM	30	44	37	111	6	108	43	157	6	22	1	29	35	165	9	209	506
Total	150	199	160	509	15	450	199	664	18	110	5	133	150	754	32	936	2242
04:00 PM	43	55	42	140	3	118	57	178	4	22	2	28	39	210	11	260	606
04:15 PM	48	45	35	128	3	106	46	155	4	30	1	35	44	226	2	272	590
04:30 PM	46	38	42	126	3	110	46	159	4	28	3	35	54	196	15	265	585
04:45 PM	39	40	35	114	11	119	42	172	4	27	1	32	36	207	8	251	569
Total	176	178	154	508	20	453	191	664	16	107	7	130	173	839	36	1048	2350
05:00 PM	40	49	35	124	7	116	45	168	2	29	2	33	32	204	7	243	568
05:15 PM	37	54	37	128	8	118	39	165	4	18	1	23	44	213	5	262	578
05:30 PM	47	52	40	139	6	120	39	165	8	32	1	41	43	225	10	278	623
05:45 PM	37	41	35	113	2	87	46	135	5	29	0	34	35	234	8	277	559
Total	161	196	147	504	23	441	169	633	19	108	4	131	154	876	30	1060	2328
Grand Total	487	573	461	1521	58	1344	559	1961	53	325	16	394	477	2469	98	3044	6920
Apprch %	32	37.7	30.3		3	68.5	28.5		13.5	82.5	4.1		15.7	81.1	3.2		
Total %	7	8.3	6.7	22	0.8	19.4	8.1	28.3	0.8	4.7	0.2	5.7	6.9	35.7	1.4	44	

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	43	**55**	**42**	**140**	3	118	**57**	**178**	**4**	22	2	28	39	210	11	260	**606**
04:15 PM	**48**	45	35	128	3	106	46	155	4	**30**	1	**35**	44	**226**	2	**272**	590
04:30 PM	46	38	42	126	3	110	46	159	4	28	**3**	35	**54**	196	**15**	265	585
04:45 PM	39	40	35	114	**11**	**119**	42	172	4	27	1	32	36	207	8	251	569
Total Volume	176	178	154	508	20	453	191	664	16	107	7	130	173	839	36	1048	2350
% App. Total	34.6	35	30.3		3	68.2	28.8		12.3	82.3	5.4		16.5	80.1	3.4		
PHF	.917	.809	.917	.907	.455	.952	.838	.933	1.00	.892	.583	.929	.801	.928	.600	.963	.969

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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	43	**55**	**42**	**140**	3	118	**57**	**178**	**4**	22	2	28	39	210	11	260
+15 mins.	**48**	45	35	128	3	106	46	155	4	**30**	1	**35**	44	**226**	2	**272**
+30 mins.	46	38	42	126	3	110	46	159	4	28	**3**	35	**54**	196	**15**	265
+45 mins.	39	40	35	114	**11**	**119**	42	172	4	27	1	32	36	207	8	251
Total Volume	176	178	154	508	20	453	191	664	16	107	7	130	173	839	36	1048
% App. Total	34.6	35	30.3		3	68.2	28.8		12.3	82.3	5.4		16.5	80.1	3.4	
PHF	.917	.809	.917	.907	.455	.952	.838	.933	1.000	.892	.583	.929	.801	.928	.600	.963

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File Name : 03_LAC_SR_Stoc PM
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Groups Printed- Dual Wheeled

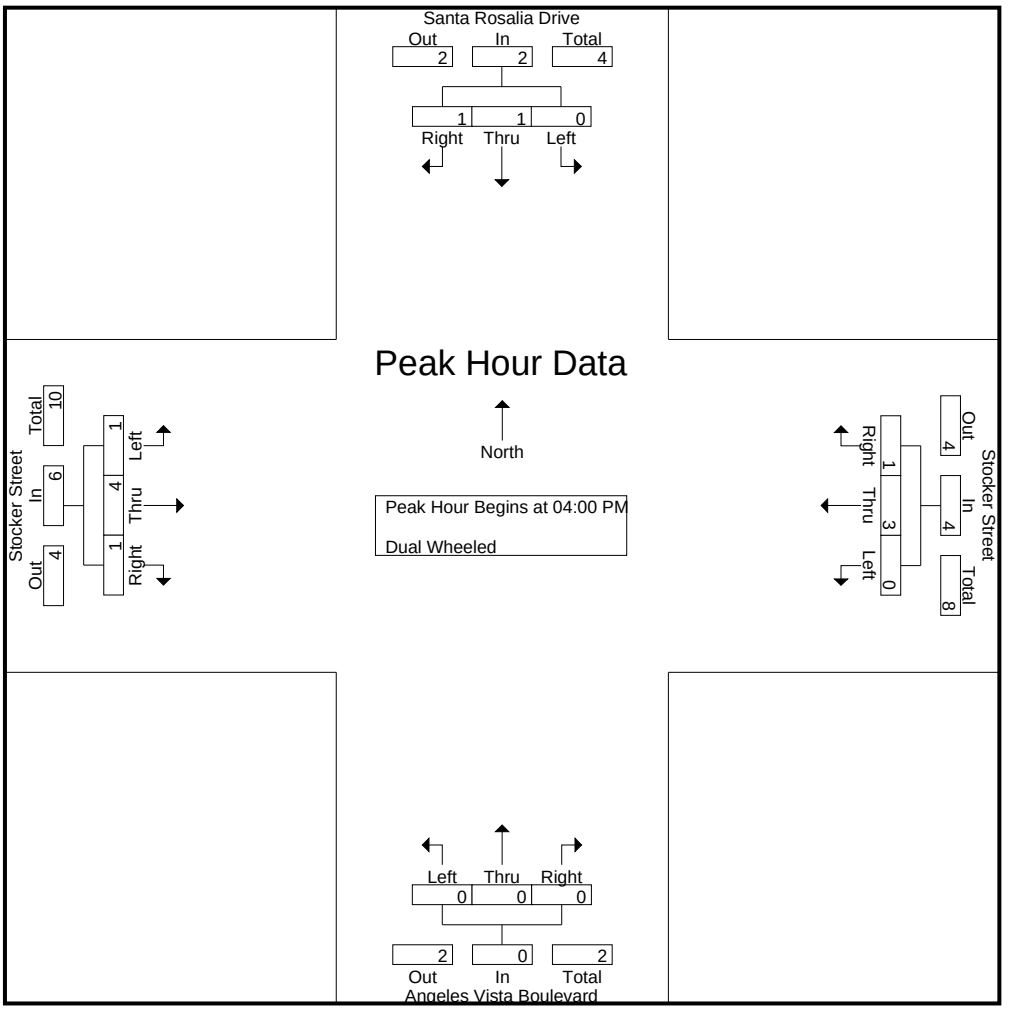
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	3	0	3	5
03:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	2	3
03:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	1	4	0	5	6
03:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	1	4	0	5	6
Total	2	0	0	2	0	1	1	2	0	1	0	1	2	12	1	15	20
04:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1	3	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
04:45 PM	0	1	0	1	0	2	1	3	0	0	0	0	0	0	0	0	4
Total	0	1	1	2	0	3	1	4	0	0	0	0	1	4	1	6	12
05:00 PM	1	1	0	2	0	1	0	1	0	0	0	0	1	2	0	3	6
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
05:30 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	3	0	3	5
05:45 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	1	3
Total	1	1	2	4	0	4	1	5	0	0	0	0	1	8	0	9	18
Grand Total	3	2	3	8	0	8	3	11	0	1	0	1	4	24	2	30	50
Apprch %	37.5	25	37.5		0	72.7	27.3		0	100	0		13.3	80	6.7		
Total %	6	4	6	16	0	16	6	22	0	2	0	2	8	48	4	60	

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	**1**	**3**	**4**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	2	2
04:45 PM	0	**1**	0	1	0	**2**	**1**	**3**	0	0	0	0	0	0	0	0	4
Total Volume	0	1	1	2	0	3	1	4	0	0	0	0	1	4	1	6	12
% App. Total	0	50	50		0	75	25		0	0	0		16.7	66.7	16.7		
PHF	.000	.250	.250	.500	.000	.375	.250	.333	.000	.000	.000	.000	.250	.500	.250	.500	.750

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City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	**1**	**3**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	0	2
+45 mins.	0	**1**	0	1	0	**2**	**1**	**3**	0	0	0	0	0	0	0	0
Total Volume	0	1	1	2	0	3	1	4	0	0	0	0	1	4	1	6
% App. Total	0	50	50		0	75	25		0	0	0		16.7	66.7	16.7	
PHF	.000	.250	.250	.500	.000	.375	.250	.333	.000	.000	.000	.000	.250	.500	.250	.500

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

City of Los Angeles
N/S: Santa Rosalia Dr/Angeles Vista Blvd
E/W: Stocker Street
Weather: Clear

File Name : 03_LAC_SR_Stoc PM
Site Code : 04122535
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Groups Printed- Buses

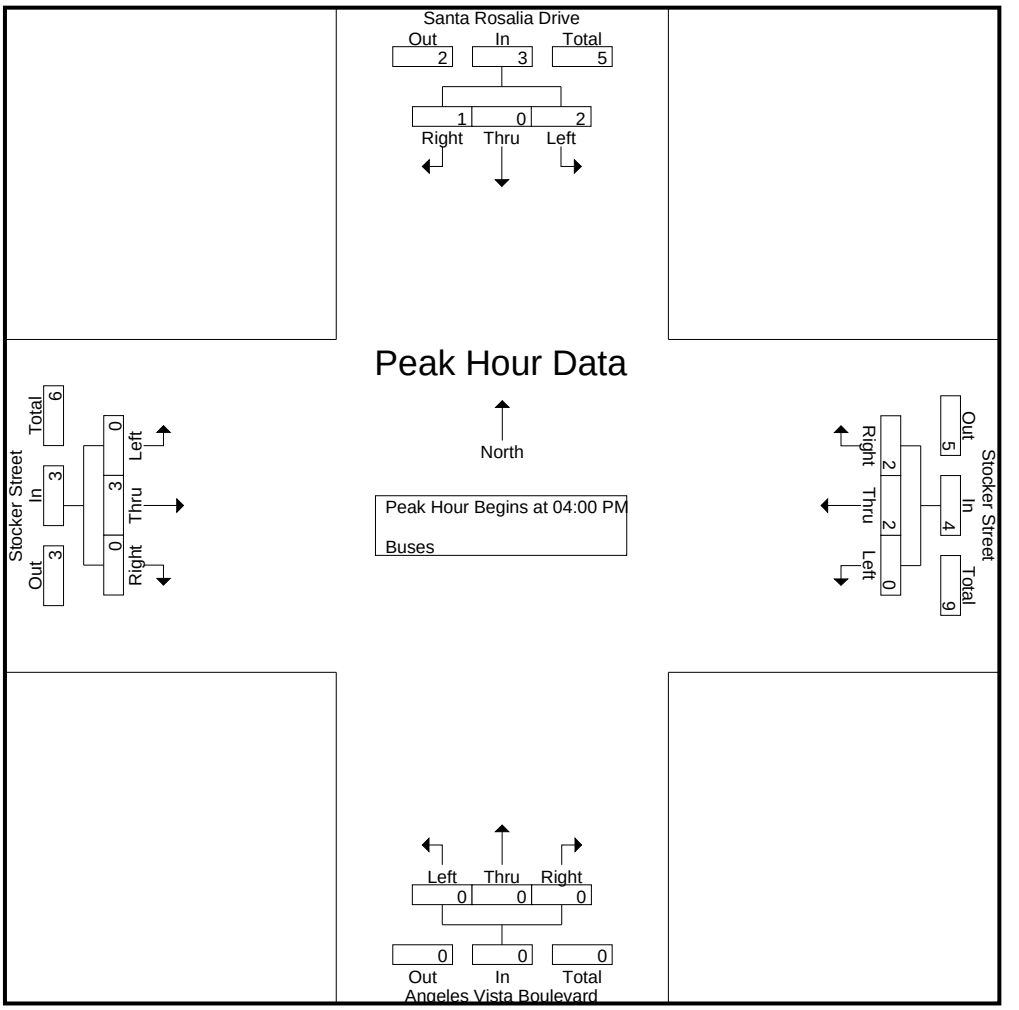
	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	5	0	0	5	0	0	1	1	0	0	0	0	0	1	0	1	7
03:15 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
03:30 PM	1	0	0	1	0	0	2	2	0	0	1	1	0	0	0	0	4
03:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	2	0	2	4
Total	8	0	0	8	0	2	3	5	0	0	1	1	0	4	0	4	18
04:00 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	3
04:15 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0	2	3
04:30 PM	1	0	1	2	0	1	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	2	0	1	3	0	2	2	4	0	0	0	0	0	3	0	3	10
05:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
05:15 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	3
Total	1	0	0	1	0	2	3	5	0	0	0	0	0	3	0	3	9
Grand Total	11	0	1	12	0	6	8	14	0	0	1	1	0	10	0	10	37
Apprch %	91.7	0	8.3		0	42.9	57.1		0	0	100		0	100	0		
Total %	29.7	0	2.7	32.4	0	16.2	21.6	37.8	0	0	2.7	2.7	0	27	0	27	

	Santa Rosalia Drive Southbound				Stocker Street Westbound				Angeles Vista Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	0	1	0	1	**3**
04:15 PM	**1**	0	0	1	0	0	0	0	0	0	0	0	0	**2**	0	**2**	3
04:30 PM	1	0	**1**	**2**	0	1	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Volume	2	0	1	3	0	2	2	4	0	0	0	0	0	3	0	3	10
% App. Total	66.7	0	33.3		0	50	50		0	0	0		0	100	0		
PHF	.500	.000	.250	.375	.000	.500	.500	.500	.000	.000	.000	.000	.000	.375	.000	.375	.833

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Start Date : 6/1/2022
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	0	1	0	1
+15 mins.	**1**	0	0	1	0	0	0	0	0	0	0	0	0	**2**	0	**2**
+30 mins.	1	0	**1**	**2**	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Total Volume	2	0	1	3	0	2	2	4	0	0	0	0	0	3	0	3
% App. Total	66.7	0	33.3		0	50	50		0	0	0		0	100	0	
PHF	.500	.000	.250	.375	.000	.500	.500	.500	.000	.000	.000	.000	.000	.375	.000	.375

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Santa Rosalia Drive/Angeles Vista Boulevard

East/West Stocker Street

Day: Tuesday **Date:** June 7, 2022 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Southern I/S CODE 5337

	N/B	S/B	E/B	W/B
DUAL-WHEELED	3	16	44	42
BIKES	8	12	7	3
BUSES	1	28	23	38

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	55	8.00	113	7.45	175	8.45	289	7.45
PM PK 15 MIN	48	3.00	141	4.00	281	5.30	184	3.30
AM PK HOUR	201	7.30	392	7.15	656	7.30	1093	7.30
PM PK HOUR	135	3.00	531	3.15	1072	5.00	682	4.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	26	129	12	167
8-9	24	139	6	169
9-10	18	64	7	89
3-4	18	111	6	135
4-5	16	107	7	130
5-6	19	108	4	131
TOTAL	121	658	42	821

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	107	131	108	346
8-9	109	145	110	364
9-10	116	95	93	304
3-4	160	199	160	519
4-5	178	179	156	513
5-6	163	197	149	509
TOTAL	833	946	776	2555

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
513	11	0	4	0
533	11	0	8	0
393	12	0	8	0
654	2	0	16	0
643	9	0	5	0
640	5	0	12	0
3376	50	0	53	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	102	458	12	572
8-9	136	488	23	647
9-10	117	406	17	540
3-4	152	770	33	955
4-5	174	846	37	1057
5-6	155	887	30	1072
TOTAL	836	3855	152	4843

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	7	818	190	1015
8-9	7	773	186	966
9-10	7	476	160	643
3-4	15	453	203	671
4-5	20	458	194	672
5-6	23	447	173	643
TOTAL	79	3425	1106	4610

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
1587	5	0	0	0
1613	5	0	2	0
1183	7	0	1	0
1626	7	0	2	0
1729	3	0	0	0
1715	9	0	0	0
9453	36	0	5	0

(Rev Oct 06)

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:
North/South: Santa Rosalia Drive/Angeles Vista Boulevard
East/West: Stocker Street

Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	Yes	District:	Southern	I/S Code:	5337
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	2	1	3
8-9	0	0	1	1
9-10	0	1	0	1
3-4	0	1	0	1
4-5	0	1	0	1
5-6	0	1	0	1
TOTAL	0	6	2	8

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	3	1	4
3-4	0	2	0	2
4-5	0	2	1	3
5-6	0	3	0	3
TOTAL	0	10	2	12

TOTAL

Hours	N-S
7-8	3
8-9	1
9-10	5
3-4	3
4-5	4
5-6	4
TOTAL	20

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	1	2	3
3-4	0	0	0	0
4-5	0	1	0	1
5-6	1	1	1	3
TOTAL	1	3	3	7

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	1	1	2
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	1	0	1
TOTAL	0	2	1	3

TOTAL

Hours	E-W
7-8	0
8-9	2
9-10	3
3-4	0
4-5	1
5-6	4
TOTAL	10

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female Riders	0	0	0	1	1
- No helmet riders	4	8	4	2	18
- Sidewalk Riding	2	7	4	2	15
- Wrong way riding	1	3	1	0	5

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: CUI

LADOT 2015 CMP

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:

North/South:	Santa Rosalia Drive/Angeles Vista Boulevard				
East/West:	Stocker Street				
Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	YES	District:	Southern	I/S Code:	5337
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

AM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00-7:15	3	3	0	2	8
7:15-7:30	0	1	0	0	1
7:30-7:45	0	4	0	0	4
7:45-8:00	1	3	0	3	7
8:00-8:15	4	2	0	1	7
8:15-8:30	2	0	1	0	3
8:30-8:45	1	5	0	2	8
8:45-9:00	1	4	1	2	8
9:00-9:15	6	2	0	2	10
9:15-9:30	1	0	0	2	3
9:30-9:45	1	8	1	0	10
9:45-10:00	0	2	0	3	5
Hours					
7 - 8	4	11	0	5	20
8 - 9	8	11	2	5	26
9 - 10	8	12	1	7	28
TOTAL	20	34	3	17	74

PM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00-3:15	2	1	0	0	3
3:15-3:30	7	0	0	3	10
3:30-3:45	3	1	0	0	4
3:45-4:00	4	0	2	4	10
4:00-4:15	1	3	0	2	6
4:15-4:30	0	2	0	1	3
4:30-4:45	2	2	0	0	4
4:45-5:00	2	2	0	0	4
5:00-5:15	6	1	0	2	9
5:15-5:30	2	1	0	0	3
5:30-5:45	2	1	0	2	5
5:45-6:00	2	2	0	5	9
Hours					
3 - 4	16	2	2	7	27
4 - 5	5	9	0	3	17
5 - 6	12	5	0	9	26
	33	16	2	19	70

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	0	0	0	0
- Skateboard/scooter	0	0	0	1	1

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2015 CMP

Counts Unlimited, Inc.
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City of Los Angeles
N/S: Santa Rosalia Drive
E/W: Marlton Avenue
Weather: Clear

File Name : 01_LAC_SR_Mar AM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

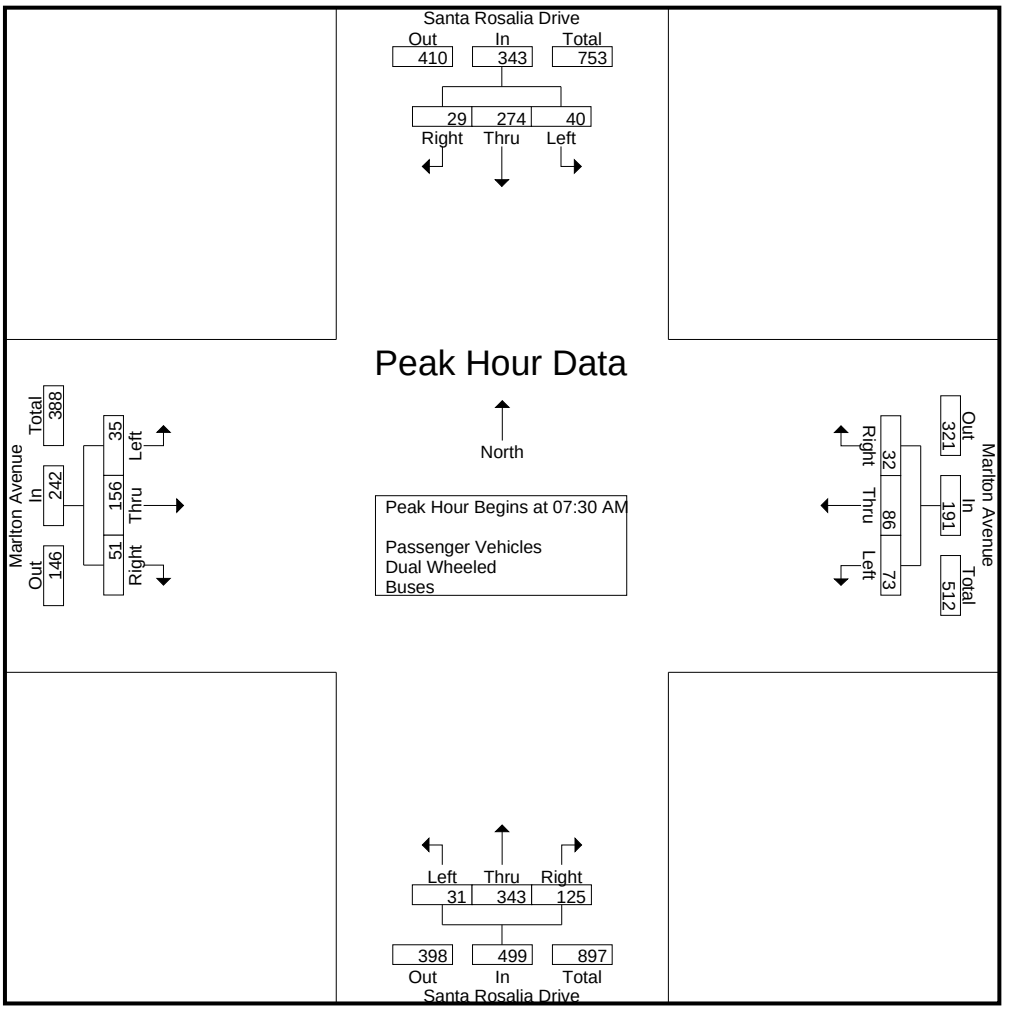
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	51	2	59	9	9	5	23	7	52	18	77	3	15	3	21	180
07:15 AM	10	58	0	68	15	19	4	38	2	69	26	97	3	21	6	30	233
07:30 AM	10	61	4	75	19	28	10	57	8	79	26	113	9	41	11	61	306
07:45 AM	10	85	14	109	14	25	8	47	9	88	22	119	14	45	16	75	350
Total	36	255	20	311	57	81	27	165	26	288	92	406	29	122	36	187	1069
08:00 AM	7	77	4	88	23	19	7	49	5	95	37	137	10	32	11	53	327
08:15 AM	13	51	7	71	17	14	7	38	9	81	40	130	2	38	13	53	292
08:30 AM	3	56	5	64	21	19	10	50	4	55	24	83	7	23	8	38	235
08:45 AM	12	64	5	81	25	14	12	51	10	53	26	89	7	26	12	45	266
Total	35	248	21	304	86	66	36	188	28	284	127	439	26	119	44	189	1120
09:00 AM	9	45	3	57	21	9	15	45	5	62	31	98	4	17	11	32	232
09:15 AM	17	37	4	58	29	16	7	52	8	49	29	86	3	17	13	33	229
09:30 AM	10	57	1	68	25	17	7	49	7	50	29	86	3	21	10	34	237
09:45 AM	7	54	1	62	20	14	10	44	2	33	26	61	7	34	10	51	218
Total	43	193	9	245	95	56	39	190	22	194	115	331	17	89	44	150	916
Grand Total	114	696	50	860	238	203	102	543	76	766	334	1176	72	330	124	526	3105
Apprch %	13.3	80.9	5.8		43.8	37.4	18.8		6.5	65.1	28.4		13.7	62.7	23.6		
Total %	3.7	22.4	1.6	27.7	7.7	6.5	3.3	17.5	2.4	24.7	10.8	37.9	2.3	10.6	4	16.9	
Passenger Vehicles	96	679	47	822	234	202	81	517	75	745	331	1151	69	325	121	515	3005
% Passenger Vehicles	84.2	97.6	94	95.6	98.3	99.5	79.4	95.2	98.7	97.3	99.1	97.9	95.8	98.5	97.6	97.9	96.8
Dual Wheeled	2	5	2	9	3	1	1	5	0	5	3	8	1	1	1	3	25
% Dual Wheeled	1.8	0.7	4	1	1.3	0.5	1	0.9	0	0.7	0.9	0.7	1.4	0.3	0.8	0.6	0.8
Buses	16	12	1	29	1	0	20	21	1	16	0	17	2	4	2	8	75
% Buses	14	1.7	2	3.4	0.4	0	19.6	3.9	1.3	2.1	0	1.4	2.8	1.2	1.6	1.5	2.4

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	10	61	4	75	19	**28**	**10**	**57**	8	79	26	113	9	41	11	61	306
07:45 AM	10	**85**	**14**	**109**	14	25	8	47	**9**	88	22	119	**14**	**45**	**16**	**75**	**350**
08:00 AM	7	77	4	88	**23**	19	7	49	5	**95**	37	**137**	10	32	11	53	327
08:15 AM	**13**	51	7	71	17	14	7	38	9	81	**40**	130	2	38	13	53	292
Total Volume	40	274	29	343	73	86	32	191	31	343	125	499	35	156	51	242	1275
% App. Total	11.7	79.9	8.5		38.2	45	16.8		6.2	68.7	25.1		14.5	64.5	21.1		
PHF	.769	.806	.518	.787	.793	.768	.800	.838	.861	.903	.781	.911	.625	.867	.797	.807	.911

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Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				08:30 AM				07:30 AM				07:30 AM			
+0 mins.	10	61	4	75	21	**19**	10	50	8	79	26	113	9	41	11	61
+15 mins.	10	**85**	**14**	**109**	25	14	12	51	**9**	88	22	119	**14**	**45**	**16**	**75**
+30 mins.	7	77	4	88	21	9	**15**	45	5	**95**	37	**137**	10	32	11	53
+45 mins.	**13**	51	7	71	**29**	16	7	**52**	9	81	**40**	130	2	38	13	53
Total Volume	40	274	29	343	96	58	44	198	31	343	125	499	35	156	51	242
% App. Total	11.7	79.9	8.5		48.5	29.3	22.2		6.2	68.7	25.1		14.5	64.5	21.1	
PHF	.769	.806	.518	.787	.828	.763	.733	.952	.861	.903	.781	.911	.625	.867	.797	.807

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File Name : 01_LAC_SR_Mar AM
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Groups Printed- Passenger Vehicles

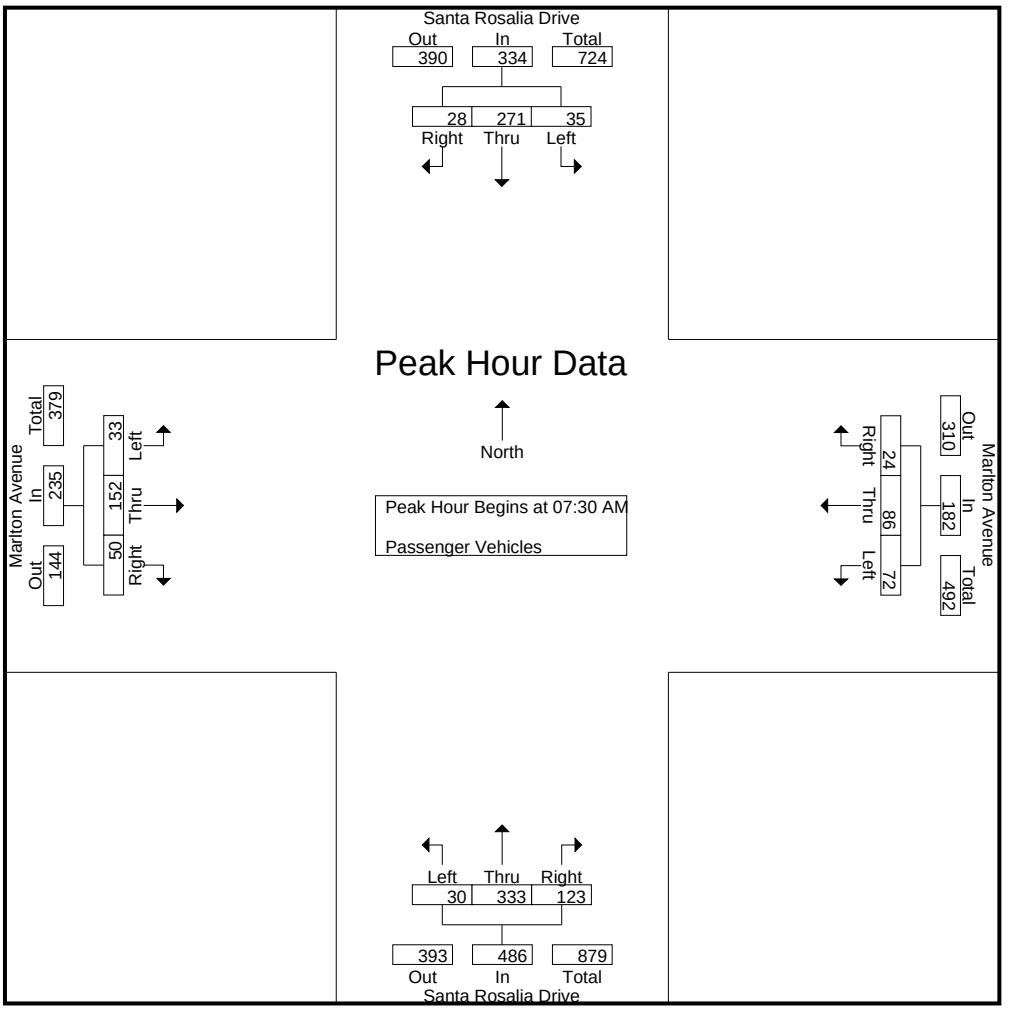
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	50	2	57	9	9	4	22	7	50	18	75	3	15	3	21	175
07:15 AM	8	54	0	62	15	19	3	37	2	67	26	95	2	21	6	29	223
07:30 AM	9	60	4	73	19	28	8	55	8	77	24	109	9	41	11	61	298
07:45 AM	8	84	14	106	14	25	5	44	8	82	22	112	12	44	15	71	333
Total	30	248	20	298	57	81	20	158	25	276	90	391	26	121	35	182	1029
08:00 AM	7	76	3	86	23	19	5	47	5	95	37	137	10	30	11	51	321
08:15 AM	11	51	7	69	16	14	6	36	9	79	40	128	2	37	13	52	285
08:30 AM	2	55	4	61	21	19	8	48	4	54	24	82	7	22	8	37	228
08:45 AM	11	63	5	79	25	13	10	48	10	51	26	87	7	26	11	44	258
Total	31	245	19	295	85	65	29	179	28	279	127	434	26	115	43	184	1092
09:00 AM	7	44	3	54	18	9	12	39	5	60	30	95	4	17	11	32	220
09:15 AM	16	35	4	55	29	16	6	51	8	49	29	86	3	17	13	33	225
09:30 AM	7	55	0	62	25	17	6	48	7	49	29	85	3	21	9	33	228
09:45 AM	5	52	1	58	20	14	8	42	2	32	26	60	7	34	10	51	211
Total	35	186	8	229	92	56	32	180	22	190	114	326	17	89	43	149	884
Grand Total	96	679	47	822	234	202	81	517	75	745	331	1151	69	325	121	515	3005
Apprch %	11.7	82.6	5.7		45.3	39.1	15.7		6.5	64.7	28.8		13.4	63.1	23.5		
Total %	3.2	22.6	1.6	27.4	7.8	6.7	2.7	17.2	2.5	24.8	11	38.3	2.3	10.8	4	17.1	

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	9	60	4	73	19	**28**	**8**	**55**	8	77	24	109	9	41	11	61	298
07:45 AM	8	**84**	**14**	**106**	14	25	5	44	8	82	22	112	**12**	**44**	**15**	**71**	**333**
08:00 AM	7	76	3	86	**23**	19	5	47	5	**95**	37	**137**	10	30	11	51	321
08:15 AM	**11**	51	7	69	16	14	6	36	**9**	79	**40**	128	2	37	13	52	285
Total Volume	35	271	28	334	72	86	24	182	30	333	123	486	33	152	50	235	1237
% App. Total	10.5	81.1	8.4		39.6	47.3	13.2		6.2	68.5	25.3		14	64.7	21.3		
PHF	.795	.807	.500	.788	.783	.768	.750	.827	.833	.876	.769	.887	.688	.864	.833	.827	.929

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City of Los Angeles
N/S: Santa Rosalia Drive
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Weather: Clear

File Name : 01_LAC_SR_Mar AM
Site Code : 04122535
Start Date : 6/1/2022
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	9	60	4	73	19	**28**	**8**	**55**	8	77	24	109	9	41	11	61
+15 mins.	8	**84**	**14**	**106**	14	25	5	44	8	82	22	112	**12**	**44**	**15**	**71**
+30 mins.	7	76	3	86	**23**	19	5	47	5	**95**	37	**137**	10	30	11	51
+45 mins.	**11**	51	7	69	16	14	6	36	**9**	79	**40**	128	2	37	13	52
Total Volume	35	271	28	334	72	86	24	182	30	333	123	486	33	152	50	235
% App. Total	10.5	81.1	8.4		39.6	47.3	13.2		6.2	68.5	25.3		14	64.7	21.3	
PHF	.795	.807	.500	.788	.783	.768	.750	.827	.833	.876	.769	.887	.688	.864	.833	.827

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City of Los Angeles
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File Name : 01_LAC_SR_Mar AM
Site Code : 04122535
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Groups Printed- Dual Wheeled

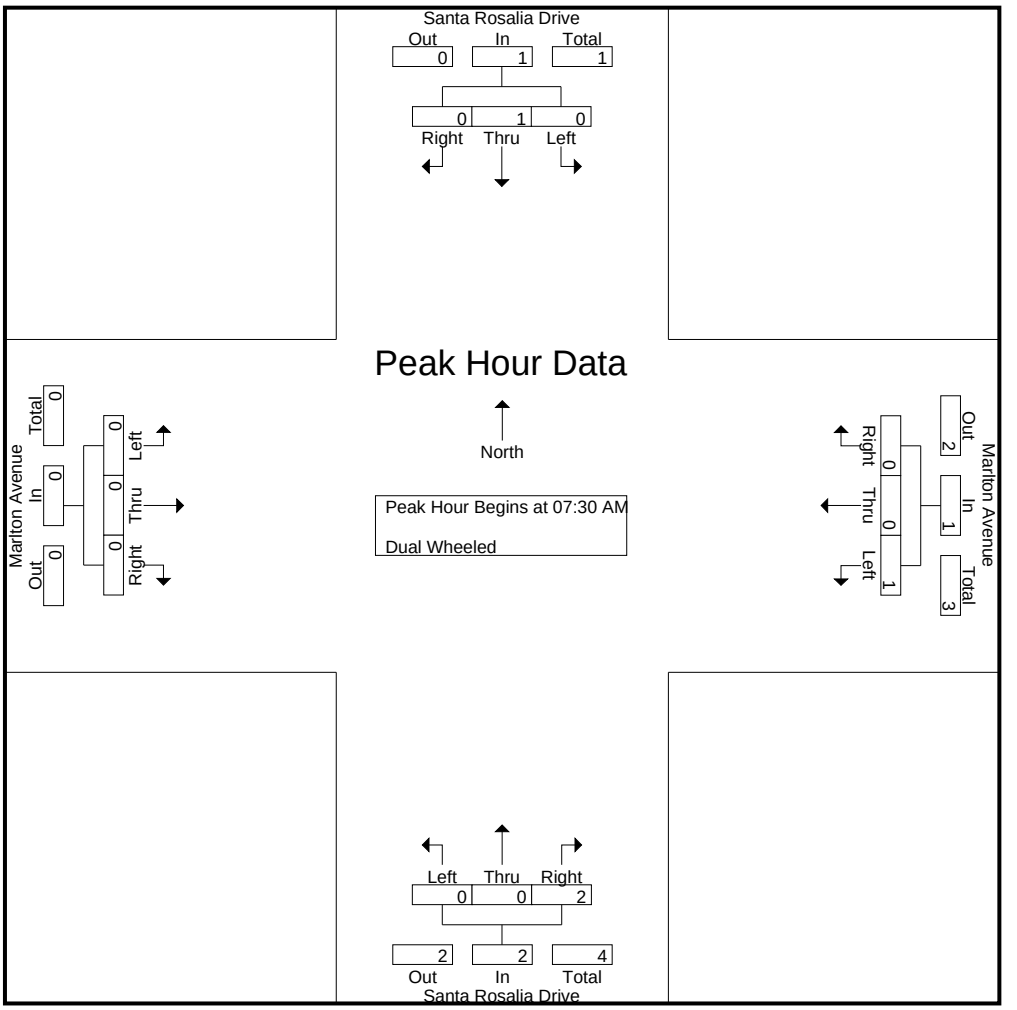
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
07:30 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	2	2	4	1	0	0	1	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	1	1	0	0	0	0	0	1	0	1	0	1	0	1	3
08:45 AM	0	0	0	0	0	1	1	2	0	1	0	1	0	0	0	0	3
Total	0	0	1	1	1	1	1	3	0	2	0	2	0	1	0	1	7
09:00 AM	0	1	0	1	2	0	0	2	0	1	1	2	0	0	0	0	5
09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM	1	2	1	4	0	0	0	0	0	0	0	0	0	0	1	1	5
09:45 AM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	2	4	1	7	2	0	0	2	0	1	1	2	0	0	1	1	12
Grand Total	2	5	2	9	3	1	1	5	0	5	3	8	1	1	1	3	25
Apprch %	22.2	55.6	22.2		60	20	20		0	62.5	37.5		33.3	33.3	33.3		
Total %	8	20	8	36	12	4	4	20	0	20	12	32	4	4	4	12	

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**1**	0	**1**	0	0	0	0	0	0	**2**	**2**	0	0	0	0	**3**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
% App. Total	0	100	0		100	0	0		0	0	100		0	0	0		
PHF	.000	.250	.000	.250	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	.333

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City of Los Angeles
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File Name : 01_LAC_SR_Mar AM
Site Code : 04122535
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	**2**	**2**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	1	0	0	1	0	0	2	2	0	0	0	0
% App. Total	0	100	0		100	0	0		0	0	100		0	0	0	
PHF	.000	.250	.000	.250	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000

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Groups Printed- Buses

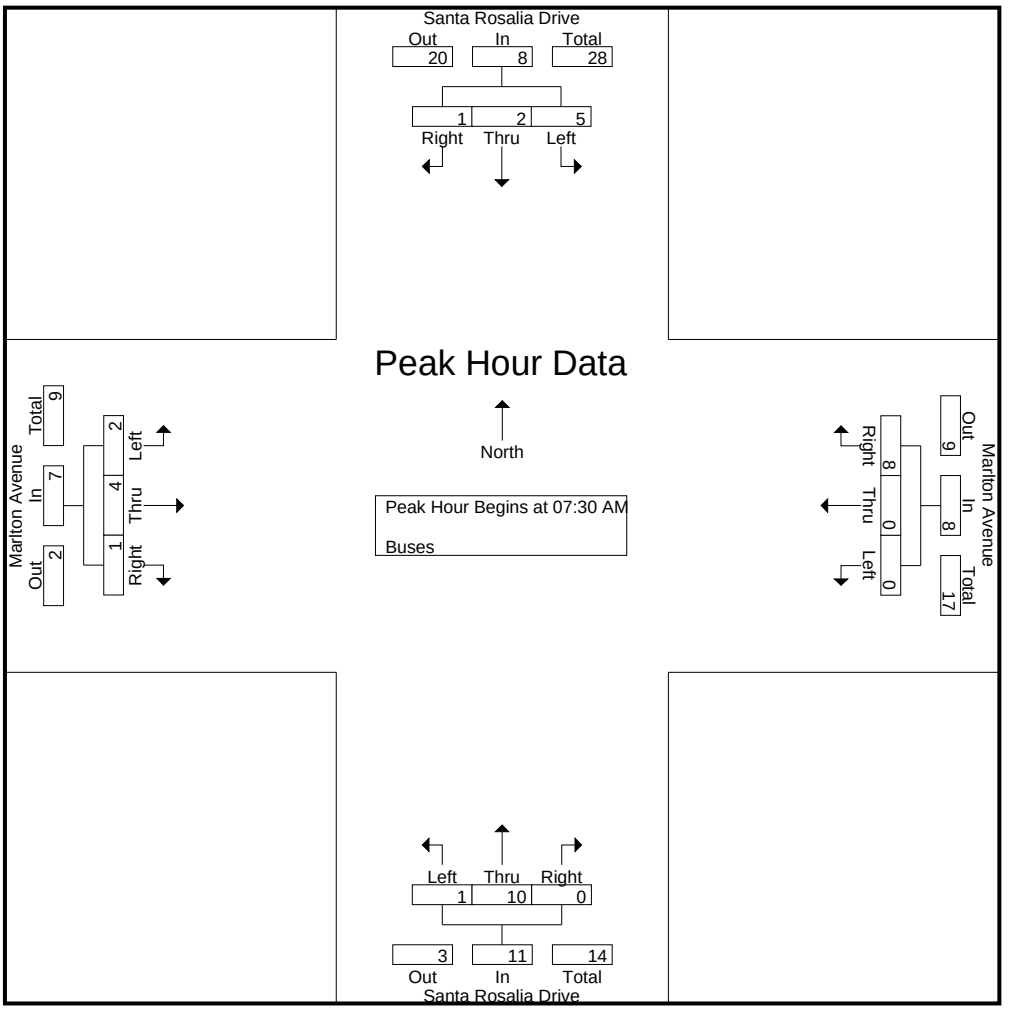
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	1	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
07:15 AM	2	4	0	6	0	0	1	1	0	1	0	1	0	0	0	0	8
07:30 AM	1	0	0	1	0	0	2	2	0	2	0	2	0	0	0	0	5
07:45 AM	2	1	0	3	0	0	3	3	1	6	0	7	2	1	1	4	17
Total	6	6	0	12	0	0	7	7	1	10	0	11	2	1	1	4	34
08:00 AM	0	1	1	2	0	0	2	2	0	0	0	0	0	2	0	2	6
08:15 AM	2	0	0	2	0	0	1	1	0	2	0	2	0	1	0	1	6
08:30 AM	1	1	0	2	0	0	2	2	0	0	0	0	0	0	0	0	4
08:45 AM	1	1	0	2	0	0	1	1	0	1	0	1	0	0	1	1	5
Total	4	3	1	8	0	0	6	6	0	3	0	3	0	3	1	4	21
09:00 AM	2	0	0	2	1	0	3	4	0	1	0	1	0	0	0	0	7
09:15 AM	1	2	0	3	0	0	1	1	0	0	0	0	0	0	0	0	4
09:30 AM	2	0	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
09:45 AM	1	1	0	2	0	0	2	2	0	1	0	1	0	0	0	0	5
Total	6	3	0	9	1	0	7	8	0	3	0	3	0	0	0	0	20
Grand Total	16	12	1	29	1	0	20	21	1	16	0	17	2	4	2	8	75
Apprch %	55.2	41.4	3.4		4.8	0	95.2		5.9	94.1	0		25	50	25		
Total %	21.3	16	1.3	38.7	1.3	0	26.7	28	1.3	21.3	0	22.7	2.7	5.3	2.7	10.7	

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	0	1	0	0	2	2	0	2	0	2	0	0	0	0	5
07:45 AM	**2**	**1**	0	**3**	0	0	**3**	**3**	**1**	**6**	0	**7**	**2**	1	**1**	**4**	**17**
08:00 AM	0	1	**1**	2	0	0	2	2	0	0	0	0	0	**2**	0	2	6
08:15 AM	2	0	0	2	0	0	1	1	0	2	0	2	0	1	0	1	6
Total Volume	5	2	1	8	0	0	8	8	1	10	0	11	2	4	1	7	34
% App. Total	62.5	25	12.5		0	0	100		9.1	90.9	0		28.6	57.1	14.3		
PHF	.625	.500	.250	.667	.000	.000	.667	.667	.250	.417	.000	.393	.250	.500	.250	.438	.500

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City of Los Angeles
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Weather: Clear

File Name : 01_LAC_SR_Mar AM
Site Code : 04122535
Start Date : 6/1/2022
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	0	0	1	0	0	2	2	0	2	0	2	0	0	0	0
+15 mins.	**2**	**1**	0	**3**	0	0	**3**	**3**	**1**	**6**	0	**7**	**2**	1	**1**	**4**
+30 mins.	0	1	**1**	2	0	0	2	2	0	0	0	0	0	**2**	0	2
+45 mins.	2	0	0	2	0	0	1	1	0	2	0	2	0	1	0	1
Total Volume	5	2	1	8	0	0	8	8	1	10	0	11	2	4	1	7
% App. Total	62.5	25	12.5		0	0	100		9.1	90.9	0		28.6	57.1	14.3	
PHF	.625	.500	.250	.667	.000	.000	.667	.667	.250	.417	.000	.393	.250	.500	.250	.438

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City of Los Angeles
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Weather: Clear

File Name : 01_LAC_SR_Mar PM
Site Code : 04122535
Start Date : 6/1/2022

Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

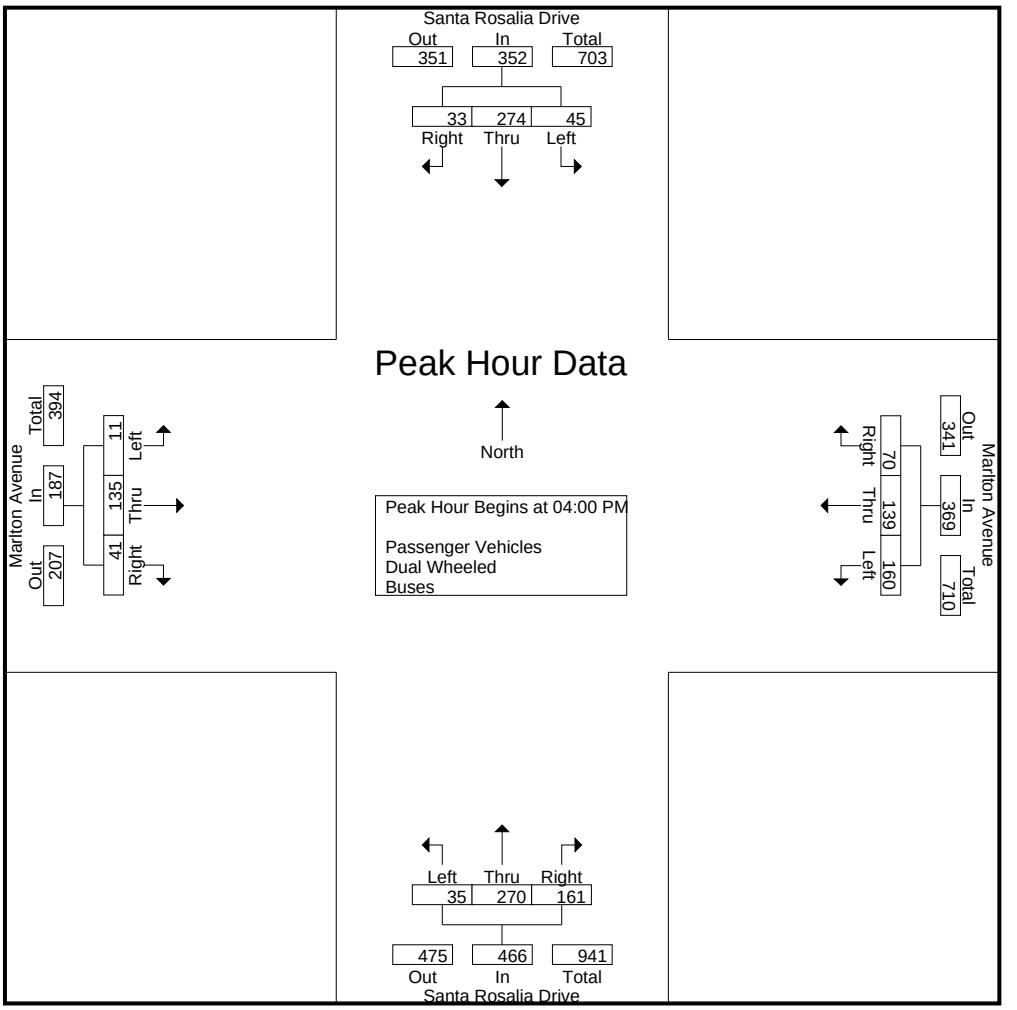
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	11	57	3	71	40	35	11	86	6	76	37	119	5	34	15	54	330
03:15 PM	18	84	6	108	54	19	18	91	15	67	42	124	5	45	8	58	381
03:30 PM	14	79	4	97	46	22	17	85	4	69	34	107	2	18	11	31	320
03:45 PM	17	63	1	81	37	22	12	71	5	63	31	99	4	19	4	27	278
Total	60	283	14	357	177	98	58	333	30	275	144	449	16	116	38	170	1309
04:00 PM	15	75	11	101	43	34	21	98	6	67	37	110	3	24	15	42	351
04:15 PM	11	68	8	87	46	35	14	95	13	54	53	120	6	39	12	57	359
04:30 PM	13	68	8	89	41	35	24	100	7	80	42	129	2	41	8	51	369
04:45 PM	6	63	6	75	30	35	11	76	9	69	29	107	0	31	6	37	295
Total	45	274	33	352	160	139	70	369	35	270	161	466	11	135	41	187	1374
05:00 PM	13	60	9	82	43	33	19	95	13	69	35	117	6	25	15	46	340
05:15 PM	7	66	10	83	42	32	18	92	4	60	31	95	8	21	15	44	314
05:30 PM	16	76	8	100	39	32	16	87	4	64	46	114	5	22	11	38	339
05:45 PM	7	60	7	74	41	30	14	85	8	87	31	126	7	26	14	47	332
Total	43	262	34	339	165	127	67	359	29	280	143	452	26	94	55	175	1325
Grand Total	148	819	81	1048	502	364	195	1061	94	825	448	1367	53	345	134	532	4008
Apprch %	14.1	78.1	7.7		47.3	34.3	18.4		6.9	60.4	32.8		10	64.8	25.2		
Total %	3.7	20.4	2	26.1	12.5	9.1	4.9	26.5	2.3	20.6	11.2	34.1	1.3	8.6	3.3	13.3	
Passenger Vehicles	132	804	81	1017	501	364	178	1043	94	810	446	1350	52	337	129	518	3928
% Passenger Vehicles	89.2	98.2	100	97	99.8	100	91.3	98.3	100	98.2	99.6	98.8	98.1	97.7	96.3	97.4	98
Dual Wheeled	0	8	0	8	1	0	2	3	0	7	2	9	0	2	0	2	22
% Dual Wheeled	0	1	0	0.8	0.2	0	1	0.3	0	0.8	0.4	0.7	0	0.6	0	0.4	0.5
Buses	16	7	0	23	0	0	15	15	0	8	0	8	1	6	5	12	58
% Buses	10.8	0.9	0	2.2	0	0	7.7	1.4	0	1	0	0.6	1.9	1.7	3.7	2.3	1.4

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**15**	**75**	**11**	**101**	43	34	21	98	6	67	37	110	3	24	**15**	42	351
04:15 PM	11	68	8	87	**46**	**35**	14	95	**13**	54	**53**	120	**6**	39	12	**57**	359
04:30 PM	13	68	8	89	41	35	**24**	**100**	7	**80**	42	**129**	2	**41**	8	51	**369**
04:45 PM	6	63	6	75	30	35	11	76	9	69	29	107	0	31	6	37	295
Total Volume	45	274	33	352	160	139	70	369	35	270	161	466	11	135	41	187	1374
% App. Total	12.8	77.8	9.4		43.4	37.7	19		7.5	57.9	34.5		5.9	72.2	21.9		
PHF	.750	.913	.750	.871	.870	.993	.729	.923	.673	.844	.759	.903	.458	.823	.683	.820	.931

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Site Code : 04122535
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Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:15 PM				04:00 PM				04:15 PM				04:15 PM			
+0 mins.	**18**	**84**	6	**108**	43	34	21	98	**13**	54	**53**	120	**6**	39	12	**57**
+15 mins.	14	79	4	97	**46**	**35**	14	95	7	**80**	42	**129**	2	**41**	8	51
+30 mins.	17	63	1	81	41	35	**24**	**100**	9	69	29	107	0	31	6	37
+45 mins.	15	75	**11**	101	30	35	11	76	13	69	35	117	6	25	**15**	46
Total Volume	64	301	22	387	160	139	70	369	42	272	159	473	14	136	41	191
% App. Total	16.5	77.8	5.7		43.4	37.7	19		8.9	57.5	33.6		7.3	71.2	21.5	
PHF	.889	.896	.500	.896	.870	.993	.729	.923	.808	.850	.750	.917	.583	.829	.683	.838

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File Name : 01_LAC_SR_Mar PM
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Groups Printed- Passenger Vehicles

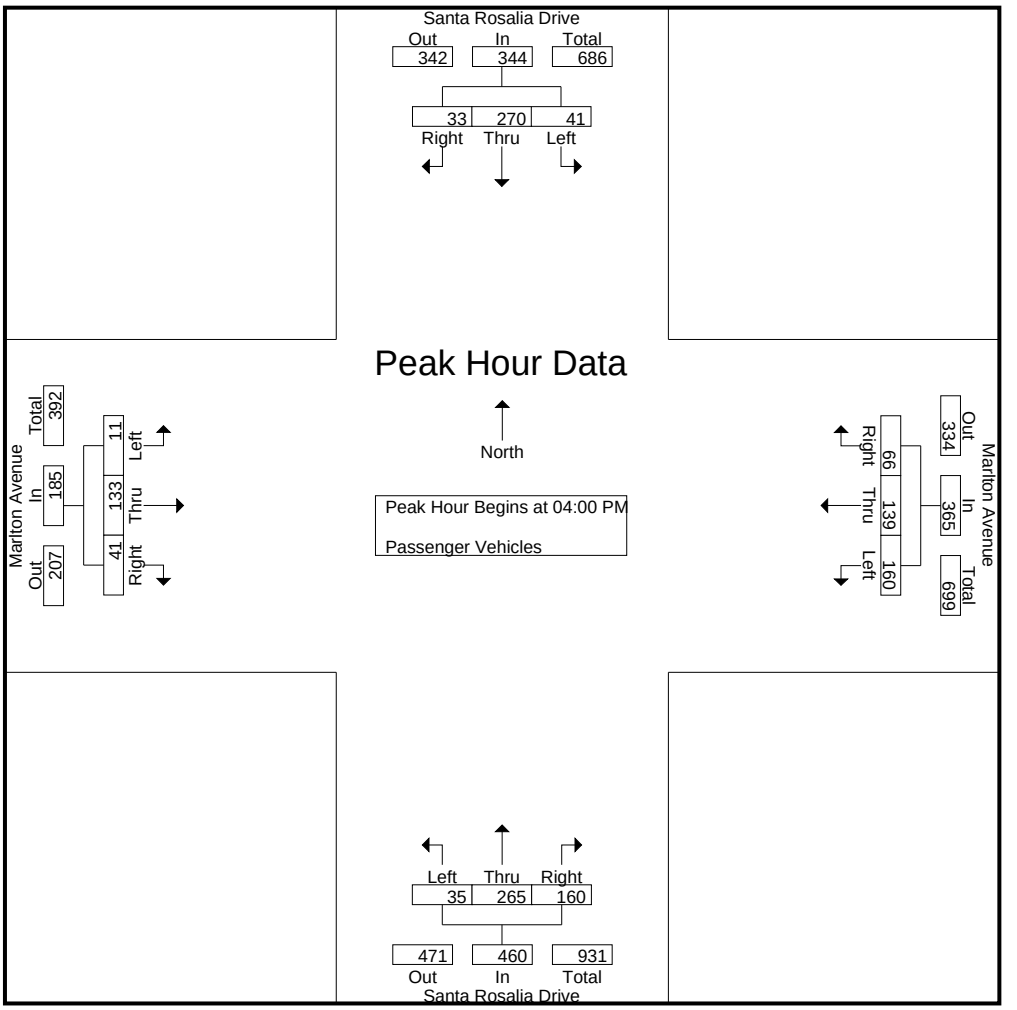
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	9	55	3	67	40	35	9	84	6	75	36	117	4	33	11	48	316
03:15 PM	16	84	6	106	54	19	17	90	15	66	42	123	5	41	7	53	372
03:30 PM	13	77	4	94	46	22	16	84	4	66	34	104	2	18	11	31	313
03:45 PM	15	61	1	77	36	22	10	68	5	62	31	98	4	18	4	26	269
Total	53	277	14	344	176	98	52	326	30	269	143	442	15	110	33	158	1270
04:00 PM	14	75	11	100	43	34	20	97	6	67	37	110	3	24	15	42	349
04:15 PM	10	67	8	85	46	35	14	95	13	52	53	118	6	38	12	56	354
04:30 PM	11	66	8	85	41	35	21	97	7	79	41	127	2	40	8	50	359
04:45 PM	6	62	6	74	30	35	11	76	9	67	29	105	0	31	6	37	292
Total	41	270	33	344	160	139	66	365	35	265	160	460	11	133	41	185	1354
05:00 PM	10	58	9	77	43	33	16	92	13	67	35	115	6	25	15	46	330
05:15 PM	7	65	10	82	42	32	17	91	4	59	31	94	8	21	15	44	311
05:30 PM	15	76	8	99	39	32	14	85	4	64	46	114	5	22	11	38	336
05:45 PM	6	58	7	71	41	30	13	84	8	86	31	125	7	26	14	47	327
Total	38	257	34	329	165	127	60	352	29	276	143	448	26	94	55	175	1304
Grand Total	132	804	81	1017	501	364	178	1043	94	810	446	1350	52	337	129	518	3928
Apprch %	13	79.1	8		48	34.9	17.1		7	60	33		10	65.1	24.9		
Total %	3.4	20.5	2.1	25.9	12.8	9.3	4.5	26.6	2.4	20.6	11.4	34.4	1.3	8.6	3.3	13.2	

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**14**	**75**	**11**	**100**	43	34	20	**97**	6	67	37	110	3	24	**15**	42	349
04:15 PM	10	67	8	85	**46**	**35**	14	95	**13**	52	**53**	118	**6**	38	12	**56**	354
04:30 PM	11	66	8	85	41	35	**21**	97	7	**79**	41	**127**	2	**40**	8	50	**359**
04:45 PM	6	62	6	74	30	35	11	76	9	67	29	105	0	31	6	37	292
Total Volume	41	270	33	344	160	139	66	365	35	265	160	460	11	133	41	185	1354
% App. Total	11.9	78.5	9.6		43.8	38.1	18.1		7.6	57.6	34.8		5.9	71.9	22.2		
PHF	.732	.900	.750	.860	.870	.993	.786	.941	.673	.839	.755	.906	.458	.831	.683	.826	.943

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City of Los Angeles
N/S: Santa Rosalia Drive
E/W: Marlton Avenue
Weather: Clear

File Name : 01_LAC_SR_Mar PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	**14**	**75**	**11**	**100**	43	34	20	**97**	6	67	37	110	3	24	**15**	42
+15 mins.	10	67	8	85	**46**	**35**	14	95	**13**	52	**53**	118	**6**	38	12	**56**
+30 mins.	11	66	8	85	41	35	**21**	97	7	**79**	41	**127**	2	**40**	8	50
+45 mins.	6	62	6	74	30	35	11	76	9	67	29	105	0	31	6	37
Total Volume	41	270	33	344	160	139	66	365	35	265	160	460	11	133	41	185
% App. Total	11.9	78.5	9.6		43.8	38.1	18.1		7.6	57.6	34.8		5.9	71.9	22.2	
PHF	.732	.900	.750	.860	.870	.993	.786	.941	.673	.839	.755	.906	.458	.831	.683	.826

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City of Los Angeles
N/S: Santa Rosalia Drive
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Weather: Clear

File Name : 01_LAC_SR_Mar PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Dual Wheeled

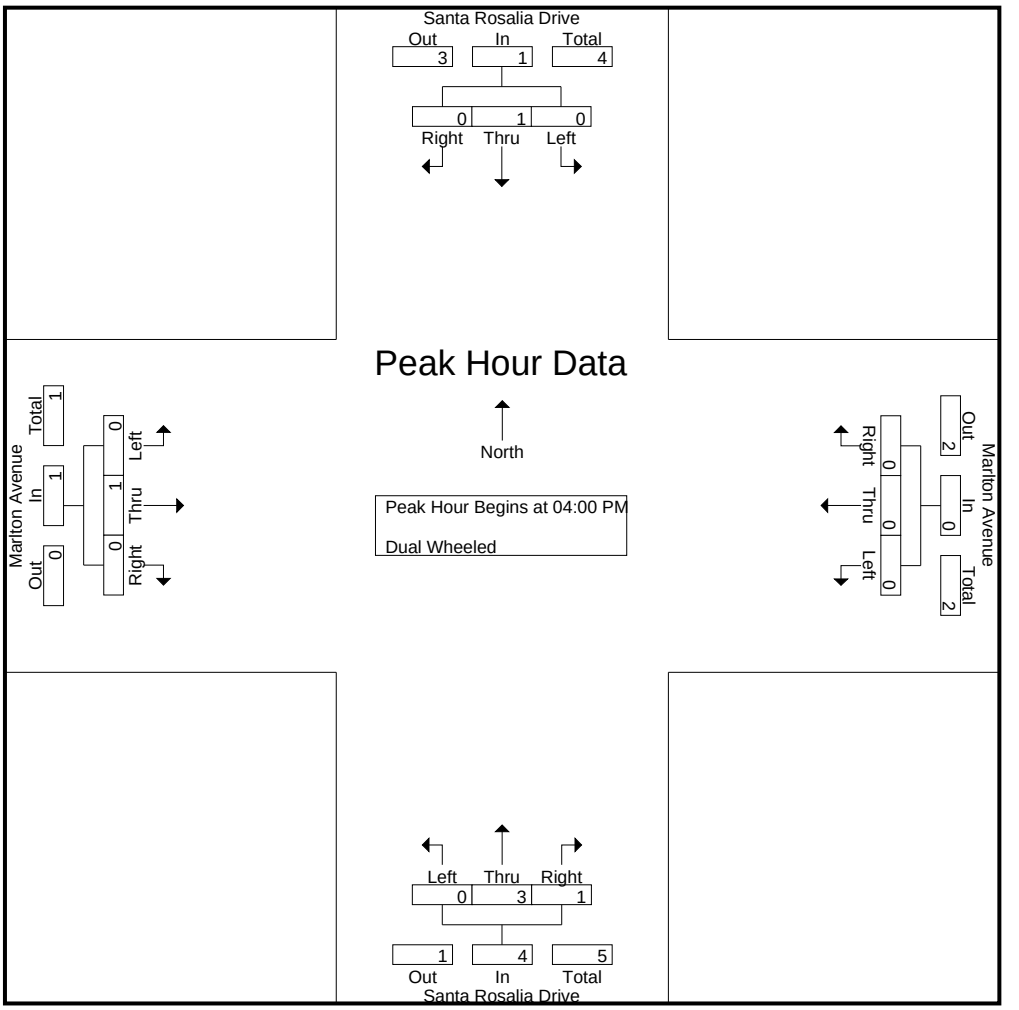
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
03:15 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
03:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
03:45 PM	0	1	0	1	1	0	0	1	0	1	0	1	0	1	0	1	4
Total	0	3	0	3	1	0	1	2	0	3	1	4	0	1	0	1	10
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	1	0	1	0	0	0	0	0	3	1	4	0	1	0	1	6
05:00 PM	0	2	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	4	0	4	0	0	1	1	0	1	0	1	0	0	0	0	6
Grand Total	0	8	0	8	1	0	2	3	0	7	2	9	0	2	0	2	22
Apprch %	0	100	0		33.3	0	66.7		0	77.8	22.2		0	100	0		
Total %	0	36.4	0	36.4	4.5	0	9.1	13.6	0	31.8	9.1	40.9	0	9.1	0	9.1	

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	**1**	0	1	0	**1**	0	**1**	**2**
04:30 PM	0	0	0	0	0	0	0	0	0	1	**1**	**2**	0	0	0	0	2
04:45 PM	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	1	0	1	0	0	0	0	0	3	1	4	0	1	0	1	6
% App. Total	0	100	0		0	0	0		0	75	25		0	100	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.750	.250	.500	.000	.250	.000	.250	.750

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City of Los Angeles
N/S: Santa Rosalia Drive
E/W: Marlton Avenue
Weather: Clear

File Name : 01_LAC_SR_Mar PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	**1**	0	1	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	1	**1**	**2**	0	0	0	0
+45 mins.	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	3	1	4	0	1	0	1
% App. Total	0	100	0		0	0	0		0	75	25		0	100	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.750	.250	.500	.000	.250	.000	.250

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City of Los Angeles
N/S: Santa Rosalia Drive
E/W: Marlton Avenue
Weather: Clear

File Name : 01_LAC_SR_Mar PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 1

Groups Printed- Buses

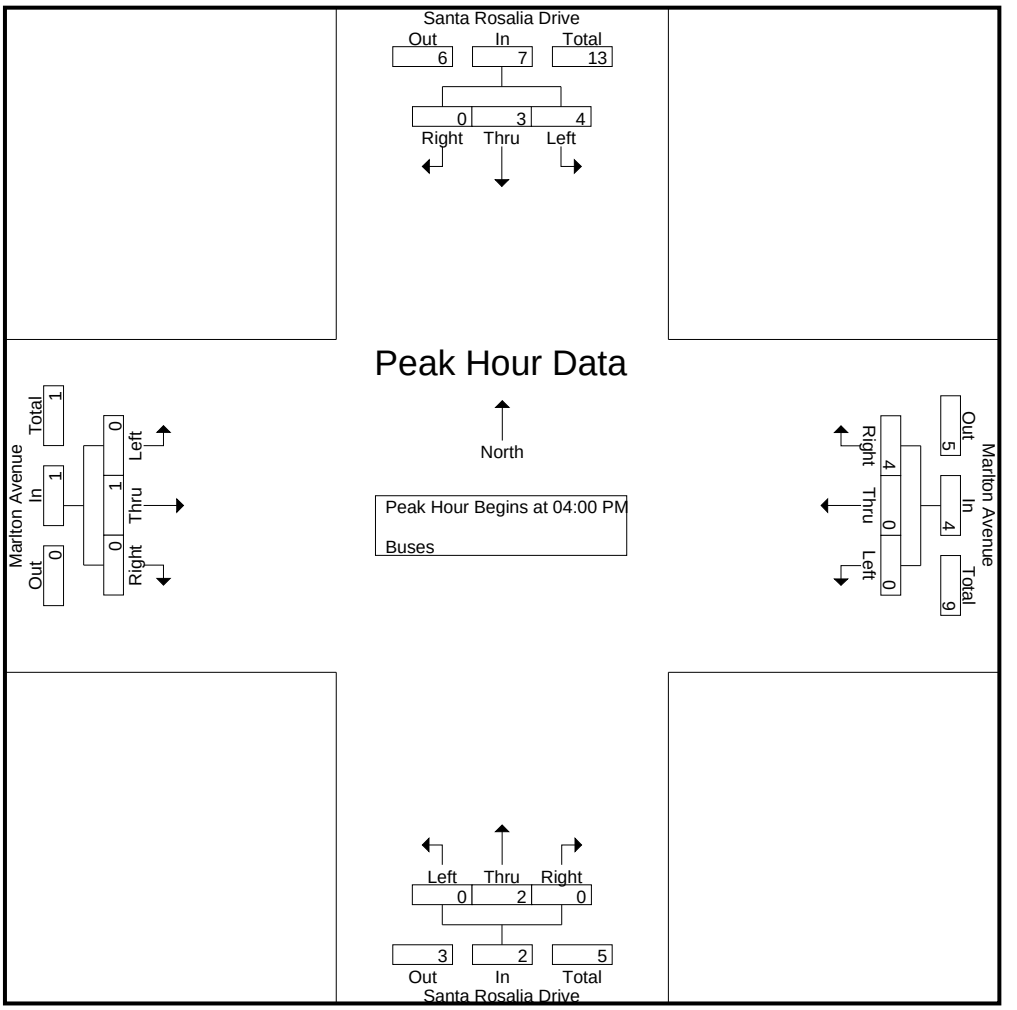
	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	2	1	0	3	0	0	2	2	0	1	0	1	1	1	4	6	12
03:15 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	4	1	5	7
03:30 PM	1	1	0	2	0	0	1	1	0	2	0	2	0	0	0	0	5
03:45 PM	2	1	0	3	0	0	2	2	0	0	0	0	0	0	0	0	5
Total	7	3	0	10	0	0	5	5	0	3	0	3	1	5	5	11	29
04:00 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
04:15 PM	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:30 PM	2	2	0	4	0	0	3	3	0	0	0	0	0	1	0	1	8
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	4	3	0	7	0	0	4	4	0	2	0	2	0	1	0	1	14
05:00 PM	3	0	0	3	0	0	2	2	0	1	0	1	0	0	0	0	6
05:15 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
05:30 PM	1	0	0	1	0	0	2	2	0	0	0	0	0	0	0	0	3
05:45 PM	1	0	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
Total	5	1	0	6	0	0	6	6	0	3	0	3	0	0	0	0	15
Grand Total	16	7	0	23	0	0	15	15	0	8	0	8	1	6	5	12	58
Apprch %	69.6	30.4	0		0	0	100		0	100	0		8.3	50	41.7		
Total %	27.6	12.1	0	39.7	0	0	25.9	25.9	0	13.8	0	13.8	1.7	10.3	8.6	20.7	

	Santa Rosalia Drive Southbound				Marlton Avenue Westbound				Santa Rosalia Drive Northbound				Marlton Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
04:15 PM	1	1	0	2	0	0	0	0	0	**1**	0	**1**	0	0	0	0	3
04:30 PM	**2**	**2**	0	**4**	0	0	**3**	**3**	0	0	0	0	0	**1**	0	**1**	**8**
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	4	3	0	7	0	0	4	4	0	2	0	2	0	1	0	1	14
% App. Total	57.1	42.9	0		0	0	100		0	100	0		0	100	0		
PHF	.500	.375	.000	.438	.000	.000	.333	.333	.000	.500	.000	.500	.000	.250	.000	.250	.438

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City of Los Angeles
N/S: Santa Rosalia Drive
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File Name : 01_LAC_SR_Mar PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
+15 mins.	1	1	0	2	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	**2**	**2**	0	**4**	0	0	**3**	**3**	0	0	0	0	0	**1**	0	**1**
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	4	3	0	7	0	0	4	4	0	2	0	2	0	1	0	1
% App. Total	57.1	42.9	0		0	0	100		0	100	0		0	100	0	
PHF	.500	.375	.000	.438	.000	.000	.333	.333	.000	.500	.000	.500	.000	.250	.000	.250

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Santa Rosalia Drive

East/West Marlton Avenue

Day: Tuesday **Date:** June 7, 2022 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Southern I/S CODE 5336

	N/B	S/B	E/B	W/B
DUAL-WHEELED	17	17	5	8
BIKES	16	12	5	3
BUSES	25	52	20	36

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	137	8.00	109	7.45	75	7.45	57	7.30
PM PK 15 MIN	129	4.30	108	3.15	58	3.15	100	4.30
AM PK HOUR	499	7.30	343	7.30	242	7.30	198	8.30
PM PK HOUR	473	4.15	387	3.15	191	4.15	369	4.00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	26	288	92	406
8-9	28	284	127	439
9-10	22	194	115	331
3-4	30	275	144	449
4-5	35	270	161	466
5-6	29	280	143	452
TOTAL	170	1591	782	2543

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	36	255	20	311
8-9	35	248	21	304
9-10	43	193	9	245
3-4	60	283	14	357
4-5	45	274	33	352
5-6	43	262	34	339
TOTAL	262	1515	131	1908

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
717	16	0	8	0
743	16	0	6	0
576	19	0	3	0
806	37	0	4	0
818	19	0	6	0
791	19	0	12	0
4451	126	0	39	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	29	122	36	187
8-9	26	119	44	189
9-10	17	89	44	150
3-4	16	116	38	170
4-5	11	135	41	187
5-6	26	94	55	175
TOTAL	125	675	258	1058

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	57	81	27	165
8-9	86	66	36	188
9-10	95	56	39	190
3-4	177	98	58	333
4-5	160	139	70	369
5-6	165	127	67	359
TOTAL	740	567	297	1604

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
352	7	0	10	0
377	9	0	6	0
340	4	0	9	0
503	16	0	6	0
556	6	0	9	0
534	9	0	12	0
2662	51	0	52	0

(Rev Oct 06)

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:
North/South: Santa Rosalia Drive
East/West: Marlton Avenue

Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	Yes	District:	Southern	I/S Code:	5336
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	3	1	4
8-9	0	1	0	1
9-10	0	1	0	1
3-4	0	2	0	2
4-5	0	2	1	3
5-6	0	3	2	5
TOTAL	0	12	4	16

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	1	2	1	4
3-4	2	1	0	3
4-5	0	3	0	3
5-6	0	2	0	2
TOTAL	3	8	1	12

TOTAL

Hours	N-S
7-8	4
8-9	1
9-10	5
3-4	5
4-5	6
5-6	7
TOTAL	28

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	2	0	2
9-10	0	0	0	0
3-4	1	1	0	2
4-5	0	0	0	0
5-6	0	1	0	1
TOTAL	1	4	0	5

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	0	0	0	0
9-10	0	0	0	0
3-4	0	0	1	1
4-5	1	0	0	1
5-6	0	1	0	1
TOTAL	1	1	1	3

TOTAL

Hours	E-W
7-8	0
8-9	2
9-10	0
3-4	3
4-5	1
5-6	2
TOTAL	8

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female Riders	1	0	0	0	1
- No helmet riders	12	10	4	1	27
- Sidewalk Riding	7	3	1	0	11
- Wrong way riding	3	2	0	0	5

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: CUI

LADOT 2015 CMP

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:					
North/South:	Santa Rosalia Drive				
East/West:	Marlton Avenue				
Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	YES	District:	Southern	I/S Code:	5336
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

AM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00-7:15	2	1	3	0	6
7:15-7:30	1	4	3	3	11
7:30-7:45	4	4	3	2	13
7:45-8:00	1	7	1	2	11
8:00-8:15	3	5	4	2	14
8:15-8:30	0	5	0	2	7
8:30-8:45	2	5	0	2	9
8:45-9:00	1	1	2	3	7
9:00-9:15	1	5	1	1	8
9:15-9:30	0	6	3	0	9
9:30-9:45	1	3	3	2	9
9:45-10:00	1	5	2	1	9
Hours					
7 - 8	8	16	10	7	41
8 - 9	6	16	6	9	37
9 - 10	3	19	9	4	35
TOTAL	17	51	25	20	113

PM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00-3:15	1	10	2	3	16
3:15-3:30	1	9	0	8	18
3:30-3:45	2	7	2	3	14
3:45-4:00	0	11	2	2	15
4:00-4:15	1	3	2	2	8
4:15-4:30	1	3	2	0	6
4:30-4:45	1	6	3	2	12
4:45-5:00	3	7	2	2	14
5:00-5:15	4	4	3	1	12
5:15-5:30	5	6	3	3	17
5:30-5:45	1	6	4	2	13
5:45-6:00	2	3	2	3	10
Hours					
3 - 4	4	37	6	16	63
4 - 5	6	19	9	6	40
5 - 6	12	19	12	9	52
	22	75	27	31	155

REMARKS (6 hour total):

	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	0	1	0	0	1
- Skateboard/scooter	1	5	2	2	10

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2015 CMP

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City of Los Angeles
N/S: Crenshaw Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 02_LAC_Cren_Stoc AM
Site Code : 04122535
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

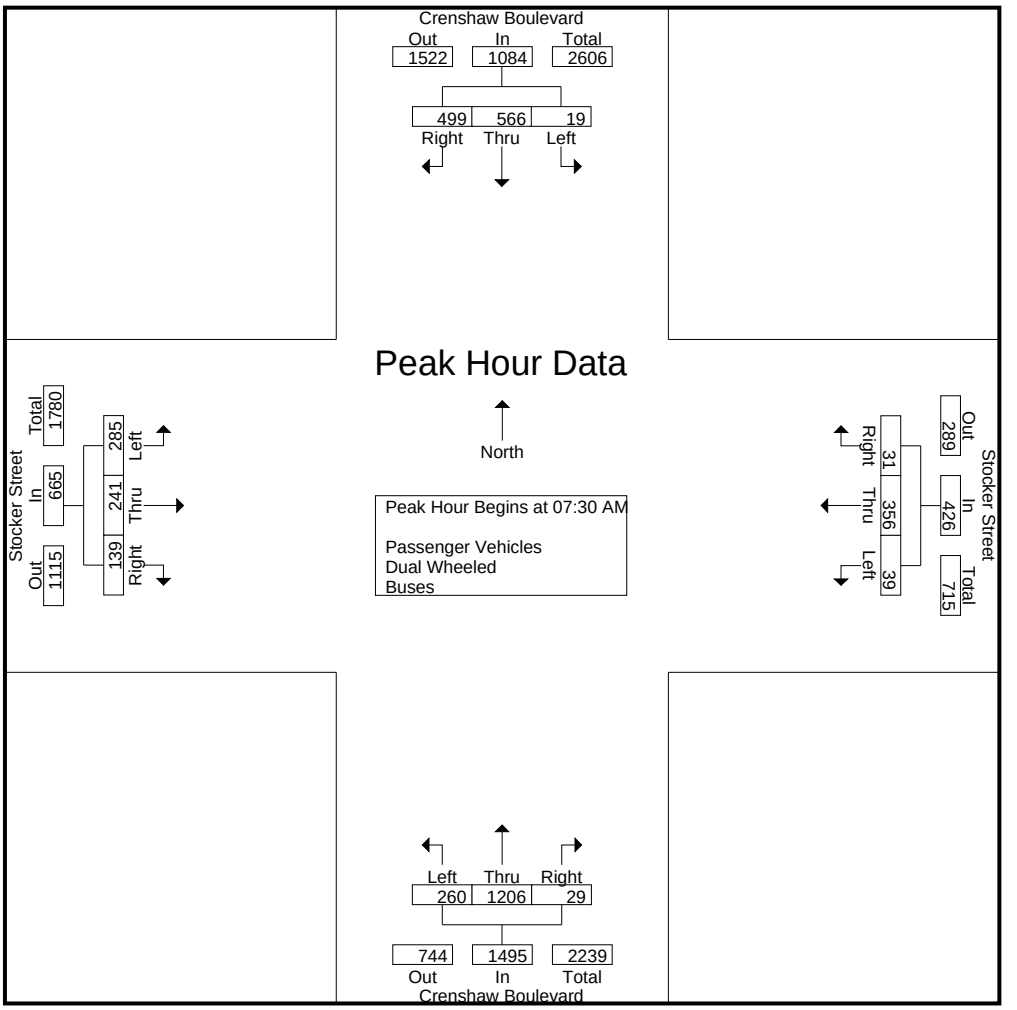
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	109	97	209	2	68	6	76	41	324	3	368	36	32	27	95	748
07:15 AM	3	116	92	211	3	86	2	91	65	353	4	422	57	40	26	123	847
07:30 AM	4	148	116	268	5	90	7	102	67	320	8	395	86	61	31	178	943
07:45 AM	9	140	125	274	11	100	11	122	70	337	7	414	79	59	43	181	991
Total	19	513	430	962	21	344	26	391	243	1334	22	1599	258	192	127	577	3529
08:00 AM	5	145	145	295	14	77	8	99	56	267	4	327	68	62	30	160	881
08:15 AM	1	133	113	247	9	89	5	103	67	282	10	359	52	59	35	146	855
08:30 AM	4	141	154	299	11	62	7	80	53	290	11	354	68	52	37	157	890
08:45 AM	2	159	99	260	4	51	6	61	45	247	7	299	74	49	42	165	785
Total	12	578	511	1101	38	279	26	343	221	1086	32	1339	262	222	144	628	3411
09:00 AM	8	152	83	243	6	43	2	51	53	176	6	235	59	53	38	150	679
09:15 AM	2	136	68	206	6	49	7	62	52	190	5	247	65	41	37	143	658
09:30 AM	0	112	84	196	4	35	2	41	56	172	3	231	73	42	37	152	620
09:45 AM	9	146	67	222	5	42	7	54	58	184	5	247	45	31	38	114	637
Total	19	546	302	867	21	169	18	208	219	722	19	960	242	167	150	559	2594
Grand Total	50	1637	1243	2930	80	792	70	942	683	3142	73	3898	762	581	421	1764	9534
Apprch %	1.7	55.9	42.4		8.5	84.1	7.4		17.5	80.6	1.9		43.2	32.9	23.9		
Total %	0.5	17.2	13	30.7	0.8	8.3	0.7	9.9	7.2	33	0.8	40.9	8	6.1	4.4	18.5	
Passenger Vehicles	47	1534	1211	2792	80	784	69	933	668	3013	71	3752	738	581	406	1725	9202
% Passenger Vehicles	94	93.7	97.4	95.3	100	99	98.6	99	97.8	95.9	97.3	96.3	96.9	100	96.4	97.8	96.5
Dual Wheeled	3	37	20	60	0	5	1	6	6	50	1	57	11	0	4	15	138
% Dual Wheeled	6	2.3	1.6	2	0	0.6	1.4	0.6	0.9	1.6	1.4	1.5	1.4	0	1	0.9	1.4
Buses	0	66	12	78	0	3	0	3	9	79	1	89	13	0	11	24	194
% Buses	0	4	1	2.7	0	0.4	0	0.3	1.3	2.5	1.4	2.3	1.7	0	2.6	1.4	2

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	**148**	116	268	5	90	7	102	67	320	8	395	**86**	61	31	178	943
07:45 AM	**9**	140	125	274	11	**100**	**11**	**122**	**70**	**337**	7	**414**	79	59	**43**	**181**	**991**
08:00 AM	5	145	**145**	**295**	**14**	77	8	99	56	267	4	327	68	**62**	30	160	881
08:15 AM	1	133	113	247	9	89	5	103	67	282	**10**	359	52	59	35	146	855
Total Volume	19	566	499	1084	39	356	31	426	260	1206	29	1495	285	241	139	665	3670
% App. Total	1.8	52.2	46		9.2	83.6	7.3		17.4	80.7	1.9		42.9	36.2	20.9		
PHF	.528	.956	.860	.919	.696	.890	.705	.873	.929	.895	.725	.903	.828	.972	.808	.919	.926

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File Name : 02_LAC_Cren_Stoc AM
Site Code : 04122535
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Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:00 AM				07:30 AM			
+0 mins.	**9**	140	125	274	5	90	7	102	41	324	3	368	**86**	61	31	178
+15 mins.	5	**145**	145	295	11	**100**	**11**	**122**	65	**353**	4	**422**	79	59	**43**	**181**
+30 mins.	1	133	113	247	**14**	77	8	99	67	320	**8**	395	68	**62**	30	160
+45 mins.	4	141	**154**	**299**	9	89	5	103	**70**	337	7	414	52	59	35	146
Total Volume	19	559	537	1115	39	356	31	426	243	1334	22	1599	285	241	139	665
% App. Total	1.7	50.1	48.2		9.2	83.6	7.3		15.2	83.4	1.4		42.9	36.2	20.9	
PHF	.528	.964	.872	.932	.696	.890	.705	.873	.868	.945	.688	.947	.828	.972	.808	.919

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File Name : 02_LAC_Cren_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
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Groups Printed- Passenger Vehicles

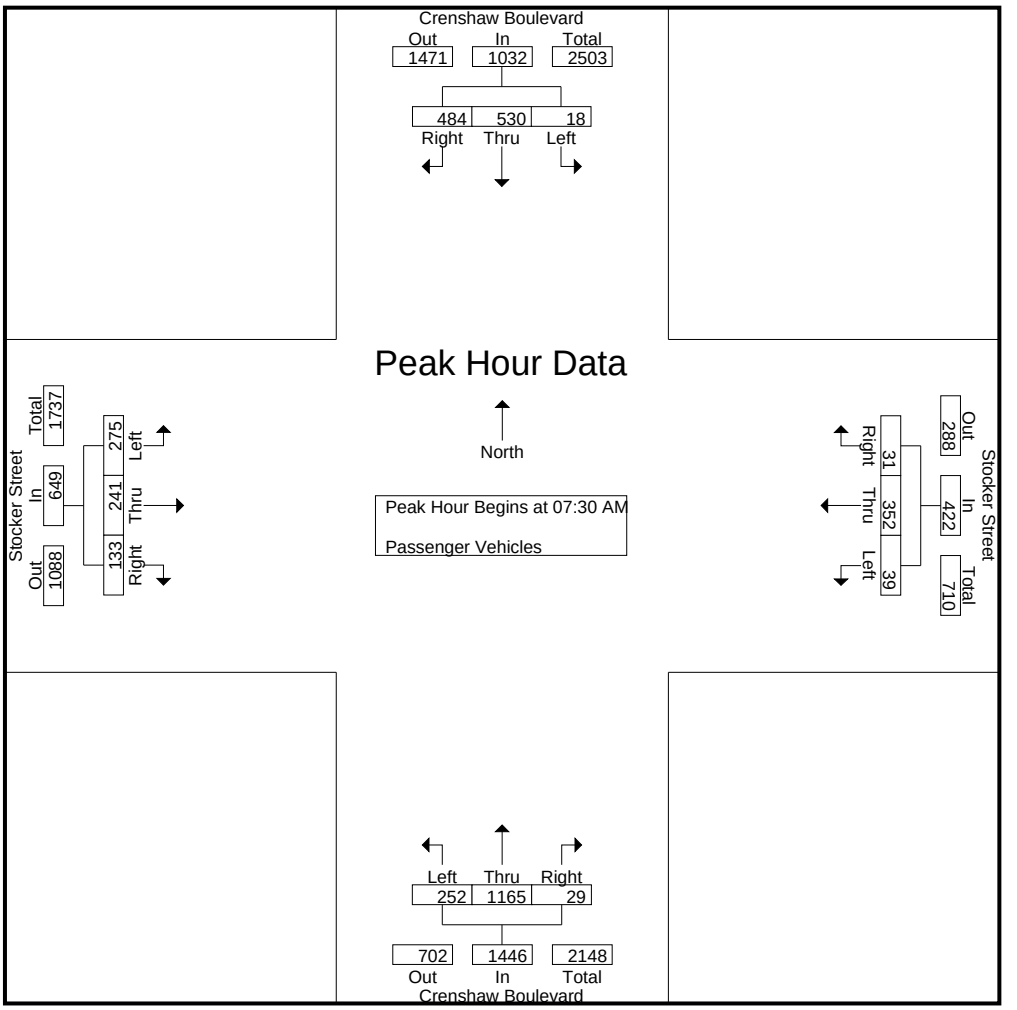
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	102	96	201	2	67	6	75	39	303	3	345	33	32	26	91	712
07:15 AM	3	106	88	197	3	84	1	88	65	342	4	411	57	40	24	121	817
07:30 AM	4	137	113	254	5	88	7	100	64	310	8	382	84	61	31	176	912
07:45 AM	8	136	122	266	11	99	11	121	66	326	7	399	77	59	41	177	963
Total	18	481	419	918	21	338	25	384	234	1281	22	1537	251	192	122	565	3404
08:00 AM	5	135	140	280	14	77	8	99	56	257	4	317	63	62	27	152	848
08:15 AM	1	122	109	232	9	88	5	102	66	272	10	348	51	59	34	144	826
08:30 AM	3	132	149	284	11	61	7	79	52	280	9	341	68	52	36	156	860
08:45 AM	2	151	97	250	4	51	6	61	44	237	7	288	71	49	40	160	759
Total	11	540	495	1046	38	277	26	341	218	1046	30	1294	253	222	137	612	3293
09:00 AM	7	145	81	233	6	43	2	51	52	166	6	224	57	53	37	147	655
09:15 AM	2	126	66	194	6	49	7	62	52	178	5	235	62	41	36	139	630
09:30 AM	0	105	84	189	4	35	2	41	55	164	3	222	71	42	36	149	601
09:45 AM	9	137	66	212	5	42	7	54	57	178	5	240	44	31	38	113	619
Total	18	513	297	828	21	169	18	208	216	686	19	921	234	167	147	548	2505
Grand Total	47	1534	1211	2792	80	784	69	933	668	3013	71	3752	738	581	406	1725	9202
Apprch %	1.7	54.9	43.4		8.6	84	7.4		17.8	80.3	1.9		42.8	33.7	23.5		
Total %	0.5	16.7	13.2	30.3	0.9	8.5	0.7	10.1	7.3	32.7	0.8	40.8	8	6.3	4.4	18.7	

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	**137**	113	254	5	88	7	100	64	310	8	382	**84**	61	31	176	912
07:45 AM	**8**	136	122	266	11	**99**	**11**	**121**	**66**	**326**	7	**399**	77	59	**41**	**177**	**963**
08:00 AM	5	135	**140**	**280**	**14**	77	8	99	56	257	4	317	63	**62**	27	152	848
08:15 AM	1	122	109	232	9	88	5	102	66	272	**10**	348	51	59	34	144	826
Total Volume	18	530	484	1032	39	352	31	422	252	1165	29	1446	275	241	133	649	3549
% App. Total	1.7	51.4	46.9		9.2	83.4	7.3		17.4	80.6	2		42.4	37.1	20.5		
PHF	.563	.967	.864	.921	.696	.889	.705	.872	.955	.893	.725	.906	.818	.972	.811	.917	.921

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File Name : 02_LAC_Cren_Stoc AM
Site Code : 04122535
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	4	**137**	113	254	5	88	7	100	64	310	8	382	**84**	61	31	176
+15 mins.	**8**	136	122	266	11	**99**	**11**	**121**	**66**	**326**	7	**399**	77	59	**41**	**177**
+30 mins.	5	135	**140**	**280**	**14**	77	8	99	56	257	4	317	63	**62**	27	152
+45 mins.	1	122	109	232	9	88	5	102	66	272	**10**	348	51	59	34	144
Total Volume	18	530	484	1032	39	352	31	422	252	1165	29	1446	275	241	133	649
% App. Total	1.7	51.4	46.9		9.2	83.4	7.3		17.4	80.6	2		42.4	37.1	20.5	
PHF	.563	.967	.864	.921	.696	.889	.705	.872	.955	.893	.725	.906	.818	.972	.811	.917

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File Name : 02_LAC_Cren_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
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Groups Printed- Dual Wheeled

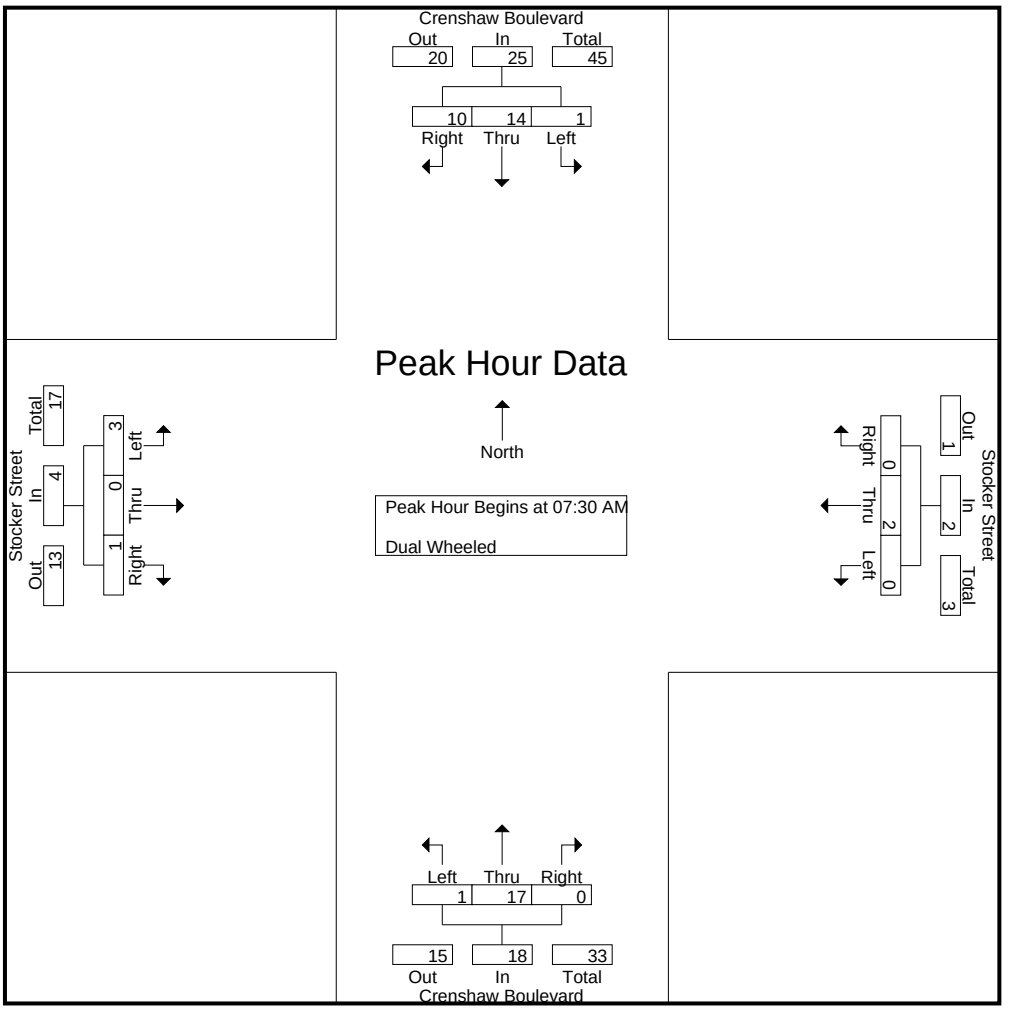
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	1	0	1	2	5	0	7	1	0	0	1	10
07:15 AM	0	5	2	7	0	1	1	2	0	5	0	5	0	0	0	0	14
07:30 AM	0	5	2	7	0	0	0	0	0	3	0	3	0	0	0	0	10
07:45 AM	1	0	2	3	0	1	0	1	0	4	0	4	1	0	0	1	9
Total	1	11	6	18	0	3	1	4	2	17	0	19	2	0	0	2	43
08:00 AM	0	4	4	8	0	0	0	0	0	5	0	5	2	0	1	3	16
08:15 AM	0	5	2	7	0	1	0	1	1	5	0	6	0	0	0	0	14
08:30 AM	1	3	5	9	0	1	0	1	0	4	1	5	0	0	0	0	15
08:45 AM	0	3	1	4	0	0	0	0	1	3	0	4	2	0	0	2	10
Total	1	15	12	28	0	2	0	2	2	17	1	20	4	0	1	5	55
09:00 AM	1	3	1	5	0	0	0	0	1	4	0	5	1	0	1	2	12
09:15 AM	0	4	1	5	0	0	0	0	0	6	0	6	2	0	1	3	14
09:30 AM	0	0	0	0	0	0	0	0	0	3	0	3	1	0	1	2	5
09:45 AM	0	4	0	4	0	0	0	0	1	3	0	4	1	0	0	1	9
Total	1	11	2	14	0	0	0	0	2	16	0	18	5	0	3	8	40
Grand Total	3	37	20	60	0	5	1	6	6	50	1	57	11	0	4	15	138
Apprch %	5	61.7	33.3		0	83.3	16.7		10.5	87.7	1.8		73.3	0	26.7		
Total %	2.2	26.8	14.5	43.5	0	3.6	0.7	4.3	4.3	36.2	0.7	41.3	8	0	2.9	10.9	

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**5**	2	7	0	0	0	0	0	3	0	3	0	0	0	0	10
07:45 AM	**1**	0	2	3	0	**1**	0	**1**	0	4	0	4	1	0	0	1	9
08:00 AM	0	4	**4**	**8**	0	0	0	0	0	**5**	0	5	**2**	0	**1**	**3**	**16**
08:15 AM	0	5	2	7	0	1	0	1	**1**	5	0	**6**	0	0	0	0	14
Total Volume	1	14	10	25	0	2	0	2	1	17	0	18	3	0	1	4	49
% App. Total	4	56	40		0	100	0		5.6	94.4	0		75	0	25		
PHF	.250	.700	.625	.781	.000	.500	.000	.500	.250	.850	.000	.750	.375	.000	.250	.333	.766

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File Name : 02_LAC_Cren_Stoc AM
Site Code : 04122535
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**5**	2	7	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	**1**	0	2	3	0	**1**	0	**1**	0	4	0	4	1	0	0	1
+30 mins.	0	4	**4**	**8**	0	0	0	0	0	**5**	0	5	**2**	0	**1**	**3**
+45 mins.	0	5	2	7	0	1	0	1	**1**	5	0	**6**	0	0	0	0
Total Volume	1	14	10	25	0	2	0	2	1	17	0	18	3	0	1	4
% App. Total	4	56	40		0	100	0		5.6	94.4	0		75	0	25	
PHF	.250	.700	.625	.781	.000	.500	.000	.500	.250	.850	.000	.750	.375	.000	.250	.333

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Groups Printed- Buses

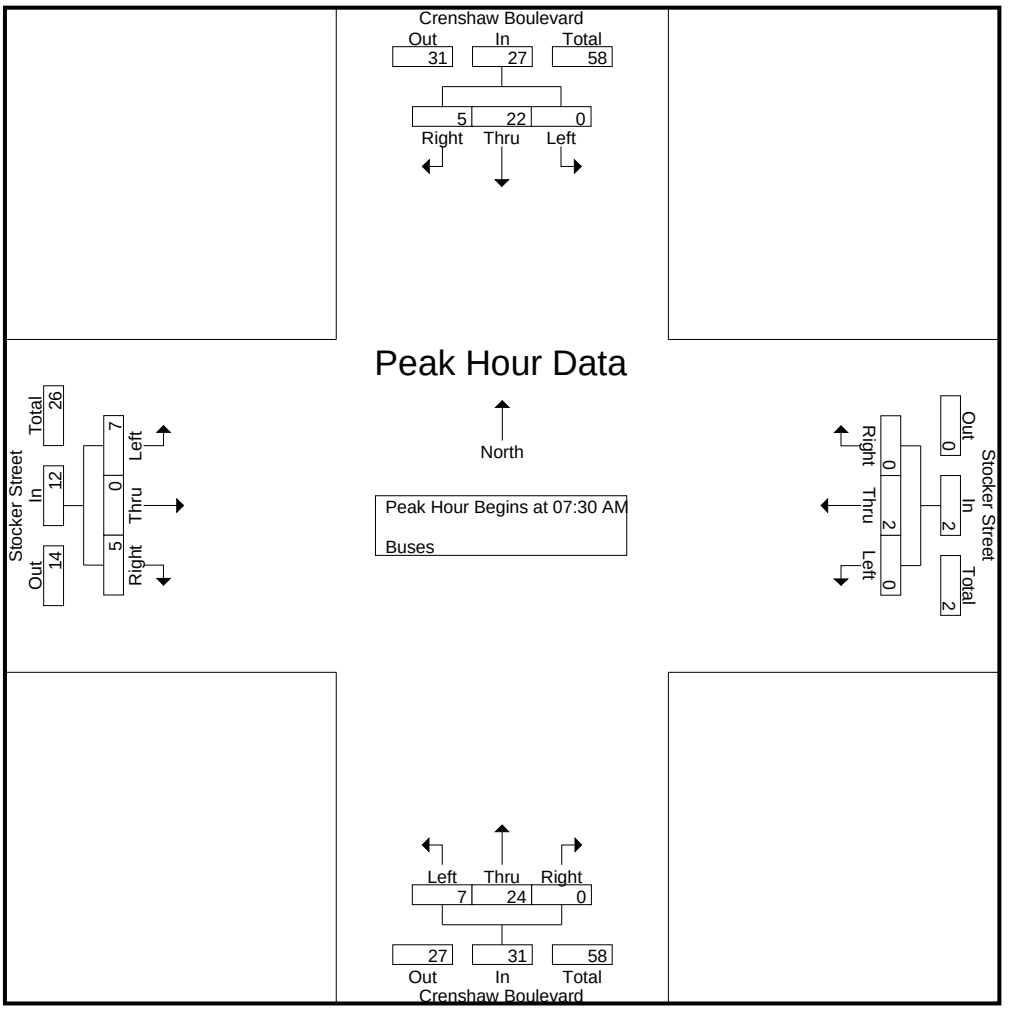
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	1	7	0	0	0	0	0	16	0	16	2	0	1	3	26
07:15 AM	0	5	2	7	0	1	0	1	0	6	0	6	0	0	2	2	16
07:30 AM	0	6	1	7	0	2	0	2	3	7	0	10	2	0	0	2	21
07:45 AM	0	4	1	5	0	0	0	0	4	7	0	11	1	0	2	3	19
Total	0	21	5	26	0	3	0	3	7	36	0	43	5	0	5	10	82
08:00 AM	0	6	1	7	0	0	0	0	0	5	0	5	3	0	2	5	17
08:15 AM	0	6	2	8	0	0	0	0	0	5	0	5	1	0	1	2	15
08:30 AM	0	6	0	6	0	0	0	0	1	6	1	8	0	0	1	1	15
08:45 AM	0	5	1	6	0	0	0	0	0	7	0	7	1	0	2	3	16
Total	0	23	4	27	0	0	0	0	1	23	1	25	5	0	6	11	63
09:00 AM	0	4	1	5	0	0	0	0	0	6	0	6	1	0	0	1	12
09:15 AM	0	6	1	7	0	0	0	0	0	6	0	6	1	0	0	1	14
09:30 AM	0	7	0	7	0	0	0	0	1	5	0	6	1	0	0	1	14
09:45 AM	0	5	1	6	0	0	0	0	0	3	0	3	0	0	0	0	9
Total	0	22	3	25	0	0	0	0	1	20	0	21	3	0	0	3	49
Grand Total	0	66	12	78	0	3	0	3	9	79	1	89	13	0	11	24	194
Apprch %	0	84.6	15.4		0	100	0		10.1	88.8	1.1		54.2	0	45.8		
Total %	0	34	6.2	40.2	0	1.5	0	1.5	4.6	40.7	0.5	45.9	6.7	0	5.7	12.4	

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**6**	1	7	0	**2**	0	**2**	3	**7**	0	10	2	0	0	2	**21**
07:45 AM	0	4	1	5	0	0	0	0	**4**	7	0	**11**	1	0	**2**	3	19
08:00 AM	0	6	1	7	0	0	0	0	0	5	0	5	**3**	0	2	**5**	17
08:15 AM	0	6	**2**	**8**	0	0	0	0	0	5	0	5	1	0	1	2	15
Total Volume	0	22	5	27	0	2	0	2	7	24	0	31	7	0	5	12	72
% App. Total	0	81.5	18.5		0	100	0		22.6	77.4	0		58.3	0	41.7		
PHF	.000	.917	.625	.844	.000	.250	.000	.250	.438	.857	.000	.705	.583	.000	.625	.600	.857

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

City of Los Angeles
N/S: Crenshaw Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 02_LAC_Cren_Stoc AM
Site Code : 04122535
Start Date : 6/1/2022
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**6**	1	7	0	**2**	0	**2**	3	**7**	0	10	2	0	0	2
+15 mins.	0	4	1	5	0	0	0	0	**4**	7	0	**11**	1	0	**2**	3
+30 mins.	0	6	1	7	0	0	0	0	0	5	0	5	**3**	0	2	**5**
+45 mins.	0	6	**2**	**8**	0	0	0	0	0	5	0	5	1	0	1	2
Total Volume	0	22	5	27	0	2	0	2	7	24	0	31	7	0	5	12
% App. Total	0	81.5	18.5		0	100	0		22.6	77.4	0		58.3	0	41.7	
PHF	.000	.917	.625	.844	.000	.250	.000	.250	.438	.857	.000	.705	.583	.000	.625	.600

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File Name : 02_LAC_Cren_Stoc PM
Site Code : 04122535
Start Date : 6/1/2022
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Groups Printed- Passenger Vehicles - Dual Wheeled - Buses

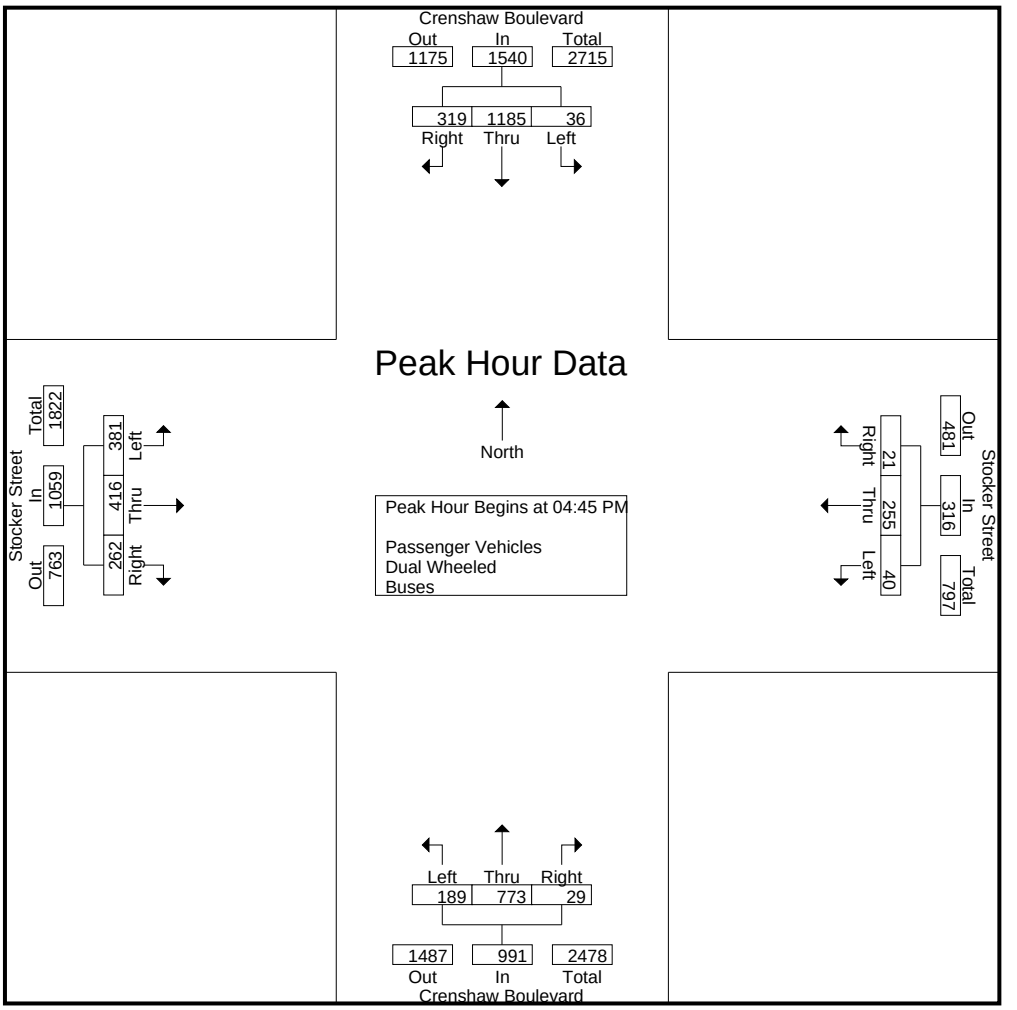
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	18	224	77	319	11	54	10	75	55	181	8	244	108	93	69	270	908
03:15 PM	6	274	61	341	12	50	7	69	63	197	10	270	92	108	67	267	947
03:30 PM	9	230	96	335	6	40	11	57	53	192	14	259	105	94	70	269	920
03:45 PM	5	258	76	339	11	50	12	73	56	207	8	271	72	88	59	219	902
Total	38	986	310	1334	40	194	40	274	227	777	40	1044	377	383	265	1025	3677
04:00 PM	4	256	80	340	7	59	3	69	56	174	6	236	104	100	53	257	902
04:15 PM	3	263	85	351	8	48	5	61	52	198	12	262	97	128	63	288	962
04:30 PM	3	305	73	381	6	51	9	66	45	196	11	252	91	104	64	259	958
04:45 PM	10	301	83	394	10	71	4	85	49	212	10	271	76	104	65	245	995
Total	20	1125	321	1466	31	229	21	281	202	780	39	1021	368	436	245	1049	3817
05:00 PM	10	272	87	369	15	64	5	84	43	189	10	242	100	108	63	271	966
05:15 PM	10	305	73	388	7	63	8	78	52	198	1	251	92	104	68	264	981
05:30 PM	6	307	76	389	8	57	4	69	45	174	8	227	113	100	66	279	964
05:45 PM	8	266	62	336	6	49	3	58	56	195	7	258	108	95	63	266	918
Total	34	1150	298	1482	36	233	20	289	196	756	26	978	413	407	260	1080	3829
Grand Total	92	3261	929	4282	107	656	81	844	625	2313	105	3043	1158	1226	770	3154	11323
Apprch %	2.1	76.2	21.7		12.7	77.7	9.6		20.5	76	3.5		36.7	38.9	24.4		
Total %	0.8	28.8	8.2	37.8	0.9	5.8	0.7	7.5	5.5	20.4	0.9	26.9	10.2	10.8	6.8	27.9	
Passenger Vehicles	92	3166	912	4170	103	653	80	836	620	2226	105	2951	1144	1209	753	3106	11063
% Passenger Vehicles	100	97.1	98.2	97.4	96.3	99.5	98.8	99.1	99.2	96.2	100	97	98.8	98.6	97.8	98.5	97.7
Dual Wheeled	0	32	6	38	3	2	1	6	3	31	0	34	9	10	8	27	105
% Dual Wheeled	0	1	0.6	0.9	2.8	0.3	1.2	0.7	0.5	1.3	0	1.1	0.8	0.8	1	0.9	0.9
Buses	0	63	11	74	1	1	0	2	2	56	0	58	5	7	9	21	155
% Buses	0	1.9	1.2	1.7	0.9	0.2	0	0.2	0.3	2.4	0	1.9	0.4	0.6	1.2	0.7	1.4

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**10**	301	83	**394**	10	**71**	4	**85**	49	**212**	**10**	**271**	76	104	65	245	**995**
05:00 PM	10	272	**87**	369	**15**	64	5	84	43	189	10	242	100	**108**	63	271	966
05:15 PM	10	305	73	388	7	63	**8**	78	**52**	198	1	251	92	104	**68**	264	981
05:30 PM	6	**307**	76	389	8	57	4	69	45	174	8	227	**113**	100	66	**279**	964
Total Volume	36	1185	319	1540	40	255	21	316	189	773	29	991	381	416	262	1059	3906
% App. Total	2.3	76.9	20.7		12.7	80.7	6.6		19.1	78	2.9		36	39.3	24.7		
PHF	.900	.965	.917	.977	.667	.898	.656	.929	.909	.912	.725	.914	.843	.963	.963	.949	.981

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File Name : 02_LAC_Cren_Stoc PM
Site Code : 04122535
Start Date : 6/1/2022
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Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				03:00 PM				05:00 PM			
+0 mins.	**10**	301	83	**394**	10	**71**	4	**85**	55	181	8	244	100	**108**	63	271
+15 mins.	10	272	**87**	369	**15**	64	5	84	**63**	197	10	270	92	104	**68**	264
+30 mins.	10	305	73	388	7	63	**8**	78	53	192	**14**	259	**113**	100	66	**279**
+45 mins.	6	**307**	76	389	8	57	4	69	56	**207**	8	**271**	108	95	63	266
Total Volume	36	1185	319	1540	40	255	21	316	227	777	40	1044	413	407	260	1080
% App. Total	2.3	76.9	20.7		12.7	80.7	6.6		21.7	74.4	3.8		38.2	37.7	24.1	
PHF	.900	.965	.917	.977	.667	.898	.656	.929	.901	.938	.714	.963	.914	.942	.956	.968

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File Name : 02_LAC_Cren_Stoc PM
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Groups Printed- Passenger Vehicles

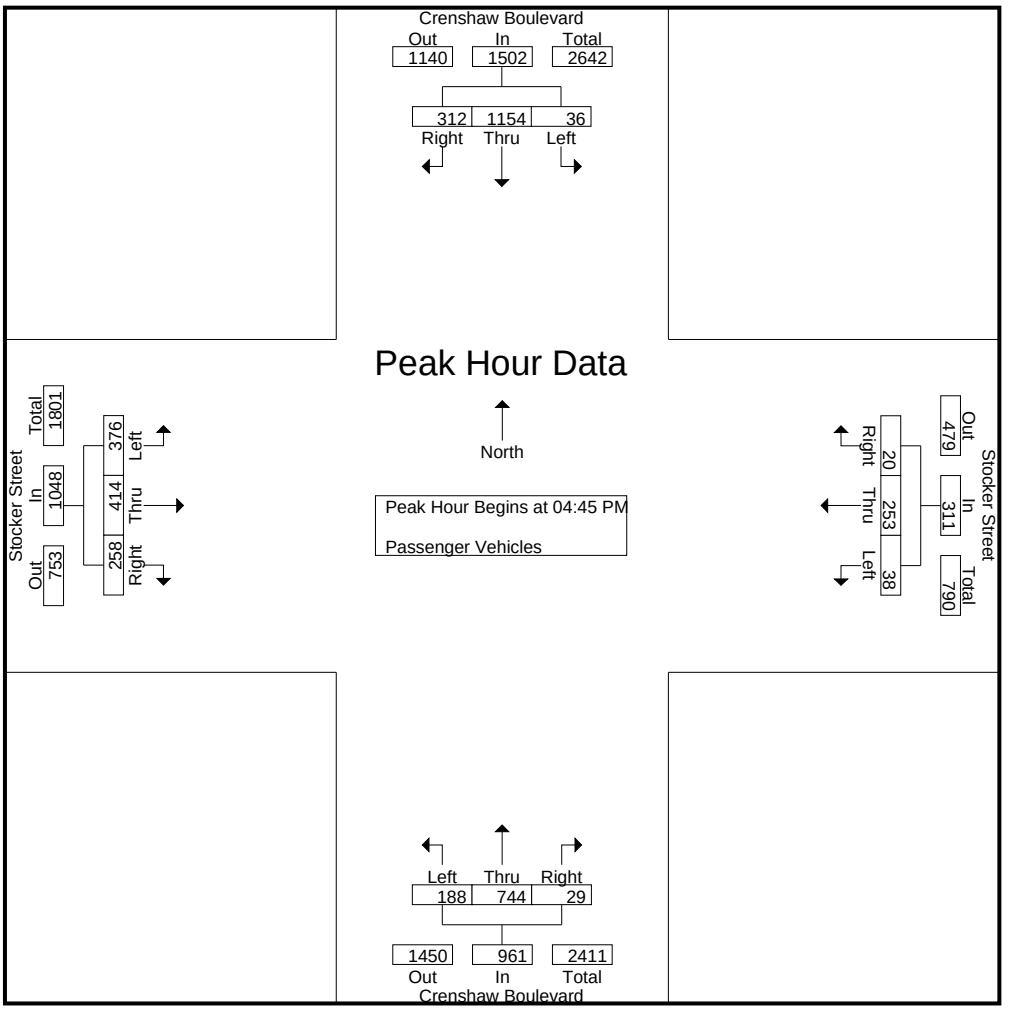
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	18	217	76	311	11	54	10	75	55	170	8	233	106	90	62	258	877
03:15 PM	6	264	60	330	12	50	7	69	63	192	10	265	92	107	64	263	927
03:30 PM	9	223	94	326	5	40	11	56	52	187	14	253	104	90	70	264	899
03:45 PM	5	248	76	329	10	50	12	72	55	195	8	258	70	85	58	213	872
Total	38	952	306	1296	38	194	40	272	225	744	40	1009	372	372	254	998	3575
04:00 PM	4	253	78	335	7	58	3	68	55	171	6	232	103	98	51	252	887
04:15 PM	3	252	84	339	8	48	5	61	52	187	12	251	96	126	63	285	936
04:30 PM	3	295	73	371	6	51	9	66	44	192	11	247	89	104	64	257	941
04:45 PM	10	295	82	387	9	70	4	83	48	201	10	259	76	104	64	244	973
Total	20	1095	317	1432	30	227	21	278	199	751	39	989	364	432	242	1038	3737
05:00 PM	10	265	85	360	15	64	5	84	43	182	10	235	98	107	61	266	945
05:15 PM	10	292	70	372	7	63	7	77	52	191	1	244	90	104	68	262	955
05:30 PM	6	302	75	383	7	56	4	67	45	170	8	223	112	99	65	276	949
05:45 PM	8	260	59	327	6	49	3	58	56	188	7	251	108	95	63	266	902
Total	34	1119	289	1442	35	232	19	286	196	731	26	953	408	405	257	1070	3751
Grand Total	92	3166	912	4170	103	653	80	836	620	2226	105	2951	1144	1209	753	3106	11063
Apprch %	2.2	75.9	21.9		12.3	78.1	9.6		21	75.4	3.6		36.8	38.9	24.2		
Total %	0.8	28.6	8.2	37.7	0.9	5.9	0.7	7.6	5.6	20.1	0.9	26.7	10.3	10.9	6.8	28.1	

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**10**	295	82	**387**	9	**70**	4	83	48	**201**	**10**	**259**	76	104	64	244	**973**
05:00 PM	10	265	**85**	360	**15**	64	5	**84**	43	182	10	235	98	**107**	61	266	945
05:15 PM	10	292	70	372	7	63	**7**	77	**52**	191	1	244	90	104	**68**	262	955
05:30 PM	6	**302**	75	383	7	56	4	67	45	170	8	223	**112**	99	65	**276**	949
Total Volume	36	1154	312	1502	38	253	20	311	188	744	29	961	376	414	258	1048	3822
% App. Total	2.4	76.8	20.8		12.2	81.4	6.4		19.6	77.4	3		35.9	39.5	24.6		
PHF	.900	.955	.918	.970	.633	.904	.714	.926	.904	.925	.725	.928	.839	.967	.949	.949	.982

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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	**10**	295	82	**387**	9	**70**	4	83	48	**201**	**10**	**259**	76	104	64	244
+15 mins.	10	265	**85**	360	**15**	64	5	**84**	43	182	10	235	98	**107**	61	266
+30 mins.	10	292	70	372	7	63	**7**	77	**52**	191	1	244	90	104	**68**	262
+45 mins.	6	**302**	75	383	7	56	4	67	45	170	8	223	**112**	99	65	**276**
Total Volume	36	1154	312	1502	38	253	20	311	188	744	29	961	376	414	258	1048
% App. Total	2.4	76.8	20.8		12.2	81.4	6.4		19.6	77.4	3		35.9	39.5	24.6	
PHF	.900	.955	.918	.970	.633	.904	.714	.926	.904	.925	.725	.928	.839	.967	.949	.949

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Groups Printed- Dual Wheeled

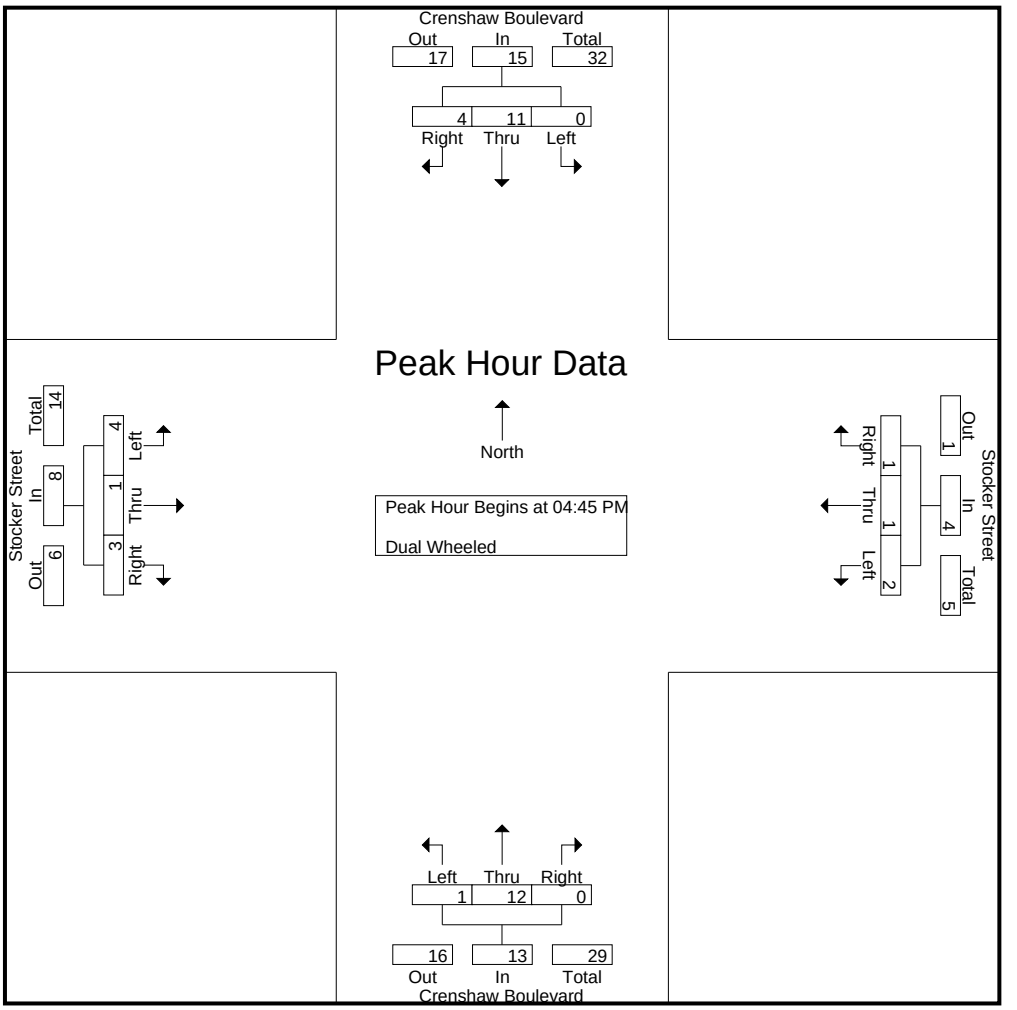
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	3	0	3	0	0	0	0	0	5	0	5	2	1	2	5	13
03:15 PM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	1	1	6
03:30 PM	0	1	0	1	1	0	0	1	0	1	0	1	0	3	0	3	6
03:45 PM	0	3	0	3	0	0	0	0	1	5	0	6	1	1	1	3	12
Total	0	10	0	10	1	0	0	1	1	13	0	14	3	5	4	12	37
04:00 PM	0	2	0	2	0	1	0	1	1	1	0	2	1	2	1	4	9
04:15 PM	0	3	1	4	0	0	0	0	0	2	0	2	0	2	0	2	8
04:30 PM	0	4	0	4	0	0	0	0	0	2	0	2	1	0	0	1	7
04:45 PM	0	1	0	1	1	1	0	2	1	5	0	6	0	0	1	1	10
Total	0	10	1	11	1	2	0	3	2	10	0	12	2	4	2	8	34
05:00 PM	0	1	1	2	0	0	0	0	0	3	0	3	2	0	1	3	8
05:15 PM	0	7	2	9	0	0	1	1	0	2	0	2	1	0	0	1	13
05:30 PM	0	2	1	3	1	0	0	1	0	2	0	2	1	1	1	3	9
05:45 PM	0	2	1	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total	0	12	5	17	1	0	1	2	0	8	0	8	4	1	2	7	34
Grand Total	0	32	6	38	3	2	1	6	3	31	0	34	9	10	8	27	105
Apprch %	0	84.2	15.8		50	33.3	16.7		8.8	91.2	0		33.3	37	29.6		
Total %	0	30.5	5.7	36.2	2.9	1.9	1	5.7	2.9	29.5	0	32.4	8.6	9.5	7.6	25.7	

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	**1**	**1**	0	**2**	**1**	**5**	0	**6**	0	0	**1**	1	10
05:00 PM	0	1	1	2	0	0	0	0	0	3	0	3	**2**	0	1	**3**	8
05:15 PM	0	**7**	**2**	**9**	0	0	**1**	1	0	2	0	2	1	0	0	1	**13**
05:30 PM	0	2	1	3	1	0	0	1	0	2	0	2	1	**1**	1	3	9
Total Volume	0	11	4	15	2	1	1	4	1	12	0	13	4	1	3	8	40
% App. Total	0	73.3	26.7		50	25	25		7.7	92.3	0		50	12.5	37.5		
PHF	.000	.393	.500	.417	.500	.250	.250	.500	.250	.600	.000	.542	.500	.250	.750	.667	.769

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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	1	0	1	**1**	**1**	0	**2**	**1**	**5**	0	**6**	0	0	**1**	1
+15 mins.	0	1	1	2	0	0	0	0	0	3	0	3	**2**	0	1	**3**
+30 mins.	0	**7**	**2**	**9**	0	0	**1**	1	0	2	0	2	1	0	0	1
+45 mins.	0	2	1	3	1	0	0	1	0	2	0	2	1	**1**	1	3
Total Volume	0	11	4	15	2	1	1	4	1	12	0	13	4	1	3	8
% App. Total	0	73.3	26.7		50	25	25		7.7	92.3	0		50	12.5	37.5	
PHF	.000	.393	.500	.417	.500	.250	.250	.500	.250	.600	.000	.542	.500	.250	.750	.667

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Groups Printed- Buses

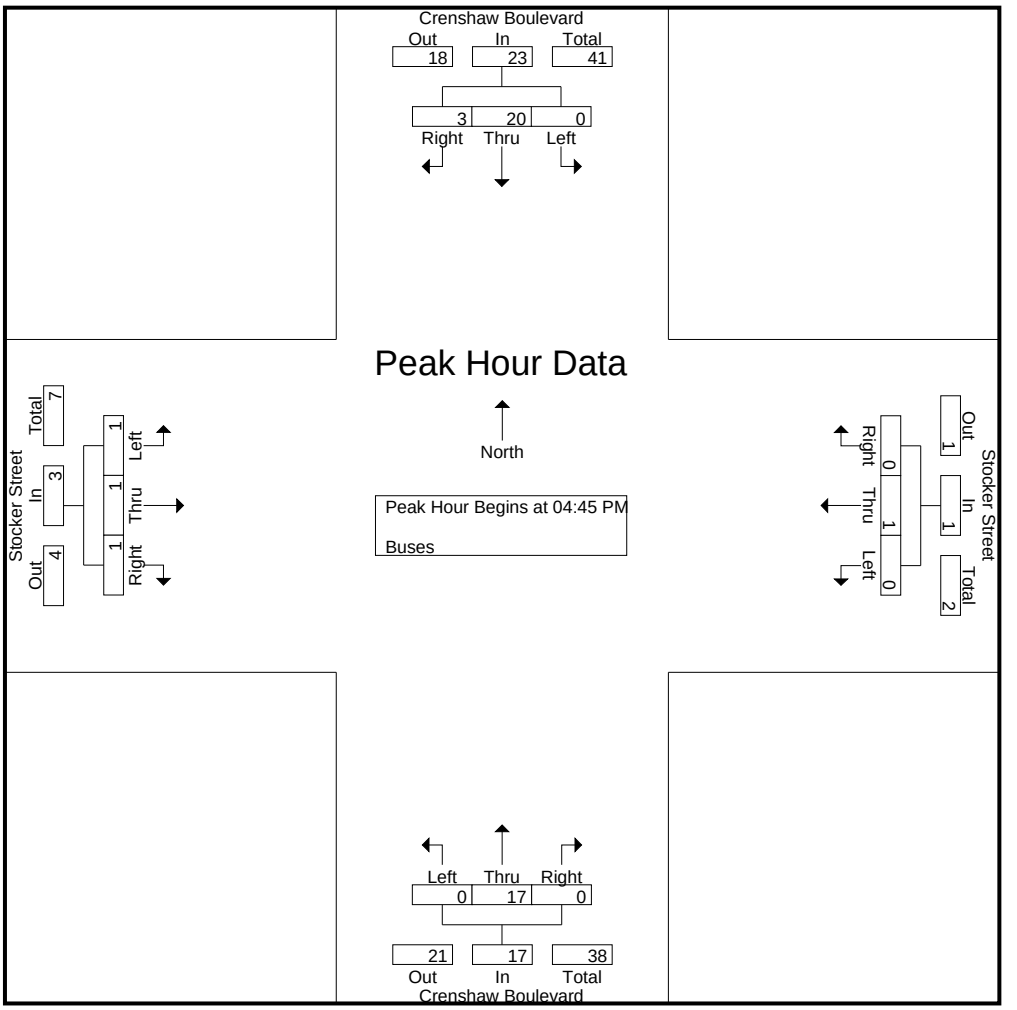
	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	4	1	5	0	0	0	0	0	6	0	6	0	2	5	7	18
03:15 PM	0	7	1	8	0	0	0	0	0	3	0	3	0	1	2	3	14
03:30 PM	0	6	2	8	0	0	0	0	1	4	0	5	1	1	0	2	15
03:45 PM	0	7	0	7	1	0	0	1	0	7	0	7	1	2	0	3	18
Total	0	24	4	28	1	0	0	1	1	20	0	21	2	6	7	15	65
04:00 PM	0	1	2	3	0	0	0	0	0	2	0	2	0	0	1	1	6
04:15 PM	0	8	0	8	0	0	0	0	0	9	0	9	1	0	0	1	18
04:30 PM	0	6	0	6	0	0	0	0	1	2	0	3	1	0	0	1	10
04:45 PM	0	5	1	6	0	0	0	0	0	6	0	6	0	0	0	0	12
Total	0	20	3	23	0	0	0	0	1	19	0	20	2	0	1	3	46
05:00 PM	0	6	1	7	0	0	0	0	0	4	0	4	0	1	1	2	13
05:15 PM	0	6	1	7	0	0	0	0	0	5	0	5	1	0	0	1	13
05:30 PM	0	3	0	3	0	1	0	1	0	2	0	2	0	0	0	0	6
05:45 PM	0	4	2	6	0	0	0	0	0	6	0	6	0	0	0	0	12
Total	0	19	4	23	0	1	0	1	0	17	0	17	1	1	1	3	44
Grand Total	0	63	11	74	1	1	0	2	2	56	0	58	5	7	9	21	155
Apprch %	0	85.1	14.9		50	50	0		3.4	96.6	0		23.8	33.3	42.9		
Total %	0	40.6	7.1	47.7	0.6	0.6	0	1.3	1.3	36.1	0	37.4	3.2	4.5	5.8	13.5	

	Crenshaw Boulevard Southbound				Stocker Street Westbound				Crenshaw Boulevard Northbound				Stocker Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	5	**1**	6	0	0	0	0	0	**6**	0	**6**	0	0	0	0	12
05:00 PM	0	**6**	1	**7**	0	0	0	0	0	4	0	4	0	**1**	**1**	**2**	**13**
05:15 PM	0	6	1	7	0	0	0	0	0	5	0	5	**1**	0	0	1	13
05:30 PM	0	3	0	3	0	**1**	0	**1**	0	2	0	2	0	0	0	0	6
Total Volume	0	20	3	23	0	1	0	1	0	17	0	17	1	1	1	3	44
% App. Total	0	87	13		0	100	0		0	100	0		33.3	33.3	33.3		
PHF	.000	.833	.750	.821	.000	.250	.000	.250	.000	.708	.000	.708	.250	.250	.250	.375	.846

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

City of Los Angeles
N/S: Crenshaw Boulevard
E/W: Stocker Street
Weather: Clear

File Name : 02_LAC_Cren_Stoc PM
Site Code : 04122535
Start Date : 6/1/2022
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	5	**1**	6	0	0	0	0	0	**6**	0	**6**	0	0	0	0
+15 mins.	0	**6**	1	**7**	0	0	0	0	0	4	0	4	0	**1**	**1**	**2**
+30 mins.	0	6	1	7	0	0	0	0	0	5	0	5	**1**	0	0	1
+45 mins.	0	3	0	3	0	**1**	0	**1**	0	2	0	2	0	0	0	0
Total Volume	0	20	3	23	0	1	0	1	0	17	0	17	1	1	1	3
% App. Total	0	87	13		0	100	0		0	100	0		33.3	33.3	33.3	
PHF	.000	.833	.750	.821	.000	.250	.000	.250	.000	.708	.000	.708	.250	.250	.250	.375

City Of Los Angeles
Department Of Transportation
MANUAL TRAFFIC COUNT SUMMARY

STREET:

North/South Crenshaw Boulevard

East/West Stocker Street

Day: Tuesday **Date:** June 7, 2022 **Weather:** CLEAR

Hours: 7-10AM 3-6PM **Staff:** CUI

School Day: YES **District:** Southern I/S CODE 45219

	N/B	S/B	E/B	W/B
DUAL-WHEELED	91	98	42	12
BIKES	17	13	7	4
BUSES	147	152	45	5

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	422	7.15	299	8.30	181	7.45	122	7.45
PM PK 15 MIN	271	3.45	394	4.45	288	4.15	85	4.45
AM PK HOUR	1599	7.00	1115	7.45	665	7.30	426	7.30
PM PK HOUR	1044	3.00	1540	4.45	1080	5.00	316	4.45

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	243	1334	22	1599
8-9	221	1086	32	1339
9-10	219	722	19	960
3-4	227	777	40	1044
4-5	202	780	39	1021
5-6	196	756	26	978
TOTAL	1308	5455	178	6941

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	19	513	430	962
8-9	12	578	511	1101
9-10	19	546	302	867
3-4	38	986	310	1334
4-5	20	1125	321	1466
5-6	34	1150	298	1482
TOTAL	142	4898	2172	7212

TOTAL	**XING S/L**		**XING N/L**	
N-S	Ped	Sch	Ped	Sch
2561	19	0	10	0
2440	26	0	15	0
1827	11	0	24	0
2378	33	0	42	0
2487	34	0	35	0
2460	29	0	43	0
14153	152	0	169	0

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	258	192	127	577
8-9	262	222	144	628
9-10	242	167	150	559
3-4	377	383	265	1025
4-5	368	436	245	1049
5-6	413	407	260	1080
TOTAL	1920	1807	1191	4918

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	21	344	26	391
8-9	38	279	26	343
9-10	21	169	18	208
3-4	40	194	40	274
4-5	31	229	21	281
5-6	36	233	20	289
TOTAL	187	1448	151	1786

TOTAL	**XING W/L**		**XING E/L**	
E-W	Ped	Sch	Ped	Sch
968	13	0	18	0
971	18	0	28	0
767	18	0	31	0
1299	49	0	41	0
1330	34	0	44	0
1369	40	0	43	0
6704	172	0	205	0

(Rev Oct 06)

City of Los Angeles
Department of Transportation

BICYCLE COUNT SUMMARY

STREET:
North/South: Crenshaw Boulevard
East/West: Stocker Street

Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	Yes	District:	Southern	I/S Code:	45219
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	1	2	0	3
8-9	0	0	1	1
9-10	0	0	0	0
3-4	1	4	0	5
4-5	1	2	1	4
5-6	1	3	0	4
TOTAL	4	11	2	17

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	1	1	2
8-9	0	0	0	0
9-10	0	0	1	1
3-4	1	1	0	2
4-5	0	4	0	4
5-6	1	2	1	4
TOTAL	2	8	3	13

TOTAL

Hours	N-S
7-8	5
8-9	1
9-10	1
3-4	7
4-5	8
5-6	8
TOTAL	30

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	0	0	0	0
8-9	1	0	0	1
9-10	1	1	1	3
3-4	0	0	1	1
4-5	1	0	0	1
5-6	0	1	0	1
TOTAL	3	2	2	7

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7-8	1	1	0	2
8-9	0	1	0	1
9-10	0	0	0	0
3-4	0	0	0	0
4-5	0	0	0	0
5-6	0	1	0	1
TOTAL	1	3	0	4

TOTAL

Hours	E-W
7-8	2
8-9	2
9-10	3
3-4	1
4-5	1
5-6	2
TOTAL	11

REMARKS (6 hour total):

	NB	SB	EB	WB	TOTAL
- Female Riders	1	0	0	1	2
- No helmet riders	13	12	5	3	33
- Sidewalk Riding	8	8	3	3	22
- Wrong way riding	8	6	3	1	18

NB: Northbound, **SB**: Southbound, **EB**: Eastbound, **WB**: Westbound, **I/S**: Intersection

Source: CUI

LADOT 2015 CMP

City of Los Angeles
Department of Transportation

PEDESTRIAN COUNT SUMMARY

STREET:

North/South:	Crenshaw Boulevard				
East/West:	Stocker Street				
Day:	Tuesday	Date:	6/7/2022	Weather:	CLEAR
School Day:	YES	District:	Southern	I/S Code:	45219
Hours:	7-10 AM, 3-6 PM	Staff:	CUI		

AM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
7:00-7:15	4	4	2	2	12
7:15-7:30	1	4	9	3	17
7:30-7:45	3	7	2	4	16
7:45-8:00	2	4	5	4	15
8:00-8:15	2	9	8	2	21
8:15-8:30	2	6	8	6	22
8:30-8:45	2	7	3	4	16
8:45-9:00	9	4	9	6	28
9:00-9:15	5	3	5	5	18
9:15-9:30	4	2	6	1	13
9:30-9:45	8	3	9	9	29
9:45-10:00	7	3	11	3	24
Hours					
7 - 8	10	19	18	13	60
8 - 9	15	26	28	18	87
9 - 10	24	11	31	18	84
TOTAL	49	56	77	49	231

PM PEAK PERIOD

15 Min. Interval	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
3:00-3:15	16	9	15	16	56
3:15-3:30	8	8	10	8	34
3:30-3:45	8	11	8	14	41
3:45-4:00	10	5	8	11	34
4:00-4:15	9	10	6	11	36
4:15-4:30	7	9	16	10	42
4:30-4:45	8	8	9	4	29
4:45-5:00	11	7	13	9	40
5:00-5:15	9	15	13	13	50
5:15-5:30	10	6	13	13	42
5:30-5:45	14	4	9	7	34
5:45-6:00	10	4	8	7	29
Hours					
3 - 4	42	33	41	49	165
4 - 5	35	34	44	34	147
5 - 6	43	29	43	40	155
	120	96	128	123	467

REMARKS (6 hour total):

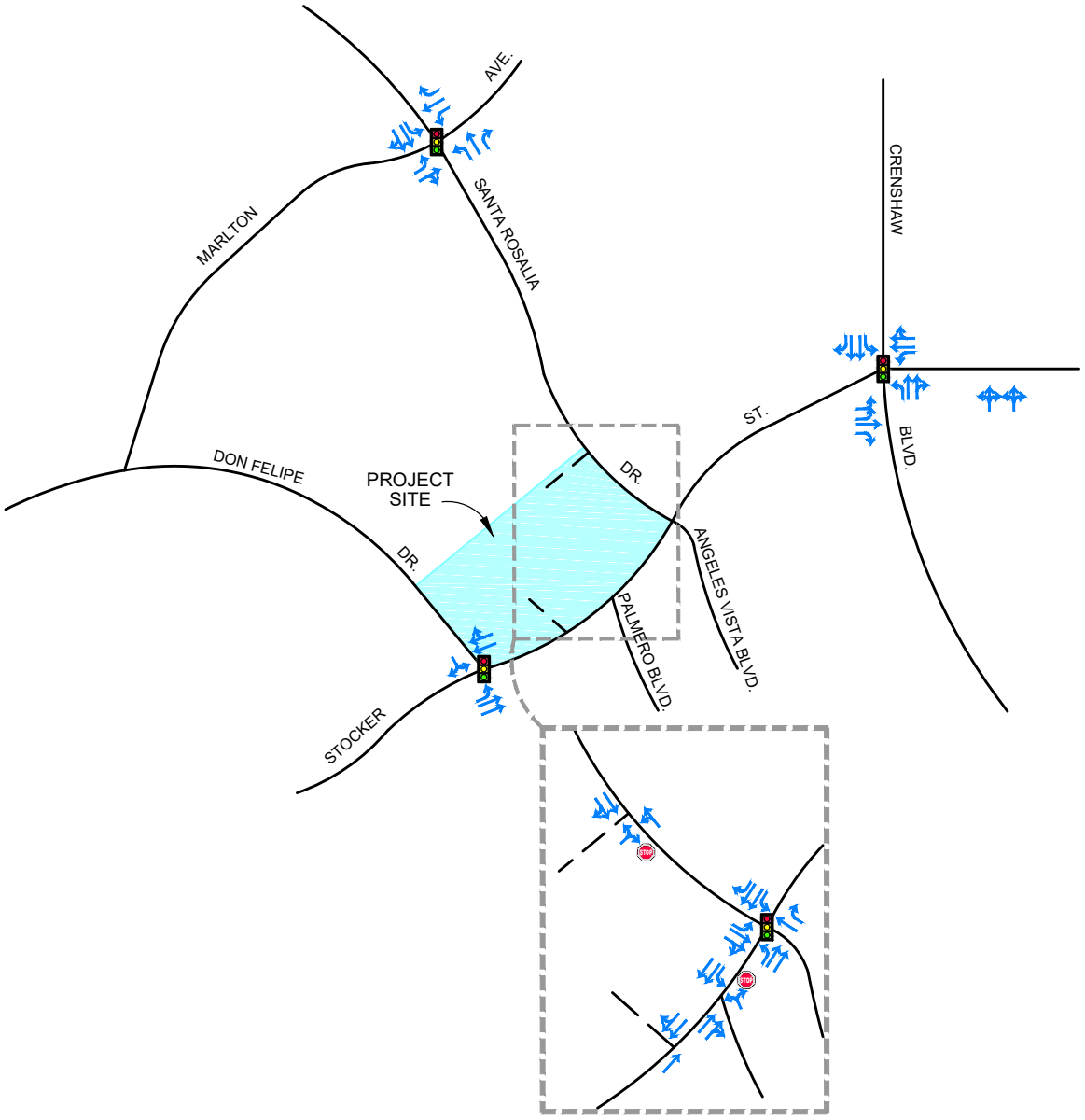
	N-LEG	S-LEG	E-LEG	W-LEG	TOTAL
- Wheelchair/special needs assistance	1	5	8	2	16
- Skateboard/scooter	3	4	12	4	23

N: North, **S**: South, **E**: East, **W**: West, **I/S**: Intersection

Source: LADOT 2015 CMP

APPENDIX E

STUDY INTERSECTION GEOMETRICS AND TRAFFIC CONTROL CONDITIONS



APPENDIX E

3/22/24
FN: 2022\JC21049 LA 3701 Stocker Studio EIR\Docs\Figs\Lane Config

INTERSECTION LANE CONFIGURATIONS AND CONDITIONS

300 Corporate Pointe, Suite 470
Culver City, California 90230
Ph (310) 473 6508 F (310) 444 9771
WWW.KOACORP.COM

APPENDIX F

NCHRP REPORT 684: INTERNAL TRIP CAPTURE ESTIMATION TOOL WORKSHEETS

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Stocker Street Creative Project	**Organization:**	KOA
Project Location:	Los Angeles	**Performed By:**	10/11/2023
Scenario Description:	With Project	**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710	231,700	sf	234	194	40
Retail	822	6,500	sf	15	9	6
Restaurant	931, 933	18,500	sf	98	56	42
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
				347	259	88

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.76	1%	12%	1.76	1%	12%
Retail	1.76	1%	12%	1.76	1%	12%
Restaurant	1.76	1%	12%	1.76	1%	12%
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	23	0	0	0
Retail	3		1	0	0	0
Restaurant	23	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	611	456	155
Internal Capture Percentage	18%	12%	36%
External Vehicle-Trips[5]	248	199	49
External Transit-Trips[6]	2	2	0
External Non-Motorized Trips[6]	61	49	12

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	8%	40%
Retail	38%	36%
Restaurant	24%	32%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	Stocker Street Creative Project
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.76	194	341	1.76	40	70
Retail	1.76	9	16	1.76	6	11
Restaurant	1.76	56	99	1.76	42	74
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		20	44	0	1	0
Retail	3		1	0	2	0
Restaurant	23	10		0	3	2
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		5	23	0	0	0
Retail	14		50	0	0	0
Restaurant	48	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	10	3	20	0		0
Hotel	10	1	6	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	26	315	341	156	2	39
Retail	6	10	16	5	0	1
Restaurant	24	75	99	38	0	9
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	28	42	70	21	0	5
Retail	4	7	11	3	0	1
Restaurant	24	50	74	25	0	6
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Stocker Street Creative Project	**Organization:**	KOA
Project Location:	Los Angeles	**Performed By:**	10/11/2023
Scenario Description:	With Project	**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office	710	231,700	sf	234	55	179
Retail	822	6,500	sf	43	22	21
Restaurant	931, 933	18,500	sf	156	99	57
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses[2]				0		
				433	176	257

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.76	1%	12%	1.76	1%	12%
Retail	1.76	1%	12%	1.76	1%	12%
Restaurant	1.76	1%	12%	1.76	1%	12%
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	3	0	0	0
Retail	1		11	0	0	0
Restaurant	3	20		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	762	310	452
Internal Capture Percentage	11%	13%	9%
External Vehicle-Trips[5]	339	134	205
External Transit-Trips[6]	3	1	2
External Non-Motorized Trips[6]	83	33	50

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	4%	2%
Retail	59%	32%
Restaurant	8%	23%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	Stocker Street Creative Project
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.76	55	97	1.76	179	315
Retail	1.76	22	39	1.76	21	37
Restaurant	1.76	99	174	1.76	57	100
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		63	13	0	6	0
Retail	1		11	1	10	2
Restaurant	3	41		8	18	7
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	3	0	0	0
Retail	30		50	0	0	0
Restaurant	29	20		0	0	0
Cinema/Entertainment	6	2	5		0	0
Residential	55	4	24	0		0
Hotel	0	1	9	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	4	93	97	47	0	11
Retail	23	16	39	8	0	2
Restaurant	14	160	174	79	1	20
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	6	309	315	153	2	38
Retail	12	25	37	13	0	3
Restaurant	23	77	100	39	0	9
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	20.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	26.0%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	42.0%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	8.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	10.0%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%

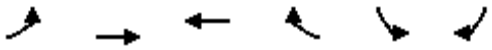
APPENDIX G

SYNCHRO DELAY AND QUEUE CALCULATION WORKSHEETS

EXISTING (2024) TRAFFIC CONDITIONS

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

03/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	91	628	985	48	38	87
Future Volume (veh/h)	91	628	985	48	38	87
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1841	1693	1841
Adj Flow Rate, veh/h	94	647	1015	49	48	109
Peak Hour Factor	0.97	0.97	0.97	0.97	0.80	0.80
Percent Heavy Veh, %	1	1	2	4	14	4
Cap, veh/h	452	2812	2708	131	150	145
Arrive On Green	0.79	0.79	0.79	0.79	0.09	0.09
Sat Flow, veh/h	534	3676	3544	167	1612	1560
Grp Volume(v), veh/h	94	647	523	541	48	109
Grp Sat Flow(s),veh/h/ln	534	1791	1777	1840	1612	1560
Q Serve(g_s), s	5.9	4.3	8.1	8.1	2.5	6.1
Cycle Q Clear(g_c), s	13.9	4.3	8.1	8.1	2.5	6.1
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	452	2812	1395	1444	150	145
V/C Ratio(X)	0.21	0.23	0.37	0.37	0.32	0.75
Avail Cap(c_a), veh/h	452	2812	1395	1444	412	399
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	1.00	1.00
Uniform Delay (d), s/veh	5.1	2.5	2.9	2.9	38.2	39.8
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.7	1.2	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	1.5	3.3	3.3	1.9	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.2	2.6	3.7	3.7	39.4	47.5
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		741	1064		157	
Approach Delay, s/veh		2.9	3.7		45.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		76.7		13.3		76.7
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		56.0		23.0		22.0
Max Q Clear Time (g_c+I1), s		10.1		8.1		15.9
Green Ext Time (p_c), s		12.6		0.4		1.9

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

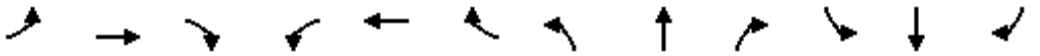
Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	956	6	8	1115	30	19
Future Vol, veh/h	956	6	8	1115	30	19
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	91	91	72	72
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	986	6	9	1225	42	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	995	0	1623	500
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	631	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	703	-	95	522
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	498	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	701	-	94	520
Mov Cap-2 Maneuver	-	-	-	-	218	-
Stage 1	-	-	-	-	323	-
Stage 2	-	-	-	-	492	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	21.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	281	-	-	701	-
HCM Lane V/C Ratio	0.242	-	-	0.013	-
HCM Control Delay (s)	21.9	-	-	10.2	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.9	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	523	14	9	878	227	29	168	8	130	149	118
Future Volume (vph)	132	523	14	9	878	227	29	168	8	130	149	118
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97		1.00	0.97	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1646	3518		1562	3303	1709		2124	1575	3090	1745	
Flt Permitted	0.24	1.00		0.41	1.00	1.00		0.90	1.00	0.95	1.00	
Satd. Flow (perm)	422	3518		675	3303	1709		1921	1575	3090	1745	
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	140	556	15	9	924	239	32	185	9	151	173	137
RTOR Reduction (vph)	0	1	0	0	0	74	0	0	7	0	31	0
Lane Group Flow (vph)	140	570	0	9	924	165	0	217	2	151	279	0
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	47.8	47.8		47.8	47.8	57.8		15.3	15.3	10.0	31.4	
Effective Green, g (s)	47.8	47.8		47.8	47.8	57.8		15.3	15.3	10.0	31.4	
Actuated g/C Ratio	0.53	0.53		0.53	0.53	0.64		0.17	0.17	0.11	0.35	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	224	1868		358	1754	1097		326	267	343	608	
v/s Ratio Prot		0.16			0.28	0.02				0.05	c0.16	
v/s Ratio Perm	c0.33			0.01		0.08		c0.11	0.00			
v/c Ratio	0.62	0.30		0.03	0.53	0.15		0.67	0.01	0.44	0.46	
Uniform Delay, d1	14.8	11.8		10.0	13.7	6.4		35.0	31.0	37.4	22.7	
Progression Factor	1.10	1.09		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.4	0.4		0.1	1.1	0.1		5.1	0.0	0.9	0.6	
Delay (s)	28.7	13.3		10.2	14.9	6.4		40.0	31.0	38.3	23.3	
Level of Service	C	B		B	B	A		D	C	D	C	
Approach Delay (s)		16.3			13.1			39.7			28.2	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	140	571	9	924	239	217	9	151	310
v/c Ratio	0.62	0.31	0.03	0.53	0.21	0.67	0.03	0.44	0.49
Control Delay	34.0	14.1	12.2	15.8	1.8	44.6	0.1	41.8	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	14.1	12.2	15.8	1.8	44.6	0.1	41.8	21.4
Queue Length 50th (ft)	58	100	2	169	5	117	0	42	114
Queue Length 95th (ft)	#166	147	11	256	31	177	0	69	161
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	224	1870	358	1755	1162	619	578	343	650
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.31	0.03	0.53	0.21	0.35	0.02	0.44	0.48

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

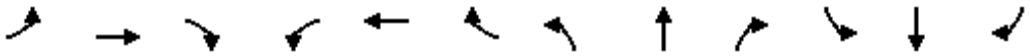
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	527	397	0
Future Vol, veh/h	0	0	0	527	397	0
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	0	0	573	432	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1005	216	432	0	-	0
Stage 1	432	-	-	-	-	-
Stage 2	573	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	252	789	1126	-	-	-
Stage 1	623	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	252	789	1126	-	-	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	623	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1126	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



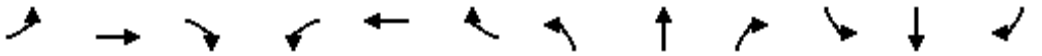
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	159	52	74	88	33	32	350	128	41	280	30
Future Volume (veh/h)	36	159	52	74	88	33	32	350	128	41	280	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.99	0.99		0.97	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	1811	1930	1870	1885	1900	1591	1781	1856	1796	1639	1961	1856
Adj Flow Rate, veh/h	44	196	64	88	105	39	35	385	141	52	354	38
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.91	0.91	0.91	0.79	0.79	0.79
Percent Heavy Veh, %	6	3	2	1	0	25	3	3	2	13	1	3
Cap, veh/h	690	697	228	594	962	674	351	604	478	234	1104	118
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1193	1377	450	1116	1900	1331	939	1856	1469	765	3391	361
Grp Volume(v), veh/h	44	0	260	88	105	39	35	385	141	52	193	199
Grp Sat Flow(s),veh/h/ln	1193	0	1826	1116	1900	1331	939	1856	1469	765	1863	1890
Q Serve(g_s), s	1.2	0.0	4.9	3.0	1.7	0.9	1.8	10.6	4.3	3.7	4.7	4.8
Cycle Q Clear(g_c), s	2.9	0.0	4.9	7.9	1.7	0.9	6.5	10.6	4.3	14.3	4.7	4.8
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	690	0	924	594	962	674	351	604	478	234	606	615
V/C Ratio(X)	0.06	0.00	0.28	0.15	0.11	0.06	0.10	0.64	0.29	0.22	0.32	0.32
Avail Cap(c_a), veh/h	690	0	924	594	962	674	482	863	683	341	866	879
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	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	8.5	0.0	8.5	10.8	7.7	7.5	17.7	17.2	15.1	23.3	15.2	15.3
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.5	0.2	0.2	0.4	3.2	1.0	0.8	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(95%),veh/ln	0.5	0.0	3.3	1.3	1.2	0.4	0.7	8.1	2.6	1.2	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.7	0.0	9.3	11.3	8.0	7.7	18.1	20.5	16.1	24.2	15.8	15.8
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		304			232			561			444	
Approach Delay, s/veh		9.2			9.2			19.2			16.8	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.4		24.6		35.4		24.6				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		9.9		16.3		6.9		12.6				
Green Ext Time (p_c), s		2.2		3.2		3.8		5.6				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

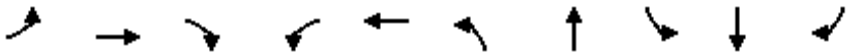
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	291	246	142	40	363	32	265	1230	30	19	577	509
Future Volume (vph)	291	246	142	40	363	32	265	1230	30	19	577	509
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1604	1719	3409		1681	4767		1532	4746	1748
Flt Permitted	0.95	1.00	1.00	0.59	1.00		0.30	1.00		0.18	1.00	1.00
Satd. Flow (perm)	3236	1773	1604	1076	3409		529	4767		291	4746	1748
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	316	267	154	46	417	37	294	1367	33	21	627	553
RTOR Reduction (vph)	0	0	95	0	6	0	0	2	0	0	0	108
Lane Group Flow (vph)	316	267	59	46	448	0	294	1398	0	21	627	445
Confl. Peds. (#/hr)	9		26	26		9	16		23	23		16
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	1%	0%	1%	0%	1%	0%	0%	1%	0%	5%	2%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	15.5	27.6	46.1	24.2	22.1		64.2	64.2		40.0	40.0	55.5
Effective Green, g (s)	15.5	27.6	46.1	24.2	22.1		64.2	64.2		40.0	40.0	55.5
Actuated g/C Ratio	0.13	0.23	0.38	0.20	0.18		0.54	0.54		0.33	0.33	0.46
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	417	407	616	278	627		460	2550		97	1582	808
v/s Ratio Prot	0.10	c0.15	0.01	0.02	c0.13		c0.10	0.29			0.13	0.07
v/s Ratio Perm			0.02	0.02			c0.24			0.07		0.18
v/c Ratio	0.76	0.66	0.10	0.17	0.71		0.64	0.55		0.22	0.40	0.55
Uniform Delay, d1	50.4	41.9	23.6	39.9	46.0		16.7	18.4		28.7	30.7	23.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	6.9	4.1	0.1	0.3	3.9		2.9	0.9		5.1	0.7	0.5
Delay (s)	57.3	46.0	23.7	40.2	49.9		19.6	19.2		33.8	31.5	23.7
Level of Service	E	D	C	D	D		B	B		C	C	C
Approach Delay (s)		46.2			49.0			19.3			27.9	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

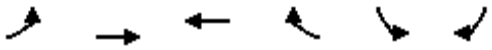


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	316	267	154	46	454	294	1400	21	627	553
v/c Ratio	0.76	0.66	0.21	0.16	0.75	0.63	0.54	0.21	0.39	0.60
Control Delay	62.4	50.6	2.2	40.7	53.9	23.3	19.6	42.9	33.4	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.4	50.6	2.2	40.7	53.9	23.3	19.6	42.9	33.4	17.2
Queue Length 50th (ft)	122	196	0	30	175	122	247	12	134	170
Queue Length 95th (ft)	169	269	19	58	211	211	337	43	208	348
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	485	580	754	282	857	489	2589	99	1619	956
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.46	0.20	0.16	0.53	0.60	0.54	0.21	0.39	0.58

Intersection Summary

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

03/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	145	1068	576	47	61	181
Future Volume (veh/h)	145	1068	576	47	61	181
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1870	1885
Adj Flow Rate, veh/h	159	1174	613	50	81	241
Peak Hour Factor	0.91	0.91	0.94	0.94	0.75	0.75
Percent Heavy Veh, %	0	1	1	0	2	1
Cap, veh/h	578	2514	2353	192	314	281
Arrive On Green	0.70	0.70	0.70	0.70	0.18	0.18
Sat Flow, veh/h	784	3676	3448	273	1781	1598
Grp Volume(v), veh/h	159	1174	327	336	81	241
Grp Sat Flow(s),veh/h/ln	784	1791	1791	1836	1781	1598
Q Serve(g_s), s	8.4	13.1	6.0	6.0	3.5	13.2
Cycle Q Clear(g_c), s	14.4	13.1	6.0	6.0	3.5	13.2
Prop In Lane	1.00			0.15	1.00	1.00
Lane Grp Cap(c), veh/h	578	2514	1257	1288	314	281
V/C Ratio(X)	0.28	0.47	0.26	0.26	0.26	0.86
Avail Cap(c_a), veh/h	578	2514	1257	1288	455	408
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	1.00	1.00
Uniform Delay (d), s/veh	7.5	6.0	4.9	4.9	32.0	36.0
Incr Delay (d2), s/veh	0.1	0.1	0.5	0.5	0.4	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	6.5	3.3	3.4	2.8	10.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.6	6.0	5.4	5.4	32.4	47.6
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		1333	663		322	
Approach Delay, s/veh		6.2	5.4		43.8	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		69.2		20.8		69.2
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		56.0		23.0		22.0
Max Q Clear Time (g_c+I1), s		8.0		15.2		16.4
Green Ext Time (p_c), s		6.5		0.7		3.0

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

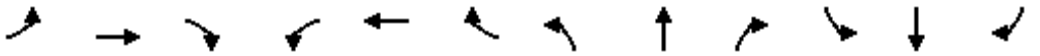
Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1080	23	13	598	9	11
Future Vol, veh/h	1080	23	13	598	9	11
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	88	88	56	56
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1213	26	15	680	16	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1243	0	1600	624
Stage 1	-	-	-	-	1230	-
Stage 2	-	-	-	-	370	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	567	-	99	433
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	565	-	96	432
Mov Cap-2 Maneuver	-	-	-	-	193	-
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	657	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	277	-	-	565	-
HCM Lane V/C Ratio	0.129	-	-	0.026	-
HCM Control Delay (s)	19.9	-	-	11.5	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	863	38	20	467	198	16	109	7	182	183	159
Future Volume (vph)	177	863	38	20	467	198	16	109	7	182	183	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1659	3544		1739	3336	1749		2139	1578	3120	1736	
Flt Permitted	0.46	1.00		0.25	1.00	1.00		0.90	1.00	0.95	1.00	
Satd. Flow (perm)	798	3544		451	3336	1749		1940	1578	3120	1736	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	186	908	40	22	502	213	17	117	8	200	201	175
RTOR Reduction (vph)	0	3	0	0	0	67	0	0	7	0	35	0
Lane Group Flow (vph)	186	945	0	22	502	146	0	134	1	200	341	0
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	51.1	51.1		51.1	51.1	61.6		11.5	11.5	10.5	28.1	
Effective Green, g (s)	51.1	51.1		51.1	51.1	61.6		11.5	11.5	10.5	28.1	
Actuated g/C Ratio	0.57	0.57		0.57	0.57	0.68		0.13	0.13	0.12	0.31	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	453	2012		256	1894	1197		247	201	364	542	
v/s Ratio Prot		c0.27			0.15	0.01				0.06	c0.20	
v/s Ratio Perm	0.23			0.05		0.07		0.07	0.00			
v/c Ratio	0.41	0.47		0.09	0.27	0.12		0.54	0.01	0.55	0.63	
Uniform Delay, d1	11.0	11.5		8.8	9.9	4.9		36.8	34.3	37.5	26.5	
Progression Factor	0.75	0.74		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.6	0.7		0.7	0.3	0.0		2.4	0.0	1.7	2.3	
Delay (s)	10.7	9.2		9.5	10.2	4.9		39.2	34.3	39.2	28.8	
Level of Service	B	A		A	B	A		D	C	D	C	
Approach Delay (s)		9.5			8.7			38.9			32.4	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	186	948	22	502	213	134	8	200	376
v/c Ratio	0.41	0.47	0.09	0.26	0.17	0.54	0.03	0.55	0.65
Control Delay	11.9	9.6	11.1	10.8	1.0	44.6	0.1	43.9	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.9	9.6	11.1	10.8	1.0	44.6	0.1	43.9	28.5
Queue Length 50th (ft)	35	92	5	72	0	73	0	55	158
Queue Length 95th (ft)	57	113	19	109	18	124	0	91	242
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	454	2018	256	1896	1254	625	579	362	607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.47	0.09	0.26	0.17	0.21	0.01	0.55	0.62

Intersection Summary

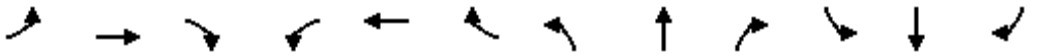
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	485	523	0
Future Vol, veh/h	0	0	0	485	523	0
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	0	0	527	568	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1095	284	568	0	-	0
Stage 1	568	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	222	714	1002	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	222	714	1002	-	-	-
Mov Cap-2 Maneuver	222	-	-	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	591	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1002	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



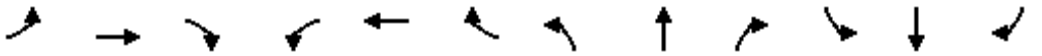
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	138	42	163	142	71	36	275	164	46	280	34
Future Volume (veh/h)	11	138	42	163	142	71	36	275	164	46	280	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.96	0.99		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	1900	1961	1900	1900	1900	1884	1824	1870	1810	1696	1961	1900
Adj Flow Rate, veh/h	13	168	51	177	154	77	40	306	182	53	322	39
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	0	1	0	0	0	6	0	2	1	9	1	0
Cap, veh/h	702	779	237	683	1031	857	330	541	427	243	967	116
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1160	1437	436	1168	1900	1579	987	1870	1478	818	3342	401
Grp Volume(v), veh/h	13	0	219	177	154	77	40	306	182	53	178	183
Grp Sat Flow(s),veh/h/ln	1160	0	1873	1168	1900	1579	987	1870	1478	818	1863	1881
Q Serve(g_s), s	0.3	0.0	3.6	5.6	2.4	1.4	2.0	8.3	6.0	3.5	4.5	4.6
Cycle Q Clear(g_c), s	2.8	0.0	3.6	9.2	2.4	1.4	6.6	8.3	6.0	11.9	4.5	4.6
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	702	0	1016	683	1031	857	330	541	427	243	539	544
V/C Ratio(X)	0.02	0.00	0.22	0.26	0.15	0.09	0.12	0.57	0.43	0.22	0.33	0.34
Avail Cap(c_a), veh/h	702	0	1016	683	1031	857	503	870	687	387	866	875
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	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	7.5	0.0	7.1	9.5	6.8	6.6	19.4	18.1	17.3	23.2	16.8	16.8
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.9	0.3	0.2	0.5	2.7	2.0	0.8	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(95%),veh/ln	0.1	0.0	2.4	2.5	1.6	0.8	0.8	6.6	3.8	1.2	3.4	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.6	0.0	7.6	10.4	7.1	6.8	19.9	20.8	19.2	24.0	17.4	17.4
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		232			408			528			414	
Approach Delay, s/veh		7.6			8.5			20.2			18.3	
Approach LOS		A			A			C			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		37.5		22.5		37.5		22.5				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		11.2		13.9		5.6		10.3				
Green Ext Time (p_c), s		3.6		3.3		3.0		5.5				

Intersection Summary												
HCM 6th Ctrl Delay			14.8									
HCM 6th LOS			B									

Notes

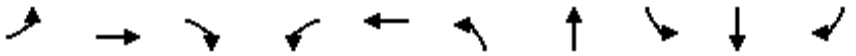
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	389	424	267	41	260	21	193	789	30	37	1209	325
Future Volume (vph)	389	424	267	41	260	21	193	789	30	37	1209	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	0.99		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.96	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1569	1642	3389		1668	4608		1557	4700	1703
Flt Permitted	0.95	1.00	1.00	0.50	1.00		0.09	1.00		0.30	1.00	1.00
Satd. Flow (perm)	3236	1773	1569	872	3389		157	4608		499	4700	1703
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	409	446	281	44	280	23	212	867	33	38	1234	332
RTOR Reduction (vph)	0	0	142	0	6	0	0	3	0	0	0	126
Lane Group Flow (vph)	409	446	139	44	297	0	212	897	0	38	1234	206
Confl. Peds. (#/hr)	44		32	32		44	42		48	48		42
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	0%	2%	5%	1%	5%	1%	4%	0%	0%	3%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	17.3	36.7	51.5	27.2	25.1		59.4	59.4		38.9	38.9	56.2
Effective Green, g (s)	17.3	36.7	51.5	27.2	25.1		59.4	59.4		38.9	38.9	56.2
Actuated g/C Ratio	0.14	0.31	0.43	0.23	0.21		0.49	0.49		0.32	0.32	0.47
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	466	542	673	243	708		264	2280		161	1523	797
v/s Ratio Prot	0.13	c0.25	0.03	0.01	c0.09		c0.10	0.19			0.26	0.04
v/s Ratio Perm			0.06	0.03			c0.30			0.08		0.08
v/c Ratio	0.88	0.82	0.21	0.18	0.42		0.80	0.39		0.24	0.81	0.26
Uniform Delay, d1	50.3	38.6	21.5	37.8	41.1		30.1	19.0		29.7	37.2	19.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	16.4	10.1	0.2	0.4	0.4		16.0	0.5		3.4	4.8	0.1
Delay (s)	66.7	48.8	21.6	38.1	41.5		46.2	19.5		33.1	41.9	19.4
Level of Service	E	D	C	D	D		D	B		C	D	B
Approach Delay (s)		48.5			41.1			24.6			37.1	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

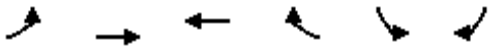


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	409	446	281	44	303	212	900	38	1234	332
v/c Ratio	0.88	0.82	0.34	0.17	0.44	0.80	0.39	0.23	0.79	0.36
Control Delay	70.4	51.6	2.8	37.0	41.6	50.0	20.3	41.1	42.9	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.4	51.6	2.8	37.0	41.6	50.0	20.3	41.1	42.9	7.5
Queue Length 50th (ft)	160	322	10	27	104	113	157	22	323	37
Queue Length 95th (ft)	#240	415	32	55	137	205	217	64	#537	114
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	485	593	880	274	868	325	2316	164	1558	938
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.75	0.32	0.16	0.35	0.65	0.39	0.23	0.79	0.35

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

EXISTING (2024) PLUS PROJECT TRAFFIC CONDITIONS



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	91	666	995	48	38	87
Future Volume (veh/h)	91	666	995	48	38	87
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1841	1693	1841
Adj Flow Rate, veh/h	94	687	1026	49	48	109
Peak Hour Factor	0.97	0.97	0.97	0.97	0.80	0.80
Percent Heavy Veh, %	1	1	2	4	14	4
Cap, veh/h	495	2812	2710	129	150	145
Arrive On Green	0.79	0.79	1.00	1.00	0.09	0.09
Sat Flow, veh/h	529	3676	3546	165	1612	1560
Grp Volume(v), veh/h	94	687	528	547	48	109
Grp Sat Flow(s),veh/h/ln	529	1791	1777	1840	1612	1560
Q Serve(g_s), s	4.2	4.6	0.0	0.0	2.5	6.1
Cycle Q Clear(g_c), s	4.2	4.6	0.0	0.0	2.5	6.1
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	495	2812	1395	1444	150	145
V/C Ratio(X)	0.19	0.24	0.38	0.38	0.32	0.75
Avail Cap(c_a), veh/h	495	2812	1395	1444	412	399
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.5	2.6	0.0	0.0	38.2	39.8
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.8	1.2	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	1.6	0.5	0.5	1.9	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	2.6	2.6	0.8	0.8	39.4	47.5
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		781	1075		157	
Approach Delay, s/veh		2.6	0.8		45.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		76.7		13.3		76.7
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		56.0		23.0		22.0
Max Q Clear Time (g_c+I1), s		2.0		8.1		6.6
Green Ext Time (p_c), s		13.2		0.4		3.4

Intersection Summary		
HCM 6th Ctrl Delay	4.9	
HCM 6th LOS	A	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1000	1155	6	0	0
Future Vol, veh/h	0	1000	1155	6	0	0
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	1087	1255	7	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	631
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	424
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	424
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

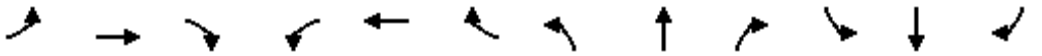
Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	994	6	9	1125	30	23
Future Vol, veh/h	994	6	9	1125	30	23
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	91	91	72	72
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1025	6	10	1236	42	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1034	0	1669	520
Stage 1	-	-	-	-	1031	-
Stage 2	-	-	-	-	638	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	680	-	89	506
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	494	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	678	-	87	504
Mov Cap-2 Maneuver	-	-	-	-	209	-
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	487	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	22.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	280	-	-	678	-
HCM Lane V/C Ratio	0.263	-	-	0.015	-
HCM Control Delay (s)	22.4	-	-	10.4	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	520	14	9	877	315	29	174	8	155	150	136
Future Volume (vph)	177	520	14	9	877	315	29	174	8	155	150	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1646	3518		1562	3303	1709		2125	1575	3090	1734	
Flt Permitted	0.24	1.00		0.41	1.00	1.00		0.90	1.00	0.95	1.00	
Satd. Flow (perm)	421	3518		676	3303	1709		1919	1575	3090	1734	
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	188	553	15	9	923	332	32	191	9	180	174	158
RTOR Reduction (vph)	0	1	0	0	0	103	0	0	7	0	35	0
Lane Group Flow (vph)	188	567	0	9	923	229	0	223	2	180	297	0
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	47.5	47.5		47.5	47.5	57.5		15.6	15.6	10.0	31.7	
Effective Green, g (s)	47.5	47.5		47.5	47.5	57.5		15.6	15.6	10.0	31.7	
Actuated g/C Ratio	0.53	0.53		0.53	0.53	0.64		0.17	0.17	0.11	0.35	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	222	1856		356	1743	1091		332	273	343	610	
v/s Ratio Prot		0.16			0.28	0.02				0.06	c0.17	
v/s Ratio Perm	c0.45			0.01		0.11		c0.12	0.00			
v/c Ratio	0.85	0.31		0.03	0.53	0.21		0.67	0.01	0.52	0.49	
Uniform Delay, d1	18.1	12.0		10.2	13.9	6.8		34.8	30.8	37.8	22.8	
Progression Factor	1.11	1.08		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	30.8	0.4		0.1	1.2	0.1		5.3	0.0	1.5	0.6	
Delay (s)	51.0	13.3		10.3	15.1	6.9		40.1	30.8	39.2	23.4	
Level of Service	D	B		B	B	A		D	C	D	C	
Approach Delay (s)		22.7			12.9			39.7			29.0	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	188	568	9	923	332	223	9	180	332
v/c Ratio	0.85	0.31	0.03	0.53	0.28	0.67	0.03	0.52	0.51
Control Delay	57.2	14.1	12.4	16.1	1.9	44.5	0.1	43.8	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	14.1	12.4	16.1	1.9	44.5	0.1	43.8	21.5
Queue Length 50th (ft)	94	100	2	171	7	120	0	50	122
Queue Length 95th (ft)	#244	147	11	258	38	181	0	79	170
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	222	1858	356	1743	1186	618	578	343	656
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.31	0.03	0.53	0.28	0.36	0.02	0.52	0.51

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

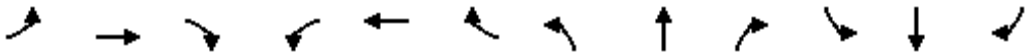
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	43	139	527	398	65
Future Vol, veh/h	16	43	139	527	398	65
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	17	47	151	573	433	71

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1344	252	504	0	-	0
Stage 1	469	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	155	748	1059	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	407	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	123	748	1059	-	-	-
Mov Cap-2 Maneuver	123	-	-	-	-	-
Stage 1	472	-	-	-	-	-
Stage 2	407	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.3	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1059	-	315	-	-
HCM Lane V/C Ratio	0.143	-	0.204	-	-
HCM Control Delay (s)	9	0	19.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.5	-	0.7	-	-



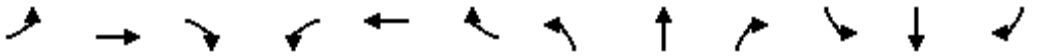
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	159	52	94	88	33	32	361	133	41	325	30
Future Volume (veh/h)	36	159	52	94	88	33	32	361	133	41	325	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.99	0.99		0.97	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	1811	1930	1870	1885	1900	1591	1781	1856	1796	1639	1961	1856
Adj Flow Rate, veh/h	44	196	64	112	105	39	35	397	146	52	411	38
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.91	0.91	0.91	0.79	0.79	0.79
Percent Heavy Veh, %	6	3	2	1	0	25	3	3	2	13	1	3
Cap, veh/h	676	682	223	580	942	660	339	623	494	237	1157	106
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1193	1376	449	1116	1900	1331	892	1856	1470	753	3445	317
Grp Volume(v), veh/h	44	0	260	112	105	39	35	397	146	52	221	228
Grp Sat Flow(s),veh/h/ln	1193	0	1826	1116	1900	1331	892	1856	1470	753	1863	1899
Q Serve(g_s), s	1.2	0.0	5.0	3.9	1.8	0.9	1.8	10.8	4.4	3.8	5.4	5.4
Cycle Q Clear(g_c), s	3.0	0.0	5.0	9.0	1.8	0.9	7.3	10.8	4.4	14.6	5.4	5.4
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	676	0	905	580	942	660	339	623	494	237	626	638
V/C Ratio(X)	0.07	0.00	0.29	0.19	0.11	0.06	0.10	0.64	0.30	0.22	0.35	0.36
Avail Cap(c_a), veh/h	676	0	905	580	942	660	454	863	684	334	866	883
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	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	8.9	0.0	8.9	11.5	8.1	7.9	17.8	16.8	14.7	23.0	15.0	15.0
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.7	0.2	0.2	0.4	3.1	1.0	0.8	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(95%),veh/ln	0.6	0.0	3.4	1.8	1.2	0.5	0.7	8.2	2.6	1.2	3.9	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.1	0.0	9.7	12.3	8.3	8.0	18.2	20.0	15.6	23.8	15.6	15.6
LnGrp LOS	A	A	A	B	A	A	B	B	B	C	B	B
Approach Vol, veh/h		304			256			578			501	
Approach Delay, s/veh		9.6			10.0			18.8			16.5	
Approach LOS		A			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.7		25.3		34.7		25.3				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		11.0		16.6		7.0		12.8				
Green Ext Time (p_c), s		2.3		3.6		3.8		5.7				

Intersection Summary		
HCM 6th Ctrl Delay		15.0
HCM 6th LOS		B

Notes

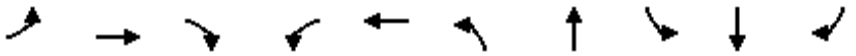
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	303	249	149	40	379	32	289	1230	30	19	577	556
Future Volume (vph)	303	249	149	40	379	32	289	1230	30	19	577	556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1606	1719	3411		1682	4767		1532	4746	1749
Flt Permitted	0.95	1.00	1.00	0.59	1.00		0.29	1.00		0.18	1.00	1.00
Satd. Flow (perm)	3236	1773	1606	1072	3411		507	4767		291	4746	1749
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	329	271	162	46	436	37	321	1367	33	21	627	604
RTOR Reduction (vph)	0	0	96	0	6	0	0	2	0	0	0	101
Lane Group Flow (vph)	329	271	66	46	467	0	321	1398	0	21	627	503
Confl. Peds. (#/hr)	9		26	26		9	16		23	23		16
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	1%	0%	1%	0%	1%	0%	0%	1%	0%	5%	2%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	15.8	28.0	48.6	25.0	22.9		63.1	63.1		36.8	36.8	52.6
Effective Green, g (s)	15.8	28.0	48.6	25.0	22.9		63.1	63.1		36.8	36.8	52.6
Actuated g/C Ratio	0.13	0.23	0.41	0.21	0.19		0.53	0.53		0.31	0.31	0.44
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	426	413	650	289	650		468	2506		89	1455	766
v/s Ratio Prot	0.10	c0.15	0.02	0.02	c0.14		c0.12	0.29			0.13	0.09
v/s Ratio Perm			0.02	0.02			c0.24			0.07		0.20
v/c Ratio	0.77	0.66	0.10	0.16	0.72		0.69	0.56		0.24	0.43	0.66
Uniform Delay, d1	50.4	41.6	22.1	39.3	45.5		17.8	19.1		31.1	33.2	26.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.7	4.0	0.1	0.3	3.8		4.1	0.9		6.1	0.9	1.6
Delay (s)	58.1	45.7	22.2	39.5	49.3		22.0	20.0		37.2	34.2	28.1
Level of Service	E	D	C	D	D		C	B		D	C	C
Approach Delay (s)		46.0			48.5			20.4			31.3	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



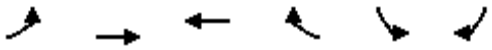
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	329	271	162	46	473	321	1400	21	627	604
v/c Ratio	0.77	0.66	0.21	0.16	0.75	0.68	0.55	0.23	0.42	0.69
Control Delay	63.0	50.3	2.0	39.8	53.2	25.7	20.4	45.9	35.9	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.0	50.3	2.0	39.8	53.2	25.7	20.4	45.9	35.9	22.6
Queue Length 50th (ft)	127	199	0	30	182	139	253	12	142	235
Queue Length 95th (ft)	176	272	19	57	218	236	341	43	208	#435
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	485	580	774	294	857	485	2543	90	1491	903
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.47	0.21	0.16	0.55	0.66	0.55	0.23	0.42	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

03/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	145	1092	614	47	61	181
Future Volume (veh/h)	145	1092	614	47	61	181
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1870	1885
Adj Flow Rate, veh/h	159	1200	653	50	81	241
Peak Hour Factor	0.91	0.91	0.94	0.94	0.75	0.75
Percent Heavy Veh, %	0	1	1	0	2	1
Cap, veh/h	597	2514	2366	181	314	281
Arrive On Green	0.70	0.70	0.93	0.93	0.18	0.18
Sat Flow, veh/h	756	3676	3466	258	1781	1598
Grp Volume(v), veh/h	159	1200	347	356	81	241
Grp Sat Flow(s),veh/h/ln	756	1791	1791	1839	1781	1598
Q Serve(g_s), s	7.6	13.5	1.6	1.6	3.5	13.2
Cycle Q Clear(g_c), s	9.1	13.5	1.6	1.6	3.5	13.2
Prop In Lane	1.00			0.14	1.00	1.00
Lane Grp Cap(c), veh/h	597	2514	1257	1290	314	281
V/C Ratio(X)	0.27	0.48	0.28	0.28	0.26	0.86
Avail Cap(c_a), veh/h	597	2514	1257	1290	455	408
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.7	6.0	0.9	0.9	32.0	36.0
Incr Delay (d2), s/veh	0.1	0.1	0.5	0.5	0.4	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	6.7	0.9	1.0	2.8	10.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.8	6.1	1.5	1.5	32.4	47.6
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		1359	703		322	
Approach Delay, s/veh		6.0	1.5		43.8	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		69.2		20.8		69.2
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		56.0		23.0		22.0
Max Q Clear Time (g_c+I1), s		3.6		15.2		15.5
Green Ext Time (p_c), s		7.0		0.7		3.5

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↱			↱
Traffic Vol, veh/h	0	1127	645	6	0	0
Future Vol, veh/h	0	1127	645	6	0	0
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	1225	701	7	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	354
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	642
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	642
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

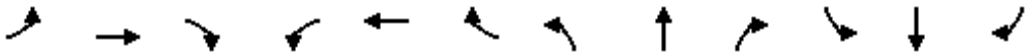
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1104	23	17	636	9	13
Future Vol, veh/h	1104	23	17	636	9	13
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	88	88	56	56
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1240	26	19	723	16	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1270	0	1657	637
Stage 1	-	-	-	-	1257	-
Stage 2	-	-	-	-	400	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	554	-	91	425
Stage 1	-	-	-	-	235	-
Stage 2	-	-	-	-	652	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	552	-	88	424
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	234	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	20.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	277	-	-	552	-
HCM Lane V/C Ratio	0.142	-	-	0.035	-
HCM Control Delay (s)	20.1	-	-	11.8	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	209	858	38	20	460	261	16	113	7	272	189	214
Future Volume (vph)	209	858	38	20	460	261	16	113	7	272	189	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1659	3543		1739	3336	1750		2140	1578	3120	1716	
Flt Permitted	0.46	1.00		0.24	1.00	1.00		0.90	1.00	0.95	1.00	
Satd. Flow (perm)	800	3543		444	3336	1750		1931	1578	3120	1716	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	220	903	40	22	495	281	17	122	8	299	208	235
RTOR Reduction (vph)	0	3	0	0	0	91	0	0	7	0	45	0
Lane Group Flow (vph)	220	940	0	22	495	190	0	139	1	299	398	0
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	49.5	49.5		49.5	49.5	60.7		12.4	12.4	11.2	29.7	
Effective Green, g (s)	49.5	49.5		49.5	49.5	60.7		12.4	12.4	11.2	29.7	
Actuated g/C Ratio	0.55	0.55		0.55	0.55	0.67		0.14	0.14	0.12	0.33	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	440	1948		244	1834	1180		266	217	388	566	
v/s Ratio Prot		0.27			0.15	0.02				0.10	c0.23	
v/s Ratio Perm	c0.27			0.05		0.09		0.07	0.00			
v/c Ratio	0.50	0.48		0.09	0.27	0.16		0.52	0.01	0.77	0.70	
Uniform Delay, d1	12.6	12.4		9.6	10.7	5.3		36.0	33.5	38.2	26.3	
Progression Factor	0.79	0.78		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.8	0.8		0.7	0.4	0.1		1.9	0.0	9.1	4.0	
Delay (s)	13.7	10.4		10.3	11.1	5.4		37.9	33.5	47.3	30.3	
Level of Service	B	B		B	B	A		D	C	D	C	
Approach Delay (s)		11.0			9.1			37.7			37.1	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	220	943	22	495	281	139	8	299	443
v/c Ratio	0.50	0.48	0.09	0.27	0.22	0.52	0.03	0.77	0.73
Control Delay	15.2	10.9	12.1	11.7	1.1	42.4	0.1	53.4	29.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.2	10.9	12.1	11.7	1.1	42.4	0.1	53.4	29.6
Queue Length 50th (ft)	79	175	6	74	0	75	0	85	186
Queue Length 95th (ft)	163	122	20	115	23	124	0	#158	278
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	439	1951	244	1834	1262	622	579	388	625
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.48	0.09	0.27	0.22	0.22	0.01	0.77	0.71

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

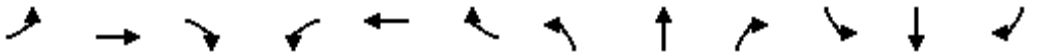
Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	151	98	485	524	40
Future Vol, veh/h	66	151	98	485	524	40
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	72	164	107	527	570	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1333	307	613	0	-	0
Stage 1	592	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	157	690	964	-	-	-
Stage 1	517	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	132	690	964	-	-	-
Mov Cap-2 Maneuver	132	-	-	-	-	-
Stage 1	436	-	-	-	-	-
Stage 2	470	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	49	1.5	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	964	-	302	-	-
HCM Lane V/C Ratio	0.11	-	0.781	-	-
HCM Control Delay (s)	9.2	0	49	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0.4	-	6.1	-	-



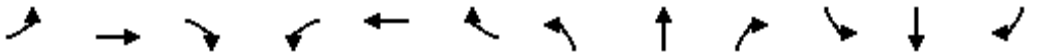
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	138	42	176	142	71	36	321	185	46	308	34
Future Volume (veh/h)	11	138	42	176	142	71	36	321	185	46	308	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.96	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	1900	1961	1900	1900	1900	1884	1824	1870	1810	1696	1961	1900
Adj Flow Rate, veh/h	13	168	51	191	154	77	40	357	206	53	354	39
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	0	1	0	0	0	6	0	2	1	9	1	0
Cap, veh/h	670	742	225	649	982	816	345	589	466	237	1065	116
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1159	1436	436	1168	1900	1579	960	1870	1480	765	3381	370
Grp Volume(v), veh/h	13	0	219	191	154	77	40	357	206	53	194	199
Grp Sat Flow(s),veh/h/ln	1159	0	1872	1168	1900	1579	960	1870	1480	765	1863	1888
Q Serve(g_s), s	0.4	0.0	3.8	6.4	2.6	1.5	2.0	9.7	6.6	3.8	4.8	4.8
Cycle Q Clear(g_c), s	2.9	0.0	3.8	10.3	2.6	1.5	6.8	9.7	6.6	13.5	4.8	4.8
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	670	0	968	649	982	816	345	589	466	237	587	595
V/C Ratio(X)	0.02	0.00	0.23	0.29	0.16	0.09	0.12	0.61	0.44	0.22	0.33	0.33
Avail Cap(c_a), veh/h	670	0	968	649	982	816	489	870	688	352	866	878
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	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	8.4	0.0	7.9	10.7	7.6	7.4	18.4	17.4	16.4	23.1	15.7	15.7
Incr Delay (d2), s/veh	0.1	0.0	0.5	1.2	0.3	0.2	0.4	2.9	1.9	0.8	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(95%),veh/ln	0.2	0.0	2.6	2.9	1.7	0.8	0.8	7.6	4.1	1.2	3.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.4	0.0	8.5	11.9	8.0	7.6	18.8	20.3	18.3	23.9	16.3	16.3
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		232			422			603			446	
Approach Delay, s/veh		8.5			9.7			19.5			17.2	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		36.0		24.0		36.0		24.0				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		12.3		15.5		5.8		11.7				
Green Ext Time (p_c), s		3.5		3.3		3.0		6.1				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

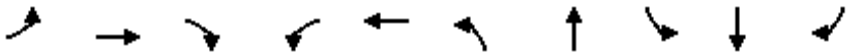
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	435	439	292	41	270	21	208	789	30	37	1209	356
Future Volume (vph)	435	439	292	41	270	21	208	789	30	37	1209	356
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	0.99		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.96	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1570	1643	3391		1668	4608		1557	4700	1706
Flt Permitted	0.95	1.00	1.00	0.50	1.00		0.09	1.00		0.30	1.00	1.00
Satd. Flow (perm)	3236	1773	1570	860	3391		166	4608		499	4700	1706
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	458	462	307	44	290	23	229	867	33	38	1234	363
RTOR Reduction (vph)	0	0	136	0	5	0	0	3	0	0	0	121
Lane Group Flow (vph)	458	462	171	44	308	0	229	897	0	38	1234	242
Confl. Peds. (#/hr)	44		32	32		44	42		48	48		42
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	0%	2%	5%	1%	5%	1%	4%	0%	0%	3%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	18.0	38.2	53.9	28.0	25.9		57.9	57.9		36.5	36.5	54.5
Effective Green, g (s)	18.0	38.2	53.9	28.0	25.9		57.9	57.9		36.5	36.5	54.5
Actuated g/C Ratio	0.15	0.32	0.45	0.23	0.22		0.48	0.48		0.30	0.30	0.45
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	485	564	705	247	731		276	2223		151	1429	774
v/s Ratio Prot	0.14	c0.26	0.03	0.01	c0.09		c0.11	0.19			0.26	0.05
v/s Ratio Perm			0.08	0.03			c0.29			0.08		0.10
v/c Ratio	0.94	0.82	0.24	0.18	0.42		0.83	0.40		0.25	0.86	0.31
Uniform Delay, d1	50.5	37.7	20.4	37.2	40.6		31.2	20.0		31.5	39.4	20.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	27.0	9.4	0.2	0.3	0.4		18.3	0.5		4.0	7.1	0.1
Delay (s)	77.5	47.1	20.6	37.5	41.0		49.5	20.5		35.4	46.5	20.9
Level of Service	E	D	C	D	D		D	C		D	D	C
Approach Delay (s)		51.8			40.6			26.4			40.6	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	458	462	307	44	313	229	900	38	1234	363
v/c Ratio	0.94	0.82	0.36	0.17	0.44	0.83	0.40	0.25	0.84	0.40
Control Delay	79.9	50.3	3.3	36.5	41.3	52.5	21.0	42.9	46.6	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.9	50.3	3.3	36.5	41.3	52.5	21.0	42.9	46.6	9.9
Queue Length 50th (ft)	183	333	18	27	107	126	161	22	334	59
Queue Length 95th (ft)	#285	434	40	55	142	#224	217	64	#537	150
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	485	597	896	273	870	327	2260	155	1464	901
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.77	0.34	0.16	0.36	0.70	0.40	0.25	0.84	0.40

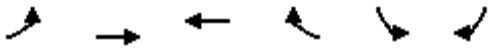
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

FUTURE (2029) TRAFFIC CONDITIONS

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

03/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	760	1097	52	69	101
Future Volume (veh/h)	97	760	1097	52	69	101
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1841	1693	1841
Adj Flow Rate, veh/h	100	784	1131	54	86	126
Peak Hour Factor	0.97	0.97	0.97	0.97	0.80	0.80
Percent Heavy Veh, %	1	1	2	4	14	4
Cap, veh/h	395	2765	2665	127	170	165
Arrive On Green	0.77	0.77	0.77	0.77	0.11	0.11
Sat Flow, veh/h	477	3676	3546	165	1612	1560
Grp Volume(v), veh/h	100	784	582	603	86	126
Grp Sat Flow(s),veh/h/ln	477	1791	1777	1840	1612	1560
Q Serve(g_s), s	8.1	5.7	10.0	10.0	4.5	7.1
Cycle Q Clear(g_c), s	18.1	5.7	10.0	10.0	4.5	7.1
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	395	2765	1372	1421	170	165
V/C Ratio(X)	0.25	0.28	0.42	0.42	0.50	0.76
Avail Cap(c_a), veh/h	395	2765	1372	1421	376	364
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	1.00	1.00
Uniform Delay (d), s/veh	6.6	3.0	3.5	3.5	38.0	39.1
Incr Delay (d2), s/veh	0.1	0.0	1.0	0.9	2.3	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.2	2.2	4.3	4.5	3.4	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.7	3.0	4.4	4.4	40.3	46.3
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		884	1185		212	
Approach Delay, s/veh		3.4	4.4		43.9	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		75.5		14.5		75.5
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		58.0		21.0		58.0
Max Q Clear Time (g_c+I1), s		12.0		9.1		20.1
Green Ext Time (p_c), s		14.9		0.5		5.0

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

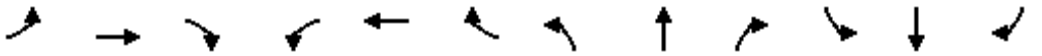
Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1134	6	8	1236	32	20
Future Vol, veh/h	1134	6	8	1236	32	20
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	91	91	72	72
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1169	6	9	1358	44	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1178	0	1872	592
Stage 1	-	-	-	-	1175	-
Stage 2	-	-	-	-	697	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	600	-	65	454
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	461	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	599	-	64	453
Mov Cap-2 Maneuver	-	-	-	-	177	-
Stage 1	-	-	-	-	259	-
Stage 2	-	-	-	-	454	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	27.5
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	231	-	-	599	-
HCM Lane V/C Ratio	0.313	-	-	0.015	-
HCM Control Delay (s)	27.5	-	-	11.1	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	188	630	15	9	970	265	30	177	8	144	157	139
Future Volume (vph)	188	630	15	9	970	265	30	177	8	144	157	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1647	3520		1564	3303	1710		2125	1575	3090	1736	
Flt Permitted	0.20	1.00		0.35	1.00	1.00		0.89	1.00	0.95	1.00	
Satd. Flow (perm)	353	3520		571	3303	1710		1913	1575	3090	1736	
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	200	670	16	9	1021	279	33	195	9	167	183	162
RTOR Reduction (vph)	0	1	0	0	0	80	0	0	7	0	33	0
Lane Group Flow (vph)	200	685	0	9	1021	199	0	228	2	167	312	0
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	46.9	46.9		46.9	46.9	56.9		16.2	16.2	10.0	32.3	
Effective Green, g (s)	46.9	46.9		46.9	46.9	56.9		16.2	16.2	10.0	32.3	
Actuated g/C Ratio	0.52	0.52		0.52	0.52	0.63		0.18	0.18	0.11	0.36	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	183	1834		297	1721	1081		344	283	343	623	
v/s Ratio Prot		0.19			0.31	0.02				0.05	c0.18	
v/s Ratio Perm	c0.57			0.02		0.10		c0.12	0.00			
v/c Ratio	1.09	0.37		0.03	0.59	0.18		0.66	0.01	0.49	0.50	
Uniform Delay, d1	21.6	12.8		10.5	14.9	6.9		34.4	30.3	37.6	22.5	
Progression Factor	1.08	1.05		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	93.2	0.6		0.2	1.5	0.1		4.7	0.0	1.1	0.6	
Delay (s)	116.5	14.0		10.7	16.5	7.0		39.1	30.3	38.7	23.2	
Level of Service	F	B		B	B	A		D	C	D	C	
Approach Delay (s)		37.2			14.4			38.8			28.2	
Approach LOS		D			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	200	686	9	1021	279	228	9	167	345
v/c Ratio	1.09	0.37	0.03	0.59	0.24	0.66	0.02	0.49	0.53
Control Delay	119.1	14.9	13.0	17.5	2.2	43.3	0.1	42.9	21.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	119.1	14.9	13.0	17.5	2.2	43.3	0.1	42.9	21.6
Queue Length 50th (ft)	~133	135	2	200	10	122	0	46	129
Queue Length 95th (ft)	#280	187	11	302	41	183	0	74	176
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	184	1837	298	1722	1151	616	578	343	665
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.37	0.03	0.59	0.24	0.37	0.02	0.49	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

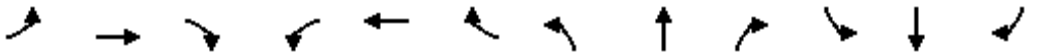
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	629	439	0
Future Vol, veh/h	0	0	0	629	439	0
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	0	0	684	477	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1161	239	477	0	-	0
Stage 1	477	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	202	763	1083	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	202	763	1083	-	-	-
Mov Cap-2 Maneuver	202	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1083	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



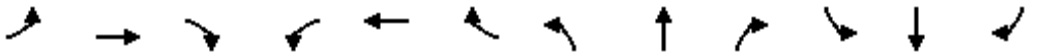
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	167	55	78	92	35	34	443	135	43	316	33
Future Volume (veh/h)	48	167	55	78	92	35	34	443	135	43	316	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.99	1.00		0.97	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	1811	1930	1870	1885	1900	1591	1781	1856	1796	1639	1961	1856
Adj Flow Rate, veh/h	59	206	68	93	110	42	37	487	148	54	400	42
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.91	0.91	0.91	0.79	0.79	0.79
Percent Heavy Veh, %	6	3	2	1	0	25	3	3	2	13	1	3
Cap, veh/h	621	626	207	517	868	607	381	696	552	226	1275	133
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1184	1371	453	1101	1900	1329	898	1856	1472	693	3400	355
Grp Volume(v), veh/h	59	0	274	93	110	42	37	487	148	54	218	224
Grp Sat Flow(s),veh/h/ln	1184	0	1824	1101	1900	1329	898	1856	1472	693	1863	1892
Q Serve(g_s), s	1.8	0.0	5.8	3.5	2.0	1.1	1.8	13.3	4.2	4.3	5.0	5.0
Cycle Q Clear(g_c), s	3.8	0.0	5.8	9.3	2.0	1.1	6.9	13.3	4.2	17.6	5.0	5.0
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	621	0	833	517	868	607	381	696	552	226	698	710
V/C Ratio(X)	0.10	0.00	0.33	0.18	0.13	0.07	0.10	0.70	0.27	0.24	0.31	0.32
Avail Cap(c_a), veh/h	621	0	833	517	868	607	462	863	685	288	866	880
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	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	10.5	0.0	10.4	13.4	9.4	9.1	15.7	15.9	13.0	23.4	13.3	13.3
Incr Delay (d2), s/veh	0.3	0.0	1.1	0.8	0.3	0.2	0.3	4.0	0.8	1.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	0.0	4.0	1.6	1.4	0.5	0.7	9.7	2.4	1.3	3.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	0.0	11.5	14.2	9.7	9.4	16.0	19.9	13.8	24.3	13.7	13.7
LnGrp LOS	B	A	B	B	A	A	B	B	B	C	B	B
Approach Vol, veh/h		333			245			672			496	
Approach Delay, s/veh		11.4			11.3			18.3			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.4		27.6		32.4		27.6				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		11.3		19.6		7.8		15.3				
Green Ext Time (p_c), s		2.1		2.9		4.0		6.0				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

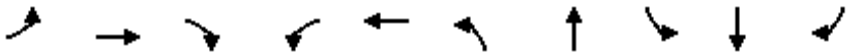
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	371	264	161	45	382	52	311	1698	34	38	900	574
Future Volume (vph)	371	264	161	45	382	52	311	1698	34	38	900	574
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1610	1720	3388		1684	4772		1540	4746	1751
Flt Permitted	0.95	1.00	1.00	0.58	1.00		0.11	1.00		0.13	1.00	1.00
Satd. Flow (perm)	3236	1773	1610	1057	3388		196	4772		213	4746	1751
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	403	287	175	52	439	60	346	1887	38	41	978	624
RTOR Reduction (vph)	0	0	93	0	10	0	0	1	0	0	0	101
Lane Group Flow (vph)	403	287	82	52	489	0	346	1924	0	41	978	523
Confl. Peds. (#/hr)	9		26	26		9	16		23	23		16
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	1%	0%	1%	0%	1%	0%	0%	1%	0%	5%	2%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	15.0	29.5	56.5	25.8	23.7		63.1	63.1		30.4	30.4	45.4
Effective Green, g (s)	15.0	29.5	56.5	25.8	23.7		63.1	63.1		30.4	30.4	45.4
Actuated g/C Ratio	0.12	0.25	0.47	0.22	0.20		0.53	0.53		0.25	0.25	0.38
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	404	435	758	286	669		437	2509		53	1202	662
v/s Ratio Prot	c0.12	0.16	0.02	0.02	c0.14		0.18	c0.40			0.21	0.10
v/s Ratio Perm			0.03	0.02			c0.24			0.19		0.20
v/c Ratio	1.00	0.66	0.11	0.18	0.73		0.79	0.77		0.77	0.81	0.79
Uniform Delay, d1	52.5	40.7	17.7	38.9	45.2		30.8	22.6		41.6	42.1	33.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	43.8	3.9	0.1	0.3	4.1		9.5	2.3		69.1	6.1	5.8
Delay (s)	96.2	44.6	17.8	39.2	49.3		40.3	24.9		110.7	48.2	38.8
Level of Service	F	D	B	D	D		D	C		F	D	D
Approach Delay (s)		63.2			48.3			27.3			46.2	
Approach LOS		E			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	41.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

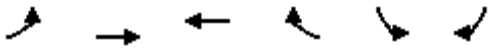
c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	403	287	175	52	499	346	1925	41	978	624
v/c Ratio	1.00	0.66	0.20	0.18	0.76	0.79	0.76	0.75	0.79	0.81
Control Delay	96.9	49.3	1.8	39.6	52.6	42.9	25.0	109.8	47.8	32.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.9	49.3	1.8	39.6	52.6	42.9	25.0	109.8	47.8	32.1
Queue Length 50th (ft)	163	210	0	33	190	197	408	30	265	304
Queue Length 95th (ft)	#269	286	21	63	226	#371	527	#105	#356	#549
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	404	541	861	291	856	439	2544	55	1234	769
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.53	0.20	0.18	0.58	0.79	0.76	0.75	0.79	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	157	1199	713	67	75	194
Future Volume (veh/h)	157	1199	713	67	75	194
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1870	1885
Adj Flow Rate, veh/h	173	1318	759	71	100	259
Peak Hour Factor	0.91	0.91	0.94	0.94	0.75	0.75
Percent Heavy Veh, %	0	1	1	0	2	1
Cap, veh/h	482	2475	2288	214	332	298
Arrive On Green	0.69	0.69	0.69	0.69	0.19	0.19
Sat Flow, veh/h	671	3676	3405	310	1781	1598
Grp Volume(v), veh/h	173	1318	410	420	100	259
Grp Sat Flow(s),veh/h/ln	671	1791	1791	1829	1781	1598
Q Serve(g_s), s	12.5	16.2	8.3	8.3	4.4	14.2
Cycle Q Clear(g_c), s	20.8	16.2	8.3	8.3	4.4	14.2
Prop In Lane	1.00			0.17	1.00	1.00
Lane Grp Cap(c), veh/h	482	2475	1238	1264	332	298
V/C Ratio(X)	0.36	0.53	0.33	0.33	0.30	0.87
Avail Cap(c_a), veh/h	482	2475	1238	1264	435	391
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	1.00	1.00
Uniform Delay (d), s/veh	9.7	6.8	5.6	5.6	31.5	35.5
Incr Delay (d2), s/veh	0.2	0.1	0.7	0.7	0.5	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	8.1	4.6	4.7	3.5	11.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.9	6.9	6.3	6.3	32.0	50.5
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		1491	830		359	
Approach Delay, s/veh		7.3	6.3		45.4	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		68.2		21.8		68.2
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		57.0		22.0		57.0
Max Q Clear Time (g_c+I1), s		10.3		16.2		22.8
Green Ext Time (p_c), s		8.8		0.6		9.0

Intersection Summary		
HCM 6th Ctrl Delay	12.1	
HCM 6th LOS	B	

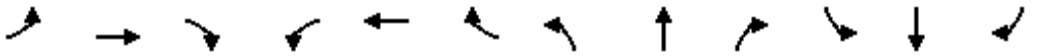
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1223	24	14	755	9	12
Future Vol, veh/h	1223	24	14	755	9	12
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	88	88	56	56
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1374	27	16	858	16	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1405	0	1853	705
Stage 1	-	-	-	-	1392	-
Stage 2	-	-	-	-	461	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	492	-	67	383
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	607	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	490	-	65	382
Mov Cap-2 Maneuver	-	-	-	-	156	-
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	587	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	23.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	236	-	-	490	-
HCM Lane V/C Ratio	0.159	-	-	0.032	-
HCM Control Delay (s)	23.1	-	-	12.6	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	201	981	40	21	606	217	17	115	7	195	192	176
Future Volume (vph)	201	981	40	21	606	217	17	115	7	195	192	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1661	3546		1741	3336	1749		2139	1578	3120	1732	
Flt Permitted	0.38	1.00		0.20	1.00	1.00		0.90	1.00	0.95	1.00	
Satd. Flow (perm)	656	3546		370	3336	1749		1930	1578	3120	1732	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	212	1033	42	23	652	233	18	124	8	214	211	193
RTOR Reduction (vph)	0	2	0	0	0	75	0	0	7	0	37	0
Lane Group Flow (vph)	212	1073	0	23	652	158	0	142	1	214	367	0
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	51.2	51.2		51.2	51.2	61.2		11.9	11.9	10.0	28.0	
Effective Green, g (s)	51.2	51.2		51.2	51.2	61.2		11.9	11.9	10.0	28.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57	0.68		0.13	0.13	0.11	0.31	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	373	2017		210	1897	1189		255	208	346	538	
v/s Ratio Prot		0.30			0.20	0.01				0.07	c0.21	
v/s Ratio Perm	c0.32			0.06		0.08		0.07	0.00			
v/c Ratio	0.57	0.53		0.11	0.34	0.13		0.56	0.01	0.62	0.68	
Uniform Delay, d1	12.4	12.0		8.9	10.4	5.1		36.6	33.9	38.2	27.1	
Progression Factor	0.73	0.77		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.6	0.9		1.1	0.5	0.1		2.6	0.0	3.3	3.6	
Delay (s)	14.6	10.1		10.0	10.9	5.1		39.2	33.9	41.5	30.7	
Level of Service	B	B		A	B	A		D	C	D	C	
Approach Delay (s)		10.8			9.4			38.9			34.4	
Approach LOS		B			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	212	1075	23	652	233	142	8	214	404
v/c Ratio	0.57	0.53	0.11	0.34	0.19	0.56	0.03	0.62	0.70
Control Delay	16.4	10.6	11.9	11.5	1.0	44.6	0.1	46.6	30.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.4	10.6	11.9	11.5	1.0	44.6	0.1	46.6	30.4
Queue Length 50th (ft)	53	110	6	97	0	77	0	60	175
Queue Length 95th (ft)	92	184	21	148	19	129	0	97	260
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	373	2019	210	1898	1254	622	579	346	608
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.53	0.11	0.34	0.19	0.23	0.01	0.62	0.66

Intersection Summary

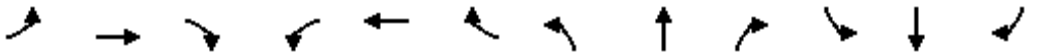
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	535	563	0
Future Vol, veh/h	0	0	0	535	563	0
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	0	0	582	612	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1194	306	612	0	-	0
Stage 1	612	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	192	691	965	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	192	691	965	-	-	-
Mov Cap-2 Maneuver	192	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	965	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



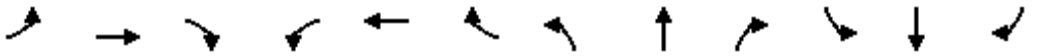
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	145	44	171	149	75	38	314	172	48	307	42
Future Volume (veh/h)	16	145	44	171	149	75	38	314	172	48	307	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.96	0.99		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	1900	1961	1900	1900	1900	1884	1824	1870	1810	1696	1961	1900
Adj Flow Rate, veh/h	20	177	54	186	162	82	42	349	191	55	353	48
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	0	1	0	0	0	6	0	2	1	9	1	0
Cap, veh/h	671	753	230	649	997	829	332	574	454	235	1009	136
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1146	1435	438	1156	1900	1579	952	1870	1479	781	3292	444
Grp Volume(v), veh/h	20	0	231	186	162	82	42	349	191	55	198	203
Grp Sat Flow(s),veh/h/ln	1146	0	1872	1156	1900	1579	952	1870	1479	781	1863	1873
Q Serve(g_s), s	0.6	0.0	4.0	6.2	2.7	1.6	2.2	9.5	6.2	3.9	5.0	5.0
Cycle Q Clear(g_c), s	3.2	0.0	4.0	10.2	2.7	1.6	7.2	9.5	6.2	13.4	5.0	5.0
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	671	0	983	649	997	829	332	574	454	235	571	574
V/C Ratio(X)	0.03	0.00	0.24	0.29	0.16	0.10	0.13	0.61	0.42	0.23	0.35	0.35
Avail Cap(c_a), veh/h	671	0	983	649	997	829	435	776	614	320	773	777
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	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	8.2	0.0	7.7	10.5	7.4	7.1	19.0	17.7	16.6	23.4	16.1	16.2
Incr Delay (d2), s/veh	0.1	0.0	0.6	1.1	0.3	0.2	0.5	3.0	1.8	0.9	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	2.7	2.8	1.8	0.9	0.9	7.5	3.8	1.3	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.3	0.0	8.3	11.6	7.7	7.4	19.5	20.7	18.4	24.3	16.8	16.8
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		251			430			582			456	
Approach Delay, s/veh		8.3			9.3			19.9			17.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		36.5		23.5		36.5		23.5				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 25		24.9		* 25		24.9				
Max Q Clear Time (g_c+I1), s		12.2		15.4		6.0		11.5				
Green Ext Time (p_c), s		4.3		2.9		3.6		5.2				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

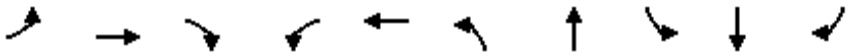
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	463	448	290	54	276	47	219	1211	44	64	1761	436
Future Volume (vph)	463	448	290	54	276	47	219	1211	44	64	1761	436
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99		1.00	0.99		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.98	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1570	1648	3328		1668	4611		1590	4700	1696
Flt Permitted	0.95	1.00	1.00	0.41	1.00		0.09	1.00		0.18	1.00	1.00
Satd. Flow (perm)	3236	1773	1570	714	3328		160	4611		309	4700	1696
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	487	472	305	58	297	51	241	1331	48	65	1797	445
RTOR Reduction (vph)	0	0	90	0	11	0	0	3	0	0	0	102
Lane Group Flow (vph)	487	472	215	58	337	0	241	1376	0	65	1797	343
Confl. Peds. (#/hr)	44		32	32		44	42		48	48		42
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	0%	2%	5%	1%	5%	1%	4%	0%	0%	3%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	13.0	36.7	52.3	31.5	29.4		59.4	59.4		38.1	38.1	51.1
Effective Green, g (s)	13.0	36.7	52.3	31.5	29.4		59.4	59.4		38.1	38.1	51.1
Actuated g/C Ratio	0.11	0.31	0.44	0.26	0.24		0.49	0.49		0.32	0.32	0.43
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	350	542	684	243	815		275	2282		98	1492	722
v/s Ratio Prot	c0.15	c0.27	0.04	0.01	c0.10		c0.11	0.30			c0.38	0.05
v/s Ratio Perm			0.10	0.05			0.32			0.21		0.15
v/c Ratio	1.39	0.87	0.31	0.24	0.41		0.88	0.60		0.66	1.20	0.48
Uniform Delay, d1	53.5	39.4	22.1	38.3	38.1		34.2	21.8		35.4	41.0	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	192.8	14.6	0.3	0.5	0.3		25.3	1.2		30.2	98.6	0.2
Delay (s)	246.3	54.0	22.4	38.8	38.4		59.5	23.0		65.6	139.6	25.0
Level of Service	F	D	C	D	D		E	C		E	F	C
Approach Delay (s)		120.5			38.4			28.4			115.4	
Approach LOS		F			D			C			F	

Intersection Summary			
HCM 2000 Control Delay	85.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	487	472	305	58	348	241	1379	65	1797	445
v/c Ratio	1.39	0.87	0.39	0.22	0.43	0.87	0.59	0.65	1.17	0.54
Control Delay	232.6	57.2	8.1	36.3	37.9	61.7	23.4	67.2	122.7	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	232.6	57.2	8.1	36.3	37.9	61.7	23.4	67.2	122.7	15.0
Queue Length 50th (ft)	~258	338	49	33	110	~163	289	43	~612	131
Queue Length 95th (ft)	#367	#513	97	67	154	#330	340	#119	#709	217
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	350	549	783	278	896	276	2321	100	1530	830
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.39	0.86	0.39	0.21	0.39	0.87	0.59	0.65	1.17	0.54

Intersection Summary

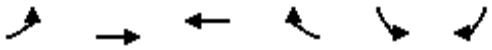
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

FUTURE (2029) WITH PROJECT TRAFFIC CONDITIONS

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

03/20/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	798	1107	52	69	101
Future Volume (veh/h)	97	798	1107	52	69	101
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1841	1693	1841
Adj Flow Rate, veh/h	100	823	1141	54	86	126
Peak Hour Factor	0.97	0.97	0.97	0.97	0.80	0.80
Percent Heavy Veh, %	1	1	2	4	14	4
Cap, veh/h	444	2765	2666	126	170	165
Arrive On Green	0.77	0.77	1.00	1.00	0.11	0.11
Sat Flow, veh/h	472	3676	3547	163	1612	1560
Grp Volume(v), veh/h	100	823	587	608	86	126
Grp Sat Flow(s),veh/h/ln	472	1791	1777	1840	1612	1560
Q Serve(g_s), s	5.5	6.1	0.0	0.0	4.5	7.1
Cycle Q Clear(g_c), s	5.5	6.1	0.0	0.0	4.5	7.1
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	444	2765	1372	1421	170	165
V/C Ratio(X)	0.23	0.30	0.43	0.43	0.50	0.76
Avail Cap(c_a), veh/h	444	2765	1372	1421	376	364
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.0	3.0	0.0	0.0	38.0	39.1
Incr Delay (d2), s/veh	0.1	0.0	1.0	0.9	2.3	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	2.3	0.7	0.7	3.4	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.1	3.1	1.0	0.9	40.3	46.3
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		923	1195		212	
Approach Delay, s/veh		3.1	1.0		43.9	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		75.5		14.5		75.5
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		58.0		21.0		58.0
Max Q Clear Time (g_c+I1), s		2.0		9.1		8.1
Green Ext Time (p_c), s		15.9		0.5		5.3

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	1178	1277	6	0	0
Future Vol, veh/h	0	1178	1277	6	0	0
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	1280	1388	7	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	698
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	383
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	383
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

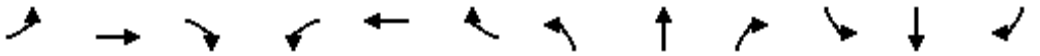
Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1172	6	9	1246	32	24
Future Vol, veh/h	1172	6	9	1246	32	24
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	91	91	72	72
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1208	6	10	1369	44	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1217	0	1919	611
Stage 1	-	-	-	-	1214	-
Stage 2	-	-	-	-	705	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	580	-	61	442
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	456	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	579	-	60	441
Mov Cap-2 Maneuver	-	-	-	-	170	-
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	448	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	28.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	231	-	-	579	-
HCM Lane V/C Ratio	0.337	-	-	0.017	-
HCM Control Delay (s)	28.3	-	-	11.3	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	1.4	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	627	15	9	969	353	30	183	8	169	158	157
Future Volume (vph)	233	627	15	9	969	353	30	183	8	169	158	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1648	3520		1564	3303	1710		2125	1575	3090	1726	
Flt Permitted	0.20	1.00		0.35	1.00	1.00		0.89	1.00	0.95	1.00	
Satd. Flow (perm)	349	3520		570	3303	1710		1914	1575	3090	1726	
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	248	667	16	9	1020	372	33	201	9	197	184	183
RTOR Reduction (vph)	0	1	0	0	0	109	0	0	7	0	37	0
Lane Group Flow (vph)	248	682	0	9	1020	263	0	234	2	197	330	0
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	46.2	46.2		46.2	46.2	56.2		16.9	16.9	10.0	33.0	
Effective Green, g (s)	46.2	46.2		46.2	46.2	56.2		16.9	16.9	10.0	33.0	
Actuated g/C Ratio	0.51	0.51		0.51	0.51	0.62		0.19	0.19	0.11	0.37	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	179	1806		292	1695	1067		359	295	343	632	
v/s Ratio Prot		0.19			0.31	0.03				0.06	c0.19	
v/s Ratio Perm	c0.71			0.02		0.13		c0.12	0.00			
v/c Ratio	1.39	0.38		0.03	0.60	0.25		0.65	0.01	0.57	0.52	
Uniform Delay, d1	21.9	13.2		10.8	15.4	7.5		33.8	29.7	38.0	22.3	
Progression Factor	1.08	1.04		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	203.9	0.6		0.2	1.6	0.1		4.2	0.0	2.3	0.8	
Delay (s)	227.5	14.3		11.0	17.0	7.6		38.0	29.7	40.3	23.1	
Level of Service	F	B		B	B	A		D	C	D	C	
Approach Delay (s)		71.1			14.5			37.7			29.1	
Approach LOS		E			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	248	683	9	1020	372	234	9	197	367
v/c Ratio	1.39	0.38	0.03	0.60	0.32	0.65	0.02	0.57	0.55
Control Delay	230.8	15.3	13.6	18.2	2.5	41.8	0.1	45.2	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	230.8	15.3	13.6	18.2	2.5	41.8	0.1	45.2	21.3
Queue Length 50th (ft)	~196	135	2	203	13	124	0	55	136
Queue Length 95th (ft)	#358	190	12	309	51	184	0	86	183
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	179	1806	292	1694	1166	616	578	343	677
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.39	0.38	0.03	0.60	0.32	0.38	0.02	0.57	0.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

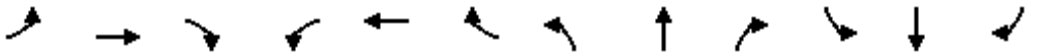
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	43	139	629	440	65
Future Vol, veh/h	16	43	139	629	440	65
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	17	47	151	684	478	71

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1500	275	549	0	-	0
Stage 1	514	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	123	723	1019	-	-	-
Stage 1	566	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	94	723	1019	-	-	-
Mov Cap-2 Maneuver	94	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	360	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.6	1.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1019	-	257	-	-
HCM Lane V/C Ratio	0.148	-	0.25	-	-
HCM Control Delay (s)	9.1	0	23.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.5	-	1	-	-



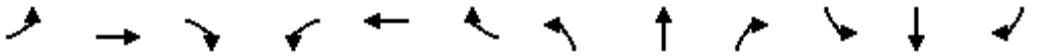
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	167	55	98	92	35	34	454	140	43	361	33
Future Volume (veh/h)	48	167	55	98	92	35	34	454	140	43	361	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.99	1.00		0.97	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	1811	1930	1870	1885	1900	1591	1781	1856	1796	1639	1961	1856
Adj Flow Rate, veh/h	59	206	68	117	110	42	37	499	154	54	457	42
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.91	0.91	0.91	0.79	0.79	0.79
Percent Heavy Veh, %	6	3	2	1	0	25	3	3	2	13	1	3
Cap, veh/h	609	614	203	505	850	595	367	713	566	227	1324	121
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1183	1371	453	1101	1900	1329	852	1856	1473	682	3447	316
Grp Volume(v), veh/h	59	0	274	117	110	42	37	499	154	54	246	253
Grp Sat Flow(s),veh/h/ln	1183	0	1824	1101	1900	1329	852	1856	1473	682	1863	1900
Q Serve(g_s), s	1.8	0.0	5.9	4.6	2.0	1.1	1.9	13.6	4.3	4.3	5.6	5.7
Cycle Q Clear(g_c), s	3.9	0.0	5.9	10.5	2.0	1.1	7.6	13.6	4.3	17.9	5.6	5.7
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	609	0	816	505	850	595	367	713	566	227	715	730
V/C Ratio(X)	0.10	0.00	0.34	0.23	0.13	0.07	0.10	0.70	0.27	0.24	0.34	0.35
Avail Cap(c_a), veh/h	609	0	816	505	850	595	436	863	685	283	866	883
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	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	10.9	0.0	10.8	14.2	9.7	9.5	15.8	15.6	12.7	23.1	13.1	13.1
Incr Delay (d2), s/veh	0.3	0.0	1.1	1.1	0.3	0.2	0.3	3.9	0.7	0.9	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(95%),veh/ln	0.9	0.0	4.1	2.1	1.5	0.6	0.7	9.8	2.5	1.3	3.9	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.2	0.0	11.9	15.3	10.0	9.7	16.2	19.5	13.5	24.1	13.6	13.6
LnGrp LOS	B	A	B	B	B	A	B	B	B	C	B	B
Approach Vol, veh/h		333			269			690			553	
Approach Delay, s/veh		11.8			12.3			18.0			14.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		31.9		28.1		31.9		28.1				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		12.5		19.9		7.9		15.6				
Green Ext Time (p_c), s		2.2		3.1		4.0		6.1				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

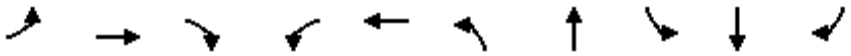
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	383	267	168	45	398	52	335	1698	34	38	900	621
Future Volume (vph)	383	267	168	45	398	52	335	1698	34	38	900	621
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1612	1720	3390		1684	4772		1540	4746	1753
Flt Permitted	0.95	1.00	1.00	0.58	1.00		0.12	1.00		0.15	1.00	1.00
Satd. Flow (perm)	3236	1773	1612	1055	3390		222	4772		247	4746	1753
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	416	290	183	52	457	60	372	1887	38	41	978	675
RTOR Reduction (vph)	0	0	91	0	9	0	0	1	0	0	0	107
Lane Group Flow (vph)	416	290	92	52	508	0	372	1924	0	41	978	568
Confl. Peds. (#/hr)	9		26	26		9	16		23	23		16
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	1%	0%	1%	0%	1%	0%	0%	1%	0%	5%	2%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	15.0	29.8	60.2	26.5	24.4		62.4	62.4		26.3	26.3	41.3
Effective Green, g (s)	15.0	29.8	60.2	26.5	24.4		62.4	62.4		26.3	26.3	41.3
Actuated g/C Ratio	0.12	0.25	0.50	0.22	0.20		0.52	0.52		0.22	0.22	0.34
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	404	440	808	294	689		485	2481		54	1040	603
v/s Ratio Prot	c0.13	0.16	0.03	0.02	c0.15		0.19	c0.40			0.21	c0.12
v/s Ratio Perm			0.03	0.02			0.20			0.17		0.21
v/c Ratio	1.03	0.66	0.11	0.18	0.74		0.77	0.78		0.76	0.94	0.94
Uniform Delay, d1	52.5	40.5	15.8	38.3	44.8		29.5	23.2		43.9	46.1	38.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	52.6	3.8	0.1	0.3	4.1		7.1	2.4		65.5	16.8	23.0
Delay (s)	105.1	44.4	15.9	38.6	48.9		36.6	25.6		109.4	62.9	61.2
Level of Service	F	D	B	D	D		D	C		F	E	E
Approach Delay (s)		66.9			48.0			27.4			63.3	
Approach LOS		E			D			C			E	

Intersection Summary			
HCM 2000 Control Delay	47.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

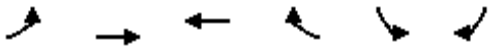


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	416	290	183	52	517	372	1925	41	978	675
v/c Ratio	1.03	0.66	0.20	0.18	0.77	0.76	0.76	0.73	0.91	0.94
Control Delay	104.0	49.1	1.8	39.0	52.5	40.0	25.7	107.0	58.1	48.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.0	49.1	1.8	39.0	52.5	40.0	25.7	107.0	58.1	48.6
Queue Length 50th (ft)	~177	213	0	33	197	211	413	30	273	369
Queue Length 95th (ft)	#280	288	22	62	233	#414	533	#99	#356	#472
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	404	543	910	298	856	487	2519	56	1077	717
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.53	0.20	0.17	0.60	0.76	0.76	0.73	0.91	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	157	1223	751	67	75	194
Future Volume (veh/h)	157	1223	751	67	75	194
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1870	1885
Adj Flow Rate, veh/h	173	1344	799	71	100	259
Peak Hour Factor	0.91	0.91	0.94	0.94	0.75	0.75
Percent Heavy Veh, %	0	1	1	0	2	1
Cap, veh/h	508	2475	2300	204	332	298
Arrive On Green	0.69	0.69	0.92	0.92	0.19	0.19
Sat Flow, veh/h	647	3676	3422	296	1781	1598
Grp Volume(v), veh/h	173	1344	430	440	100	259
Grp Sat Flow(s),veh/h/ln	647	1791	1791	1832	1781	1598
Q Serve(g_s), s	11.1	16.7	2.6	2.6	4.4	14.2
Cycle Q Clear(g_c), s	13.7	16.7	2.6	2.6	4.4	14.2
Prop In Lane	1.00			0.16	1.00	1.00
Lane Grp Cap(c), veh/h	508	2475	1238	1266	332	298
V/C Ratio(X)	0.34	0.54	0.35	0.35	0.30	0.87
Avail Cap(c_a), veh/h	508	2475	1238	1266	435	391
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.0	6.9	1.2	1.2	31.5	35.5
Incr Delay (d2), s/veh	0.1	0.1	0.8	0.8	0.5	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	8.3	1.4	1.4	3.5	11.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.1	7.0	2.0	2.0	32.0	50.5
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		1517	870		359	
Approach Delay, s/veh		7.0	2.0		45.4	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		68.2		21.8		68.2
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		57.0		22.0		57.0
Max Q Clear Time (g_c+I1), s		4.6		16.2		18.7
Green Ext Time (p_c), s		9.5		0.6		9.6

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1271	802	6	0	0
Future Vol, veh/h	0	1271	802	6	0	0
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	1382	872	7	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	440
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	565
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	565
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1247	24	18	793	9	14
Future Vol, veh/h	1247	24	18	793	9	14
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	88	88	56	56
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1401	27	20	901	16	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1432	0	1910	718
Stage 1	-	-	-	-	1419	-
Stage 2	-	-	-	-	491	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	481	-	61	376
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	586	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	479	-	58	375
Mov Cap-2 Maneuver	-	-	-	-	150	-
Stage 1	-	-	-	-	192	-
Stage 2	-	-	-	-	561	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	23.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	236	-	-	479	-
HCM Lane V/C Ratio	0.174	-	-	0.043	-
HCM Control Delay (s)	23.4	-	-	12.9	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	976	40	21	599	280	17	119	7	285	198	231
Future Volume (vph)	233	976	40	21	599	280	17	119	7	285	198	231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1661	3546		1741	3336	1749		2140	1579	3120	1713	
Flt Permitted	0.38	1.00		0.20	1.00	1.00		0.89	1.00	0.95	1.00	
Satd. Flow (perm)	658	3546		365	3336	1749		1923	1579	3120	1713	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	245	1027	42	23	644	301	18	128	8	313	218	254
RTOR Reduction (vph)	0	2	0	0	0	101	0	0	7	0	47	0
Lane Group Flow (vph)	245	1067	0	23	644	200	0	146	1	313	425	0
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	49.9	49.9		49.9	49.9	59.9		13.2	13.2	10.0	29.3	
Effective Green, g (s)	49.9	49.9		49.9	49.9	59.9		13.2	13.2	10.0	29.3	
Actuated g/C Ratio	0.55	0.55		0.55	0.55	0.67		0.15	0.15	0.11	0.33	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	364	1966		202	1849	1164		282	231	346	557	
v/s Ratio Prot		0.30			0.19	0.02				0.10	c0.25	
v/s Ratio Perm	c0.37			0.06		0.10		0.08	0.00			
v/c Ratio	0.67	0.54		0.11	0.35	0.17		0.52	0.01	0.90	0.76	
Uniform Delay, d1	14.3	12.8		9.5	11.1	5.7		35.5	32.8	39.5	27.2	
Progression Factor	0.81	0.83		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.7	1.0		1.1	0.5	0.1		1.6	0.0	25.9	6.2	
Delay (s)	20.3	11.6		10.7	11.6	5.8		37.1	32.8	65.4	33.4	
Level of Service	C	B		B	B	A		D	C	E	C	
Approach Delay (s)		13.2			9.8			36.8			46.2	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	245	1069	23	644	301	146	8	313	472
v/c Ratio	0.67	0.54	0.11	0.35	0.24	0.52	0.02	0.90	0.78
Control Delay	23.9	12.3	13.1	12.4	1.2	41.1	0.1	70.5	32.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.9	12.3	13.1	12.4	1.2	41.1	0.1	70.5	32.6
Queue Length 50th (ft)	98	144	6	98	0	78	0	92	208
Queue Length 95th (ft)	#237	221	22	157	24	127	0	#168	297
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	364	1966	202	1848	1254	619	579	346	629
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.54	0.11	0.35	0.24	0.24	0.01	0.90	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

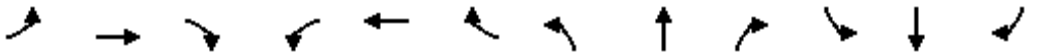
Intersection	
Int Delay, s/veh	11

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	66	151	98	535	564	40
Future Vol, veh/h	66	151	98	535	564	40
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	72	164	107	582	613	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1431	328	656	0	-	0
Stage 1	635	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	136	668	929	-	-	-
Stage 1	491	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	668	929	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	408	-	-	-	-	-
Stage 2	443	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	69.2	1.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	929	-	268	-	-
HCM Lane V/C Ratio	0.115	-	0.88	-	-
HCM Control Delay (s)	9.4	0	69.2	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.4	-	7.6	-	-



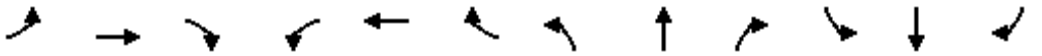
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	145	44	184	149	75	38	360	193	48	335	42
Future Volume (veh/h)	16	145	44	184	149	75	38	360	193	48	335	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.97	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	1900	1961	1900	1900	1900	1884	1824	1870	1810	1696	1961	1900
Adj Flow Rate, veh/h	20	177	54	200	162	82	42	400	214	55	385	48
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	0	1	0	0	0	6	0	2	1	9	1	0
Cap, veh/h	641	720	220	618	953	792	344	617	489	228	1099	136
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1146	1434	438	1155	1900	1578	926	1870	1481	730	3330	412
Grp Volume(v), veh/h	20	0	231	200	162	82	42	400	214	55	214	219
Grp Sat Flow(s),veh/h/ln	1146	0	1872	1155	1900	1578	926	1870	1481	730	1863	1880
Q Serve(g_s), s	0.6	0.0	4.2	7.1	2.8	1.6	2.2	10.9	6.8	4.2	5.2	5.3
Cycle Q Clear(g_c), s	3.4	0.0	4.2	11.4	2.8	1.6	7.5	10.9	6.8	15.1	5.2	5.3
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	641	0	939	618	953	792	344	617	489	228	615	620
V/C Ratio(X)	0.03	0.00	0.25	0.32	0.17	0.10	0.12	0.65	0.44	0.24	0.35	0.35
Avail Cap(c_a), veh/h	641	0	939	618	953	792	422	776	615	290	773	780
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	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	9.1	0.0	8.5	11.7	8.1	7.9	18.1	17.1	15.7	23.6	15.2	15.2
Incr Delay (d2), s/veh	0.1	0.0	0.6	1.4	0.4	0.3	0.5	3.4	1.8	1.0	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(95%),veh/ln	0.3	0.0	2.9	3.3	1.9	0.9	0.8	8.4	4.2	1.3	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.2	0.0	9.1	13.1	8.5	8.1	18.5	20.5	17.5	24.5	15.8	15.9
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		251			444			656			488	
Approach Delay, s/veh		9.1			10.5			19.4			16.8	
Approach LOS		A			B			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	35.1	24.9	35.1	24.9
Change Period (Y+Rc), s	* 5	5.1	* 5	5.1
Max Green Setting (Gmax), s	* 25	24.9	* 25	24.9
Max Q Clear Time (g_c+I1), s	13.4	17.1	6.2	12.9
Green Ext Time (p_c), s	4.2	2.7	3.5	5.5

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

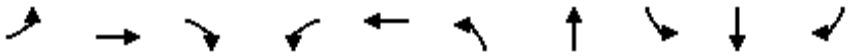
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	509	463	315	54	286	47	234	1211	44	64	1761	467
Future Volume (vph)	509	463	315	54	286	47	234	1211	44	64	1761	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99		1.00	0.99		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.98	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1570	1649	3332		1668	4611		1590	4700	1696
Flt Permitted	0.95	1.00	1.00	0.39	1.00		0.09	1.00		0.18	1.00	1.00
Satd. Flow (perm)	3236	1773	1570	672	3332		161	4611		309	4700	1696
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	536	487	332	58	308	51	257	1331	48	65	1797	477
RTOR Reduction (vph)	0	0	89	0	11	0	0	3	0	0	0	97
Lane Group Flow (vph)	536	487	243	58	348	0	257	1376	0	65	1797	380
Confl. Peds. (#/hr)	44		32	32		44	42		48	48		42
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	0%	2%	5%	1%	5%	1%	4%	0%	0%	3%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	13.0	37.3	52.5	32.1	30.0		58.8	58.8		37.9	37.9	50.9
Effective Green, g (s)	13.0	37.3	52.5	32.1	30.0		58.8	58.8		37.9	37.9	50.9
Actuated g/C Ratio	0.11	0.31	0.44	0.27	0.25		0.49	0.49		0.32	0.32	0.42
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	350	551	686	238	833		269	2259		97	1484	719
v/s Ratio Prot	c0.17	c0.27	0.04	0.01	c0.10		c0.12	0.30			c0.38	0.06
v/s Ratio Perm			0.11	0.05			0.35			0.21		0.17
v/c Ratio	1.53	0.88	0.35	0.24	0.42		0.96	0.61		0.67	1.21	0.53
Uniform Delay, d1	53.5	39.3	22.5	38.7	37.7		35.9	22.2		35.6	41.0	25.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	253.1	15.8	0.3	0.5	0.3		42.4	1.2		31.2	101.4	0.3
Delay (s)	306.6	55.1	22.8	39.2	38.0		78.3	23.5		66.8	142.5	26.0
Level of Service	F	E	C	D	D		E	C		E	F	C
Approach Delay (s)		146.7			38.2			32.1			116.6	
Approach LOS		F			D			C			F	

Intersection Summary			
HCM 2000 Control Delay	94.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	536	487	332	58	359	257	1379	65	1797	477
v/c Ratio	1.53	0.88	0.42	0.23	0.44	0.95	0.60	0.66	1.18	0.58
Control Delay	289.5	58.2	9.1	36.5	37.7	76.9	23.8	67.9	126.2	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	289.5	58.2	9.1	36.5	37.7	76.9	23.8	67.9	126.2	16.9
Queue Length 50th (ft)	~299	353	60	33	114	~188	289	43	~612	156
Queue Length 95th (ft)	#411	#538	112	67	159	#359	340	#119	#709	251
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	350	553	786	274	906	270	2295	99	1519	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.53	0.88	0.42	0.21	0.40	0.95	0.60	0.66	1.18	0.58

Intersection Summary

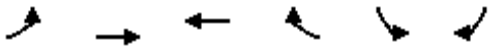
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

FUTURE (2029) WITH PROJECT TRAFFIC CONDITIONS WITH TDM MEASURES

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

10/08/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	91	658	992	48	38	87
Future Volume (veh/h)	91	658	992	48	38	87
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1841	1693	1841
Adj Flow Rate, veh/h	94	678	1023	49	48	109
Peak Hour Factor	0.97	0.97	0.97	0.97	0.80	0.80
Percent Heavy Veh, %	1	1	2	4	14	4
Cap, veh/h	496	2812	2710	130	150	145
Arrive On Green	0.79	0.79	1.00	1.00	0.09	0.09
Sat Flow, veh/h	530	3676	3545	165	1612	1560
Grp Volume(v), veh/h	94	678	527	545	48	109
Grp Sat Flow(s),veh/h/ln	530	1791	1777	1840	1612	1560
Q Serve(g_s), s	4.2	4.5	0.0	0.0	2.5	6.1
Cycle Q Clear(g_c), s	4.2	4.5	0.0	0.0	2.5	6.1
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	496	2812	1395	1444	150	145
V/C Ratio(X)	0.19	0.24	0.38	0.38	0.32	0.75
Avail Cap(c_a), veh/h	496	2812	1395	1444	412	399
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.5	2.6	0.0	0.0	38.2	39.8
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.8	1.2	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	1.5	0.5	0.5	1.9	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	2.6	2.6	0.8	0.8	39.4	47.5
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		772	1072		157	
Approach Delay, s/veh		2.6	0.8		45.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		76.7		13.3		76.7
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		56.0		23.0		22.0
Max Q Clear Time (g_c+I1), s		2.0		8.1		6.5
Green Ext Time (p_c), s		13.1		0.4		3.4

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	992	1152	0	0	0
Future Vol, veh/h	0	992	1152	0	0	0
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	1078	1252	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	626
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	427
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	427
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	986	6	9	1122	30	22
Future Vol, veh/h	986	6	9	1122	30	22
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	91	91	72	72
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1016	6	10	1233	42	31

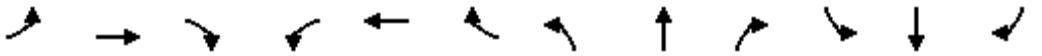
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1025	0	1659	515
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	637	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	685	-	90	510
Stage 1	-	-	-	-	313	-
Stage 2	-	-	-	-	494	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	683	-	88	508
Mov Cap-2 Maneuver	-	-	-	-	211	-
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	487	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	22.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	280	-	-	683	-
HCM Lane V/C Ratio	0.258	-	-	0.014	-
HCM Control Delay (s)	22.3	-	-	10.3	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	1	-	-	0	-

HCM Signalized Intersection Capacity Analysis
4: Angeles Vista Boulevard/Santa Rosalia Drive & Stocker Street

10/08/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	167	521	14	9	873	295	29	173	8	151	150	133
Future Volume (vph)	167	521	14	9	873	295	29	173	8	151	150	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1648	3518		1562	3303	1730		2125	1575	3090	1735	
Flt Permitted	0.24	1.00		0.41	1.00	1.00		0.90	1.00	0.95	1.00	
Satd. Flow (perm)	425	3518		676	3303	1730		1919	1575	3090	1735	
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	178	554	15	9	919	311	32	190	9	176	174	155
RTOR Reduction (vph)	0	1	0	0	0	97	0	0	7	0	34	0
Lane Group Flow (vph)	178	568	0	9	919	214	0	222	2	176	295	0
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	47.6	47.6		47.6	47.6	57.6		15.5	15.5	10.0	31.6	
Effective Green, g (s)	47.6	47.6		47.6	47.6	57.6		15.5	15.5	10.0	31.6	
Actuated g/C Ratio	0.53	0.53		0.53	0.53	0.64		0.17	0.17	0.11	0.35	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	224	1860		357	1746	1107		330	271	343	609	
v/s Ratio Prot		0.16			0.28	0.02				0.06	c0.17	
v/s Ratio Perm	c0.42			0.01		0.10		c0.12	0.00			
v/c Ratio	0.79	0.31		0.03	0.53	0.19		0.67	0.01	0.51	0.48	
Uniform Delay, d1	17.2	11.9		10.1	13.8	6.7		34.9	30.9	37.7	22.8	
Progression Factor	1.10	1.08		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.5	0.4		0.1	1.1	0.1		5.3	0.0	1.3	0.6	
Delay (s)	43.5	13.3		10.3	15.0	6.7		40.2	30.9	39.0	23.4	
Level of Service	D	B		B	B	A		D	C	D	C	
Approach Delay (s)		20.5			12.9			39.8			28.9	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	178	569	9	919	311	222	9	176	329
v/c Ratio	0.79	0.31	0.03	0.53	0.26	0.67	0.03	0.51	0.51
Control Delay	49.6	14.1	12.4	16.0	1.8	44.5	0.1	43.5	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	14.1	12.4	16.0	1.8	44.5	0.1	43.5	21.5
Queue Length 50th (ft)	85	100	2	169	6	119	0	49	121
Queue Length 95th (ft)	#225	147	11	257	36	180	0	78	169
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	224	1859	357	1745	1193	618	578	343	655
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.31	0.03	0.53	0.26	0.36	0.02	0.51	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

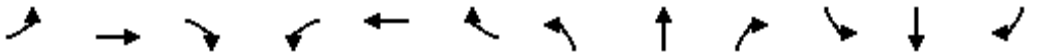
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	32	108	527	397	50
Future Vol, veh/h	13	32	108	527	397	50
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	-	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	14	35	117	573	432	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1266	243	486	0	-	0
Stage 1	459	-	-	-	-	-
Stage 2	807	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	173	758	1075	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	438	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	154	758	1075	-	-	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	538	-	-	-	-	-
Stage 2	438	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	1.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1075	-	355	-	-
HCM Lane V/C Ratio	0.109	-	0.138	-	-
HCM Control Delay (s)	8.8	-	16.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	0.5	-	-



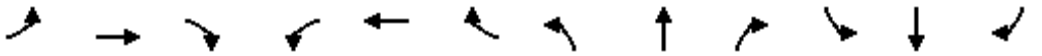
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	159	52	89	88	33	32	359	132	41	315	30
Future Volume (veh/h)	36	159	52	89	88	33	32	359	132	41	315	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.99	0.99		0.97	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	1811	1930	1870	1885	1900	1591	1781	1856	1796	1639	1961	1856
Adj Flow Rate, veh/h	44	196	64	106	105	39	35	395	145	52	399	38
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.91	0.91	0.91	0.79	0.79	0.79
Percent Heavy Veh, %	6	3	2	1	0	25	3	3	2	13	1	3
Cap, veh/h	679	685	224	582	946	663	342	620	491	236	1147	109
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1193	1376	449	1116	1900	1331	901	1856	1470	755	3435	325
Grp Volume(v), veh/h	44	0	260	106	105	39	35	395	145	52	215	222
Grp Sat Flow(s),veh/h/ln	1193	0	1826	1116	1900	1331	901	1856	1470	755	1863	1897
Q Serve(g_s), s	1.2	0.0	5.0	3.7	1.8	0.9	1.8	10.8	4.4	3.8	5.2	5.3
Cycle Q Clear(g_c), s	3.0	0.0	5.0	8.7	1.8	0.9	7.1	10.8	4.4	14.6	5.2	5.3
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	679	0	909	582	946	663	342	620	491	236	622	634
V/C Ratio(X)	0.06	0.00	0.29	0.18	0.11	0.06	0.10	0.64	0.30	0.22	0.35	0.35
Avail Cap(c_a), veh/h	679	0	909	582	946	663	460	863	684	335	866	882
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	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	8.8	0.0	8.8	11.4	8.0	7.8	17.8	16.9	14.8	23.1	15.1	15.1
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.7	0.2	0.2	0.4	3.2	1.0	0.8	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(95%),veh/ln	0.6	0.0	3.3	1.7	1.2	0.5	0.7	8.2	2.6	1.2	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	0.0	9.6	12.1	8.2	8.0	18.1	20.1	15.7	23.9	15.6	15.7
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		304			250			575			489	
Approach Delay, s/veh		9.5			9.8			18.9			16.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.9		25.1		34.9		25.1				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		10.7		16.6		7.0		12.8				
Green Ext Time (p_c), s		2.2		3.5		3.8		5.7				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

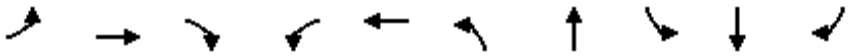
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	249	147	40	375	32	283	1230	30	19	577	542
Future Volume (vph)	300	249	147	40	375	32	283	1230	30	19	577	542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	0.88
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1605	1719	3411		1681	4767		1532	4746	3024
Flt Permitted	0.95	1.00	1.00	0.59	1.00		0.29	1.00		0.18	1.00	1.00
Satd. Flow (perm)	3236	1773	1605	1072	3411		514	4767		291	4746	3024
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	326	271	160	46	431	37	314	1367	33	21	627	589
RTOR Reduction (vph)	0	0	96	0	6	0	0	2	0	0	0	0
Lane Group Flow (vph)	326	271	64	46	462	0	314	1398	0	21	627	589
Confl. Peds. (#/hr)	9		26	26		9	16		23	23		16
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	1%	0%	1%	0%	1%	0%	0%	1%	0%	5%	2%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	15.7	27.9	47.9	24.8	22.7		63.4	63.4		37.7	37.7	53.4
Effective Green, g (s)	15.7	27.9	47.9	24.8	22.7		63.4	63.4		37.7	37.7	53.4
Actuated g/C Ratio	0.13	0.23	0.40	0.21	0.19		0.53	0.53		0.31	0.31	0.44
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	423	412	640	286	645		466	2518		91	1491	1345
v/s Ratio Prot	0.10	c0.15	0.02	0.02	c0.14		c0.11	0.29			0.13	0.06
v/s Ratio Perm			0.02	0.02			c0.24			0.07		0.14
v/c Ratio	0.77	0.66	0.10	0.16	0.72		0.67	0.56		0.23	0.42	0.44
Uniform Delay, d1	50.4	41.7	22.6	39.5	45.6		17.5	18.9		30.4	32.5	23.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.7	4.1	0.1	0.3	3.8		3.8	0.9		5.8	0.9	0.1
Delay (s)	58.1	45.8	22.6	39.7	49.4		21.3	19.8		36.3	33.4	23.0
Level of Service	E	D	C	D	D		C	B		D	C	C
Approach Delay (s)		46.2			48.6			20.1			28.5	
Approach LOS		D			D			C			C	

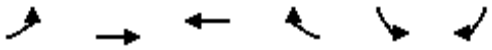
Intersection Summary			
HCM 2000 Control Delay	30.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	326	271	160	46	468	314	1400	21	627	589
v/c Ratio	0.77	0.66	0.21	0.16	0.75	0.67	0.55	0.23	0.41	0.43
Control Delay	62.8	50.4	2.1	40.0	53.3	25.1	20.2	45.1	35.3	21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.8	50.4	2.1	40.0	53.3	25.1	20.2	45.1	35.3	21.9
Queue Length 50th (ft)	126	199	0	30	180	134	251	12	139	154
Queue Length 95th (ft)	175	272	19	58	216	230	340	43	208	244
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	485	580	769	291	857	485	2553	93	1524	1417
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.47	0.21	0.16	0.55	0.65	0.55	0.23	0.41	0.42

Intersection Summary



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	145	1087	604	47	61	181
Future Volume (veh/h)	145	1087	604	47	61	181
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1870	1885
Adj Flow Rate, veh/h	159	1195	643	50	81	241
Peak Hour Factor	0.91	0.91	0.94	0.94	0.75	0.75
Percent Heavy Veh, %	0	1	1	0	2	1
Cap, veh/h	602	2514	2363	184	314	281
Arrive On Green	0.70	0.70	0.93	0.93	0.18	0.18
Sat Flow, veh/h	763	3676	3462	262	1781	1598
Grp Volume(v), veh/h	159	1195	342	351	81	241
Grp Sat Flow(s),veh/h/ln	763	1791	1791	1838	1781	1598
Q Serve(g_s), s	7.5	13.4	1.5	1.5	3.5	13.2
Cycle Q Clear(g_c), s	9.0	13.4	1.5	1.5	3.5	13.2
Prop In Lane	1.00			0.14	1.00	1.00
Lane Grp Cap(c), veh/h	602	2514	1257	1290	314	281
V/C Ratio(X)	0.26	0.48	0.27	0.27	0.26	0.86
Avail Cap(c_a), veh/h	602	2514	1257	1290	455	408
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.7	6.0	0.9	0.9	32.0	36.0
Incr Delay (d2), s/veh	0.1	0.1	0.5	0.5	0.4	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	6.7	0.9	0.9	2.8	10.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.7	6.1	1.5	1.5	32.4	47.6
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		1354	693		322	
Approach Delay, s/veh		6.0	1.5		43.8	
Approach LOS		A	A		D	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	69.2	20.8	69.2
Change Period (Y+Rc), s	6.0	5.0	6.0
Max Green Setting (Gmax), s	56.0	23.0	22.0
Max Q Clear Time (g_c+I1), s	3.5	15.2	15.4
Green Ext Time (p_c), s	6.9	0.7	3.5

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1122	635	0	0	0
Future Vol, veh/h	0	1122	635	0	0	0
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	1220	690	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	345
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	651
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	651
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

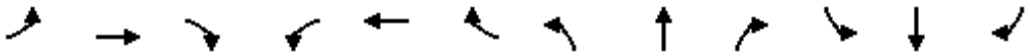
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1099	23	16	626	9	13
Future Vol, veh/h	1099	23	16	626	9	13
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	88	88	56	56
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1235	26	18	711	16	23

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1265	0	1644	635
Stage 1	-	-	-	-	1252	-
Stage 2	-	-	-	-	392	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	556	-	92	426
Stage 1	-	-	-	-	237	-
Stage 2	-	-	-	-	658	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	554	-	89	425
Mov Cap-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	637	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	20
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	279	-	-	554	-
HCM Lane V/C Ratio	0.141	-	-	0.033	-
HCM Control Delay (s)	20	-	-	11.7	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.5	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	859	38	20	458	247	16	112	7	272	188	202
Future Volume (vph)	202	859	38	20	458	247	16	112	7	272	188	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1663	3543		1739	3336	1768		2139	1578	3120	1720	
Flt Permitted	0.46	1.00		0.24	1.00	1.00		0.90	1.00	0.95	1.00	
Satd. Flow (perm)	804	3543		441	3336	1768		1931	1578	3120	1720	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	213	904	40	22	492	266	17	120	8	299	207	222
RTOR Reduction (vph)	0	3	0	0	0	86	0	0	7	0	42	0
Lane Group Flow (vph)	213	941	0	22	492	180	0	137	1	299	387	0
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	49.2	49.2		49.2	49.2	60.9		12.2	12.2	11.7	30.0	
Effective Green, g (s)	49.2	49.2		49.2	49.2	60.9		12.2	12.2	11.7	30.0	
Actuated g/C Ratio	0.55	0.55		0.55	0.55	0.68		0.14	0.14	0.13	0.33	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	439	1936		241	1823	1196		261	213	405	573	
v/s Ratio Prot		c0.27			0.15	0.02				0.10	c0.23	
v/s Ratio Perm	0.26			0.05		0.08		0.07	0.00			
v/c Ratio	0.49	0.49		0.09	0.27	0.15		0.52	0.01	0.74	0.68	
Uniform Delay, d1	12.6	12.6		9.7	10.8	5.2		36.2	33.7	37.7	25.8	
Progression Factor	0.79	0.78		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.6	0.8		0.7	0.4	0.1		1.9	0.0	6.9	3.1	
Delay (s)	13.5	10.6		10.5	11.2	5.3		38.1	33.7	44.6	29.0	
Level of Service	B	B		B	B	A		D	C	D	C	
Approach Delay (s)		11.1			9.2			37.9			35.4	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	213	944	22	492	266	137	8	299	429
v/c Ratio	0.48	0.49	0.09	0.27	0.21	0.53	0.03	0.74	0.70
Control Delay	14.8	11.0	12.1	11.7	1.1	42.9	0.1	50.9	28.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.8	11.0	12.1	11.7	1.1	42.9	0.1	50.9	28.6
Queue Length 50th (ft)	79	183	6	77	0	74	0	82	172
Queue Length 95th (ft)	131	122	20	113	22	123	0	#158	270
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	440	1944	241	1826	1273	622	579	404	628
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.49	0.09	0.27	0.21	0.22	0.01	0.74	0.68

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

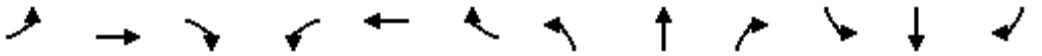
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	112	77	485	523	31
Future Vol, veh/h	51	112	77	485	523	31
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	-	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	55	122	84	527	568	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1280	301	602	0	-	0
Stage 1	585	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	170	696	973	-	-	-
Stage 1	521	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	155	696	973	-	-	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.5	1.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	973	-	333	-	-
HCM Lane V/C Ratio	0.086	-	0.532	-	-
HCM Control Delay (s)	9	-	27.5	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	3	-	-



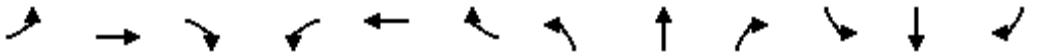
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	138	42	173	142	71	36	310	179	46	302	34
Future Volume (veh/h)	11	138	42	173	142	71	36	310	179	46	302	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.96	0.99		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	1900	1961	1900	1900	1900	1884	1824	1870	1810	1696	1961	1900
Adj Flow Rate, veh/h	13	168	51	188	154	77	40	344	199	53	347	39
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	0	1	0	0	0	6	0	2	1	9	1	0
Cap, veh/h	678	751	228	657	994	826	341	577	456	239	1041	116
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1159	1436	436	1168	1900	1579	966	1870	1479	779	3373	376
Grp Volume(v), veh/h	13	0	219	188	154	77	40	344	199	53	190	196
Grp Sat Flow(s),veh/h/ln	1159	0	1873	1168	1900	1579	966	1870	1479	779	1863	1886
Q Serve(g_s), s	0.4	0.0	3.8	6.2	2.5	1.5	2.0	9.3	6.4	3.7	4.7	4.8
Cycle Q Clear(g_c), s	2.9	0.0	3.8	10.0	2.5	1.5	6.8	9.3	6.4	13.1	4.7	4.8
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	678	0	980	657	994	826	341	577	456	239	575	582
V/C Ratio(X)	0.02	0.00	0.22	0.29	0.15	0.09	0.12	0.60	0.44	0.22	0.33	0.34
Avail Cap(c_a), veh/h	678	0	980	657	994	826	492	870	688	361	866	877
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	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	8.2	0.0	7.7	10.4	7.4	7.2	18.6	17.6	16.6	23.1	16.0	16.0
Incr Delay (d2), s/veh	0.1	0.0	0.5	1.1	0.3	0.2	0.4	2.9	1.9	0.8	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(95%),veh/ln	0.2	0.0	2.5	2.8	1.7	0.8	0.8	7.4	4.0	1.2	3.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.2	0.0	8.3	11.5	7.8	7.4	19.1	20.4	18.5	23.9	16.6	16.6
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		232			419			583			439	
Approach Delay, s/veh		8.3			9.4			19.7			17.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		36.4		23.6		36.4		23.6				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		12.0		15.1		5.8		11.3				
Green Ext Time (p_c), s		3.5		3.3		3.0		5.9				

Intersection Summary												
HCM 6th Ctrl Delay			14.9									
HCM 6th LOS			B									

Notes

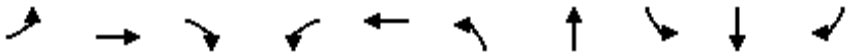
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	423	435	286	41	268	21	204	789	30	37	1209	346
Future Volume (vph)	423	435	286	41	268	21	204	789	30	37	1209	346
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	0.88
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	0.99		1.00	1.00	0.92
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.96	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1570	1643	3391		1668	4608		1557	4700	2895
Flt Permitted	0.95	1.00	1.00	0.50	1.00		0.09	1.00		0.30	1.00	1.00
Satd. Flow (perm)	3236	1773	1570	863	3391		163	4608		499	4700	2895
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	445	458	301	44	288	23	224	867	33	38	1234	353
RTOR Reduction (vph)	0	0	138	0	6	0	0	3	0	0	0	0
Lane Group Flow (vph)	445	458	163	44	305	0	224	897	0	38	1234	353
Confl. Peds. (#/hr)	44		32	32		44	42		48	48		42
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	0%	2%	5%	1%	5%	1%	4%	0%	0%	3%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2			6	7
Permitted Phases			4	8			2			6		6
Actuated Green, G (s)	17.8	37.8	53.1	27.8	25.7		58.3	58.3		37.3	37.3	55.1
Effective Green, g (s)	17.8	37.8	53.1	27.8	25.7		58.3	58.3		37.3	37.3	55.1
Actuated g/C Ratio	0.15	0.31	0.44	0.23	0.21		0.49	0.49		0.31	0.31	0.46
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		5.6	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		5.5	5.5	2.0
Lane Grp Cap (vph)	480	558	694	246	726		271	2238		155	1460	1329
v/s Ratio Prot	0.14	c0.26	0.03	0.01	c0.09		c0.11	0.19			0.26	0.04
v/s Ratio Perm			0.07	0.03			c0.30			0.08		0.08
v/c Ratio	0.93	0.82	0.24	0.18	0.42		0.83	0.40		0.25	0.85	0.27
Uniform Delay, d1	50.5	38.0	20.8	37.3	40.7		31.1	19.7		30.8	38.7	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	23.7	9.8	0.2	0.4	0.4		18.3	0.5		3.7	6.2	0.0
Delay (s)	74.2	47.7	21.0	37.7	41.1		49.3	20.2		34.6	44.8	20.0
Level of Service	E	D	C	D	D		D	C		C	D	C
Approach Delay (s)		50.8			40.7			26.0			39.2	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



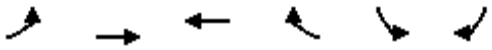
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	445	458	301	44	311	224	900	38	1234	353
v/c Ratio	0.93	0.82	0.36	0.17	0.44	0.82	0.40	0.24	0.82	0.26
Control Delay	77.5	50.8	3.2	36.6	41.3	52.4	20.8	42.3	45.2	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.5	50.8	3.2	36.6	41.3	52.4	20.8	42.3	45.2	19.5
Queue Length 50th (ft)	177	330	16	27	106	123	160	22	331	85
Queue Length 95th (ft)	#273	430	38	55	141	218	217	64	#537	143
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	485	596	890	274	869	325	2277	158	1496	1346
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.77	0.34	0.16	0.36	0.69	0.40	0.24	0.82	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

10/08/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	790	1104	52	69	101
Future Volume (veh/h)	97	790	1104	52	69	101
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1841	1693	1841
Adj Flow Rate, veh/h	100	814	1138	54	86	126
Peak Hour Factor	0.97	0.97	0.97	0.97	0.80	0.80
Percent Heavy Veh, %	1	1	2	4	14	4
Cap, veh/h	445	2765	2666	126	170	165
Arrive On Green	0.77	0.77	1.00	1.00	0.11	0.11
Sat Flow, veh/h	473	3676	3547	164	1612	1560
Grp Volume(v), veh/h	100	814	585	607	86	126
Grp Sat Flow(s),veh/h/ln	473	1791	1777	1840	1612	1560
Q Serve(g_s), s	5.5	6.0	0.0	0.0	4.5	7.1
Cycle Q Clear(g_c), s	5.5	6.0	0.0	0.0	4.5	7.1
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	445	2765	1372	1421	170	165
V/C Ratio(X)	0.22	0.29	0.43	0.43	0.50	0.76
Avail Cap(c_a), veh/h	445	2765	1372	1421	376	364
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.0	3.0	0.0	0.0	38.0	39.1
Incr Delay (d2), s/veh	0.1	0.0	1.0	0.9	2.3	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	2.3	0.7	0.7	3.4	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.1	3.0	1.0	0.9	40.3	46.3
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h		914	1192		212	
Approach Delay, s/veh		3.1	1.0		43.9	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		75.5		14.5		75.5
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		58.0		21.0		58.0
Max Q Clear Time (g_c+I1), s		2.0		9.1		8.0
Green Ext Time (p_c), s		15.8		0.5		5.2

Intersection Summary	
HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Traffic Vol, veh/h	0	1170	1274	0	0	0
Future Vol, veh/h	0	1170	1274	0	0	0
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	1272	1385	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	693
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	386
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	386
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

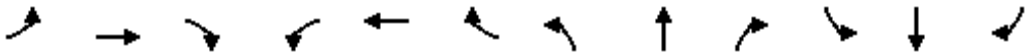
Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1164	6	9	1243	32	23
Future Vol, veh/h	1164	6	9	1243	32	23
Conflicting Peds, #/hr	0	3	3	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	91	91	72	72
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1200	6	10	1366	44	32

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1209	0	1909	607
Stage 1	-	-	-	-	1206	-
Stage 2	-	-	-	-	703	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	584	-	61	444
Stage 1	-	-	-	-	250	-
Stage 2	-	-	-	-	457	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	583	-	60	443
Mov Cap-2 Maneuver	-	-	-	-	171	-
Stage 1	-	-	-	-	250	-
Stage 2	-	-	-	-	449	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	28.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	230	-	-	583	-
HCM Lane V/C Ratio	0.332	-	-	0.017	-
HCM Control Delay (s)	28.2	-	-	11.3	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	1.4	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	628	15	9	965	333	30	182	8	165	158	154
Future Volume (vph)	223	628	15	9	965	333	30	182	8	165	158	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1649	3520		1564	3303	1730		2125	1575	3090	1728	
Flt Permitted	0.20	1.00		0.35	1.00	1.00		0.89	1.00	0.95	1.00	
Satd. Flow (perm)	353	3520		569	3303	1730		1914	1575	3090	1728	
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	237	668	16	9	1016	351	33	200	9	192	184	179
RTOR Reduction (vph)	0	1	0	0	0	103	0	0	7	0	36	0
Lane Group Flow (vph)	237	683	0	9	1016	248	0	233	2	192	327	0
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	46.3	46.3		46.3	46.3	56.3		16.8	16.8	10.0	32.9	
Effective Green, g (s)	46.3	46.3		46.3	46.3	56.3		16.8	16.8	10.0	32.9	
Actuated g/C Ratio	0.51	0.51		0.51	0.51	0.63		0.19	0.19	0.11	0.37	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	181	1810		292	1699	1082		357	294	343	631	
v/s Ratio Prot		0.19			0.31	0.03				0.06	c0.19	
v/s Ratio Perm	c0.67			0.02		0.12		c0.12	0.00			
v/c Ratio	1.31	0.38		0.03	0.60	0.23		0.65	0.01	0.56	0.52	
Uniform Delay, d1	21.9	13.2		10.8	15.3	7.4		33.9	29.8	37.9	22.3	
Progression Factor	1.08	1.04		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	172.8	0.6		0.2	1.6	0.1		4.2	0.0	2.0	0.7	
Delay (s)	196.4	14.3		11.0	16.9	7.5		38.1	29.8	39.9	23.1	
Level of Service	F	B		B	B	A		D	C	D	C	
Approach Delay (s)		61.1			14.4			37.8			28.9	
Approach LOS		E			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	237	684	9	1016	351	233	9	192	363
v/c Ratio	1.31	0.38	0.03	0.60	0.30	0.65	0.02	0.56	0.54
Control Delay	200.2	15.2	13.4	18.0	2.4	42.1	0.1	44.8	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	200.2	15.2	13.4	18.0	2.4	42.1	0.1	44.8	21.4
Queue Length 50th (ft)	~182	135	2	202	12	124	0	54	135
Queue Length 95th (ft)	#340	189	12	306	48	184	0	84	181
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	181	1811	293	1700	1175	616	578	343	675
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.38	0.03	0.60	0.30	0.38	0.02	0.56	0.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

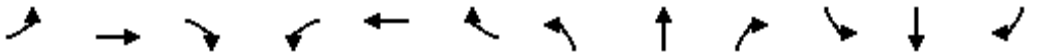
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	32	108	629	439	50
Future Vol, veh/h	13	32	108	629	439	50
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	-	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	14	35	117	684	477	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1422	266	531	0	-	0
Stage 1	504	-	-	-	-	-
Stage 2	918	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	138	733	1034	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	388	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	122	733	1034	-	-	-
Mov Cap-2 Maneuver	122	-	-	-	-	-
Stage 1	508	-	-	-	-	-
Stage 2	388	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.3	1.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1034	-	300	-	-
HCM Lane V/C Ratio	0.114	-	0.163	-	-
HCM Control Delay (s)	8.9	-	19.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	0.6	-	-



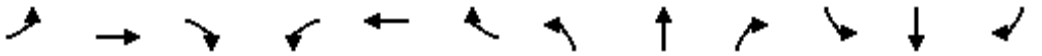
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	167	55	93	92	35	34	452	139	43	351	33
Future Volume (veh/h)	48	167	55	93	92	35	34	452	139	43	351	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.99	1.00		0.97	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	1811	1930	1870	1885	1900	1591	1781	1856	1796	1639	1961	1856
Adj Flow Rate, veh/h	59	206	68	111	110	42	37	497	153	54	444	42
Peak Hour Factor	0.81	0.81	0.81	0.84	0.84	0.84	0.91	0.91	0.91	0.79	0.79	0.79
Percent Heavy Veh, %	6	3	2	1	0	25	3	3	2	13	1	3
Cap, veh/h	612	616	203	508	854	597	370	710	563	227	1314	124
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1183	1371	453	1101	1900	1329	863	1856	1473	683	3437	324
Grp Volume(v), veh/h	59	0	274	111	110	42	37	497	153	54	240	246
Grp Sat Flow(s),veh/h/ln	1183	0	1824	1101	1900	1329	863	1856	1473	683	1863	1898
Q Serve(g_s), s	1.8	0.0	5.8	4.4	2.0	1.1	1.9	13.6	4.3	4.3	5.5	5.5
Cycle Q Clear(g_c), s	3.9	0.0	5.8	10.2	2.0	1.1	7.4	13.6	4.3	17.9	5.5	5.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	612	0	819	508	854	597	370	710	563	227	712	726
V/C Ratio(X)	0.10	0.00	0.33	0.22	0.13	0.07	0.10	0.70	0.27	0.24	0.34	0.34
Avail Cap(c_a), veh/h	612	0	819	508	854	597	442	863	685	283	866	883
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	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	10.8	0.0	10.7	14.0	9.7	9.4	15.8	15.6	12.8	23.2	13.1	13.2
Incr Delay (d2), s/veh	0.3	0.0	1.1	1.0	0.3	0.2	0.3	4.0	0.7	1.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	4.1	2.0	1.5	0.6	0.7	9.8	2.5	1.3	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.1	0.0	11.8	15.0	10.0	9.6	16.1	19.6	13.5	24.1	13.6	13.6
LnGrp LOS	B	A	B	B	A	A	B	B	B	C	B	B
Approach Vol, veh/h		333			263			687			540	
Approach Delay, s/veh		11.7			12.0			18.0			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		32.0		28.0		32.0		28.0				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 22		27.9		* 22		27.9				
Max Q Clear Time (g_c+I1), s		12.2		19.9		7.8		15.6				
Green Ext Time (p_c), s		2.2		3.0		4.0		6.1				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes

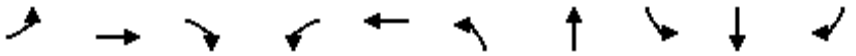
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	267	166	45	394	52	329	1698	34	38	900	607
Future Volume (vph)	380	267	166	45	394	52	329	1698	34	38	900	607
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		4.5	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	0.88
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1614	1720	3389		1685	4772		1547	4746	3031
Flt Permitted	0.95	1.00	1.00	0.58	1.00		0.95	1.00		0.07	1.00	1.00
Satd. Flow (perm)	3236	1773	1614	1055	3389		1685	4772		120	4746	3031
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.90	0.90	0.90	0.92	0.92	0.92
Adj. Flow (vph)	413	290	180	52	453	60	366	1887	38	41	978	660
RTOR Reduction (vph)	0	0	87	0	9	0	0	2	0	0	0	0
Lane Group Flow (vph)	413	290	93	52	504	0	366	1923	0	41	978	660
Confl. Peds. (#/hr)	9		26	26		9	16		23	23		16
Confl. Bikes (#/hr)									2			1
Heavy Vehicles (%)	1%	0%	1%	0%	1%	0%	0%	1%	0%	5%	2%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		Prot	NA		D.P+P	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2		1	6	7
Permitted Phases			4	8						2		6
Actuated Green, G (s)	13.0	29.3	62.3	26.3	24.2		33.0	54.2		60.1	25.9	38.9
Effective Green, g (s)	13.0	29.3	62.3	26.3	24.2		33.0	54.2		60.1	25.9	38.9
Actuated g/C Ratio	0.11	0.24	0.52	0.22	0.20		0.28	0.45		0.50	0.22	0.32
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		4.5	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		3.0	5.5	2.0
Lane Grp Cap (vph)	350	432	837	283	683		463	2155		130	1024	982
v/s Ratio Prot	c0.13	0.16	0.03	0.01	c0.15		c0.22	c0.40		0.02	0.21	0.07
v/s Ratio Perm			0.03	0.03						0.14		0.14
v/c Ratio	1.18	0.67	0.11	0.18	0.74		0.79	0.89		0.32	0.96	0.67
Uniform Delay, d1	53.5	41.0	14.7	38.5	44.9		40.3	30.2		21.7	46.5	35.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	106.6	4.4	0.1	0.3	4.2		8.9	6.2		1.4	19.2	1.4
Delay (s)	160.1	45.4	14.8	38.8	49.1		49.2	36.4		23.1	65.7	36.5
Level of Service	F	D	B	D	D		D	D		C	E	D
Approach Delay (s)		92.8			48.2			38.4			53.1	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	413	290	180	52	513	366	1925	41	978	660
v/c Ratio	1.18	0.67	0.19	0.18	0.77	0.79	0.87	0.28	0.92	0.66
Control Delay	152.8	49.9	1.7	39.3	52.6	55.1	35.2	18.7	60.3	34.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	152.8	49.9	1.7	39.3	52.6	55.1	35.2	18.7	60.3	34.0
Queue Length 50th (ft)	~197	213	0	33	196	262	489	14	273	226
Queue Length 95th (ft)	#299	289	22	62	232	#473	#691	35	#356	290
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	350	513	934	288	855	462	2224	147	1059	995
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	0.57	0.19	0.18	0.60	0.79	0.87	0.28	0.92	0.66

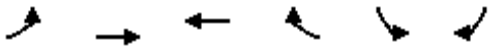
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 6th Signalized Intersection Summary
1: Stocker Street & Don Felipe Drive

10/08/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	157	1218	741	67	75	194
Future Volume (veh/h)	157	1218	741	67	75	194
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1870	1885
Adj Flow Rate, veh/h	173	1338	788	71	100	259
Peak Hour Factor	0.91	0.91	0.94	0.94	0.75	0.75
Percent Heavy Veh, %	0	1	1	0	2	1
Cap, veh/h	513	2475	2297	207	332	298
Arrive On Green	0.69	0.69	0.92	0.92	0.19	0.19
Sat Flow, veh/h	653	3676	3417	299	1781	1598
Grp Volume(v), veh/h	173	1338	425	434	100	259
Grp Sat Flow(s),veh/h/ln	653	1791	1791	1831	1781	1598
Q Serve(g_s), s	10.9	16.6	2.5	2.5	4.4	14.2
Cycle Q Clear(g_c), s	13.4	16.6	2.5	2.5	4.4	14.2
Prop In Lane	1.00			0.16	1.00	1.00
Lane Grp Cap(c), veh/h	513	2475	1238	1266	332	298
V/C Ratio(X)	0.34	0.54	0.34	0.34	0.30	0.87
Avail Cap(c_a), veh/h	513	2475	1238	1266	435	391
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.9	6.9	1.2	1.2	31.5	35.5
Incr Delay (d2), s/veh	0.1	0.1	0.8	0.7	0.5	15.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	8.3	1.4	1.4	3.5	11.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.1	7.0	2.0	2.0	32.0	50.5
LnGrp LOS	A	A	A	A	C	D
Approach Vol, veh/h		1511	859		359	
Approach Delay, s/veh		7.0	2.0		45.4	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		68.2		21.8		68.2
Change Period (Y+Rc), s		6.0		5.0		6.0
Max Green Setting (Gmax), s		57.0		22.0		57.0
Max Q Clear Time (g_c+I1), s		4.5		16.2		18.6
Green Ext Time (p_c), s		9.3		0.6		9.5

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1266	792	0	0	0
Future Vol, veh/h	0	1266	792	0	0	0
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	1376	861	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	431
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	573
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	573
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

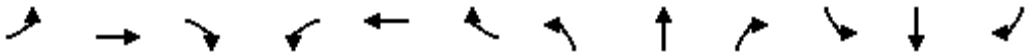
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1242	24	17	793	9	14
Future Vol, veh/h	1242	24	17	793	9	14
Conflicting Peds, #/hr	0	4	4	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	45	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	88	88	56	56
Heavy Vehicles, %	1	0	0	1	0	0
Mvmt Flow	1396	27	19	901	16	25

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1427	0	1903	716
Stage 1	-	-	-	-	1414	-
Stage 2	-	-	-	-	489	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	483	-	62	377
Stage 1	-	-	-	-	194	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	481	-	59	376
Mov Cap-2 Maneuver	-	-	-	-	151	-
Stage 1	-	-	-	-	193	-
Stage 2	-	-	-	-	564	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	23.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	238	-	-	481	-
HCM Lane V/C Ratio	0.173	-	-	0.04	-
HCM Control Delay (s)	23.3	-	-	12.8	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	977	40	21	597	266	17	118	7	265	197	219
Future Volume (vph)	226	977	40	21	597	266	17	118	7	265	197	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	16	16	12	9	12	12
Total Lost time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1664	3546		1741	3336	1767		2140	1579	3120	1717	
Flt Permitted	0.38	1.00		0.20	1.00	1.00		0.89	1.00	0.95	1.00	
Satd. Flow (perm)	662	3546		367	3336	1767		1924	1579	3120	1717	
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	238	1028	42	23	642	286	18	127	8	291	216	241
RTOR Reduction (vph)	0	2	0	0	0	95	0	0	7	0	45	0
Lane Group Flow (vph)	238	1068	0	23	642	191	0	145	1	291	412	0
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	Prot	NA	
Protected Phases		6			2	3		4		3	8	
Permitted Phases	6			2		2	4	4	4		8	
Actuated Green, G (s)	50.2	50.2		50.2	50.2	60.2		12.9	12.9	10.0	29.0	
Effective Green, g (s)	50.2	50.2		50.2	50.2	60.2		12.9	12.9	10.0	29.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56	0.67		0.14	0.14	0.11	0.32	
Clearance Time (s)	5.5	5.5		5.5	5.5	6.1		5.3	5.3	6.1	5.3	
Vehicle Extension (s)	3.8	3.8		4.4	4.4	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	369	1977		204	1860	1181		275	226	346	553	
v/s Ratio Prot		0.30			0.19	0.02				0.09	c0.24	
v/s Ratio Perm	c0.36			0.06		0.09		0.08	0.00			
v/c Ratio	0.64	0.54		0.11	0.35	0.16		0.53	0.01	0.84	0.75	
Uniform Delay, d1	13.7	12.6		9.4	10.9	5.5		35.7	33.0	39.2	27.2	
Progression Factor	0.77	0.80		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.7	1.0		1.1	0.5	0.1		1.8	0.0	16.6	5.4	
Delay (s)	18.3	11.0		10.5	11.4	5.6		37.5	33.1	55.8	32.6	
Level of Service	B	B		B	B	A		D	C	E	C	
Approach Delay (s)		12.3			9.6			37.3			41.7	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.9
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	238	1070	23	642	286	145	8	291	457
v/c Ratio	0.64	0.54	0.11	0.35	0.23	0.53	0.03	0.84	0.76
Control Delay	21.5	11.6	12.9	12.2	1.1	41.9	0.1	61.7	32.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.5	11.6	12.9	12.2	1.1	41.9	0.1	61.7	32.1
Queue Length 50th (ft)	93	142	6	97	0	78	0	85	200
Queue Length 95th (ft)	#224	205	22	155	23	127	0	#152	287
Internal Link Dist (ft)		217		793		1015			290
Turn Bay Length (ft)	130		115		110		20	130	
Base Capacity (vph)	369	1979	204	1860	1267	620	579	346	624
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.54	0.11	0.35	0.23	0.23	0.01	0.84	0.73

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

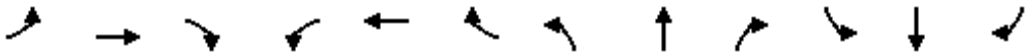
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	112	77	535	563	31
Future Vol, veh/h	51	112	77	535	563	31
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	-	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	55	122	84	582	612	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1379	323	646	0	-	0
Stage 1	629	-	-	-	-	-
Stage 2	750	-	-	-	-	-
Critical Hdwy	6.63	6.93	4.13	-	-	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	147	673	937	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	134	673	937	-	-	-
Mov Cap-2 Maneuver	134	-	-	-	-	-
Stage 1	450	-	-	-	-	-
Stage 2	466	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.3	1.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	937	-	298	-	-
HCM Lane V/C Ratio	0.089	-	0.595	-	-
HCM Control Delay (s)	9.2	-	33.3	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	3.6	-	-



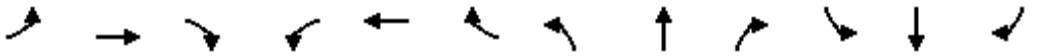
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	145	44	181	149	75	38	349	187	48	329	42
Future Volume (veh/h)	16	145	44	181	149	75	38	349	187	48	329	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.99	0.99		0.97	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	1900	1961	1900	1900	1900	1884	1824	1870	1810	1696	1961	1900
Adj Flow Rate, veh/h	20	177	54	197	162	82	42	388	208	55	378	48
Peak Hour Factor	0.82	0.82	0.82	0.92	0.92	0.92	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	0	1	0	0	0	6	0	2	1	9	1	0
Cap, veh/h	648	727	222	626	963	800	341	607	481	230	1078	136
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1146	1434	438	1155	1900	1578	931	1870	1480	742	3322	419
Grp Volume(v), veh/h	20	0	231	197	162	82	42	388	208	55	211	215
Grp Sat Flow(s),veh/h/ln	1146	0	1872	1155	1900	1578	931	1870	1480	742	1863	1878
Q Serve(g_s), s	0.6	0.0	4.2	6.9	2.8	1.6	2.2	10.6	6.6	4.1	5.2	5.2
Cycle Q Clear(g_c), s	3.3	0.0	4.2	11.1	2.8	1.6	7.4	10.6	6.6	14.7	5.2	5.2
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	648	0	949	626	963	800	341	607	481	230	605	610
V/C Ratio(X)	0.03	0.00	0.24	0.31	0.17	0.10	0.12	0.64	0.43	0.24	0.35	0.35
Avail Cap(c_a), veh/h	648	0	949	626	963	800	425	776	614	297	773	779
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	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	8.9	0.0	8.3	11.4	8.0	7.7	18.3	17.3	15.9	23.5	15.4	15.5
Incr Delay (d2), s/veh	0.1	0.0	0.6	1.3	0.4	0.3	0.5	3.2	1.8	1.0	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(95%),veh/ln	0.3	0.0	2.8	3.2	1.9	0.9	0.9	8.2	4.1	1.3	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	0.0	8.9	12.8	8.3	7.9	18.7	20.5	17.7	24.5	16.0	16.1
LnGrp LOS	A	A	A	B	A	A	B	C	B	C	B	B
Approach Vol, veh/h		251			441			638			481	
Approach Delay, s/veh		8.9			10.2			19.5			17.0	
Approach LOS		A			B			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.4		24.6		35.4		24.6				
Change Period (Y+Rc), s		* 5		5.1		* 5		5.1				
Max Green Setting (Gmax), s		* 25		24.9		* 25		24.9				
Max Q Clear Time (g_c+I1), s		13.1		16.7		6.2		12.6				
Green Ext Time (p_c), s		4.2		2.7		3.5		5.4				

Intersection Summary												
HCM 6th Ctrl Delay			15.1									
HCM 6th LOS			B									

Notes

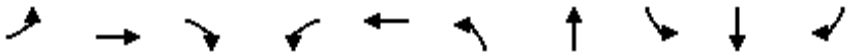
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	497	459	309	54	284	47	230	1211	44	64	1761	457
Future Volume (vph)	497	459	309	54	284	47	230	1211	44	64	1761	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	13	11	11	12	10	10	12	9	10	16
Total Lost time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		4.5	5.6	6.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95		1.00	0.91		1.00	0.91	0.88
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99		1.00	0.99		1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3236	1773	1573	1649	3331		1668	4611		1624	4700	2875
Flt Permitted	0.95	1.00	1.00	0.39	1.00		0.95	1.00		0.10	1.00	1.00
Satd. Flow (perm)	3236	1773	1573	684	3331		1668	4611		175	4700	2875
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.91	0.91	0.91	0.98	0.98	0.98
Adj. Flow (vph)	523	483	325	58	305	51	253	1331	48	65	1797	466
RTOR Reduction (vph)	0	0	90	0	11	0	0	3	0	0	0	0
Lane Group Flow (vph)	523	483	235	58	345	0	253	1376	0	65	1797	466
Confl. Peds. (#/hr)	44		32	32		44	42		48	48		42
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	0%	2%	5%	1%	5%	1%	4%	0%	0%	3%	2%
Turn Type	Prot	NA	pm+ov	pm+pt	NA		Prot	NA		D.P+P	NA	pm+ov
Protected Phases	7	4	5	3	8		5	2		1	6	7
Permitted Phases			4	8						2		6
Actuated Green, G (s)	13.0	37.2	55.5	32.0	29.9		18.3	49.4		54.4	34.9	47.9
Effective Green, g (s)	13.0	37.2	55.5	32.0	29.9		18.3	49.4		54.4	34.9	47.9
Actuated g/C Ratio	0.11	0.31	0.46	0.27	0.25		0.15	0.41		0.45	0.29	0.40
Clearance Time (s)	6.0	6.6	5.7	4.5	6.6		5.7	5.6		4.5	5.6	6.0
Vehicle Extension (s)	2.0	3.8	3.0	3.0	3.0		3.0	4.7		3.0	5.5	2.0
Lane Grp Cap (vph)	350	549	727	240	829		254	1898		139	1366	1147
v/s Ratio Prot	c0.16	c0.27	0.05	0.01	c0.10		c0.15	0.30		0.02	c0.38	0.04
v/s Ratio Perm			0.10	0.05						0.19		0.12
v/c Ratio	1.49	0.88	0.32	0.24	0.42		1.00	0.73		0.47	1.32	0.41
Uniform Delay, d1	53.5	39.3	20.4	38.5	37.7		50.8	29.6		21.2	42.5	25.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	237.0	15.3	0.3	0.5	0.3		55.0	2.5		2.5	147.3	0.1
Delay (s)	290.5	54.5	20.6	39.0	38.1		105.8	32.1		23.7	189.8	25.9
Level of Service	F	D	C	D	D		F	C		C	F	C
Approach Delay (s)		139.0			38.2			43.5			152.4	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	109.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	102.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	523	483	325	58	356	253	1379	65	1797	466
v/c Ratio	1.49	0.88	0.39	0.22	0.44	1.00	0.70	0.41	1.28	0.40
Control Delay	274.2	57.6	7.5	36.4	37.7	108.4	32.4	25.2	168.3	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	274.2	57.6	7.5	36.4	37.7	108.4	32.4	25.2	168.3	23.0
Queue Length 50th (ft)	~288	349	50	33	113	~245	342	27	~646	128
Queue Length 95th (ft)	#399	#532	96	67	157	#411	404	53	#743	172
Internal Link Dist (ft)		793			490		259		826	
Turn Bay Length (ft)	150		170	55		145		200		200
Base Capacity (vph)	350	553	828	275	906	254	1968	157	1402	1159
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.49	0.87	0.39	0.21	0.39	1.00	0.70	0.41	1.28	0.40

Intersection Summary

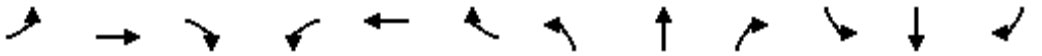
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

FUTURE (2029) WITH PROJECT TRAFFIC CONDITIONS WITH TDM MEASURES + TCR IMPROVEMENT

HCM Signalized Intersection Capacity Analysis
4: Angeles Vista Boulevard/Santa Rosalia Drive & Stocker Street

10/08/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	167	521	14	9	873	295	29	173	8	151	150	133
Future Volume (vph)	167	521	14	9	873	295	29	173	8	151	150	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	10	14	13	10	10	13
Total Lost time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1652	3518		1568	3303	1732	1620	2027	1627	3204	1773	1608
Flt Permitted	0.13	1.00		0.44	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	233	3518		723	3303	1732	1620	2027	1627	3204	1773	1608
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	178	554	15	9	919	311	32	190	9	176	174	155
RTOR Reduction (vph)	0	2	0	0	0	133	0	0	7	0	0	120
Lane Group Flow (vph)	178	567	0	9	919	178	32	190	2	176	174	35
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2	3	7	4		3	8	
Permitted Phases	6			2		2		4	4		8	8
Actuated Green, G (s)	39.4	39.4		32.5	32.5	42.6	5.5	15.2	15.2	10.1	20.6	20.6
Effective Green, g (s)	39.4	39.4		32.5	32.5	42.6	5.5	15.2	15.2	10.1	20.6	20.6
Actuated g/C Ratio	0.44	0.44		0.36	0.36	0.47	0.06	0.17	0.17	0.11	0.23	0.23
Clearance Time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Vehicle Extension (s)	3.0	3.8		3.0	4.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	253	1540		288	1192	819	99	342	274	359	405	368
v/s Ratio Prot	c0.07	0.16		0.00	c0.28	0.02	0.02	c0.09		0.05	c0.10	
v/s Ratio Perm	0.23			0.01		0.08			0.00			0.02
v/c Ratio	0.70	0.37		0.03	0.77	0.22	0.32	0.56	0.01	0.49	0.43	0.10
Uniform Delay, d1	19.2	17.0		18.6	25.5	13.9	40.5	34.3	31.1	37.5	29.7	27.4
Progression Factor	1.02	1.02		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.5	0.7		0.0	4.9	0.1	1.9	2.0	0.0	1.1	0.7	0.1
Delay (s)	28.1	18.1		18.6	30.3	14.0	42.4	36.3	31.1	38.6	30.4	27.5
Level of Service	C	B		B	C	B	D	D	C	D	C	C
Approach Delay (s)		20.5			26.1			36.9			32.4	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

4: Angeles Vista Boulevard/Santa Rosalia Drive & Stocker Street

10/08/2024



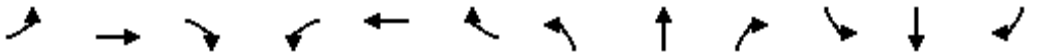
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	178	569	9	919	311	32	190	9	176	174	155
v/c Ratio	0.66	0.32	0.03	0.72	0.32	0.23	0.64	0.02	0.49	0.43	0.28
Control Delay	29.6	16.0	19.9	28.6	3.7	42.1	46.2	0.1	42.7	34.8	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.6	16.0	19.9	28.6	3.7	42.1	46.2	0.1	42.7	34.8	2.2
Queue Length 50th (ft)	56	97	3	237	15	17	103	0	49	94	0
Queue Length 95th (ft)	#177	195	14	323	56	46	167	0	77	140	7
Internal Link Dist (ft)		217		793			1015			290	
Turn Bay Length (ft)	130		115		110	20		20	130		134
Base Capacity (vph)	283	1862	349	1269	977	141	358	485	359	455	584
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.31	0.03	0.72	0.32	0.23	0.53	0.02	0.49	0.38	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
4: Angeles Vista Boulevard/Santa Rosalia Drive & Stocker Street

10/08/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	859	38	20	458	247	16	112	7	272	188	202
Future Volume (vph)	202	859	38	20	458	247	16	112	7	272	188	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	10	14	13	10	10	13
Total Lost time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1667	3543		1743	3336	1772	1685	2027	1631	3236	1756	1624
Flt Permitted	0.29	1.00		0.30	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	504	3543		556	3336	1772	1685	2027	1631	3236	1756	1624
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	213	904	40	22	492	266	17	120	8	299	207	222
RTOR Reduction (vph)	0	3	0	0	0	143	0	0	7	0	0	162
Lane Group Flow (vph)	213	941	0	22	492	123	17	120	1	299	207	60
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2	3	7	4		3	8	
Permitted Phases	6			2		2		4	4		8	8
Actuated Green, G (s)	39.1	39.1		28.7	28.7	41.6	2.8	13.5	13.5	12.9	24.4	24.4
Effective Green, g (s)	39.1	39.1		28.7	28.7	41.6	2.8	13.5	13.5	12.9	24.4	24.4
Actuated g/C Ratio	0.43	0.43		0.32	0.32	0.46	0.03	0.15	0.15	0.14	0.27	0.27
Clearance Time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Vehicle Extension (s)	3.0	3.8		3.0	4.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	377	1539		204	1063	819	52	304	244	463	476	440
v/s Ratio Prot	0.08	c0.27		0.00	c0.15	0.02	0.01	c0.06		c0.09	c0.12	
v/s Ratio Perm	0.17			0.03		0.05			0.00			0.04
v/c Ratio	0.56	0.61		0.11	0.46	0.15	0.33	0.39	0.00	0.65	0.43	0.14
Uniform Delay, d1	17.3	19.6		21.7	24.5	14.0	42.7	34.6	32.5	36.4	27.1	24.8
Progression Factor	1.04	0.82		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	1.7		0.2	1.5	0.1	3.7	0.8	0.0	3.1	0.6	0.1
Delay (s)	19.9	17.7		22.0	25.9	14.1	46.3	35.4	32.5	39.5	27.7	25.0
Level of Service	B	B		C	C	B	D	D	C	D	C	C
Approach Delay (s)		18.1			21.8			36.5			31.7	
Approach LOS		B			C			D			C	

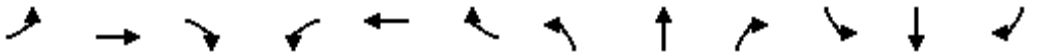
Intersection Summary			
HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	213	944	22	492	266	17	120	8	299	207	222
v/c Ratio	0.52	0.53	0.08	0.42	0.27	0.15	0.52	0.02	0.65	0.43	0.37
Control Delay	20.3	14.8	25.4	25.2	2.4	42.2	45.2	0.1	43.1	31.3	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	14.8	25.4	25.2	2.4	42.2	45.2	0.1	43.1	31.3	5.6
Queue Length 50th (ft)	49	119	8	110	0	9	65	0	82	88	0
Queue Length 95th (ft)	134	201	28	177	38	31	118	0	124	170	51
Internal Link Dist (ft)		217		793			1015			290	
Turn Bay Length (ft)	130		115		110	20		20	130		134
Base Capacity (vph)	477	1807	267	1178	1025	117	270	425	510	487	616
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.52	0.08	0.42	0.26	0.15	0.44	0.02	0.59	0.43	0.36

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	628	15	9	965	333	30	182	8	165	158	154
Future Volume (vph)	223	628	15	9	965	333	30	182	8	165	158	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	10	14	13	10	10	13
Total Lost time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1652	3520		1569	3303	1733	1620	2027	1627	3204	1773	1608
Flt Permitted	0.14	1.00		0.39	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	241	3520		647	3303	1733	1620	2027	1627	3204	1773	1608
Peak-hour factor, PHF	0.94	0.94	0.94	0.95	0.95	0.95	0.91	0.91	0.91	0.86	0.86	0.86
Adj. Flow (vph)	237	668	16	9	1016	351	33	200	9	192	184	179
RTOR Reduction (vph)	0	2	0	0	0	91	0	0	8	0	0	137
Lane Group Flow (vph)	237	682	0	9	1016	260	33	200	2	192	184	42
Confl. Peds. (#/hr)	7		9	9		7	4		1	1		4
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	2%	2%	7%	11%	2%	4%	4%	0%	0%	2%	0%	2%
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2	3	7	4		3	8	
Permitted Phases	6			2		2		4	4		8	8
Actuated Green, G (s)	39.9	39.9		30.8	30.8	41.3	5.1	15.0	15.0	10.5	21.2	21.2
Effective Green, g (s)	39.9	39.9		30.8	30.8	41.3	5.1	15.0	15.0	10.5	21.2	21.2
Actuated g/C Ratio	0.44	0.44		0.34	0.34	0.46	0.06	0.17	0.17	0.12	0.24	0.24
Clearance Time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Vehicle Extension (s)	3.0	3.8		3.0	4.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	280	1560		243	1130	795	91	337	271	373	417	378
v/s Ratio Prot	c0.10	0.19		0.00	c0.31	0.04	0.02	c0.10		0.06	c0.10	
v/s Ratio Perm	0.27			0.01		0.11			0.00			0.03
v/c Ratio	0.85	0.44		0.04	0.90	0.33	0.36	0.59	0.01	0.51	0.44	0.11
Uniform Delay, d1	20.2	17.3		19.7	28.1	15.5	40.9	34.7	31.3	37.4	29.3	27.0
Progression Factor	0.99	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.2	0.9		0.1	11.4	0.2	2.5	2.8	0.0	1.2	0.7	0.1
Delay (s)	40.2	18.0		19.8	39.5	15.7	43.3	37.5	31.3	38.6	30.1	27.1
Level of Service	D	B		B	D	B	D	D	C	D	C	C
Approach Delay (s)		23.7			33.3			38.0			32.1	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

4: Angeles Vista Boulevard/Santa Rosalia Drive & Stocker Street

10/08/2024



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	237	684	9	1016	351	33	200	9	192	184	179
v/c Ratio	0.80	0.38	0.03	0.84	0.39	0.25	0.69	0.02	0.51	0.44	0.32
Control Delay	39.6	15.3	18.7	33.9	7.0	43.5	49.1	0.1	42.6	34.4	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.6	15.3	18.7	33.9	7.0	43.5	49.1	0.1	42.6	34.4	3.3
Queue Length 50th (ft)	80	128	3	271	49	17	108	0	53	99	0
Queue Length 95th (ft)	#267	224	13	354	97	48	177	0	82	146	19
Internal Link Dist (ft)		217		793			1015			290	
Turn Bay Length (ft)	130		115		110	20		20	130		134
Base Capacity (vph)	298	1860	303	1229	918	133	331	466	388	458	586
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.37	0.03	0.83	0.38	0.25	0.60	0.02	0.49	0.40	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
4: Angeles Vista Boulevard/Santa Rosalia Drive & Stocker Street

10/08/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	977	40	21	597	266	17	118	7	265	197	219
Future Volume (vph)	226	977	40	21	597	266	17	118	7	265	197	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	11	10	16	10	14	13	10	10	13
Total Lost time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1667	3546		1744	3336	1771	1685	2027	1631	3236	1756	1624
Flt Permitted	0.21	1.00		0.26	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	368	3546		479	3336	1771	1685	2027	1631	3236	1756	1624
Peak-hour factor, PHF	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Adj. Flow (vph)	238	1028	42	23	642	286	18	127	8	291	216	241
RTOR Reduction (vph)	0	3	0	0	0	127	0	0	7	0	0	176
Lane Group Flow (vph)	238	1067	0	23	642	159	18	127	1	291	216	65
Confl. Peds. (#/hr)	5		9	9		5	3					3
Confl. Bikes (#/hr)									1			2
Heavy Vehicles (%)	1%	1%	3%	0%	1%	2%	0%	0%	0%	1%	1%	1%
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2	3	7	4		3	8	
Permitted Phases	6			2		2		4	4		8	8
Actuated Green, G (s)	39.7	39.7		30.5	30.5	42.8	2.3	13.6	13.6	12.3	24.4	24.4
Effective Green, g (s)	39.7	39.7		30.5	30.5	42.8	2.3	13.6	13.6	12.3	24.4	24.4
Actuated g/C Ratio	0.44	0.44		0.34	0.34	0.48	0.03	0.15	0.15	0.14	0.27	0.27
Clearance Time (s)	5.7	5.5		5.5	5.5	6.1	5.3	5.3	5.3	6.1	5.3	5.3
Vehicle Extension (s)	3.0	3.8		3.0	4.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	321	1564		190	1130	842	43	306	246	442	476	440
v/s Ratio Prot	0.09	c0.30		0.00	c0.19	0.03	0.01	c0.06		c0.09	c0.12	
v/s Ratio Perm	c0.24			0.04		0.06			0.00			0.04
v/c Ratio	0.74	0.68		0.12	0.57	0.19	0.42	0.42	0.00	0.66	0.45	0.15
Uniform Delay, d1	18.0	20.1		21.1	24.4	13.6	43.2	34.6	32.5	36.9	27.3	24.9
Progression Factor	1.25	0.97		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	2.2		0.3	2.1	0.1	6.5	0.9	0.0	3.5	0.7	0.2
Delay (s)	30.7	21.7		21.4	26.4	13.7	49.7	35.5	32.5	40.4	28.0	25.1
Level of Service	C	C		C	C	B	D	D	C	D	C	C
Approach Delay (s)		23.4			22.5			37.0			31.9	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	22.6
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

4: Angeles Vista Boulevard/Santa Rosalia Drive & Stocker Street

10/08/2024



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	238	1070	23	642	286	18	127	8	291	216	241
v/c Ratio	0.69	0.59	0.09	0.52	0.28	0.17	0.54	0.02	0.66	0.45	0.39
Control Delay	30.4	17.9	21.5	24.3	2.9	43.6	46.1	0.1	44.2	31.7	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	17.9	21.5	24.3	2.9	43.6	46.1	0.1	44.2	31.7	6.1
Queue Length 50th (ft)	55	132	9	157	11	10	69	0	80	92	0
Queue Length 95th (ft)	#186	324	25	205	45	32	123	0	122	179	58
Internal Link Dist (ft)		217		793			1015			290	
Turn Bay Length (ft)	130		115		110	20		20	130		134
Base Capacity (vph)	349	1819	254	1263	1029	109	270	425	478	483	621
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.59	0.09	0.51	0.28	0.17	0.47	0.02	0.61	0.45	0.39

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX H

LADOT TCR REPORT AND CONCEPTUAL SIGNING & STRIPING PLAN

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
Departmental Correspondence

TRAFFIC
CONTROL
REPORT

February 12, 2020
8 – Southern – SR 93670,
107590, 118896, 136077
Angeles Vista Bl, Santa Rosalia
Dr & Stocker St

Left Turn Phasing

DETERMINATION

1. That protected-only left-turn phasing with the appropriate signal indications be authorized for installation for northbound Angeles Vista Boulevard at the intersection of Stocker Street (LAMC Section 80.07).
2. That protected-permissive left-turn phasing with the appropriate signal indications be authorized for installation for eastbound and westbound Stocker Street at the intersection of Angeles Vista Boulevard and Santa Rosalia Drive (LAMC Section 80.07).
3. That the traffic signal modification be added to the Department's list of approved, but unfunded projects, until such time that funding for the cost of construction can be identified.

DISCUSSION

The Department of Transportation received several requests regarding signal timing, congestion, and striping at the intersection of Angeles Vista Boulevard, Santa Rosalia Drive and Stocker Street. Southbound Santa Rosalia Drive has a shared through-right lane at Stocker Street, and many requesters asked for an exclusive right-turn only lane.

A comprehensive traffic engineering study for this intersection has been completed. The study included an investigation of the physical conditions and existing traffic controls, a review of traffic volumes, an analysis of collisions reported to the Police Department for the previous five years, a review of the complaints at or near the intersection, and observations of traffic movements through the intersection.

Stocker Street is designated Boulevard II in the City of Los Angeles, and is striped with two lane of traffic in each direction, left turn channelization, and a right turn pocket for westbound Stocker Street at Santa Rosalia Drive. The County of Los Angeles has established a 40 mph speed limit on Stocker Street west of Santa Rosalia Drive. Santa Rosalia Drive is a designated Collector Street in the City of Los Angeles and changes name to Angeles Vista Boulevard at Stocker Street. Santa Rosalia Drive is striped with one northbound travel lane, two southbound left-turn lanes, and a shared through and right-turn lane. Angeles Vista Boulevard is striped with one lane in each direction. The boundary with the County of Los Angeles is at the south and west legs of the intersection. The County of Los Angeles was contacted regarding the results of the study, and concur with the recommendations.

Results of the engineering study indicate that this location satisfies the "Case A.1(c): Geometry" for protected-only left-turn phasing for northbound Angeles Vista Boulevard. Eastbound Stocker Street satisfies the "Case C.2: Traffic Volume", for protected-permissive left-turn phasing. Westbound Stocker Street satisfies the "Case C.8: Opposing Direction" for protected-permissive left-turn phasing. The installation of protected-only and protected-permissive left-turn phasing, as described in the Determination, and striping changes recommended by the District Office and Design Division are therefore recommended to improve safety and operations at the intersection.

Recommended by:

CRYSTAL KILLIAN, P.E.
Transportation Engineer
Southern District

Approved by:

ROY W. KIM, P.E.
Senior Transportation Engineer
East Area District Operations

c: Emeline Nguyen, Dina Andrews, Fernando Montes-Rodriguez, Tara Sullivan, CD 8
Tim Conger, Scott Brown, Steve Gaur, LADOT
Marty Amundson, MAMUND@dpw.lacounty.gov
Lee Miller, LMILLER@dpw.lacounty.gov
James Chon, JCHON@dpw.lacounty.gov D
Daniel Quintana, DQUINTAN@dpw.lacounty.gov
Raul Igtanloc, RIGTAN@dpw.lacounty.gov
Ruben Cruz, RCRUZ@dpw.lacounty.gov,
Henry Hernandez, HHERNAND@dpw.lacounty.gov
Phil Phan, PPHAN@dpw.lacounty.gov, LA County

DT 302 (R.9/79)

City of Los Angeles
DEPARTMENT OF
TRANSPORTATION

Sheet Nº 86776

ENGINEERING WORK ORDER

INITIATED By:	SCHEDULING RELEASE:	WORK PERFORMED BY:
Name Kien Nguyen	BY	Crew Chief
Office Southern	To	Completion Date
Date 2/11/2020	Date	Division Head Certification

LOCATION Santa Rosalia Dr / Angeles Vista Bl & Stocker St.

C.D. No.	State Route No.	Other Jurisdiction Affected
8		

Summary of Work

Prepare traffic signal plan for protected-only left-turn phasing in NB Angeles Vista Bl & PPLT phasing in EB/WB Stocker St.

Comm. App. _____

DIVISION USE ONLY

Assigned To	Date	Estimated Design Completion date

WORK TO BE DONE

Count		
Acc Search		
Col Diagram		
Heli Photos		
Vert Photos		
Base Dwg		
Prelim Dwg		
Final Dwg		

Estimated Cost

Actual Cost

Drawing File No.

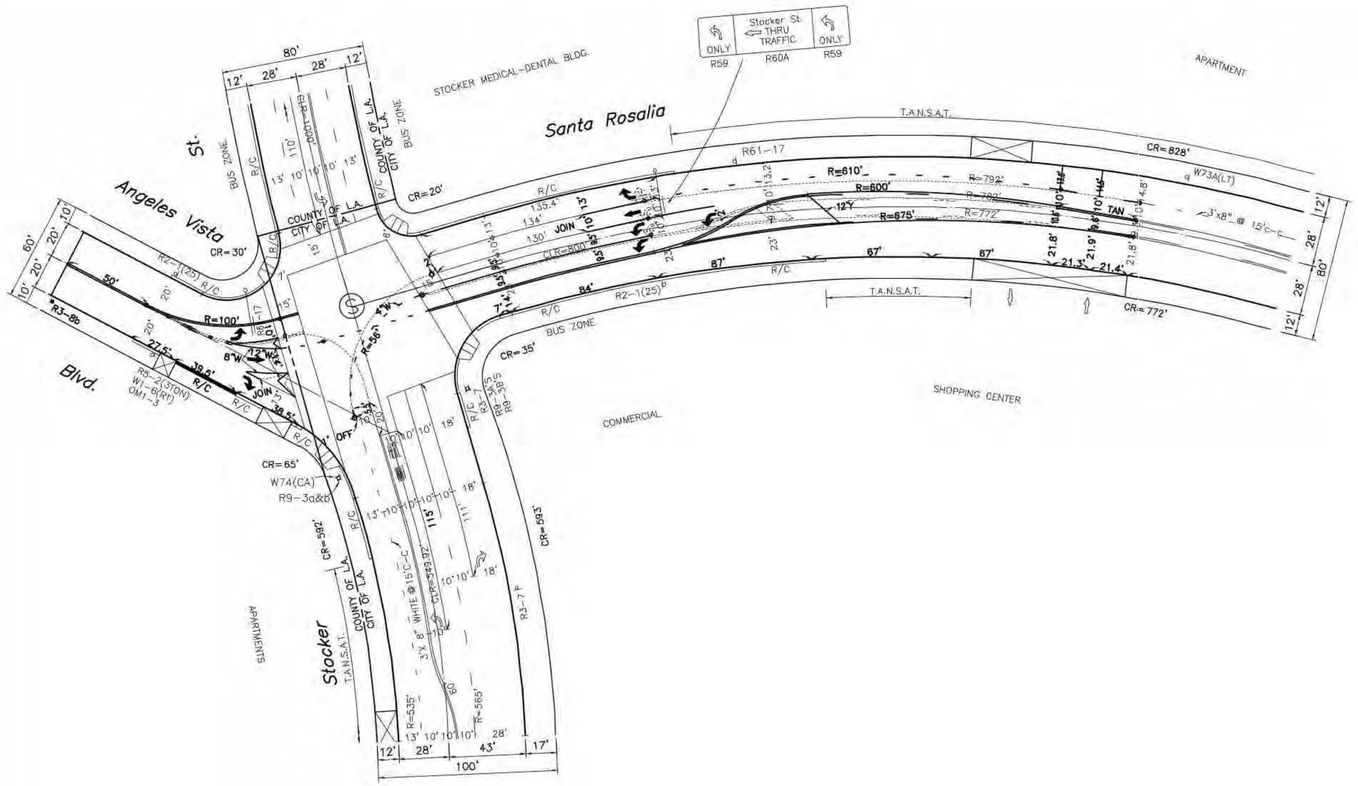
Req. Rec.

PW Plan Rec.

Installed

PROJECT NO.

FIELD CHECK COMMENTS



LEGEND

1. EXISTING STRIPING & MARKINGS TO REMAIN
   EXISTING STRIPING & MARKINGS TO BE REMOVED
   PROPOSED STRIPING & MARKINGS
2. EXISTING SIGNS ▪ PROPOSED SIGNS
3. SIGNALIZED INTERSECTION
4. R/C EXISTING RED CURB
   R/C PROPOSED RED CURB

NOTES

1. LENGTH OF DESIGN : 650' ±
2. PAINT REMOVAL REQUIRED.

SCALE: 1"=40'

DISTRICT INITIATED

SUBMITTED DEC 04 20 13
TIM CONGER
Transportation Engineer

APPROVED DEC 05 20 13
MANOOCHEHR ADHAMI
Senior Transportation Engineer

REGISTERED PROFESSIONAL ENGINEER
MANOOCHEHR ADHAMI
No. 69854
CIVIL
STATE OF CALIFORNIA

INSTALLATION DATES

MARKOUT BEGAN:

MARKOUT COMPLETED:

STRIPING COMPLETED:

References:
A-2962 A-4915
A-1314 FB114-185

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
JON KIRK MUKRI, INTERIM GENERAL MANAGER

SANTA ROSALIA DRIVE
AT STOCKER STREET

Thomas Guide	District	PROJECT NO.	DRAWING NO.	
673-D2,E3	S	GFUND000	A-6260	1/1

1"=20' ORIGINAL MAP SCALE 1"=40'
20 10 0 20 40 60 80 100 FEET
40 20 0 40 80 120 160 200 FEET

SCALES HORIZ. 1"= VERT. 1"=

SHEET

INDEX NUMBER

NO.	REVISION DESCRIPTION	BY	DATE
BASE			
CHECK		EF	11/21/2013
DESIGN		CK	12/03/2013

PRINCIPAL T.E. | T.E./SR. T.E. | SUPERVISOR DISTRICT BIKEWAYS

STOP R1-1	SPEED LIMIT 25 R2-1
RIGHT LANE MUST TURN RIGHT R3-7	R9-3a
R61-17(CA)	USE CROSSWALK R9-3b
W1-6	W3-3
W4-2	OM1-3 (YELLOW)
S1-1	LEFT LANE SIGNS LEFT AHEAD W73A(CA)
SCHOOL S4-3	THRU TRAFFIC MERGE LEFT W74(CA)

APPENDIX I

LADOT TRAFFIC SIGNAL WARRANT WORKSHEETS

LADOT

Traffic Signal Warrants Worksheet

SR#

DATE 7/15/23 PREPARER KOA REVIEWER _____

MAJOR ST: Santa Rosalia Drive

MINOR ST: Project Driveway

Critical Approach Speed ____ MPH or Speed Limit 25 MPH

Speed limit or critical speed on major street traffic > 40 mph..... ☐ or

In built up area of isolated community of < 10,000 population..... ☐

RURAL (R) ☐ URBAN (U) ☒

Eight-Hour Vehicular Volume — WARRANT 1

N/A ☐

SATISFIED YES ☐

NO ☒

** The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal **

a. Condition A or Condition B or combination of 80% of both parts A and B must be satisfied.

b. A 6-hour Manual Count may be used in a determination that this warrant is not met. However, supplement manual counts should be taken during separate hours for a determination that this warrant is met.

c. In applying each condition, the major street and minor street volumes shall be for the same hours. On the minor street, the higher volume does not need to be the same approach during each of the hours.

d. The study should consider the effects of the right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count.

e. Figure 4C-103(CA) should be used for new intersections, significantly reconstructed intersections, where near-term land development will result in increased volumes, or where it is not reasonable to use current traffic volumes.

f. Engineering judgment should also be used in applying various traffic signal warrants to cases where approaches consist of one lane plus one left-turn or right-turn lane. This site-specific traffic characteristics should dictate whether an approach is considered as one lane or two lanes. For example, for an approach with one lane for through and right-turning traffic plus a left-turn lane, if engineering judgment indicates that it should be considered a one-lane approach because the traffic using the left turn lane is minor, the total traffic volume approaching the intersection should be applied against the signal warrants as a one-lane approach. The approach should be considered two lanes if approximately half of the traffic on the approach turns left and the left-turn lane is of sufficient length to accommodate all left-turn vehicles. Similar engineering judgment and rationale should be applied to a street approach with one through/left-turn lane plus a right-turn lane. In this case, the degree of conflict of minor-street right-turn traffic with traffic on the major street should be considered. Thus, right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict. The approach should be evaluated as a one -lane approach with only the traffic volume in the through/left-turn lane considered.

g. At an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher volume of the major-street left-turn volumes plus the higher volume minor-street approach as the “minor street” volume and both approaches of the major street minus the higher of the major-street left-turn volume as “major street” volume. In these cases, engineering judgment should be used to determine if left-turn phasing is necessary to accommodate the high volume of left-turn traffic.

Eight-Hour Vehicular Volume WARRANT 1 (continued)

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

Attachment A: Streetlight Data Counts

Condition A

Minimum Vehicle Volume

SATISFIED	YES	NO
100%	☐	☒
80%	☐	☒

Attachment B: Future with Project Volumes

RIGHT TURN REDUCTION APPLICATION *MINOR STREET* (If Yes, fill in percentage) ☒ ☐ ____%

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOW IN BRACKETS) X	R	U	R	Hours 15:00	16:00	17:00	07:00	18:00	08:00	09:00	06:00
	1 ✔		2 or More									
Both Approach Major Street	500 ✔ (400)✔	350 (280)	600 (480)	420 (336)	964	880	856	907	691	738	608	384
Highest Approach Minor Street	150 ✔ (120)✔	105 (84)	200 (160)	140 (112)	163	163	163	45	163	45	45	45
80% Both Approach Major Street					771	704	684	725	552	590	486	307
80% Highest Approach Minor Street					130	130	130	36	130	36	36	36

Condition B

Interruption of Continuous Traffic

SATISFIED	YES	NO
100%	☐	☒
80%	☐	☒

RIGHT TURN REDUCTION APPLICATION *MINOR STREET* (If Yes, fill in percentage) ☐ ☐ ____%

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOW IN BRACKETS) X	R	U	R	Hours 15:00	16:00	17:00	07:00	18:00	08:00	09:00	06:00
	1 ✔		2 or More ☐									
Both Approach Major Street	750 ✔ (600)✔	525 (420)	900 (720)	630 (504)	964	880	856	907	691	738	608	384
Highest Approach Minor Street	75 ✔ (60) ✔	53 (42)	100 (80)	70 (56)	163	163	163	45	163	45	45	45
80% Both Approach Major Street					771	704	684	725	552	590	486	307
80% Highest Approach Minor Street					130	130	130	36	130	36	36	36

COMBINATION OF A & B

SATISFIED	YES	NO
	☐	☒

REQUIREMENT	CONDITION	✓	FULFILLED YES	FULFILLED NO
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		☐	☒
	AND			
	B. INTERRUPTION OF CONTINUOUS TRAFFIC			
AND				
AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCOVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS		☐	☐	☒

Eight-Hour Vehicular Volume WARRANT 1 (continued)

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

Projected Volumes

	N/A	
SATISFIED	YES	NO
	☐	☐

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)
Based on Estimated Average Daily Traffic - see *Note**

URBAN ☐	RURAL ☐	Minimum Requirements Estimated Average Daily Traffic			
CONDITION A - Minimum Vehicular Volume Satisfied ☐ Not Satisfied ☐		Vehicles Per Day On Major Street (Total of Both Approaches)		Vehicles Per Day On Higher-Volume Minor Street Approach (One Direction Only)	
Number of lanes for moving traffic on each approach		Urban	Rural	Urban	Rural
Major Street	Minor Street				
1……	1……	8,000	5,600	2,400	1,680
2 or More……..	1……	9,600	6,720	2,400	1,680
2 or More……..	2 or More……..	9,600	6,720	3,200	2,240
1……	2 or More……..	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic Satisfied ☐ Not Satisfied ☐		Vehicles Per Day On Major Street (Total of Both Approaches)		Vehicles Per Day On Higher-Volume Minor Street Approach (One Direction Only)	
Number of lanes for moving traffic on each approach		Urban	Rural	Urban	Rural
Minor Street	Minor Street				
1……	1……	12,000	8,400	1,200	850
2 or More……..	1……	14,400	10,080	1,200	850
2 or More……..	2 or More……..	14,400	10,080	1,600	1,120
1……	2 or More……..	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B Satisfied ☐ Not Satisfied ☐ No one condition satisfied, but following conditions fulfilled 80% or more…… A _____ B _____		2 CONDITIONS 80%		2 CONDITIONS 80%	

***Note:** To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes*

Four-Hour Vehicular Volume

WARRANT 2

SATISFIED — N/A ☐ YES ☐ NO ☒

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. Record hourly vehicle volumes for the highest four hours of an average day.

b. In applying each condition, the major street and minor street volumes shall be for the same hours. On the minor street, the higher volume does not need to be the same approach during each of the hours.

c. The study should consider the effects of the right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count.

d. Engineering judgment should also be used in applying various traffic signal warrants to cases where approaches consist of one lane plus one left-turn or right-turn lane. This site-specific traffic characteristics should dictate whether an approach is considered as one lane or two lanes. For example, for an approach with one lane for through and right-turning traffic plus a left-turn lane, if engineering judgment indicates that it should be considered a one-lane approach because the traffic using the left turn lane is minor, the total traffic volume approaching the intersection should be applied against the signal warrants as a one-lane approach. The approach should be considered two lanes if approximately half of the traffic on the approach turns left and the left-turn lane is of sufficient length to accommodate all left-turn vehicles. Similar engineering judgment and rationale should be applied to a street approach with one through/left-turn lane plus a right-turn lane. In this case, the degree of conflict of minor-street right-turn traffic with traffic on the major street should be considered. Thus, right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict. The approach should be evaluated as a one-lane approach with only the traffic volume in the through/left-turn lane considered.

e. At an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher volume of the major-street left-turn volumes plus the higher volume minor-street approach as the “minor street” volume and both approaches of the major street minus the higher of the major-street left-turn volume as “major street” volume. In these cases, engineering judgment should be used to determine if left-turn phasing is necessary to accommodate the high volume of left -turn traffic.

APPROACH LANES	One	2 or More	Hours 15:00	*16:00*	*17:00*	07:00
Both Approaches - Major Street	✔	☐	964	881	856	907
Higher Approach - Minor Street	✔	☐	163	163	163	45

	YES	NO
RIGHT TURN REDUCTION APPLICATION *MINOR STREET*	☐	☒
(If Yes, fill in percentage) _____ %		

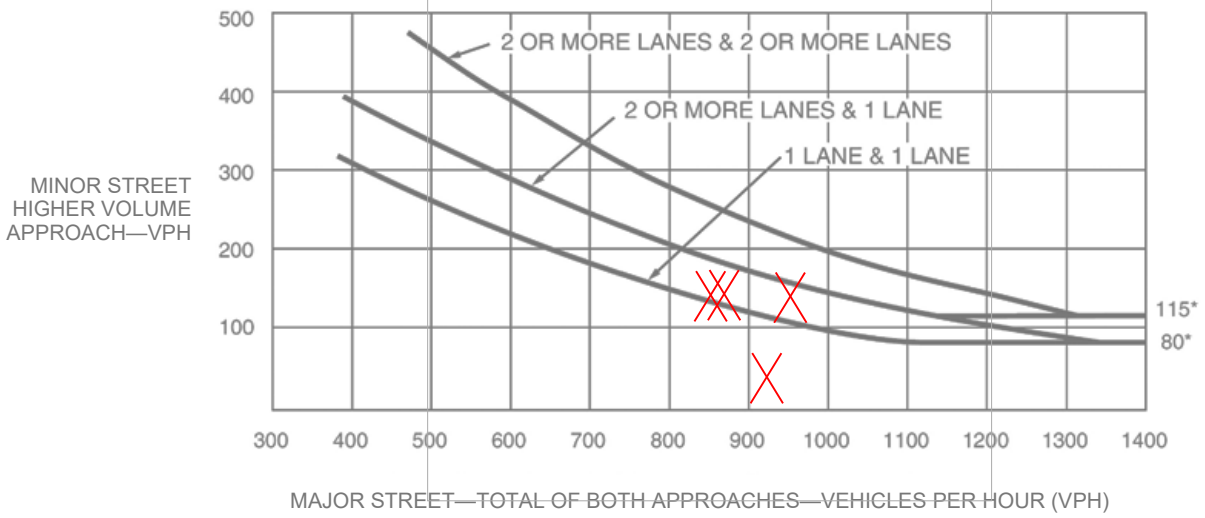
* All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	☐	☒
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)		

Four-Hour Vehicular Volume WARRANT 2 (continued)

✯ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ✯

URBAN

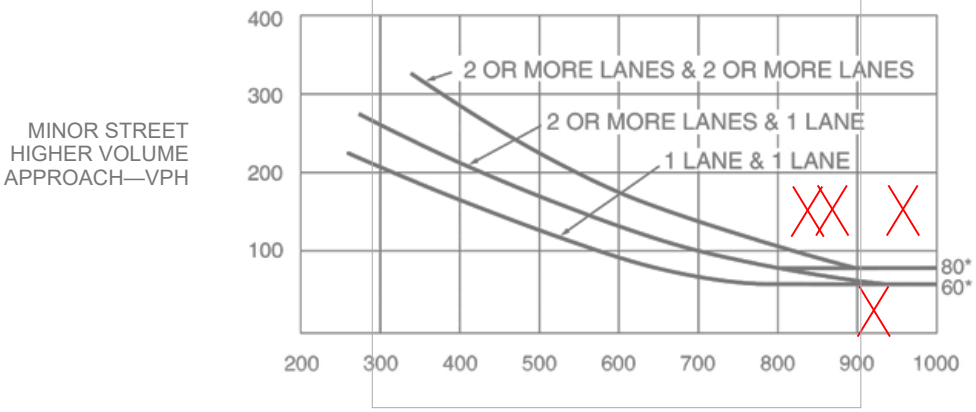
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



**Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.*

RURAL

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)



**Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.*

Peak Hour WARRANT 3

N/A ☒

SATISFIED YES ☐ NO ☐

⋆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ⋆

a. Part A or Part B must be satisfied.
b. This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.
c. In applying each condition, the major street and minor street volumes shall be for the same hours.
d. The study should consider the effects of the right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count.
e. Estimated Peak Hour Volumes may be used for new intersections, significantly reconstructed intersections, or where near-term land development will result in increased volumes.
f. Engineering judgment should also be used in applying various traffic signal warrants to cases where approaches consist of one lane plus one left-turn or right-turn lane. This site-specific traffic characteristics should dictate whether an approach is considered as one lane or two lanes. For example, for an approach with one lane for through and right-turning traffic plus a left-turn lane, if engineering judgment indicates that it should be considered a one-lane approach because the traffic using the left turn lane is minor, the total traffic volume approaching the intersection should be applied against the signal warrants as a one-lane approach. The approach should be considered two lanes if approximately half of the traffic on the approach turns left and the left-turn lane is of sufficient length to accommodate all left-turn vehicles. Similar engineering judgment and rationale should be applied to a street approach with one through/left-turn lane plus a right-turn lane. In this case, the degree of conflict of minor-street right-turn traffic with traffic on the major street should be considered. Thus, right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict. The approach should be evaluated as a one-lane approach with only the traffic volume in the through/left-turn lane considered.
g. At an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher volume of the major-street left-turn volumes plus the higher volume minor-street approach as the “minor street” volume and both approaches of the major street minus the higher of the major-street left-turn volume as “major street” volume. In these cases, engineering judgment should be used to determine if left-turn phasing is necessary to accommodate the high volume of left-turn traffic.

Unusual facility per Note b.	YES ☐	NO ☐

Name _____

PART A

SATISFIED	**YES**	**NO**
All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)	☐	☐

		YES	NO	N/A
1.	The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	☐	☐	☐
2.	The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	☐	☐	☐
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for inter-sections with four or more approaches or 650 vph for intersections with three approaches.	☐	☐	☐

PART B

SATISFIED	**YES**	**NO**
	☐	☐

APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street		☐	
Higher Approach - Minor Street		☐	

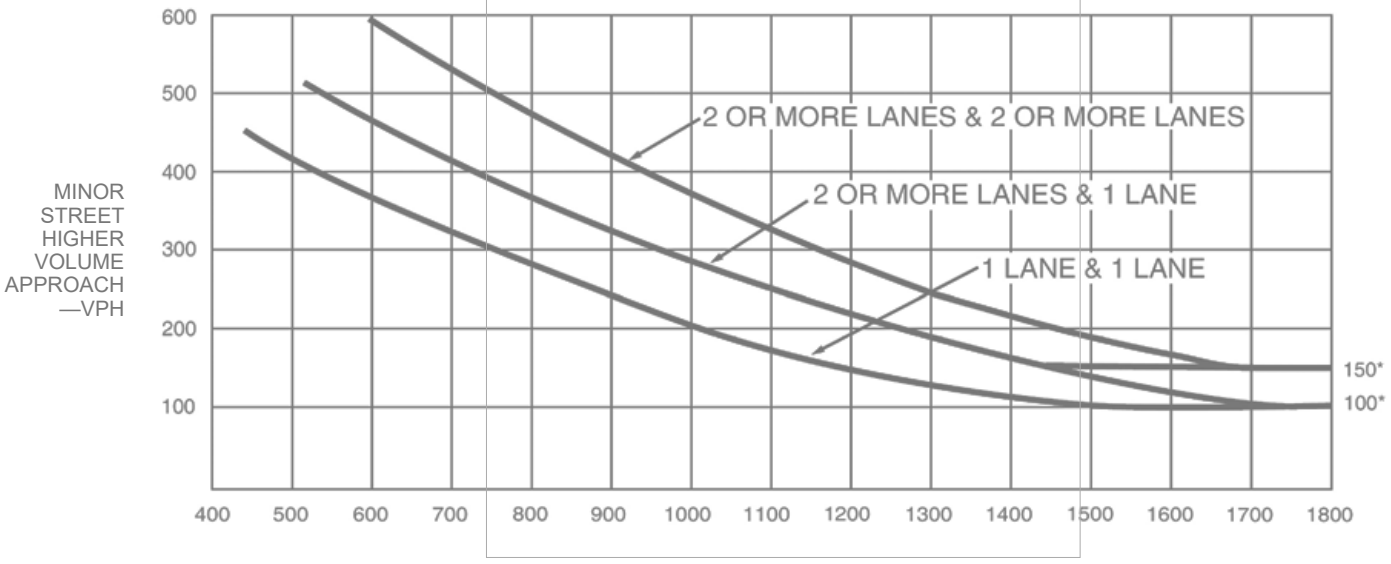
RIGHT TURN REDUCTION APPLICATION *MINOR STREET*	**YES** ☐	**NO** ☐
(If Yes, fill in percentage)	_____%	

	YES	NO
The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	☐	☐
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)		

Peak Hour WARRANT 3 (continued)

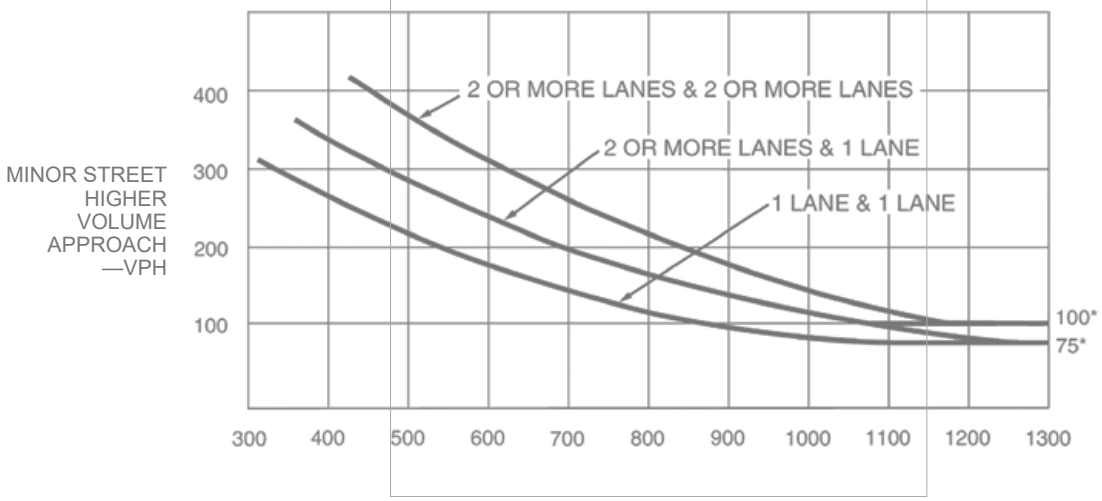
✯ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ✯

URBAN
Figure 4C-3. Warrant 3, Peak Hour



** Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.*

RURAL
Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(C. MMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



** Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor street approach with one lane.*

Pedestrian Counts Not Available

Pedestrian Volume

WARRANT 4

N/A ☒

SATISFIED YES ☐ NO ☐

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. Parts 1 and 2 shall be satisfied.
b. The pedestrian volume criterion may be reduced by as much as 50% if the 15th percentile speed of the pedestrians is less than 3.5 feet/second.
c. Estimated pedestrian volumes may be used where nearby, near-term land use development has been approved for construction.
d. In applying each condition, the total vehicles per hour on the major street (on both approaches) and the total pedestrians per hour crossing the major street shall be for the same hours.
e. The Pedestrian Volume signal warrants shall not be applied at locations where the distance to the nearest traffic control signal or STOP sign controlling the street that pedestrians desire to cross is less than 300 feet, unless the proposed traffic control signal will not restrict the progressive movement of traffic.
f. Traffic control signal may not be needed at the study location if adjacent coordinated traffic control signals consistently provide gaps of adequate length for pedestrians to cross the street.
g. If it is considered at a non-intersection crossing, the traffic control signal should be installed at least 100 feet from side streets or driveways that are controlled by STOP or YIELD signs. If the traffic control signal is installed at a non-intersection crossing, at least one of the signal faces should be over the traveled way for each approach, parking and other sight obstructions should be prohibited for at least 100 feet in advance of and at least 20 feet beyond the crosswalk or site accommodations should be made through curb extensions or other techniques to provide adequate sight distance, and the installation should include suitable standard signs and pavement markings.
h. Bicycles may be counted as pedestrians.
i. Pedestrian Hybrid Beacons may be considered instead of a traffic signal if a device is recommended based upon pedestrian needs

PART 1 (A or B must be satisfied) — SATISFIED YES ☐ NO ☐

A. FOUR-HOUR PEDESTRIAN VOLUMES

	Hours			
Vehicles per hour on major street for 4 hours				
Pedestrians crossing major street per hour for highest 4 hours				

(FIGURE 4C-5 OR 4C-6 SATISFIED)

SATISFIED	YES	NO
100%	☐	☐
80%	☐	☐
50%	☐	☐
15% WALKING RATE	_____ fps	

B. ONE HOUR PEDESTRIAN VOLUMES

	Hour
Vehicles per hour on major street for 1 hour	
Pedestrians crossing major street per hour for highest 1 hour	*0*

(FIGURE 4C-7 or 4C-8 SATISFIED)

SATISFIED	YES	NO
100%	☐	☐
80%	☐	☐
50%	☐	☐
15% WALKING RATE	_____ fps	

PART 2 — SATISFIED YES ☐ NO ☐

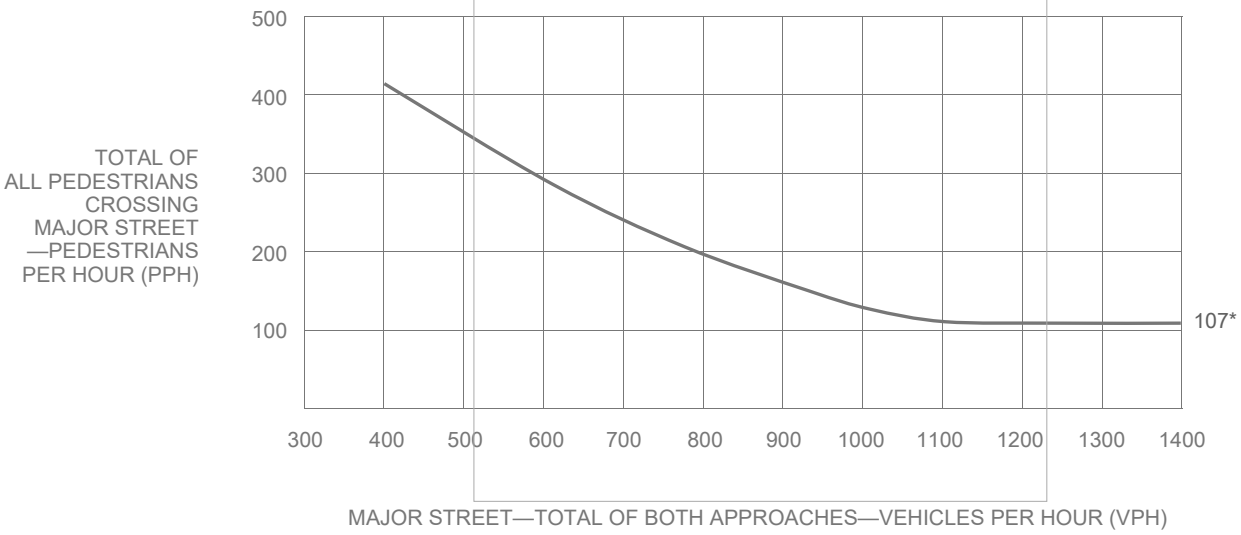
	YES	NO
AND, The distance to the nearest traffic signal along the major street is greater than 300 ft	☐	☐
OR, The proposed traffic signal will not restrict progressive traffic flow along the major street	☐	☐

Pedestrian Volume WARRANT 4 (continued)

✯ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ✯

SPEED ≤ 35 MPH

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume



** Note: 107 pph applies as the lower threshold volume*

SPEED > 35 MPH

Figure 4C-6. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)



** Note: 75 pph applies as the lower threshold volume*

Pedestrian Volume WARRANT 4 (continued)

✯ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ✯

SPEED ≤ 35 MPH

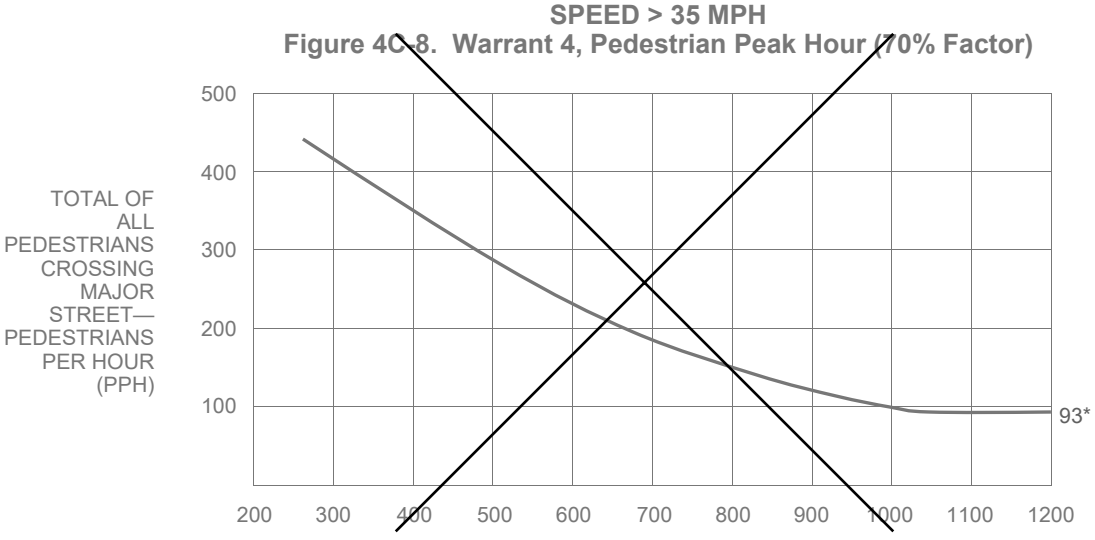
Figure 4C-7. Warrant 4, Pedestrian Peak Hour



** Note: 133 pph applies as the lower threshold volume*

SPEED > 35 MPH

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



** Note: 93 pph applies as the lower threshold volume*

School Crossing WARRANT 5

N/A ☒

SATISFIED YES ☐ NO ☐

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. Part A and Part B shall be satisfied.
b. For purposes of this warrant, schoolchildren include elementary through high school students.
c. Estimated schoolchildren volumes may be used where a new school or expanded school has been approved for construction.
d. The need for a traffic control signal shall be considered when an engineering study of the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of schoolchildren at an established school crossing across the major street shows that the number of adequate gaps in the traffic stream during the period when the schoolchildren are using the crossing is less than the number of minutes in the same period and there are a minimum of 20 schoolchildren during the highest crossing hour.
e. The School Crossing signal warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 300 feet, unless the proposed traffic control signal will not restrict the progressive movement of traffic.
f. Non-intersectional schoolchildren crosswalk locations may be signalized when justified.
g. Pedestrian Hybrid Beacons may be considered instead of a traffic signal if a device is recommended based upon pedestrian needs

PART A — SATISFIED YES ☐ NO ☐

Gap / Minutes and # of Children		Hour		YES	NO
Gaps vs Minutes	Minutes Children Using Crossing		Gaps < Minutes	☐	☐
	Number of Adequate Gaps		**AND** Children ≥ 20/hr	☐	☐
School Age Pedestrians Crossing Street / hr					
AND, Consideration has been given to less restrictive remedial measures				☐	☐

PART B — SATISFIED YES ☐ NO ☐

	YES	NO
The distance to the nearest traffic signal along the major street is greater than 300 ft	☐	☐
OR, The proposed traffic signal will not restrict progressive movement of traffic	☐	☐

Coordinated Signal System WARRANT 6

N/A ☒

SATISFIED YES ☐ NO ☐

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. The Coordinated Signal System signal warrant should not be applied where the resultant spacing of traffic control signals would be less than 1,000 feet.
b. All Parts must be satisfied.

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	YES	NO
≥ 1000 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	☐	☐
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		☐	☐
OR, On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.			

Crash Experience Warrant — WARRANT 7

N/A ☐ SATISFIED YES ☐ NO ☒

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. All Parts must be satisfied.
b. For locations that involve other agencies, crash data from other involved jurisdictions should be obtained.

Attachment C: 2023 SWITRS Collision Data for Santa Rosalia Drive

			YES	NO
Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency			☐	☐
REQUIREMENTS	Number of crashes reported within a 12-month period susceptible to correction by a traffic signal: ***0***		☐	☐
5 OR MORE	*Indicate Date(s):*			
REQUIREMENTS	**CONDITIONS**	✓		
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume	☐	☐	☐
	OR, Warrant 1, Condition B - Interruption of Continuous Traffic	☐		
	OR, Warrant 4, Pedestrian Volume Condition - Ped Vol ≥ 80% for ped volumes per Figures 4C-5 to 4C-8	☐		

Roadway Network — WARRANT 8

N/A ☐ SATISFIED YES ☐ NO ☒

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. Existing traffic volumes with an ambient growth rate of 1% (or other LADOT approved ambient growth rate) may be used if projected volumes are not available.
b. All Parts must be satisfied.

MINIMUM VOLUME REQUIREMENTS	**ENTERING VOLUMES - ALL APPROACHES**	✓	**FULLFILLED** YES	NO
1000 Veh / Hr	During Typical Weekday Peak Hour ___*1,154*___ Veh/Hr **AND** has 5-year projected traffic volumes that meet one or more of Warrants 1,2, and 3 during an average weekday.	✔	☐	☒
	OR During Each of Any 5 Hrs. of a Saturday or Sunday _____ Veh / Hr	☐		

CHARACTERISTICS OF MAJOR ROUTES	**MAJOR ROUTE A**	**MAJOR ROUTE B**		
Highway System Serving as Principal Network for Through Traffic				
Rural or Suburban Highway Outside Of, Entering, or Traversing a City				
Appears as Major Route on an Official Plan			**YES**	**NO**
Any Major Route Characteristics Met, Both Streets			☐	☒

Intersection Near a Grade Crossing

WARRANT 9

N/A ☒
SATISFIED YES ☐
NO ☐

☆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ☆

a. Both Parts A and B shall be satisfied.

b. This Warrant shall only be applied after review and approval by the LADOT Railroad Crossing and Safety Section (RCOSS), subject to CPUC General Order approval.

c. This Warrant does not apply for Pre-Signals and/or Queue-Cutter signals, as an alternative application of Pre-Signals (See 2012 CA MUTCD, Sec 8C.09). Pre-Signals shall only be applied after review and approval by RCOSS, subject to CPUC General Order approval.

	FULFILLED	
	YES	NO
PART A A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft	☐	☐
PART B **There is one minor street approach lane at the track crossing** - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH **OR, There are two or more minor street approach lanes at the track crossing -** During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10. Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH	☐	☐

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C-10.

1. Number of Rail Traffic per Day _____ Adjustment factor from Table 4C-2 _____
2. Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from Table 4C-3 _____
3. Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from Table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses * on Minor-Street Approach	Adjustment Factor
0 %	1.00
2 %	1.09
4 %	1.19
6 % or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people

Intersection Near a Grade Crossing WARRANT 9 (continued)

✯ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ✯

**Table 4C-4. Warrant 9,
Adjustment Factor for Percentage of Tractor-Trailer Trucks**

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

**Figure 4C-9. Warrant 9, Intersection Near a Grade Crossing
(One Approach Lane at the Track Crossing)**

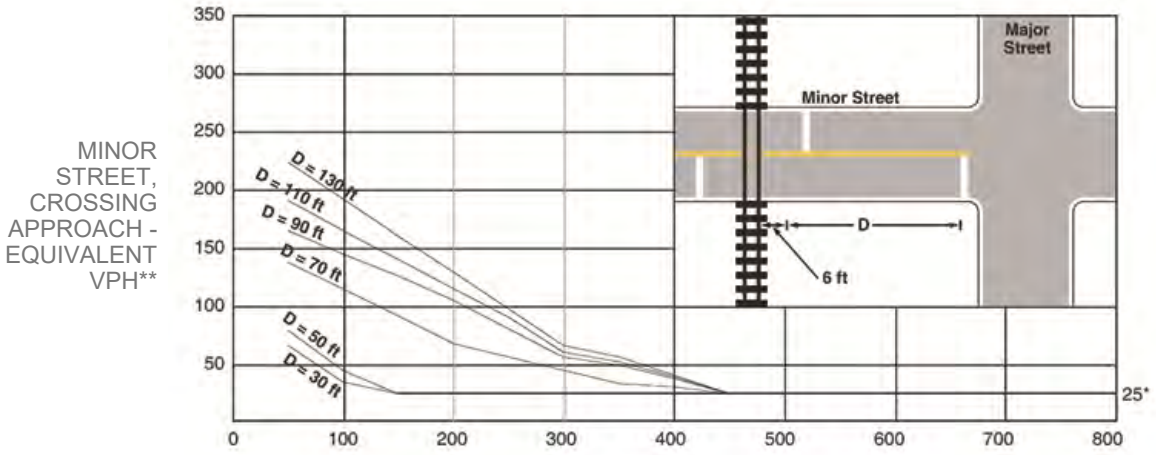
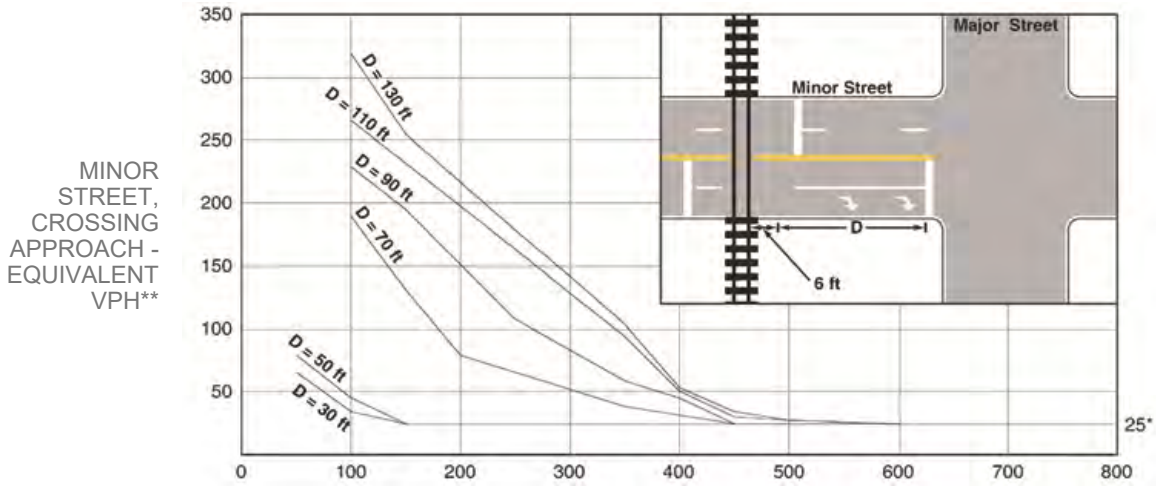


**Figure 4C-10. Warrant 9, Intersection Near a Grade Crossing
(Two or More Approach Lanes at the Track Crossing)**



** 25 vph applies as the lower threshold volume*
*** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate*

The next two warrants are not included in the MUTCD (CA) standard warrants, but are added as optional warrants that an engineer may use with discretion to justify a traffic signal for special conditions where other traffic control devices could be considered, but where a traffic signal might be more appropriate

Bicyclist Counts Not Available

Bicycles WARRANT 10

N/A	☒
SATISFIED YES	☐
NO	☐

✯ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ✯

a. Part A and Part B shall be satisfied
b. Per MUTCD (CA) Section 4C.01.15: "For signal warrant analysis, bicyclists may be counted as either vehicles or pedestrians."
c. When performing a signal warrant analysis, bicyclists riding in the street with other vehicular traffic are usually counted as vehicles, and bicyclists who are clearly using pedestrian facilities are usually counted as pedestrians; however for this bicycle specific warrant, bicyclists are counted as bicyclists, regardless of where they are riding.
d. Bicycle signal faces should be considered for use when this warrant is satisfied, with the final determination made during the signal design process. Refer to MUTCD (CA) Section 4D.104 (CA).
e. Estimated peak hour bicycle volumes may be used for new intersections, significantly reconstructed intersections, or where new bicycle facilities or near-term land development are proposed which will result in increased bicycle volumes.

PART A and B must be satisfied	SATISFIED	YES	NO
		☐	☐

PART A (*1 or 2 below must be satisfied*)	SATISFIED	YES	NO
1. Location meets the Department's guidelines for a marked crosswalk with Pedestrian Hybrid Beacons, where pedestrian units are replaced with bicyclists; **AND** the minor street is designated as part of the Neighborhood Enhanced Network in the Mobility Plan 2035 Element of the City's General Plan.		☐	☐
2. The intersection features a two-way bicycle or pedestrian path or trail within the median or alongside one of the roadways.		☐	☐

PART B (*1, 2, or 3 below must be satisfied*)	SATISFIED	YES	NO
1. Signal would be part of a corridor or area project to improve bicycle connectivity.*		☐	☐
2. Signal is associated with a development project.*		☐	☐
3. There have been at least 3 correctable collisions involving bicyclists in the last 1 year, 2 per year for the last 2 years, or 5 in the last 3 years of available data.		☐	☐

Specify dates of correctable bicycle collisions:

	Period Dates	Dates of Correctable Bicycle Collisions
1 year		
2 year		
3 year		

**The authority for a traffic signal justified using Part B.1 or B.2 shall be automatically rescinded three years after the date of approval if funding for construction of the traffic signal is not secured or project plans are not actively being reviewed for approval.*

Pedestrian Activated Yellow Flashing Beacons

WARRANT 11

N/A ☒

SATISFIED YES ☐

NO ☐

⋆ The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal ⋆

a. All Parts shall be satisfied.
b. This warrant should be applied when Pedestrian Activated Yellow Flashing Beacons are recommended within 600 feet BOTH upstream and downstream of existing traffic signals.

PART A	YES	NO
Location meets the guidelines for the installation of Pedestrian Activated Yellow Flashing Beacons as described in the LADOT Marked Crosswalk Guidelines.	☐	☐

PART B

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNALS	YES	NO
≤ 600 ft	N _____ ft, S _____ ft, E _____ ft, W _____ ft	☐	☐

AATTACHMENT A

Weekday

	North			East			South			West													
	Sta Rosalia N (Southbound)			Other Dwy (Westbound)			Sta Rosalia S (Northbound)			Proj Dwy (Eastbound)											BY HOUR		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total	Total %	MAJOR	MINOR 1	MINOR 2	SUM	MAX MINOR	MAJOR	MINOR		
6:00am	0	20	1	0	0	0	0	5	0	0	0	0	26	0.0054	-	-		-					
6:15am	0	17	1	0	0	0	0	13	0	0	0	0	31	0.0065	-	-		-					
6:30am	1	25	1	1	0	0	0	39	0	1	0	0	68	0.0142	-	-		-					
6:45am	0	37	1	1	0	0	0	49	0	1	0	0	89	0.0185	210	2	2	214	2	210	4	214	8
7:00am	0	47	3	0	0	1	0	70	0	1	0	0	122	0.0254	304	3	3	310					
7:15am	1	47	3	0	0	1	1	102	0	2	0	0	157	0.0327	427	4	5	436					
7:30am	3	84	3	0	0	0	2	103	1	3	0	1	200	0.0416	557	3	8	568					
7:45am	4	106	4	1	0	0	2	101	1	2	0	0	221	0.046	688	3	9	700	9	688	12	700	4
8:00am	3	108	4	1	0	1	5	72	1	2	0	0	197	0.041	761	4	10	775					
8:15am	3	56	4	0	0	2	6	51	1	2	0	0	125	0.026	728	5	10	743					
8:30am	3	52	4	0	0	3	6	46	1	1	0	0	116	0.0241	644	8	7	659					
8:45am	2	41	3	0	0	2	4	56	1	1	0	0	110	0.0229	533	9	6	548	9	533	15	548	6
9:00am	3	56	2	0	0	1	2	45	0	1	0	0	110	0.0229	448	8	5	461					
9:15am	4	49	3	1	0	2	2	38	0	2	0	1	102	0.0212	423	9	6	438					
9:30am	4	61	3	1	0	3	2	42	1	3	0	0	120	0.025	424	10	8	442					
9:45am	2	43	3	0	0	3	3	48	1	3	0	1	107	0.0223	417	11	11	439	11	417	22	439	7
3:00pm	4	108	5	3	0	5	1	86	5	5	0	2	224	0.0466	518	18	17	553					
3:15pm	4	87	4	3	0	4	1	101	5	5	0	2	216	0.045	624	22	21	667					
3:30pm	2	68	3	4	0	3	2	102	4	4	0	2	194	0.0404	692	25	24	741					
3:45pm	2	100	6	3	0	2	1	81	4	4	0	1	204	0.0425	786	27	25	838	27	786	52	838	1
4:00pm	3	120	10	2	0	3	1	87	4	3	0	3	236	0.0491	802	24	24	850					
4:15pm	3	79	7	2	0	4	1	72	4	3	0	3	178	0.037	766	23	23	812					
4:30pm	4	81	5	3	0	4	1	63	5	3	0	2	171	0.0356	744	23	22	789					
4:45pm	4	76	4	4	0	3	1	70	5	4	0	2	173	0.036	710	25	23	758	25	710	48	758	2
5:00pm	3	89	5	4	0	3	1	76	3	4	0	2	190	0.0395	662	27	23	712					
5:15pm	3	80	4	3	1	2	1	79	4	4	0	1	182	0.0379	667	27	22	716					
5:30pm	4	100	3	4	1	1	1	62	5	4	0	1	186	0.0387	683	26	22	731					
5:45pm	4	81	4	3	1	1	1	68	7	3	0	1	174	0.0362	688	24	20	732	24	688	44	732	3
6:00pm	3	76	4	3	1	2	1	65	6	3	0	1	165	0.0343	666	23	18	707					
6:15pm	3	60	4	3	0	2	1	57	4	3	0	1	138	0.0287	624	22	17	663					
6:30pm	2	66	4	3	0	2	1	57	3	4	0	1	143	0.0298	582	21	17	620					
6:45pm	2	54	3	3	0	2	1	57	3	3	0	2	130	0.0271	537	21	18	576	21	537	39	576	5
Grand Tota	83	2174	118	56	4	62	52	2063	79	84	0	30	4805	1									

ATTACHMENT B

Weekday

	North			East			South			West								
	Sta Rosalia N (Southbound)			Other Dwy (Westbound)			Sta Rosalia S (Northbound)			Proj Dwy (Eastbound)					BY HOUR			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total		MAX MINOR	MAJOR	MINOR	
6:00am	104	22	1	0	0	0	0	6	48	12	0	33	226					
6:15am	0	19	1	0	0	0	0	15	0									
6:30am	1	27	1	1	0	0	0	43	0									
6:45am	0	41	1	1	0	0	0	54	0						45	384	47	431	8
7:00am	104	51	3	0	0	1	0	79	48	12	0	33	331					
7:15am	1	51	3	0	0	1	1	112	0				169					
7:30am	3	92	3	0	0	0	2	114	1				215					
7:45am	4	117	4	1	0	0	2	111	1				240		45	907	52	959	4
8:00am	107	120	4	1	0	1	5	81	49	12	0	33	413					
8:15am	3	62	4	0	0	2	6	57	1				135					
8:30am	3	58	4	0	0	3	6	50	1				125					
8:45am	2	45	3	0	0	2	4	62	1				119		45	738	54	792	6
9:00am	107	62	2	0	0	1	2	50	48	12	0	33	317					
9:15am	4	54	3	1	0	2	2	42	0				108					
9:30am	4	67	3	1	0	3	2	46	1				127					
9:45am	2	47	3	0	0	3	3	53	1				112		45	608	56	664	7
3:00pm	77	120	5	3	0	5	1	96	34	49	0	114	504					
3:15pm	4	96	4	3	0	4	1	111	5				228					
3:30pm	2	75	3	4	0	3	2	112	4				205					
3:45pm	2	110	6	3	0	2	1	89	4				217		163	964	190	1154	1
4:00pm	76	132	10	2	0	3	1	97	33	49	0	114	517					
4:15pm	3	87	7	2	0	4	1	80	4				188					
4:30pm	4	89	5	3	0	4	1	69	5				180					
4:45pm	4	84	4	4	0	3	1	78	5				183		163	880	188	1068	2
5:00pm	76	99	5	4	0	3	1	85	32	49	0	114	468					
5:15pm	3	88	4	3	1	2	1	87	4				193					
5:30pm	4	110	3	4	1	1	1	68	5				197					
5:45pm	4	89	4	3	1	1	1	75	7				185		163	856	187	1043	3
6:00pm	76	84	4	3	1	2	1	72	35	49	0	114	441					
6:15pm	3	66	4	3	0	2	1	63	4				146					
6:30pm	2	73	4	3	0	2	1	63	3				151					
6:45pm	2	60	3	3	0	2	1	63	3				137		163	691	184	875	5

Project Peak Hour Volumes

AM	104	0	0	0	0	0	0	1	48	12	0	33	
PM	73	0	0	0	0	0	0	1	29	49	0	114	

ATTACHMENT C

CASE_ID	ACCIDENT_YEAR	PROC_DATE	JURIS	COLLISION_DATE	COLLISION_TIME	OFFICER_ID	REPORTING_DISTRICT	DAY_OF_WEEK	CHP_SHIFT	POPULATION	CNTY_CITY_LOC	SPECIAL_COND	BEAT_TYPE	CHP_BEAT_TYPE	CITY_DIVISION_LAPD	CHP_BEAT_CLASS	BEAT_NUMBER	PRIMARY_RD	SECONDARY_RD	DISTANCE	DIRECTION	INTERSECTION	WEATHER_1	WEATHER_2	STATE_HWY_IND
9578515	2023	20230524	1942	20230426	1615	39764	0363	3	5	7	1942	0	0	0	C	0	25MQ51	MARLTON AV	SANTA ROSALIA	0		Y	A	-	N
9599776	2023	20230601	1942	20230622	2500	41704	0363	4	5	7	1942	0	0	0	C	0	25MQ57	HILLCREST DR	SANTA ROSALIA DR	420	N	N	A	-	N
9626324	2023	20231018	1942	20230903	2235	40404	0363	7	5	7	1942	0	0	0	C	0	25TL33	STOCKER ST	SANTA ROSALIA DR	0		Y	A	-	N
9642585	2023	20231122	1942	20231122	2205	41072	0363	3	5	7	1942	0	0	0	C	0	25T35	MARLTON AV	SANTA ROSALIA DR	575	N	N	A	-	N
9520601	2023	20230927	1942	20230713	2135	40529	0363	4	5	7	1942	0	0	0	C	0	25TL33	SANTA ROSALIA D	WEST AV	208	W	N	A	-	N
9574137	2023	20230426	1942	20230328	600	35393	0311	2	5	7	1942	0	0	0	C	0	25TL21	SANTA ROSALIA D	BUCKINGHAM RD	0		Y	A	-	N
9586071	2023	20230608	1942	20230312	1505	30892	0362	7	5	7	1942	0	0	0	C	0	3A98W4	SANTA ROSALIA D	POTOMAC AV	25	W	N	A	-	N

CASE_ID	CALTRANS_COUNTY	CALTRANS_DISTRICT	STATE_ROUTE	ROUTE_SUFFIX	POSTMILE_PREFIX	POSTMILE	LOCATION_TYPE	RAMP_INTERSECTION	SIDE_OF_HWY	TOW_AWAY	COLLISION_SEVERITY	NUMBER_KILLED	NUMBER_INJURED	PARTY_COUNT	PRIMARY_COLL_FACTOR	PCF_CODE_OF_VIOL	PCF_VIOL_CATEGORY	PCF_VIOLATION	PCF_VIOLATION2	PCF_VIOL_SUBSECTION
9578515										Y	2	0	2	3	A	-	1	DUI	23153	A
9599776										N	0	0	0	2	B	-	22	Other Improper Driving		
9626324										Y	2	0	5	4	A	-	12	Traffic Signals and Signs	21453	A
9642585										Y	0	0	0	1	B	-	22	Other Improper Driving		
9520601										N	1	1	1	3	A	-	11	Pedestrian Violation	21954	A
9574137										N	3	0	1	2	A	-	9	Automobile ROW	21810	A
9586071										N	4	0	1	3	A	-	12	Traffic Signals and Signs	22450	

CASE_ID	HIT_AND_RUN	TYPE_OF_COLLISION	MVIW	PED_ACTION	ROAD_SURFACE	ROAD_COND_1	ROAD_COND_2	LIGHTING	CONTROL_DEVICE	CHP_ROAD_TYPE	PEDESTRIAN_ACCIDENT	BICYCLE_ACCIDENT	MOTORCYCLE_ACCIDENT	TRUCK_ACCIDENT	NOT_PRIVATE_PROPERTY	ALCOHOL_INVOLVED	STWD_VEHTYPE_AT_FAULT	CHP_VEHTYPE_AT_FAULT
9578515	N	D	D	A	A	H	-	A	A	0					Y	Y	A	01
9599776	M	B	E	A	A	H	-	A	D	0					Y		-	99
9626324	N	D	C	A	A	H	-	C	A	0					Y		A	07
9642585	M	E	I	A	A	H	-	C	D	0					Y		-	99
9520601	F	G	B	D	A	H	-	C	A	0	Y				Y		N	60
9574137	F	D	G	A	A	H	-	A	A	0		Y			Y		-	99
9586071	N	D	C	A	A	H	-	A	D	0					Y		A	08

CASE_ID	COUNT_SEVERE_INJ	COUNT_VISIBLE_INJ	COUNT_COMPLAINT_PAIN	COUNT_PED_KILLED	COUNT_PED_INJURED	COUNT_BICYCLIST_KILLED	COUNT_BICYCLIST_INJURED	COUNT_MC_KILLED	COUNT_MC_INJURED	PRIMARY_RAMP	SECONDARY_RAMP	LATITUDE	LONGITUDE
9578515	1	1	0	0	0	0	0	0	0	-	-		
9599776	0	0	0	0	0	0	0	0	0	-	-		
9626324	1	1	3	0	0	0	0	0	0	-	-		
9642585	0	0	0	0	0	0	0	0	0	-	-		
9520601	1	0	0	1	1	0	0	0	0	-	-		
9574137	0	1	0	0	0	0	1	0	0	-	-		
9586071	0	0	1	0	0	0	0	0	0	-	-		

APPENDIX J

PARKING STRUCTURE QUEUING ANALYSIS

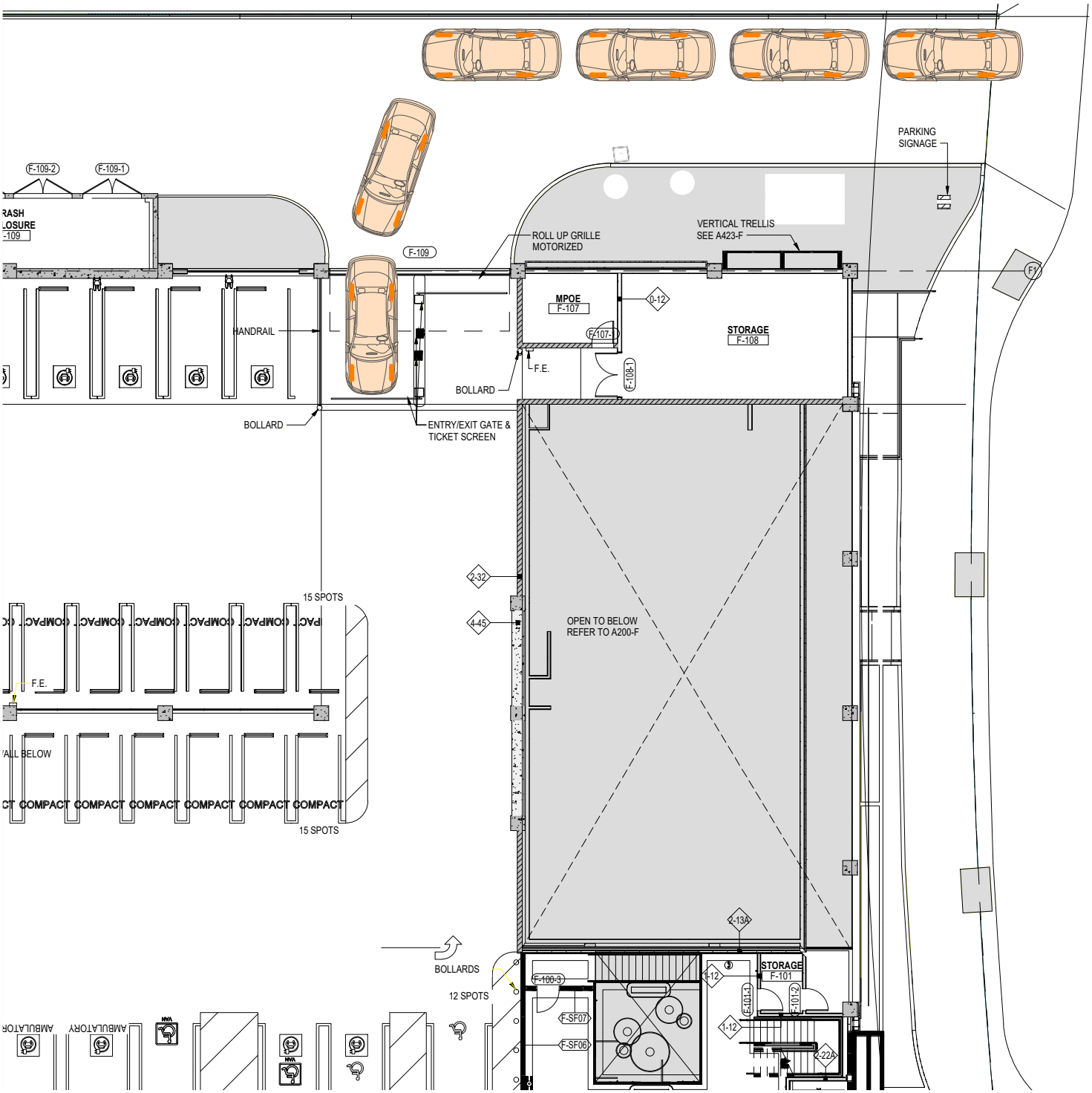
STOCKER STUDIO CREATIVE PROJECT PARKING STRUCTURE VEHICLE QUEUE CALCULATIONS

Maximum Vehicle Arrival Rate (λ) =	152	veh/hr
Parking System with Control Gate (μ) =	417	veh/hr
$\rho = (\lambda/\mu) =$	0.3645	

Vehicle Queue	Parking System with Control Gate Probability		Cumulative Probability	
0	$p\{0\} = 1 - \rho =$	0.6355	0.6355	
1	$p\{1\} = p\{0\} \times \rho^1 =$	0.2316	0.8671	
2	$p\{2\} = p\{0\} \times \rho^2 =$	0.0844	0.9516	<----- 95th percentile vehicle queue
3	$p\{3\} = p\{0\} \times \rho^3 =$	0.03078	0.9823	
4	$p\{4\} = p\{0\} \times \rho^4 =$	0.01122	0.9936	<----- 99th percentile vehicle queue
5	$p\{5\} = p\{0\} \times \rho^5 =$	0.00409	0.9977	
6	$p\{6\} = p\{0\} \times \rho^6 =$	0.00149	0.9991	
7	$p\{7\} = p\{0\} \times \rho^7 =$	0.00054	0.9997	
8	$p\{8\} = p\{0\} \times \rho^8 =$	0.0002	0.9999	
9	$p\{9\} = p\{0\} \times \rho^9 =$	7.2E-05	1.0000	
10	$p\{10\} = p\{0\} \times \rho^{10} =$	2.6E-05	1.0000	

Note:

Parking system assumptions are based Table 4-4 (pg. 140) in Parking Structure , Third Edition (2001). Conservatively, the service rate was blended based on the insertion card entry (435 veh/hr) and push button ticket entry (400 veh/hr) to account for frequent parkers versus per use parkers.



P

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

++FIGURE XX

++TITLE 1
++TITLE 2
++TITLE 3

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