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LOCAL TRANSPORTATION ASSESSMENT

15101 PARAMOUNT PROJECT

City of Paramount, California
September 19, 2023

Prepared for:

Paramount Gateway LLC
4490 Ayers Avenue
Vernon, California 90058

LLG Ref. 1-23-4544-1

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LOCAL TRANSPORTATION ASSESSMENT

15101 PARAMOUNT PROJECT

City of Paramount, California
September 19, 2023

1.0 INTRODUCTION

1.1 Transportation Assessment Overview

This transportation assessment report has been prepared to identify and evaluate the potential effects on the transportation network resulting from the proposed 15101 Paramount project (the "Project") located in the City of Paramount (the "City"). The project site is located at southwest corner of the Somerset Boulevard/Paramount Boulevard intersection. The proposed project site and general vicinity are shown in ***Figure 1-1***.

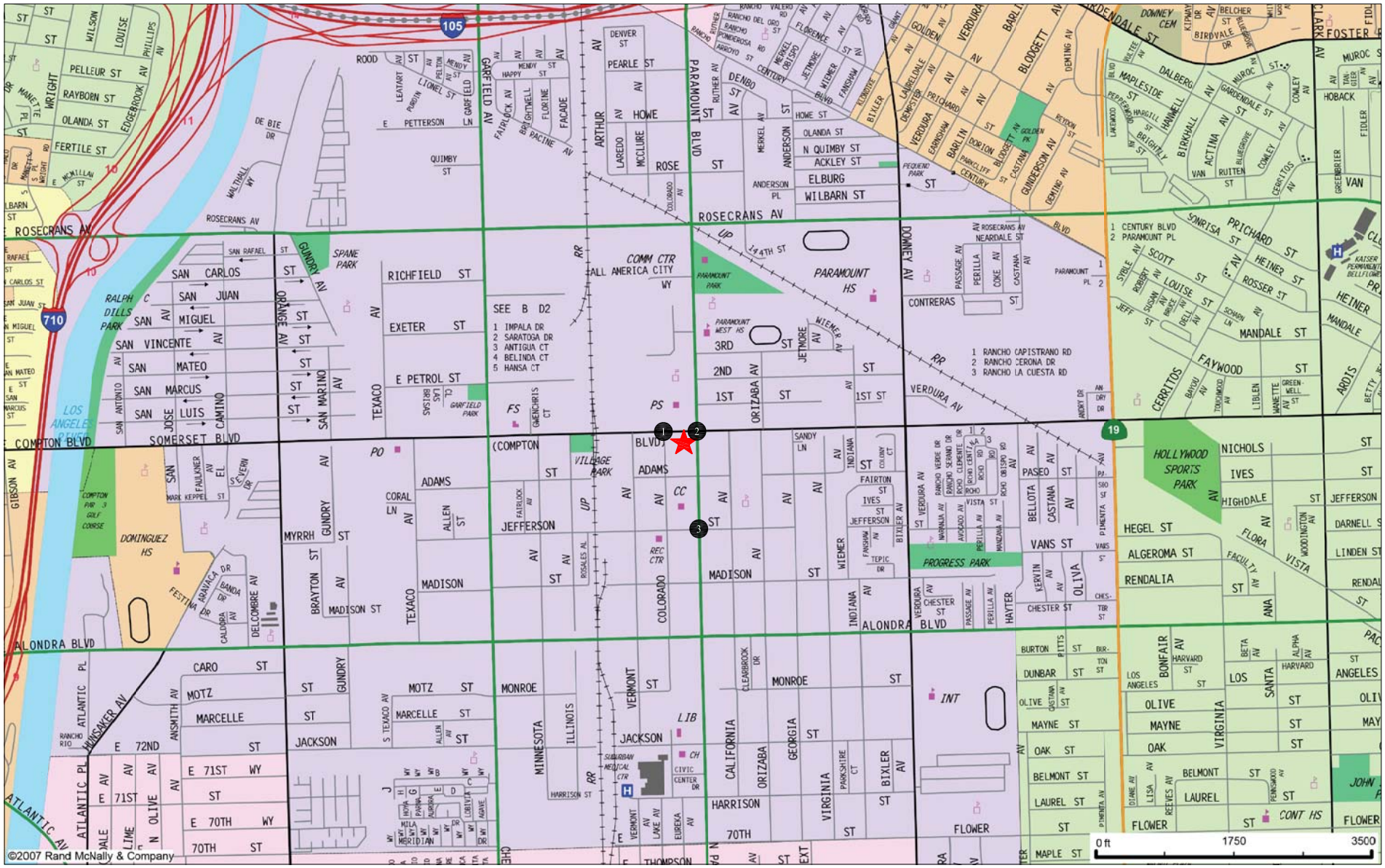
In compliance with the California Environmental Quality Act (CEQA) Sections 15064.3 and 15064.7, the City of Paramount utilizes Vehicle Miles Traveled (VMT) for the purpose of analyzing transportation impacts under CEQA. In addition, the City maintains vehicle Level of Service (LOS) standards for local transportation infrastructure for purposes outside of CEQA. The City's requirements identify both CEQA based analysis requirements and non-CEQA based analysis requirements for analyzing the potential transportation impacts of proposed development projects.

Pursuant to the current statutory requirements of the CEQA Guidelines, the proposed project's transportation impacts are determined on the basis of VMT. The VMT assessment and impact conclusions are summarized separately in the "15101 Paramount Boulevard Project – Vehicle Miles Traveled Assessment," prepared by Linscott, Law and Greenspan, Engineers in July 2023.

This local transportation assessment evaluates potential project-related effects on intersection operations and LOS at four (4) key intersections (including the project driveway) in the vicinity of the project site. The study intersections were determined in consultation with City of Paramount staff. This report (i) presents the proposed project's existing transportation network context, (ii) presents existing traffic volumes, (iii) forecasts future cumulative baseline conditions, (iv) forecasts project-generated traffic, (v) assesses the potential for project-related effects on the existing transportation network consistent with the non-CEQA based metrics set forth as requested by City staff, and (vi) recommends transportation network improvement measures, where necessary.

1.2 Study Methodology

The local transportation analysis criteria for this assessment were identified in consultation with City of Paramount staff. The analysis criteria were determined based on the City's requirements, the proposed project description and location, and the characteristics of the surrounding transportation system. City of Paramount staff confirmed the appropriateness of the analysis criteria when it



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LINSCOTT LAW & GREENSPAN engineers

★ Project Site

(XX) Study Intersection

Figure 1-1
Vicinity Map

15101 Paramount Project

approved the scoping document. The approved scoping document is attached to this report in ***Appendix A***.

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743 (Steinberg, 2013). Among other things, SB 743 created a process to change the methodology to analyze transportation impacts under CEQA (Public Resources Code Section 21000 and following) in order to promote 1) the reduction of greenhouse gas emissions, 2) the development of multimodal transportation networks, and 3) a diversity of land uses. On December 30, 2013, the State of California Governor's Office of Planning and Research (OPR) released a preliminary evaluation of alternative methods of transportation analysis, which included analysis based on project VMT rather than impacts to intersection Level of Service. OPR issued other draft discussion documents in March 2015 and January 2016, suggesting new revisions to the CEQA Guidelines. Concurrently, OPR developed the *Technical Advisory on Evaluating Transportation Impacts in CEQA*[1] *("Technical Advisory")*, which provides non-binding recommendations on the implementation of VMT methodology and which has significantly informed the way VMT analyses are conducted in the State. In November 2017, OPR submitted the proposed amendments to the CEQA Guidelines to the State's Natural Resources Agency (including the new Guidelines Section 15064.3 which governs how analyses of potential traffic impacts should be conducted). On January 26, 2018, the Natural Resources Agency published a Notice of Rulemaking, commencing the formal rulemaking process for the amendments to the CEQA Guidelines. On December 28, 2018, the California Office of Administrative Law adopted the proposed amendments, formally implementing the use of VMT as the metric for transportation analysis under CEQA. State-wide implementation of the new metric was required by July 1, 2020. The proposed project's CEQA-compliant VMT impact analysis is presented separately in the "15101 Paramount Boulevard Project – Vehicle Miles Traveled Assessment," prepared by Linscott, Law and Greenspan, Engineers in July 2023.

The passage of SB 743 and the resulting amendment to the CEQA Guidelines does not prevent agencies from continuing to analyze delay or LOS outside of CEQA review for other transportation planning or analysis purposes (i.e., general plans, impact fee programs, corridor studies, congestion reduction, or ongoing network monitoring). These analysis requirements and LOS standards apply to discretionary approvals of new land use development projects. This assessment utilizes the latest version of the City-approved Highway Capacity Manual (HCM) methodology to evaluate intersection LOS, which is then compared to the City's LOS standards and reviewed for detrimental effects on circulation within the existing transportation network. In conjunction with City staff, a total of four (4) study intersections (including the project driveway) were selected for analysis. The City's requirements also require an analysis of a proposed project's effect on existing pedestrian, bicycle, and transit infrastructure in the vicinity of the project site as well as the provision of multi-modal facilities within the site itself.

[1] *Technical Advisory on Evaluating Transportation Impacts in CEQA*, Governor's Office of Planning and Research, December 2018.

2.0 PROJECT DESCRIPTION

2.1 Existing Project Site

The proposed project site is located at 15101 Paramount Boulevard in the City of Paramount. The project site is generally bounded by Somerset Boulevard to the north, Adams Street to the south, Paramount Boulevard to the east, and Colorado Avenue to the west. The project site is currently occupied by a 22,724 square-foot Ace Hardware Store and Lindsay Lumber. All structures will be removed to accommodate the proposed project. The project vicinity is shown in *Figure 1-1*.

Vehicular access to the existing project site is currently provided via one driveway on Somerset Boulevard, one driveway on Paramount Boulevard, two driveways on Adams Street, and one driveway on Colorado Avenue. The existing driveways on Somerset Boulevard and Paramount Boulevard are currently limited to right-turn ingress and egress movements due to the existing raised medians along Somerset Boulevard and Paramount Boulevard. The existing driveways on Colorado Avenue and Adams Street currently accommodate full access (i.e., (i.e., left-turn and right-turn ingress and egress traffic movements). An aerial photograph of the existing site is presented in ***Figure 2-1***.

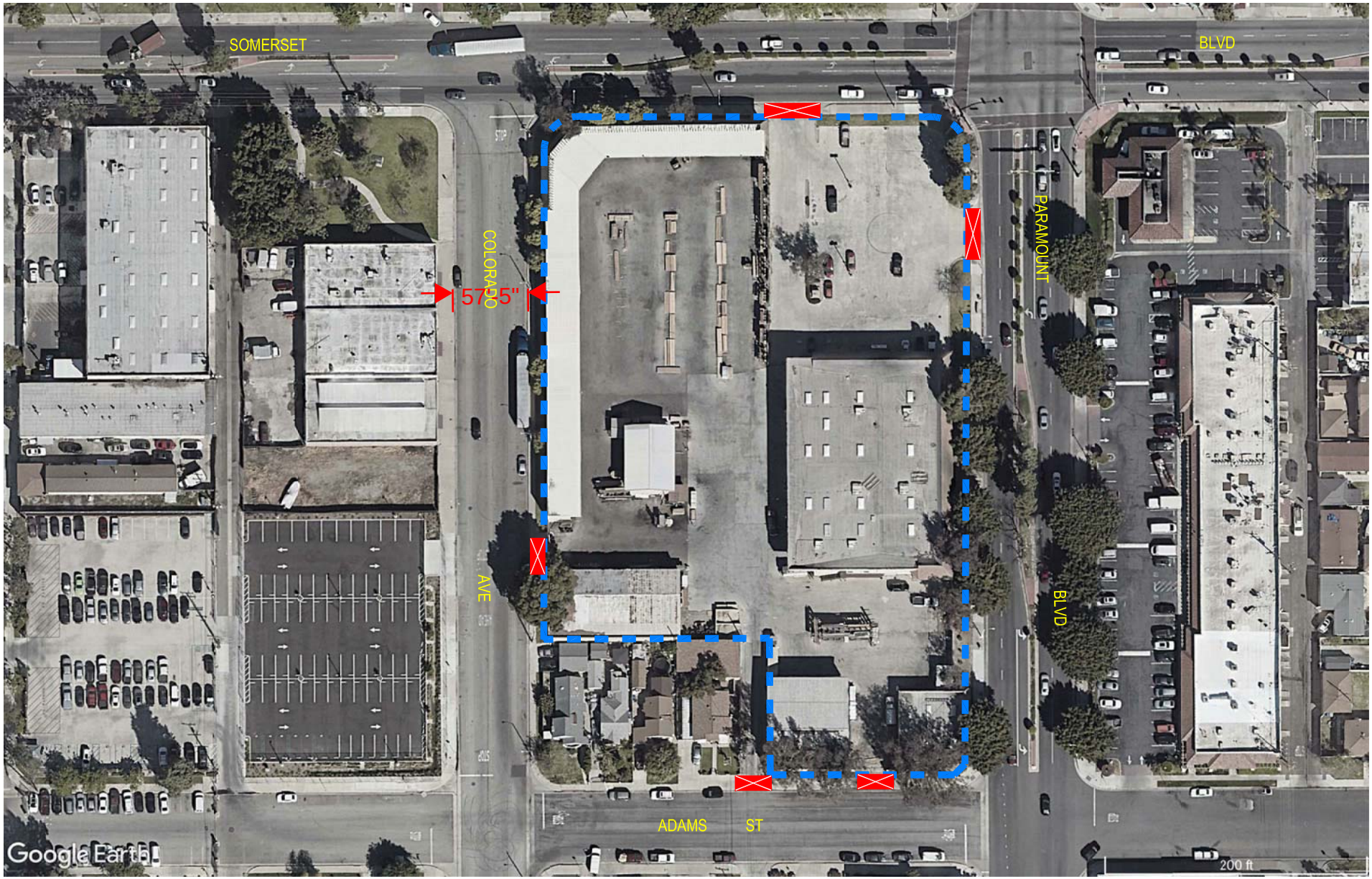
2.2 Proposed Project Description

The proposed project consists of the development of a commercial center with one grocery store and two free-standing drive-through restaurants on the project site. A 23,256 square-foot Sprouts Farmers Market is planned to be constructed in the central portion of the project site (Building 1). The loading dock for the supermarket is planned to be provided south of the proposed building. A 2,760 square-foot Chick-fil-A restaurant is planned to be constructed in the northwest corner of the project site (Building 2). The Chick-fil-A restaurant will accommodate outdoor dining via 24 outdoor seats in a 634 square-foot patio area located west of the proposed building. The restaurant will provide dual entry drive-through queuing lanes, which will accommodate up to 35 vehicles in queue. A 2,400 square-foot Starbucks restaurant is planned to be constructed in the southeast corner of the project site (Building 3). The Starbucks restaurant will accommodate both indoor and outdoor dining via 20 interior seats and 8 outdoor seats in a 574 square-foot patio area located north of the proposed building. The Starbucks restaurant will provide dual entry drive-through queuing lanes that transition into a single drive-through queuing lane for drive-through service operations which will accommodate up to 16 vehicles in queue. The project build-out and occupancy year is anticipated by the year 2025. The proposed site plan is illustrated in ***Figure 2-2***.

2.3 Project Site Access

2.3.1 *Vehicular Site Access*

As shown in *Figure 2*-2, vehicular access to the project site will be accommodated via two driveways on Colorado Avenue, two right-turn only driveways on Paramount Boulevard, and the existing alleyway on Adams Street. A description of each proposed project site access point is provided in further detail below:



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MAP SOURCE: GOOGLE EARTH PRO

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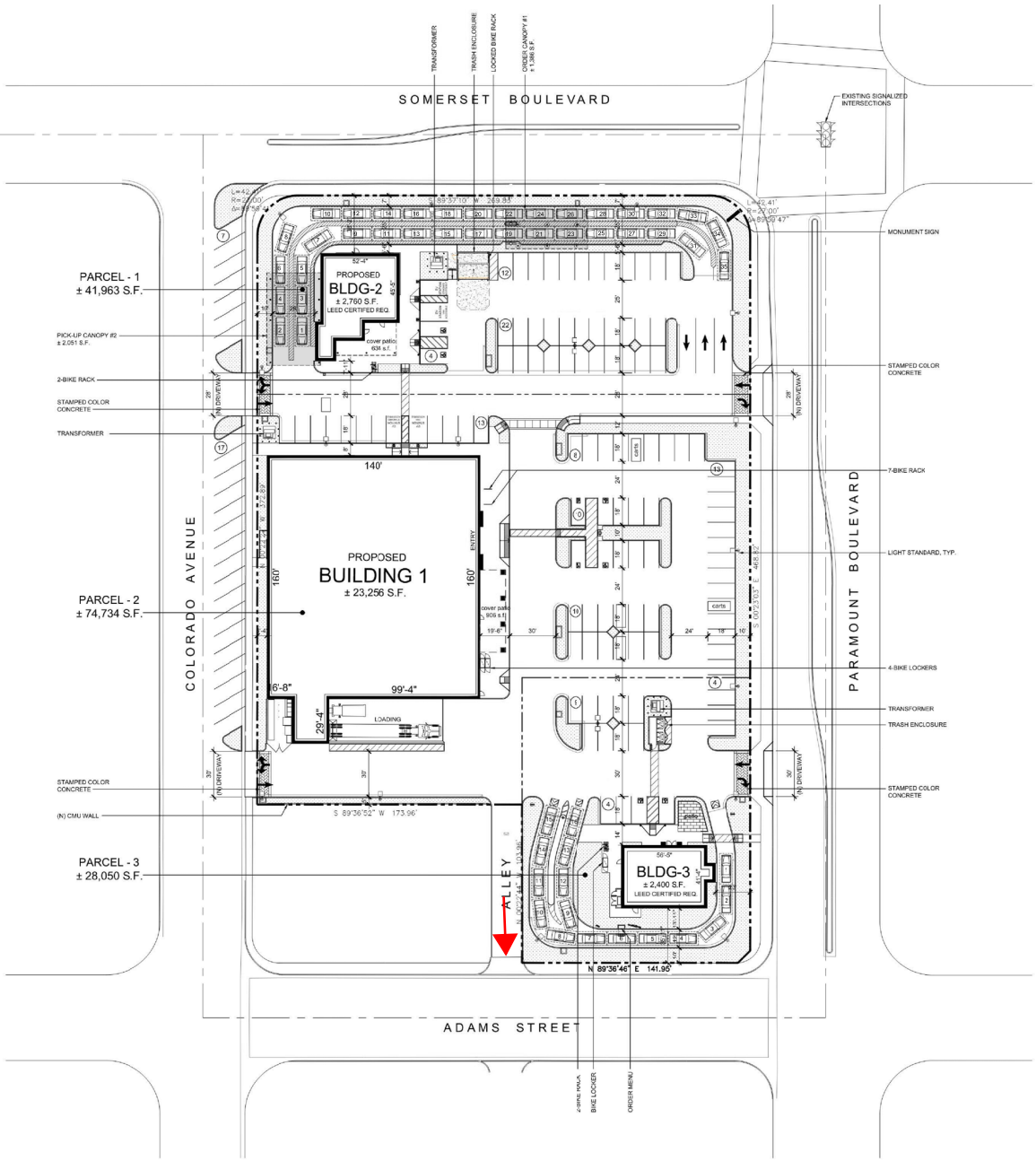
Project Site

Existing Driveway

Figure 2-1
Aerial Photograph of Existing Project Site



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SOURCE: MMA ACHITECTURE

Figure 2-2
Conceptual Site Plan

- Colorado Avenue Northerly Driveway
  This driveway will be located on the east side of Colorado Avenue along the westerly property boundary. This site driveway will provide access to the northern project site drive-aisle located between the proposed Chick-fil-A restaurant and the Sprouts Farmers Market. The Colorado Avenue northerly driveway is planned to accommodate full access (i.e., left-turn and right-turn ingress and egress traffic movements). The driveway will be constructed to City of Paramount design standards.

- Colorado Avenue Southerly Driveway
  This driveway will be located on the east side of Colorado Avenue at the southern property boundary. This site driveway will provide access to the southern project site drive-aisle located between the proposed Sprouts Farmers Market and the existing residential homes along Adams Street. The Colorado Avenue southerly driveway is planned to accommodate full access (i.e., left-turn and right-turn ingress and egress traffic movements). The driveway will be constructed to City of Paramount design standards.

- Paramount Boulevard Northerly Driveway
  This driveway will be located on the west side of Paramount Boulevard along the easterly property boundary. This site driveway will provide access to the northerly project site drive-aisle located between the parking areas for the Chick-fil-A restaurant and the Sprouts Farmers Market. Due to the presence of a raised median island along Paramount Boulevard, the driveway will accommodate right-turning inbound and outbound movements to and from the southbound travel lanes on Paramount Boulevard only. The driveway will be constructed to City of Paramount design standards.

- Paramount Boulevard Southerly Driveway
  This driveway will be located on the west side of Paramount Boulevard along the easterly property boundary in the southern portion of the site. This site driveway will provide access to the southerly project site drive-aisle located between the main parking area and the proposed Starbucks restaurant. Due to the presence of a raised median island along Paramount Boulevard, the driveway will accommodate right-turning inbound and outbound movements to and from the southbound travel lanes on Paramount Boulevard only. The driveway will be constructed to City of Paramount design standards.

- Existing Adams Street Alleyway
  The existing Adams Street Alleyway that borders the westerly property boundary on the southern portion of the site will be maintained. The existing Adams Street alleyway will continue to serve as a one-way southbound exit only driveway on Adams Street from the project site. The existing alleyway will continue to accommodate outbound only movements (i.e., left-turn and right-turn egress traffic movements).

Within the project site, vehicle circulation will be accommodated by drive-aisles which provide access to the surface parking areas and the drive-through service window queue storage lanes. As shown in *Figure 2*-2, the proposed Chick-fil-A drive-through storage lane will be accessible from the northerly project site drive-aisle adjacent to the throat of the Paramount Boulevard northerly driveway. The service lanes are planned to wrap counter-clockwise around the proposed Chick-fil-A restaurant adjacent to the property line along Somerset Boulevard. The northern project site drive-aisle will accommodate egress from the Chick-fil-A drive-through service lanes. Access to the proposed Starbucks drive-through service-window queue storage lanes will be accommodated by the southerly project site drive-aisle. The service lanes are planned to wrap counter-clockwise around the proposed Starbucks restaurant adjacent to the existing alleyway and Adams Street. Egress from the Starbucks drive-through service lane is planned to occur near the easterly project site boundary, near the proposed Paramount Boulevard southerly driveway.

2.3.2 *Non-Vehicular Site Access*

Pedestrian access to the project site will be accommodated via the existing public sidewalks and pedestrian facilities provided along Colorado Avenue, Paramount Boulevard, Somerset Boulevard and Adams Street. Pedestrian access within the project site will be accommodated by Americans with Disabilities Act (ADA) compliant walkways that will connect the building entrances to the public right-of-way. The walkways will provide exclusive pedestrian and bicycle access from the public sidewalk to the proposed project, thus minimizing the extent of pedestrian and bicycle interaction with vehicles at the site and providing a comfortable, convenient, and safe environment for pedestrians and bicyclists to access the proposed project from the public right-of-way. Pedestrian pathways will also be constructed surrounding the proposed buildings.

2.4 Project Parking

The proposed project is planned to provide a total of 109 vehicular parking spaces, consisting of 97 standard parking spaces, eight (8) handicap accessible spaces, and four (4) electric vehicle (EV) spaces.

A calculation of the project's off-street parking requirements was prepared based on the parking ratios provided in the Paramount Municipal Code Chapter 17.44.460 (Number of Off-Street Spaces Required). Application of the Municipal Code parking requirement to the proposed project results in an on-site parking requirement of 95 spaces, as shown below:

Proposed Sprouts (General Commercial):	23,256 SF x 1 space/300 SF	=	78 spaces
Proposed Chick-fil-A Restaurant:	24 seats x 1 space/3 seats	=	8 spaces
Proposed Starbucks Restaurant:	28 seats x 1 space/3 seats	=	9 spaces
	Total Required Project Parking	=	95 spaces

The proposed project's planned on-site parking supply of 109 spaces therefore exceeds the Municipal Code parking requirement of 95 spaces, resulting in a surplus of 14 spaces.

The proposed project also plans to install on-street angled parking spaces along the east side of Colorado Avenue between Somerset Boulevard and the southerly Colorado Avenue driveway. In addition, the project will provide 11 short-term bicycle parking spaces and eight (8) secure long-term bicycle parking spaces.

2.5 Project Loading

All loading activities for the project are anticipated to occur on-site. The truck dock and loading pad for the Sprouts Farmers Market is planned to be provided south of the proposed building at the southwest corner of the site. Trucks are anticipated to utilize the Colorado Avenue Southerly Driveway to access the site and once on-site would conduct back-in maneuvers to access the designated loading areas. Trucks are anticipated to utilize the Paramount Boulevard Southerly Driveway to exit the site.

2.6 Drive-Through Service Window Queuing Analysis

A review of the expected maximum drive-through service-window vehicle queue lengths was conducted to determine the adequacy of the proposed service-lane queue storage areas. A queuing analysis for each proposed drive-through service lane is provided below.

2.6.1 *Proposed Chick-fil-A Restaurant*

A review of the expected maximum drive-through service-window vehicle queue lengths was conducted to determine the adequacy of the proposed service-lane queue storage areas. In recognition of the unique vehicle queuing characteristics of Chick-fil-A restaurants, vehicle queuing at three (3) other existing Chick-fil-A restaurant locations in the Southern California region was reviewed in order to more appropriately forecast the expected vehicle queue at the proposed project. The following three (3) locations were observed in order to document the queuing at existing Chick-fil-A drive-through operations:

- 4127 Campus Drive, Irvine, California
- 31872 Del Obispo Street, San Juan Capistrano, California
- 31479 Avenue E, Yucaipa, California

Queuing observations at these existing locations were conducted in December 2021 (i.e., after the Los Angeles County Health Department Safer at Home orders due to COVID-19 had been lifted and local schools were in regular in-person session). The queue observations were collected by the independent traffic data subconsultant Transportation Studies Inc. (TSI) on three consecutive days (i.e., Thursday, Friday, and Saturday) during the morning (7:00-9:00 AM), mid-day (11:00 AM-2:00 PM), and evening (4:00-7:00 PM) peak service periods. The vehicular queues at each site were recorded at 5-minute intervals during these observation periods. The queuing observation data worksheets are provided in ***Appendix B***.

The queue length frequency at each observation site, as well as the aggregate queue length frequency for all three sites is presented in ***Table 2-1***. Based on the aggregate observations, an average of 11 vehicles in the drive-through service window queue can be expected, with an 85th percentile queue of 18 vehicles and a 95th percentile queue of 22 vehicles. The 85th percentile queue represents the maximum vehicle queue with approximately 85 percent probability; 85 percent of the time the queue is expected to be 18 vehicles or less, and 15 percent of the time the queue may be 19 vehicles or more. The 95th percentile queue represents the maximum vehicle queue with 95 percent probability; 95 percent of the time the queue is expected to be 22 vehicles or less, and five (5) percent of the time the queue may be 23 vehicles or more. The maximum observed queue totaled 31 vehicles. It is noted that while the 85th percentile queue is the design standard typically used in the traffic engineering profession the 95th percentile queue has been used in order to provide a conservative assessment.

As shown in *Figure 2-2*, the proposed Chick-fil-A restaurant component is planned to accommodate up to 35 vehicles in queue plus an additional 4 vehicles on-site before the project driveway. Therefore, the proposed drive-through service lanes are expected to adequately accommodate the 95th percentile queue of 22 vehicles without encroaching into the on-site drive-aisles or the adjacent public right-of-way. The proposed drive-through service lanes would also adequately accommodate the maximum observed queue of 31 vehicles. Vehicle queue extending to Paramount Boulevard is not expected. It is noted that the typical queue throughout the rest of the day is expected to be less than the vehicle queue during the morning, mid-day, and evening peak service times.

In addition, similar to other existing Chick-fil-A restaurants, Chick-fil-A employees/order takers will be deployed during peak hours, as necessary, to conduct remote ordering with tablets in order to expedite drive-through operations. Clear signage directing vehicles to the drive-through service lane will be installed on the project site to minimize unnecessary circulation within the site.

2.6.2 *Proposed Starbucks Restaurant*

A review of the expected drive-through vehicle queue length was performed for the proposed Starbucks drive-through service window operations. In recognition of the unique vehicle queuing characteristics of Starbucks drive-through service businesses, vehicle queuing at four (4) other existing Starbucks drive-through businesses in the Southern California region was reviewed in order to forecast the expected vehicle queue at the proposed project more appropriately. The following four (4) locations were observed in order to document the queuing at existing Starbucks drive-through operations:

- 9702 Lower Azusa Road, El Monte, California
- 10613 Garvey Avenue, El Monte, California
- 10737 Beverly Boulevard, Whittier, California
- 4700-4704 Firestone Boulevard, South Gate, California

Table 2-1
Summary of Chick-fil-A Drive-Through Service Lane Queuing Observations

OBSERVED QUEUE LENGTH (VEHICLES) [1]	FREQUENCY OF QUEUE LENGTH			TOTAL QUEUE LENGTH FREQUENCY	CUMULATIVE	
	4127 Campus Drive, Irvine [2]	31872 Del Obispo St., San Juan Cap. [2]	31479 Avenue E, Yucaipa [3]		QUEUE LENGTH FREQUENCY	PERCENT PROBABILITY
0	5	12	0	17	17	1.7%
1	8	4	3	15	32	3.3%
2	2	19	3	24	56	5.8%
3	11	13	9	33	89	9.2%
4	9	14	17	40	129	13.3%
5	7	9	15	31	160	16.5%
6	11	15	23	49	209	21.5%
7	9	20	31	60	269	27.7%
8	18	28	15	61	330	34.0%
9	4	23	23	50	380	39.1%
10	14	27	22	63	443	45.6%
11	12	29	26	67	510	52.5%
12	21	20	18	59	569	58.5%
13	22	23	24	69	638	65.6%
14	18	15	19	52	690	71.0%
15	19	13	10	42	732	75.3%
16	13	14	22	49	781	80.3%
17	25	8	8	41	822	84.6%
18	26	5	6	37	859	88.4%
19	17	2	8	27	886	91.2%
20	8	2	4	14	900	92.6%
21	15	3	2	20	920	94.7%
22	8	2	5	15	935	96.2%
23	7	3	4	14	949	97.6%
24	7	0	3	10	959	98.7%
25	2	0	0	2	961	98.9%
26	1	1	1	3	964	99.2%
27	5	0	1	6	970	99.8%
28	0	0	1	1	971	99.9%
29	0	0	0	0	971	99.9%
30	0	0	0	0	971	99.9%
31	0	0	1	1	972	100.0%
Total Observations	324	324	324	972	--	--
Average	14	10	11	11	--	--
85th Percentile	20	15	16	18	--	--
95th Percentile	23	18	21	22	--	--
Maximum	27	26	31	31	--	--

[1] Queue length represents the maximum vehicle queue observed every five (5) minutes during the observation period.
[2] Observations were conducted on December 9 through 11, 2021, for the hours of 7:00-9:00 AM, 11:00 AM-2:00 PM, and 4:00-8:00 PM.
[3] Observations were conducted on December 16 through 18, 2021, for the hours of 7:00-9:00 AM, 11:00 AM-2:00 PM, and 4:00-8:00 PM.

Queuing observations at the first three existing locations were conducted in April 2019 (i.e., prior to the start of the COVID-19 pandemic), and were collected by the independent traffic data subconsultant National Data & Surveying Services (NDS). Queuing observations at the fourth existing location (i.e., in the City of South Gate) were conducted in March 2023 and were collected by the independent traffic data subconsultant City Traffic Counters (CTC). Vehicular queues at all four locations were recorded in five minute increments for the weekday AM period of 6:00 to 9:00 AM. The Starbucks queuing observation data worksheets are provided in ***Appendix C***.

Table 2-2 summarizes the queue length frequency at each observation site, as well as the aggregate queue length frequency for all four sites. Based on the aggregate observations, an average queue of four (4) vehicles in the drive-through lane can be expected during the morning peak period, with an 85th percentile queue of nine (9) vehicles and a 95th percentile queue of ten (10) vehicles. The 85th percentile queue represents the maximum vehicle queue with approximately 85 percent probability; 85 percent of the time the queue will be nine (9) vehicles or less, and 15 percent of the time the queue may be 10 vehicles or more. The 95th percentile queue represents the maximum vehicle queue with approximately 95 percent probability; 95 percent of the time the queue will be 10 vehicles or less, and five (5) percent of the time the queue may be 11 vehicles or more. The maximum queue observed totaled 12 vehicles. It is noted that the 85th percentile queue is the design standard typically used in the traffic engineering profession.

As shown in Figure 2-2, the proposed Starbucks restaurant component will provide a drive-through service lane which is expected to accommodate up to 16 vehicles in queue. Therefore, the proposed drive-through service lane and on-site area is expected to adequately accommodate the 95th percentile queue of 10 vehicles. The proposed drive-through service lanes would also adequately accommodate the maximum observed queue of 12 vehicles. Vehicle queue extending to Paramount Boulevard is not expected. It is noted that the typical queue throughout the rest of the day is expected to be less than the vehicle queue during the weekday morning commute peak hour.

2.7 Project Trip Generation and Distribution

2.7.1 *Project Trip Generation Forecast*

Traffic volumes to be generated by the proposed project were forecast for the weekday AM and PM peak hours, and over a 24-hour period. Trip generation rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[2] were utilized to forecast project traffic generation for the proposed project. Traffic volumes expected to be generated by the proposed project were based upon rates per 1,000 square feet. Trip generation average rates for the following uses were used to forecast the traffic volumes expected to be generated by the proposed project:

- ITE Land Use Code 850: Supermarket
- ITE Land Use Code 934: Fast-Food Restaurant with Drive-Through

[2] Institute of Transportation Engineers *Trip Generation Manual*, 11th Edition, Washington, D.C., 2021.

Table 2-2
Summary of Starbucks Drive-Through Service Lane Queuing Observations

OBSERVED QUEUE LENGTH (VEHICLES) [1]	FREQUENCY OF QUEUE LENGTH				TOTAL QUEUE LENGTH FREQUENCY	CUMULATIVE	
	9702 Lower Azusa Road [2]	10613 Garvey Avenue [3]	10737 Beverly Boulevard [4]	4704 Firestone Boulevard [5]		QUEUE LENGTH FREQUENCY	PERCENT PROBABILITY
0	3	3	0	2	8	8	5.4%
1	11	4	0	4	19	27	18.4%
2	11	4	2	4	21	48	32.7%
3	5	4	3	2	14	62	42.2%
4	5	5	4	5	19	81	55.1%
5	1	4	6	5	16	97	66.0%
6	1	4	4	4	13	110	74.8%
7	0	3	2	1	6	116	78.9%
8	0	2	2	3	7	123	83.7%
9	0	2	4	3	9	132	89.8%
10	0	1	5	2	8	140	95.2%
11	0	0	2	1	3	143	97.3%
12	0	1	3	0	4	147	100.0%
13	0	0	0	0	0	147	100.0%
14	0	0	0	0	0	147	100.0%
15	0	0	0	0	0	147	100.0%
16	0	0	0	0	0	147	100.0%
17	0	0	0	0	0	147	100.0%
18	0	0	0	0	0	147	100.0%
19	0	0	0	0	0	147	100.0%
20	0	0	0	0	0	147	100.0%
Total Observations	37	37	37	36	147	--	--
Average	2	4	6	5	4	--	--
85th Percentile	4	8	10	9	9	--	--
95th Percentile	5	10	12	10	10	--	--
Maximum	6	12	12	11	12	--	--

[1] Queue length represents the maximum vehicle queue observed every five (5) minutes during the observation period.

[2] Observations were conducted at the Starbucks located at 9702 Lower Azusa Road, El Monte, on April 2, 2019 from 6:00 to 9:00 AM.

[3] Observations were conducted at the Starbucks located at 10613 Garvey Avenue, El Monte, on April 2, 2019 from 6:00 to 9:00 AM.

[4] Observations were conducted at the Starbucks located at 10737 Beverly Boulevard, Whittier, on April 2, 2019 from 6:00 to 9:00 AM.

[5] Observations were conducted at the Starbucks located at 4704 Firestone Boulevard, South Gate, on March 16, 2023 from 6:00 to 9:00 AM.

- ITE Land Use Code 937: Coffee Shop with Drive Through

In addition to the proposed project trip generation forecasts, forecasts were also made for the existing, active land use on the project site. ITE Land Use Code 812 Building Materials and Lumber Store trip generation average rates were used to forecast expected traffic generation for the existing, active land use on-site.

The trip generation forecast for the proposed project is summarized in ***Table 2-3***. As presented in *Table 2-3*, the proposed project is expected to generate 360 net new vehicle trips (186 inbound trips and 174 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 342 net new vehicle trips (175 inbound trips and 167 outbound trips). Over a 24-hour period, the proposed project is forecast to generate 4,366 net new daily trip ends during a typical weekday (2,183 inbound trips and 2,183 outbound trips).

2.7.2 *Project Trip Distribution and Assignment*

Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- The site's proximity to major traffic corridors (i.e., Paramount Boulevard, Somerset Boulevard, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress scheme planned for the proposed project;
- Nearby population and employment centers; and
- Input from City of Paramount staff.

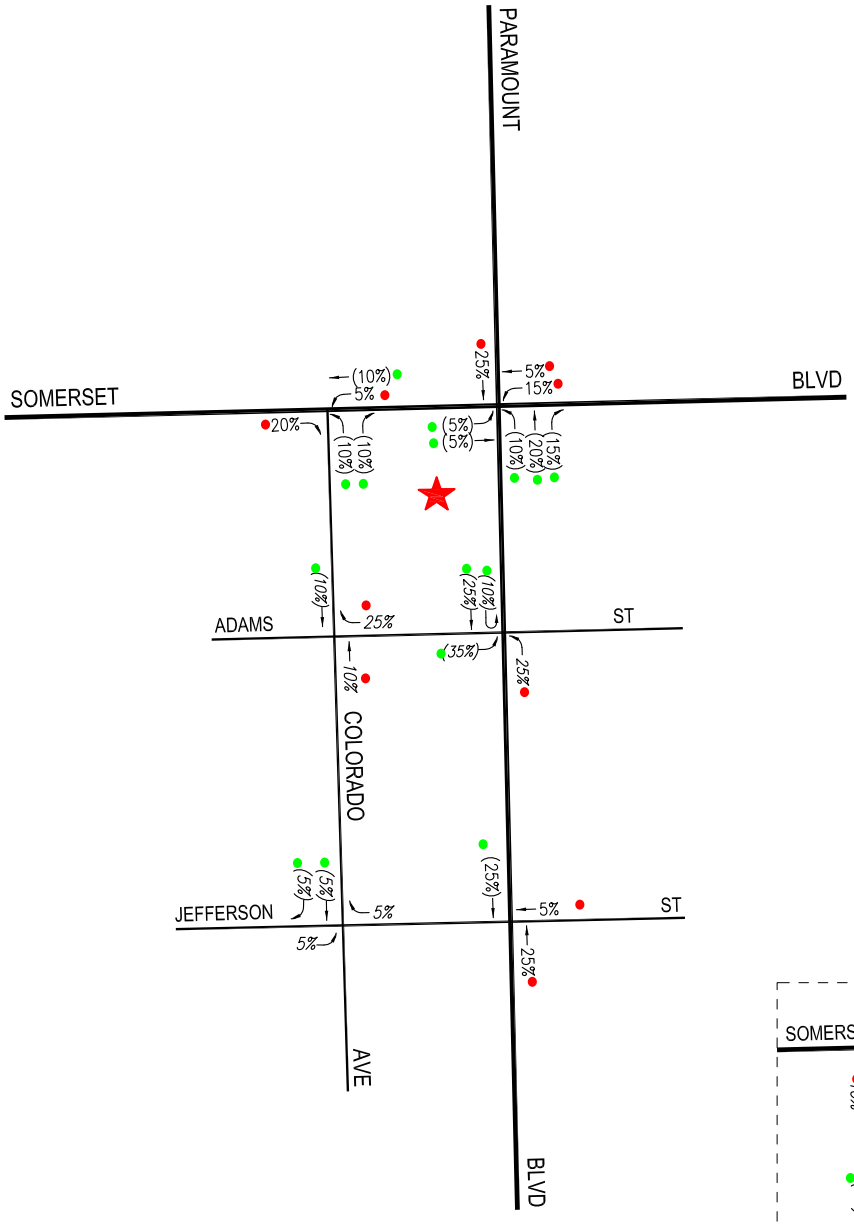
The traffic volume distribution percentages for the proposed project during AM and PM peak hours at the study intersections are illustrated in ***Figure 2-3***. The forecast AM and PM peak hour project traffic volumes at the study intersections are presented in ***Figures 2-4*** and ***2-5***, respectively. The traffic volume assignments presented in *Figures 2-4 and 2-5* reflect the traffic distribution characteristics shown in *Figure 2-3* and the proposed project traffic generation forecast presented in *Table 2-3*.

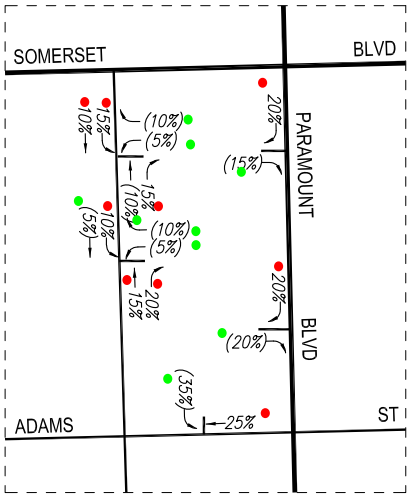
Table 2-3
PROJECT TRIP GENERATION FORECAST

TRIP GENERATION RATES [1]									
	ITE			WEEKDAY			WEEKDAY		
	LAND USE			AM PEAK HOUR			PM PEAK HOUR		
ITE LAND USE CATEGORY	CODE	VARIABLE	DAILY	IN (%)	OUT (%)	TOTAL	IN (%)	OUT (%)	TOTAL
Building Materials and Lumber Store	812	Per 1,000 SF	17.05	62%	38%	1.59	46%	54%	2.25
Supermarket	850	Per 1,000 SF	93.84	59%	41%	2.86	50%	50%	8.95
Fast-Food Restaurant with Drive-Through Window	934	Per 1,000 SF	467.48	51%	49%	44.61	52%	48%	33.03
Coffee Shop with Drive-Through Window	937	Per 1,000 SF	533.57	51%	49%	85.88	50%	50%	38.99

PROJECT TRIP GENERATION FORECAST									
	ITE		DAILY	AM PEAK HOUR			PM PEAK HOUR		
	LAND USE		TRIP ENDS [2]	VOLUMES [2]			VOLUMES [2]		
LAND USE	CODE	SIZE	VOLUMES	IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Project									
Supermarket	850	23,256 GSF	2,182	40	27	67	104	104	208
Fast-Food Restaurant with Drive-Through Window	934	2,760 GSF	1,290	63	60	123	47	44	91
Coffee Shop with Drive-Through Window	937	2,400 GSF	1,281	105	101	206	47	47	94
Subtotal Proposed Project			***4,753***	***208***	***188***	***396***	***198***	***195***	***393***
Existing Uses									
Building Materials and Lumber Store	812	(22,724) GSF	(387)	(22)	(14)	(36)	(23)	(28)	(51)
Subtotal Existing Uses			***(387)***	***(22)***	***(14)***	***(36)***	***(23)***	***(28)***	***(51)***
NET NEW PROJECT TRIPS			***4,366***	***186***	***174***	***360***	***175***	***167***	***342***

[1] Source: ITE "Trip Generation Manual", 11th Edition, 2021.
[2] Trips are one-way traffic movements, entering or leaving.





PROJECT DRIVEWAY DISTRIBUTION

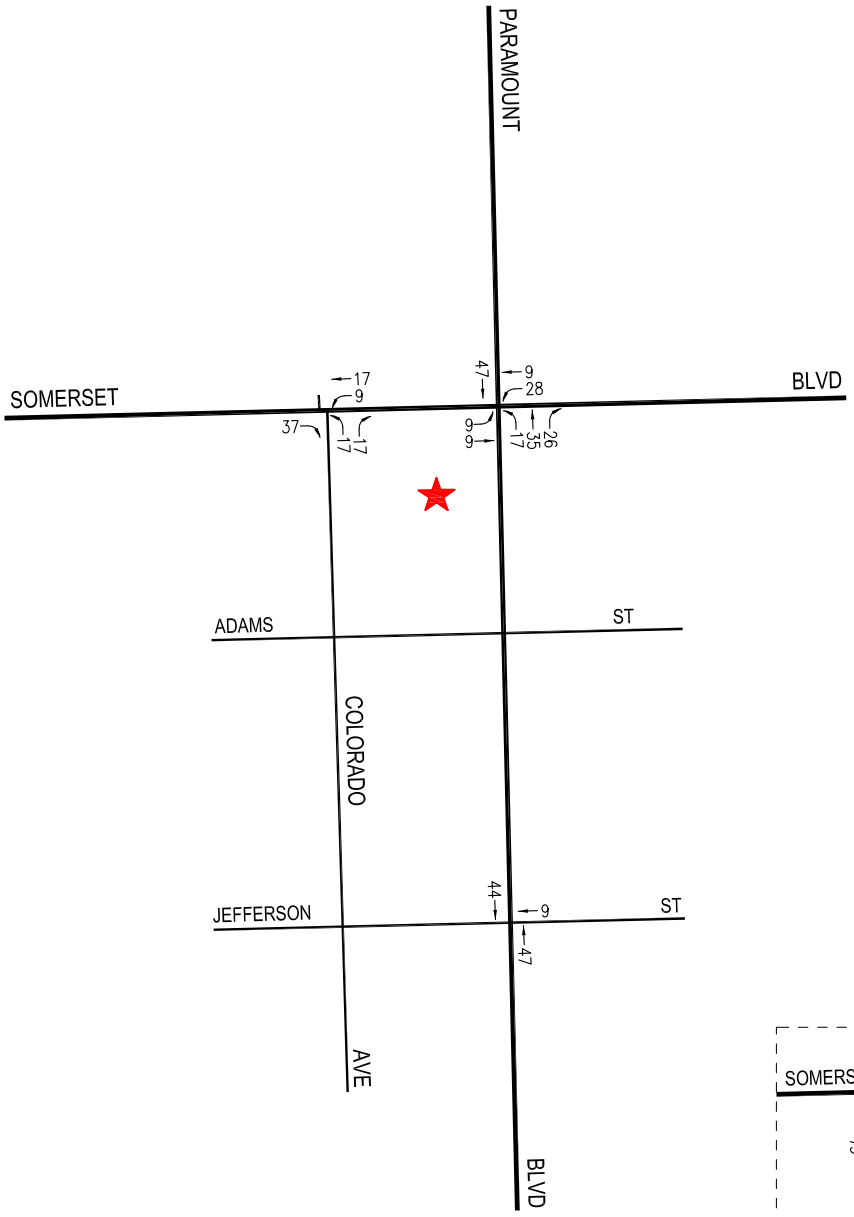
N

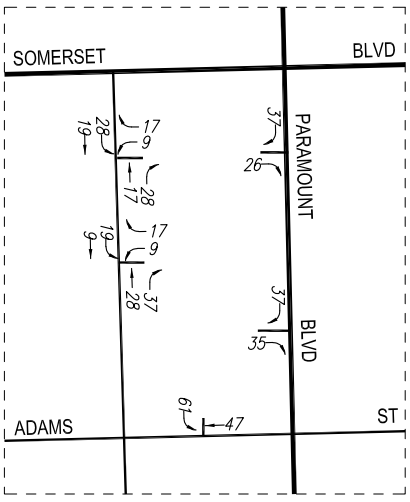
Project Site

XX = Inbound Percentage

(XX) = Outbound Percentage

Figure 2-3
Project Trip Distribution





PROJECT DRIVEWAY VOLUMES

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Project Site

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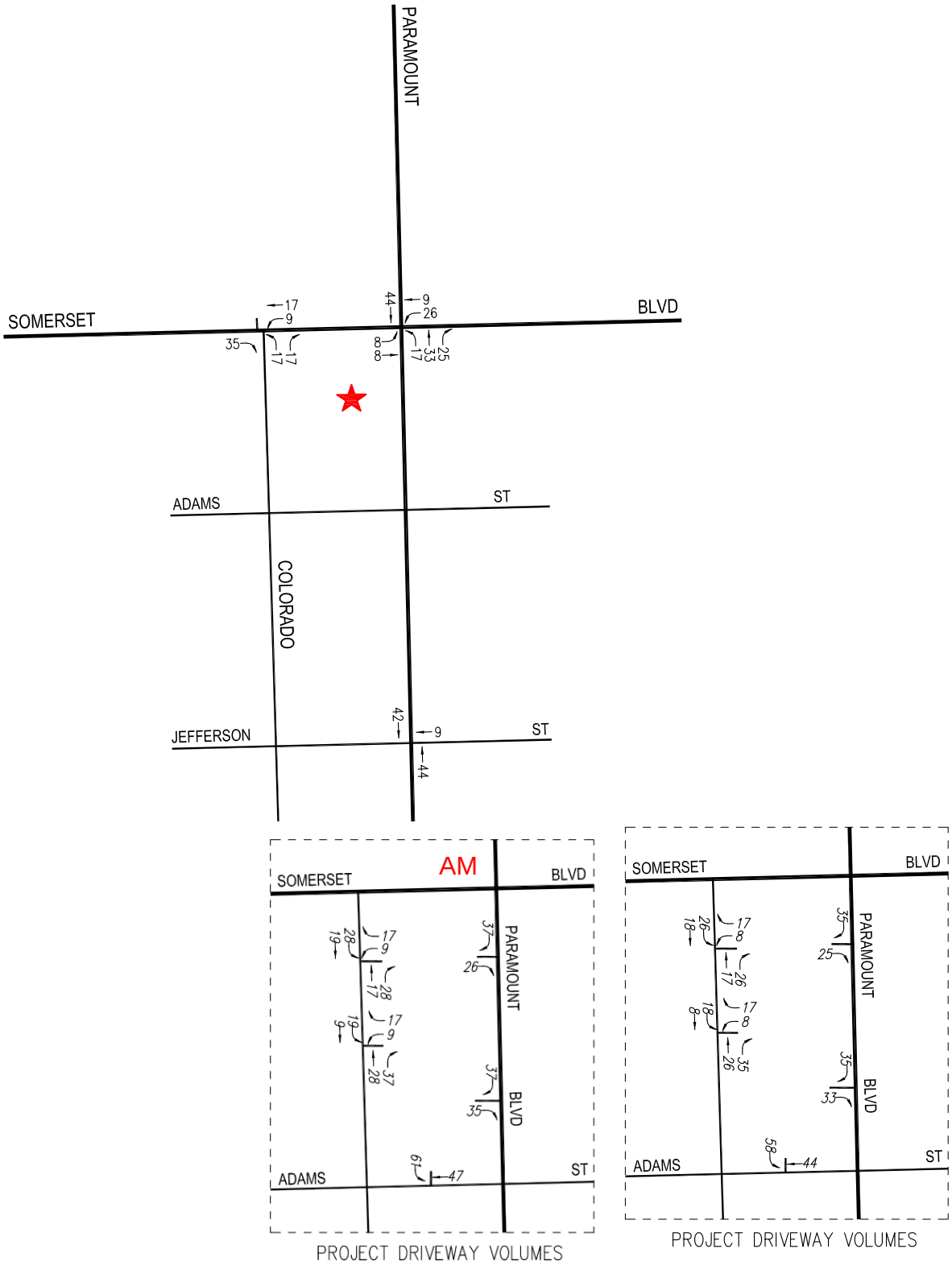
Figure 2-4
Project Traffic Volumes
Weekday AM Peak Hour
15101 Paramount Project



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Project Site

Figure 2-5
Project Traffic Volumes
Weekday PM Peak Hour
15101 Paramount Project

3.0 PROJECT SITE CONTEXT

The following sections provide an overview of the transportation infrastructure in the vicinity of the proposed project, including infrastructure which supports both motorized and non-motorized transportation modes.

3.1 Non-Vehicle Network

Non-vehicular transportation generally encompasses walking, biking, and other active transportation modes. Distinct facilities are often provided for these non-vehicular modes. Most prominently, paved sidewalks are typically provided to facilitate pedestrian travel outside of the roadway. In some cases, bicycle facilities such as painted bike lanes or separated bike paths are provided within the roadway in order to separate bike traffic from vehicular traffic. Roadways which are designed to prioritize non-vehicular transportation modes utilize complimentary non-vehicular infrastructure in order to promote comfortable, safe travel for both pedestrians and bicyclists. A review of the pedestrian and bicycle infrastructure provided in the vicinity of the project site is provided below.

3.1.1 *Pedestrian System*

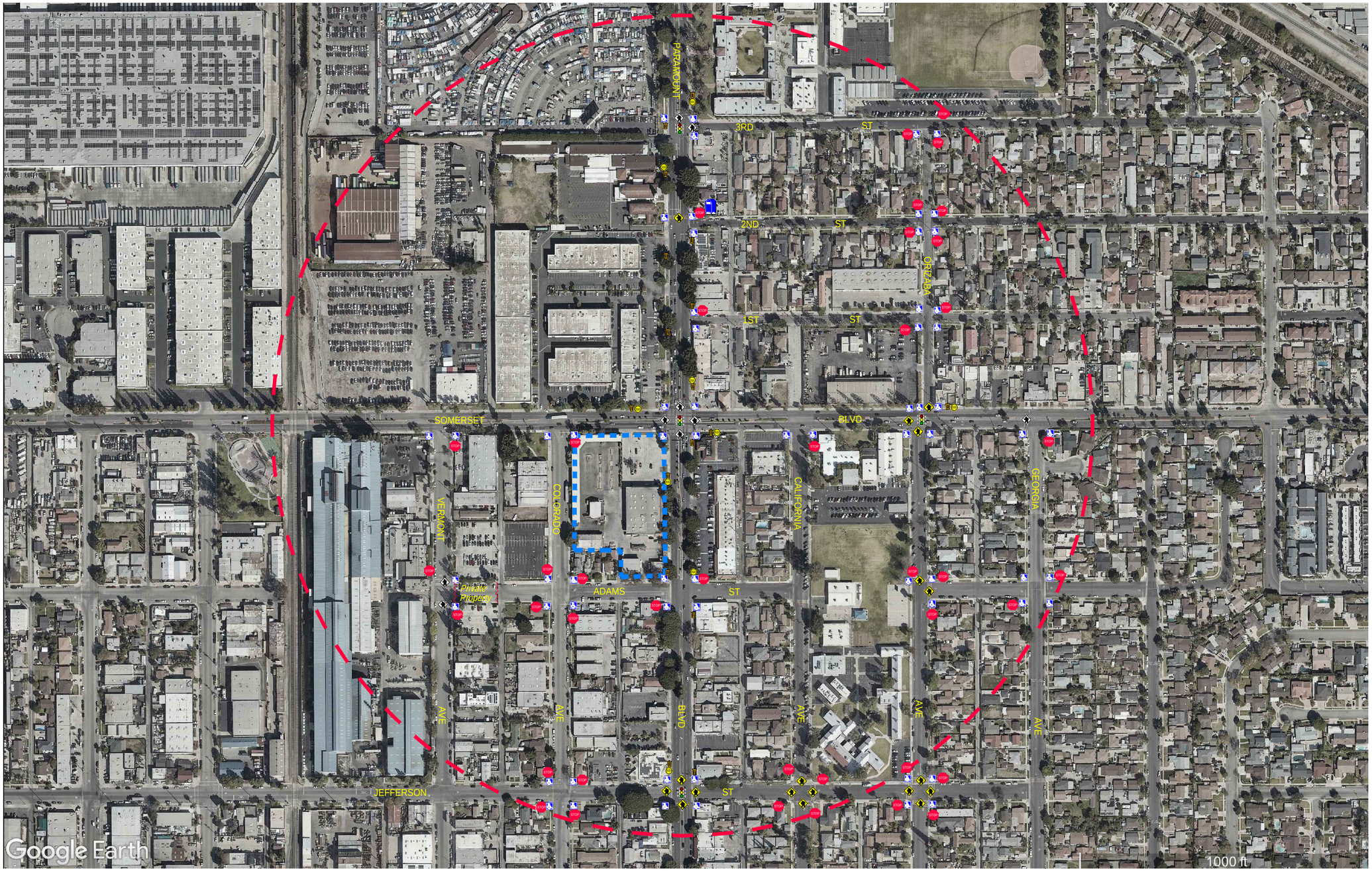
Pedestrian infrastructure consists of facilities such as sidewalks, crosswalks, pedestrian signals, curb access ramps, Americans with Disabilities Act (ADA) compliant tactile warning strips, and curb extensions, among other things. These facilities are generally provided within the study area. Public sidewalks and pedestrian facilities are provided on all streets within the project vicinity, including Colorado Avenue, Paramount Boulevard, Somerset Boulevard, and Adams Street. ***Figure 3-1*** shows the existing pedestrian and transit facilities near the project site.

The project frontages along Colorado Avenue, Paramount Boulevard, Somerset Boulevard, and Adams Street are currently improved with sidewalk, curb, and gutter. As described in *Section 2.3, Project Site Access*, the proposed project will provide two driveways on Colorado Avenue, two right-turn only driveways on Paramount Boulevard, and utilize the existing alleyway on Adams Street. The driveway will be constructed to City of Paramount standards and will maintain public sidewalk access across the driveway opening. The proposed project therefore will not result in the removal, degradation, or loss of access to any existing pedestrian facilities in the vicinity. Additionally, the project will provide an ADA compliant pedestrian walkway connecting the existing public sidewalks surrounding the project site to the walkways within the proposed development.

Walkability indicates walking is readily available as a safe, connected, accessible and pleasant mode of transport. Several criteria are widely accepted as key aspects of walkability of urban areas that should be satisfied. The underlying principle is that pedestrians should not be delayed, diverted, or placed in danger. These criteria include:

- Connectivity: People can walk from one place to another without encountering major obstacles, obstructions, or loss of connectivity.

- Convivial: Pedestrian routes are friendly and attractive, and perceived as such by pedestrians.



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- SITE
- SIGNAL
- STOP SIGN
- 0.25 MILE RADIUS FROM PROJECT SITE
- ADA
- ADA YELLOW TRUNCATED DOME
- CROSSWALK
- CROSSWALK YELLOW
- B BENCH
- BR BIKE RACK
- BS BUS STOP
- BB BUS STOP WITH BUS BENCH
- BBS BUS STOP WITH BUS BENCH & SHELTER
- BIKE ROUTE/LANE
- MAIL BOX
- TRASH

Figure 3-1
Existing Nearby Pedestrian & Transit Facilities

15101 Paramount Project

- Conspicuous: Suitable levels of lighting, visibility and surveillance over its entire length, with high quality delineation and signage.

- Comfortable: High quality and well-maintained footpaths of suitable widths, attractive landscaping and architecture, shelter and rest spaces, and a suitable allocation of roadspace to pedestrians.

- Convenient: Walking is a realistic travel choice, partly because of the impact of the other criteria set forth above, but also because walking routes are of a suitable length as a result of land use planning with minimal delays.

A review of the proposed project pedestrian walkways indicates that these primary characteristics are accommodated within and adjacent to the project. Proposed project features would include landscaped and lighted pedestrian walkways connecting facilities within the site, as well as connections with the adjacent public sidewalks along the project frontage. Street trees and streetscape plantings should be introduced along the same public frontages in accordance with the City's standards. In addition, project signage could include general ground level and wayfinding pedestrian signage around the perimeter of the project site, building identification signs, and other sign types. Wayfinding signs would be located at access points to the on-site amenities and facilities, parking area/s, and building entrances.

3.1.2 *Bicycle System*

Bicycle infrastructure consists of both facilities within the roadway as well as public bicycle parking spaces. The Federal and State transportation systems recognize three primary bikeway facilities: Bicycle Paths (Class I), Bicycle Lanes (Class II), and Bicycle Routes (Class III). Bicycle Paths (Class I) are exclusive car-free facilities that are typically not located within a roadway area. Bicycle Lanes (Class II) are part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Bicycle Routes (Class III) are preferably located on collector and lower volume arterial streets.

Bicycle access to the project site will be facilitated by the City's bicycle roadway network. Existing and proposed bicycle facilities (e.g., Class I Bicycle Path, Class II Bicycle Lanes, Class III Bicycle Routes, Proposed Bicycle Routes, Bicycle Boulevards, etc.) identified in the City's General Plan Update[3] will be located within an approximate one-mile radius from the project site. The location of the proposed bicycle lane network for the City in close proximity to the project site and in the surrounding area is illustrated in ***Figure 3-2***. As shown in *Figure 3-2*, Class II Bicycle Lanes are proposed for Jefferson Street west of Paramount Boulevard and Class III Bicycle Routes east of Paramount Boulevard.

[3] Bellflower-Paramount Active Transportation Plan, June 2019.

MAP SOURCE: 2019 BELLFLOWER-PARAMOUNT JOINT ACTIVE TRANSPORTATION PLAN

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LINSCOTT LAW & GREENSPAN engineers

★ Project Site

Figure 3-2
City of Paramount Proposed Bicycle Network

3.2 Transit Network

Public bus transit service in the project vicinity is currently provided by the Los Angeles Metropolitan Transportation Authority (Metro) and Long Beach Transit (LBT). A summary of the existing transit routes, including the transit route, destinations and number of buses during the AM and PM peak hours is presented in ***Table 3–1***. The existing public transit routes in the project vicinity are illustrated in ***Figure 3–3***. As summarized in *Table 3-1*, a total of four public transit routes provide service near the project site.

3.3 Vehicle Network

3.3.1 *Roadway Classifications*

The City of Paramount utilizes the roadway categories recognized by regional, state and federal transportation agencies. There are four (4) categories in the roadway hierarchy, ranging from freeways with the highest capacity to two-lane undivided roadways with the lowest capacity. The roadway categories are summarized as follows:

- *Freeways* are limited-access and high speed travel ways included in the state and federal highway systems. Their purpose is to carry regional through-traffic. Access is provided by interchanges with typical spacing of one mile or greater. No local access is provided to adjacent land uses.

- *Arterial* roadways are major streets that primarily accommodate regional, subregional, and intra-city travel. Through traffic comprises the bulk of traffic volumes on arterial roadways. In the City of Paramount, this roadway type is divided into two categories: Major and Secondary arterials. Major arterial roadways are designed to move relatively high volumes of traffic between the freeway and local circulation system. Intersections along major arterials are at-grade and typically signalized. Access from private property and collector streets is limited, as is on-street parking. Secondary arterial roadways are similar to major arterials, but serve a more localized function. Secondary arterials generally have less access and parking restrictions and a narrower right-of-way than major arterials.

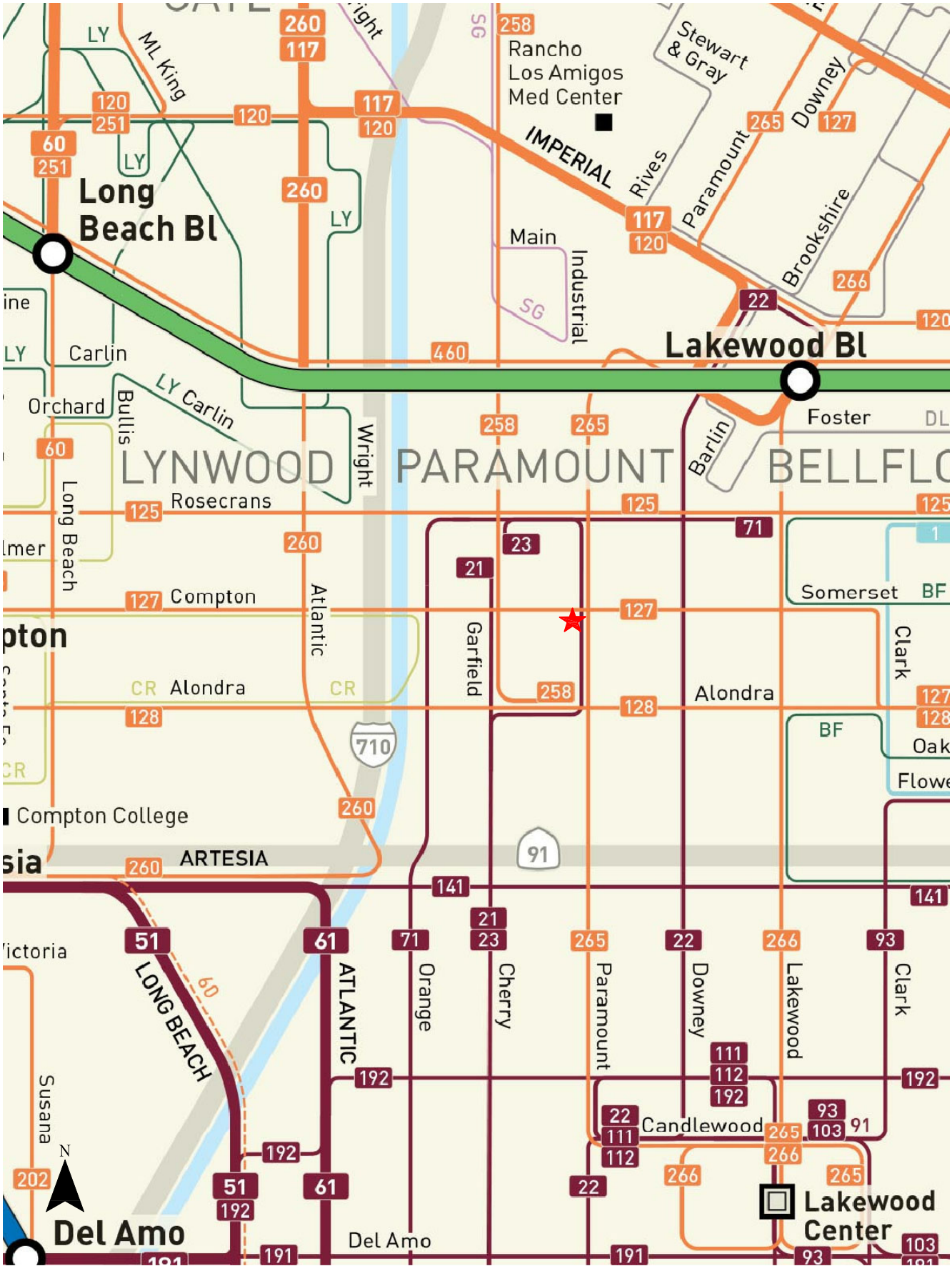
- *Collector* roadways are designed to distribute traffic from higher classified arterial streets to local access streets and adjacent properties.

- *Local* roadways are designed to be low-volume and low-speed streets that provide access to individual properties. Residential streets are generally not intended to handle through traffic.

Table 3-1
EXISTING TRANSIT ROUTES [1]

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES DURING PEAK HOUR		
			DIR	AM	PM
Metro 127	Los Angeles to Downey Depot Transit Center via Rosewood, Compton, Paramount	Somerset Boulevard, Colorado Avenue, Paramount Boulevard	EB WB	2 2	2 2
Metro 265	Lakewood to Pico Rivera via North Long Beach, Paramount, Downey	Paramount Boulevard, Somerset Boulevard, Jefferson Street	NB SB	1 1	1 1
LBT 21, 23	Long Beach Transit Center to Paramount	Paramount Boulevard, Somerset Boulevard, Jefferson Street	NB SB	2 2	2 2
TOTAL				**10**	**10**

[1] Sources: Los Angeles County Metropolitan Transportation Authority (Metro) and Long Beach Transit (LBT) websites, August 2023.



MAP SOURCE: METROPOLITAN TRANSPORTATION AUTHORITY WEBSITE

★ Project Site

Figure 3-3
Existing Transit Routes

3.3.2 *Roadway Descriptions*

Immediate access to the project site is provided via Paramount Boulevard, Colorado Avenue, Somerset Boulevard, and Adams Street. The current lane configurations and traffic control measures at each study intersection is presented in ***Figure 3-4***. Descriptions of the roadways which make up the study area are provided in ***Table 3-2***, including the roadway classification, number of lanes, median types, and speed limits designated by the City of Paramount.

3.4 Traffic Count Data

Manual counts of vehicular turning movements were conducted at the following intersections identified for review in consultation with City staff:

1. Colorado Avenue/Somerset Boulevard (Unsignalized)
2. Paramount Boulevard/Somerset Boulevard (Signalized)
3. Paramount Boulevard/Jefferson Street (Signalized)
4. Paramount Boulevard/Project Driveway (Unsignalized)

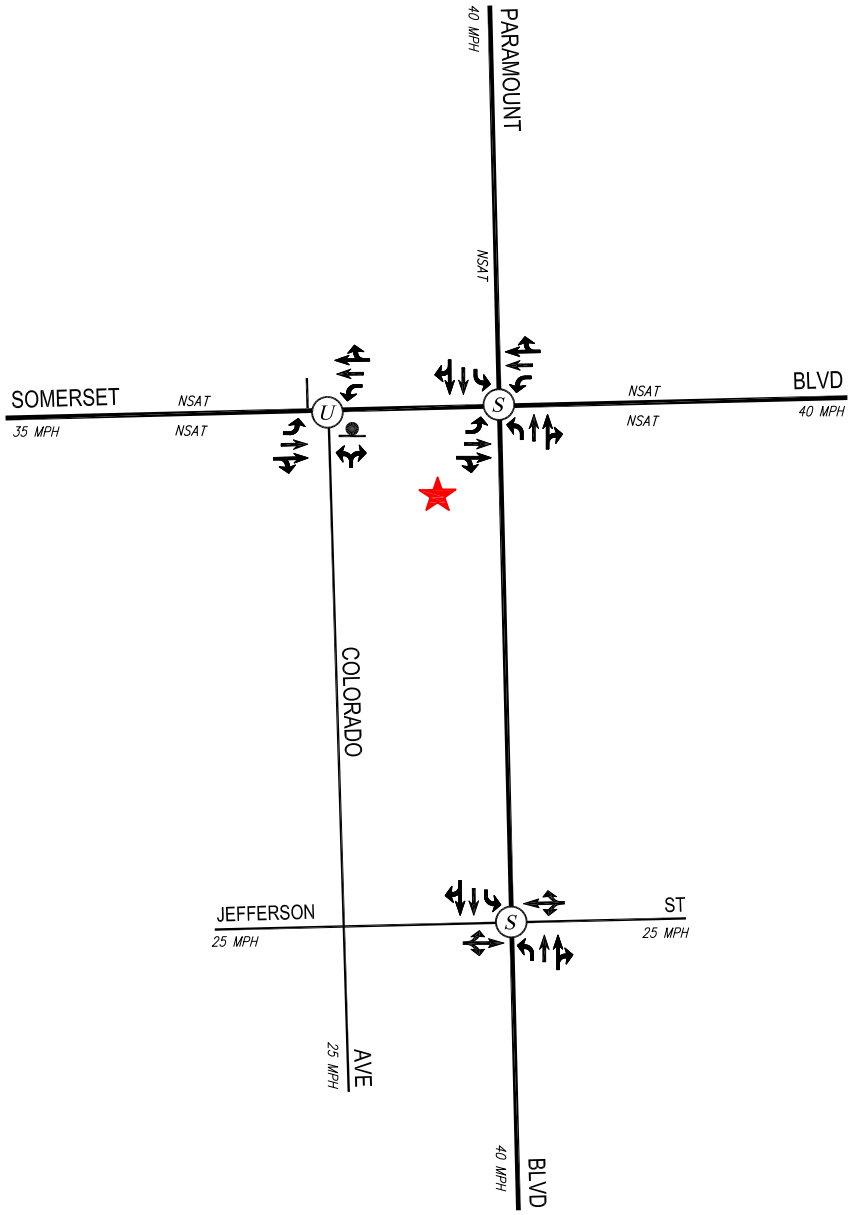
The manual traffic counts were conducted at the three intersections during the weekday morning (AM) and afternoon (PM) commute periods to determine the peak hour traffic volumes. The manual counts were conducted in May 2023 by an independent traffic count subconsultant (City Traffic Counters) at the study intersections on a typical weekday from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM to determine the AM and PM peak commute hours, respectively. In conjunction with the manual turning movement vehicle counts, counts of bicycle and pedestrian volumes were also collected during the peak periods. It is noted that all of the traffic counts were conducted when local schools were in session. The traffic count data for the Paramount Boulevard/Project Driveway location were derived from the traffic count data for the adjacent intersections (i.e., the southbound volumes from the Paramount Boulevard/Somerset Boulevard intersection).

The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 3-5*** and ***3-6***, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in ***Appendix D***.

3.5 Cumulative Development Projects

The forecast of future pre-project conditions was prepared in accordance to procedures outlined in Section 15130 of the CEQA Guidelines. Specifically, the CEQA Guidelines provide two (2) options for developing the future traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or



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Project Site

Figure 3-4
Existing Lane Configurations

Table 3-2
EXISTING ROADWAY DESCRIPTIONS

ROADWAY	CLASSIFICATION [1]	TRAVEL LANES			MEDIAN TYPES [4]	SPEED LIMIT
		DIRECTION [2]	NO. LANES [3]			
Paramount Boulevard						
-North of Somerset Boulevard	Primary	NB-SB	4	[5]	RMI	40
-South of Adams Street	Primary	NB-SB	4		RMI	40
Somerset Boulevard	Secondary	EB-WB	4	[5]	RMI	35
Colorado Avenue	Minor	NB-SB	2	[6],[7]	N/A	25
Jefferson Street	Minor	EB-WB	2		N/A	25
Adams Street	Minor	EB-WB	2		N/A	25

Notes:

[1] Roadway classifications obtained from the *City of Paramount 2019 Bellflower-Paramount Joint Active Transportation Plan.*

[2] Direction of roadways in the project area: NB-SB = northbound and southbound; and EB-WB = eastbound and westbound.

[3] Number of lanes in both directions on the roadway. Variations in number of travel lanes due to time restricted on-street parallel parking are noted below.

[4] Median type of the road: RMI = Raised Median Island; 2WLT = 2-Way Left-Turn Lane; and N/A = Not Applicable.

[5] No Stopping Anytime southbound direction, eastbound direction, westbound direction.

[6] Tow Away No Parking Anytime southbound direction.

[7] No Parking Anytime Except by Permit Only northbound direction.

(B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency."

Although the CEQA Guidelines do not strictly apply to the local transportation assessment required by the City of Paramount, this transportation analysis provides a highly conservative estimate of future pre-project traffic volumes as it incorporates both the "A" and "B" options outlined in the CEQA Guidelines for purposes of developing the forecast.

3.5.1 *Related Projects*

A forecast of on-street traffic conditions prior to occupancy of the proposed project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area (i.e., within an approximate 0.50-mile radius from the project site). With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impacts of all ongoing development. The related projects research was based on information on file with the City of Paramount. The list of related projects in the project site area is presented in ***Table 3-3***. The location of the related projects is shown in ***Figure 3-7***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. The related projects' respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 3-3*. The related projects traffic volumes were distributed and assigned to the street system based on the projects' locations in relation to the study intersections, their proximity to major traffic corridors, proposed land uses, nearby population and employment centers, etc. The assignment of the related projects traffic volumes to the study intersections during the weekday AM and PM peak hours are displayed in ***Figures 3-8*** and ***3-9***, respectively.

3.5.2 *Ambient Traffic Growth Factor*

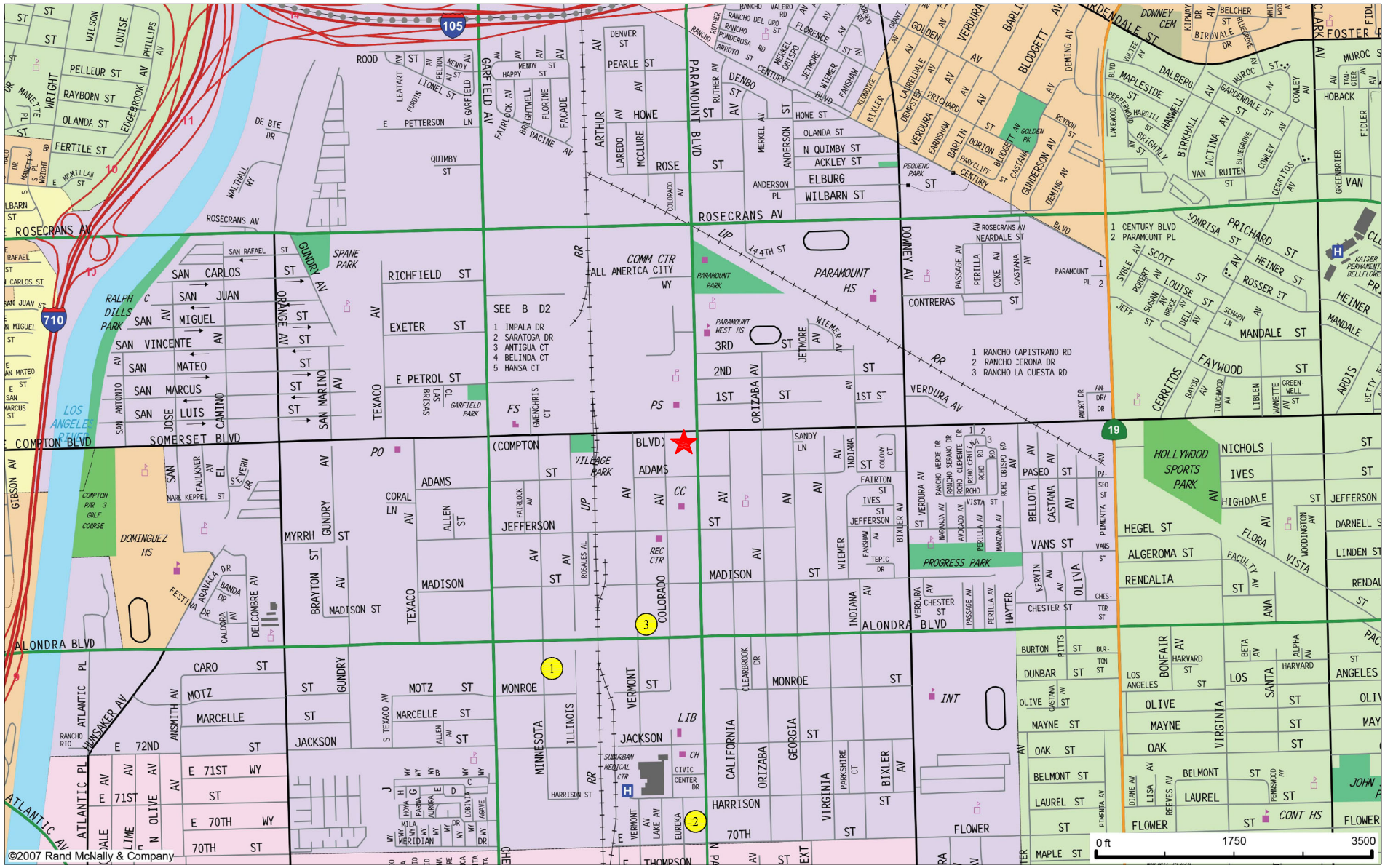
Horizon year background traffic growth estimates have been calculated using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown related projects in the study area as well as account for typical growth in traffic volumes due to the development of projects outside the study area. Based on review of the general traffic growth factors provided in the Los Angeles County 2010 Congestion Management Program[4] (CMP) for the project study area (i.e., RSA 22, Downey), it is anticipated that existing traffic volumes in the vicinity are expected to

[4] Los Angeles County Metropolitan Transportation Authority (Metro) 2010 Congestion Management Program.

Table 3-3
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT STATUS	PROJECT NAME/NUMBER ADDRESS/LOCATION	LAND USE DATA		PROJECT DATA SOURCE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
1	Approved	15932 Minnesota Avenue	Self-Storage	104,630 GSF	[3]	90	(3)	3	0	7	1	8
2	Approved	16635 Paramount Boulvard	Senior Mixed-Use Housing	60 DU	[4]	194	4	8	12	8	7	15
3	Constructed	Kentucky Fried Chicken Restaurant 7803 Alondra Boulevard	Fast-Food Restaurant	2,100 GSF	[5]	982	48	46	94	36	33	69
TOTAL						**1,266**	**49**	**57**	**106**	**51**	**41**	**92**

[1] Source: City of Paramount Planning Department, except as noted below. The peak hour traffic volumes were forecast and by applying trip rates as provided in the ITE "Trip Generation", 11th Edition, 2021.
[2] Trips are one-way traffic movements, entering or leaving.
[3] Source: "Go Store It Paramount Project Transportation and Parking Assessment", prepared by LLG Engineers, dated June 3, 2022.
[4] ITE Land Use Code 252 (Senior Adult Housing - Multifamily) trip generation average rates.
[5] ITE Land Use Code 934 (Fast-Food Restaurant with Drive-Through) trip generation average rates.



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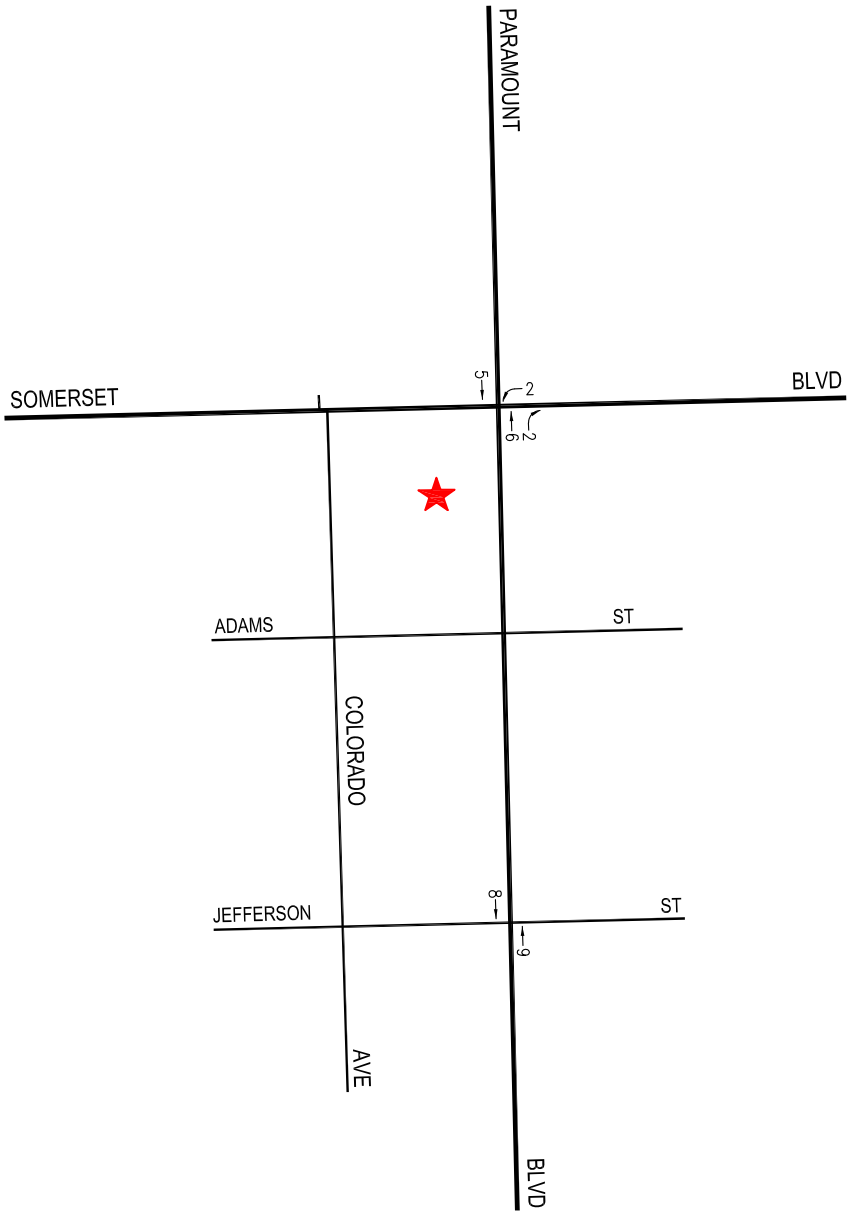
★ Project Site

(#) Related Project

Figure 3-7
Location of Related Projects



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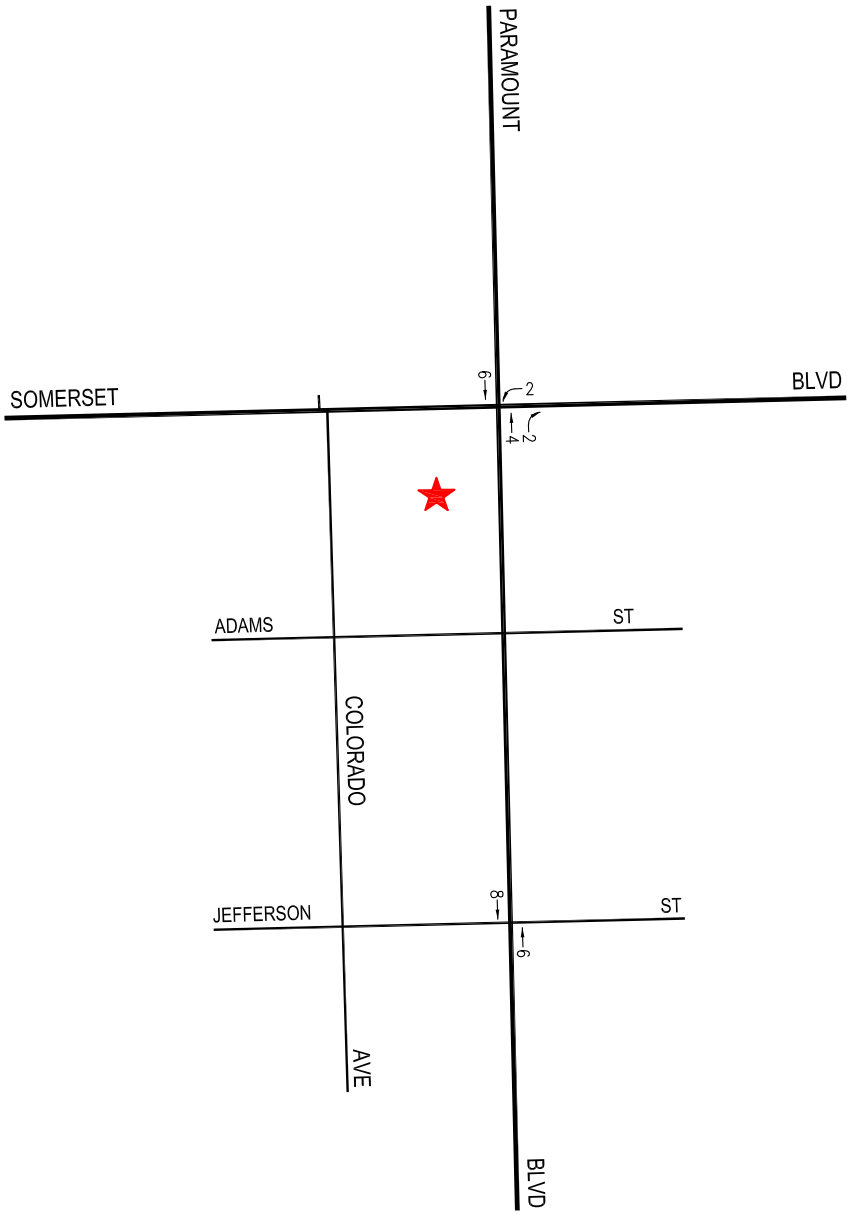
Project Site

Figure 3-8
Related Projects Traffic Volumes
Weekday AM Peak Hour
15101 Paramount Project



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Project Site

Figure 3-9
Related Projects Traffic Volumes
Weekday PM Peak Hour
15101 Paramount Project

increase at an annual rate of 0.24% per year between the years 2020 and 2025. An annual growth rate of 0.24 percent (0.24%) until the year 2025 (i.e., the anticipated project build-out year) was selected for this analysis. Therefore, application of this 0.24 percent (0.24%) ambient growth factor in addition to the forecast traffic generated by the related projects allows for a conservative forecast of future traffic volumes in the project study area as incorporation of both (i.e., an ambient traffic growth rate and a detailed list of cumulative development projects) is expected to overstate potential future traffic volumes. The cumulative development projects should already be incorporated as part of the growth rate projection per the adopted, local and regional planning documents (i.e., which account for the future population, housing, and employment [socio-economic data] projections).

4.0 INTERSECTION OPERATIONAL ANALYSIS

As part of the discretionary review and approval process, the City has the authority to require a LOS analysis in order to assess the proposed project's consistency with the City's General Plan LOS goals. Specifically, the City requires an operational analysis of intersections in the vicinity of a proposed project in order to evaluate site access and circulation constraints that may be caused or worsened by project-generated traffic. The following section presents the intersection operational (i.e., Level of Service) analyses prepared for the proposed project pursuant to the General Plan LOS standards and transportation infrastructure goals.

4.1 Analysis Methodology

In order to estimate the proposed project's effect on intersection operations, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic volumes on a peak hour and daily basis. The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area. The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area. The proposed project's forecast trip generation, distribution, and assignment is presented in *Section 2.7* herein. With the forecasting process complete and project traffic assignments developed, the effect of the proposed project is isolated by comparing operational conditions at the selected study intersections using existing and expected future traffic volumes without and with forecast project traffic.

The study intersection LOS was analyzed using the Highway Capacity Manual[5] (HCM) method of analysis. The HCM methodology determines the average control delay (expressed in seconds per vehicle [s/veh]) at the intersection. Average control delay for any particular movement is a function of the capacity of the approach and the degree of saturation. The intersection delay is subsequently assigned a LOS value to describe intersection operations. Level of Service varies from LOS A (free flow conditions) to LOS F (jammed condition). The average control delay for signalized intersections represents the delay attributed to the traffic control facility as compared to a reference travel time in the absence of traffic control, geometric delay, incidents, and the influence of other vehicles. A detailed description of the HCM method and corresponding Level of Service for the signalized study intersections is provided in ***Appendix E***.

[5] *Highway Capacity Manual 6th Edition*, Transportation Research Board of the National Academies of Sciences-Engineering-Medicine, 2016.

For the unsignalized location, the HCM methodology for unsignalized/two-way stop-controlled (TWSC) intersections was utilized for the analysis. The TWSC methodology estimates the average control delay for each minor-street movement (or shared movement) as well as major-street left-turns and determines the LOS for each constrained movement. A description of the HCM method and corresponding Level of Service for the unsignalized intersection is also provided in *Appendix E*.

The HCM method calculations were prepared using the *Synchro 11* software package which implements the HCM operational methodology. A *Synchro* network was created based on existing conditions field reviews at the study intersections. In addition, specifics such as traffic volume data, lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing, etc., were coded to complete the existing network. The parameters and assumptions utilized in the analysis were based on the direction provided by City staff.

4.2 Criteria for Intersection Operational Analysis

The relative effect of the added project traffic volumes to be generated by the proposed project during the weekday AM and PM peak hours was evaluated based on analysis of existing and future operating conditions at the study intersections, without and with the proposed project. The previously discussed capacity analysis procedures were utilized to evaluate the delay and service level characteristics at each study intersection.

The City of Paramount General Plan has established the minimum acceptable Level of Service (LOS) D for peak hour intersection operations. A traffic operations issue is identified if the addition of the traffic generated from the proposed project triggers an intersection operating at acceptable LOS (i.e., LOS D or better) to operate at unacceptable LOS (i.e., LOS E or F). Where intersections are found to operate at unacceptable LOS, and the addition of project-generated traffic causes an exceedance of the City's criteria, improvements should be identified to increase performance to pre-project conditions under each scenario.

4.3 Analysis Scenarios

Pursuant to the City's Guidelines and in coordination with City staff, LOS calculations have been prepared for the following scenarios:

[a] Year 2023 Existing conditions.

[b] Year 2023 Existing with project conditions.

[c] Condition [a] plus 0.24 percent (0.24%) per year annual ambient traffic growth through year 2025 and with completion and occupancy of the related projects (i.e., future cumulative [opening year] without project conditions).

[d] Condition [c] with completion and occupancy of the proposed project.

[e] Condition [d] with implementation of intersection improvement measures, if necessary.

The weekday AM and PM peak hour LOS analysis prepared for the study intersections is summarized in ***Table 4-1***. The calculation data worksheets for the analyzed intersections are provided in *Appendix E*.

4.4 Year 2023 Existing Conditions

4.4.1 *Year 2023 Existing Conditions*

As indicated in column [1] of *Table 4-1*, all of the study intersections currently operate at LOS D or better during the weekday AM and PM peak hours. The existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 3–5* and *3–6*, respectively.

4.4.2 *Year 2023 Existing With Project Conditions*

As shown in column [2] of *Table 4-1*, application of the City's threshold criteria to the "Existing With Project" scenario indicates that the project-related effects in the delay at one of the study intersections is expected to exceed the City's threshold criteria as noted below:

- Int. No.1 – Colorado Avenue/Somerset Boulevard
  - AM Pk Hr: Delay incr. of 28.3 s/veh [to 63.1 s/veh (LOS F) from 34.8 s/veh (LOS D)]
  - PM Pk Hr: Delay incr. of 25.9 s/veh [to 48.9 s/veh (LOS E) from 23.0 s/veh (LOS C)]

Incremental delays, but not exceeding the City's criteria, are noted at the remaining study intersections. Refer to Section 4.7 for a discussion of improvement measures considered for this intersection. The existing with project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 4–1*** and ***4–2***, respectively.

4.5 Future Year 2025 Cumulative Conditions

4.5.1 *Future Year 2025 Cumulative Without Project Conditions*

The future year 2025 (opening year) cumulative baseline conditions were forecast based on the addition of traffic generated by the completion and occupancy of the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth). The delays at the study intersections are incrementally increased with the addition of ambient traffic and traffic generated by the related projects listed in *Table 3-3*.

Table 4-1
SUMMARY OF INTERSECTION OPERATIONAL ANALYSIS [a]
DELAYS AND LEVELS OF SERVICE
WEEKDAY AM AND PM PEAK HOURS

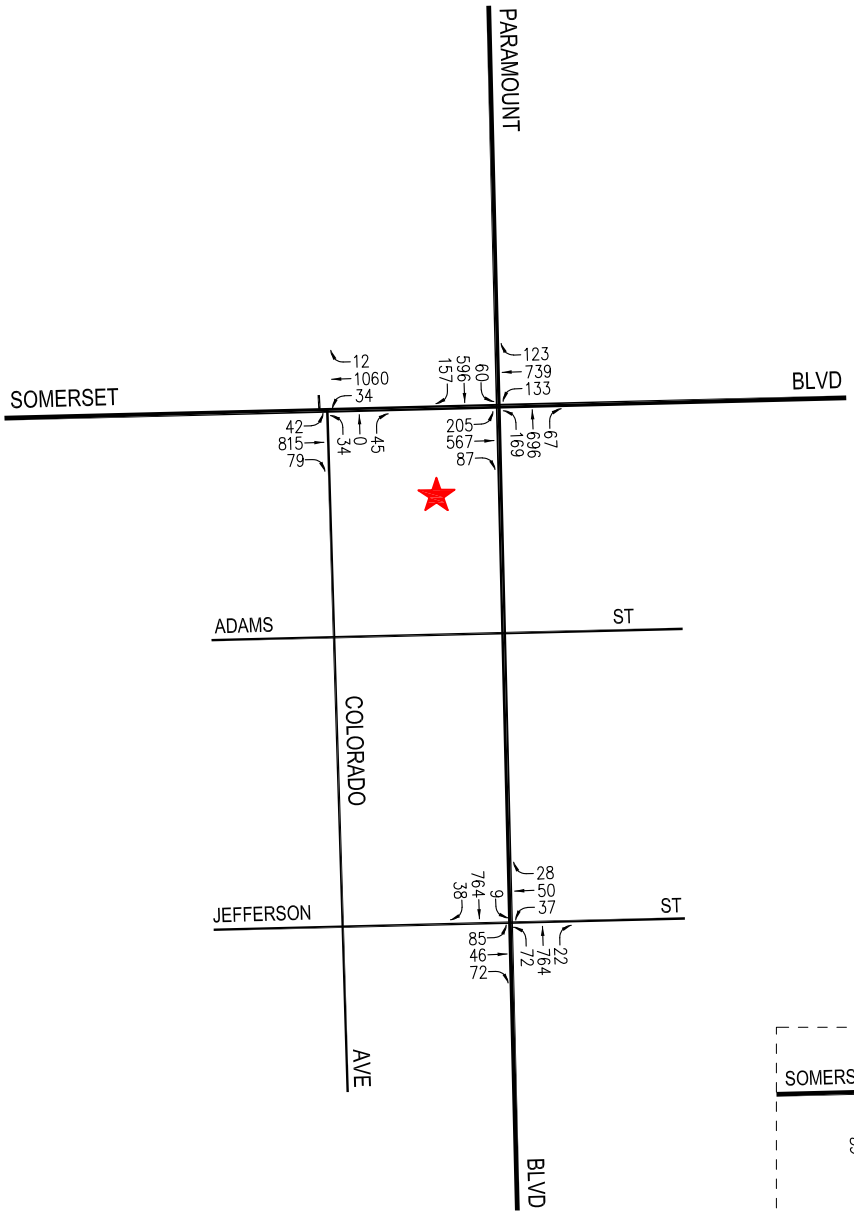
				[1]		[2]			[3]		[4]			[5]		
NO.	INTERSECTION	TRAFFIC CONTROL	PEAK HOUR	YEAR 2023 EXISTING Delay [b]	LOS [c]	EXISTING W/ PROJECT Delay [b]	LOS [c]	CHANGE Delay [b] [(2)-(1)]	YEAR 2025 FUTURE W/O PROJECT Delay [b]	LOS [c]	YEAR 2025 FUTURE W/ PROJECT Delay [b]	LOS [c]	CHANGE Delay [b] [(4)-(3)]	YEAR 2025 FUTURE W/PROJ. IMPROVEMENT Delay [b]	LOS [c]	CHANGE Delay [b] [(5)-(3)]
1	Colorado Avenue/	Unsignalized	AM	34.8	D	63.1	F	28.3	35.2	E	64.0	F	28.8	49.9	E	14.7
	Somerset Boulevard		PM	23.0	C	48.9	E	25.9	23.2	C	49.9	E	26.7	38.0	E	14.8
2	Paramount Boulevard/	Signalized	AM	41.3	D	45.4	D	4.1	41.8	D	46.1	D	4.3	46.1	D	4.3
	Somerset Boulevard		PM	34.5	C	37.2	D	2.7	34.8	C	37.6	D	2.8	37.6	D	2.8
3	Paramount Boulevard/	Signalized	AM	12.6	B	12.7	B	0.1	12.6	B	12.7	B	0.1	12.7	B	0.1
	Jefferson Street		PM	13.0	B	13.1	B	0.1	13.0	B	13.1	B	0.1	13.1	B	0.1
4	Paramount Boulevard/	Unsignalized	AM	--	--	11.5	B	--	--	--	11.6	B	11.6	11.6	B	11.6
	North Project Driveway		PM	--	--	11.4	B	--	--	--	11.5	B	11.5	11.5	B	11.5

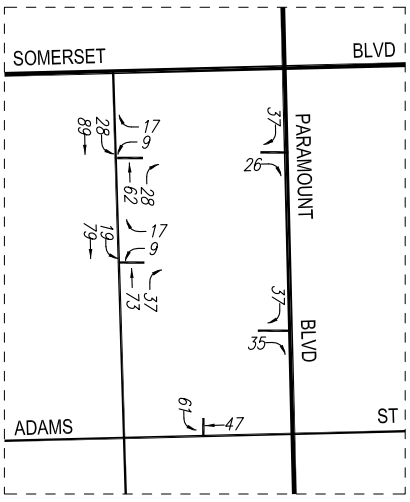
[a] Intersection analysis based on the Highway Capacity Manual, 6th Edition operational analysis methodologies.

[b] Reported control delay values in seconds per vehicle.

[c] Intersection Levels of Service are based on the following criteria:

Signalized Intersection Control Delay (s/veh)	Unsignalized Intersection Control Delay (s/veh)	LOS
<= 10	<= 10	A
> 10-20	> 10-15	B
> 20-35	> 15-25	C
> 35-55	> 25-35	D
> 55-80	> 35-50	E
> 80	> 50	F





PROJECT DRIVEWAY VOLUMES

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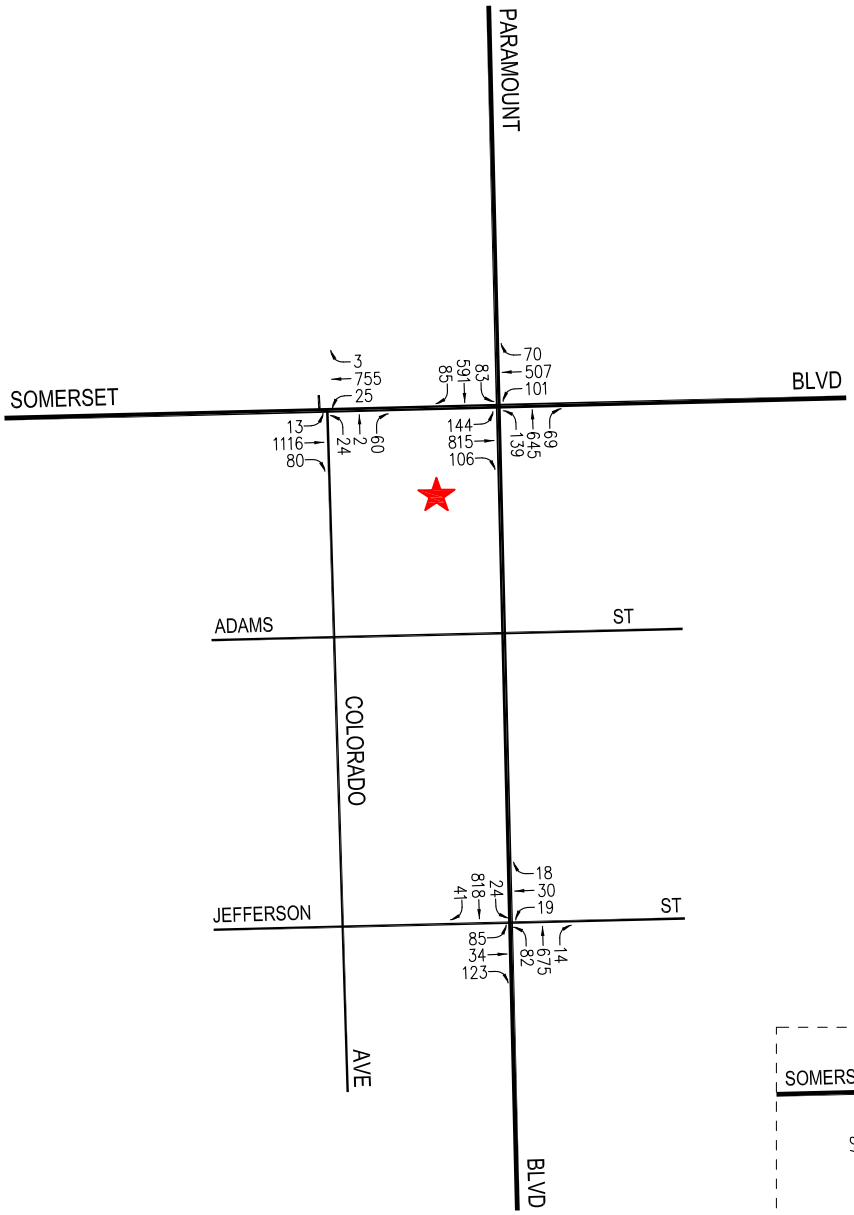
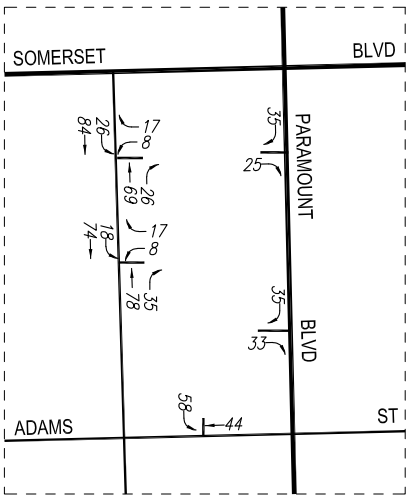
Project Site

LINSCOTT LAW & GREENSPAN engineers

Figure 4-1
Existing With Project Traffic Volumes
Weekday AM Peak Hour
15101 Paramount Project





PROJECT DRIVEWAY VOLUMES

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Project Site

LINSCOTT LAW & GREENSPAN engineers

Figure 4-2
Existing With Project Traffic Volumes
Weekday PM Peak Hour
15101 Paramount Project

As presented in column [3] of *Table 4-1*, three of four intersections are expected to operate at LOS D or better during the weekday AM and PM peak hours with the addition of growth in ambient traffic and related projects traffic under the future without project conditions. The following intersection is expected to operate at LOS E or F during the peak hours shown below with the addition of growth in ambient traffic and related projects traffic under the future without project conditions:

- Int. No. 1: Colorado Ave/Somerset Blvd. AM Peak Hour: Delay = 35.2 sec., LOS E
  PM Peak Hour: Delay = 23.2 sec., LOS C

The future year 2025 without project (existing plus ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 4–3*** and ***4–4***, respectively.

4.5.2 *Future Year 2025 Cumulative With Project Conditions*

As shown in column [4] of *Table 4-1*, application of the City's threshold criteria to the "Future Year 2025 With Project" scenario indicates that the project-related effects in the delay at one of the study intersections is expected to exceed the City's threshold criteria as noted below:

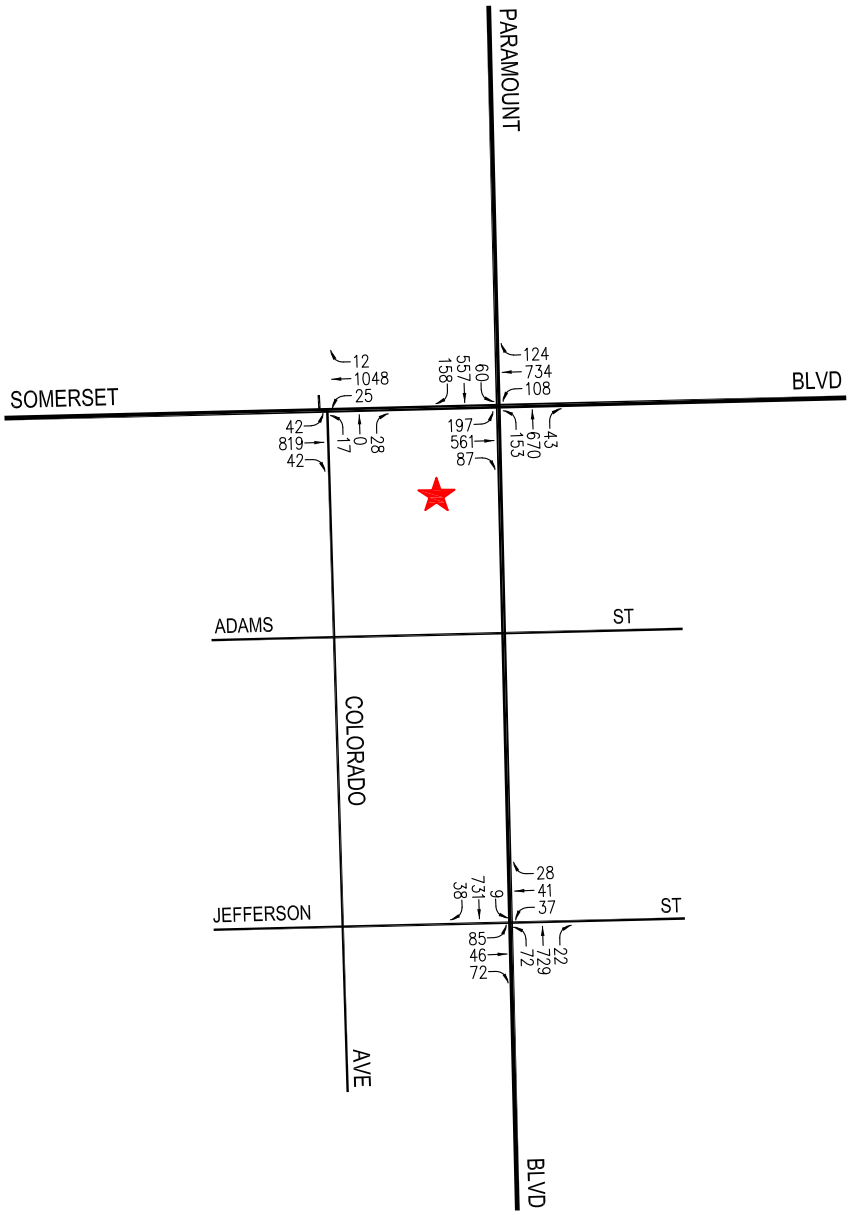
- Int. No.1 – Colorado Avenue/Somerset Boulevard
  - AM Pk Hr: Delay incr. of 28.8 s/veh [to 64.0 s/veh (LOS F) from 35.2 s/veh (LOS E)]
  - PM Pk Hr: Delay incr. of 26.7 s/veh [to 49.9 s/veh (LOS E) from 23.2 s/veh (LOS C)]

Incremental delays, but not exceeding the City's criteria, are noted at the remaining study intersections. Refer to Section 4.7 for a discussion of improvement measures considered for this intersection. The future year 2025 with project traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in in ***Figures 4–5*** and ***4–6***, respectively.

4.6 Access and Circulation Review

The access and circulation have been evaluated for the project. The analysis of Northerly Site Driveway on Paramount Boulevard was prepared based on the HCM operational analysis methodology. The driveway analyses were prepared utilizing the *Synchro 11* software package, which implements the Highway Capacity Manual operational methods. A *Synchro* network was created based on existing conditions field reviews at the site driveways. In addition, specifics such as traffic volume data, lane configurations, available vehicle storage lengths, crosswalk locations, posted speed limits, traffic signal timing and phasing for signalized locations, etc., were coded to complete the roadway network. Traffic volume data were obtained from manual counts conducted at the site driveways during the weekday morning and afternoon commute periods and are contained in *Appendix D*.

The operational analysis of vehicle queuing at the site driveway was prepared for the following conditions:



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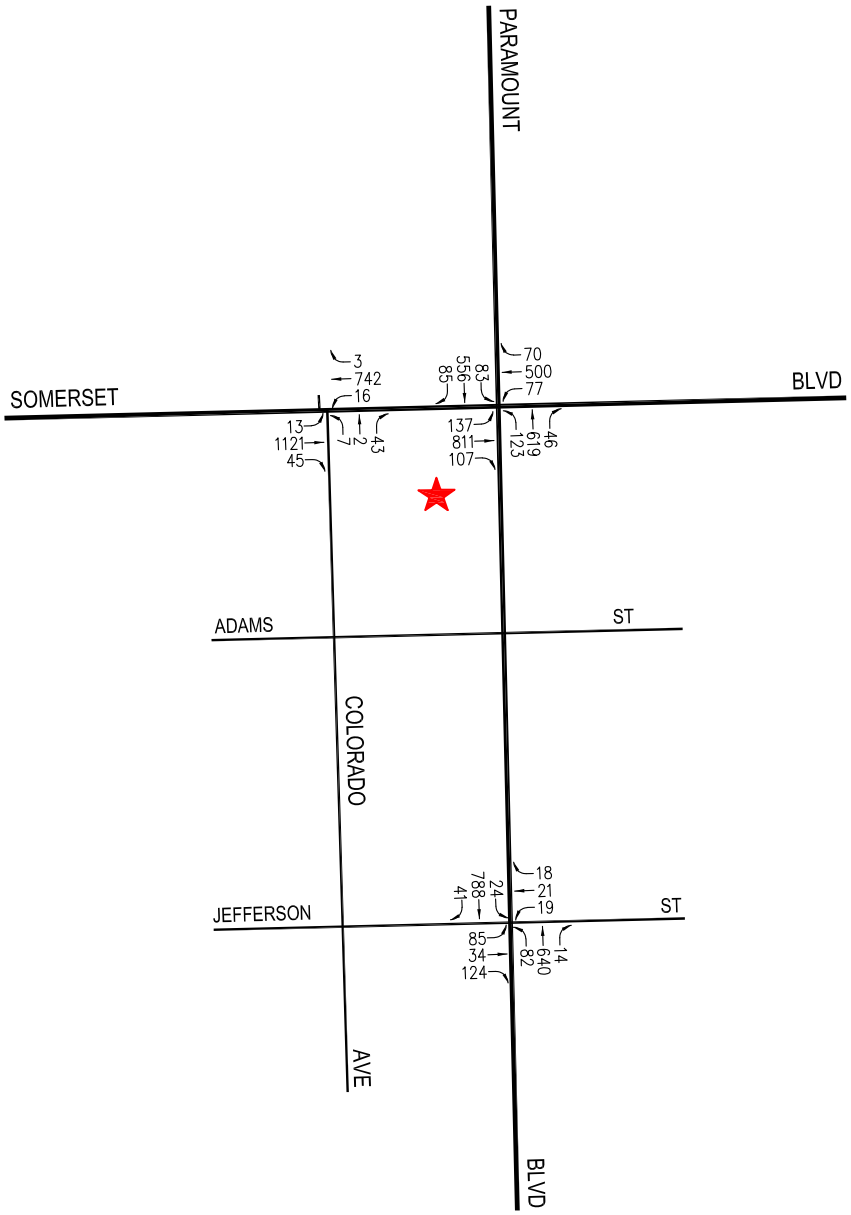
Project Site

Figure 4-3
Future Year 2025 Without Project Traffic Volumes
Weekday AM Peak Hour
15101 Paramount Project



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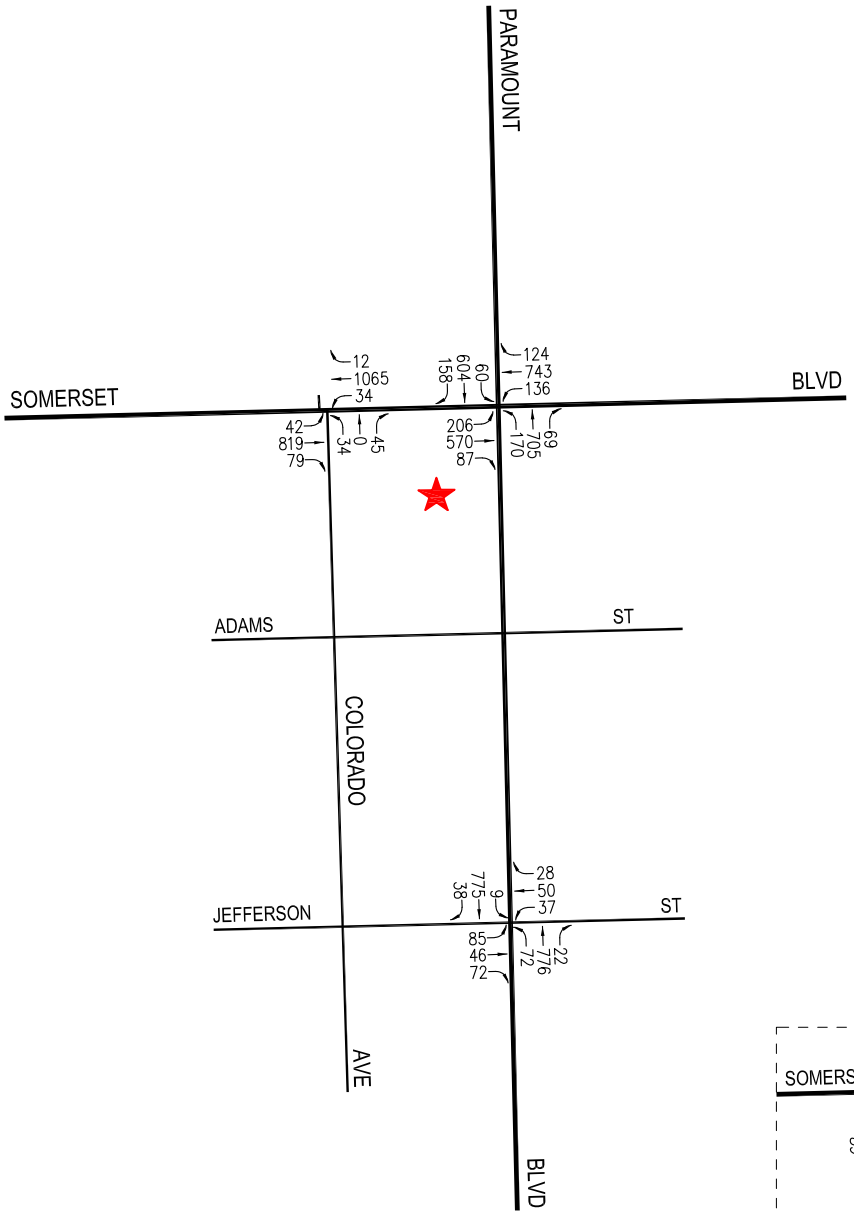
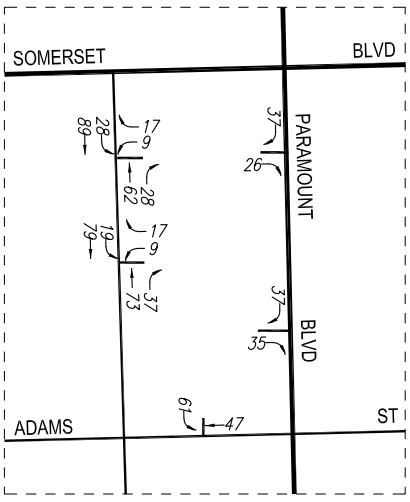
Project Site

Figure 4-4
Future Year 2025 Without Project Traffic Volumes
Weekday PM Peak Hour
15101 Paramount Project





PROJECT DRIVEWAY VOLUMES

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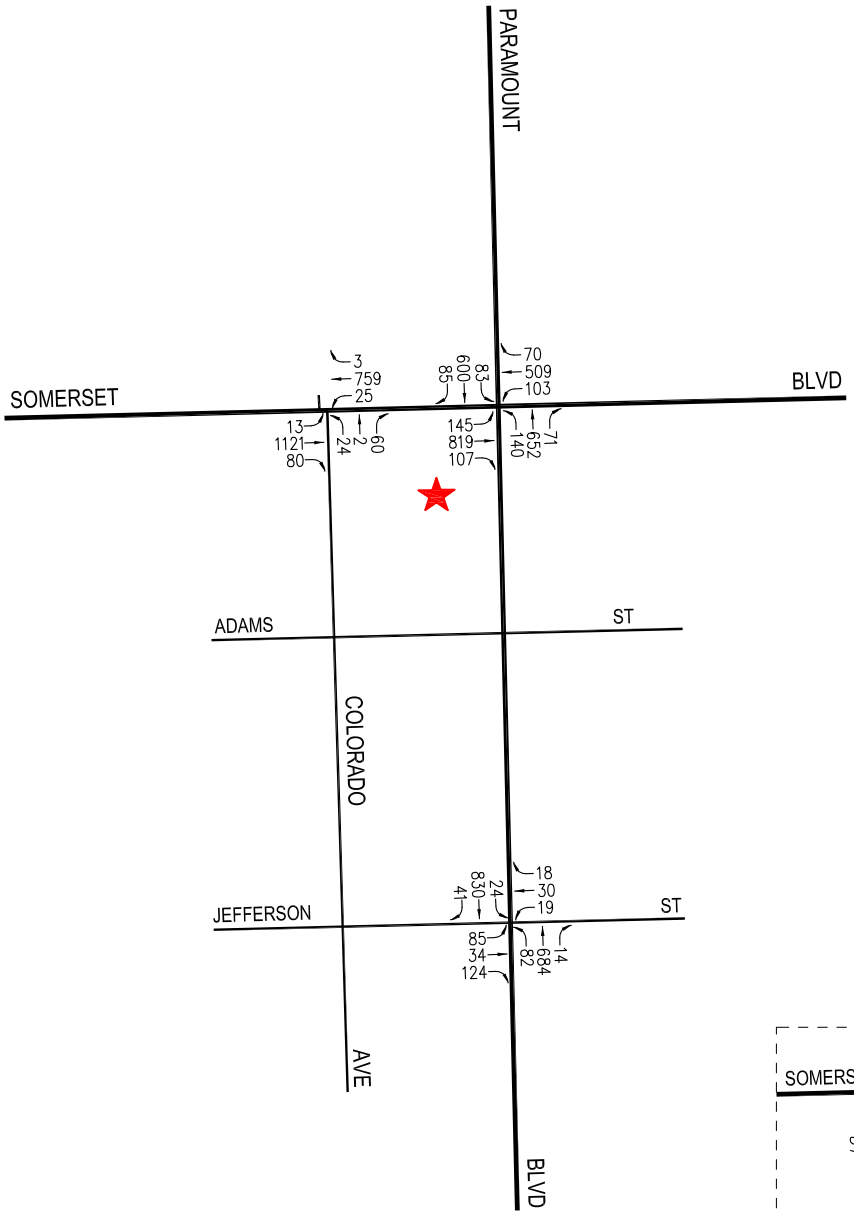
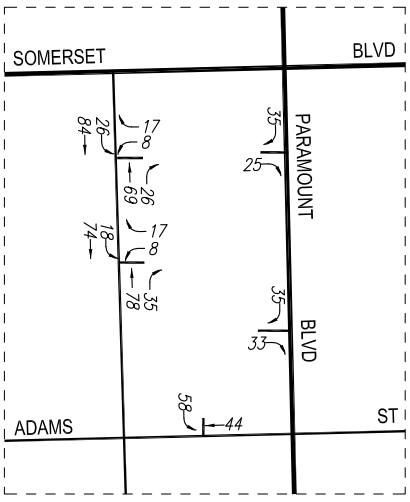
Project Site

Figure 4-5
Future Year 2025 With Project Traffic Volumes
Weekday AM Peak Hour
15101 Paramount Project





PROJECT DRIVEWAY VOLUMES

N

Project Site

Figure 4-6
Future Year 2025 With Project Traffic Volumes
Weekday PM Peak Hour
15101 Paramount Project

[a] Existing conditions.

[b] Condition [a] plus 0.24 percent (0.24%) annual ambient traffic growth through year 2025 (i.e., project build-out) and with completion and occupancy of the related projects (i.e., future without project conditions).

[c] Condition [b] with completion and occupancy of the proposed project (i.e., future with project conditions).

The HCM methodology for unsignalized intersections was utilized to calculate vehicle queuing. The operational analysis reports the 95th percentile queues (in feet) for the minor street approaches for the unsignalized intersections. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles. As such, an average vehicle length of 25 feet, which includes the length of the vehicle and spacing between vehicles, was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet. The summary of the operational analysis of the site driveway is provided in ***Table 4-2.*** As presented in *Table 4-2*, it is concluded the proposed project weekday AM and PM peak hour traffic volumes will not cause or substantially extend vehicle queuing at the site driveway. The HCM methodology worksheets for the site driveway are contained in ***Appendix E***.

4.7 Non-CEQA Transportation (Operational) Measures

Physical improvement measures were reviewed for the Colorado Avenue/Somerset Boulevard intersection in an effort to reduce the previously identified forecast project-related effects during the weekday AM and PM peak hours. The potential physical improvement measure is described below.

- Installation of a Northbound Right-Turn Only Lane

  The previously identified forecast project-related effects at the Colorado Avenue/Somerset Boulevard intersection during the weekday AM and PM peak hours could be reduced via the installation of a right-turn only lane for the northbound Colorado Avenue approach to Somerset Boulevard with the resulting approach lane configurations consisting of one shared left-turn/through lane and one right-turn only lane. With this measure, the overall delay and LOS at the intersection would be improved substantially (i.e., with expected improvements in delay in Year 2025 Cumulative conditions from 64.0 s/veh [LOS F] to 49.9 s/veh [LOS E] during the AM peak hour and from 49.9 s/veh [LOS E] to 38.0 s/veh [LOS E] during the PM peak hour).

Several measures are also recommended to enhance site access and circulation. The following traffic management measures are recommended to facilitate access to and from the planned project site:

Table 4-2
SUMMARY OF VEHICLE QUEUING [1]
WEEKDAY AM AND PM PEAK HOURS

NO.	DRIVEWAY	TRAFFIC CONTROL	MOVEMENT	PEAK HOUR	95th PERCENTILE QUEUES (FEET PER LANE) [2]					
					EXISTING	YEAR 2023 EXISTING WITH PROJECT	CHANGE IN QUEUE [3]	YEAR 2025 FUTURE W/O PROJECT	YEAR 2025 FUTURE W/ PROJECT	CHANGE IN QUEUE [3]
1	Project Driveway/ Paramount Boulevard	Unsignalized	EBR	AM	0	5	5	0	5	5
				PM	0	3	3	0	3	3
			SBR	AM	0	0	0	0	0	0
				PM	0	0	0	0	0	0

[1] Pursuant to LA County Public Works' *Transportation Impact Analysis Guidelines* , July 2020, the Highway Capacity Manual (HCM) methodology for intersections was utilized to calculate vehicle queuing.

[2] The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The HCM 6th Edition methodology worksheets report queues in number of vehicles per lane, however an average vehicle length of 25 feet was assumed for analysis purposes. The reported queues therefore represent the calculated maximum back of queue in feet per lane.

[3] Represents the change in calculated maximum back of queue (in feet per lane) due to the addition of project-related traffic.

- Install appropriate pavement markings (i.e., stop bar with STOP legend) on the project site exit drive aisles to ensure that motorists stop prior to the sidewalk before exiting the site.

- Install a STOP sign facing the project site exit drive aisles to further ensure that motorists stop prior to the sidewalk before exiting the site.

4.8 Transportation Demand Management Measures

Transportation Demand Management (TDM) measures when implemented are expected to decrease the number of vehicular trips generated by persons traveling to the site by offering specific facilities, services and actions designed to increase the use of alternative transportation modes (e.g., transit, rail, walking, bicycling, carpool, etc.). TDM measures can be very effective especially given the proximity to the existing nearby transit corridors and opportunities. The TDM measures are aimed at providing opportunities to reduce parking demand and automobile dependency, as well as to promote alternative travel modes.

Below are some potential TDM measures that are applicable for the project.

- Provide a bulletin board, display case or kiosk displaying transportation information located where the greatest number of employees are likely to see it (e.g., main travel paths, central elevator banks, lobby, etc.). Information in the area shall include, but is not limited to, the following:

    - Current maps, routes and schedules for public transit routes serving the site

    - Bicycle route and facility information, including regional/local bicycle maps and bicycle safety information

- Provide sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development. Install a pedestrian wayfinding program directing employees and visitors to/from the project site and public bus and rail transit lines, as well as to the project site and parking facilities.

- Provide short and long-term bicycle parking for employees and visitors to support safe and comfortable bicycle travel. Short-term bicycle parking typically consists of bicycle racks. Long-term bicycle parking consists of fully enclosed spaces accessible only to the owner or operator of the bicycle, which protects the bike from inclement weather, and typically consists of bicycle lockers, bicycle rooms, or bicycle cages.

5.0 SUMMARY AND CONCLUSIONS

- ***Project Description*** - The proposed project site is located at 15101 Paramount Boulevard in the City of Paramount. The proposed project consists of the development of a 23,256 square-foot grocery store (Building 1), a 2,760 square-foot Chick-fil-A restaurant with dual drive through service queuing lanes (Building 2), and a 2,400 square-foot coffee shop with drive-through service lane (Building 3). The project build-out and occupancy year is anticipated by the year 2025.

- ***Project Site Access***– Vehicular access to the project site will be accommodated via two driveways on Colorado Avenue, two right-turn only driveways on Paramount Boulevard, and the existing exit-only alleyway on Adams Street.

- ***Project Parking –*** A total of 109 parking spaces is planned to be provided for the project. In addition, the project will provide 11 short-term bicycle parking spaces and eight (8) secure long-term bicycle parking spaces.

- ***Project Service-Window Queuing*** – The proposed Chick-fil-A restaurant is planned to accommodate up to 35 vehicles in dual-loaded drive-through service lanes. Based on empirical observations at existing Chick-fil-A restaurants, a maximum queue of 22 vehicles is forecast for the proposed restaurant. Therefore, it is expected that the proposed Chick-fil-A service-lane queue storage area will adequately accommodate the forecast maximum vehicle queue. The proposed Starbucks restaurant is planned to accommodate up to 16 vehicles in the drive-through service lane. Utilizing empirical drive-through utilization and service rate data collected at existing Starbucks, a maximum queue of 10 vehicles is forecast for the proposed restaurant. Therefore, it is expected that the proposed Starbucks service-lane queue storage area will adequately accommodate the forecast maximum vehicle queue.

- ***Project Trip Generation*** – The proposed project is expected to generate 360 net new vehicle trips (186 inbound trips and 174 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 342 net new vehicle trips (175 inbound trips and 167 outbound trips). Over a 24-hour period, the proposed project is forecast to generate 4,366 net daily trip ends during a typical weekday (2,183 inbound trips and 2,183 outbound trips).

- ***Intersection Operational Analysis*** – Four intersections, including the proposed project driveway, were reviewed for consistency with the City of Paramount's adopted Level of Service (LOS) standards. The study intersections were evaluated using the City-approved Highway Capacity Manual (HCM) methodology to determine the LOS under existing and future year 2025 cumulative without and with project conditions. Based on application of the City's threshold criteria, project-related effects in the delay at the Colorado Avenue/Somerset Boulevard is forecast to exceed the City's threshold criteria. An improvement measure is proposed at the Colorado

Avenue/Somerset Boulevard intersection in an effort to reduce the identified forecast project-related effects during the weekday AM and PM peak hours.

APPENDIX A

SCOPING DOCUMENT

MEMORANDUM

To:	John King City of Paramount Planning Department	Date:	April 26, 2023
From:	Francesca S. Bravo Linscott, Law & Greenspan, Engineers	LLG Ref:	1-23-4544-1
Subject:	15101 Paramount Boulevard Project – Transportation Assessment Scope of Work		

LINSCOTT LAW & GREENSPAN engineers

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San Diego

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit the following Transportation Assessment Scope of Work for the 15101 Paramount Boulevard for your review and approl9val.

Transportation Assessment Scope of Work

A. Project Location: The project site is located at 15101 Paramount Boulevard. The project site is bounded by Somerset Boulevard to the north, Adams Street to the south, Paramount Boulevard to the east, and Colorado Avenue to the west. The project site is currently occupied by a 22,724 square-foot Ace Hardware Store and Lindsay Lumber. All structures will be removed to accommodate the proposed project. See attached ***Figure 1-1, Vicinity Map***.

B. Project Description: The proposed project consists of the development of a 23,336 square-foot grocery store (Building 1), a 2,760 square-foot Chick-fil-A restaurant with dual drive through service queuing lanes (Building 2), and a 1,600 square-foot fast casual restaurant and 1,400 square-foot coffee shop with drive-through service lane (Building 3). The proposed project is planned to provide a total of 153 vehicular parking spaces. Vehicular access to the project site will be accommodated via two driveways on Colorado Avenue, two right-turn only driveways on Paramount Boulevard, and the existing alleyway on Adams Street. The project build-out and occupancy year is anticipated by the year 2025. See attached ***Figure 2-2 – Site Plan***.

C. Project Traffic Generation: Traffic volumes to be generated by the proposed project were forecast for the weekday AM and PM peak hours, and over a 24-hour period. Trip generation rates provided in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*[1] were utilized to forecast project traffic generation for the proposed project. Traffic volumes expected to be generated by the proposed project were based upon rates per 1,000 square feet. Trip generation average rates for the following uses were used to forecast the traffic volumes expected to be generated by the proposed project:

- ITE Land Use Code 850: Supermarket
- ITE Land Use Code 930: Fast Casual Restaurant

[1] Institute of Transportation Engineers *Trip Generation Manual*, 11th Edition, Washington, D.C., 2021.

- ITE Land Use Code 934: Fast-Food Restaurant with Drive-Through
- ITE Land Use Code 937: Coffee Shop with Drive Through

In addition to the proposed project trip generation forecasts, forecasts were also made for the existing, active land use on the project site. ITE Land Use Code 812 Building Materials and Lumber Store trip generation average rates were used to forecast expected traffic generation for the existing, active land uses on-site.

The trip generation forecast for the proposed project is summarized in ***Table 2-1***. As presented in *Table 2-1*, the proposed project is expected to generate 192 net new vehicle trips (98 inbound trips and 94 outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is expected to generate 204 net new vehicle trips (107 inbound trips and 97 outbound trips). Over a 24-hour period, the proposed project is forecast to generate 2,575 net daily trip ends during a typical weekday (1,288 inbound trips and 1,288 outbound trips).

C. VMT Assessment: It is understood that the City of Paramount has not formally adopted VMT methodology, screening criteria, or thresholds for VMT analysis of land use development projects within its jurisdiction. It is further understood that the City intends to generally follow the methodology set forth in the Los Angeles County Public Works Transportation Impact Guidelines (dated July 23, 2020).

Consistent with the recommendations provided by the Governor's Office of Planning and Research (OPR) in the "Technical Advisory on Evaluating Transportation Impacts in CEQA" (December 2018), the County's Guidelines recognize four screening criteria which may be applied to screen proposed projects out of detailed VMT analysis. The guidelines provide the following four (4) types of potential screening criteria that may be applied to screen projects from project-level assessment:

- Non-Retail Project Trip Generation Screening
- Retail Project Site Plan Screening
- Proximity to Transit Based Screening
- Residential Land Use Screening

Proposed projects are not required to satisfy all of the screening criteria in order to screen out of further VMT analysis; satisfaction of one criterion is sufficient for screening purposes. Projects, or project components, which are screened out of detailed VMT assessment based on these criteria are presumed to have less than significant transportation impacts.

Based on a review of the project's development program, size, and other pertinent factors, it was determined that the City's screening criteria may be applied to the proposed project. Specifically, the "Retail Project Site Plan" screening criterion is applicable to the proposed project. The following section provides a detailed review of the application of the screening criteria to the proposed project.

Retail Project Site Plan Screening Criteria

New local serving retail development typically redistributes shopping trips rather than creating new ones. By adding retail opportunities into the urban fabric and improving retail destination proximity, local serving retail developments tend to shorten trips and reduce VMT, and may be presumed to cause less than significant impacts. Consistent with OPR's guidance, the County assumes that retail projects of any type which are less than 50,000 square feet may be considered local serving retail.

Therefore, Section 3.1.2.2 of the County Guidelines states: "A project that contains a local serving retail use is assumed to have less than significant VMT impacts for the retail portion of the project. If the answer to the following question is no, a less than significant determination can be made for the portion of the project that contains retail uses.

- Does the project contain retail uses that exceed 50,000 square feet of gross floor area?"

The proposed project consists of the development of a total of 29,096 square-feet of building area (i.e., 23,336 SF supermarket + 2,760 SF fast-food restaurant with drive-through + 1,400 Sf coffee shop with drive-through + 1,600 fast casual restaurant = 29,096 SF). The proposed land use type is identified by County Guidelines as a retail land use, and the size of the overall project is well below 50,000 square feet. Therefore, the answer to the screening question is "No." The proposed project satisfies the criteria to be considered a local serving use and is screened out of further VMT analysis as it is presumed to cause less than significant transportation impacts. A separate VMT screening memorandum will be prepared for the project for review and approval.

D. Site Access Studies:

The following three (3) locations have been identified for evaluation. See attached *Figure 1-1 –Vicinity Map.* The existing traffic control of each study location is presented below.

1. Colorado Avenue/Somerset Boulevard/ (Unsignalized)
2. Paramount Boulevard/Somerset Boulevard (Signalized)
3. Paramount Boulevard/Jefferson Street (Signalized)

LINSCOTT LAW & GREENSPAN engineers

Level of Service calculations will be prepared for the study locations for the weekday AM and PM peak hour conditions for the following scenarios:

- Existing conditions
- Opening Year Without Project (Year 2025) conditions
- Opening Year With Project (Year 2025) conditions

Utilize City approved capacity analysis methodologies (i.e., Highway Capacity Manual method) for the Level of Service calculations. The results of these analyses will be reviewed in order to determine the project's effect on LOS at nearby intersections.

Pending your review of the above information, we will proceed with the transportation assessment. Please feel free to contact us at 626.796.2322 if you have any questions, comments, or suggested revisions regarding the above. Thank you.

Approved by:

John Cavet

City of Paramount

5-1-23

Date

Attachments

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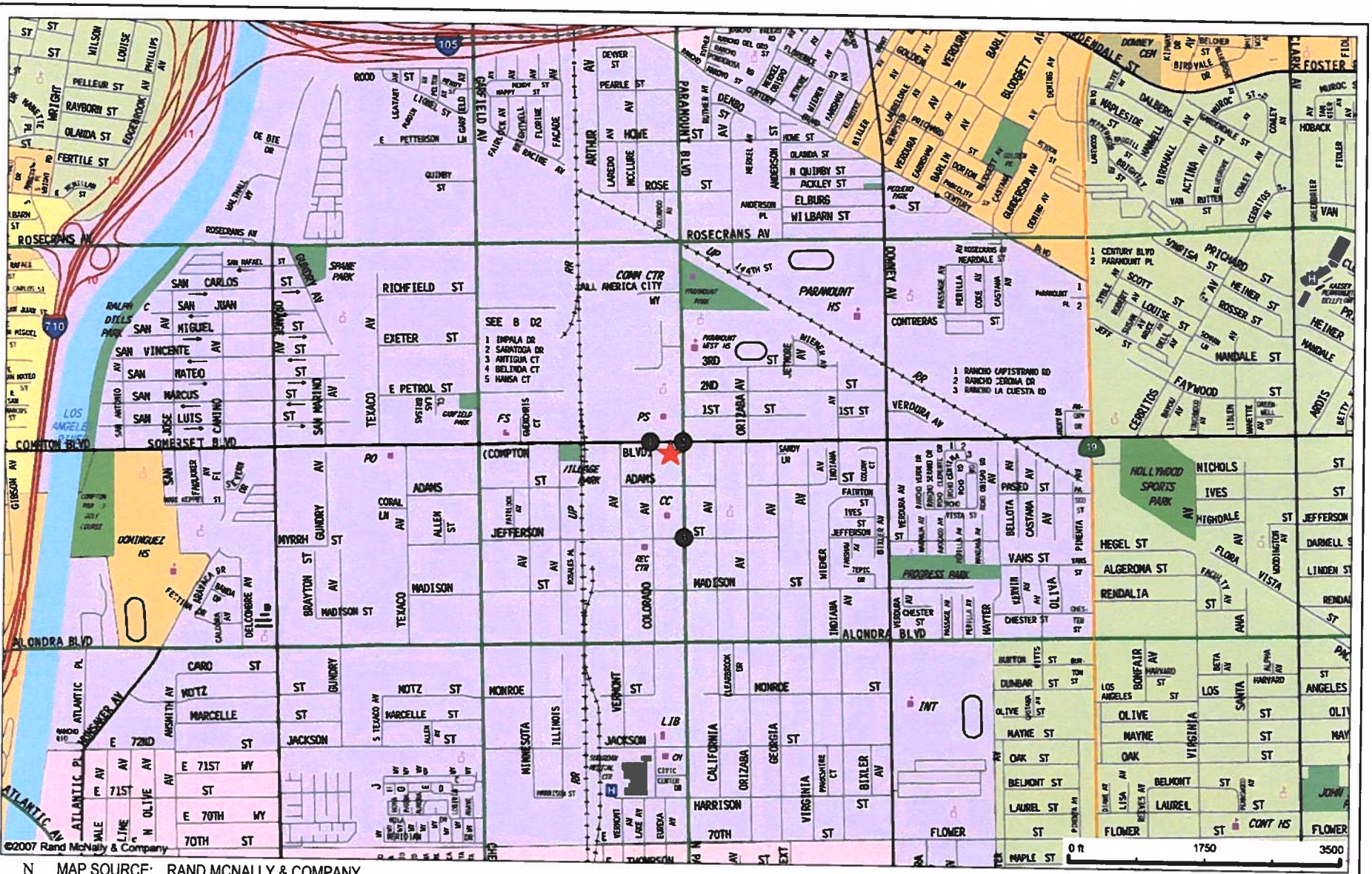

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MAP SOURCE: RAND MCNALLY & COMPANY

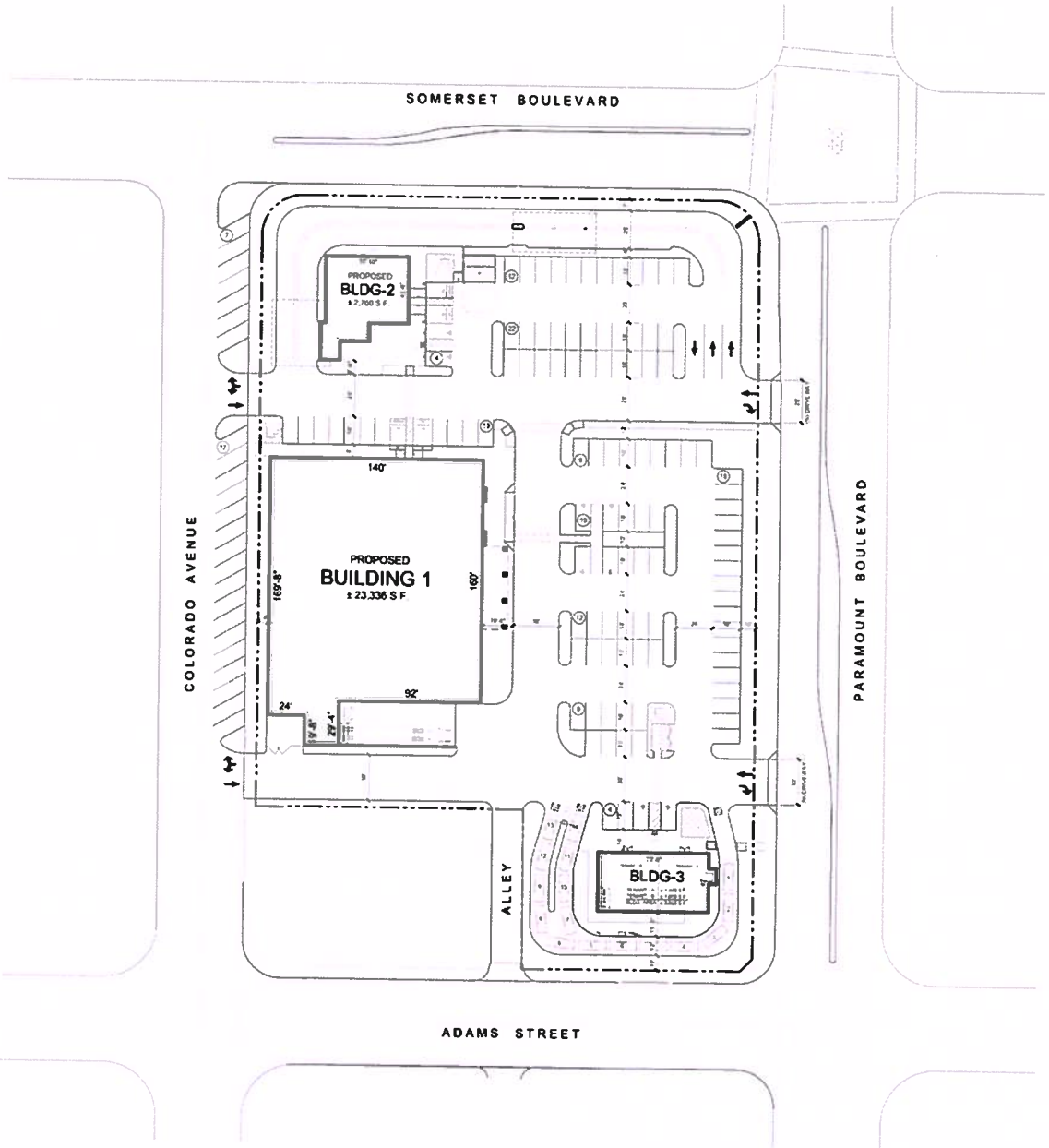
LINSCOTT LAW & GREENSPAN Engineers

★ Project Site

● Study Intersection

Figure 1-1
Vicinity Map

15101 Paramount Project



SOURCE: MMA ACHITECTURE

LINSCOTT LAW & GREENSPAN engineers

Figure 2-2
Conceptual Site Plan

15101 Paramount Project

Table 2-1
PROJECT TRIP GENERATION FORECAST

TRIP GENERATION RATES [1]									
ITE LAND USE CATEGORY	ITE LAND USE CODE	VARIABLE	WEEKDAY DAILY	WEEKDAY AM PEAK HOUR			WEEKDAY PM PEAK HOUR		
				IN (%)	OUT (%)	TOTAL	IN (%)	OUT (%)	TOTAL
Building Materials and Lumber Store	812	Per 1,000 SF	17.05	62%	38%	1.59	46%	54%	2.25
Supermarket	850	Per 1,000 SF	93.84	59%	41%	2.86	50%	50%	8.95
Fast Casual Restaurant	930	Per 1,000 SF	97.14	50%	50%	1.43	55%	45%	12.55
Fast-Food Restaurant with Drive-Through Window	934	Per 1,000 SF	467.48	51%	49%	44.61	52%	48%	33.03
Coffee Shop with Drive-Through Window	937	Per 1,000 SF	533.57	51%	49%	85.88	50%	50%	38.99

PROJECT TRIP GENERATION FORECAST									
LAND USE	ITE LAND USE CODE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
				IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Project									
Supermarket	850	23,336 GSF	2,190	40	27	67	105	104	209
- Less Pass-by (36%) [3]			(788)	(14)	(10)	(24)	(38)	(37)	(75)
Fast Casual Restaurant	930	1,600 GSF	155	1	1	2	11	9	20
Fast-Food Restaurant with Drive-Through Window	934	2,760 GSF	1,290	63	60	123	47	44	91
- Less Pass-by (49%) [3]			(632)	(31)	(29)	(60)	(23)	(22)	(45)
Coffee Shop with Drive-Through Window	937	1,400 GSF	747	61	59	120	28	27	55
Subtotal Proposed Project			***2,962***	***120***	***108***	***228***	***130***	***125***	***255***
Existing Uses									
Building Materials and Lumber Store	812	(22,724) GSF	(387)	(22)	(14)	(36)	(23)	(28)	(51)
Subtotal Existing Uses			***(387)***	***(22)***	***(14)***	***(36)***	***(23)***	***(28)***	***(51)***
NET NEW PROJECT TRIPS			***2,575***	***98***	***94***	***192***	***107***	***97***	***204***

[1] Source: ITE "Trip Generation Manual", 11th Edition, 2021.
[2] Trips are one-way traffic movements, entering or leaving.
[3] Sources: ITE "Trip Generation Manual", 11th Edition, 2021 and ITE "Trip Generation Handbook", 3rd Edition, 2017. Pass-by trips are made as intermediate stops o way from an origin to a primary destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that off direct access to the site. Pursuant to ITE guidelines, pass-by adjustments were applied after the transit and internal capture adjustments were applied.

APPENDIX B

CHICK-FIL-A DRIVE-THROUGH QUEUING DATA

Location Irvine Chick-Fil-A
DATE 12/9/2021

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	0	1	1
7:05 AM	1	0	1
7:10 AM	0	0	0
7:15 AM	1	0	1
7:20 AM	0	0	0
7:25 AM	0	1	1
7:30 AM	0	0	0
7:35 AM	1	2	3
7:40 AM	2	1	3
7:45 AM	3	3	6
7:50 AM	3	2	5
7:55 AM	3	2	5
8:00 AM	2	2	4
8:05 AM	3	0	3
8:10 AM	2	2	4
8:15 AM	2	2	4
8:20 AM	3	1	4
8:25 AM	0	1	1
8:30 AM	1	2	3
8:35 AM	2	2	4
8:40 AM	2	3	5
8:45 AM	2	4	6
8:50 AM	3	1	4
8:55 AM	1	2	3
11:00 AM	0	0	0
11:05 AM	0	0	0
11:10 AM	7	1	8
11:15 AM	5	3	8
11:20 AM	5	4	9
11:25 AM	3	0	3
11:30 AM	5	4	9
11:35 AM	6	0	6
11:40 AM	5	2	7
11:45 AM	6	5	11
11:50 AM	7	7	14
11:55 AM	7	9	16
12:00 PM	6	11	17
12:05 PM	7	10	17
12:10 PM	7	10	17
12:15 PM	7	6	13
12:20 PM	7	12	19
12:25 PM	7	12	19
12:30 PM	7	12	19
12:35 PM	7	14	21
12:40 PM	7	6	13
12:45 PM	7	9	16
12:50 PM	7	10	17
12:55 PM	7	16	23
1:00 PM	7	16	23
1:05 PM	7	16	23
1:10 PM	7	16	23
1:15 PM	7	6	13
1:20 PM	7	7	14
1:25 PM	7	6	13
1:30 PM	7	11	18
1:35 PM	7	12	19
1:40 PM	7	14	21
1:45 PM	7	10	17
1:50 PM	7	16	23
1:55 PM	7	15	22
4:00 PM	6	11	17
4:05 PM	5	14	19
4:10 PM	7	15	22
4:15 PM	5	7	12
4:20 PM	7	8	15
4:25 PM	5	7	12
4:30 PM	4	14	18
4:35 PM	4	9	13
4:40 PM	8	11	19
4:45 PM	7	11	18
4:50 PM	7	10	17
4:55 PM	7	15	22
5:00 PM	8	13	21
5:05 PM	4	6	10
5:10 PM	6	12	18
5:15 PM	5	9	14
5:20 PM	7	11	18
5:25 PM	3	7	10
5:30 PM	6	14	20
5:35 PM	7	14	21
5:40 PM	4	15	19
5:45 PM	5	8	13
5:50 PM	8	16	24
5:55 PM	6	12	18
6:00 PM	5	11	16
6:05 PM	4	11	15
6:10 PM	10	14	24
6:15 PM	2	6	8
6:20 PM	10	14	24
6:25 PM	5	10	15
6:30 PM	9	18	27
6:35 PM	4	13	17
6:40 PM	8	11	19
6:45 PM	10	17	27
6:50 PM	6	11	17
6:55 PM	10	15	25
7:00 PM	9	11	20
7:05 PM	7	17	24
7:10 PM	8	16	24
7:15 PM	6	14	20
7:20 PM	9	15	24
7:25 PM	7	11	18
7:30 PM	9	11	20
7:35 PM	5	10	15
7:40 PM	6	10	16
7:45 PM	5	9	14
7:50 PM	4	8	12
7:55 PM	4	8	12

Location Irvine Chick-Fil-A
DATE 12/10/2021

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	2	5	7
7:05 AM	3	3	6
7:10 AM	3	8	11
7:15 AM	3	4	7
7:20 AM	2	6	8
7:25 AM	4	8	12
7:30 AM	3	3	6
7:35 AM	4	8	12
7:40 AM	3	4	7
7:45 AM	1	3	4
7:50 AM	1	2	3
7:55 AM	5	8	13
8:00 AM	3	7	10
8:05 AM	3	5	8
8:10 AM	4	8	12
8:15 AM	3	8	11
8:20 AM	5	8	13
8:25 AM	4	8	12
8:30 AM	5	7	12
8:35 AM	7	14	21
8:40 AM	0	3	3
8:45 AM	3	5	8
8:50 AM	5	9	14
8:55 AM	5	8	13
11:00 AM	4	8	12
11:05 AM	3	8	11
11:10 AM	4	8	12
11:15 AM	6	12	18
11:20 AM	4	6	10
11:25 AM	6	13	19
11:30 AM	5	13	18
11:35 AM	7	11	18
11:40 AM	6	15	21
11:45 AM	7	14	21
11:50 AM	5	16	21
11:55 AM	4	11	15
12:00 PM	4	10	14
12:05 PM	3	7	10
12:10 PM	5	5	10
12:15 PM	4	10	14
12:20 PM	7	10	17
12:25 PM	5	13	18
12:30 PM	7	10	17
12:35 PM	5	13	18
12:40 PM	3	14	17
12:45 PM	7	11	18
12:50 PM	9	12	21
12:55 PM	5	10	15
1:00 PM	7	9	16
1:05 PM	4	8	12
1:10 PM	8	11	19
1:15 PM	6	12	18
1:20 PM	10	17	27
1:25 PM	7	9	16
1:30 PM	7	15	22
1:35 PM	6	14	20
1:40 PM	10	16	26
1:45 PM	6	12	18
1:50 PM	6	12	18
1:55 PM	2	6	8
4:00 PM	4	10	14
4:05 PM	3	5	8
4:10 PM	3	4	7
4:15 PM	5	8	13
4:20 PM	3	9	12
4:25 PM	4	6	10
4:30 PM	4	9	13
4:35 PM	5	12	17
4:40 PM	6	8	14
4:45 PM	6	11	17
4:50 PM	4	8	12
4:55 PM	4	9	13
5:00 PM	7	8	15
5:05 PM	2	8	10
5:10 PM	4	12	16
5:15 PM	10	15	25
5:20 PM	8	14	22
5:25 PM	4	15	19
5:30 PM	8	9	17
5:35 PM	8	13	21
5:40 PM	6	13	19
5:45 PM	5	13	18
5:50 PM	6	15	21
5:55 PM	8	15	23
6:00 PM	6	13	19
6:05 PM	7	10	17
6:10 PM	7	11	18
6:15 PM	5	6	11
6:20 PM	4	11	15
6:25 PM	4	14	18
6:30 PM	8	9	17
6:35 PM	8	13	21
6:40 PM	6	13	19
6:45 PM	5	9	14
6:50 PM	7	9	16
6:55 PM	5	13	18
7:00 PM	6	9	15
7:05 PM	5	12	17
7:10 PM	5	13	18
7:15 PM	7	10	17
7:20 PM	7	16	23
7:25 PM	9	13	22
7:30 PM	5	10	15
7:35 PM	5	11	16
7:40 PM	5	13	18
7:45 PM	4	11	15
7:50 PM	11	16	27
7:55 PM	5	10	15

Location Irvine Chick-Fil-A
DATE 12/11/2021

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	0	1	1
7:05 AM	1	1	2
7:10 AM	1	2	3
7:15 AM	1	1	2
7:20 AM	3	5	8
7:25 AM	2	1	3
7:30 AM	0	1	1
7:35 AM	2	4	6
7:40 AM	2	4	6
7:45 AM	3	4	7
7:50 AM	0	1	1
7:55 AM	2	3	5
8:00 AM	1	3	4
8:05 AM	1	2	3
8:10 AM	4	6	10
8:15 AM	4	8	12
8:20 AM	3	5	8
8:25 AM	1	4	5
8:30 AM	4	10	14
8:35 AM	2	4	6
8:40 AM	2	3	5
8:45 AM	4	9	13
8:50 AM	2	2	4
8:55 AM	4	5	9
11:00 AM	3	3	6
11:05 AM	3	3	6
11:10 AM	3	10	13
11:15 AM	4	7	11
11:20 AM	4	6	10
11:25 AM	3	11	14
11:30 AM	5	17	22
11:35 AM	4	10	14
11:40 AM	2	9	11
11:45 AM	2	4	6
11:50 AM	9	11	20
11:55 AM	7	14	21
12:00 PM	4	7	11
12:05 PM	8	16	24
12:10 PM	4	13	17
12:15 PM	3	9	12
12:20 PM	8	10	18
12:25 PM	4	14	18
12:30 PM	2	6	8
12:35 PM	6	11	17
12:40 PM	5	8	13
12:45 PM	5	12	17
12:50 PM	5	14	19
12:55 PM	5	8	13
1:00 PM	3	13	16
1:05 PM	5	13	18
1:10 PM	8	9	17
1:15 PM	4	9	13
1:20 PM	7	12	19
1:25 PM	4	10	14
1:30 PM	6	14	20
1:35 PM	6	13	19
1:40 PM	5	10	15
1:45 PM	8	13	21
1:50 PM	11	16	27
1:55 PM	7	15	22
4:00 PM	4	10	14
4:05 PM	6	9	15
4:10 PM	6	10	16
4:15 PM	8	12	20
4:20 PM	3	5	8
4:25 PM	4	4	8
4:30 PM	4	6	10
4:35 PM	4	6	10
4:40 PM	3	8	11
4:45 PM	4	13	17
4:50 PM	2	9	11
4:55 PM	4	8	12
5:00 PM	1	4	5
5:05 PM	5	9	14
5:10 PM	4	5	9
5:15 PM	3	12	15
5:20 PM	5	9	14
5:25 PM	4	11	15
5:30 PM	3	4	7
5:35 PM	5	7	12
5:40 PM	5	8	13
5:45 PM	2	6	8
5:50 PM	5	7	12
5:55 PM	6	7	13
6:00 PM	4	3	7
6:05 PM	4	7	11
6:10 PM	4	3	7
6:15 PM	4	10	14
6:20 PM	4	11	15
6:25 PM	3	5	8
6:30 PM	2	6	8
6:35 PM	4	13	17
6:40 PM	4	7	11
6:45 PM	4	11	15
6:50 PM	4	9	13
6:55 PM	6	7	13
7:00 PM	4	4	8
7:05 PM	5	5	10
7:10 PM	4	9	13
7:15 PM	3	5	8
7:20 PM	5	10	15
7:25 PM	5	7	12
7:30 PM	5	11	16
7:35 PM	5	7	12
7:40 PM	3	7	10
7:45 PM	7	9	16
7:50 PM	6	12	18
7:55 PM	6	15	21

Location SJC Chick-Fil-A
DATE 12/9/2021

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	0	0	0
7:05 AM	1	1	2
7:10 AM	5	4	9
7:15 AM	3	4	7
7:20 AM	1	1	2
7:25 AM	2	2	4
7:30 AM	1	0	1
7:35 AM	2	2	4
7:40 AM	1	2	3
7:45 AM	3	4	7
7:50 AM	2	1	3
7:55 AM	0	0	0
8:00 AM	2	1	3
8:05 AM	4	6	10
8:10 AM	1	0	1
8:15 AM	1	1	2
8:20 AM	2	2	4
8:25 AM	4	4	8
8:30 AM	4	3	7
8:35 AM	1	2	3
8:40 AM	0	0	0
8:45 AM	4	4	8
8:50 AM	1	1	2
8:55 AM	1	1	2
11:00 AM	3	6	9
11:05 AM	5	2	7
11:10 AM	5	4	9
11:15 AM	5	5	10
11:20 AM	2	2	4
11:25 AM	5	8	13
11:30 AM	7	7	14
11:35 AM	7	9	16
11:40 AM	7	7	14
11:45 AM	3	4	7
11:50 AM	8	8	16
11:55 AM	7	7	14
12:00 PM	7	7	14
12:05 PM	5	12	17
12:10 PM	5	6	11
12:15 PM	12	6	18
12:20 PM	8	9	17
12:25 PM	13	8	21
12:30 PM	9	8	17
12:35 PM	6	7	13
12:40 PM	9	13	22
12:45 PM	5	12	17
12:50 PM	5	6	11
12:55 PM	13	5	18
1:00 PM	8	5	13
1:05 PM	7	8	15
1:10 PM	5	9	14
1:15 PM	8	11	19
1:20 PM	6	10	16
1:25 PM	10	5	15
1:30 PM	8	5	13
1:35 PM	7	9	16
1:40 PM	6	6	12
1:45 PM	6	7	13
1:50 PM	2	4	6
1:55 PM	8	1	9
4:00 PM	7	10	17
4:05 PM	3	0	3
4:10 PM	5	6	11
4:15 PM	5	6	11
4:20 PM	3	3	6
4:25 PM	7	5	12
4:30 PM	4	4	8
4:35 PM	3	4	7
4:40 PM	4	3	7
4:45 PM	5	5	10
4:50 PM	3	10	13
4:55 PM	5	5	10
5:00 PM	6	7	13
5:05 PM	5	6	11
5:10 PM	7	6	13
5:15 PM	8	5	13
5:20 PM	8	7	15
5:25 PM	4	7	11
5:30 PM	6	3	9
5:35 PM	5	5	10
5:40 PM	6	5	11
5:45 PM	4	3	7
5:50 PM	4	5	9
5:55 PM	5	3	8
6:00 PM	4	7	11
6:05 PM	5	4	9
6:10 PM	6	15	21
6:15 PM	7	5	12
6:20 PM	5	5	10
6:25 PM	6	4	10
6:30 PM	4	4	8
6:35 PM	5	5	10
6:40 PM	6	9	15
6:45 PM	4	5	9
6:50 PM	6	4	10
6:55 PM	4	5	9
7:00 PM	6	4	10
7:05 PM	6	4	10
7:10 PM	6	7	13
7:15 PM	6	5	11
7:20 PM	5	7	12
7:25 PM	5	6	11
7:30 PM	4	5	9
7:35 PM	4	2	6
7:40 PM	7	3	10
7:45 PM	5	9	14
7:50 PM	5	1	6
7:55 PM	1	3	4

Location SJC Chick-Fil-A
DATE 12/10/2021

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	0	0	0
7:05 AM	0	0	0
7:10 AM	1	1	2
7:15 AM	1	1	2
7:20 AM	0	0	0
7:25 AM	2	1	3
7:30 AM	0	1	1
7:35 AM	3	3	6
7:40 AM	4	4	8
7:45 AM	1	1	2
7:50 AM	1	1	2
7:55 AM	3	2	5
8:00 AM	3	5	8
8:05 AM	2	1	3
8:10 AM	3	3	6
8:15 AM	1	1	2
8:20 AM	2	2	4
8:25 AM	3	3	6
8:30 AM	2	1	3
8:35 AM	4	5	9
8:40 AM	3	4	7
8:45 AM	2	1	3
8:50 AM	3	3	6
8:55 AM	2	2	4
11:00 AM	3	4	7
11:05 AM	5	4	9
11:10 AM	4	4	8
11:15 AM	8	8	16
11:20 AM	5	6	11
11:25 AM	4	8	12
11:30 AM	8	7	15
11:35 AM	3	8	11
11:40 AM	10	6	16
11:45 AM	7	2	9
11:50 AM	6	8	14
11:55 AM	6	4	10
12:00 PM	6	6	12
12:05 PM	6	14	20
12:10 PM	8	8	16
12:15 PM	7	8	15
12:20 PM	11	12	23
12:25 PM	12	7	19
12:30 PM	11	15	26
12:35 PM	13	9	22
12:40 PM	11	12	23
12:45 PM	8	6	14
12:50 PM	10	6	16
12:55 PM	12	9	21
1:00 PM	9	11	20
1:05 PM	9	8	17
1:10 PM	9	14	23
1:15 PM	8	8	16
1:20 PM	10	8	18
1:25 PM	7	8	15
1:30 PM	7	6	13
1:35 PM	9	7	16
1:40 PM	5	4	9
1:45 PM	4	6	10
1:50 PM	6	4	10
1:55 PM	5	4	9
4:00 PM	7	7	14
4:05 PM	2	7	9
4:10 PM	6	2	8
4:15 PM	6	6	12
4:20 PM	6	4	10
4:25 PM	5	8	13
4:30 PM	6	5	11
4:35 PM	5	9	14
4:40 PM	8	2	10
4:45 PM	4	8	12
4:50 PM	5	7	12
4:55 PM	8	3	11
5:00 PM	3	2	5
5:05 PM	3	4	7
5:10 PM	4	3	7
5:15 PM	5	6	11
5:20 PM	5	4	9
5:25 PM	4	4	8
5:30 PM	4	5	9
5:35 PM	6	5	11
5:40 PM	4	6	10
5:45 PM	4	4	8
5:50 PM	5	6	11
5:55 PM	5	6	11
6:00 PM	4	6	10
6:05 PM	4	8	12
6:10 PM	5	3	8
6:15 PM	8	7	15
6:20 PM	7	9	16
6:25 PM	7	8	15
6:30 PM	4	5	9
6:35 PM	7	1	8
6:40 PM	5	6	11
6:45 PM	10	6	16
6:50 PM	7	8	15
6:55 PM	6	7	13
7:00 PM	8	10	18
7:05 PM	4	6	10
7:10 PM	4	5	9
7:15 PM	6	1	7
7:20 PM	5	1	6
7:25 PM	3	5	8
7:30 PM	5	7	12
7:35 PM	5	8	13
7:40 PM	6	2	8
7:45 PM	6	8	14
7:50 PM	8	7	15
7:55 PM	4	6	10

Location SJC Chick-Fil-A
DATE 12/11/2021

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	0	0	0
7:05 AM	1	1	2
7:10 AM	3	3	6
7:15 AM	1	1	2
7:20 AM	0	0	0
7:25 AM	2	2	4
7:30 AM	2	2	4
7:35 AM	4	4	8
7:40 AM	1	1	2
7:45 AM	0	0	0
7:50 AM	2	2	4
7:55 AM	1	1	2
8:00 AM	2	4	6
8:05 AM	3	1	4
8:10 AM	2	2	4
8:15 AM	1	1	2
8:20 AM	2	2	4
8:25 AM	1	1	2
8:30 AM	1	0	1
8:35 AM	3	4	7
8:40 AM	0	0	0
8:45 AM	0	0	0
8:50 AM	1	1	2
8:55 AM	2	3	5
11:00 AM	5	3	8
11:05 AM	6	6	12
11:10 AM	2	4	6
11:15 AM	7	7	14
11:20 AM	7	6	13
11:25 AM	3	3	6
11:30 AM	5	5	10
11:35 AM	6	6	12
11:40 AM	6	6	12
11:45 AM	6	7	13
11:50 AM	6	3	9
11:55 AM	5	6	11
12:00 PM	4	5	9
12:05 PM	4	10	14
12:10 PM	9	8	17
12:15 PM	9	7	16
12:20 PM	8	3	11
12:25 PM	5	13	18
12:30 PM	7	5	12
12:35 PM	7	8	15
12:40 PM	6	5	11
12:45 PM	5	8	13
12:50 PM	7	5	12
12:55 PM	9	2	11
1:00 PM	4	4	8
1:05 PM	4	6	10
1:10 PM	7	6	13
1:15 PM	5	8	13
1:20 PM	4	8	12
1:25 PM	5	6	11
1:30 PM	7	5	12
1:35 PM	8	6	14
1:40 PM	10	7	17
1:45 PM	3	7	10
1:50 PM	7	9	16
1:55 PM	2	5	7
4:00 PM	6	5	11
4:05 PM	3	2	5
4:10 PM	3	5	8
4:15 PM	3	2	5
4:20 PM	0	0	0
4:25 PM	3	4	7
4:30 PM	3	2	5
4:35 PM	0	2	2
4:40 PM	3	3	6
4:45 PM	1	2	3
4:50 PM	4	8	12
4:55 PM	1	2	3
5:00 PM	3	5	8
5:05 PM	3	5	8
5:10 PM	2	5	7
5:15 PM	4	3	7
5:20 PM	4	4	8
5:25 PM	5	9	14
5:30 PM	3	3	6
5:35 PM	5	6	11
5:40 PM	4	0	4
5:45 PM	3	2	5
5:50 PM	4	4	8
5:55 PM	5	8	13
6:00 PM	3	4	7
6:05 PM	5	7	12
6:10 PM	5	6	11
6:15 PM	6	4	10
6:20 PM	5	5	10
6:25 PM	4	1	5
6:30 PM	6	5	11
6:35 PM	4	6	10
6:40 PM	6	7	13
6:45 PM	7	6	13
6:50 PM	8	3	11
6:55 PM	1	2	3
7:00 PM	3	5	8
7:05 PM	2	3	5
7:10 PM	1	1	2
7:15 PM	4	4	8
7:20 PM	2	6	8
7:25 PM	6	2	8
7:30 PM	2	1	3
7:35 PM	6	7	13
7:40 PM	4	4	8
7:45 PM	7	8	15
7:50 PM	6	3	9
7:55 PM	4	3	7

File Q2112021
DATE 12/16/2021
Location Chic-fil-A-Yucaipa

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	6	2	8
7:05 AM	1	2	3
7:10 AM	3	1	4
7:15 AM	1	3	4
7:20 AM	2	1	3
7:25 AM	2	2	4
7:30 AM	2	5	7
7:35 AM	4	2	6
7:40 AM	2	7	9
7:45 AM	4	2	6
7:50 AM	1	3	4
7:55 AM	0	5	5
8:00 AM	4	7	11
8:05 AM	6	0	6
8:10 AM	5	0	5
8:15 AM	6	5	11
8:20 AM	4	3	7
8:25 AM	2	4	6
8:30 AM	4	0	4
8:35 AM	2	6	8
8:40 AM	4	2	6
8:45 AM	3	3	6
8:50 AM	2	4	6
8:55 AM	4	3	7
11:00 AM	6	10	16
11:05 AM	8	5	13
11:10 AM	7	4	11
11:15 AM	3	11	14
11:20 AM	5	5	10
11:25 AM	5	4	9
11:30 AM	11	11	22
11:35 AM	9	10	19
11:40 AM	0	4	4
11:45 AM	6	7	13
11:50 AM	5	5	10
11:55 AM	5	5	10
12:00 PM	11	8	19
12:05 PM	10	13	23
12:10 PM	7	6	13
12:15 PM	6	6	12
12:20 PM	8	8	16
12:25 PM	8	8	16
12:30 PM	13	10	23
12:35 PM	8	9	17
12:40 PM	12	14	26
12:45 PM	11	9	20
12:50 PM	8	8	16
12:55 PM	5	6	11
1:00 PM	5	6	11
1:05 PM	7	5	12
1:10 PM	8	8	16
1:15 PM	7	7	14
1:20 PM	4	6	10
1:25 PM	11	11	22
1:30 PM	8	6	14
1:35 PM	8	9	17
1:40 PM	8	9	17
1:45 PM	13	7	20
1:50 PM	6	8	14
1:55 PM	7	7	14
4:00 PM	8	3	11
4:05 PM	8	2	10
4:10 PM	2	6	8
4:15 PM	5	6	11
4:20 PM	4	8	12
4:25 PM	5	3	8
4:30 PM	6	2	8
4:35 PM	5	9	14
4:40 PM	4	4	8
4:45 PM	6	6	12
4:50 PM	4	5	9
4:55 PM	5	6	11
5:00 PM	6	10	16
5:05 PM	5	8	13
5:10 PM	0	4	4
5:15 PM	9	6	15
5:20 PM	5	4	9
5:25 PM	7	7	14
5:30 PM	4	5	9
5:35 PM	6	5	11
5:40 PM	9	9	18
5:45 PM	7	7	14
5:50 PM	5	6	11
5:55 PM	7	8	15
6:00 PM	6	4	10
6:05 PM	5	4	9
6:10 PM	7	9	16
6:15 PM	9	10	19
6:20 PM	4	5	9
6:25 PM	8	8	16
6:30 PM	3	1	4
6:35 PM	9	11	20
6:40 PM	5	6	11
6:45 PM	8	7	15
6:50 PM	5	7	12
6:55 PM	15	12	27
7:00 PM	8	7	15
7:05 PM	6	7	13
7:10 PM	3	3	6
7:15 PM	5	6	11
7:20 PM	12	12	24
7:25 PM	7	5	12
7:30 PM	8	11	19
7:35 PM	10	6	16
7:40 PM	12	11	23
7:45 PM	7	5	12
7:50 PM	11	7	18
7:55 PM	5	5	10

File Q2112021
DATE 12/17/2021
Location Chic-fil-A-Yucaipa

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	4	3	7
7:05 AM	4	0	4
7:10 AM	2	6	8
7:15 AM	5	3	8
7:20 AM	3	4	7
7:25 AM	1	3	4
7:30 AM	1	1	2
7:35 AM	5	2	7
7:40 AM	3	2	5
7:45 AM	2	3	5
7:50 AM	2	1	3
7:55 AM	1	4	5
8:00 AM	3	3	6
8:05 AM	2	3	5
8:10 AM	3	4	7
8:15 AM	4	6	10
8:20 AM	3	6	9
8:25 AM	5	4	9
8:30 AM	3	4	7
8:35 AM	2	3	5
8:40 AM	5	4	9
8:45 AM	6	3	9
8:50 AM	5	3	8
8:55 AM	3	2	5
11:00 AM	11	6	17
11:05 AM	11	11	22
11:10 AM	6	6	12
11:15 AM	5	6	11
11:20 AM	5	8	13
11:25 AM	5	11	16
11:30 AM	9	7	16
11:35 AM	3	7	10
11:40 AM	8	7	15
11:45 AM	13	11	24
11:50 AM	10	9	19
11:55 AM	8	10	18
12:00 PM	5	4	9
12:05 PM	4	9	13
12:10 PM	11	8	19
12:15 PM	9	7	16
12:20 PM	8	9	17
12:25 PM	8	8	16
12:30 PM	6	7	13
12:35 PM	6	4	10
12:40 PM	13	15	28
12:45 PM	5	6	11
12:50 PM	10	6	16
12:55 PM	8	10	18
1:00 PM	9	12	21
1:05 PM	6	6	12
1:10 PM	7	6	13
1:15 PM	11	10	21
1:20 PM	9	10	19
1:25 PM	7	6	13
1:30 PM	15	16	31
1:35 PM	6	5	11
1:40 PM	12	11	23
1:45 PM	7	7	14
1:50 PM	8	9	17
1:55 PM	8	7	15
4:00 PM	8	3	11
4:05 PM	2	4	6
4:10 PM	4	3	7
4:15 PM	9	5	14
4:20 PM	3	0	3
4:25 PM	5	9	14
4:30 PM	3	4	7
4:35 PM	5	7	12
4:40 PM	4	8	12
4:45 PM	5	3	8
4:50 PM	7	2	9
4:55 PM	6	4	10
5:00 PM	7	5	12
5:05 PM	6	7	13
5:10 PM	3	8	11
5:15 PM	4	9	13
5:20 PM	6	7	13
5:25 PM	4	6	10
5:30 PM	3	3	6
5:35 PM	8	6	14
5:40 PM	8	9	17
5:45 PM	9	9	18
5:50 PM	10	8	18
5:55 PM	8	8	16
6:00 PM	0	2	2
6:05 PM	4	4	8
6:10 PM	6	7	13
6:15 PM	8	7	15
6:20 PM	15	9	24
6:25 PM	4	7	11
6:30 PM	7	7	14
6:35 PM	6	7	13
6:40 PM	7	9	16
6:45 PM	7	6	13
6:50 PM	6	7	13
6:55 PM	11	11	22
7:00 PM	6	5	11
7:05 PM	9	5	14
7:10 PM	6	7	13
7:15 PM	8	7	15
7:20 PM	8	4	12
7:25 PM	7	9	16
7:30 PM	5	5	10
7:35 PM	6	4	10
7:40 PM	9	2	11
7:45 PM	6	4	10
7:50 PM	3	4	7
7:55 PM	3	8	11

File Q2112021
DATE 12/18/2021
Location Chic-fil-A-Yucaipa

	Queue Pick-Up to Order Board	Total Line Queue Order Board Back	Total Queue
7:00 AM	1	0	1
7:05 AM	1	2	3
7:10 AM	2	2	4
7:15 AM	2	2	4
7:20 AM	1	0	1
7:25 AM	0	2	2
7:30 AM	2	1	3
7:35 AM	1	0	1
7:40 AM	2	5	7
7:45 AM	1	2	3
7:50 AM	4	4	8
7:55 AM	4	3	7
8:00 AM	1	3	4
8:05 AM	4	2	6
8:10 AM	3	2	5
8:15 AM	3	3	6
8:20 AM	2	5	7
8:25 AM	2	1	3
8:30 AM	5	4	9
8:35 AM	2	3	5
8:40 AM	2	5	7
8:45 AM	3	3	6
8:50 AM	4	3	7
8:55 AM	3	4	7
11:00 AM		3	3
11:05 AM		4	4
11:10 AM		7	7
11:15 AM		10	10
11:20 AM		6	6
11:25 AM		4	4
11:30 AM		7	7
11:35 AM		7	7
11:40 AM		7	7
11:45 AM		6	6
11:50 AM		6	6
11:55 AM		6	6
12:00 PM		4	4
12:05 PM		6	6
12:10 PM		5	5
12:15 PM		10	10
12:20 PM		7	7
12:25 PM		7	7
12:30 PM		7	7
12:35 PM		5	5
12:40 PM		5	5
12:45 PM		9	9
12:50 PM		11	11
12:55 PM		6	6
1:00 PM		7	7
1:05 PM		10	10
1:10 PM		11	11
1:15 PM		7	7
1:20 PM		9	9
1:25 PM		9	9
1:30 PM		4	4
1:35 PM		8	8
1:40 PM		7	7
1:45 PM		6	6
1:50 PM		6	6
1:55 PM		5	5
4:00 PM	5	7	12
4:05 PM	7	7	14
4:10 PM	9	7	16
4:15 PM	8	6	14
4:20 PM	10	3	13
4:25 PM	1	6	7
4:30 PM	9	5	14
4:35 PM	9	8	17
4:40 PM	8	4	12
4:45 PM	6	1	7
4:50 PM	2	8	10
4:55 PM	5	8	13
5:00 PM	2	6	8
5:05 PM	6	7	13
5:10 PM	1	4	5
5:15 PM	11	11	22
5:20 PM	7	6	13
5:25 PM	7	6	13
5:30 PM	10	10	20
5:35 PM	5	2	7
5:40 PM	5	4	9
5:45 PM	3	8	11
5:50 PM	8	6	14
5:55 PM	3	7	10
6:00 PM	9	7	16
6:05 PM	6	5	11
6:10 PM	3	5	8
6:15 PM	6	7	13
6:20 PM	3	3	6
6:25 PM	7	9	16
6:30 PM	5	4	9
6:35 PM	7	8	15
6:40 PM	4	5	9
6:45 PM	6	6	12
6:50 PM	9	5	14
6:55 PM	7	9	16
7:00 PM	8	8	16
7:05 PM	5	4	9
7:10 PM	6	6	12
7:15 PM	4	7	11
7:20 PM	5	5	10
7:25 PM	6	3	9
7:30 PM	9	10	19
7:35 PM	8	4	12
7:40 PM	8	7	15
7:45 PM	4	3	7
7:50 PM	5	5	10
7:55 PM	7	2	9

APPENDIX C

STARBUCKS DRIVE-THROUGH QUEUING DATA

Queue Study

Location: 9702 Lower Azusa Rd
City: El Monte, CA

Date: 4/2/2019
Day: Tuesday

Time:	TOTAL
06:00 AM	0
06:05 AM	1
06:10 AM	0
06:15 AM	1
06:20 AM	1
06:25 AM	4
06:30 AM	0
06:35 AM	1
06:40 AM	1
06:45 AM	3
06:50 AM	4
06:55 AM	3
07:00 AM	5
07:05 AM	2
07:10 AM	1
07:15 AM	2
07:20 AM	3
07:25 AM	3
07:30 AM	6
07:35 AM	1
07:40 AM	2
07:45 AM	4
07:50 AM	4
07:55 AM	1
08:00 AM	1
08:05 AM	2
08:10 AM	4
08:15 AM	2
08:20 AM	1
08:25 AM	3
08:30 AM	2
08:35 AM	2
08:40 AM	1
08:45 AM	2
08:50 AM	2
08:55 AM	2
09:00 AM	2
03:00 PM	3
03:05 PM	1
03:10 PM	1
03:15 PM	0
03:20 PM	0
03:25 PM	0
03:30 PM	1
03:35 PM	2
03:40 PM	0
03:45 PM	0
03:50 PM	0
03:55 PM	0
04:00 PM	0
04:05 PM	0
04:10 PM	0
04:15 PM	0
04:20 PM	0
04:25 PM	0
04:30 PM	0
04:35 PM	1
04:40 PM	1
04:45 PM	2
04:50 PM	1
04:55 PM	0
05:00 PM	0
05:05 PM	1
05:10 PM	0
05:15 PM	2
05:20 PM	2
05:25 PM	1
05:30 PM	0
05:35 PM	0
05:40 PM	3
05:45 PM	0
05:50 PM	0
05:55 PM	0
06:00 PM	0

Queue Study

Location: 10613 Garvey Ave
City: El Monte, CA

Date: 4/2/2019
Day: Tuesday

Time:	TOTAL
06:00 AM	2
06:05 AM	0
06:10 AM	2
06:15 AM	0
06:20 AM	4
06:25 AM	1
06:30 AM	3
06:35 AM	0
06:40 AM	7
06:45 AM	8
06:50 AM	5
06:55 AM	4
07:00 AM	5
07:05 AM	7
07:10 AM	6
07:15 AM	4
07:20 AM	4
07:25 AM	3
07:30 AM	1
07:35 AM	5
07:40 AM	12
07:45 AM	9
07:50 AM	2
07:55 AM	1
08:00 AM	3
08:05 AM	4
08:10 AM	3
08:15 AM	6
08:20 AM	1
08:25 AM	6
08:30 AM	5
08:35 AM	6
08:40 AM	2
08:45 AM	10
08:50 AM	8
08:55 AM	9
09:00 AM	7
03:00 PM	2
03:05 PM	1
03:10 PM	3
03:15 PM	2
03:20 PM	0
03:25 PM	0
03:30 PM	0
03:35 PM	0
03:40 PM	0
03:45 PM	1
03:50 PM	3
03:55 PM	0
04:00 PM	2
04:05 PM	3
04:10 PM	1
04:15 PM	1
04:20 PM	0
04:25 PM	2
04:30 PM	2
04:35 PM	1
04:40 PM	2
04:45 PM	0
04:50 PM	0
04:55 PM	1
05:00 PM	1
05:05 PM	1
05:10 PM	0
05:15 PM	1
05:20 PM	1
05:25 PM	0
05:30 PM	1
05:35 PM	0
05:40 PM	1
05:45 PM	2
05:50 PM	0
05:55 PM	0
06:00 PM	0

Queue Study

Location: 10737 Beverly Blvd
City: Whittier, CA

Date: 4/2/2019
Day: Tuesday

Time:	TOTAL
06:00 AM	5
06:05 AM	2
06:10 AM	4
06:15 AM	5
06:20 AM	4
06:25 AM	3
06:30 AM	4
06:35 AM	4
06:40 AM	7
06:45 AM	3
06:50 AM	6
06:55 AM	3
07:00 AM	10
07:05 AM	5
07:10 AM	9
07:15 AM	6
07:20 AM	6
07:25 AM	8
07:30 AM	10
07:35 AM	12
07:40 AM	9
07:45 AM	11
07:50 AM	9
07:55 AM	10
08:00 AM	8
08:05 AM	12
08:10 AM	10
08:15 AM	10
08:20 AM	9
08:25 AM	11
08:30 AM	12
08:35 AM	7
08:40 AM	5
08:45 AM	6
08:50 AM	5
08:55 AM	5
09:00 AM	2
03:00 PM	0
03:05 PM	2
03:10 PM	9
03:15 PM	5
03:20 PM	4
03:25 PM	8
03:30 PM	6
03:35 PM	5
03:40 PM	5
03:45 PM	1
03:50 PM	4
03:55 PM	2
04:00 PM	0
04:05 PM	1
04:10 PM	2
04:15 PM	1
04:20 PM	1
04:25 PM	2
04:30 PM	1
04:35 PM	2
04:40 PM	5
04:45 PM	2
04:50 PM	0
04:55 PM	0
05:00 PM	1
05:05 PM	4
05:10 PM	3
05:15 PM	0
05:20 PM	1
05:25 PM	0
05:30 PM	2
05:35 PM	1
05:40 PM	2
05:45 PM	3
05:50 PM	1
05:55 PM	4
06:00 PM	6

DRIVE THRU QUEUE SUMMARY - RESULTS

CLIENT: LLG - PASADENA
SURVEY SITE: Starbuck - 4704 Firestone Boulevard, South Gate
DATE: THURSDAY, MARCH 16, 2023
PERIOD: 6:00 AM TO 09:00 AM
03:00 PM TO 06:00 PM

TIME OBSERVED:	DRIVE THRU VEHICLE QUEUE
0600-0605	1
0605-0610	0
0610-0615	1
0615-0620	1
0620-0625	0
0625-0630	3
0630-0635	2
0635-0640	2
0640-0645	6
0645-0650	10
0650-0655	5
0655-0700	4
0700-0705	5
0705-0710	7
0710-0715	5
0715-0720	6
0720-0725	4
0725-0730	4
0730-0735	3
0735-0740	4
0740-0745	5
0745-0750	10
0750-0755	4
0755-0800	2
0800-0805	2
0805-0810	8
0810-0815	11
0815-0820	8
0820-0825	9
0825-0830	9
0830-0835	9
0835-0840	6
0840-0845	6
0845-0850	8
0850-0855	5
0855-0900	1

TIME OBSERVED:	DRIVE THRU VEHICLE QUEUE
0300-0305	11
0305-0310	8
0310-0315	5
0315-0320	2
0320-0325	9
0325-0330	4
0330-0335	4
0335-0340	8
0340-0345	6
0345-0350	4
0350-0355	4
0355-0400	3
0400-0405	4
0405-0410	4
0410-0415	6
0415-0420	4
0420-0425	5
0425-0430	7
0430-0435	6
0435-0440	6
0440-0445	5
0445-0450	3
0450-0455	5
0455-0500	6
0500-0505	7
0505-0510	6
0510-0515	5
0515-0520	7
0520-0525	4
0525-0530	6
0530-0535	3
0535-0540	2
0540-0545	3
0545-0550	2
0550-0555	1
0555-0600	2

APPENDIX D

TRAFFIC COUNT DATA

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

File Name : ColoradoAve_SomersetBlvd
Site Code : 00000000
Start Date : 5/9/2023
Page No : 1

Groups Printed- Vehicles

	Pacific Auto Company Driveway Southbound			Somerset Boulevard Westbound			Colorado Avenue Northbound			Somerset Boulevard Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	1	0	2	6	202	1	3	0	7	0	86	6	314
07:15 AM	0	0	0	3	205	2	2	0	4	2	148	11	377
07:30 AM	0	0	0	1	265	2	3	0	4	2	164	9	450
07:45 AM	0	1	3	2	270	1	5	0	7	6	204	13	512
Total	1	1	5	12	942	6	13	0	22	10	602	39	1653
08:00 AM	2	1	7	3	257	1	6	0	8	10	243	14	552
08:15 AM	0	0	5	6	270	5	4	0	6	14	201	5	516
08:30 AM	1	1	4	14	246	5	2	0	7	12	167	10	469
08:45 AM	0	0	2	2	167	3	9	3	3	4	166	9	368
Total	3	2	18	25	940	14	21	3	24	40	777	38	1905
04:00 PM	0	1	0	1	161	1	3	1	14	8	221	6	417
04:15 PM	0	0	2	1	167	0	5	1	4	7	262	4	453
04:30 PM	1	0	3	0	177	0	2	0	8	3	271	9	474
04:45 PM	1	1	4	5	184	0	1	1	12	3	284	8	504
Total	2	2	9	7	689	1	11	3	38	21	1038	27	1848
05:00 PM	1	4	6	7	183	2	1	0	1	4	293	19	521
05:15 PM	1	0	5	4	194	1	3	1	22	3	268	9	511
05:30 PM	0	0	3	4	183	0	3	0	5	1	267	7	473
05:45 PM	2	0	3	4	152	0	0	0	7	1	254	13	436
Total	4	4	17	19	712	3	7	1	35	9	1082	48	1941
Grand Total	10	9	49	63	3283	24	52	7	119	80	3499	152	7347
Apprch %	14.7	13.2	72.1	1.9	97.4	0.7	29.2	3.9	66.9	2.1	93.8	4.1	
Total %	0.1	0.1	0.7	0.9	44.7	0.3	0.7	0.1	1.6	1.1	47.6	2.1	

File Name : ColoradoAve_SomersetBlvd
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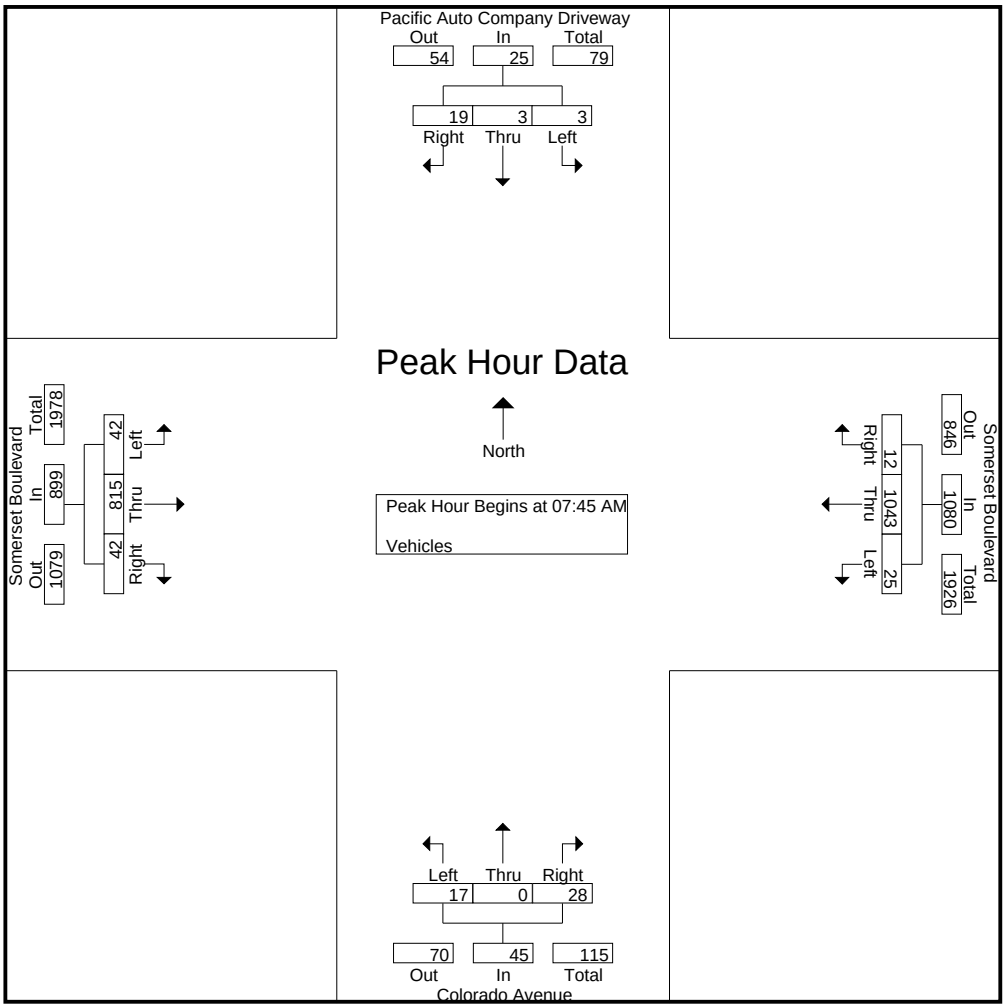
	Pacific Auto Company Driveway Southbound				Somerset Boulevard Westbound				Colorado Avenue Northbound				Somerset Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**1**	3	4	2	**270**	1	273	5	0	7	12	6	204	13	223	512
08:00 AM	**2**	1	**7**	**10**	3	257	1	261	**6**	0	**8**	**14**	10	**243**	**14**	**267**	**552**
08:15 AM	0	0	5	5	6	270	**5**	**281**	4	0	6	10	**14**	201	5	220	516
08:30 AM	1	1	4	6	**14**	246	5	265	2	0	7	9	12	167	10	189	469
Total Volume	3	3	19	25	25	1043	12	1080	17	0	28	45	42	815	42	899	2049
% App. Total	12	12	76		2.3	96.6	1.1		37.8	0	62.2		4.7	90.7	4.7		
PHF	.375	.750	.679	.625	.446	.966	.600	.961	.708	.000	.875	.804	.750	.838	.750	.842	.928



CITY TRAFFIC COUNTERS

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File Name : ColoradoAve_SomersetBlvd
Site Code : 00000000
Start Date : 5/9/2023
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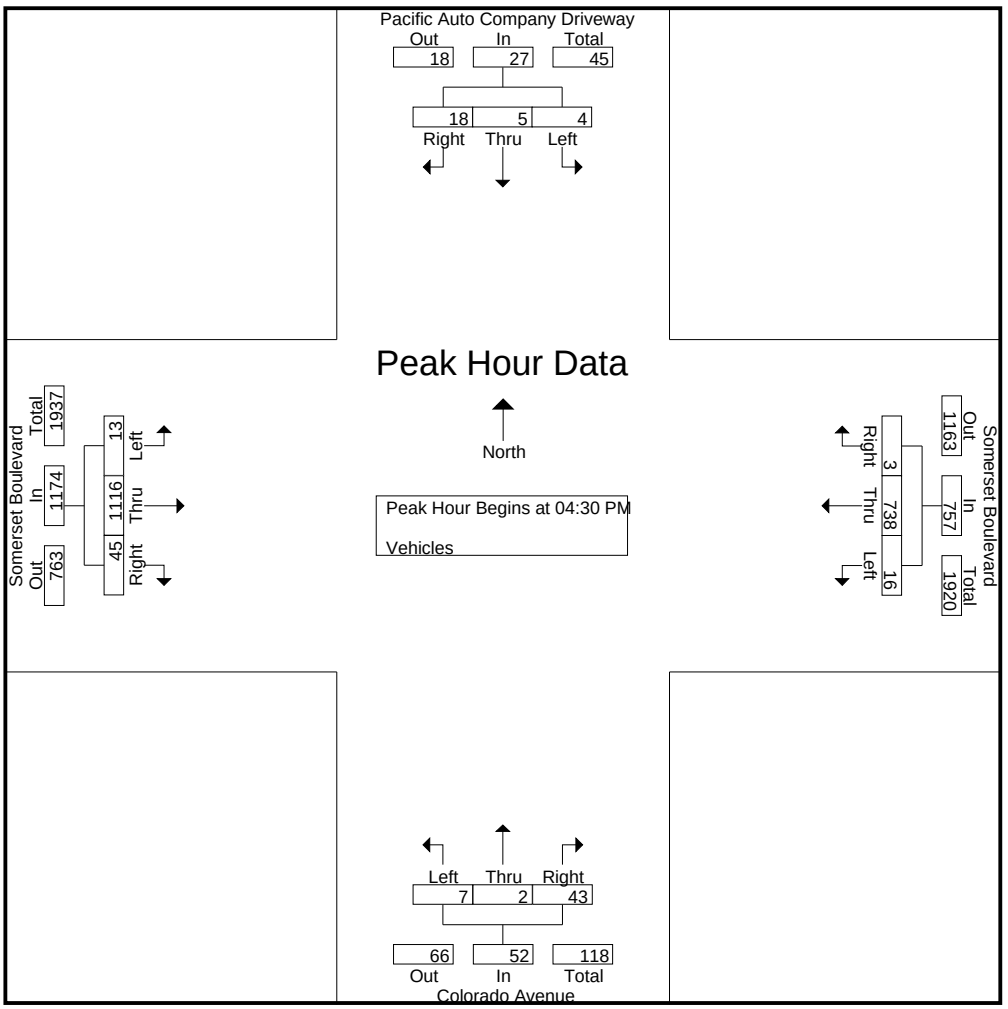
	Pacific Auto Company Driveway Southbound				Somerset Boulevard Westbound				Colorado Avenue Northbound				Somerset Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	0	3	4	0	177	0	177	2	0	8	10	3	271	9	283	474
04:45 PM	1	1	4	6	5	184	0	189	1	**1**	12	14	3	284	8	295	504
05:00 PM	1	**4**	**6**	**11**	**7**	183	**2**	192	1	0	1	2	**4**	**293**	**19**	**316**	**521**
05:15 PM	1	0	5	6	4	**194**	1	**199**	**3**	1	**22**	**26**	3	268	9	280	511
Total Volume	4	5	18	27	16	738	3	757	7	2	43	52	13	1116	45	1174	2010
% App. Total	14.8	18.5	66.7		2.1	97.5	0.4		13.5	3.8	82.7		1.1	95.1	3.8		
PHF	1.00	.313	.750	.614	.571	.951	.375	.951	.583	.500	.489	.500	.813	.952	.592	.929	.964



CITY TRAFFIC COUNTERS

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File Name : ColoradoAve_SomersetBlvd_BP
Site Code : 00000000
Start Date : 5/9/2023

Groups Printed- Pedestrians and Bikes

	Pacific Auto Company Driveway South Leg		Somerset Boulevard West Leg		Colorado Avenue North Leg		Somerset Boulevard East Leg		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:00 AM	2	0	0	0	1	2	0	0	5
07:15 AM	0	2	0	1	1	0	0	0	4
07:30 AM	2	0	2	2	0	6	0	1	13
07:45 AM	0	2	1	0	0	3	0	0	6
Total	4	4	3	3	2	11	0	1	28
08:00 AM	2	3	0	0	0	3	0	0	8
08:15 AM	0	1	0	0	0	4	0	0	5
08:30 AM	0	0	0	0	2	5	0	0	7
08:45 AM	0	2	0	1	1	1	0	0	5
Total	2	6	0	1	3	13	0	0	25
04:00 PM	1	0	0	0	0	4	0	0	5
04:15 PM	0	0	0	0	0	1	0	0	1
04:30 PM	0	0	0	0	1	0	0	0	1
04:45 PM	1	0	0	0	1	1	0	0	3
Total	2	0	0	0	2	6	0	0	10
05:00 PM	1	2	0	0	0	1	0	0	4
05:15 PM	0	3	1	0	0	2	0	0	6
05:30 PM	1	0	0	0	0	3	0	0	4
05:45 PM	1	5	0	0	0	1	0	0	7
Total	3	10	1	0	0	7	0	0	21
Grand Total	11	20	4	4	7	37	0	1	84
Apprch %	35.5	64.5	50	50	15.9	84.1	0	100	
Total %	13.1	23.8	4.8	4.8	8.3	44	0	1.2	

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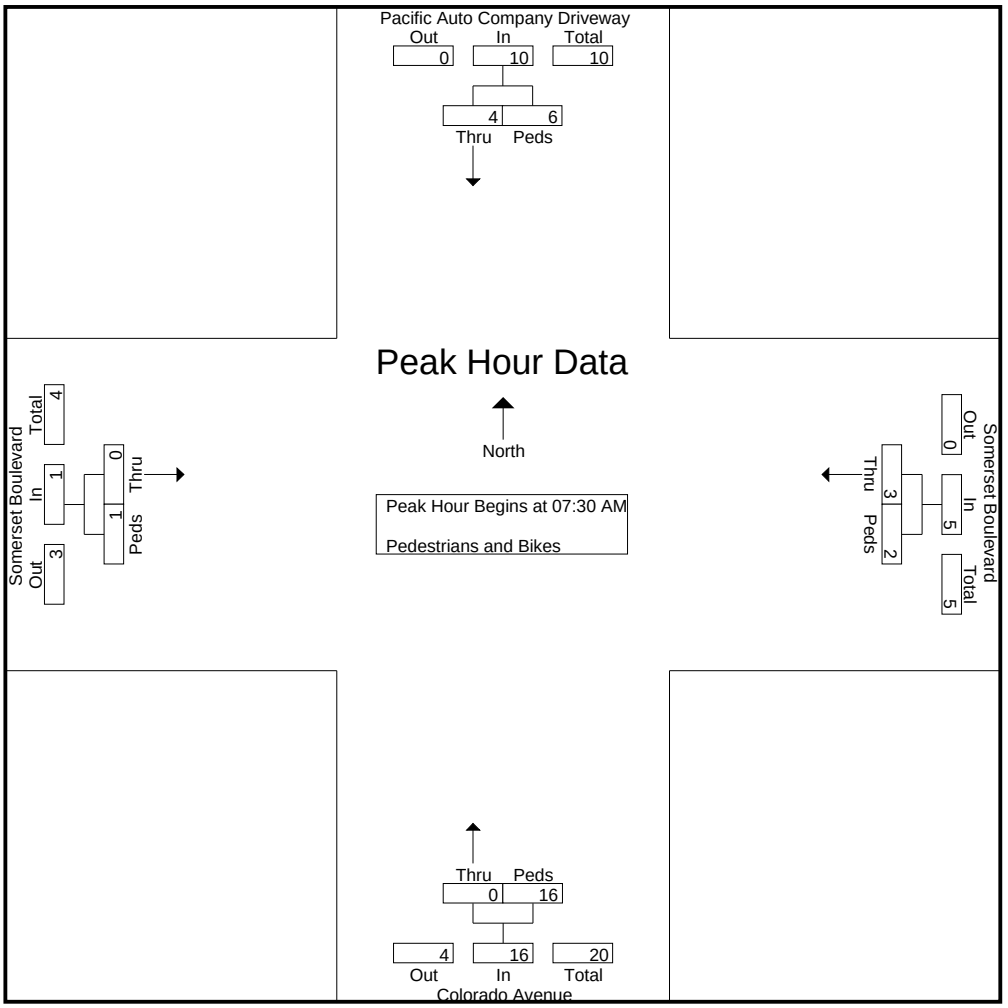
	Pacific Auto Company Driveway South Leg			Somerset Boulevard West Leg			Colorado Avenue North Leg			Somerset Boulevard East Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:30 AM													
07:30 AM	**2**	0	2	**2**	**2**	**4**	0	**6**	**6**	0	**1**	**1**	**13**
07:45 AM	0	2	2	1	0	1	0	3	3	0	0	0	6
08:00 AM	2	**3**	**5**	0	0	0	0	3	3	0	0	0	8
08:15 AM	0	1	1	0	0	0	0	4	4	0	0	0	5
Total Volume	4	6	10	3	2	5	0	16	16	0	1	1	32
% App. Total	40	60		60	40		0	100		0	100		
PHF	.500	.500	.500	.375	.250	.313	.000	.667	.667	.000	.250	.250	.615



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File Name : ColoradoAve_SomersetBlvd_BP
Site Code : 00000000
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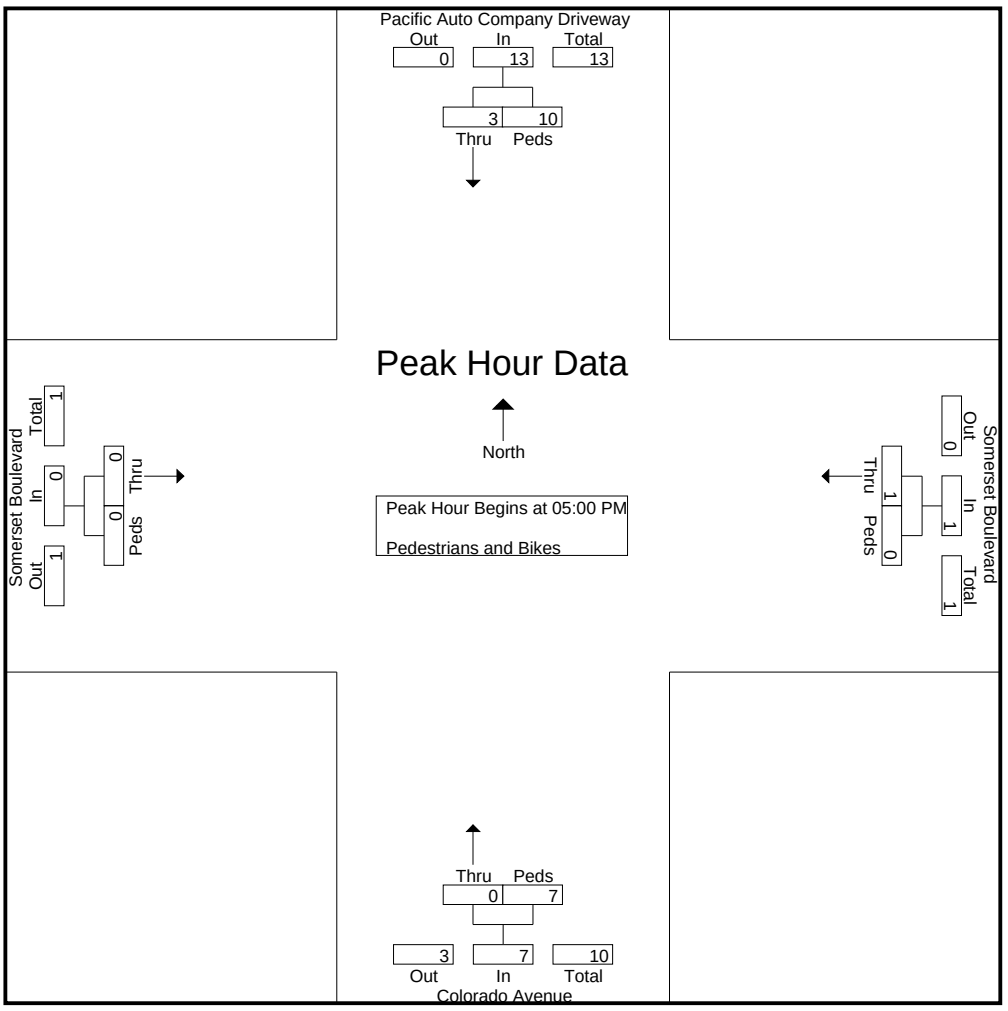
	Pacific Auto Company Driveway South Leg			Somerset Boulevard West Leg			Colorado Avenue North Leg			Somerset Boulevard East Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 05:00 PM													
05:00 PM	**1**	2	3	0	0	0	0	1	1	0	0	0	4
05:15 PM	0	3	3	**1**	0	**1**	0	2	2	0	0	0	6
05:30 PM	1	0	1	0	0	0	0	**3**	**3**	0	0	0	4
05:45 PM	1	**5**	**6**	0	0	0	0	1	1	0	0	0	**7**
Total Volume	3	10	13	1	0	1	0	7	7	0	0	0	21
% App. Total	23.1	76.9		100	0		0	100		0	0		
PHF	.750	.500	.542	.250	.000	.250	.000	.583	.583	.000	.000	.000	.750



CITY TRAFFIC COUNTERS

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File Name : ParamountBlvd_SomersetBlvd
Site Code : 00000000
Start Date : 5/9/2023
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Groups Printed- Vehicles

	Paramount Boulevard Southbound			Somerset Boulevard Westbound			Paramount Boulevard Northbound			Somerset Boulevard Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	8	82	17	8	165	11	23	72	7	15	66	11	485
07:15 AM	13	112	26	9	155	11	17	90	8	21	104	18	584
07:30 AM	11	125	20	16	214	22	32	77	12	19	134	23	705
07:45 AM	14	117	38	19	195	29	28	143	11	55	143	17	809
Total	46	436	101	52	729	73	100	382	38	110	447	69	2583
08:00 AM	17	135	36	25	175	41	47	188	16	55	179	16	930
08:15 AM	13	142	54	27	179	25	39	182	7	49	138	26	881
08:30 AM	16	155	29	34	181	28	38	148	7	37	98	28	799
08:45 AM	15	123	22	15	103	19	45	135	10	44	87	29	647
Total	61	555	141	101	638	113	169	653	40	185	502	99	3257
04:00 PM	27	201	35	22	106	24	30	151	14	46	166	31	853
04:15 PM	21	135	16	18	122	13	30	138	11	26	196	33	759
04:30 PM	21	144	25	23	101	15	39	127	12	28	210	25	770
04:45 PM	17	129	22	22	117	16	24	120	12	24	226	32	761
Total	86	609	98	85	446	68	123	536	49	124	798	121	3143
05:00 PM	21	144	19	18	129	13	36	146	10	35	208	28	807
05:15 PM	21	141	25	20	140	23	29	143	8	37	202	21	810
05:30 PM	16	125	20	18	126	15	28	158	13	22	209	25	775
05:45 PM	25	137	21	19	103	19	29	165	13	42	188	32	793
Total	83	547	85	75	498	70	122	612	44	136	807	106	3185
Grand Total	276	2147	425	313	2311	324	514	2183	171	555	2554	395	12168
Apprch %	9.7	75.4	14.9	10.6	78.4	11	17.9	76.1	6	15.8	72.9	11.3	
Total %	2.3	17.6	3.5	2.6	19	2.7	4.2	17.9	1.4	4.6	21	3.2	

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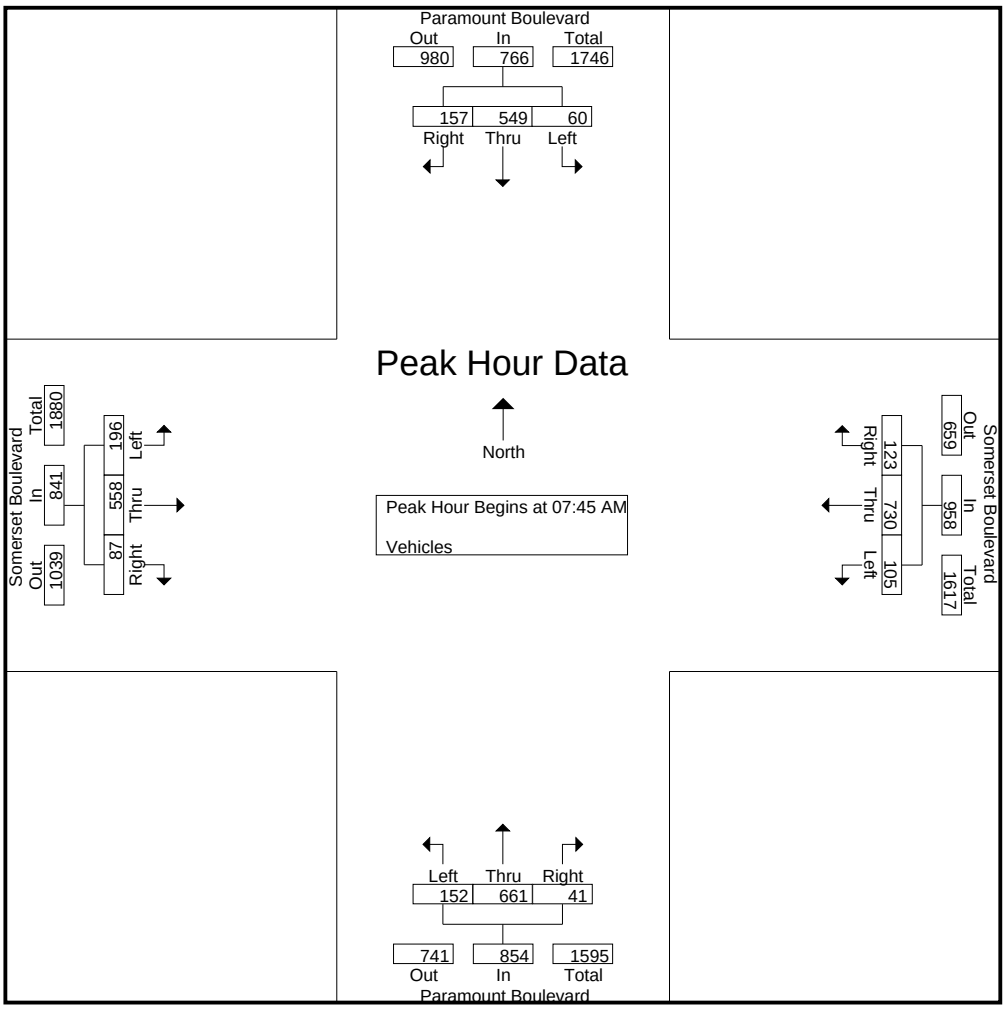
	Paramount Boulevard Southbound				Somerset Boulevard Westbound				Paramount Boulevard Northbound				Somerset Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	14	117	38	169	19	**195**	29	**243**	28	143	11	182	**55**	143	17	215	809
08:00 AM	**17**	135	36	188	25	175	**41**	241	**47**	**188**	**16**	**251**	55	**179**	16	**250**	**930**
08:15 AM	13	142	**54**	**209**	27	179	25	231	39	182	7	228	49	138	26	213	881
08:30 AM	16	**155**	29	200	**34**	181	28	243	38	148	7	193	37	98	**28**	163	799
Total Volume	60	549	157	766	105	730	123	958	152	661	41	854	196	558	87	841	3419
% App. Total	7.8	71.7	20.5		11	76.2	12.8		17.8	77.4	4.8		23.3	66.3	10.3		
PHF	.882	.885	.727	.916	.772	.936	.750	.986	.809	.879	.641	.851	.891	.779	.777	.841	.919



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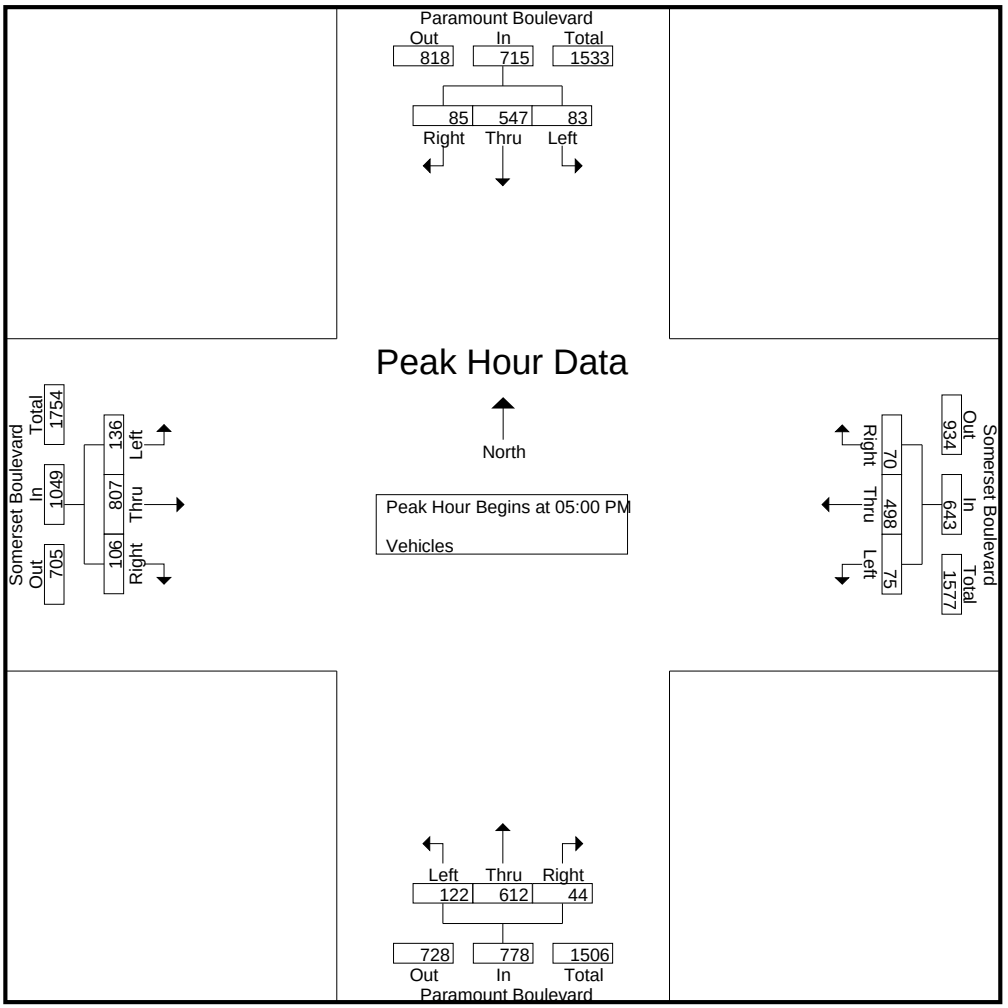
	Paramount Boulevard Southbound				Somerset Boulevard Westbound				Paramount Boulevard Northbound				Somerset Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	21	**144**	19	184	18	129	13	160	**36**	146	10	192	35	208	28	**271**	807
05:15 PM	21	141	**25**	**187**	**20**	**140**	**23**	**183**	29	143	8	180	37	202	21	260	**810**
05:30 PM	16	125	20	161	18	126	15	159	28	158	**13**	199	22	**209**	25	256	775
05:45 PM	**25**	137	21	183	19	103	19	141	29	**165**	13	**207**	**42**	188	**32**	262	793
Total Volume	83	547	85	715	75	498	70	643	122	612	44	778	136	807	106	1049	3185
% App. Total	11.6	76.5	11.9		11.7	77.4	10.9		15.7	78.7	5.7		13	76.9	10.1		
PHF	.830	.950	.850	.956	.938	.889	.761	.878	.847	.927	.846	.940	.810	.965	.828	.968	.983



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Groups Printed- Pedestrians and Bikes

	Paramount Boulevard South Leg		Somerset Boulevard West Leg		Paramount Boulevard North Leg		Somerset Boulevard East Leg		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:00 AM	1	1	0	0	1	0	0	0	3
07:15 AM	1	0	1	0	0	1	0	2	5
07:30 AM	0	2	0	0	0	1	1	2	6
07:45 AM	0	0	0	2	0	0	0	1	3
Total	2	3	1	2	1	2	1	5	17
08:00 AM	0	1	0	1	1	0	0	5	8
08:15 AM	0	1	1	0	0	0	0	0	2
08:30 AM	0	6	0	3	0	1	0	2	12
08:45 AM	0	4	1	2	0	0	2	0	9
Total	0	12	2	6	1	1	2	7	31
04:00 PM	0	1	0	1	1	1	0	3	7
04:15 PM	0	1	0	3	0	3	0	4	11
04:30 PM	0	0	1	1	0	0	0	4	6
04:45 PM	3	1	2	0	0	0	1	2	9
Total	3	3	3	5	1	4	1	13	33
05:00 PM	0	1	2	2	0	0	0	3	8
05:15 PM	0	1	1	0	0	0	1	4	7
05:30 PM	0	0	1	0	1	0	0	0	2
05:45 PM	0	0	1	0	1	1	3	0	6
Total	0	2	5	2	2	1	4	7	23
Grand Total	5	20	11	15	5	8	8	32	104
Apprch %	20	80	42.3	57.7	38.5	61.5	20	80	
Total %	4.8	19.2	10.6	14.4	4.8	7.7	7.7	30.8	

File Name : ParamountBlvd_SomersetBlvd_BP
Site Code : 00000000
Start Date : 5/9/2023
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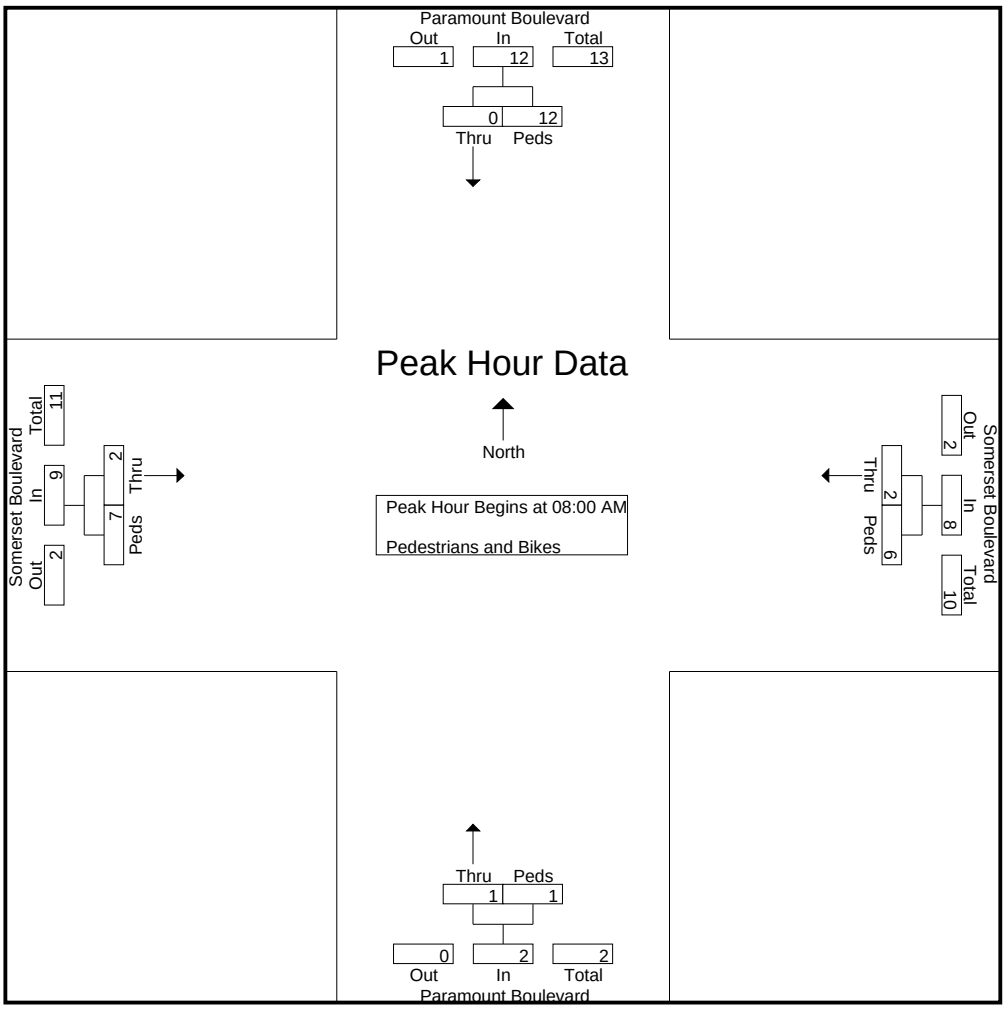
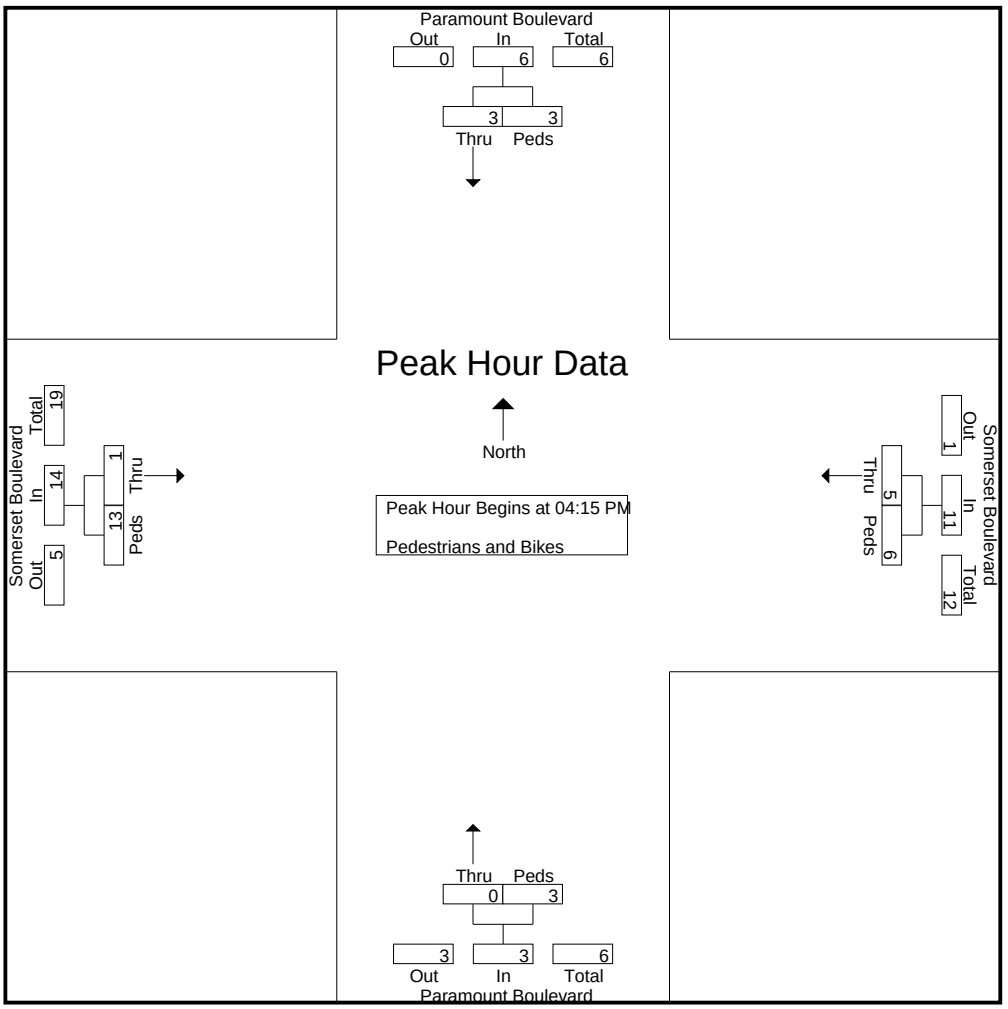
	Paramount Boulevard South Leg			Somerset Boulevard West Leg			Paramount Boulevard North Leg			Somerset Boulevard East Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	0	1	1	0	1	1	**1**	0	**1**	0	**5**	**5**	8
08:15 AM	0	1	1	**1**	0	1	0	0	0	0	0	0	2
08:30 AM	0	**6**	**6**	0	**3**	**3**	0	**1**	1	0	2	2	**12**
08:45 AM	0	4	4	1	2	3	0	0	0	**2**	0	2	9
Total Volume	0	12	12	2	6	8	1	1	2	2	7	9	31
% App. Total	0	100		25	75		50	50		22.2	77.8		
PHF	.000	.500	.500	.500	.500	.667	.250	.250	.500	.250	.350	.450	.646



File Name : ParamountBlvd_SomersetBlvd_BP
Site Code : 00000000
Start Date : 5/9/2023

	Paramount Boulevard South Leg			Somerset Boulevard West Leg			Paramount Boulevard North Leg			Somerset Boulevard East Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:15 PM													
04:15 PM	0	**1**	1	0	**3**	3	0	**3**	**3**	0	**4**	**4**	**11**
04:30 PM	0	0	0	1	1	2	0	0	0	0	4	4	6
04:45 PM	**3**	1	**4**	**2**	0	2	0	0	0	**1**	2	3	9
05:00 PM	0	1	1	2	2	**4**	0	0	0	0	3	3	8
Total Volume	3	3	6	5	6	11	0	3	3	1	13	14	34
% App. Total	50	50		45.5	54.5		0	100		7.1	92.9		
PHF	.250	.750	.375	.625	.500	.688	.000	.250	.250	.250	.813	.875	.773



CITY TRAFFIC COUNTERS

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File Name : ParamountBlvd_JeffersonSt
Site Code : 00000000
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Groups Printed- Vehicles

	Paramount Boulevard Southbound			Jefferson Street Westbound			Paramount Boulevard Northbound			Jefferson Street Eastbound			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	103	2	1	3	2	12	95	3	6	4	14	245
07:15 AM	0	133	4	3	1	4	10	91	1	10	1	13	271
07:30 AM	3	166	3	14	7	12	13	121	9	5	7	17	377
07:45 AM	1	120	5	15	13	11	11	152	7	9	9	18	371
Total	4	522	14	33	24	29	46	459	20	30	21	62	1264
08:00 AM	6	159	4	16	17	17	21	202	10	37	26	17	532
08:15 AM	0	208	10	16	18	6	15	194	3	26	13	17	526
08:30 AM	1	205	7	2	2	2	20	151	7	12	4	22	435
08:45 AM	2	148	17	3	4	3	16	170	2	10	3	16	394
Total	9	720	38	37	41	28	72	717	22	85	46	72	1887
04:00 PM	6	233	12	7	5	4	18	165	2	23	11	38	524
04:15 PM	6	193	13	1	4	4	21	154	2	21	7	26	452
04:30 PM	6	169	8	8	6	4	23	187	7	20	10	30	478
04:45 PM	6	181	8	3	6	6	20	125	3	21	6	29	414
Total	24	776	41	19	21	18	82	631	14	85	34	123	1868
05:00 PM	6	212	6	5	6	2	12	179	7	16	13	38	502
05:15 PM	6	165	12	6	3	5	17	152	12	19	15	16	428
05:30 PM	2	156	11	2	9	0	18	198	7	16	5	15	439
05:45 PM	3	166	11	12	6	12	10	161	14	22	7	21	445
Total	17	699	40	25	24	19	57	690	40	73	40	90	1814
Grand Total	54	2717	133	114	110	94	257	2497	96	273	141	347	6833
Apprch %	1.9	93.6	4.6	35.8	34.6	29.6	9	87.6	3.4	35.9	18.5	45.6	
Total %	0.8	39.8	1.9	1.7	1.6	1.4	3.8	36.5	1.4	4	2.1	5.1	

CITY TRAFFIC COUNTERS

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Site Code : 00000000
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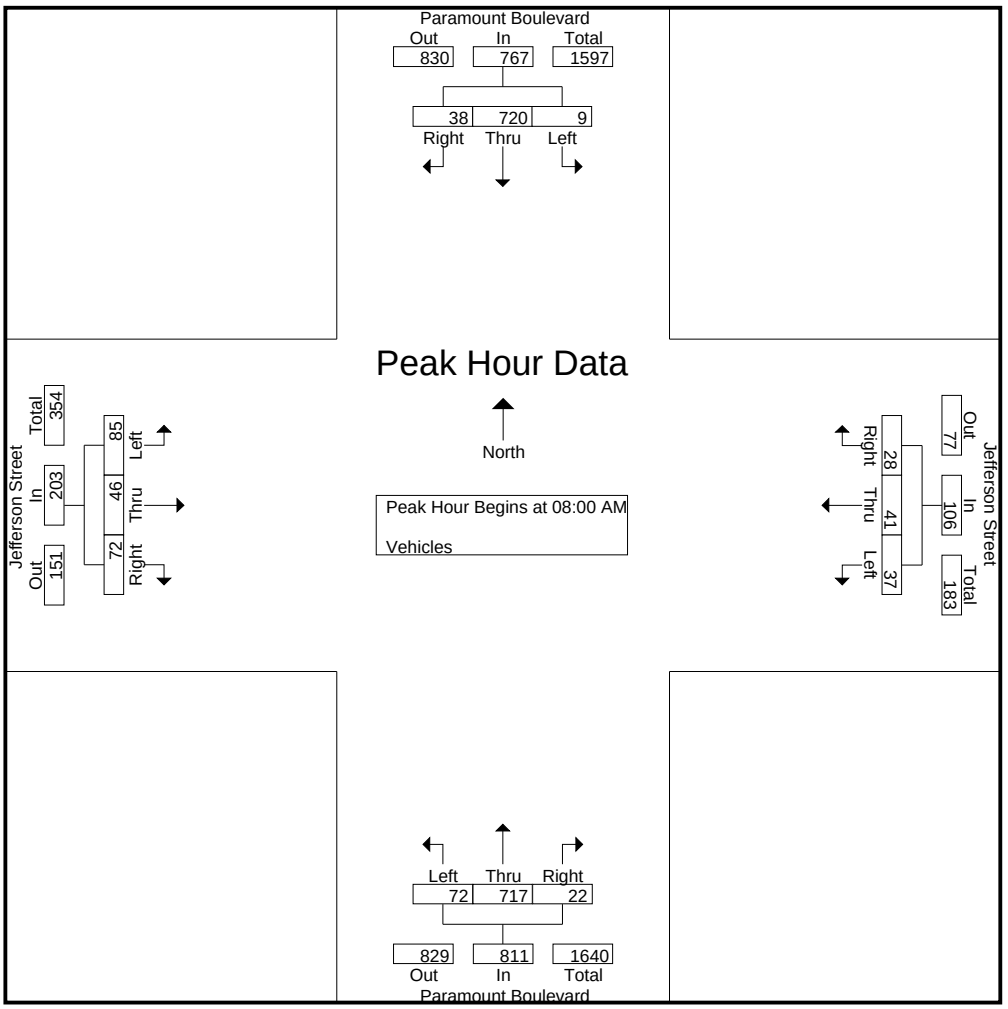
	Paramount Boulevard Southbound				Jefferson Street Westbound				Paramount Boulevard Northbound				Jefferson Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**6**	159	4	169	**16**	17	**17**	**50**	**21**	**202**	**10**	**233**	**37**	**26**	17	**80**	**532**
08:15 AM	0	**208**	10	**218**	16	**18**	6	40	15	194	3	212	26	13	17	56	526
08:30 AM	1	205	7	213	2	2	2	6	20	151	7	178	12	4	**22**	38	435
08:45 AM	2	148	**17**	167	3	4	3	10	16	170	2	188	10	3	16	29	394
Total Volume	9	720	38	767	37	41	28	106	72	717	22	811	85	46	72	203	1887
% App. Total	1.2	93.9	5		34.9	38.7	26.4		8.9	88.4	2.7		41.9	22.7	35.5		
PHF	.375	.865	.559	.880	.578	.569	.412	.530	.857	.887	.550	.870	.574	.442	.818	.634	.887



CITY TRAFFIC COUNTERS

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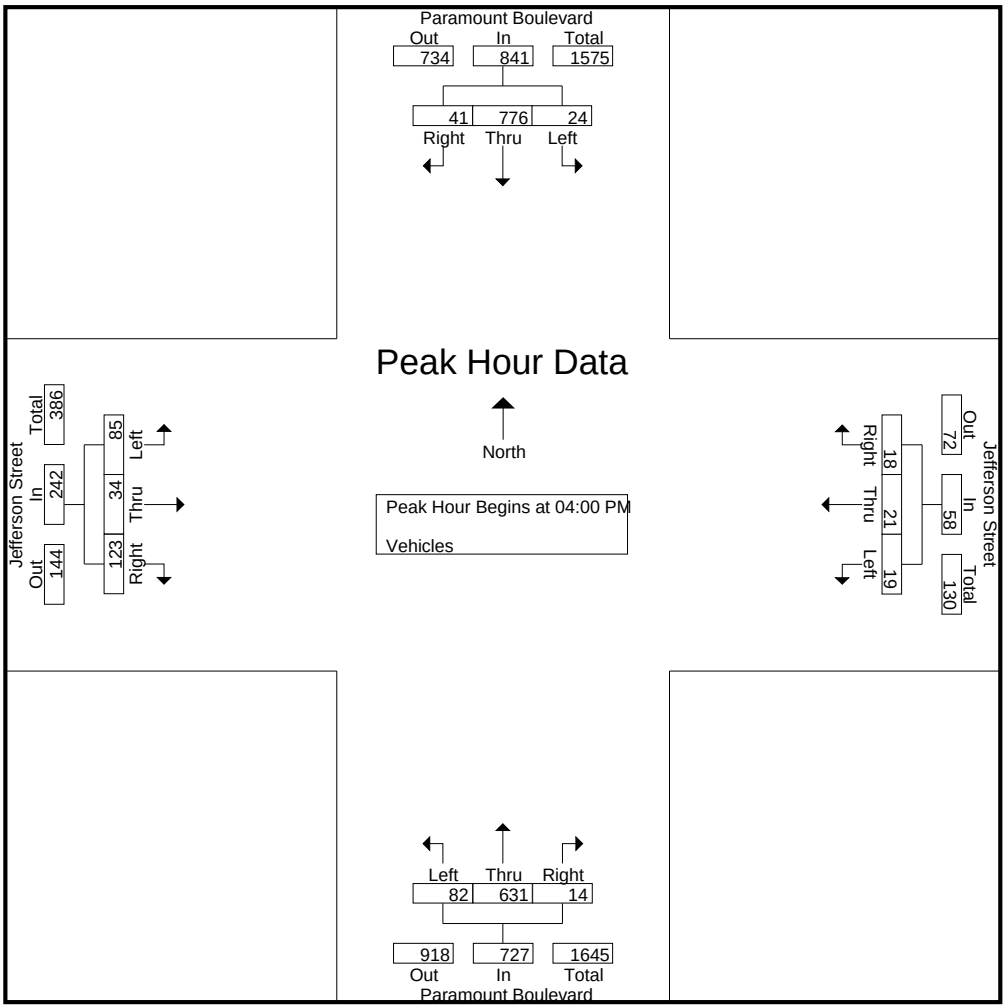
File Name : ParamountBlvd_JeffersonSt
Site Code : 00000000
Start Date : 5/9/2023
Page No : 3

	Paramount Boulevard Southbound				Jefferson Street Westbound				Paramount Boulevard Northbound				Jefferson 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 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**6**	**233**	12	**251**	7	5	4	16	18	165	2	185	**23**	**11**	**38**	**72**	**524**
04:15 PM	6	193	**13**	212	1	4	4	9	21	154	2	177	21	7	26	54	452
04:30 PM	6	169	8	183	**8**	**6**	4	**18**	**23**	**187**	**7**	**217**	20	10	30	60	478
04:45 PM	6	181	8	195	3	6	**6**	15	20	125	3	148	21	6	29	56	414
Total Volume	24	776	41	841	19	21	18	58	82	631	14	727	85	34	123	242	1868
% App. Total	2.9	92.3	4.9		32.8	36.2	31		11.3	86.8	1.9		35.1	14	50.8		
PHF	1.00	.833	.788	.838	.594	.875	.750	.806	.891	.844	.500	.838	.924	.773	.809	.840	.891



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Groups Printed- Pedestrians and Bikes

	Paramount Boulevard South Leg		Jefferson Street West Leg		Paramount Boulevard North Leg		Jefferson Street East Leg		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:00 AM	0	0	0	1	0	0	0	0	1
07:15 AM	0	0	1	2	0	0	0	3	6
07:30 AM	1	4	0	2	0	1	0	0	8
07:45 AM	0	5	0	2	0	1	0	2	10
Total	1	9	1	7	0	2	0	5	25
08:00 AM	0	3	0	2	0	0	0	1	6
08:15 AM	0	0	0	5	0	1	1	3	10
08:30 AM	0	0	0	3	0	3	1	2	9
08:45 AM	0	0	0	2	0	1	1	1	5
Total	0	3	0	12	0	5	3	7	30
04:00 PM	2	2	0	2	0	1	0	0	7
04:15 PM	0	1	0	1	0	1	0	0	3
04:30 PM	2	0	1	1	0	2	0	1	7
04:45 PM	0	3	4	6	1	0	3	1	18
Total	4	6	5	10	1	4	3	2	35
05:00 PM	1	0	3	6	0	3	0	1	14
05:15 PM	0	0	0	6	0	1	1	0	8
05:30 PM	0	1	0	2	1	0	0	2	6
05:45 PM	1	2	1	6	0	0	1	0	11
Total	2	3	4	20	1	4	2	3	39
Grand Total	7	21	10	49	2	15	8	17	129
Apprch %	25	75	16.9	83.1	11.8	88.2	32	68	
Total %	5.4	16.3	7.8	38	1.6	11.6	6.2	13.2	

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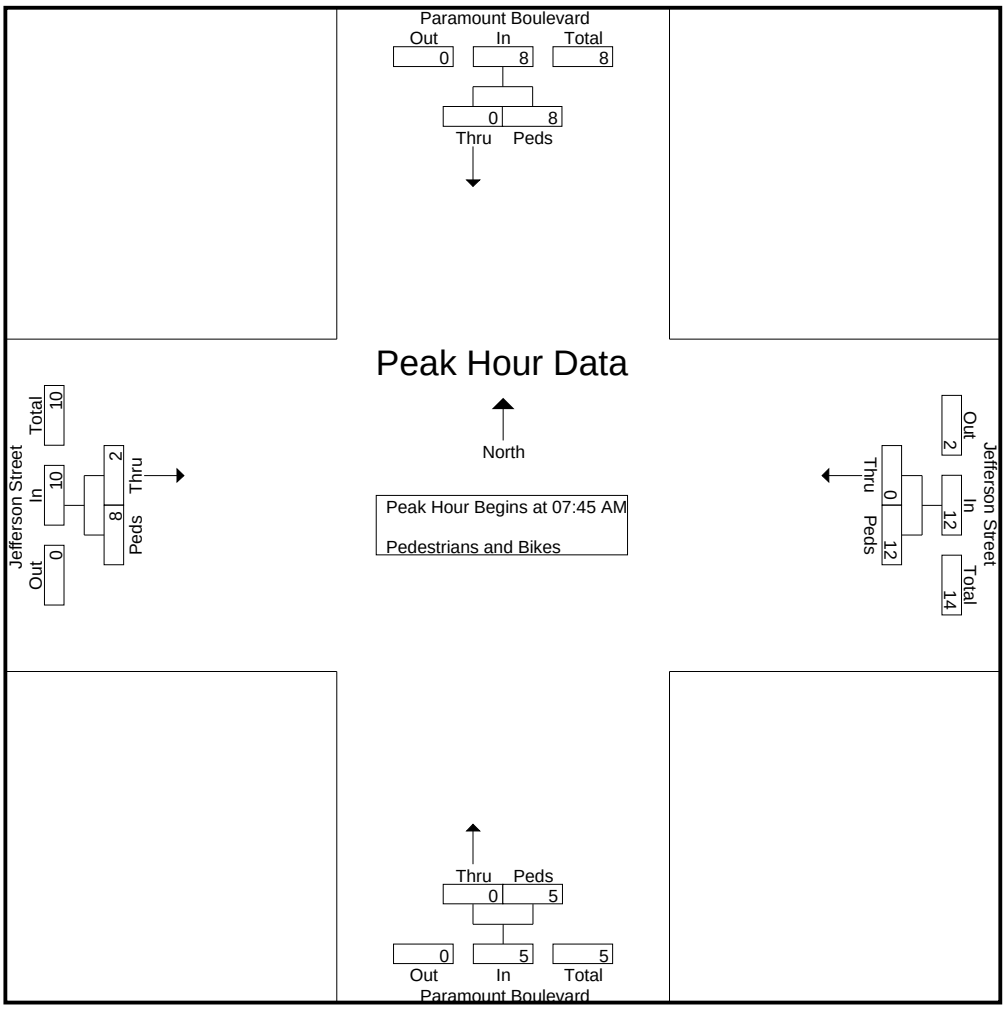
	Paramount Boulevard South Leg			Jefferson Street West Leg			Paramount Boulevard North Leg			Jefferson Street East Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:45 AM													
07:45 AM	0	**5**	**5**	0	2	2	0	1	1	0	2	2	**10**
08:00 AM	0	3	3	0	2	2	0	0	0	0	1	1	6
08:15 AM	0	0	0	0	**5**	**5**	0	1	1	**1**	**3**	**4**	10
08:30 AM	0	0	0	0	3	3	0	**3**	**3**	1	2	3	9
Total Volume	0	8	8	0	12	12	0	5	5	2	8	10	35
% App. Total	0	100		0	100		0	100		20	80		
PHF	.000	.400	.400	.000	.600	.600	.000	.417	.417	.500	.667	.625	.875



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File Name : ParamountBlvd_JeffersonSt_BP
Site Code : 00000000
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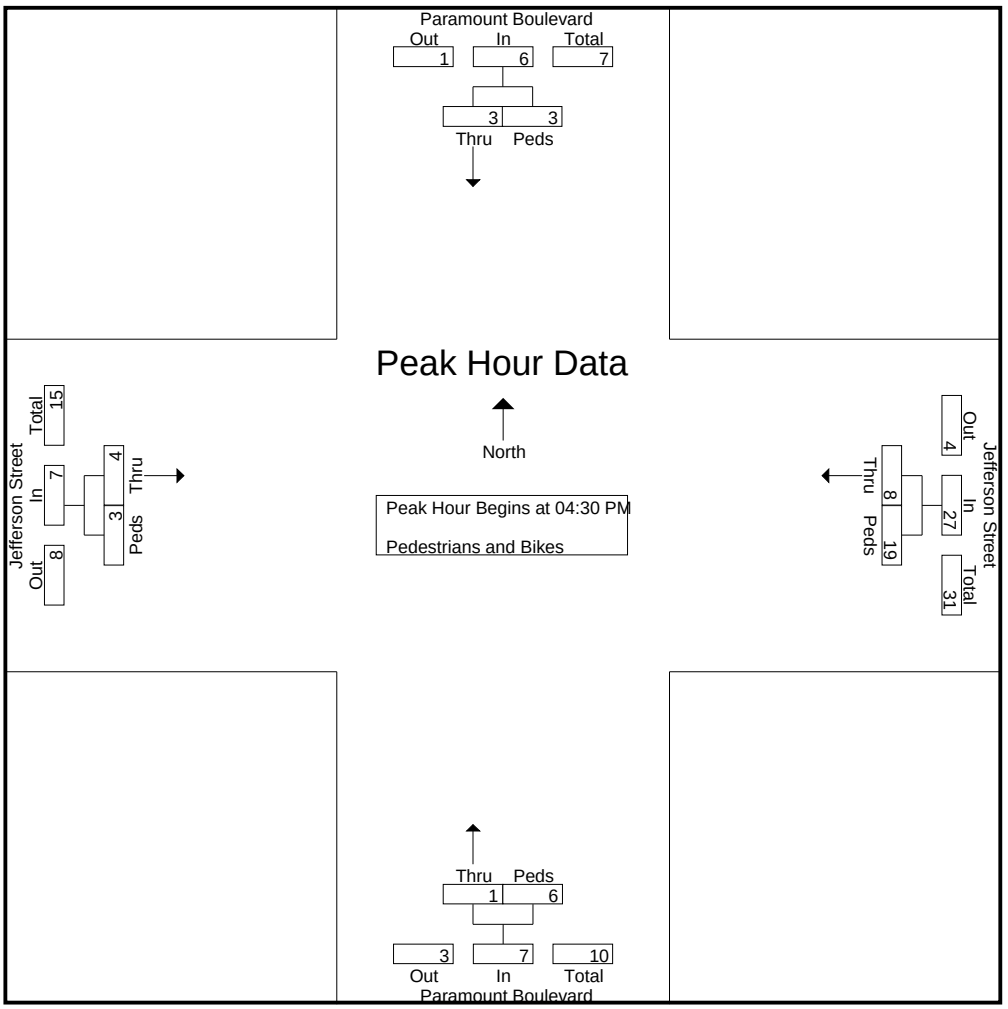
	Paramount Boulevard South Leg			Jefferson Street West Leg			Paramount Boulevard North Leg			Jefferson Street East Leg			
Start Time	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	**2**	0	2	1	1	2	0	2	2	0	**1**	1	7
04:45 PM	0	**3**	**3**	**4**	**6**	**10**	**1**	0	1	**3**	1	**4**	**18**
05:00 PM	1	0	1	3	6	9	0	**3**	**3**	0	1	1	14
05:15 PM	0	0	0	0	6	6	0	1	1	1	0	1	8
Total Volume	3	3	6	8	19	27	1	6	7	4	3	7	47
% App. Total	50	50		29.6	70.4		14.3	85.7		57.1	42.9		
PHF	.375	.250	.500	.500	.792	.675	.250	.500	.583	.333	.750	.438	.653



APPENDIX E

HCM LEVELS OF SERVICE EXPLANATION

HCM DATA WORKSHEETS
WEEKDAY AM AND PM PEAK HOURS

LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

In the *Highway Capacity Manual (HCM)*, published by the Transportation Research Board, 2000, level of service for unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incidents, control, traffic, or geometric delay. Only the portion of total delay attributed to the traffic control measures, either traffic signals or stop signs, is quantified. This delay is called *control delay*. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Level of Service criteria for unsignalized intersections are stated in terms of the average control delay per vehicle. The level of service is determined by the computed or measured control delay and is defined for each minor movement. Average control delay for any particular minor movement is a function of the service time for the approach and the degree of utilization. (Level of service is not defined for the intersection as a whole for two-way stop controlled intersections.)

Level of Service Criteria for TWSC/AWSC Intersections

Level of Service	Average Control Delay (Sec/Veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Level of Service (LOS) values are used to describe intersection operations with service levels varying from LOS A (free flow) to LOS F (jammed condition). The following descriptions summarize *HCM* criteria for each level of service:

LOS A describes operations with very low control delay, up to 10 seconds per vehicle.

LOS B describes operations with control delay greater than 10 and up to 15 seconds per vehicle.

LOS C describes operations with control delay greater than 15 and up to 25 seconds per vehicle.

LOS D describes operations with control delay greater than 25 and up to 35 seconds per vehicle.

LOS E describes operations with control delay greater than 35 and up to 50 seconds per vehicle.

LOS F describes operations with control delay in excess of 50 seconds per vehicle. For two-way stop controlled intersections, LOS F exists when there are insufficient gaps of suitable size to allow side-street demand to safely cross through a major-street traffic stream. This level of service is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	815	42	25	1043	12	17	0	28	0	0	0
Future Vol, veh/h	42	815	42	25	1043	12	17	0	28	0	0	0
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	886	46	27	1134	13	18	0	30	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1147	0	0	948	0	0	1638	2218	482
Stage 1	-	-	-	-	-	-	1017	1017	-
Stage 2	-	-	-	-	-	-	621	1201	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	605	-	-	720	-	-	91	43	530
Stage 1	-	-	-	-	-	-	310	313	-
Stage 2	-	-	-	-	-	-	498	256	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	605	-	-	709	-	-	80	0	522
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	0	-
Stage 1	-	-	-	-	-	-	282	0	-
Stage 2	-	-	-	-	-	-	479	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0.2	34.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	169	605	-	-	709	-	-
HCM Lane V/C Ratio	0.289	0.075	-	-	0.038	-	-
HCM Control Delay (s)	34.8	11.4	-	-	10.3	-	-
HCM Lane LOS	D	B	-	-	B	-	-
HCM 95th %tile Q(veh)	1.1	0.2	-	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	1116	45	16	738	3	7	2	43	0	0	0
Future Vol, veh/h	13	1116	45	16	738	3	7	2	43	0	0	0
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1213	49	17	802	3	8	2	47	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	805	0	0	1272	0	0	1711	2115	641
Stage 1	-	-	-	-	-	-	1276	1276	-
Stage 2	-	-	-	-	-	-	435	839	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	815	-	-	542	-	-	82	50	417
Stage 1	-	-	-	-	-	-	226	236	-
Stage 2	-	-	-	-	-	-	620	379	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	815	-	-	537	-	-	77	0	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	77	0	-
Stage 1	-	-	-	-	-	-	220	0	-
Stage 2	-	-	-	-	-	-	600	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.3	23
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	256	815	-	-	537	-	-
HCM Lane V/C Ratio	0.221	0.017	-	-	0.032	-	-
HCM Control Delay (s)	23	9.5	-	-	11.9	-	-
HCM Lane LOS	C	A	-	-	B	-	-
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	815	79	34	1060	12	34	0	45	0	0	0
Future Vol, veh/h	42	815	79	34	1060	12	34	0	45	0	0	0
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	886	86	37	1152	13	37	0	49	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1165	0	0	988	0	0	1687	2276	502
Stage 1	-	-	-	-	-	-	1037	1037	-
Stage 2	-	-	-	-	-	-	650	1239	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	595	-	-	695	-	-	85	40	515
Stage 1	-	-	-	-	-	-	303	307	-
Stage 2	-	-	-	-	-	-	481	246	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	595	-	-	684	-	-	73	0	507
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	0	-
Stage 1	-	-	-	-	-	-	275	0	-
Stage 2	-	-	-	-	-	-	455	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0.3	63.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	142	595	-	-	684	-	-
HCM Lane V/C Ratio	0.605	0.077	-	-	0.054	-	-
HCM Control Delay (s)	63.1	11.6	-	-	10.6	-	-
HCM Lane LOS	F	B	-	-	B	-	-
HCM 95th %tile Q(veh)	3.2	0.2	-	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	1116	80	25	755	3	24	2	60	0	0	0
Future Vol, veh/h	13	1116	80	25	755	3	24	2	60	0	0	0
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1213	87	27	821	3	26	2	65	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	824	0	0	1310	0	0	1760	2173	660
Stage 1	-	-	-	-	-	-	1295	1295	-
Stage 2	-	-	-	-	-	-	465	878	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	802	-	-	524	-	-	76	46	406
Stage 1	-	-	-	-	-	-	221	231	-
Stage 2	-	-	-	-	-	-	599	364	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	802	-	-	519	-	-	70	0	402
Mov Cap-2 Maneuver	-	-	-	-	-	-	70	0	-
Stage 1	-	-	-	-	-	-	215	0	-
Stage 2	-	-	-	-	-	-	568	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.4	48.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	171	802	-	-	519	-	-
HCM Lane V/C Ratio	0.547	0.018	-	-	0.052	-	-
HCM Control Delay (s)	48.9	9.6	-	-	12.3	-	-
HCM Lane LOS	E	A	-	-	B	-	-
HCM 95th %tile Q(veh)	2.8	0.1	-	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	819	42	25	1048	12	17	0	28	0	0	0
Future Vol, veh/h	42	819	42	25	1048	12	17	0	28	0	0	0
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	890	46	27	1139	13	18	0	30	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1152	0	0	952	0	0	1645	2227	484
Stage 1	-	-	-	-	-	-	1021	1021	-
Stage 2	-	-	-	-	-	-	624	1206	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	602	-	-	717	-	-	90	43	529
Stage 1	-	-	-	-	-	-	309	312	-
Stage 2	-	-	-	-	-	-	496	255	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	602	-	-	706	-	-	79	0	521
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	0	-
Stage 1	-	-	-	-	-	-	281	0	-
Stage 2	-	-	-	-	-	-	477	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0.2	35.2
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	167	602	-	-	706	-	-
HCM Lane V/C Ratio	0.293	0.076	-	-	0.038	-	-
HCM Control Delay (s)	35.2	11.5	-	-	10.3	-	-
HCM Lane LOS	E	B	-	-	B	-	-
HCM 95th %tile Q(veh)	1.2	0.2	-	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	1121	45	16	742	3	7	2	43	0	0	0
Future Vol, veh/h	13	1121	45	16	742	3	7	2	43	0	0	0
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1218	49	17	807	3	8	2	47	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	810	0	0	1277	0	0	1719	2125	644
Stage 1	-	-	-	-	-	-	1281	1281	-
Stage 2	-	-	-	-	-	-	438	844	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	812	-	-	540	-	-	81	49	416
Stage 1	-	-	-	-	-	-	225	235	-
Stage 2	-	-	-	-	-	-	618	377	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	812	-	-	535	-	-	76	0	412
Mov Cap-2 Maneuver	-	-	-	-	-	-	76	0	-
Stage 1	-	-	-	-	-	-	219	0	-
Stage 2	-	-	-	-	-	-	598	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.3	23.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	254	812	-	-	535	-	-
HCM Lane V/C Ratio	0.223	0.017	-	-	0.033	-	-
HCM Control Delay (s)	23.2	9.5	-	-	12	-	-
HCM Lane LOS	C	A	-	-	B	-	-
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	819	79	34	1065	12	34	0	45	0	0	0
Future Vol, veh/h	42	819	79	34	1065	12	34	0	45	0	0	0
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	890	86	37	1158	13	37	0	49	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1171	0	0	992	0	0	1694	2286	504
Stage 1	-	-	-	-	-	-	1041	1041	-
Stage 2	-	-	-	-	-	-	653	1245	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	592	-	-	693	-	-	84	39	513
Stage 1	-	-	-	-	-	-	301	305	-
Stage 2	-	-	-	-	-	-	480	244	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	592	-	-	682	-	-	72	0	505
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	0	-
Stage 1	-	-	-	-	-	-	273	0	-
Stage 2	-	-	-	-	-	-	454	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0.3	64
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	141	592	-	-	682	-	-
HCM Lane V/C Ratio	0.609	0.077	-	-	0.054	-	-
HCM Control Delay (s)	64	11.6	-	-	10.6	-	-
HCM Lane LOS	F	B	-	-	B	-	-
HCM 95th %tile Q(veh)	3.2	0.2	-	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	1121	80	25	759	3	24	2	60	0	0	0
Future Vol, veh/h	13	1121	80	25	759	3	24	2	60	0	0	0
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1218	87	27	825	3	26	2	65	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	828	0	0	1315	0	0	1767	2182	663
Stage 1	-	-	-	-	-	-	1300	1300	-
Stage 2	-	-	-	-	-	-	467	882	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	799	-	-	522	-	-	75	45	404
Stage 1	-	-	-	-	-	-	219	230	-
Stage 2	-	-	-	-	-	-	597	362	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	799	-	-	517	-	-	69	0	400
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	0	-
Stage 1	-	-	-	-	-	-	213	0	-
Stage 2	-	-	-	-	-	-	566	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.4	49.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	169	799	-	-	517	-	-
HCM Lane V/C Ratio	0.553	0.018	-	-	0.053	-	-
HCM Control Delay (s)	49.9	9.6	-	-	12.3	-	-
HCM Lane LOS	E	A	-	-	B	-	-
HCM 95th %tile Q(veh)	2.9	0.1	-	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	819	79	34	1065	12	34	0	45	0	0	0
Future Vol, veh/h	42	819	79	34	1065	12	34	0	45	0	0	0
Conflicting Peds, #/hr	0	0	16	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	890	86	37	1158	13	37	0	49	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	1171	0	0	992	0	0	1694	2286	504
Stage 1	-	-	-	-	-	-	1041	1041	-
Stage 2	-	-	-	-	-	-	653	1245	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	592	-	-	693	-	-	84	39	513
Stage 1	-	-	-	-	-	-	301	305	-
Stage 2	-	-	-	-	-	-	480	244	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	592	-	-	682	-	-	72	0	505
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	0	-
Stage 1	-	-	-	-	-	-	273	0	-
Stage 2	-	-	-	-	-	-	454	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0.3	49.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	72	505	592	-	-	682	-	-
HCM Lane V/C Ratio	0.513	0.097	0.077	-	-	0.054	-	-
HCM Control Delay (s)	98.9	12.9	11.6	-	-	10.6	-	-
HCM Lane LOS	F	B	B	-	-	B	-	-
HCM 95th %tile Q(veh)	2.1	0.3	0.2	-	-	0.2	-	-

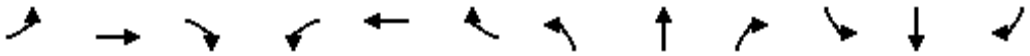
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	1121	80	25	759	3	24	2	60	0	0	0
Future Vol, veh/h	13	1121	80	25	759	3	24	2	60	0	0	0
Conflicting Peds, #/hr	0	0	10	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	60	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1218	87	27	825	3	26	2	65	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	828	0	0	1315	0	0	1767	2182	663
Stage 1	-	-	-	-	-	-	1300	1300	-
Stage 2	-	-	-	-	-	-	467	882	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.84	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	5.84	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.84	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32
Pot Cap-1 Maneuver	799	-	-	522	-	-	75	45	404
Stage 1	-	-	-	-	-	-	219	230	-
Stage 2	-	-	-	-	-	-	597	362	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	799	-	-	517	-	-	69	0	400
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	0	-
Stage 1	-	-	-	-	-	-	213	0	-
Stage 2	-	-	-	-	-	-	566	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0.4	38
HCM LOS			E

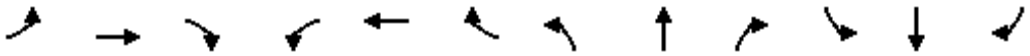
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	69	400	799	-	-	517	-	-
HCM Lane V/C Ratio	0.41	0.163	0.018	-	-	0.053	-	-
HCM Control Delay (s)	89.4	15.7	9.6	-	-	12.3	-	-
HCM Lane LOS	F	C	A	-	-	B	-	-
HCM 95th %tile Q(veh)	1.6	0.6	0.1	-	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	558	87	105	730	123	152	661	41	60	549	157
Future Volume (veh/h)	196	558	87	105	730	123	152	661	41	60	549	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	213	607	95	114	793	134	165	718	45	65	597	171
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1116	174	143	924	156	201	1166	73	84	756	216
Arrive On Green	0.14	0.36	0.36	0.08	0.30	0.30	0.04	0.11	0.11	0.05	0.28	0.28
Sat Flow, veh/h	1781	3079	481	1781	3035	513	1781	3396	213	1781	2721	778
Grp Volume(v), veh/h	213	350	352	114	464	463	165	376	387	65	389	379
Grp Sat Flow(s),veh/h/ln	1781	1777	1783	1781	1777	1771	1781	1777	1832	1781	1777	1721
Q Serve(g_s), s	10.5	14.1	14.1	5.7	22.1	22.1	8.3	18.1	18.1	3.2	18.2	18.3
Cycle Q Clear(g_c), s	10.5	14.1	14.1	5.7	22.1	22.1	8.3	18.1	18.1	3.2	18.2	18.3
Prop In Lane	1.00		0.27	1.00		0.29	1.00		0.12	1.00		0.45
Lane Grp Cap(c), veh/h	247	644	646	143	541	539	201	610	629	84	494	478
V/C Ratio(X)	0.86	0.54	0.55	0.80	0.86	0.86	0.82	0.62	0.62	0.78	0.79	0.79
Avail Cap(c_a), veh/h	247	644	646	247	541	539	247	610	629	247	494	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	22.8	22.8	40.6	29.5	29.5	42.4	34.2	34.2	42.4	30.1	30.1
Incr Delay (d2), s/veh	24.5	3.3	3.3	3.7	16.1	16.2	13.7	4.6	4.5	5.7	12.1	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	6.2	6.2	2.5	11.3	11.2	4.5	9.3	9.6	1.5	9.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.4	26.1	26.1	44.4	45.6	45.7	56.1	38.8	38.7	48.1	42.2	42.7
LnGrp LOS	E	C	C	D	D	D	E	D	D	D	D	D
Approach Vol, veh/h		915			1041			928			833	
Approach Delay, s/veh		34.5			45.5			41.9			42.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	31.9	7.2	35.4	10.2	37.1	13.1	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	12.5	24.1	5.2	20.1	7.7	16.1	10.3	20.3
Green Ext Time (p_c), s	0.0	0.6	0.0	2.4	0.0	3.7	0.0	2.4

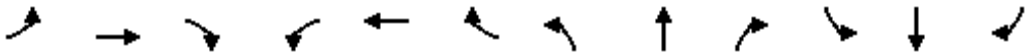
Intersection Summary	
HCM 6th Ctrl Delay	41.3
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	807	106	75	498	70	122	612	44	83	547	85
Future Volume (veh/h)	136	807	106	75	498	70	122	612	44	83	547	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	148	877	115	82	541	76	133	665	48	90	595	92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1273	167	105	1129	158	166	1029	74	115	856	132
Arrive On Green	0.10	0.40	0.40	0.06	0.36	0.36	0.03	0.10	0.10	0.06	0.28	0.28
Sat Flow, veh/h	1781	3158	414	1781	3129	438	1781	3358	242	1781	3082	475
Grp Volume(v), veh/h	148	494	498	82	306	311	133	352	361	90	342	345
Grp Sat Flow(s),veh/h/ln	1781	1777	1795	1781	1777	1790	1781	1777	1823	1781	1777	1781
Q Serve(g_s), s	7.3	20.7	20.7	4.1	12.0	12.1	6.7	17.1	17.2	4.5	15.5	15.6
Cycle Q Clear(g_c), s	7.3	20.7	20.7	4.1	12.0	12.1	6.7	17.1	17.2	4.5	15.5	15.6
Prop In Lane	1.00		0.23	1.00		0.24	1.00		0.13	1.00		0.27
Lane Grp Cap(c), veh/h	181	716	723	105	641	646	166	544	559	115	494	495
V/C Ratio(X)	0.82	0.69	0.69	0.78	0.48	0.48	0.80	0.65	0.65	0.78	0.69	0.70
Avail Cap(c_a), veh/h	247	716	723	247	641	646	247	544	559	247	494	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	22.2	22.2	41.8	22.2	22.2	42.8	35.8	35.8	41.5	29.1	29.1
Incr Delay (d2), s/veh	10.4	5.4	5.3	4.6	2.5	2.6	6.1	5.8	5.7	4.3	7.8	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	9.1	9.2	1.9	5.1	5.2	3.3	8.9	9.2	2.0	7.3	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	27.6	27.5	46.3	24.8	24.8	48.8	41.6	41.5	45.7	36.9	37.0
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		1140			699			846			777	
Approach Delay, s/veh		30.5			27.3			42.7			38.0	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	37.0	8.8	32.1	8.3	40.8	11.4	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	9.3	14.1	6.5	19.2	6.1	22.7	8.7	17.6
Green Ext Time (p_c), s	0.0	3.6	0.0	2.6	0.0	1.6	0.0	3.1

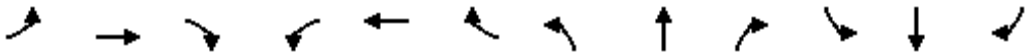
Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	567	87	133	739	123	169	696	67	60	596	157
Future Volume (veh/h)	205	567	87	133	739	123	169	696	67	60	596	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	223	616	95	145	803	134	184	757	73	65	648	171
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1025	158	178	891	149	220	1161	112	84	771	203
Arrive On Green	0.14	0.33	0.33	0.10	0.29	0.29	0.04	0.12	0.12	0.05	0.28	0.28
Sat Flow, veh/h	1781	3086	475	1781	3041	507	1781	3274	316	1781	2776	732
Grp Volume(v), veh/h	223	354	357	145	469	468	184	411	419	65	415	404
Grp Sat Flow(s),veh/h/ln	1781	1777	1784	1781	1777	1772	1781	1777	1813	1781	1777	1730
Q Serve(g_s), s	11.1	15.0	15.0	7.2	22.8	22.8	9.2	19.9	19.9	3.2	19.8	19.8
Cycle Q Clear(g_c), s	11.1	15.0	15.0	7.2	22.8	22.8	9.2	19.9	19.9	3.2	19.8	19.8
Prop In Lane	1.00		0.27	1.00		0.29	1.00		0.17	1.00		0.42
Lane Grp Cap(c), veh/h	247	590	592	178	520	519	220	630	643	84	494	481
V/C Ratio(X)	0.90	0.60	0.60	0.82	0.90	0.90	0.83	0.65	0.65	0.78	0.84	0.84
Avail Cap(c_a), veh/h	247	590	592	247	520	519	247	630	643	247	494	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	25.1	25.1	39.7	30.6	30.6	42.2	34.4	34.4	42.4	30.6	30.6
Incr Delay (d2), s/veh	31.7	4.5	4.5	9.7	21.4	21.4	17.6	5.2	5.1	5.7	15.7	16.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	6.8	6.8	3.5	12.2	12.2	5.3	10.2	10.4	1.5	10.1	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	29.5	29.6	49.4	51.9	52.0	59.8	39.6	39.5	48.1	46.3	46.8
LnGrp LOS	E	C	C	D	D	D	E	D	D	D	D	D
Approach Vol, veh/h		934			1082			1014			884	
Approach Delay, s/veh		39.2			51.6			43.2			46.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	30.9	7.2	36.4	12.0	34.4	14.1	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	13.1	24.8	5.2	21.9	9.2	17.0	11.2	21.8
Green Ext Time (p_c), s	0.0	0.1	0.0	1.8	0.0	3.4	0.0	1.8

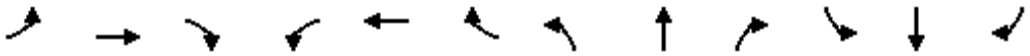
Intersection Summary	
HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	815	106	101	507	70	139	645	69	83	591	85
Future Volume (veh/h)	144	815	106	101	507	70	139	645	69	83	591	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	886	115	110	551	76	151	701	75	90	642	92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1180	153	139	1080	149	186	1027	110	115	866	124
Arrive On Green	0.11	0.37	0.37	0.08	0.34	0.34	0.03	0.10	0.10	0.06	0.28	0.28
Sat Flow, veh/h	1781	3162	410	1781	3137	431	1781	3234	346	1781	3117	446
Grp Volume(v), veh/h	157	498	503	110	311	316	151	385	391	90	365	369
Grp Sat Flow(s),veh/h/ln	1781	1777	1795	1781	1777	1791	1781	1777	1803	1781	1777	1787
Q Serve(g_s), s	7.8	22.0	22.0	5.5	12.5	12.6	7.6	18.8	18.8	4.5	16.8	16.9
Cycle Q Clear(g_c), s	7.8	22.0	22.0	5.5	12.5	12.6	7.6	18.8	18.8	4.5	16.8	16.9
Prop In Lane	1.00		0.23	1.00		0.24	1.00		0.19	1.00		0.25
Lane Grp Cap(c), veh/h	190	663	670	139	612	617	186	564	572	115	494	496
V/C Ratio(X)	0.83	0.75	0.75	0.79	0.51	0.51	0.81	0.68	0.68	0.78	0.74	0.74
Avail Cap(c_a), veh/h	247	663	670	247	612	617	247	564	572	247	494	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	24.6	24.6	40.8	23.4	23.5	42.6	35.9	35.9	41.5	29.6	29.6
Incr Delay (d2), s/veh	12.6	7.6	7.6	3.8	3.0	3.0	10.6	6.6	6.5	4.3	9.6	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	10.1	10.2	2.5	5.4	5.5	4.0	9.9	10.0	2.0	8.1	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.0	32.2	32.1	44.6	26.5	26.5	53.1	42.5	42.4	45.7	39.2	39.2
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		1158			737			927			824	
Approach Delay, s/veh		34.9			29.2			44.2			39.9	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	35.5	8.8	33.1	10.0	38.1	12.4	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	9.8	14.6	6.5	20.8	7.5	24.0	9.6	18.9
Green Ext Time (p_c), s	0.0	3.5	0.0	2.2	0.0	0.7	0.0	2.8

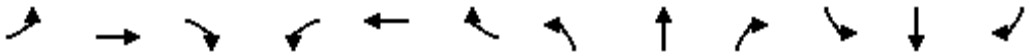
Intersection Summary	
HCM 6th Ctrl Delay	37.2
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	561	87	108	734	124	153	670	43	60	557	158
Future Volume (veh/h)	197	561	87	108	734	124	153	670	43	60	557	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	214	610	95	117	798	135	166	728	47	65	605	172
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1109	172	147	921	156	202	1166	75	84	757	215
Arrive On Green	0.14	0.36	0.36	0.08	0.30	0.30	0.04	0.11	0.11	0.05	0.28	0.28
Sat Flow, veh/h	1781	3081	479	1781	3034	513	1781	3389	219	1781	2726	773
Grp Volume(v), veh/h	214	351	354	117	467	466	166	382	393	65	394	383
Grp Sat Flow(s),veh/h/ln	1781	1777	1783	1781	1777	1771	1781	1777	1831	1781	1777	1722
Q Serve(g_s), s	10.6	14.2	14.3	5.8	22.4	22.4	8.3	18.4	18.5	3.2	18.5	18.6
Cycle Q Clear(g_c), s	10.6	14.2	14.3	5.8	22.4	22.4	8.3	18.4	18.5	3.2	18.5	18.6
Prop In Lane	1.00		0.27	1.00		0.29	1.00		0.12	1.00		0.45
Lane Grp Cap(c), veh/h	247	639	642	147	539	537	202	611	630	84	494	478
V/C Ratio(X)	0.86	0.55	0.55	0.80	0.87	0.87	0.82	0.62	0.62	0.78	0.80	0.80
Avail Cap(c_a), veh/h	247	639	642	247	539	537	247	611	630	247	494	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	23.0	23.0	40.6	29.6	29.6	42.4	34.3	34.3	42.4	30.2	30.2
Incr Delay (d2), s/veh	24.9	3.4	3.4	3.7	16.9	17.0	13.9	4.8	4.6	5.7	12.7	13.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.2	6.3	2.6	11.5	11.4	4.6	9.5	9.7	1.5	9.2	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	26.4	26.4	44.3	46.6	46.6	56.3	39.1	39.0	48.1	42.8	43.4
LnGrp LOS	E	C	C	D	D	D	E	D	D	D	D	D
Approach Vol, veh/h		919			1050			941			842	
Approach Delay, s/veh		34.9			46.3			42.1			43.5	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	31.8	7.2	35.5	10.4	36.9	13.2	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	12.6	24.4	5.2	20.5	7.8	16.3	10.3	20.6
Green Ext Time (p_c), s	0.0	0.4	0.0	2.3	0.0	3.6	0.0	2.3

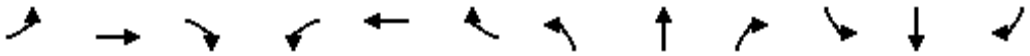
Intersection Summary	
HCM 6th Ctrl Delay	41.8
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	811	107	77	500	70	123	619	46	83	556	85
Future Volume (veh/h)	137	811	107	77	500	70	123	619	46	83	556	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	149	882	116	84	543	76	134	673	50	90	604	92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1266	166	108	1126	157	167	1029	76	115	858	130
Arrive On Green	0.10	0.40	0.40	0.06	0.36	0.36	0.03	0.10	0.10	0.06	0.28	0.28
Sat Flow, veh/h	1781	3156	415	1781	3131	437	1781	3350	249	1781	3090	470
Grp Volume(v), veh/h	149	497	501	84	307	312	134	357	366	90	347	349
Grp Sat Flow(s),veh/h/ln	1781	1777	1795	1781	1777	1790	1781	1777	1822	1781	1777	1782
Q Serve(g_s), s	7.4	20.9	20.9	4.2	12.1	12.1	6.7	17.4	17.4	4.5	15.8	15.8
Cycle Q Clear(g_c), s	7.4	20.9	20.9	4.2	12.1	12.1	6.7	17.4	17.4	4.5	15.8	15.8
Prop In Lane	1.00		0.23	1.00		0.24	1.00		0.14	1.00		0.26
Lane Grp Cap(c), veh/h	182	713	720	108	639	644	167	546	559	115	494	495
V/C Ratio(X)	0.82	0.70	0.70	0.78	0.48	0.48	0.80	0.65	0.65	0.78	0.70	0.71
Avail Cap(c_a), veh/h	247	713	720	247	639	644	247	546	559	247	494	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	22.4	22.4	41.7	22.3	22.3	42.8	35.8	35.9	41.5	29.2	29.2
Incr Delay (d2), s/veh	10.7	5.6	5.5	4.5	2.6	2.6	6.3	6.0	5.9	4.3	8.1	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	9.3	9.4	1.9	5.2	5.2	3.3	9.1	9.3	2.0	7.5	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.3	28.0	27.9	46.2	24.9	24.9	49.1	41.8	41.7	45.7	37.3	37.4
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		1147			703			857			786	
Approach Delay, s/veh		30.8			27.5			42.9			38.3	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	36.9	8.8	32.1	8.4	40.6	11.5	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	9.4	14.1	6.5	19.4	6.2	22.9	8.7	17.8
Green Ext Time (p_c), s	0.0	3.6	0.0	2.6	0.0	1.5	0.0	3.0

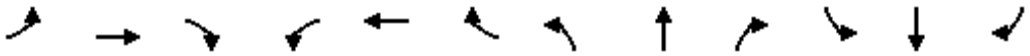
Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	570	87	136	743	124	170	705	69	60	604	158
Future Volume (veh/h)	206	570	87	136	743	124	170	705	69	60	604	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	224	620	95	148	808	135	185	766	75	65	657	172
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	1019	156	181	889	148	222	1161	114	84	772	202
Arrive On Green	0.14	0.33	0.33	0.10	0.29	0.29	0.04	0.12	0.12	0.05	0.28	0.28
Sat Flow, veh/h	1781	3089	472	1781	3040	508	1781	3269	320	1781	2781	727
Grp Volume(v), veh/h	224	356	359	148	472	471	185	416	425	65	420	409
Grp Sat Flow(s),veh/h/ln	1781	1777	1784	1781	1777	1771	1781	1777	1812	1781	1777	1731
Q Serve(g_s), s	11.1	15.1	15.2	7.3	23.1	23.1	9.3	20.2	20.2	3.2	20.1	20.1
Cycle Q Clear(g_c), s	11.1	15.1	15.2	7.3	23.1	23.1	9.3	20.2	20.2	3.2	20.1	20.1
Prop In Lane	1.00		0.26	1.00		0.29	1.00		0.18	1.00		0.42
Lane Grp Cap(c), veh/h	247	586	588	181	519	518	222	631	644	84	494	481
V/C Ratio(X)	0.91	0.61	0.61	0.82	0.91	0.91	0.84	0.66	0.66	0.78	0.85	0.85
Avail Cap(c_a), veh/h	247	586	588	247	519	518	247	631	644	247	494	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	25.3	25.3	39.6	30.7	30.7	42.2	34.5	34.5	42.4	30.7	30.7
Incr Delay (d2), s/veh	32.6	4.6	4.7	10.4	22.4	22.5	17.8	5.3	5.2	5.7	16.6	17.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	6.8	6.9	3.6	12.5	12.4	5.3	10.4	10.6	1.5	10.4	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.7	29.9	30.0	50.0	53.1	53.2	60.0	39.9	39.8	48.1	47.3	47.8
LnGrp LOS	E	C	C	D	D	D	E	D	D	D	D	D
Approach Vol, veh/h		939			1091			1026			894	
Approach Delay, s/veh		39.7			52.7			43.5			47.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	30.8	7.2	36.5	12.1	34.2	14.2	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	13.1	25.1	5.2	22.2	9.3	17.2	11.3	22.1
Green Ext Time (p_c), s	0.0	0.0	0.0	1.6	0.0	3.4	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	46.1
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	819	107	103	509	70	140	652	71	83	600	85
Future Volume (veh/h)	145	819	107	103	509	70	140	652	71	83	600	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	890	116	112	553	76	152	709	77	90	652	92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	1174	153	141	1077	148	187	1027	111	115	868	122
Arrive On Green	0.11	0.37	0.37	0.08	0.34	0.34	0.03	0.10	0.10	0.06	0.28	0.28
Sat Flow, veh/h	1781	3160	412	1781	3138	430	1781	3229	350	1781	3124	440
Grp Volume(v), veh/h	158	500	506	112	312	317	152	390	396	90	370	374
Grp Sat Flow(s),veh/h/ln	1781	1777	1795	1781	1777	1792	1781	1777	1802	1781	1777	1788
Q Serve(g_s), s	7.8	22.2	22.2	5.6	12.6	12.7	7.6	19.1	19.1	4.5	17.1	17.2
Cycle Q Clear(g_c), s	7.8	22.2	22.2	5.6	12.6	12.7	7.6	19.1	19.1	4.5	17.1	17.2
Prop In Lane	1.00		0.23	1.00		0.24	1.00		0.19	1.00		0.25
Lane Grp Cap(c), veh/h	191	660	667	141	610	615	187	565	573	115	494	497
V/C Ratio(X)	0.83	0.76	0.76	0.79	0.51	0.51	0.81	0.69	0.69	0.78	0.75	0.75
Avail Cap(c_a), veh/h	247	660	667	247	610	615	247	565	573	247	494	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	24.8	24.8	40.7	23.5	23.6	42.6	36.0	36.0	41.5	29.7	29.7
Incr Delay (d2), s/veh	12.9	8.0	7.9	3.8	3.1	3.1	10.8	6.8	6.7	4.3	10.1	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	10.2	10.3	2.5	5.5	5.6	4.0	10.0	10.2	2.0	8.3	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	32.7	32.7	44.5	26.6	26.6	53.4	42.8	42.7	45.7	39.7	39.8
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h		1164			741			938			834	
Approach Delay, s/veh		35.3			29.3			44.5			40.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	35.4	8.8	33.1	10.1	37.9	12.4	29.5
Change Period (Y+Rc), s	3.0	4.5	3.0	4.5	3.0	4.5	3.0	4.5
Max Green Setting (Gmax), s	12.5	25.0	12.5	25.0	12.5	25.0	12.5	25.0
Max Q Clear Time (g_c+I1), s	9.8	14.7	6.5	21.1	7.6	24.2	9.6	19.2
Green Ext Time (p_c), s	0.0	3.5	0.0	2.1	0.0	0.6	0.0	2.7

Intersection Summary	
HCM 6th Ctrl Delay	37.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	46	72	37	41	28	72	717	22	9	720	38
Future Volume (veh/h)	85	46	72	37	41	28	72	717	22	9	720	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	50	78	40	45	30	78	779	24	10	783	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	125	159	188	206	120	414	2170	67	424	2118	111
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	572	432	551	464	711	415	664	3519	108	677	3434	180
Grp Volume(v), veh/h	220	0	0	115	0	0	78	393	410	10	405	419
Grp Sat Flow(s),veh/h/ln	1555	0	0	1590	0	0	664	1777	1850	677	1777	1837
Q Serve(g_s), s	5.5	0.0	0.0	0.0	0.0	0.0	5.9	9.8	9.8	0.7	10.2	10.2
Cycle Q Clear(g_c), s	10.0	0.0	0.0	4.5	0.0	0.0	16.1	9.8	9.8	10.5	10.2	10.2
Prop In Lane	0.42		0.35	0.35		0.26	1.00		0.06	1.00		0.10
Lane Grp Cap(c), veh/h	506	0	0	513	0	0	414	1096	1141	424	1096	1133
V/C Ratio(X)	0.43	0.00	0.00	0.22	0.00	0.00	0.19	0.36	0.36	0.02	0.37	0.37
Avail Cap(c_a), veh/h	506	0	0	513	0	0	414	1096	1141	424	1096	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	0.0	24.3	0.0	0.0	12.6	8.5	8.5	11.1	8.6	8.6
Incr Delay (d2), s/veh	2.7	0.0	0.0	1.0	0.0	0.0	1.0	0.9	0.9	0.1	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	2.0	0.0	0.0	0.9	3.4	3.5	0.1	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	0.0	25.3	0.0	0.0	13.6	9.4	9.4	11.2	9.5	9.5
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		220			115			881			834	
Approach Delay, s/veh		28.9			25.3			9.8			9.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	18.1	12.0	12.5	6.5
Green Ext Time (p_c), s	3.7	1.1	3.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	34	123	19	21	18	82	631	14	24	776	41
Future Volume (veh/h)	85	34	123	19	21	18	82	631	14	24	776	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	37	134	21	23	20	89	686	15	26	843	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	88	228	172	186	139	387	2192	48	471	2114	113
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	458	304	791	413	643	480	625	3555	78	745	3428	183
Grp Volume(v), veh/h	263	0	0	64	0	0	89	343	358	26	437	451
Grp Sat Flow(s),veh/h/ln	1552	0	0	1535	0	0	625	1777	1856	745	1777	1834
Q Serve(g_s), s	9.1	0.0	0.0	0.0	0.0	0.0	7.6	8.2	8.3	1.5	11.3	11.3
Cycle Q Clear(g_c), s	12.8	0.0	0.0	2.4	0.0	0.0	18.8	8.2	8.3	9.8	11.3	11.3
Prop In Lane	0.35		0.51	0.33		0.31	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	502	0	0	497	0	0	387	1096	1145	471	1096	1131
V/C Ratio(X)	0.52	0.00	0.00	0.13	0.00	0.00	0.23	0.31	0.31	0.06	0.40	0.40
Avail Cap(c_a), veh/h	502	0	0	497	0	0	387	1096	1145	471	1096	1131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	23.6	0.0	0.0	13.6	8.2	8.2	10.5	8.8	8.8
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.5	0.0	0.0	1.4	0.7	0.7	0.2	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	0.0	1.1	0.0	0.0	1.1	2.9	3.0	0.3	3.9	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	0.0	24.1	0.0	0.0	14.9	8.9	8.9	10.7	9.9	9.8
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		263			64			790			914	
Approach Delay, s/veh		31.0			24.1			9.6			9.9	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	20.8	14.8	13.3	4.4
Green Ext Time (p_c), s	3.3	1.2	3.7	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	46	72	37	50	28	72	764	22	9	764	38
Future Volume (veh/h)	85	46	72	37	50	28	72	764	22	9	764	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	50	78	40	54	30	78	830	24	10	830	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	125	159	177	230	113	395	2174	63	402	2125	105
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	571	431	551	429	797	391	636	3526	102	646	3446	170
Grp Volume(v), veh/h	220	0	0	124	0	0	78	418	436	10	428	443
Grp Sat Flow(s),veh/h/ln	1554	0	0	1617	0	0	636	1777	1851	646	1777	1839
Q Serve(g_s), s	5.1	0.0	0.0	0.0	0.0	0.0	6.4	10.6	10.6	0.7	10.9	10.9
Cycle Q Clear(g_c), s	9.9	0.0	0.0	4.8	0.0	0.0	17.3	10.6	10.6	11.3	10.9	10.9
Prop In Lane	0.42		0.35	0.32		0.24	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	506	0	0	520	0	0	395	1096	1142	402	1096	1134
V/C Ratio(X)	0.44	0.00	0.00	0.24	0.00	0.00	0.20	0.38	0.38	0.02	0.39	0.39
Avail Cap(c_a), veh/h	506	0	0	520	0	0	395	1096	1142	402	1096	1134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	0.0	24.5	0.0	0.0	13.1	8.6	8.6	11.5	8.7	8.7
Incr Delay (d2), s/veh	2.7	0.0	0.0	1.1	0.0	0.0	1.1	1.0	1.0	0.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	2.1	0.0	0.0	0.9	3.7	3.9	0.1	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	0.0	25.5	0.0	0.0	14.2	9.7	9.6	11.6	9.8	9.7
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		220			124			932			881	
Approach Delay, s/veh		28.8			25.5			10.0			9.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	19.3	11.9	13.3	6.8
Green Ext Time (p_c), s	4.0	1.1	3.5	0.6

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	34	123	19	30	18	82	675	14	24	818	41
Future Volume (veh/h)	85	34	123	19	30	18	82	675	14	24	818	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	37	134	21	33	20	89	734	15	26	889	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	87	228	154	233	124	369	2196	45	448	2120	107
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	456	303	788	356	808	431	599	3561	73	713	3439	174
Grp Volume(v), veh/h	263	0	0	74	0	0	89	366	383	26	459	475
Grp Sat Flow(s),veh/h/ln	1547	0	0	1594	0	0	599	1777	1857	713	1777	1836
Q Serve(g_s), s	9.1	0.0	0.0	0.0	0.0	0.0	8.1	9.0	9.0	1.6	12.0	12.0
Cycle Q Clear(g_c), s	12.8	0.0	0.0	2.8	0.0	0.0	20.2	9.0	9.0	10.6	12.0	12.0
Prop In Lane	0.35		0.51	0.28		0.27	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	501	0	0	512	0	0	369	1096	1145	448	1096	1132
V/C Ratio(X)	0.53	0.00	0.00	0.14	0.00	0.00	0.24	0.33	0.33	0.06	0.42	0.42
Avail Cap(c_a), veh/h	501	0	0	512	0	0	369	1096	1145	448	1096	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	23.7	0.0	0.0	14.1	8.3	8.3	10.9	8.9	8.9
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.6	0.0	0.0	1.5	0.8	0.8	0.2	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	0.0	1.2	0.0	0.0	1.2	3.1	3.3	0.3	4.2	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	0.0	0.0	24.3	0.0	0.0	15.7	9.2	9.1	11.1	10.1	10.1
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	B	B
Approach Vol, veh/h		263			74			838			960	
Approach Delay, s/veh		31.1			24.3			9.8			10.1	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	22.2	14.8	14.0	4.8
Green Ext Time (p_c), s	3.6	1.2	4.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	46	72	37	41	28	72	729	22	9	731	38
Future Volume (veh/h)	85	46	72	37	41	28	72	729	22	9	731	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	50	78	40	45	30	78	792	24	10	795	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	125	159	188	206	120	409	2171	66	418	2120	109
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	572	432	551	464	711	415	657	3521	107	669	3437	177
Grp Volume(v), veh/h	220	0	0	115	0	0	78	400	416	10	411	425
Grp Sat Flow(s),veh/h/ln	1555	0	0	1590	0	0	657	1777	1850	669	1777	1838
Q Serve(g_s), s	5.5	0.0	0.0	0.0	0.0	0.0	6.0	10.0	10.0	0.7	10.4	10.4
Cycle Q Clear(g_c), s	10.0	0.0	0.0	4.5	0.0	0.0	16.4	10.0	10.0	10.7	10.4	10.4
Prop In Lane	0.42		0.35	0.35		0.26	1.00		0.06	1.00		0.10
Lane Grp Cap(c), veh/h	506	0	0	513	0	0	409	1096	1141	418	1096	1133
V/C Ratio(X)	0.43	0.00	0.00	0.22	0.00	0.00	0.19	0.36	0.36	0.02	0.38	0.38
Avail Cap(c_a), veh/h	506	0	0	513	0	0	409	1096	1141	418	1096	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	0.0	24.3	0.0	0.0	12.7	8.5	8.5	11.2	8.6	8.6
Incr Delay (d2), s/veh	2.7	0.0	0.0	1.0	0.0	0.0	1.0	0.9	0.9	0.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	2.0	0.0	0.0	0.9	3.5	3.6	0.1	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	0.0	25.3	0.0	0.0	13.7	9.5	9.4	11.3	9.6	9.6
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		220			115			894			846	
Approach Delay, s/veh		28.9			25.3			9.8			9.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	18.4	12.0	12.7	6.5
Green Ext Time (p_c), s	3.7	1.1	3.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	34	124	19	21	18	82	640	14	24	788	41
Future Volume (veh/h)	85	34	124	19	21	18	82	640	14	24	788	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	37	135	21	23	20	89	696	15	26	857	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	87	229	172	185	138	382	2193	47	466	2116	111
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	455	303	794	412	642	479	617	3557	77	738	3431	180
Grp Volume(v), veh/h	264	0	0	64	0	0	89	348	363	26	444	458
Grp Sat Flow(s),veh/h/ln	1552	0	0	1534	0	0	617	1777	1856	738	1777	1835
Q Serve(g_s), s	9.1	0.0	0.0	0.0	0.0	0.0	7.8	8.4	8.4	1.6	11.5	11.5
Cycle Q Clear(g_c), s	12.8	0.0	0.0	2.4	0.0	0.0	19.2	8.4	8.4	10.0	11.5	11.5
Prop In Lane	0.35		0.51	0.33		0.31	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	502	0	0	496	0	0	382	1096	1145	466	1096	1131
V/C Ratio(X)	0.53	0.00	0.00	0.13	0.00	0.00	0.23	0.32	0.32	0.06	0.40	0.41
Avail Cap(c_a), veh/h	502	0	0	496	0	0	382	1096	1145	466	1096	1131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	23.6	0.0	0.0	13.7	8.2	8.2	10.6	8.8	8.8
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.5	0.0	0.0	1.4	0.8	0.7	0.2	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	0.0	1.1	0.0	0.0	1.1	2.9	3.0	0.3	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	0.0	0.0	24.1	0.0	0.0	15.2	9.0	9.0	10.8	9.9	9.9
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		264			64			800			928	
Approach Delay, s/veh		31.1			24.1			9.7			9.9	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	21.2	14.8	13.5	4.4
Green Ext Time (p_c), s	3.4	1.2	3.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	46	72	37	50	28	72	776	22	9	775	38
Future Volume (veh/h)	85	46	72	37	50	28	72	776	22	9	775	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	50	78	40	54	30	78	843	24	10	842	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	125	159	177	230	113	390	2176	62	397	2126	104
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	571	431	551	429	797	391	629	3528	100	638	3448	168
Grp Volume(v), veh/h	220	0	0	124	0	0	78	425	442	10	434	449
Grp Sat Flow(s),veh/h/ln	1554	0	0	1617	0	0	629	1777	1852	638	1777	1839
Q Serve(g_s), s	5.1	0.0	0.0	0.0	0.0	0.0	6.5	10.8	10.8	0.7	11.1	11.1
Cycle Q Clear(g_c), s	9.9	0.0	0.0	4.8	0.0	0.0	17.6	10.8	10.8	11.6	11.1	11.1
Prop In Lane	0.42		0.35	0.32		0.24	1.00		0.05	1.00		0.09
Lane Grp Cap(c), veh/h	506	0	0	520	0	0	390	1096	1142	397	1096	1134
V/C Ratio(X)	0.44	0.00	0.00	0.24	0.00	0.00	0.20	0.39	0.39	0.03	0.40	0.40
Avail Cap(c_a), veh/h	506	0	0	520	0	0	390	1096	1142	397	1096	1134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	0.0	24.5	0.0	0.0	13.2	8.7	8.7	11.6	8.7	8.7
Incr Delay (d2), s/veh	2.7	0.0	0.0	1.1	0.0	0.0	1.2	1.0	1.0	0.1	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.0	2.1	0.0	0.0	1.0	3.8	3.9	0.1	3.9	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	0.0	25.5	0.0	0.0	14.4	9.7	9.7	11.7	9.8	9.8
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		220			124			945			893	
Approach Delay, s/veh		28.8			25.5			10.1			9.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	19.6	11.9	13.6	6.8
Green Ext Time (p_c), s	4.0	1.1	3.6	0.6

Intersection Summary		
HCM 6th Ctrl Delay	12.7	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	34	124	19	30	18	82	684	14	24	830	41
Future Volume (veh/h)	85	34	124	19	30	18	82	684	14	24	830	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	92	37	135	21	33	20	89	743	15	26	902	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	87	229	154	233	124	364	2197	44	444	2122	106
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	454	302	791	355	807	430	592	3562	72	707	3441	172
Grp Volume(v), veh/h	264	0	0	74	0	0	89	371	387	26	466	481
Grp Sat Flow(s),veh/h/ln	1547	0	0	1593	0	0	592	1777	1857	707	1777	1836
Q Serve(g_s), s	9.2	0.0	0.0	0.0	0.0	0.0	8.3	9.1	9.1	1.7	12.3	12.3
Cycle Q Clear(g_c), s	12.9	0.0	0.0	2.8	0.0	0.0	20.5	9.1	9.1	10.8	12.3	12.3
Prop In Lane	0.35		0.51	0.28		0.27	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	501	0	0	511	0	0	364	1096	1145	444	1096	1132
V/C Ratio(X)	0.53	0.00	0.00	0.14	0.00	0.00	0.24	0.34	0.34	0.06	0.43	0.43
Avail Cap(c_a), veh/h	501	0	0	511	0	0	364	1096	1145	444	1096	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	0.0	0.0	23.7	0.0	0.0	14.3	8.4	8.4	11.0	9.0	9.0
Incr Delay (d2), s/veh	3.9	0.0	0.0	0.6	0.0	0.0	1.6	0.8	0.8	0.3	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	0.0	1.2	0.0	0.0	1.2	3.2	3.3	0.3	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	0.0	0.0	24.3	0.0	0.0	15.9	9.2	9.2	11.2	10.2	10.1
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	B	B
Approach Vol, veh/h		264			74			847			973	
Approach Delay, s/veh		31.1			24.3			9.9			10.2	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	60.0	30.0	60.0	30.0
Change Period (Y+Rc), s	4.5	4.0	4.5	4.0
Max Green Setting (Gmax), s	55.5	26.0	55.5	26.0
Max Q Clear Time (g_c+I1), s	22.5	14.9	14.3	4.8
Green Ext Time (p_c), s	3.6	1.2	4.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	26	0	0	741	37
Future Vol, veh/h	0	26	0	0	741	37
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	28	0	0	805	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	423	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	579	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	579	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	579	-	-
HCM Lane V/C Ratio	-	0.049	-	-
HCM Control Delay (s)	-	11.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	25	0	0	728	35
Future Vol, veh/h	0	25	0	0	728	35
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	27	0	0	791	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	415	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	586	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	586	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	586	-	-
HCM Lane V/C Ratio	-	0.046	-	-
HCM Control Delay (s)	-	11.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	26	0	0	753	37
Future Vol, veh/h	0	26	0	0	753	37
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	28	0	0	818	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	429	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	574	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	574	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	574	-	-
HCM Lane V/C Ratio	-	0.049	-	-
HCM Control Delay (s)	-	11.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	25	0	0	739	35
Future Vol, veh/h	0	25	0	0	739	35
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	27	0	0	803	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	421	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	581	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	581	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	581	-	-
HCM Lane V/C Ratio	-	0.047	-	-
HCM Control Delay (s)	-	11.5	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-