STRATHMORE AND GARVEY MIXED USE PROJECT TRAFFIC IMPACT ANALYSIS

City of Rosemead

September 9, 2022

gandini

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

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prepared by

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Project No. 19538

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EXECUTIVE SUMMARY

The 1.21-acre project site is located at the northwest corner of the intersection of Strathmore Avenue and Garvey Avenue in the City of Rosemead.

The project site is currently developed with retail and outdoor storage uses. The proposed project involves redevelopment with a seven-story mixed-use development comprised of 93 apartment dwelling units (including 26 live/work units), 6,040 square feet of retail, 12,801 square feet of office, a two-story parking structure, and related landscaping improvements. Vehicle access is proposed at Strathmore Avenue, Virginia Street, and a public alley connecting to Brighton Street at the west side of the property. The proposed project is anticipated to be constructed and fully operational by year 2024.

Existing Conditions

The study intersections currently operate at acceptable Levels of Service (LOS) during the peak hours for Existing conditions, except for the following study intersection which currently operates at an unacceptable Level of Service (E or F) during the PM peak hour:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (PM- LOS E)

Project Trip Generation

The proposed project is forecast to generate a total of approximately 864 daily trips, including 62 trips during the AM peak hour and 74 trips during the PM peak hour

Forecast Levels of Service

The study intersections are forecast to operate at acceptable Levels of Service during the peak hours for Opening Year (2024) Without Project conditions, except for the following study intersection:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (AM-LOS E, PM-LOS F)

The study intersections are forecast to operate at acceptable Levels of Service during the peak hours for Opening Year (2024) With Project conditions, except for the following study intersection which is forecast to continue operating at an unacceptable Levels of Service:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (AM-LOS E, PM-LOS F)

The proposed project is forecast to result in no adverse transportation effects based on the established thresholds.

Congestion Management Program (CMP)

The proposed project would result in no operational CMP impact as it does not meet the thresholds requiring a traffic impact analysis for CMP purposes and no further CMP analysis is warranted. A transit impact review was conducted for compliance with the CMP requirements and found that the proposed project is forecast to have a nominal impact on transit demand.

Specific Plan Amendment

Relative to the 2035 without GASP condition, buildout of the GASP with the proposed Specific Plan Amendment would not result in new significant impacts or mitigation in addition to those already identified in the previously certified GASP EIR.

VMT Impacts

The proposed project satisfies the screening criteria for low-VMT generating area and may be presumed to result in a less than significant VMT impact in accordance with City of Rosemead VMT guidelines.

1. INTRODUCTION

This section describes the purpose of this traffic impact analysis, project location, proposed development, and study area. Figure 1 shows the project location map. Figure 2 illustrates the project site plan.

PURPOSE

The purpose of this study is to evaluate the potential for transportation impacts resulting from development of the proposed project both in the context of the City of Rosemead's discretionary authority for conformance with locally established operational standards and the California Environmental Quality Act (CEQA). Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in to assist the reader with terms related to transportation engineering.

This study was prepared in consultation with City of Rosemead staff and in accordance with the procedures and methodologies for assessing transportation impacts established by the City. To assess the project's conformance with local operational standards, this study evaluates the project's effect on traffic operations and, if necessary, identifies recommended improvements or corrective measures to alleviate operational deficiencies substantially caused or worsened by the proposed project. For CEQA purposes, this study also evaluates the significance of project-related transportation impacts as measured by vehicle miles traveled (VMT) relative to thresholds established by the City of Rosemead as the lead agency and, if necessary, identifies any feasible mitigation measures to mitigate any significant impacts.

PROJECT DESCRIPTION

The 1.21-acre project site is located at the northwest corner of the intersection of Strathmore Avenue and Garvey Avenue in the City of Rosemead.

The project site is currently developed with retail and outdoor storage uses. The proposed project involves redevelopment with a seven-story mixed-use development comprised of 93 apartment dwelling units (including 26 live/work units), 6,040 square feet of retail, 12,801 square feet of office, a two-story parking structure, and related landscaping improvements. Vehicle access is proposed at Strathmore Avenue, Virginia Street, and a public alley connecting to Brighton Street at the west side of the property. The proposed project is anticipated to be constructed and fully operational by year 2024.

SCOPE OF ANALYSIS

The scope of this analysis was determined in consultation with City of Rosemead staff as documented in the City-approved scoping agreement provided in Appendix B.

Study Area

Based on the study intersections identified in the approved scoping agreement, the study area consists of the following study intersections within the City of Rosemead:

	Study Intersections	Jurisdiction
1.	Del Mar Avenue (NS) at Garvey Avenue (EW)	Rosemead
2.	Brighton Street (NS) at Garvey Avenue (EW)	Rosemead
3.	Project Driveway (NS) at Virginia Avenue (EW)	Rosemead
4.	Strathmore Avenue (NS) at Virginia Street (EW)	Rosemead
5.	Strathmore Avenue (NS) at Project Driveway (EW)	Rosemead

Study Intersections	Jurisdiction
6. Strathmore Avenue (NS) at Garvey Avenue (EW)	Rosemead
7. San Gabriel Boulevard (NS) at Garvey Avenue (EW)	Rosemead

Notes:
(NS) = north-south roadway; (EW) = east-west roadway

Analysis Scenarios

In accordance with City of Rosemead requirements, the following scenarios are analyzed for weekday AM and PM peak hour conditions:

- Existing (2022);
- Opening Year (2024) Without Project (Existing + Growth Factor + Cumulative Projects); and
- Opening Year (2024) With Project (Existing + Growth Factor + Cumulative Projects + Project).

Legend

(#) Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

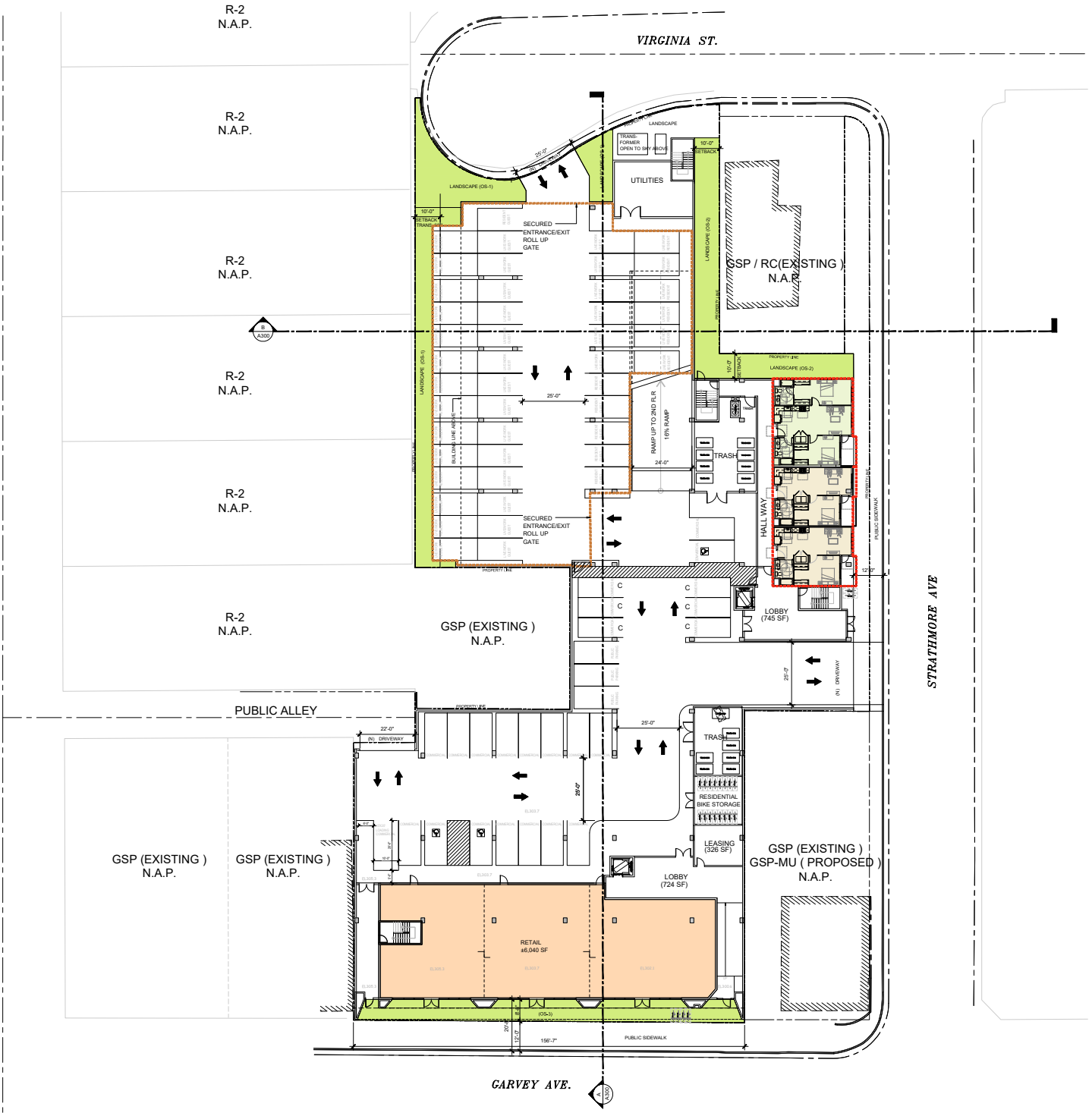


Figure 2
Site Plan

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

LEVEL OF SERVICE ANALYTICAL METHODOLOGY (NON-CEQA)

Level of Service analysis is performed for assessing conformance with General Plan and operational standards established by the applicable agencies. In accordance with current CEQA provisions, a project's effect on automobile delay (as measured by Level of Service) shall not constitute a significant environmental impact.

Intersection Capacity Utilization (Signalized Intersections)

In accordance with City of Rosemead guidelines, analysis of signalized intersections is based on the Intersection Capacity Utilization (ICU) methodology. The ICU methodology compares the volume of traffic using the intersection to the capacity of the intersection. The resulting volume-to-capacity (V/C) ratio represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The volume-to-capacity ratio is then correlated to a performance measure known as Level of Service based on the following thresholds:

Level of Service	Volume/Capacity Ratio
A	≤ 0.600
B	0.601 to 0.700
C	0.701 to 0.800
D	0.801 to 0.900
E	0.901 to 1.000
F	> 1.000

Source: Transportation Research Board, Interim Materials on Highway Capacity, Transportation Research Circular No. 212, January 1980.

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). ICU analysis was performed using the Vistro software.

In accordance with City of Rosemead requirements, this analysis uses the following input parameters for the ICU analysis: 1,800 vehicles per hour per lane for through and turn lanes, 3,240 vehicles per hour for dual left-turn lanes, and a total clearance time of 10 percent.

It is common practice for a right turn lane to be considered "de facto" if the paved lane width of a shared through/right turn lane is wide enough for right turning vehicles to travel outside the through lane. This analysis uses a minimum lane width of 20 feet from curb to lane stripe. Additionally, a de facto right turn lane is only considered where on-street parking is prohibited near the intersection approach.

Intersection Delay Methodology (Unsignalized Intersections)

The methodology used to assess the performance of unsignalized intersections in the City of Rosemead is known as the intersection delay methodology based on the procedures contained in the *Highway Capacity Manual*. The methodology compares the traffic volume using the intersection to the capacity of the

intersection to calculate the delay associated with the traffic control at the intersection. The intersection delay is then correlated to a performance measure known as Level of Service based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: *Highway Capacity Manual* (Transportation Research Board, 7th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). Intersection delay analysis was performed using the Vistro software.

If the paved lane width of a shared through/right turn lane is wide enough to permit a separate right turn, it is common practice for a right turn lane to be considered "de facto." To function as a de facto right turn lane there must be sufficient width for right turning vehicles to travel outside the through lane. This analysis uses a minimum lane width of 20 feet from curb to lane stripe. Additionally, a de facto right turn lane was only considered where on-street parking is prohibited near the intersection approach.

Performance Standards

The City of Rosemead has established minimum acceptable Level of Service standards during peak hour conditions of LOS D or better for intersections.

In accordance with the City of Rosemead guidelines, a project is considered to cause an adverse transportation effect if the project-related increase in the volume-to-capacity ratio equals or exceeds the threshold shown below:

Adverse Transportation Effect Threshold		
Level of Service	Volume/Capacity (V/C)	V/C Incremental Increase
E/F	0.91 or more	+0.02 or more

Although the City of Rosemead does not specify an adverse transportation effect threshold for unsignalized intersections, the following criteria is commonly used to assess the need for improvements at unsignalized intersections:

a) The addition of project trips causes the intersection to degrade from an acceptable Level of Service (D or better) to deficient Level of Service (E or F).

OR

b) The project increases delay by two or more seconds at an intersection that is already operating at a deficient Level of Service (E or F) prior to the addition of project trips;

AND

c) Peak hour volumes satisfy the California Manual on Uniform Traffic Controls (CA MUTCD) peak hour traffic signal warrant.

If a project is forecast to have an adverse transportation effect, feasible improvements that will reduce the effect to an acceptable level should be identified, to the extent feasible. Improvements can be in many forms, including the addition of lanes, traffic control modification, or transportation demand management measures.

VEHICLE MILES TRAVELED ANALYTICAL METHODOLOGY (CEQA)

The metric used to evaluate the transportation impact of land use and transportation projects under CEQA is known as vehicle miles traveled (VMT). In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Additional information and a detailed project assessment is provided in the Vehicle Miles Traveled section presented later in this report.

3. EXISTING CONDITIONS

EXISTING ROADWAY SYSTEM

Figure 3 identifies the lane geometry and intersection traffic controls for Existing conditions based on a field survey of the study area. Regional access to the project area is provided by the Interstate 10 freeway approximately 0.6 miles north of the project site. The key north-south roadways providing local circulation are Del Mar Avenue, Brighton Street, Strathmore Avenue, and San Gabriel Boulevard. The key east-west roadways providing local circulation are Virginia Street and Garvey Avenue.

Del Mar Avenue is a 4-lane undivided to 4-lane undivided roadway in the study area. Del Mar Avenue is classified as a Major Arterial in the City of Rosemead Circulation Plan. On-street parking is intermittently permitted in the project area. No bicycle facilities are provided in the study area, but Del Mar Avenue is a potential future bicycle route. Sidewalks are provided on both sides of the roadway.

Brighton Street is a 2-lane undivided roadway in the study area. Brighton Street is not classified in the City of Rosemead Circulation Plan. On-street parking is generally permitted in the project area. No bicycle facilities are provided in the study area. Sidewalks are provided on both sides of the roadway north of Garvey Avenue and intermittently provided on both sides of the roadway south of Garvey Avenue.

Strathmore Avenue is a 2-lane undivided roadway in the study area. Strathmore Avenue is not classified in the City of Rosemead Circulation Plan. On-street parking is generally permitted in the project area. No bicycle facilities are provided in the study area. Sidewalks are provided on both sides of the roadway.

San Gabriel Boulevard is a 4-lane divided roadway in the study area. San Gabriel Boulevard is classified as a Major Arterial in the City of Rosemead Circulation Plan. On-street parking is generally prohibited in the project area. No bicycle facilities are provided in the study area. Sidewalks are provided on both sides of the roadway.

Garvey Avenue is a 4-lane divided roadway in the study area. Garvey Avenue is classified as a Major Arterial in the City of Rosemead Circulation Plan. On-street parking is intermittently permitted in the project area. No bicycle facilities are provided in the study area, but Garvey Avenue is a potential future bicycle route. Sidewalks are provided on both sides of the roadway.

PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown on Figure 4.

BICYCLE ROUTES

No on-street bicycle facilities are provided in the project area. The City of Rosemead Existing Bicycle Routes and Potential Future Routes is depicted on Figure 5, and shows potential future bicycle facilities in the project area along Del Mar Avenue and Garvey Avenue.

TRANSIT FACILITIES

Figure 6 and Figure 7 show the existing transit routes available in the project vicinity. As shown on Figure 6, Foothill Transit does not service the study area. As shown on Figure 7, Montebello Bus Line Route 20 services San Gabriel Boulevard, and Los Angeles County Metropolitan Transportation Authority Route 70 and Rosemead Explorer service Garvey Avenue. Bus stops are located along Garvey Avenue including on the northwest and southeast corner of the Del Mar Avenue and Garvey Avenue intersection west of the project site, and on the northwest and southwest corner of the Kelburn Avenue and Garvey Avenue intersection east of the project site.

General Plan Context

Figure 8 shows the City of Rosemead Circulation Plan roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan.

Existing Traffic Volumes

Figure 9 and Figure 10 show the Existing AM and PM peak hour intersection turning movement volumes. Existing peak hour intersection volumes are based upon AM peak period and PM peak period intersection turning movement counts obtained in August 2022 during typical weekday conditions when schools were in session. The weekday AM peak period was counted between 7:00 AM and 9:00 AM and the weekday PM peak period was counted between 4:00 PM and 6:00 PM; these periods generally capture the peak times for commuter traffic when the roadway system is typically experiencing peak demand. The actual peak hour within each two-hour count period is determined based on the sum of the four consecutive 15-minute periods with the highest total volume. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest total volume and may vary at other intersections. Intersection turning movement count worksheets are provided in Appendix C.

Existing Intersection Level of Service

The intersection Levels of Service for Existing conditions have been calculated and are shown in Table 1. Existing intersection Level of Service worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate at acceptable Levels of Service during the peak hours for Existing conditions, except for the following study intersection which currently operates at an unacceptable Level of Service (E or F) during the PM peak hour:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (PM-LOS E)

.

Table 1
Existing Intersection Level of Service

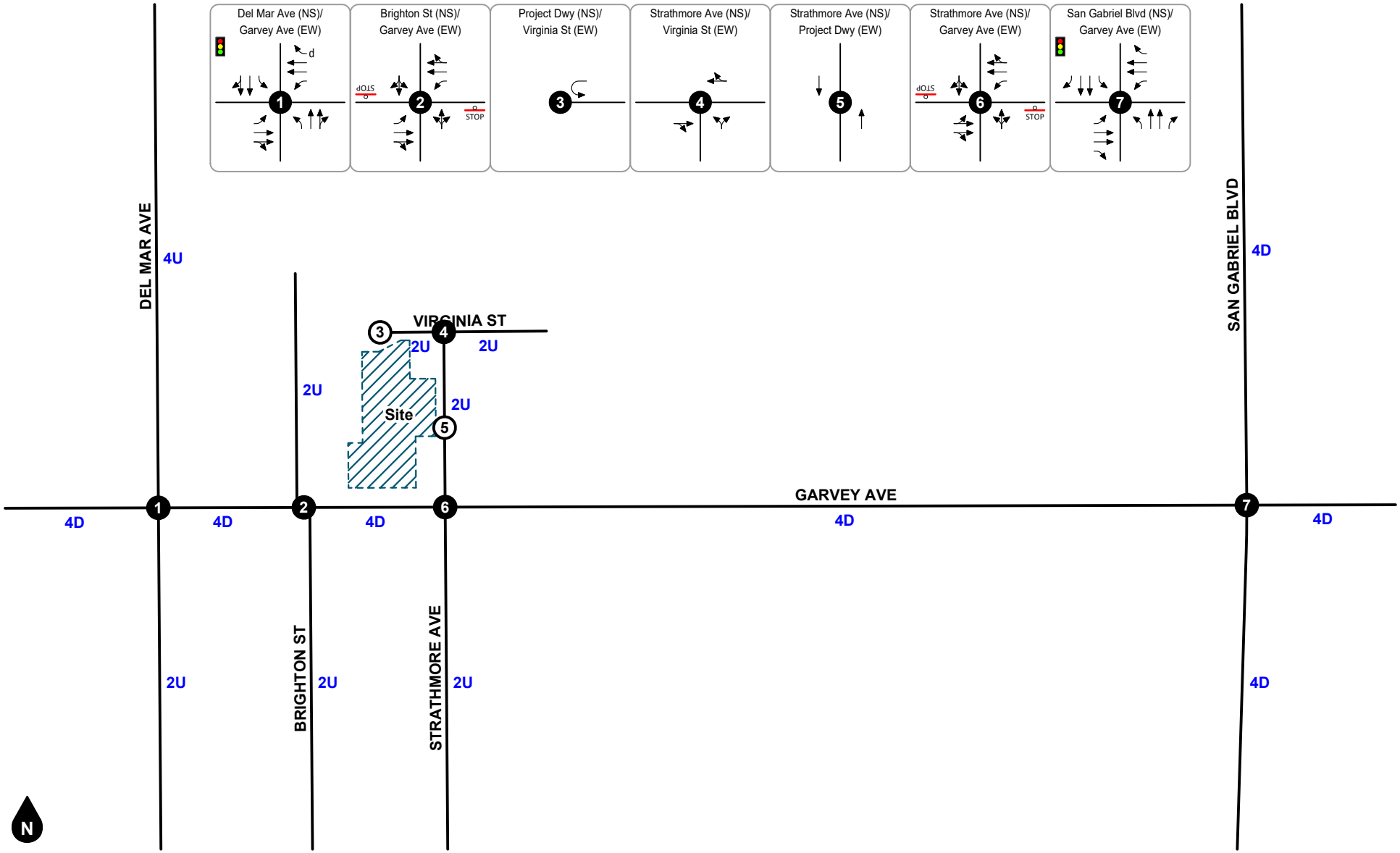
ID	Study Intersection	Traffic Control[1]	AM Peak Hour ICU or [Delay][2]	AM Peak Hour LOS[3]	PM Peak Hour ICU or [Delay][2]	PM Peak Hour LOS[3]
1.	Del Mar Ave at Garvey Ave	TS	0.614	B	0.685	B
2.	Brighton St at Garvey Ave	CSS	[14.7]	B	[16.9]	C
4.	Strathmore Ave at Virginia St	CSS	[8.4]	A	[8.5]	A
6.	Strathmore Ave at Garvey Ave	CSS	[30.2]	D	[37.9]	E
7.	San Gabriel Blvd at Garvey Ave	TS	0.693	B	0.777	C

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) ICU = Intersection Capacity Utilization. For unsignalized intersections, delay is shown in [seconds/vehicle]. For intersections with cross street stop control, delay and Level of Service are based on the worst individual minor street approach or major street left turn movement.

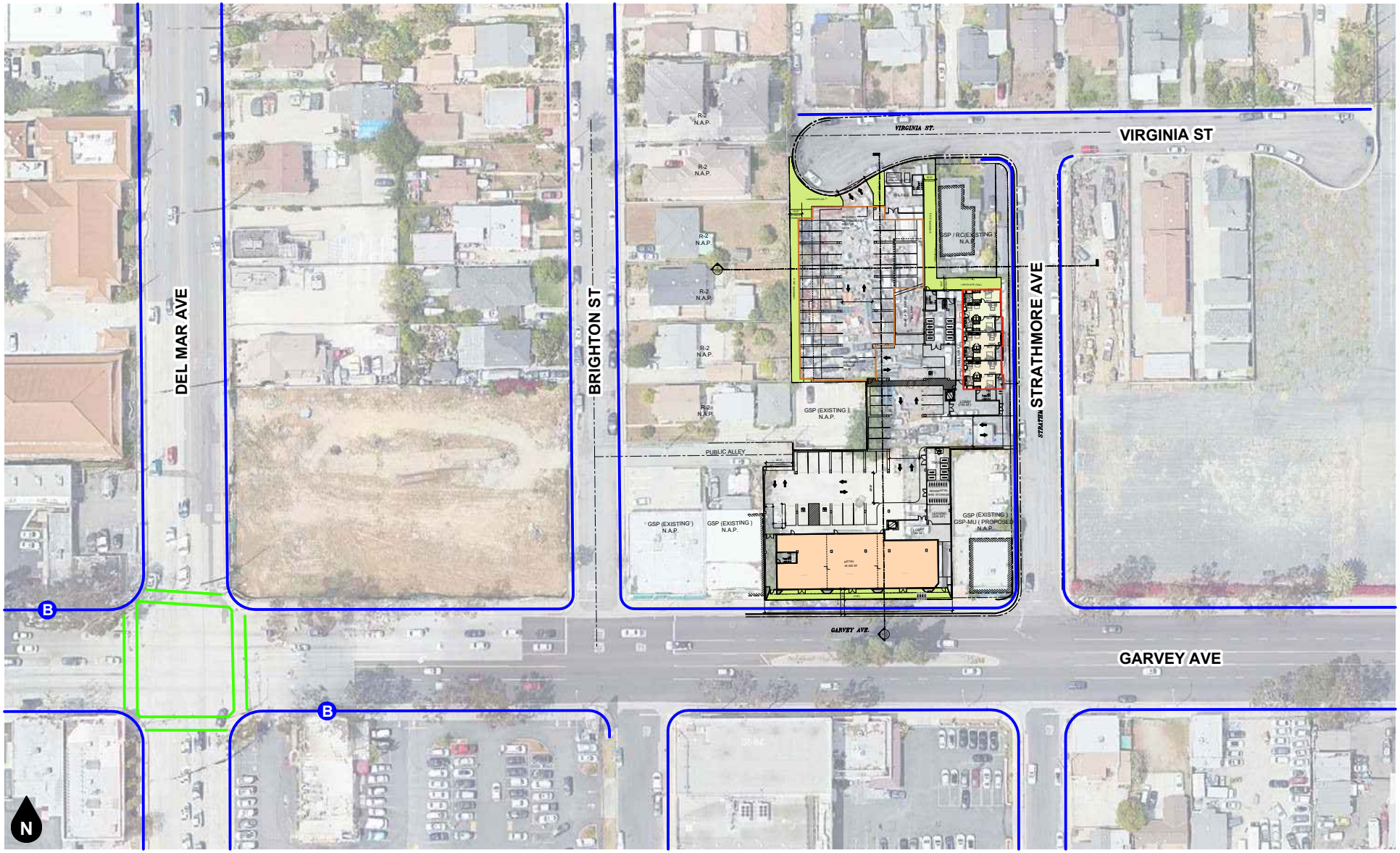
(3) LOS = Level of Service



Legend

- Traffic Signal
- Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane
- d De Facto Right Turn Lane

Figure 3
Existing Lane Geometry and Intersection Traffic Controls



Legend
- Sidewalk
- Cross Walk
- B Bus Stop

Figure 4
Existing Pedestrian Facilities

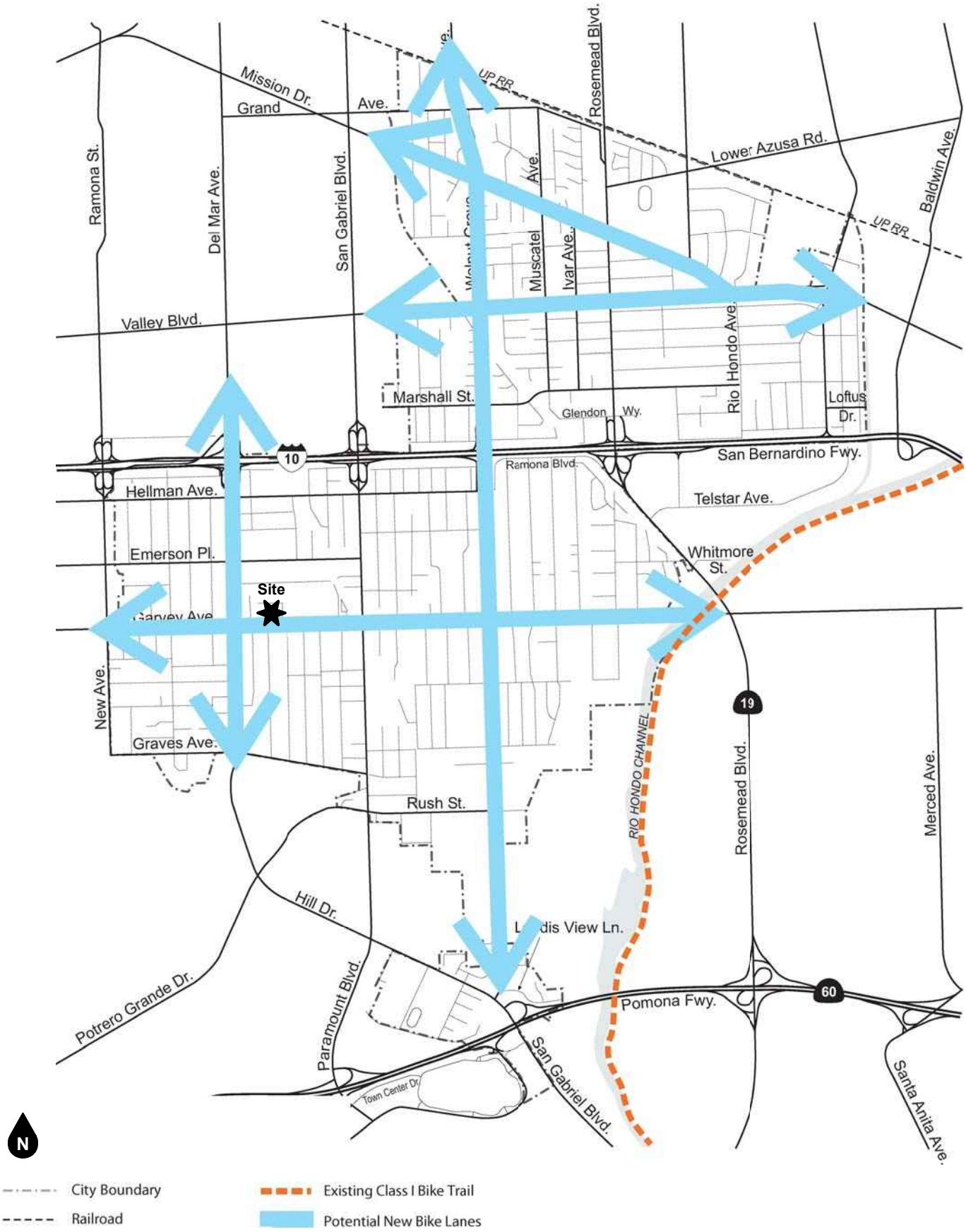
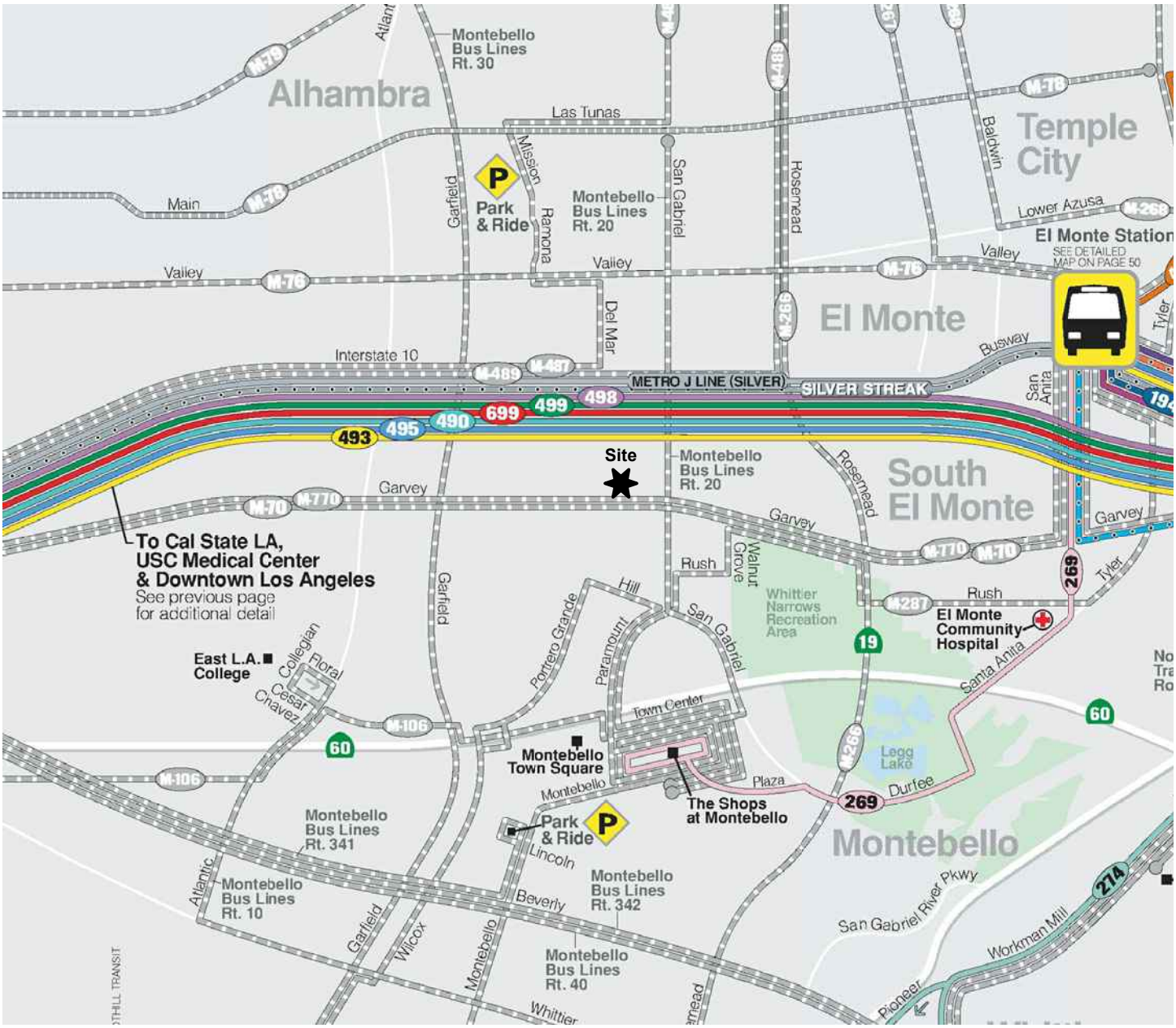


Figure 5
City of Rosemead Existing Bicycle Routes and Potential Future Routes

Source: City of Rosemead



ROUTE DESIGNATIONS

- **Foothill Transit:** These lines are paused. Please check the Foothill Transit website for the latest updates.
- **Foothill Transit** lines are shown with solid route lines
- **Foothill Transit** lines with *20 minute or better frequency* during weekday service on local routes are shown with this ⊙ symbol
- Other transit lines are shown with dashed route lines
- **Metro** routes have an "M" in the route symbol
- **Omitrans** routes have an "O" in the route symbol
- **Pasadena** routes have a "P" in the route symbol

N

Figure 6
Foothill Transit System Map

Source: Foothill Transit

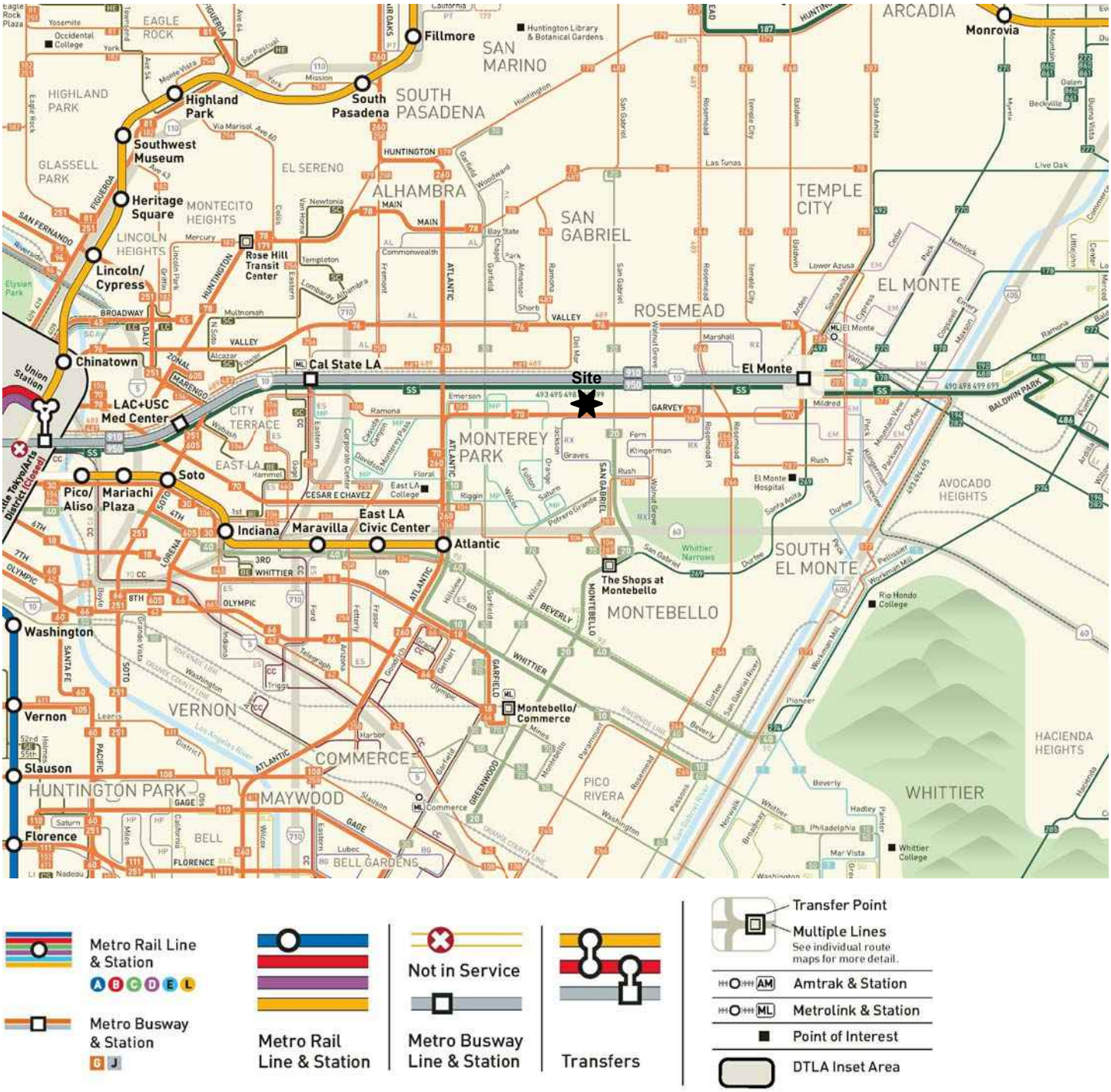


Figure 7
Los Angeles County Metropolitan Transportation Authority System Map

Source: LA Metro

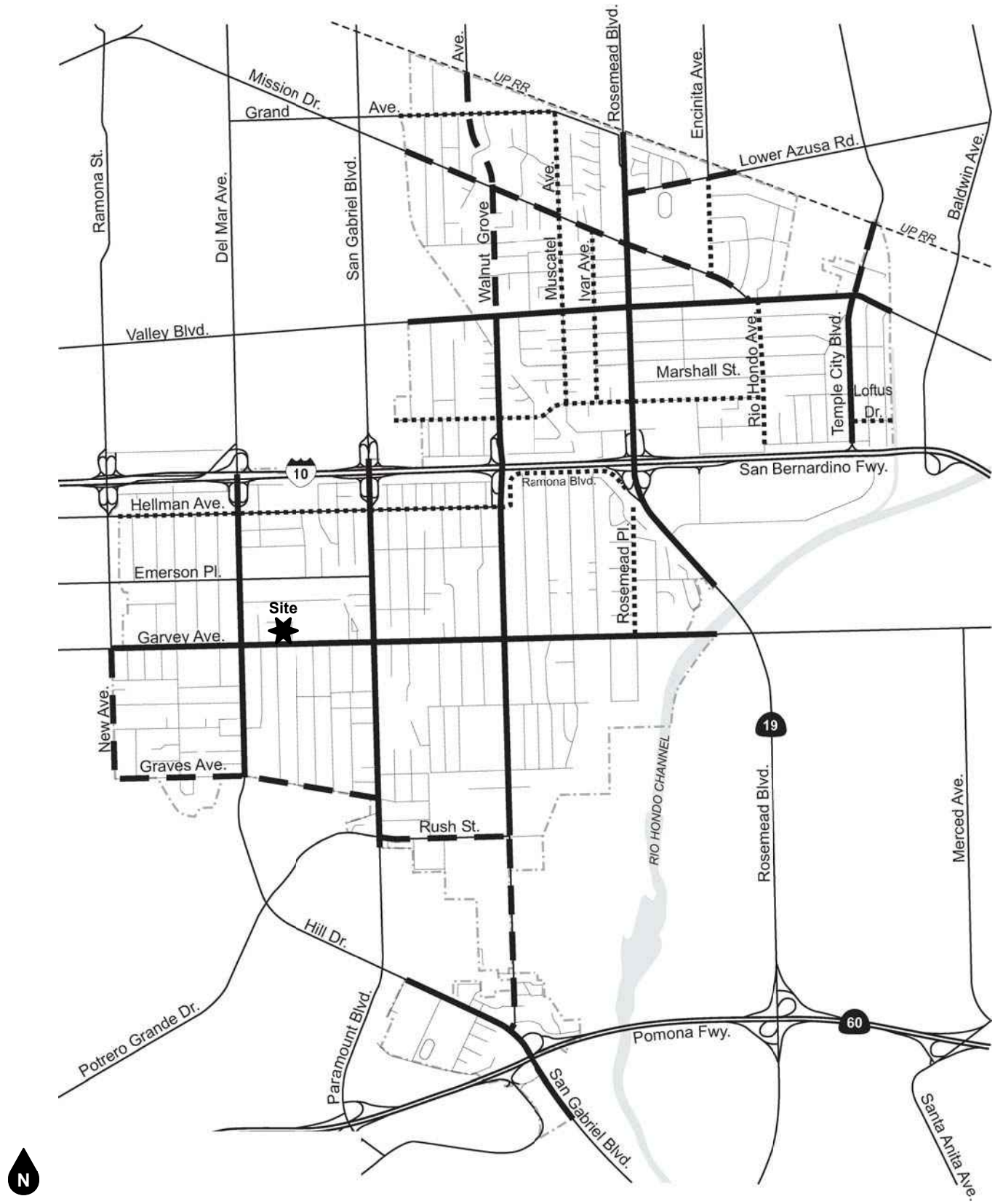


Figure 8
City of Rosemead Circulation Plan

Source: City of Rosemead

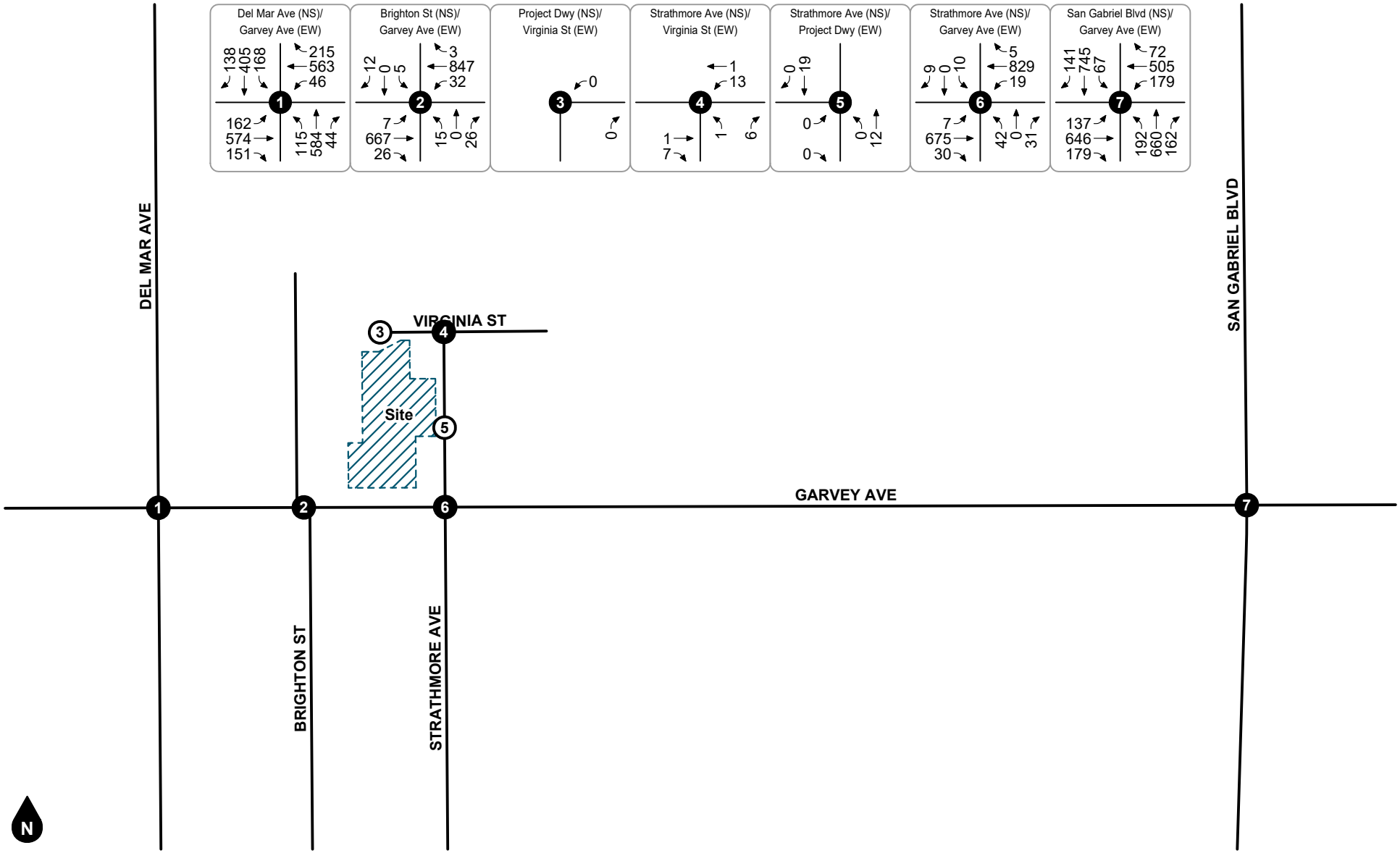


Figure 9
Existing AM Peak Hour Intersection Turning Movement Volumes

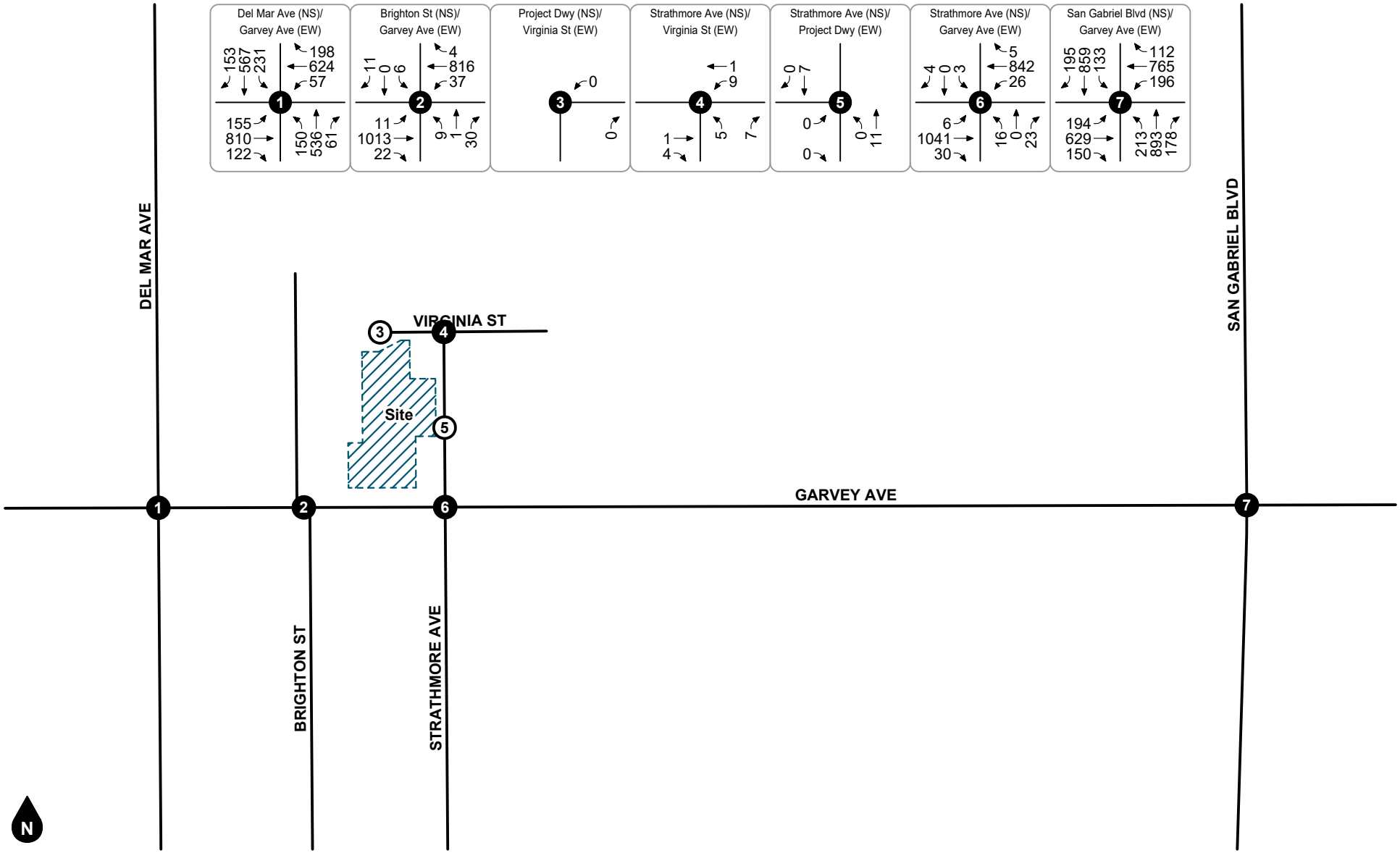


Figure 10
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT FORECASTS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated on figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows the project trip generation based upon trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use descriptions, trip generation rates for Multifamily Housing (Mid-Rise) (Land Use Code 221), General Office (Land Use Code 710), and Strip Retail Plaza (<40k)) (Land Use Code 822) were determined to adequately represent the proposed uses and were used to calculate the project trip generation forecast. The project trip generation forecast is determined by multiplying the trip generation rates by the land use quantities.

As shown in Table 2, the proposed project is forecast to generate a total of approximately 864 daily trips, including 62 trips during the AM peak hour and 74 trips during the PM peak hour.

OTHER FACTORS AFFECTING TRIP GENERATION

Traffic volumes shown in Table 2 consist of the total trips generated for each project land use. As a residential trip generated by the project may also interact with the commercial retail or office land uses within the project, a double counting of those trips occurs. To account for this internal interaction, the trips generated by the project site have been adjusted in accordance with procedures developed by the National Cooperative Highway Research Program 684 Internal Capture Estimation Tool as incorporated into the ITE *Trip Generation Handbook* (3rd Edition). Detailed internal capture worksheets are provided in the scoping agreement in Appendix B.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 11 shows the forecast directional distribution patterns for the project generated trips. The project trip distribution patterns are based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

The project-generated AM and PM peak hour intersection turning movement volumes are shown on Figure 12 and Figure 13.

Table 2
Project Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Land Use Variable[2]	% In	% Out	Rate	% In	% Out	Rate	Daily Rate
Multifamily Housing (Mid-Rise, Not Close to Rail Transit)	ITE 221	DU	23%	77%	0.37	61%	39%	0.39	4.54
General Office Building	ITE 710	TSF	88%	12%	1.52	17%	83%	1.44	10.84
Strip Retail Plaza (<40k)	ITE 822	TSF	60%	40%	2.36	50%	50%	6.59	54.45

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Multifamily Housing (Mid-Rise, Not Close to Rail Transit)	ITE 221	93 DU	8	26	34	22	14	36	422
Internal Capture[3] (AM: 0% In, 4% Out; PM: 23% In, 21% Out)			*0*	*-1*	*-1*	*-5*	*-3*	*-8*	*-9*
Subtotal			8	25	33	17	11	28	413
General Office Building	ITE 710	12.801 TSF	17	2	19	3	15	18	139
Internal Capture[3] (AM: 12% In, 50% Out; PM: 33% In, 13% Out)			*-2*	*-1*	*-3*	*-1*	*-2*	*-3*	*-6*
Subtotal			15	1	16	2	13	15	133
Strip Retail Plaza (<40k)	ITE 822	6.040 TSF	9	6	15	20	20	40	329
Internal Capture[3] (AM: 11% In, 17% Out; PM: 20% In, 25% Out)			*-1*	*-1*	*-2*	*-4*	*-5*	*-9*	*-11*
Subtotal			*8*	*5*	*13*	*16*	*15*	*31*	*318*
TOTAL TRIPS GENERATED			**31**	**31**	**62**	**35**	**39**	**74**	**864**

Notes:

1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting unless otherwise noted.
2. DU = Dwelling Units; TSF = Thousand Square Feet
3. Internal capture calculated using the NCHRP 684 Internal Trip Capture Estimation Tool included in the ITE *Trip Generation Handbook* (3rd Edition, 2017).

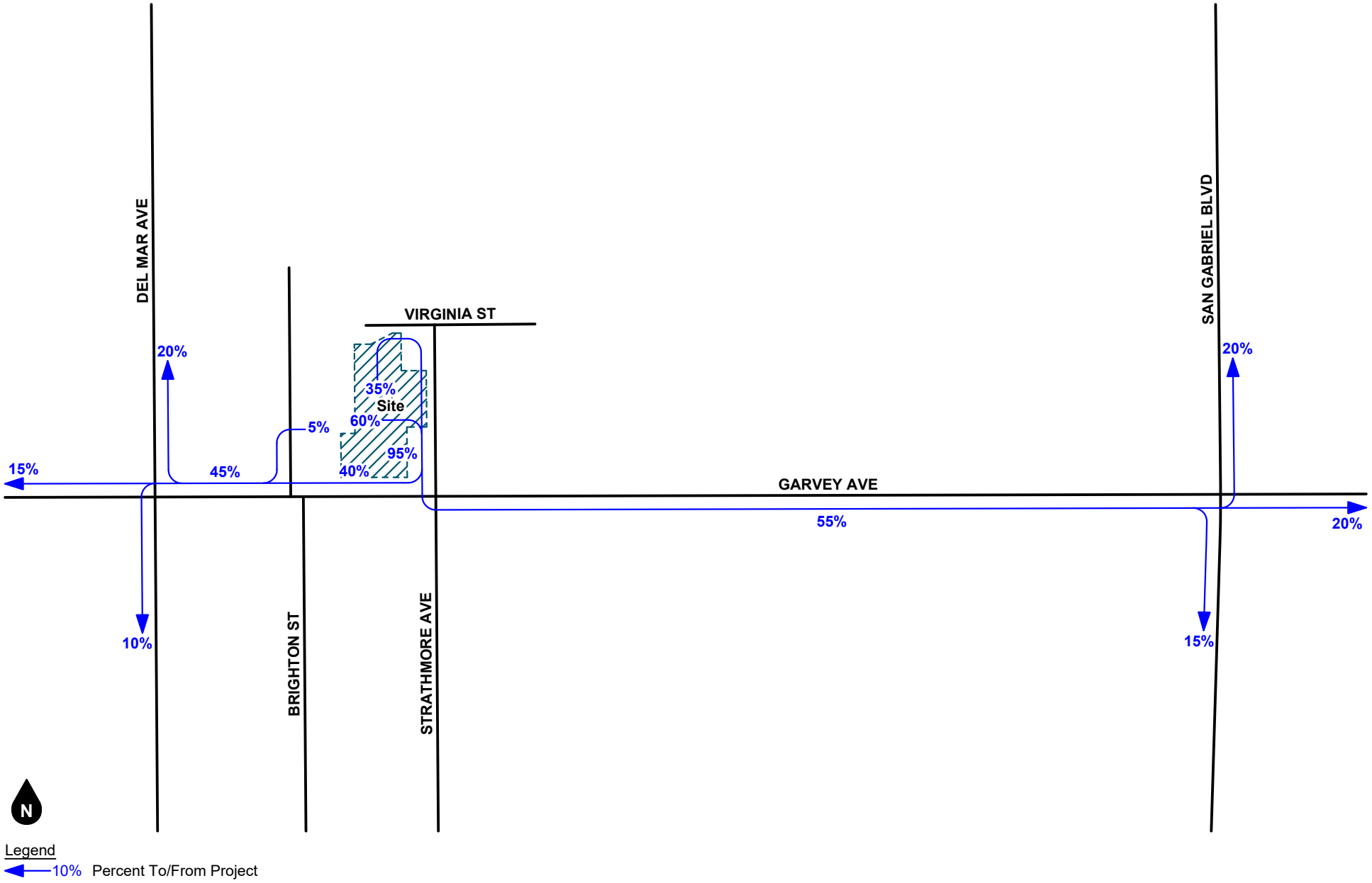
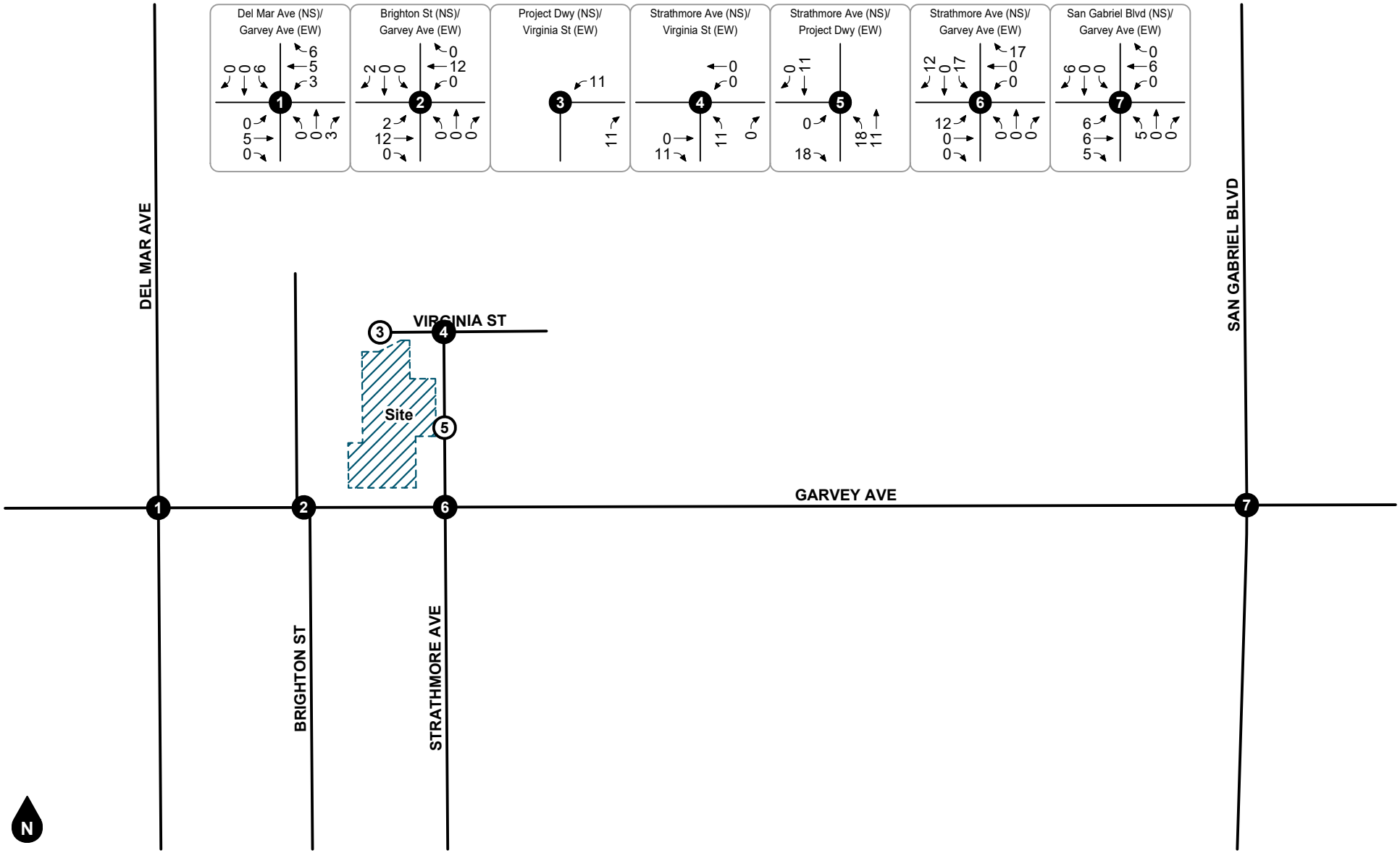


Figure 11
Project Trip Distribution



Legend

(#) Study Intersection

(#) Project Driveway

Figure 12
Project AM Peak Hour Intersection Turning Movement Volumes

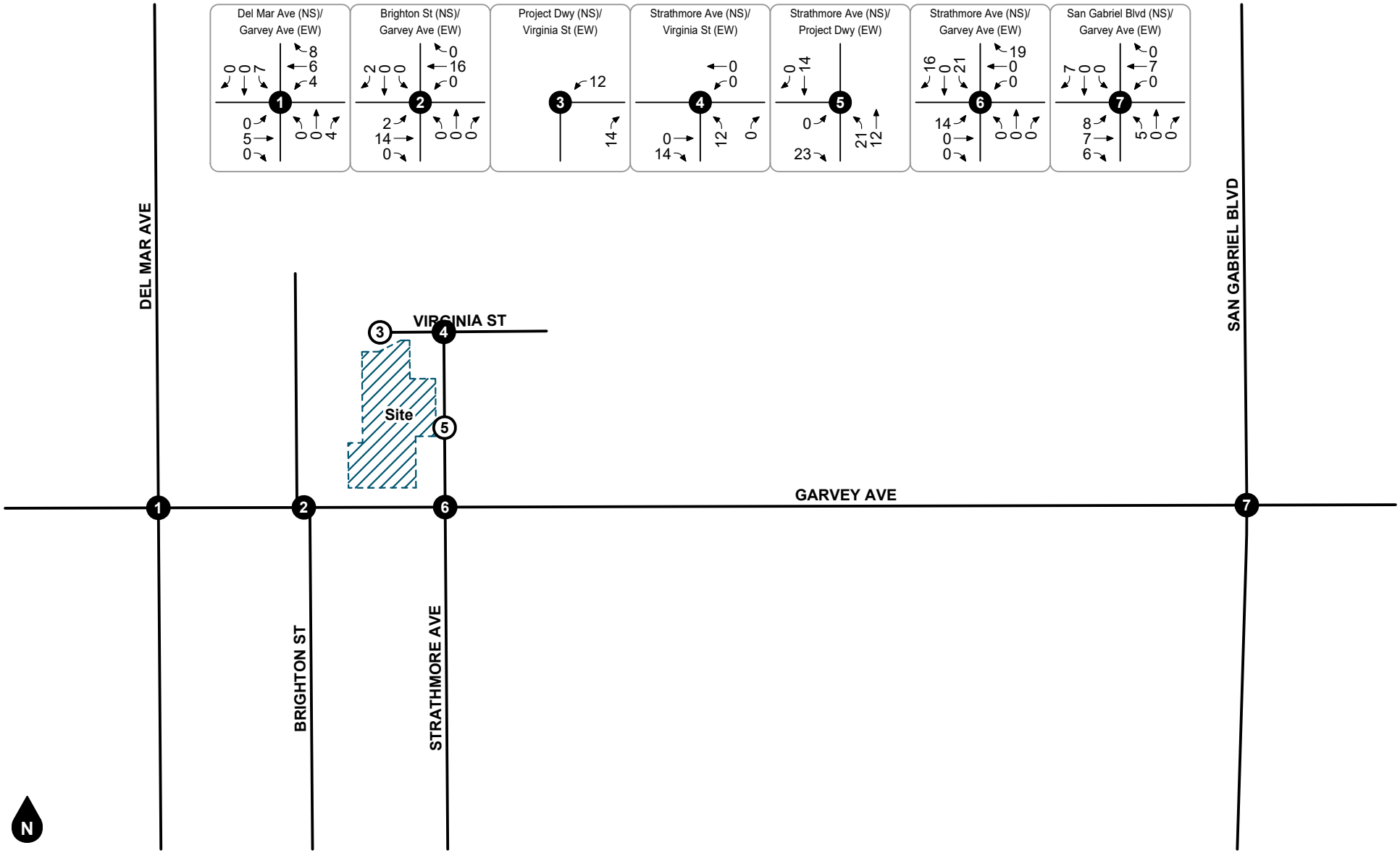


Figure 13
Project PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

This section describes how future volume forecasts for each analysis scenario were developed. Forecast study area volumes are illustrated on figures contained in this section.

OTHER DEVELOPMENT

To account for trips generated by future development, trips generated by other development projects in the Cities of Rosemead, Monterey Park, and San Gabriel were added to the study area. Table 3 shows the trip generation summary for other development projects. Figure 14 shows the other development location map.

Figure 15 and Figure 16 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

AMBIENT GROWTH

To account for ambient growth on roadways, existing traffic volumes were increased by a growth rate of 0.8-percent per year over a two-year period for Cumulative [Opening Year (2024)] conditions; this equates to a total growth factor of approximately 1.0161. The ambient growth rate was conservatively applied to all movements at the study intersections.

ANALYSIS SCENARIO VOLUME FORECASTS

Opening Year (2024) Without Project

Opening Year (2024) Without Project volume forecasts were derived by adding the other development generated trips to Existing volumes with ambient growth. Opening Year (2024) Without Project AM and PM peak hour intersection turning movement volumes are shown on Figure 17 and Figure 18.

Opening Year (2024) With Project

Opening Year (2024) With Project volume forecasts were derived by adding project generated trips to Opening Year (2024) Without Project volumes. Opening Year (2024) With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 19 and Figure 20.

Table 3 (1 of 2)
Other Development Trip Generation

Map ID	Address	Land Use	Source[1]	Quantity[2]	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
City of San Gabriel											
SG1	400-420 W. Valley Blvd.	Commercial	ITE 821	50.495 TSF	54	33	87	128	134	262	3,409
		- Pass-By (40% PM)			--	--	--	-51	-54	-105	-105
		Apartment	ITE 221	127 DU	11	36	47	30	19	49	577
		Subtotal			65	69	134	107	99	206	3,881
SG2	101-111 W. Valley Blvd.	Hotel	ITE 310	225 RM	58	46	104	68	65	133	1,798
		Commercial	ITE 822	33.000 TSF	47	31	78	109	109	218	1,797
		Condominiums	ITE 220	87 DU	8	26	34	28	16	44	586
		Subtotal			113	103	216	205	190	395	4,181
SG3	101 E. Valley Blvd.	Condominiums	ITE 220	81 DU	8	25	33	26	15	41	546
		Office	ITE 710	4.500 TSF	6	1	7	1	5	6	49
		Commercial	ITE 822	8.000 TSF	11	8	19	26	26	52	436
		Restaurant	ITE 930	5.000 TSF	4	4	8	35	28	63	486
		Subtotal			29	38	67	88	74	162	1,517
SG4	221-303 E. Valley Blvd.	Hotel	ITE 310	316 RM	81	64	145	95	91	186	2,525
		Commercial	ITE 822	1.000 TSF	1	1	2	3	3	6	54
		Restaurant	ITE 930	10.000 TSF	7	7	14	69	56	125	971
		Subtotal			89	72	161	167	150	317	3,550
SG5	300 E. Valley Blvd.	Condominiums	ITE 220	63 DU	6	19	25	20	12	32	425
		Commercial	ITE 822	4.000 TSF	6	4	10	13	13	26	218
		Restaurant	ITE 930	12.000 TSF	9	9	18	83	68	151	1,166
		Subtotal			21	32	53	116	93	209	1,809
SG6	400-420 Valley Blvd.	Condominiums	ITE 220	127 DU	12	39	51	41	24	65	856
		Office	ITE 710	4.500 TSF	6	1	7	1	5	6	49
		Commercial	ITE 822	40.000 TSF	57	38	95	132	132	264	2,178
		Restaurant	ITE 930	3.000 TSF	2	2	4	21	17	38	291
		Subtotal			77	80	157	195	178	373	3,374
SG7	1616 & 1619 Walnut St.	Apartments	ITE 220	38 DU	4	12	16	12	7	19	256
SG8	500 E. Valley Blvd.	Commercial	ITE 822	5.300 TSF	8	5	13	17	17	34	289
SG9	810 E. Valley Blvd.	Condominiums	ITE 220	7 DU	1	2	3	2	1	3	47
		Commercial	ITE 822	29.800 TSF	42	28	70	98	98	196	1,623
		Subtotal			43	30	73	100	99	199	1,670
SG10	860 E Valley Blvd.	Condominiums	ITE 220	49 DU	5	15	20	16	9	25	330
		Commercial	ITE 822	4.600 TSF	7	4	11	15	15	30	250
		Restaurant	ITE 930	4.600 TSF	3	3	6	32	26	58	447
		Subtotal			15	22	37	63	50	113	1,027
SG11	1975 S. Del Mar Ave.	Multi-Family Housing (Mid-Rise)	ITE 221	35 DU	3	10	13	8	5	13	159
SG12	1920 Strathmore Ave.	Multi-Family Housing (Low-Rise)	ITE 220	3 DU	0	1	1	1	1	2	20
SG13	1956 Strathmore Ave.	Multi-Family Housing (Low-Rise)	ITE 220	3 DU	0	1	1	1	1	2	20
SG14	2029 Denton Ave.	Multi-Family Housing (Low-Rise)	ITE 220	3 DU	0	1	1	1	1	2	20

Table 3 (2 of 2)
Other Development Trip Generation

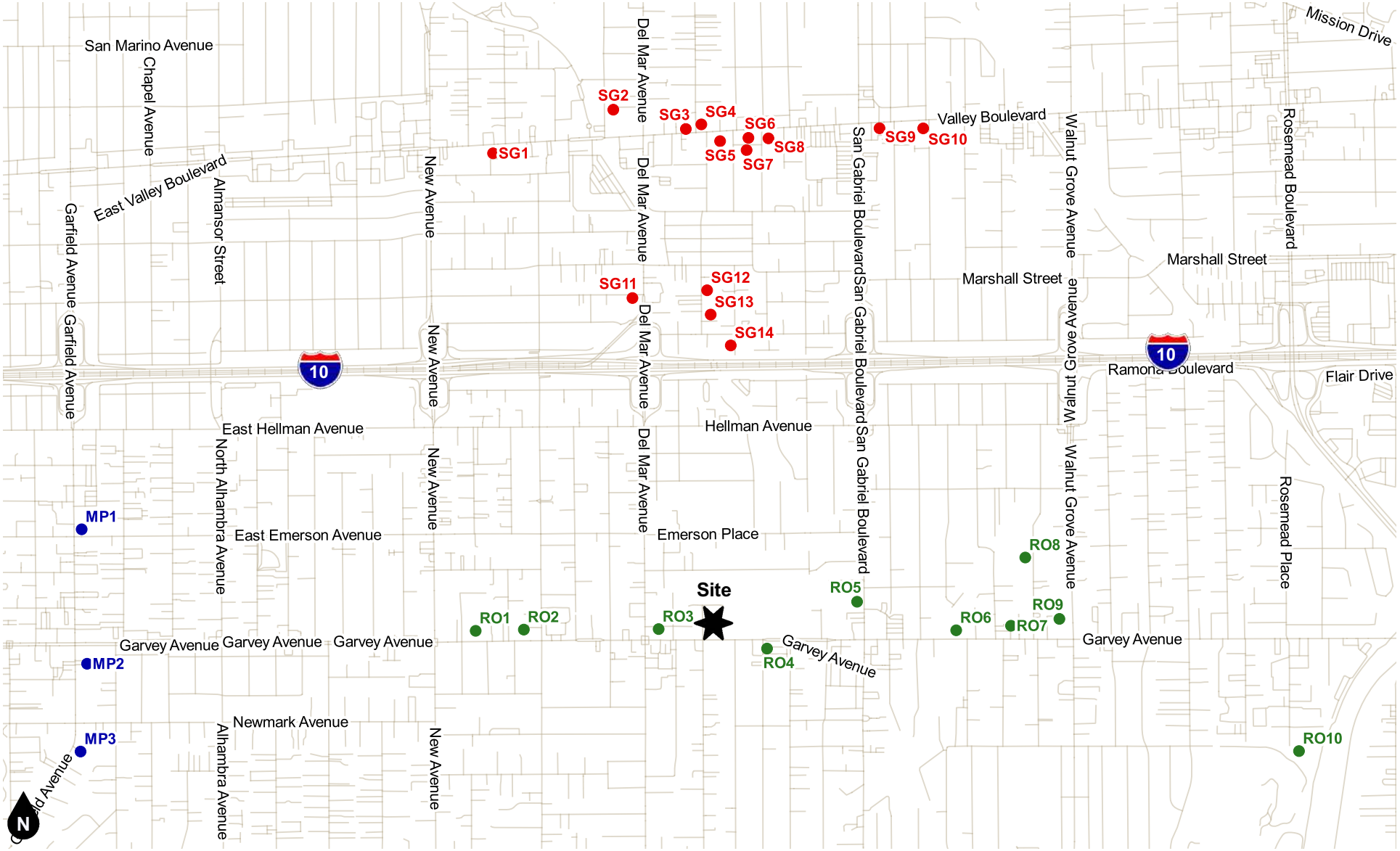
Map ID	Address	Land Use	Source[1]	Quantity[2]	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
City of Monterey Park											
MP1	400 N. Garfield Ave.	Church	ITE 560	23 TSF	5	3	8	5	6	11	178
MP2	100 S. Garfield Ave.	Mixed-Use[3]	--	-- --	108	105	213	84	63	147	5,904
MP3	126 N. New Ave.	Multi-Family Housing (Low-Rise)	ITE 220	66 DU	6	20	26	21	12	33	445
City of Rosemead											
RO1	7419-7459 Garvey Ave.	Multi-Family Housing (Mid-Rise)	ITE 221	90 DU	8	26	34	21	14	35	409
RO2	7539 & 7545 Garvey Ave.	Apartments	ITE 221	75 DU	6	21	27	18	11	29	341
		Commercial	ITE 822	6.346 TSF	9	6	15	21	21	42	346
		Subtotal			15	27	42	39	32	71	687
RO3	7801-7825 Garvey Ave.	Multi-Family Housing (Mid-Rise)	ITE 221	69 DU	6	20	26	16	10	26	313
RO4	8002 Garvey Ave.	Multi-Family Housing (Mid-Rise)	ITE 221	92 DU	8	26	34	22	14	36	418
RO5	3035 San Gabriel Blvd.	Multi-Family Housing (Mid-Rise)	ITE 221	160 DU	14	46	60	38	24	62	726
		Commercial	ITE 821	73.750 TSF	79	48	127	188	195	383	4,980
		- Pass-By (40% PM)			--	--	--	-75	-78	-153	-153
		Subtotal			93	94	187	151	141	292	5,553
RO6	8399 Garvey Ave.	Medical Clinic	ITE 720	15.000 TSF	37	98	135	18	41	59	540
RO7	8449 Garvey Ave.	Multi-Family Housing (Mid-Rise)	ITE 221	26 DU	2	7	9	6	4	10	118
		Commercial	ITE 822	15.600 TSF	22	15	37	51	51	102	849
		- Pass-By (40% PM)			--	--	--	-20	-20	-40	-40
		Subtotal			24	22	46	37	35	72	927
RO8	3133-3141 Willard Ave.	Residential	ITE 220	31 DU	3	9	12	10	6	16	209
RO9	3001 Walnut Grove Ave.	Multi-Family Housing (Mid-Rise)	ITE 221	42 DU	4	12	16	10	6	16	191
		Commercial	ITE 822	17.394 TSF	25	16	41	57	57	114	947
		- Pass-By (40% PM)			--	--	--	-23	-23	-46	-46
		Subtotal			29	28	57	44	40	84	1,092
RO10	2562 River Ave.	Warehouse	ITE 221	36.596 TSF	5	1	6	2	5	7	63
Total					814	955	1,769	1,551	1,384	2,935	38,511

Notes:

(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code.

(2) TSF = Thousand Square Feet; DU = Dwelling Units; RM = Rooms

(3) Source: *Traffic Impact Study for Garvey/Garfield Mixed-Use Development* (August 2021, KOA).

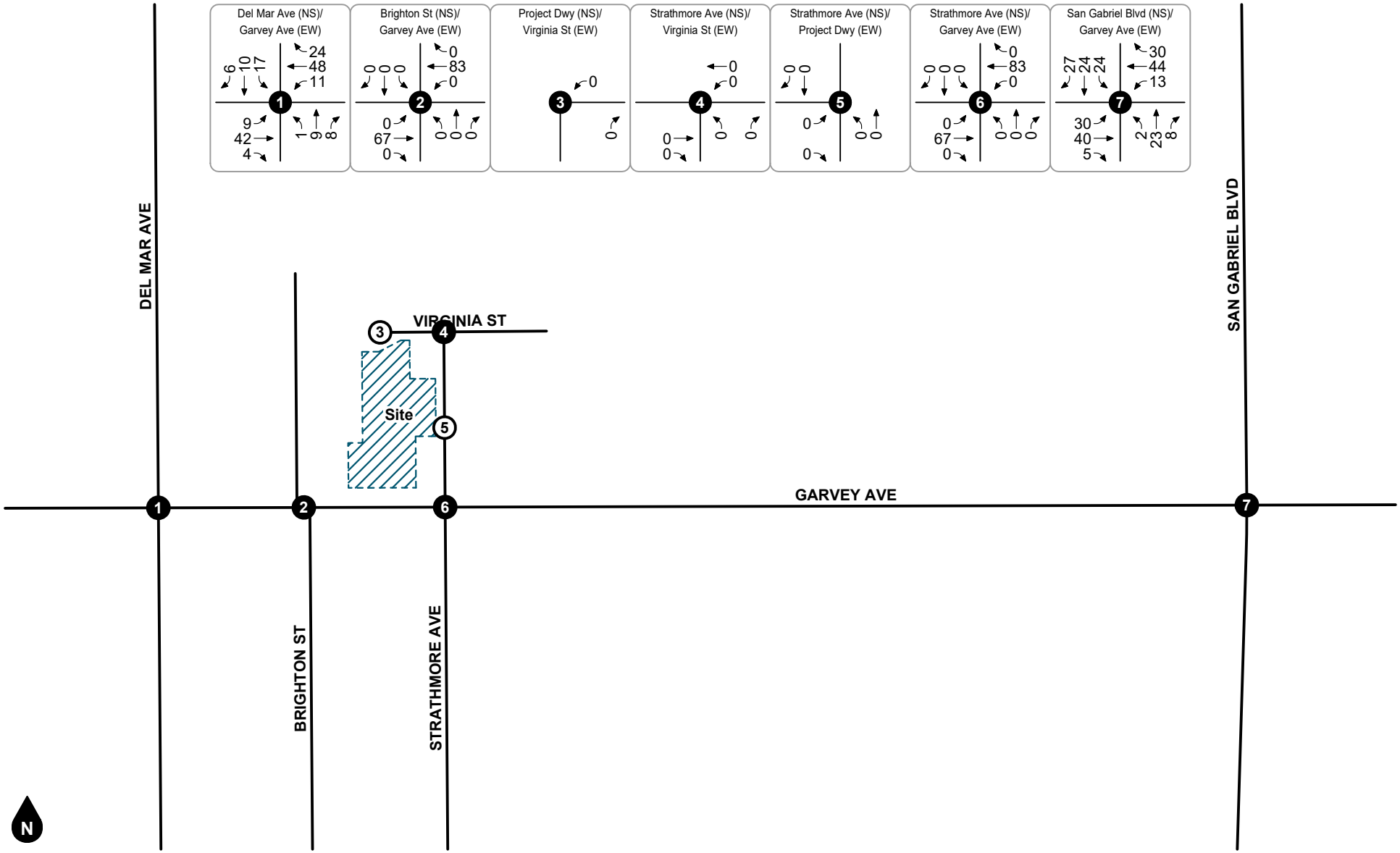


Legend

\# Other Development ID in:

- City of Monterey Park
- City of Rosemead
- City of San Gabriel

Figure 14
Other Development Location Map



Legend

(#) Study Intersection

(#) Project Driveway

Figure 15
Other Development
AM Peak Hour Intersection Turning Movement Volumes

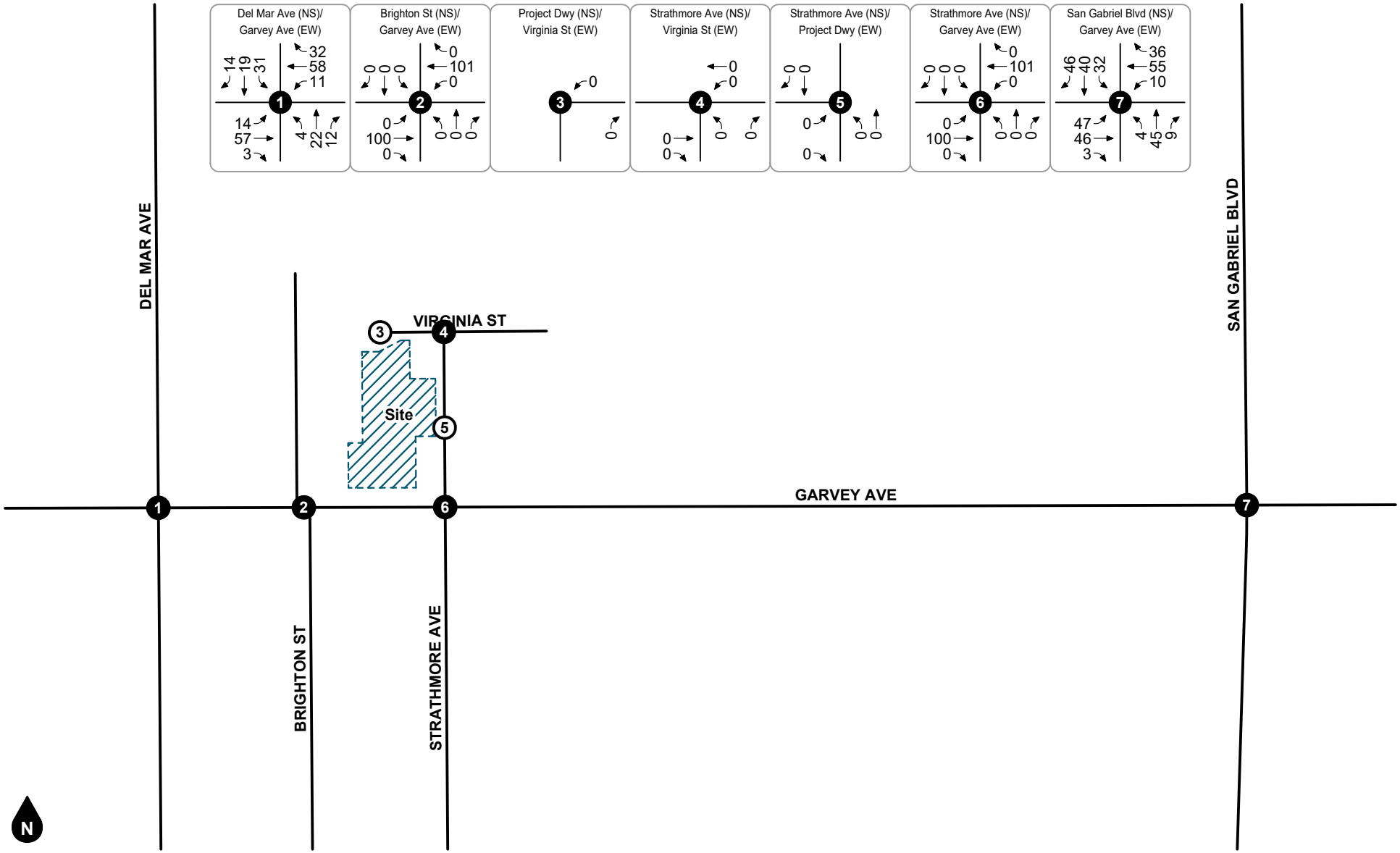


Figure 16
Other Development
PM Peak Hour Intersection Turning Movement Volumes

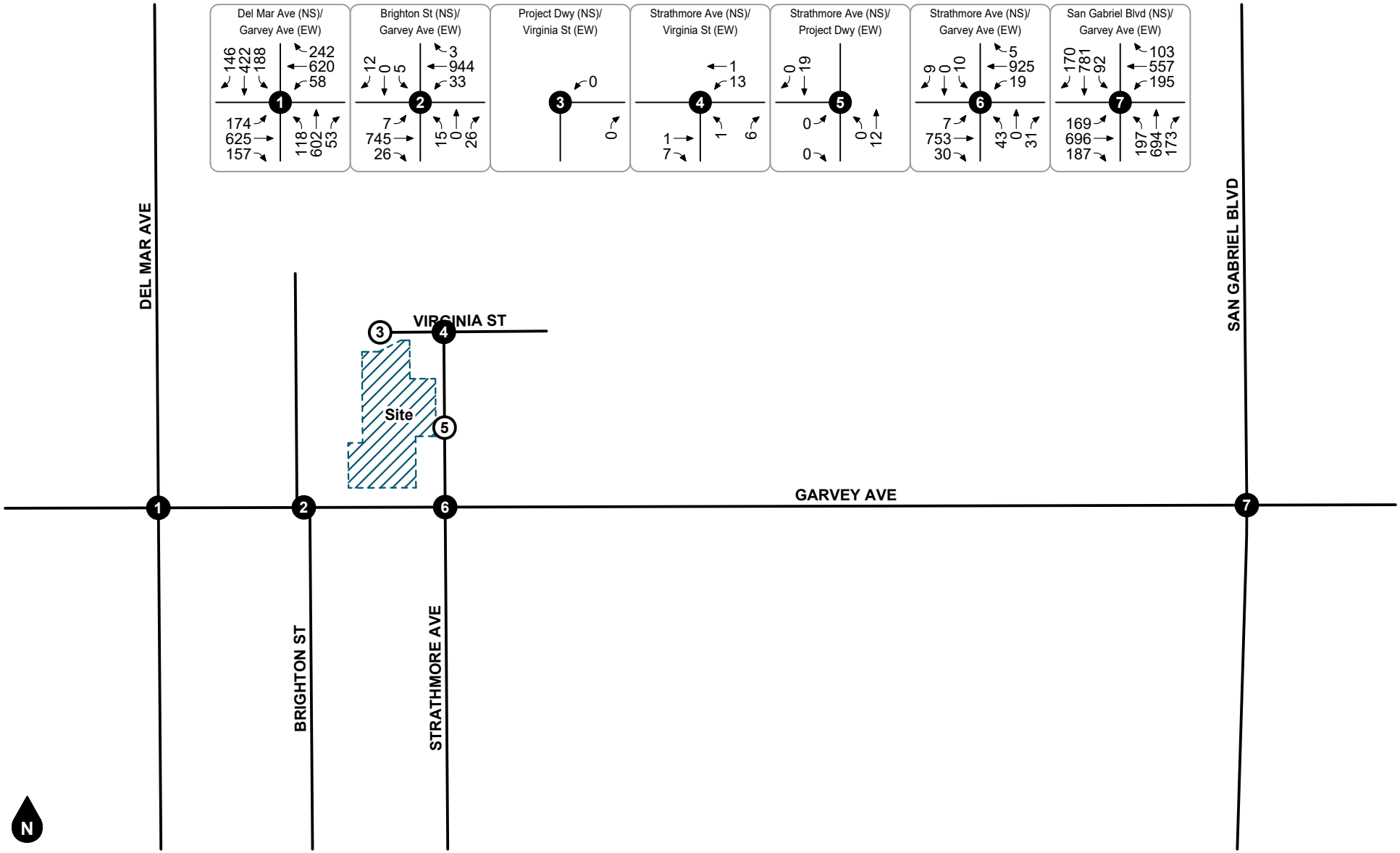
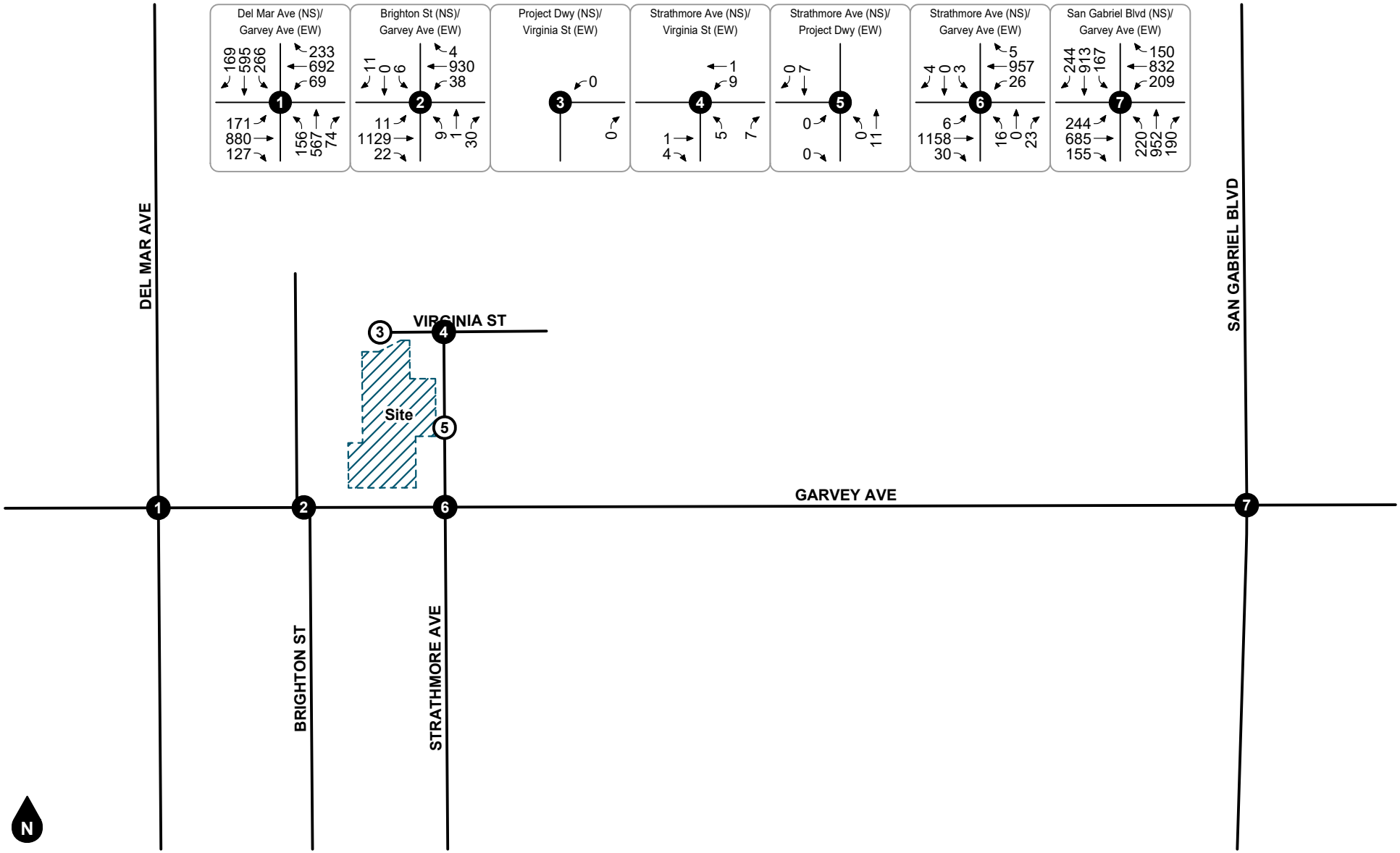


Figure 17
Opening Year (2024) Without Project
AM Peak Hour Intersection Turning Movement Volumes

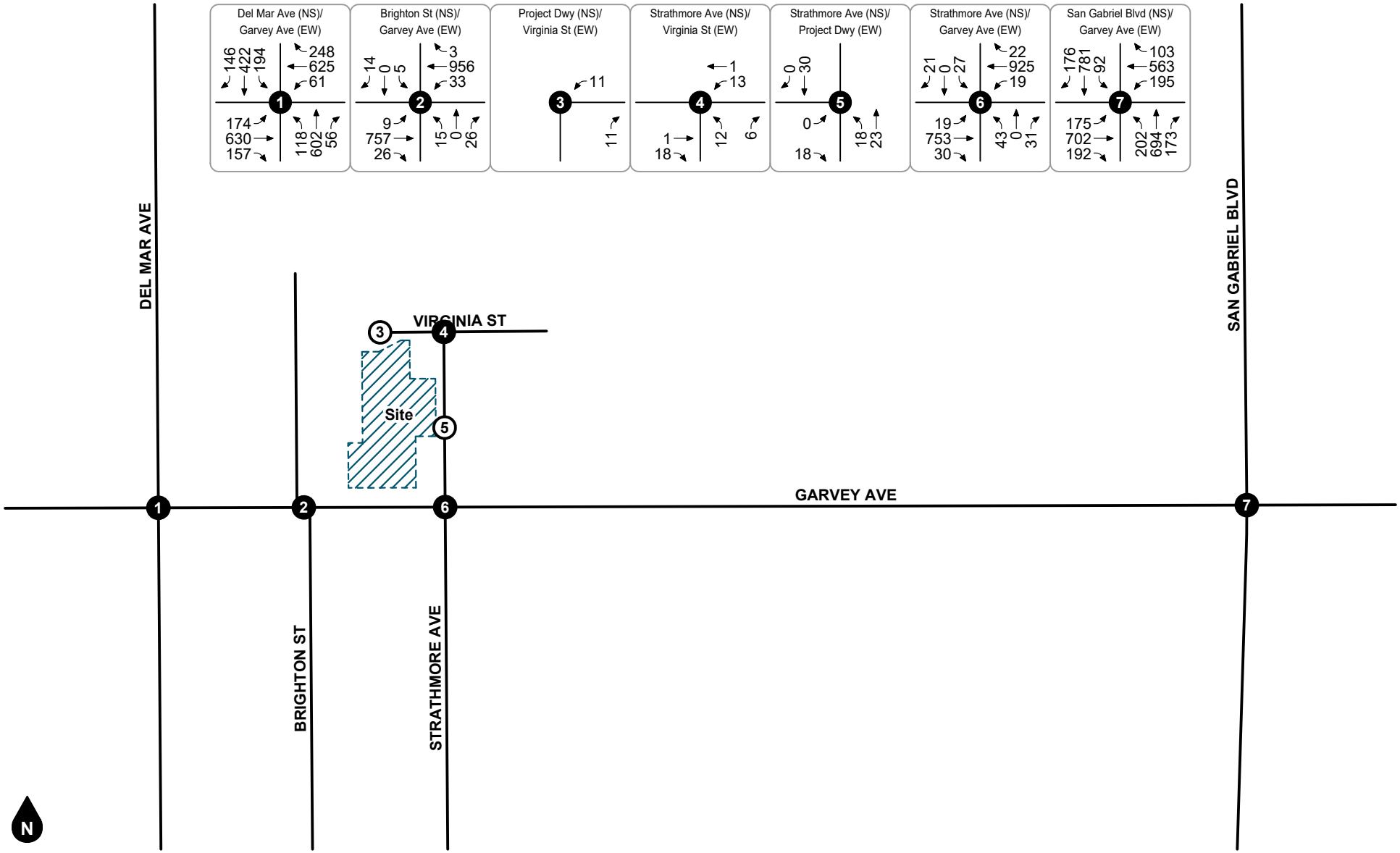


Legend

(#) Study Intersection

(#) Project Driveway

Figure 18
Opening Year (2024) Without Project
PM Peak Hour Intersection Turning Movement Volumes

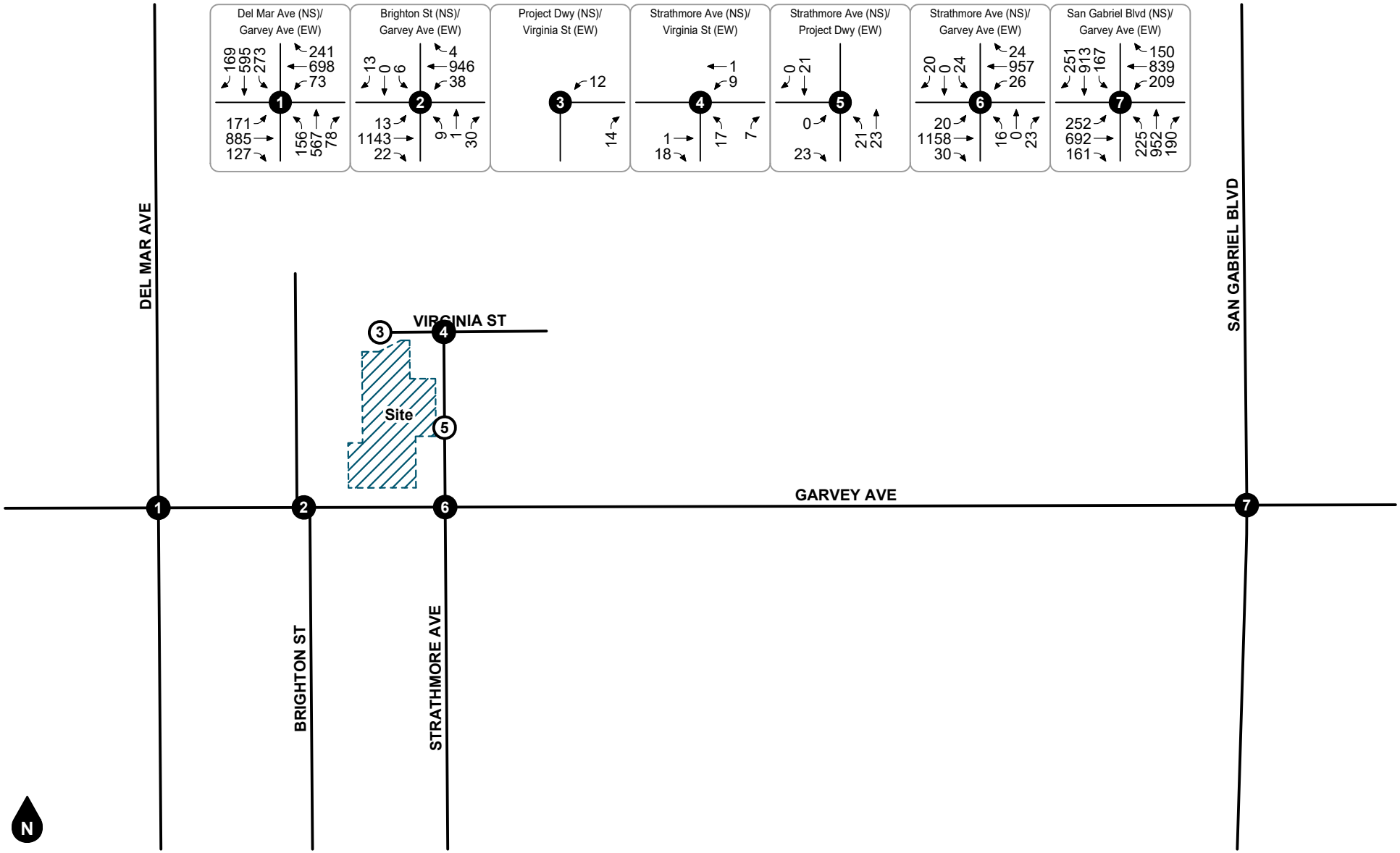


Legend

Study Intersection

(#) Project Driveway

Figure 19
Opening Year (2024) With Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

Study Intersection

(#) Project Driveway

Figure 20
Opening Year (2024) With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE OPERATIONAL ANALYSIS

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix D.

OPENING YEAR (2024) WITHOUT PROJECT

Intersection Levels of Service for Opening Year (2024) Without Project conditions are shown in Table 4. As shown in Table 4, the study intersections are forecast to operate at acceptable Levels of Service during the peak hours for Opening Year (2024) Without Project conditions, except for the following study intersection:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (AM-LOS E, PM-LOS F)

OPENING YEAR (2024) WITH PROJECT

Intersection Level of Service

Intersection Levels of Service for Opening Year (2024) With Project conditions are shown in Table 5. As shown in Table 5, the study intersections are forecast to operate at acceptable Levels of Service during the peak hours for Opening Year (2024) With Project conditions, except for the following study intersection which is forecast to continue operating at an unacceptable Levels of Service:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (AM-LOS E, PM-LOS F)

The deficient Level of Service at the intersection of Strathmore Avenue/Garvey Avenue (#6) is associated with the northbound left turn movement. The major street approaches along Garvey Avenue are forecast to operate at Level of Service A and the southbound approach on Strathmore Avenue is forecast to operate at Level of Service C.

Traffic Signal Warrant Analysis

Since the currently unsignalized intersection of Strathmore Avenue/Garvey Avenue is forecast to operate at deficient Levels of Service, the need for installation of a traffic signal at this study intersection was evaluated based on the CA MUTCD peak hour volume traffic signal warrant. The traffic signal warrant charts are provided in Appendix E.

Installation of a traffic signal is not warranted at the intersection of Strathmore Avenue/Garvey Avenue based on the forecast AM and PM peak hour volumes for Opening Year (2024) With Project conditions.

Transportation Effect Assessment

Table 6 evaluates the project's transportation effect at the study intersections for Opening Year (2024) With Project conditions. As shown in Table 6, the proposed project is forecast to result in no adverse transportation effects based on the established thresholds.

Although the proposed project is forecast to worsen the Level of Service deficiency at the intersection of Strathmore Avenue/Garvey Avenue, the peak hour volumes do not warrant installation of a traffic signal; therefore, the project's effect does not meet the established definition of an adverse effect at unsignalized intersections.

Notwithstanding the above, the following improvements were identified to address the deficient Level of Service at the study intersection of Strathmore Avenue/Garvey Avenue for Opening Year (2024) With Project conditions:

- Remove the raised median on the west leg of Garvey Avenue and replace it with a two-way left turn median.

OR

- Restrict the northbound approach to right turns only during the AM and PM peak hours.

Table 4
Opening Year (2024) Without Project Intersection Level of Service

ID	Study Intersection	Traffic Control[1]	AM Peak Hour ICU or [Delay][2]	AM Peak Hour LOS[3]	PM Peak Hour ICU or [Delay][2]	PM Peak Hour LOS[3]
1.	Del Mar Ave at Garvey Ave	TS	0.655	B	0.744	C
2.	Brighton St at Garvey Ave	CSS	[15.9]	C	[18.8]	C
3.	Project Dwy at Virginia St	CSS	[0.0]	A	[0.0]	A
4.	Strathmore Ave at Virginia St	CSS	[8.4]	A	[8.5]	A
5.	Strathmore Ave at Project Dwy	CSS	[0.0]	A	[0.0]	A
6.	Strathmore Ave at Garvey Ave	CSS	[40.2]	E	[53.6]	F
7.	San Gabriel Blvd at Garvey Ave	TS	0.728	C	0.843	D

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) ICU = Intersection Capacity Utilization. For unsignalized intersections, delay is shown in [seconds/vehicle]. For intersections with cross street stop control, delay and Level of Service are based on the worst individual minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 5
Opening Year (2024) With Project Intersection Level of Service

ID	Study Intersection	Traffic Control[1]	AM Peak Hour ICU or [Delay][2]	AM Peak Hour LOS[3]	PM Peak Hour ICU or [Delay][2]	PM Peak Hour LOS[3]
1.	Del Mar Ave at Garvey Ave	TS	0.661	B	0.753	C
2.	Brighton St at Garvey Ave	CSS	[15.8]	C	[19.1]	C
3.	Project Dwy at Virginia St	CSS	[0.0]	A	[0.0]	A
4.	Strathmore Ave at Virginia St	CSS	[8.7]	A	[8.7]	A
5.	Strathmore Ave at Project Dwy	CSS	[8.5]	A	[8.4]	A
6.	Strathmore Ave at Garvey Ave	CSS	[45.3]	E	[61.3]	F
	- With Improvements	CSS	[21.1]	C	[24.0]	C
7.	San Gabriel Blvd at Garvey Ave	TS	0.733	C	0.852	D

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) ICU = Intersection Capacity Utilization. For unsignalized intersections, delay is shown in [seconds/vehicle]. For intersections with cross street stop control, delay and Level of Service are based on the worst individual minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 6
Assessment of Transportation Effect for Opening Year (2024) With Project

ID Study Intersection	AM Peak Hour						PM Peak Hour					
	Without Project		With Project		Project-Related Change	Adverse Effect?	Without Project		With Project		Project-Related Change	Adverse Effect?
	ICU or [Delay][1]	LOS[2]	ICU or [Delay][2]	LOS[2]			ICU or [Delay][2]	LOS[2]	ICU or [Delay][2]	LOS[2]		
1. Del Mar Ave at Garvey Ave	0.655	B	0.661	B	+0.006	No	0.744	C	0.753	C	+0.009	No
2. Brighton St at Garvey Ave	[15.9]	C	[15.8]	C	-0.100	No	[18.8]	C	[19.1]	C	+0.300	No
3. Project Dwy at Virginia St	[0.0]	A	[0.0]	A	0.0	No	[0.0]	A	[0.0]	A	0.0	No
4. Strathmore Ave at Virginia St	[8.4]	A	[8.7]	A	+0.300	No	[8.5]	A	[8.7]	A	+0.200	No
5. Strathmore Ave at Project Dwy	[0.0]	A	[8.5]	A	+8.500	No	[0.0]	A	[8.4]	A	+8.400	No
6. Strathmore Ave at Garvey Ave	[40.2]	E	[45.3]	E	+5.100	No[3]	[53.6]	F	[61.3]	F	+7.700	No[3]
- With Improvements[4]	-	-	[21.1]	C	-19.100	No	-	-	[24.0]	C	-29.600	No
7. San Gabriel Blvd at Garvey Ave	0.728	C	0.733	C	+0.005	No	0.843	D	0.852	D	+0.009	No

Notes:

(1) ICU = Intersection Capacity Utilization; control delay for unsiganlized intersections shown as [seconds/vehicle].

(2) LOS = Level of Service

(3) AM and PM peak hour volumes are not forecast to satisfy the CA MUTCD peak hour traffic signal warrant; see Appendix E.

(4) Improvement reflects option to remove remove the raised median on the west leg of Garvey Avenue and replace it with a two-way left turn lane.

7. SITE ACCESS AND CIRCULATION

This section includes a description of project improvements necessary to provide site access and an evaluation of site access and circulation.

PROJECT DESIGN FEATURES

- Construct the Project Driveway (NS) at Virginia Street (EW) (#3) to provide one inbound lane and one outbound lane with northbound stop-control.

- Construct the Strathmore Avenue (NS) at Project Driveway (EW) (#5) to provide one inbound lane and one outbound lane with eastbound stop-control and the following lane configurations:

    - Northbound: one shared left/through lane
    - Southbound: one shared through/right turn lane
    - Eastbound: one shared left/right turn lane

- Construct a driveway at the public alley connecting to Brighton Street.

This analysis also assumes the project shall comply with the following conditions as part of the City of Rosemead standard development review process:

- A construction work site traffic control plan shall comply with State standards set forth in the California Manual of Uniform Traffic Control Devices and shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bike route, or bus stop closures and detours as well as haul routes and hours of operation. All construction related trips shall be restricted to off-peak hours to the extent possible.

- All on-site and off-site roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project shall be constructed in accordance with applicable State/Federal engineering standards and to the satisfaction of the City of Rosemead.

- Site-adjacent roadways shall be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of Rosemead.

- Adequate off-street parking shall be provided to the satisfaction of City of Rosemead.

- Adequate emergency vehicle access shall be provided to the satisfaction of the Rosemead Fire Department.

- The final grading, landscaping, and street improvement plans shall demonstrate that sight distance requirements are met in accordance with applicable City of Rosemead sight distance standards.

SIGHT DISTANCE EVALUATION

Stopping sight distance is the length of roadway that is visible to the driver and should allow for a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path. At an intersection with a stop-control on the minor street approach, sight distance should be sufficient to allow the driver on the minor road to anticipate and avoid potential collisions. If the available sight distance is at least equal to the appropriate stopping sight distance, then drivers on the intersecting roads should be visible to each other and

can avoid potential collisions. In some cases, this may require the driver on the major road to substantially slow down or stop to avoid the minor-road vehicle. Longer sight distances may be desirable to enhance traffic operations; however, for minor roads with relatively low volumes, stopping sight distance is generally accepted as the minimum line of sight that should be provided.

A sight distance evaluation was prepared for the project driveways based on guidance from the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets* (2018) ["the AASHTO Greenbook"].

The stopping sight distance was determined in accordance with Table 3-1 of the AASHTO Greenbook. Garvey Avenue has a posted speed limit of 35 miles per hour, which is the presumed design speed for this analysis and correlates to a stopping sight distance of 250 feet per AASHTO guidance.

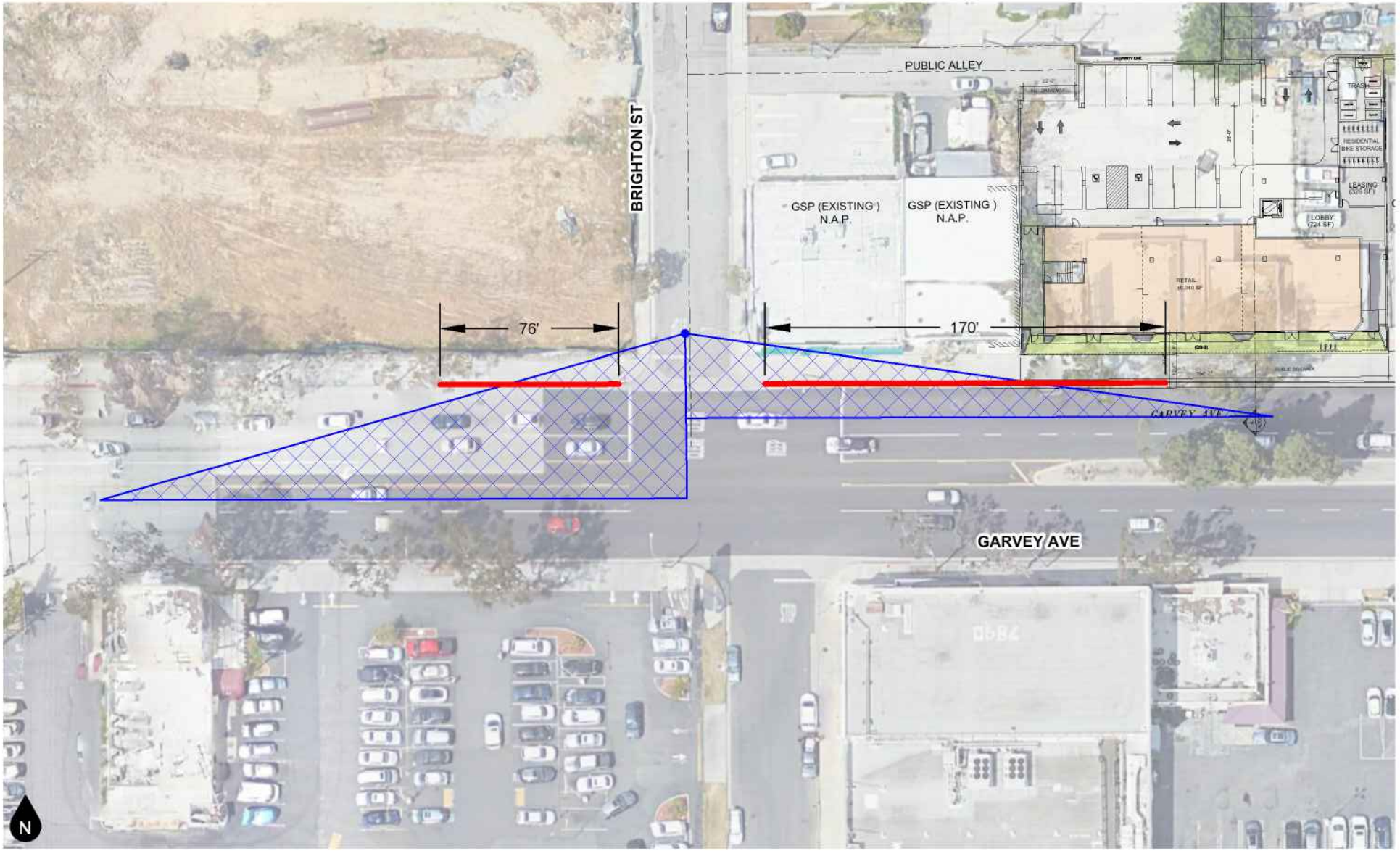
The AAHSTO Greenbook does not specify a location for the decision point (i.e., minor road driver's eye) since it depends on the placement of any marked stop line. In this case, there are marked stop lines on the southbound approaches of the minor street roads; therefore, the decision point was assumed to be located at an approximately 10-foot setback from the stop line. This allows sufficient space for the driver on the minor road to wait without the front bumper intruding past the marked stop line on the major road.

Figure 21 shows the sight distance evaluation for southbound Brighton Street from both directions. Figure 22 shows the sight distance evaluation for southbound Strathmore Avenue from both directions. Each figure also shows recommended "no parking" zones to prevent on-street parking from obstructing the line of sight.

As shown on Figure 21, "no parking" designation is recommended by installing red curb markings along the north side of Garvey Avenue from Brighton Street to approximately 76 feet west and 170 feet east.

As shown on Figure 22, "no parking" designation is recommended by installing red curb markings along the north side of Garvey Avenue from Strathmore Avenue to approximately 66 feet west and 160 feet east.

Figure 23 summarizes the recommended "no parking" designations for both intersections based on the sight distance analysis.

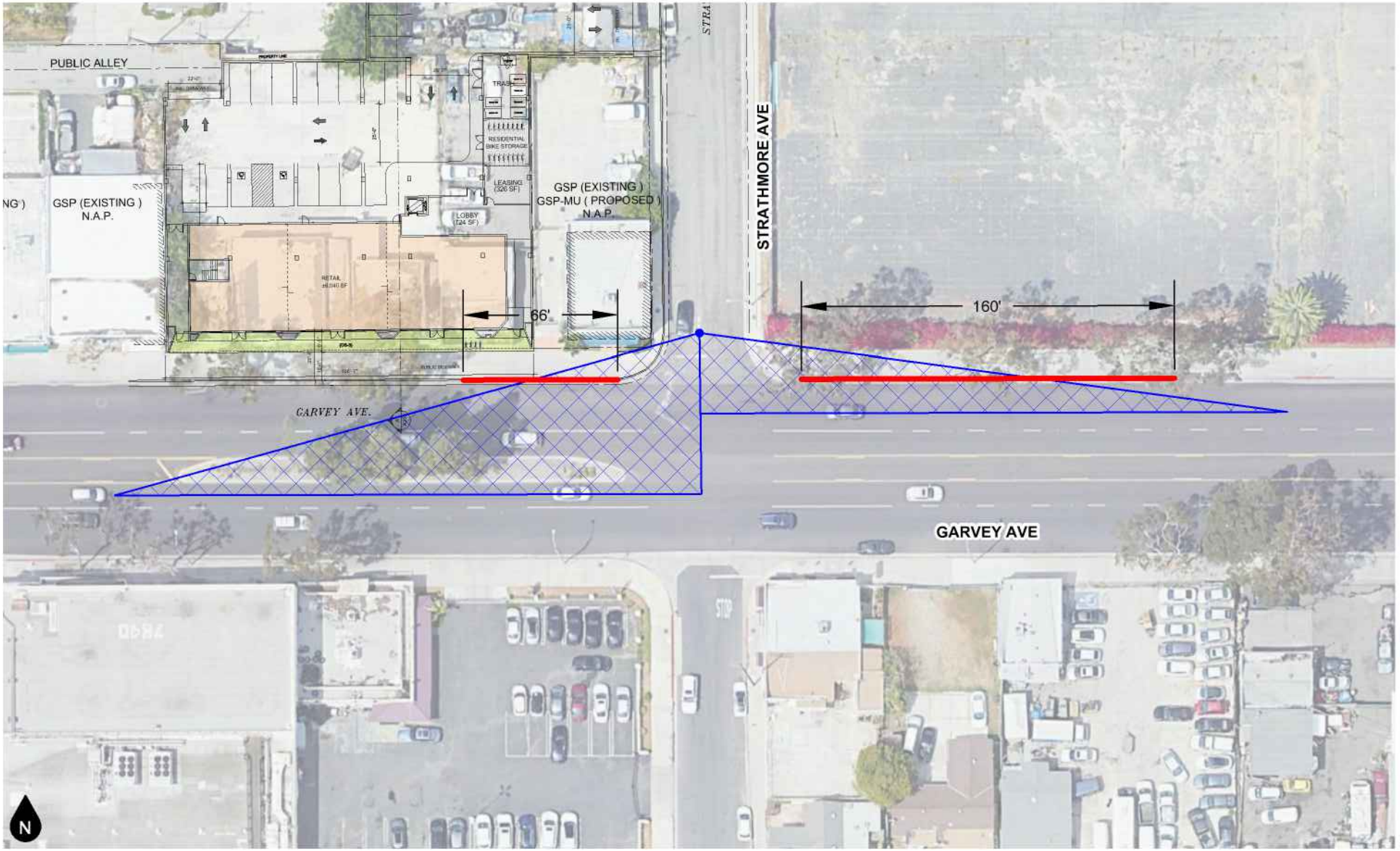


Legend

- Line of Sight for 35 MPH Stopping Sight Distance (250 feet)
- Clear Sight Triangle
- Recommended "No Parking"

Figure 21

Stopping Sight Distance for Southbound Brighton Street at Garvey Avenue

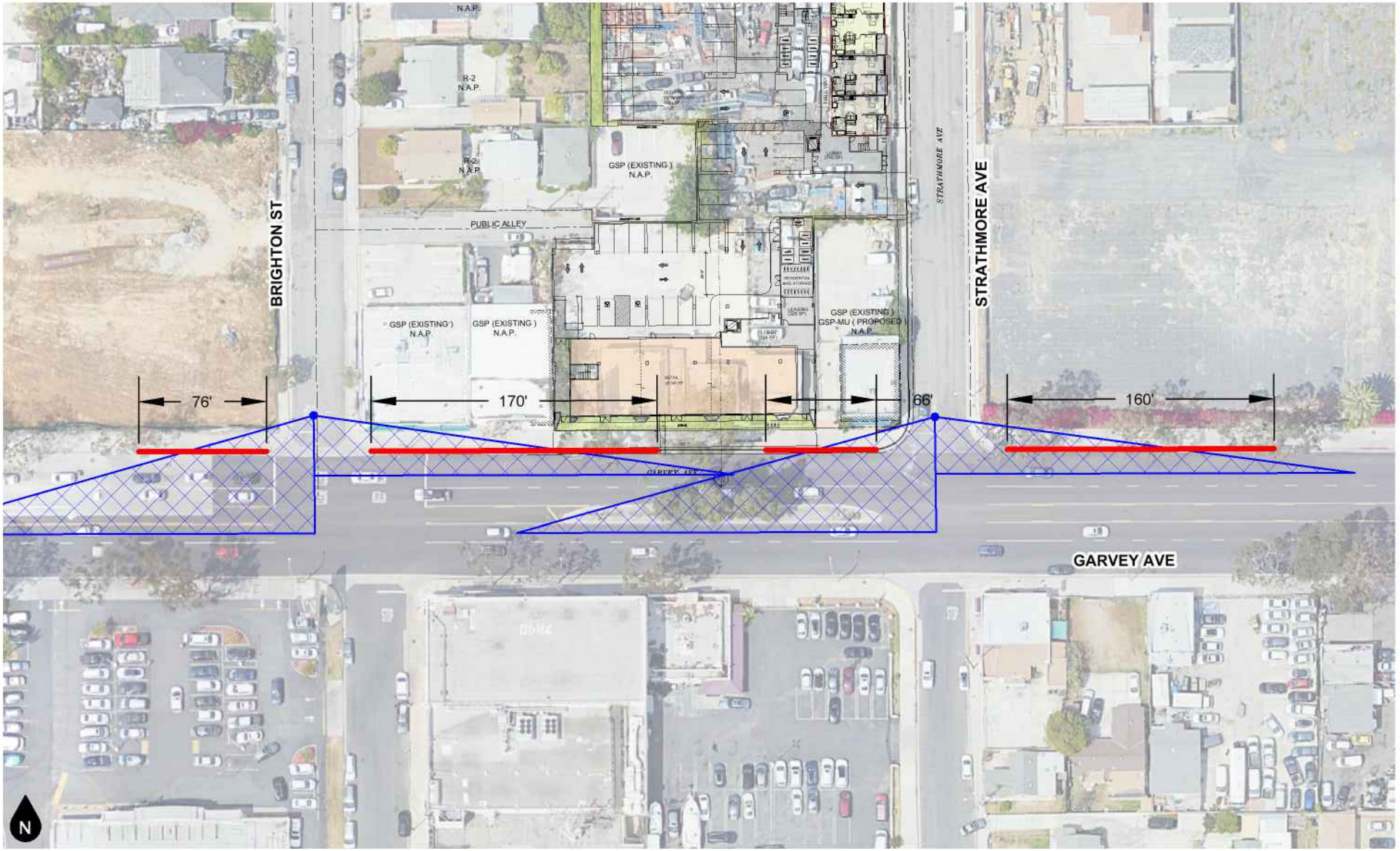


Legend

- Line of Sight for 35 MPH Stopping Sight Distance (250 feet)
- Clear Sight Triangle
- Recommended "No Parking"

Figure 22

Stopping Sight Distance for Southbound Strathmore Avenue at Garvey Avenue



Legend

- Line of Sight for 35 MPH Stopping Sight Distance (250 feet)
- Clear Sight Triangle
- Recommended "No Parking"

Figure 23
Recommended "No Parking" Zones

8. CONGESTION MANAGEMENT PROGRAM

This section provides analysis of the project impacts at County facilities in accordance with typical Los Angeles County Congestion Management Program (CMP) requirements.

CRITERIA FOR REQUIRING A TRAFFIC IMPACT ANALYSIS FOR CMP

The Los Angeles County 2010 CMP provides the following thresholds for requiring a CMP-compliant traffic impact analysis:

- All CMP arterial monitoring intersections, including monitored freeway on or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic)

- If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions).

- Mainline freeway monitoring locations were the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

As previously shown in Table 2, the proposed project is forecast to generate approximately 62 AM peak hour trips and 74 PM peak hour trips, which are distributed to/from the project site. The intersections of Del Mar Avenue/Garvey Avenue and San Gabriel Boulevard/Garvey Avenue are not CMP intersections. The project will not add 150 or more peak hour trips to the I-10 Freeway since the project generates less than this threshold in total during each peak hour. Therefore, the proposed project would not result in a CMP impact as it does not meet the thresholds requiring a traffic impact analysis for CMP purposes and no further CMP traffic analysis is warranted.

CMP TRANSIT IMPACT REVIEW

The Los Angeles County Metropolitan Transportation Authority *2010 Congestion Management Program*, Appendix D - Guidelines for CMP Transportation Impact Analysis, utilizes a conversion factor based on the daily and AM and PM peak hour trip generation to provide for a transit analysis. The conversion is as follows:

- Multiply the total trips generated by 1.4 to convert vehicle trips to person trips;
- For each time period, multiply the result by one of the following factors:

  3.5% of Total Person Trips Generated for most cases, except:

  10% primarily Residential within 1/4 mile of a CMP transit center
  15% primarily Commercial within 1/4 mile of a CMP transit center
  7% primarily Residential within 1/4 mile of a CMP multi-modal transportation center
  9% primarily Commercial within 1/4 mile of a CMP multi-modal transportation center
  5% primarily Residential within 1/4 mile of a CMP transit corridor
  7% primarily Commercial within 1/4 mile of a CMP transit corridor
  0% if no fixed route transit services operate within one mile of the project

Accordingly, the proposed project-generated transit trips are calculated as follows:

- Daily: ((864 trips x 1.4) x 0.035) ≈ 42
- Morning Peak Hour: ((62 trips x 1.4) x 0.035) ≈ 3
- Evening Peak Hour: ((74 trips x 1.4) x 0.035) ≈ 4

The proposed project is forecast to generate approximately three (3) transit trips during the AM peak hour and approximately four (4) transit trips during the PM peak hour. Based on the existing transit services available in the project vicinity and the relatively low transit trip generation, the proposed project is forecast to have a nominal impact on transit demand.

9. SPECIFIC PLAN AMENDMENT ANALYSIS

This section provides an assessment of potential impacts relating to the proposed Specific Plan Amendment component of the proposed project.

SPECIFIC PLAN BACKGROUND

The project site is located within the Garvey Avenue Specific Plan (GASP) and involves a Specific Plan Amendment. It is estimated the GASP will support development of 1,048 dwelling units and an additional estimated population of 2,710 residents. Environmental impacts for the Garvey Avenue Specific Plan were evaluated in the *Environmental Impact Report Garvey Avenue Corridor Specific Plan* (May 2017) ["GASP EIR"].

The proposed project involves a Zone Change from GSP-Residential/Commercial (GSP-R/C) to Incentivized Mixed-Use (GSP-MU) to allow for greater development potential compared to the current zoning. Therefore, the effect of the proposed project relative to the Specific Plan buildout scenario anticipated in the GASP EIR was evaluated to identify whether the project would result in any new significant impacts.

SPECIFIC PLAN BASELINE

Baseline traffic conditions for the Specific Plan Amendment were obtained from the GASP EIR and supporting traffic analysis contained in Appendix G of the GASP EIR (*Traffic Impact Analysis for the Garvey Avenue Specific Plan EIR* (KOA Corporation, May 2016)). The GASP EIR traffic analysis evaluated traffic impacts associated with buildout of the GASP based on a future year 2035 baseline.

Affected Study Area

The transportation section of the GASP EIR included evaluation of intersection Levels of Service at nine study intersections, two freeway mainline segments, and six freeway ramp intersections. Based on the project trip generation and assignment, the project is forecast to contribute more than 50 peak hour trips at the following three intersections evaluated in the GASP EIR:

- Del Mar Avenue at Garvey Avenue (City of Rosemead)
- Kelburn Avenue at Garvey Avenue (City of Rosemead)
- San Gabriel Boulevard at Garvey Avenue (City of Rosemead)

The project trip contributions at other roadway elements evaluated in the GASP EIR would not exceed the criteria for further evaluation (see Congestion Management Program section); therefore, the project would have a negligible effect on those facilities.

Relevant Thresholds of Significance

The GASP EIR uses the following threshold to identify significant impacts at study intersections within City of Rosemead jurisdiction:

Level of Service	Without Project Volume/Capacity (V/C)	Project-Related V/C Increase
F	1.00 or more	Equal to or greater than 0.02

Relevant Mitigation Measures

GASP EIR Mitigation Measure 13.A-1 includes the following mitigation measures for the three study intersections at which the proposed project has the potential to cause new impacts:

- Del Mar Avenue (NS) at Garvey Avenue (EW)
  - Add a third through lane for the eastbound and westbound approaches
- Kelburn Avenue (NS) at Garvey Avenue (EW)
  - Add a third through lane for the eastbound and westbound approaches
- San Gabriel Boulevard (NS) at Garvey Avenue (EW)
  - Add a third through lane for the eastbound and westbound approaches

The GASP EIR concludes that impacts would remain significant and unavoidable at the intersections of Del Mar Avenue/Garvey Avenue and San Gabriel Boulevard/Garvey Avenue with consideration of Mitigation Measure 13.A-1.

Specific Plan Amendment Impact Assessment

Table 7 shows an assessment of the impacts associated with the proposed project/Specific Plan Amendment.

ICU and Levels of Service for baseline year 2035 without and with GASP were obtained from the GASP EIR. ICU and Levels of Service for year 2035 with the proposed Specific Plan Amendment were calculated by adding project trips the year 2035 with GASP traffic volume forecasts. This is a conservative assessment since it does not take credit for the net change in trips between the proposed project and the current zoning. Level of Service worksheets for the Specific Plan Amendment analysis are provided in Appendix G.

As shown in Table 7, consistent with the GASP EIR, traffic impacts associated with the proposed Specific Plan Amendment are forecast to remain significant and unavoidable at the following study intersections with consideration of Mitigation Measure 13.A-1:

- Del Mar Avenue at Garvey Avenue (AM peak hour)
- San Gabriel Boulevard at Garvey Avenue (AM and PM peak hours)

Amendment-related increases in ICU are generally marginal and would not exceed the threshold of significance (+0.02 at Level of Service F) compared to buildout of the current GASP land uses. Relative to the 2035 without GASP condition, buildout of the GASP with the proposed Specific Plan Amendment would not result in new significant impacts or mitigation in addition to those already identified in the previously certified GASP EIR.

Table 7
Significant Impact Assessment for Specific Plan Amendment

Study Intersection	Peak Hour	2035 Without GASP[1]		2035 With GASP[2]				2035 With SPA[3]			
		ICU	LOS	ICU	LOS	Change in ICU	Significant Impact?	ICU	LOS	Change in ICU	Significant Impact?
Del Mar Ave at Garvey Ave	AM	0.829	D	1.054	F	+0.225	YES	1.061	F	+0.232	YES
	PM	0.810	D	0.938	E	+0.128	No	0.946	E	+0.136	No
Kelburn Ave at Garvey Ave	AM	0.553	A	0.812	D	+0.259	No	0.845	D	+0.292	No
	PM	0.589	A	0.686	B	+0.097	No	0.720	C	+0.131	No
San Gabriel Blvd at Garvey Ave	AM	0.812	D	1.153	F	+0.341	YES	1.161	F	+0.349	YES
	PM	0.895	D	1.072	F	+0.177	YES	1.079	F	+0.184	YES

Notes:

GASP = Garvey Avenue Specific Plan; ICU = Intersection Capacity Analysis; LOS = Level of Service

(1) Source: Draft Environmental Impact Report Garvey Avenue Corridor Specific Plan (May 2017); Table 13-3.

(2) Source: Draft Environmental Impact Report Garvey Avenue Corridor Specific Plan (May 2017); Table 13-8 (including mitigation).

(3) Source: Ganddini Group, September 2022; see Appendix G.

10. VEHICLE MILES TRAVELED (VMT)

VMT Background

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Agencies are required to apply the updated CEQA guidelines for VMT analysis and implementation was required State-wide by July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The *Technical Advisory on Evaluating Transportation Impacts in CEQA* (State of California, December 2018) ["OPR Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

Screening Assessment

Consistent with recommendations in the OPR Technical Advisory, the City of Rosemead has established screening criteria for certain projects that may be presumed to have a less than significant VMT impact, including projects located in low-VMT generating areas. The San Gabriel Valley Council of Governments (SGVCOG) VMT Evaluation Tool was used to determine if the project can be screened out and presumed to result in a less than significant VMT impact in accordance with City of Rosemead VMT guidelines.

The proposed project is located in a low-VMT generating area. Therefore, the proposed project satisfies the screening criteria for low-VMT generating area and may be presumed to result in a less than significant VMT impact in accordance with City of Rosemead VMT guidelines.

The SGVCOG VMT Evaluation Tool findings are included in Appendix F.

11. CONCLUSIONS

This section summarizes the findings and mitigation measures (if any) identified in previous sections of this study.

PROJECT TRIP GENERATION

The proposed project is forecast to generate a total of approximately 864 daily trips, including 62 trips during the AM peak hour and 74 trips during the PM peak hour

FORECAST LEVELS OF SERVICE

The study intersections are forecast to operate at acceptable Levels of Service during the peak hours for Opening Year (2024) Without Project conditions, except for the following study intersection:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (AM-LOS E, PM-LOS F)

The study intersections are forecast to operate at acceptable Levels of Service during the peak hours for Opening Year (2024) With Project conditions, except for the following study intersection which is forecast to continue operating at an unacceptable Levels of Service:

- Strathmore Avenue (NS) at Garvey Avenue (EW) - #6 (AM-LOS E, PM-LOS F)

The proposed project is forecast to result in no adverse transportation effects based on the established thresholds.

CONGESTION MANAGEMENT PROGRAM

The proposed project would result in no operational CMP impact as it does not meet the thresholds requiring a traffic impact analysis for CMP purposes and no further CMP analysis is warranted. A transit impact review was conducted for compliance with the CMP requirements and found that the proposed project is forecast to have a nominal impact on transit demand.

SPECIFIC PLAN AMENDMENT

Relative to the 2035 without GASP condition, buildout of the GASP with the proposed Specific Plan Amendment would not result in new significant impacts or mitigation in addition to those already identified in the previously certified GASP EIR.

VMT IMPACTS

The proposed project satisfies the screening criteria for low-VMT generating area and may be presumed to result in a less than significant VMT impact in accordance with City of Rosemead VMT guidelines.

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Volume Count Worksheets
Appendix D Level of Service Worksheets
Appendix E Traffic Signal Warrant Graphs
Appendix F SGVCOG VMT Evaluation Tool
Appendix G Level of Service Worksheets for Specific Plan Amendment Analysis

APPENDIX A

GLOSSARY

GLOSSARY OF TERMS

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
LOS	Level of Service
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CONTROL DELAY: The component of delay, typically expressed in seconds per vehicle, resulting from the type of traffic control at an intersection. Control delay is measured by comparison with the uncontrolled condition; it includes delay incurred by slowing down, stopping/waiting, and speeding up.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic travelling at a given speed to radically alter their speed or trajectory. Corner sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 36 inches above the pavement in the center of the nearest approach lane.

CYCLE LENGTH: The time period in seconds required for a traffic signal to complete one full cycle of indications.

CUL-DE-SAC: A local street open at one end only and with special provisions for turning around.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

PASSENGER CAR EQUIVALENT (PCE): A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SHARED/RECIPROCAL PARKING AGREEMENT: A written binding document executed between property owners to provide a designated number of off-street parking stalls within a designated area to be available for specified businesses or land uses.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queueing to occur.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through an intersection.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle on the major roadway travelling at a given speed to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 6 inches above the pavement.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination (i.e., each trip has two trip-ends). A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheel base as well as the steering mechanism of the vehicle.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

SCOPING AGREEMENT

MEMORANDUM OF UNDERSTANDING

TO: CITY OF ROSEMEAD

FROM: Bryan Crawford, Senior Transportation Planner | GANDDINI GROUP, INC.

DATE: July 11, 2022

SUBJECT: Strathmore and Garvey Mixed Use Project Traffic Impact Analysis Scoping

INTRODUCTION

The purpose of this traffic study scoping document is to outline the proposed traffic analysis parameters and assumptions for review/concurrence by City of Rosemead staff.

PROJECT DESCRIPTION

Figure 1 shows the project location map. The project site is located at the northwest corner of the intersection of Strathmore Avenue and Garvey Avenue in the City of Rosemead, as exhibited in Figure 2.

The site plan is show in Appendix A. The 1.21-acre project site is currently developed with retail and outdoor storage uses. The proposed project involves redevelopment with a seven-story mixed-use development comprised of 93 apartment dwelling units (including 26 live/work units), 6,040 square feet of retail, 12,801 square feet of office, a two-story parking structure, and related landscaping improvements. The proposed project is anticipated to be constructed and fully operational by year 2024.

Vehicle access is proposed at Strathmore Avenue, Virginia Street, and a public alley connecting to Brighton Street at the west side of the property.

PROJECT TRIP GENERATION

Table 1 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). ITE land use codes 221 (Multifamily Housing (Mid-Rise)) 710 (General Office Building), and 822 (Strip Retail Plaza (<40k)) have been used to estimate the site-specific trip generation estimates for the project land uses.

Traffic volumes shown in Table 1 consist of the total trips generated for each project land use. As a residential trip generated by the project may also interact with the commercial retail or office land uses within the project, a double counting of those trips occurs. To account for this internal interaction, the trips generated by the project site have been adjusted in accordance with procedures developed by the National Cooperative Highway Research Program 684 Internal Capture Estimation Tool as incorporated into the ITE *Trip Generation Handbook* (3rd Edition). Detailed internal capture worksheets are provided in the scoping agreement in Appendix B.

As shown in Table 1, the proposed project is forecast to generate approximately 864 daily trips, including 62 trips during the AM peak hour and 74 trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION

Figure 3 illustrates the forecast directional distribution patterns of project-generated trips.

STUDY AREA

Based on City of Rosemead guidelines, intersections identified for analysis typically include signalized intersections at which a project is forecast to contribute 50 or more trips during the AM or PM peak hours. The study area is proposed to consist of the following seven (7) study intersections, even if the project may not contribute 50 or more trips during either peak hour.

Study Intersections (Figure 1)

1. Del Mar Avenue (NS) at Garvey Avenue (EW)
2. Brighton Street (NS) at Garvey Avenue (EW)
3. Project Driveway (NS) at Virginia Street (EW)
4. Strathmore Avenue (NS) at Virginia Street (EW)
5. Strathmore Avenue (NS) at Project Driveway (EW)
6. Strathmore Avenue (NS) at Garvey Avenue (EW)
7. San Gabriel Boulevard (NS) at Garvey Avenue (EW)

TRAFFIC COUNTS

Intersection turning movement counts will be used at the study intersections during the AM peak period (7:00 AM – 9:00 AM) and PM peak period (4:00 PM – 6:00 PM) on a typical weekday (Tuesday, Wednesday, or Thursday).

ANALYSIS SCENARIOS

The traffic study shall evaluate the following analysis scenarios for weekday AM and PM peak hour conditions:

- Existing [2022]
- Opening Year Without Project [2024]
- Opening Year With Project [2024]

ANALYSIS METHODOLOGY

Signalized Intersections

In accordance with City of Rosemead guidelines, analysis of signalized intersections is based on the Intersection Capacity Utilization (ICU) methodology. The ICU methodology compares the volume of traffic using the intersection to the capacity of the intersection. The resulting volume-to-capacity (V/C) ratio represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The volume-to-capacity ratio is then correlated to a performance measure known as Level of Service based on the following thresholds:

Level of Service	Volume/Capacity Ratio
A	≤ 0.600
B	0.601 to 0.700

C	0.701 to 0.800
D	0.801 to 0.900
E	0.901 to 1.000
F	> 1.000

Source: Transportation Research Board, Interim Materials on Highway Capacity, Transportation Research Circular No. 212, January 1980.

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). ICU analysis was performed using the Vistro software.

Consistent with City of Rosemead guidelines, this analysis uses the following input parameters for the ICU analysis: 1,800 vehicles per hour per lane for through and turn lanes, 3,240 vehicles per hour for dual left-turn lanes, and a total clearance time of 10 percent.

Intersection Level of Service analysis shall be performed using the Vistro software.

Unsignalized Intersections

The technique used to assess the performance of unsignalized intersections in the City of Rosemead and California Department of Transportation (Caltrans) freeway ramp intersections is known as the intersection delay methodology based on the procedures contained in the Highway Capacity Manual. The methodology compares the traffic volume using the intersection to the capacity of the intersection to calculate the delay associated with the traffic control at the intersection. The intersection delay is then correlated to a performance measure known as Level of Service based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board, Highway Capacity Manual (6th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure).

Intersection Level of Service analysis shall be performed using the Vistro software.

PERFORMANCE STANDARDS

The City of Rosemead has established minimum acceptable Level of Service standards during peak hour conditions of LOS D or better for intersections.

OPERATIONAL THRESHOLDS

In accordance with the City of Rosemead guidelines, a project operational traffic impact occurs if the project related increase in the volume-to-capacity ratio equals or exceeds the thresholds shown below:

Significant Impact Threshold for Intersections		
Level of Service	~~Volume/Capacity~~	Incremental Increase
E or F ~~F~~	~~1.01 or more~~	0.02 or more

Based on the California Department of Transportation established performance standards, a potentially operational traffic impact is defined to occur if the addition of project generated trips is forecast to cause the performance of a State Highway study in~~t~~ersection to change from acceptable Level of Service (D or better) to unacceptable Level of Service (E or F).

If a project is forecast to cause an operational traffic impact, feasible improvements that will reduce the operational impact to an acceptable LOS are identified. Improvements can be in many forms, including the addition of lanes, traffic control modification, or demand management measures. If no feasible improvements can be identified for an operationally deficient facility, the operational traffic impact will remain deficient.

FORECASTING METHODOLOGY

Ambient Growth Rate

To account for area-wide ambient growth, the Opening Year 2024 will include a 0.8% annual growth for 2 years (total growth factor = 1.0161) over the 2022 base volumes. City staff shall confirm that this growth rate is applicable and refine as necessary.

Other Cumulative Projects

A list of pending and approved cumulative development projects will be obtained from Cities of Rosemead, Monterey Park, San Gabriel, South San Gabriel, and Alhambra staff. These lists will be narrowed down to include projects within a 1.5 mile radius of the project site.

Trip forecasts for other development projects within the project study area will be determined based on the Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition, 2021 and will be added to existing roadway volumes for the applicable analysis scenarios.

SIGHT DISTANCE ANALYSIS

A sight distance analysis will be performed at the intersections of Brighton Street at Garvey Avenue and Strathmore Avenue at Garvey Avenue.

GARVEY AVENUE SPECIFIC PLAN

The proposed project is located within the Garvey Avenue Specific Plan. The proposed development will be analyzed with the assumed uses within the Garvey Avenue Specific Plan (Study Area TAZ Boundary 2165-3) to determine conformity with the assumptions within this TAZ within the Garvey Avenue Specific Plan.

VEHICLES MILES TRAVELED (VMT) ANALYSIS

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Agencies are required to apply the updated CEQA guidelines for VMT analysis and implementation was required State-wide by July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Technical Advisory on Evaluating Transportation Impacts in CEQA (State of California, December 2018) ["Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

The City of Rosemead has established VMT analysis guidelines at this time; therefore, the project-related VMT impact has been assessed based on guidance from the City of Rosemead *Adopting Resolution No. 2020-22 Establishing the Traffic Threshold of Significance for California Environmental Quality Act (CEQA) to Vehicle Miles Traveled (VMT) Rather than Level of Service (LOS)* (June 9, 2020).

VMT Screening Assessment

The project VMT impact has been assessed in accordance with guidance from the City of Rosemead *Adopting Resolution No. 2020-22 Establishing the Traffic Threshold of Significance for California Environmental Quality Act (CEQA) to Vehicle Miles Traveled (VMT) Rather than Level of Service (LOS)* (June 9, 2020).

Consistent with recommendations in the OPR Technical Advisory, the City of Rosemead has established screening criteria for certain projects that may be presumed to have a less than significant VMT impact, including projects located in low-VMT generating areas. The San Gabriel Valley Council of Governments (SGVCOG) VMT Evaluation Tool was used to determine if the project can be screened out and presumed to result in a less than significant VMT impact in accordance with City of Rosemead VMT guidelines.

The proposed project is located in a low-VMT generating area. Therefore, the proposed project satisfies the screening criteria for low-VMT generating area and may be presumed to result in a less than significant VMT impact in accordance with City of Rosemead VMT guidelines.

Appendix C includes the SGVCOG VMT Evaluation Tool findings.

CONCLUSION

We appreciate the opportunity to provide this scoping document for your review. Should you have any questions or comments regarding the proposed scope, please contact Bryan Crawford at (714) 795-3100 x 104 or bryan@ganddini.com.

Table 1
Draft Project Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Land Use Variable[2]	% In	% Out	Rate	% In	% Out	Rate	Daily Rate
Multifamily Housing (Mid-Rise, Not Close to Rail Transit)	ITE 221	DU	23%	77%	0.37	61%	39%	0.39	4.54
General Office Building	ITE 710	TSF	88%	12%	1.52	17%	83%	1.44	10.84
Strip Retail Plaza (<40k)	ITE 822	TSF	60%	40%	2.36	50%	50%	6.59	54.45

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Multifamily Housing (Mid-Rise, Not Close to Rail Transit)	ITE 221	93 DU	8	26	34	22	14	36	422
Internal Capture[3] (AM: 0% In, 4% Out; PM: 23% In, 21% Out)			*0*	*-1*	*-1*	*-5*	*-3*	*-8*	*-9*
Subtotal			8	25	33	17	11	28	413
General Office Building	ITE 710	12.801 TSF	17	2	19	3	15	18	139
Internal Capture[3] (AM: 12% In, 50% Out; PM: 33% In, 13% Out)			*-2*	*-1*	*-3*	*-1*	*-2*	*-3*	*-6*
Subtotal			15	1	16	2	13	15	133
Strip Retail Plaza (<40k)	ITE 822	6.040 TSF	9	6	15	20	20	40	329
Internal Capture[3] (AM: 11% In, 17% Out; PM: 20% In, 25% Out)			*-1*	*-1*	*-2*	*-4*	*-5*	*-9*	*-11*
Subtotal			*8*	*5*	*13*	*16*	*15*	*31*	*318*
TOTAL TRIPS GENERATED			**31**	**31**	**62**	**35**	**39**	**74**	**864**

Notes:
1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code.
   All rates based on General Urban/Suburban setting unless otherwise noted.
2. DU = Dwelling Units; TSF = Thousand Square Feet
3. Internal Capture calculated using the NCHRP 684 Internal Trip Capture Estimation Tool included in the ITE *Trip Generation Handbook* (3rd Edition, 2017).

Legend

Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

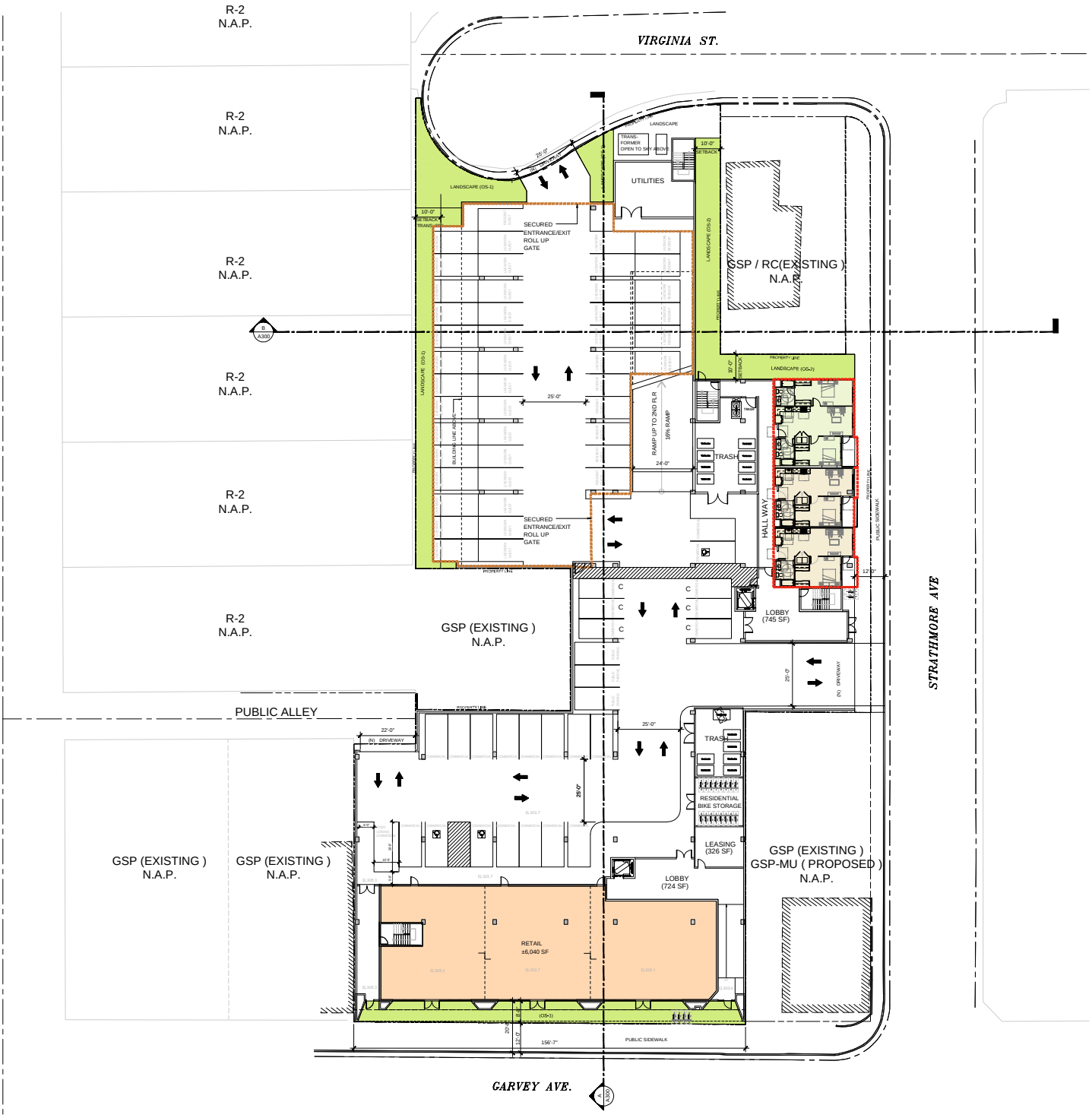
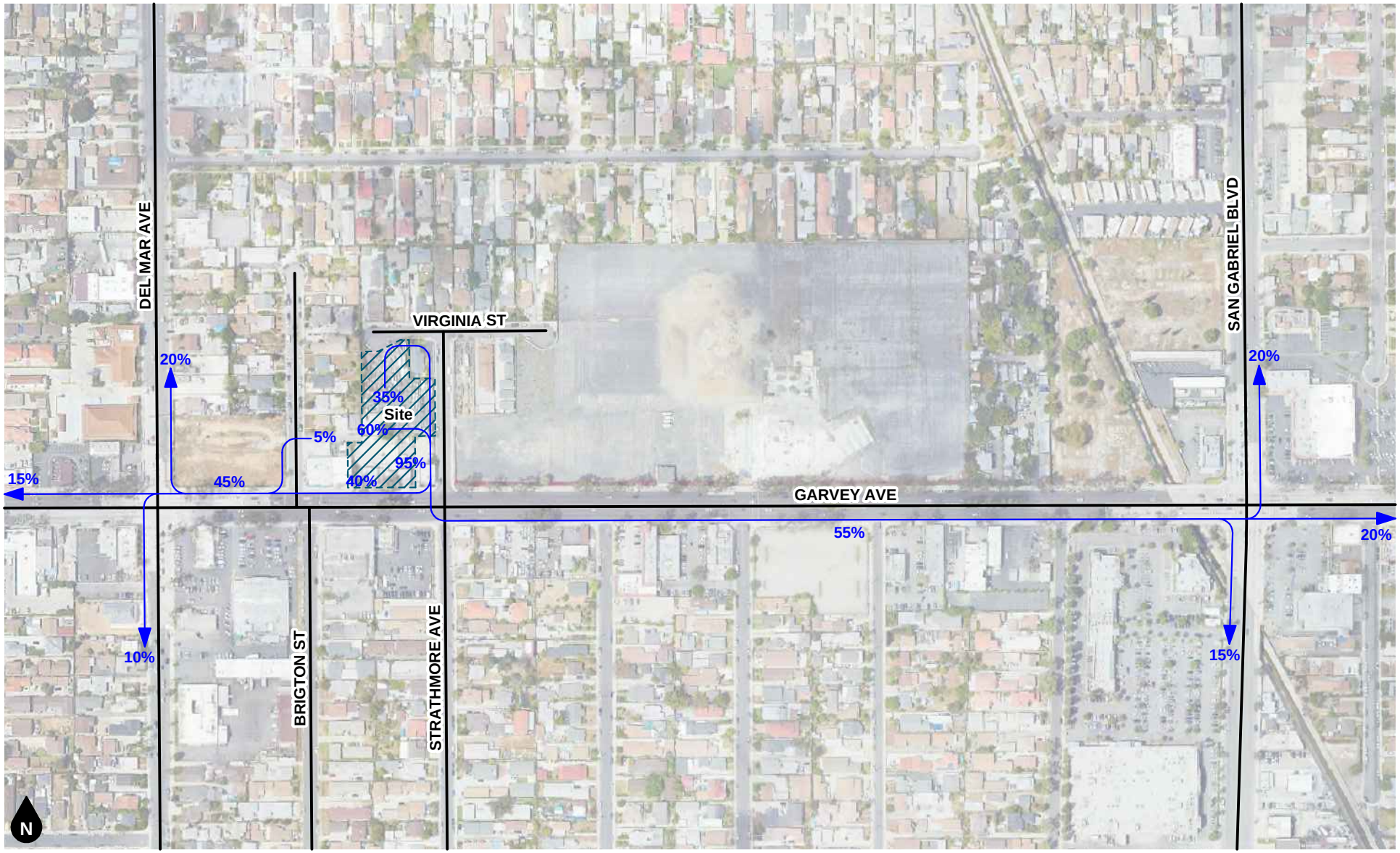


Figure 2
Site Plan



Legend

10% Percent From Project

Figure 3
Project Trip Distribution

Appendix A

Site Plan

PROJECT
STRATHMORE AND GARVEY MIXED-USE
7849-7857 GARVEY AVE.
7900 & 7916 VIRGINIA ST.
ROSEMEAD, CA 91770

OWNER
GREEN PARK LLC
120 E. VALLEY BLVD.
SAN GABRIEL, CA 91776

970 N. BROADWAY, SUITE 107
LOS ANGELES, CA 90012
scale(s) lab architects
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PROPOSED NON-RESIDENTIAL CALCULATION

Commercial Area

Retail 1	6,040	(Avg. 2,000 sf)
Office	12,801	sf

Live-Work Units (see plan for location)

Unity Type	Count	Gross (SF)	LIVE (SF)	WORK(SF)	Parking Required	Total Live (SF)	Total Work (SF)	Total Gross (SF)	Total Parking Required
Unit 1A	4	705	226	479	2	902	1,918	2,820	8
Unit 1B	4	740	240	500	2	960	2,000	2,960	8
Unit 1C	1	723	223	500	2	223	500	723	2
Unit 2A	4	1,065	340	725	2	1360	2,900	4,260	8
Unit 2B	3	1,026	314	712	2	942	2,136	3,078	6
Unit 2C-C	1	1,129	299	830	2	299	830	1,129	2
Unit 2D	1	1,162	380	782	2	380	782	1,162	2
Unit 2H	1	1,175	295	880	2	295	880	1,175	2
Unit 2I	3	1,064	328	736	2	984	2,208	3,192	6
Unit 2J	1	1,115	323	792	2	323	792	1,115	2
Unit 3A	2	1,406	450	956	2	900	1,912	2,812	4
Unit 3B	1	1,745	722	1023	2	722	1,023	1,745	2
Total Live-Work Units	**26**					**8,290**	**17,881**	**26,171**	**52**

Live	8,290	**32%**	**Live/Work**	26
Work	17,881	**68%**	**Live/Work Guest**	26
Total (Residential-Work Retail + Office)	**36,722**	**SF**		

11	**Floor Area Land Use Mix:**		Provided	Required
	Residential Net	76,352	**68%**	70% or less
	Commercial	36,722	**32%**	30% or greater
	Total	113,074		

12	**Parking:**		
	Total Provided Parking	**211**	spaces
	Level 1	73	spaces
	Level 2	67	spaces
	Level 3	71	spaces
	including	5	Accessible spaces
	including	183	Standard 9'x18'
	including	22	Compact 8'x16' 10%
	including	1	Loading space (10' X 20')
	Total Required Parking	**200**	spaces 11 (Surplus) 3 for Public parking
	Residential (1 per DU)	67	spaces
	Residential Guest (0.5 per DU)	34	spaces
	Residential Live/Work	26	spaces (See Non Residential Calculation) Tandem
	Residential Live/Work Guest	26	spaces (See Non Residential Calculation) parking
	Retail (1/400)	15	spaces
	Offices (1/400)	32	spaces
	Total Bicycle Parking	20	spaces 10% Req'd Parking

13	**Lot Coverage:**	**45,456**	**Footprint**
		52,926	Lot area
		85.9%	

14	**Floor Area Ratio (FAR):**	**116,017**	**Total Habitable Area (SF)**
	Total Unit Net Area (SF)+Amenities	97,176	
	Total Retail Area (SF)	6,040	
	Total Office Area	12,801	
	Total Access and Hallways	-	
		52,926	Lot area
		2.2	Actual
		3.0	Allowed with Provision of Community Benefits

15	**Common Open Space:**		
	Commercial	52,926	Parcel Area 5% of total commercial parcel with 50% min landscape
		2,646	Required Open Area (Parcel with Commercial)
		3,654	Provided Open Area
		7%	Actual > 5%
		3,495	Landscape Area (see landscape plans)
		96%	Actual > 50%
	Residential	13,800	Required (150 SF/ DU), 93 Units
		19,114	Provided (Outdoor + Indoor)

16	**Landscape:**		
		52,926	Lot Area (SF)
		6,831	Provided
		3,176	Required (6%)

17	**Private Open Space:**	**6,975**	**Required (75 SF/ DU)**
		10,067	Provided

18	**Height:**	**35 -75 Feet**	**Actual**
		75 Feet	Allowed
		See Sheets A300 (Sections) for setback compliance	

19	**Community Benefits Points:**		**Earned**	**Max Points**	**FAR Earned**	**Density Earned**
.	Lot Consolidation	2 lots consolidated into 1 parcels	35	35		
.	Family Friendly Development	10% 3br Units	30	50		
.		Library, Play area	20			
.	Non Residential Component	Avg 2,000 SF	20	20		
.	Public Parking	3 stalls	6	50		
.	Sustainable Design	CALGREEN Tier 1	20	20		
		Total	**131**		**80**	DU/Acre

PROJECT SUMMARY

1	**Address:**	7849 - 7857 Garvey Ave., Rosemead CA
		7900, 7916 Virginia St., Rosemead CA
2	**Property Developer:**	Green Park Property LLC. 120 E Valley Blvd. San Gabriel CA. 91776 C/O Cindy Lau (626) 307-0062
3	**General Plan Designation:**	**Current zoning designation :** Garvey Ave. Specific Plan, GSP, GSP/RC Zone
		Proposed zoning designation : Garvey Ave. Specific Plan, GSP-MU (Commercial and Residential Mixed-use) Zone
4	**Scope of Work:**	7 stories , 93 units apartment with retail and offices (mixed-use). Parking will be structured
5	**Legal Description:**	5287-039-001,5287-039-002,5287-039-003 ,5287-039-004,5287-039-005,5287-039-011 - Lot Consolidation Proposed
6	**Lot Size:**	52,926 SF (1.21) Acres)
7	**Residential Density:**	Proposed 93 DU/1.21 AC < 80 DU/Arce - Allowed with community benefits provision of the GASP.
8	**Occupancies:**	Residential Apartments (R2), Retail (M), Offices (B), Parking Structure (S2)
9	**Type of Construction:**	4 stories Type IIIA over 3 stories Type IA concrete podium
10	**Floor Area:**	See Below

Unit Count

	1br	2br	3br	**Total/Level**
1st level	2	1	0	**3**
2nd level	0	1	0	**1**
3rd level	0	1	0	**1**
4th level	5	11	3	**19**
5th level	6	12	3	**21**
6th level	10	12	3	**25**
7th level	8	14	1	**23**
total	31	52	10	93
Unit mix	33.3%	55.9%	10.8%	100%

Live/Work unit	26	units
Residential (stand-alone)	67	units

		PER UNIT				TOTAL				Unit Types Distribution Per Level							
		Gross (SF)	Net (SF)	Deck (SF)	Unit Count	Gross (SF)	Net (SF)	Deck (SF)	Unit Type	1st level	2nd level	3rd level	4th level	5th level	6th level	7th level	Total
844	Unit 1A	705	646	75	19	13395	12274	1425	1br	2	0	0	2	3	7	5	19
	Unit 1B	740	690	100	8	5920	5520	800	1br	0	0	0	2	2	2	2	8
	Unit 1C	723	676	98	4	2892	2704	392	1br	0	0	0	1	1	1	1	4
	Unit 2A	1065	986	75	10	10650	9860	750	1br	1	1	1	1	2	2	2	10
	Unit 2A-S	1297	1,230	248	1	1297	1230	248	1br	0	0	0	0	0	0	1	1
	Unit 2B	1026	970	93	12	12312	11640	1116	1br	0	0	0	3	3	3	3	12
	Unit 2C-C	1,129	1,056	146	4	4516	4224	584	2br	0	0	0	1	1	1	1	4
	Unit 2D	1,162	1,100	78	4	4648	4400	312	2br	0	0	0	1	1	1	1	4
	Unit 2E	1,187	1,128	106	2	2374	2256	212	2br	0	0	0	0	0	0	2	2
	Unit 2H	1,175	1,100	75	4	4700	4400	300	2br	0	0	0	1	1	1	1	4
	Unit 2I	1,064	1,002	220	12	12768	12024	2640	1br	0	0	0	3	3	3	3	12
	Unit 2J	1,115	1,039	108	3	3345	3117	324	1br	0	0	0	1	1	1	0	3
	Unit 3A	1,406	1,343	106	6	8436	8058	636	3br	0	0	0	2	2	2	0	6
	Unit 3B	1,745	1,664	82	4	6980	6656	328	3br	0	0	0	1	1	1	1	4
	Total				**93**	**94,233**	**88,363**		**DU**	3	1	1	19	21	25	23	93
	Live -Work Commercial					17,881											
	Residential Net					**76,352**											

COMMON OPEN SPACE AREA
Amenities (Residential)

Private Open Space	**SF**		**Area**	**SF**	
Private Decks and Balconies	10,067		Lobbies	1,469	Indoor
Residential Common Open Space		2nd floor	Leasing	326	
Courtyard 1 (4th flr)	4,069	Outdoor			
Courtyard 2 (4th flr)	2,591	3rd floor	Library	723	
Deck 1 (4th flr)	2,387		Co-working	1,856	
Deck 2 (6th flr)	1,254		Co-working	1,447	
		4th floor	Co-working	1,545	
			Co-working	1,447	
Total	**10,301**	(Outdoor)			
			Total	**8,813**	(Indoor)
Combined Residential Common Open Space	**19,114**	(Outdoor/Indoor)			
Commercial Open Space	**3,654**	(Outdoor)			
	1,860	OS-1			
	1,502	OS-2			
	292	OS-3			

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PROPOSED MIXED-USE

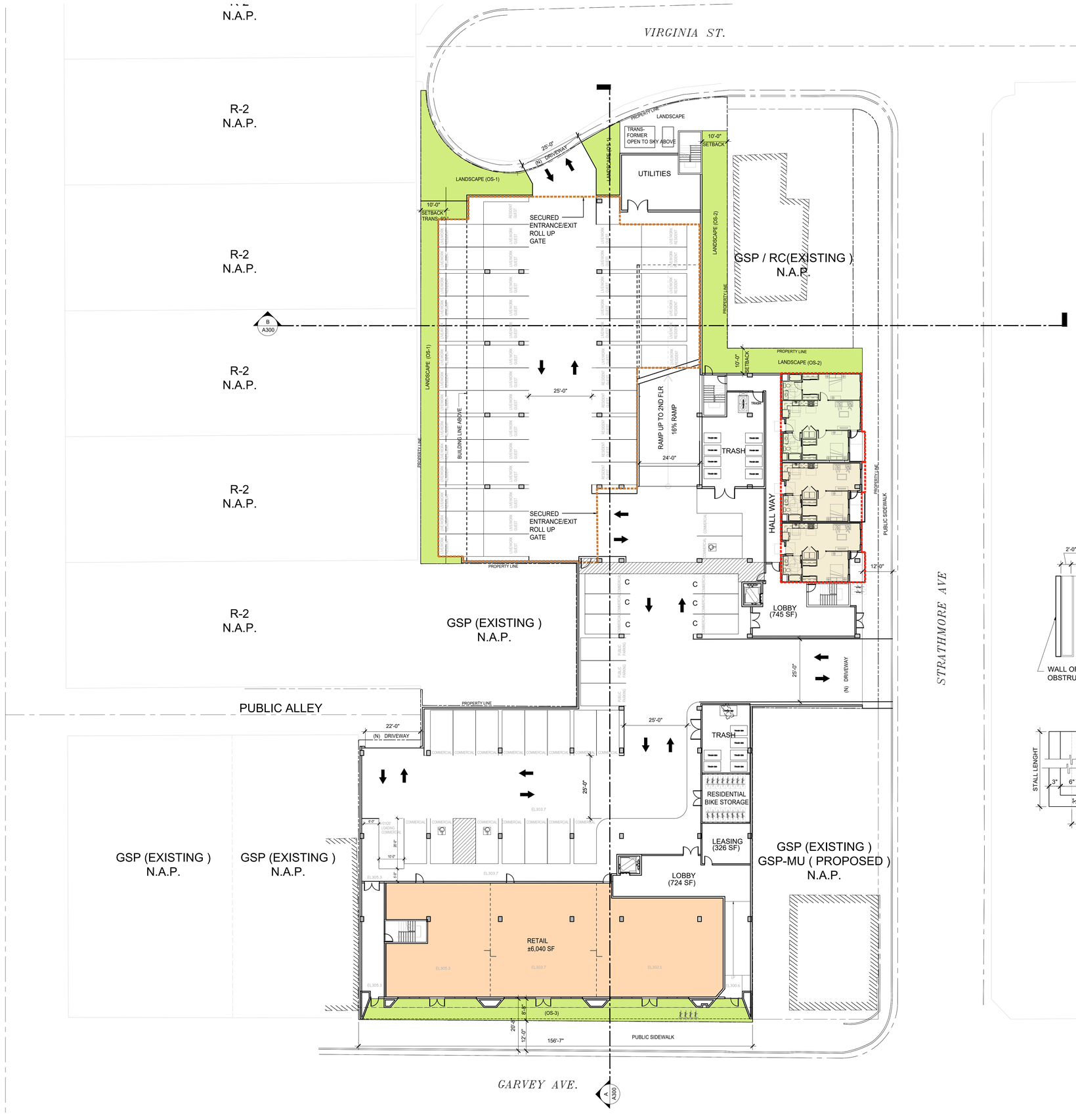
DEVELOPER: GREEN PARK LLC.

7849-7857 GARVEY AVE.
7900 & 7916 VIRGINIA ST.
ROSEMEAD, CALIFORNIA 91770

DESCRIPTION: **PROJECT DATA**

SHEET: **A-001**

DATE: **22-06-01**



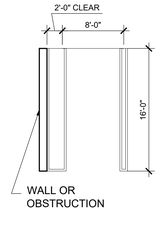
1 SITE PLAN (GROUND FLOOR)

SCALE: 1/16"=1'-0"

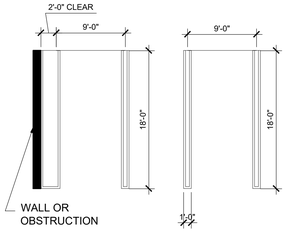
PLAN LEGEND

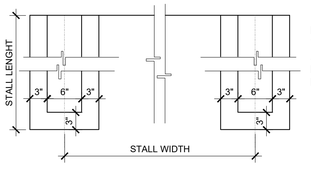
- RETAIL
- OFFICES
- RESIDENTIAL AMMENITIES
- 1 BEDROOM
- 2 BEDROOM
- 3 BEDROOM
- COURTYARD/ OPEN AREA
- LIVE-WORK UNITS
- SECURED PARKING AREA

COMPACT PARKING



STANDARD PARKING





PARKING STALLS SHALL BE STRIPED WITH THREE-INCH DOUBLE LINES, SIX INCHES APART. THE STALL WIDTH SHALL BE MEASURED FROM THE CENTER POINT OF EACH DOUBLE STRIPED MARKING.

NORTH

SCALE: 1/16" = 1'-0"

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LOS ANGELES, CA 90012
p. 213.537.0910
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PROPOSED MIXED-USE

DEVELOPER: GREEN PARK LLC.

7849-7857 GARVEY AVE.
7900 & 7916 VIRGINIA ST.
ROSEMEAD, CALIFORNIA 91770

DESCRIPTION: **SITE PLAN**

SHEET: **A-100**

DATE: **22-06-01**

Appendix B

Internal Capture Worksheets

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Strathmore and Garvey Mixed Use Project	**Organization:**	Ganddini Group, Inc.
Project Location:	NW corner Strathmore/Garvey	**Performed By:**	Bryan Crawford
Scenario Description:	Mixed-Use	**Date:**	7/11/2022
Analysis Year:	2022	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				19	17	2
Retail				15	9	6
Restaurant				0		
Cinema/Entertainment				0		
Residential				34	8	26
Hotel				0		
All Other Land Uses[2]				0		
				68	34	34

Table 2-A: Mode Split and Vehicle Occupancy Estimates

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

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

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

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

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

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	68	34	34
Internal Capture Percentage	9%	9%	9%
External Vehicle-Trips[5]	62	31	31
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	12%	50%
Retail	11%	17%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	4%
Hotel	N/A	N/A

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

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

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

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

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

[6]Person-Trips

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

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

Project Name:	Strathmore and Garvey Mixed Use Project
Analysis Period:	**AM Street Peak Hour**

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

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	17	17	1.00	2	2
Retail	1.00	9	9	1.00	6	6
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	8	8	1.00	26	26
Hotel	1.00	0	0	1.00	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	1	0	0	0
Retail	2		1	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	5	0		0
Hotel	0	0	0	0	0	

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

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

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

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	2	15	17	15	0	0
Retail	1	8	9	8	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	8	8	8	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	1	1	2	1	0	0
Retail	1	5	6	5	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	25	26	25	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

[2]Person-Trips

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

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

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	Strathmore and Garvey Mixed Use Project	**Organization:**	Ganddini Group, Inc.
Project Location:	NW corner Strathmore/Garvey	**Performed By:**	Bryan Crawford
Scenario Description:	Mixed-Use	**Date:**	44753
Analysis Year:	2022	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

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

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				18	3	15
Retail				40	20	20
Restaurant				0		
Cinema/Entertainment				0		
Residential				36	22	14
Hotel				0		
All Other Land Uses[2]				0		
				94	45	49

Table 2-P: Mode Split and Vehicle Occupancy Estimates

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

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

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

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	0	0
Retail	0		0	0	5	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	2	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	94	45	49
Internal Capture Percentage	21%	22%	20%
External Vehicle-Trips[5]	74	35	39
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

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

Land Use	Entering Trips	Exiting Trips
Office	33%	13%
Retail	20%	25%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	23%	21%
Hotel	N/A	N/A

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

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

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

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

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

[6]Person-Trips

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

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

Project Name:	Strathmore and Garvey Mixed Use Project
Analysis Period:	**PM Street Peak Hour**

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

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	3	3	1.00	15	15
Retail	1.00	20	20	1.00	20	20
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	22	22	1.00	14	14
Hotel	1.00	0	0	1.00	0	0

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		3	1	0	0	0
Retail	0		6	1	5	1
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	6	3	0		0
Hotel	0	0	0	0	0	

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

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	1	0
Retail	1		0	0	10	0
Restaurant	1	10		0	4	0
Cinema/Entertainment	0	1	0		1	0
Residential	2	2	0	0		0
Hotel	0	0	0	0	0	

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

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	1	2	3	2	0	0
Retail	4	16	20	16	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	17	22	17	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	2	13	15	13	0	0
Retail	5	15	20	15	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	11	14	11	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

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

[2]Person-Trips

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

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

Appendix C

SGVCOG VMT Evaluation Tool Report

SGVCOG VMT Evaluation Tool Report

Project Details

Timestamp of Analysis: July 11, 2022, 11:15:49 AM

Project Name: Strathmore and Garvey Mized Use PRoject

Project Description: Seven-Story Mixed-Use Development

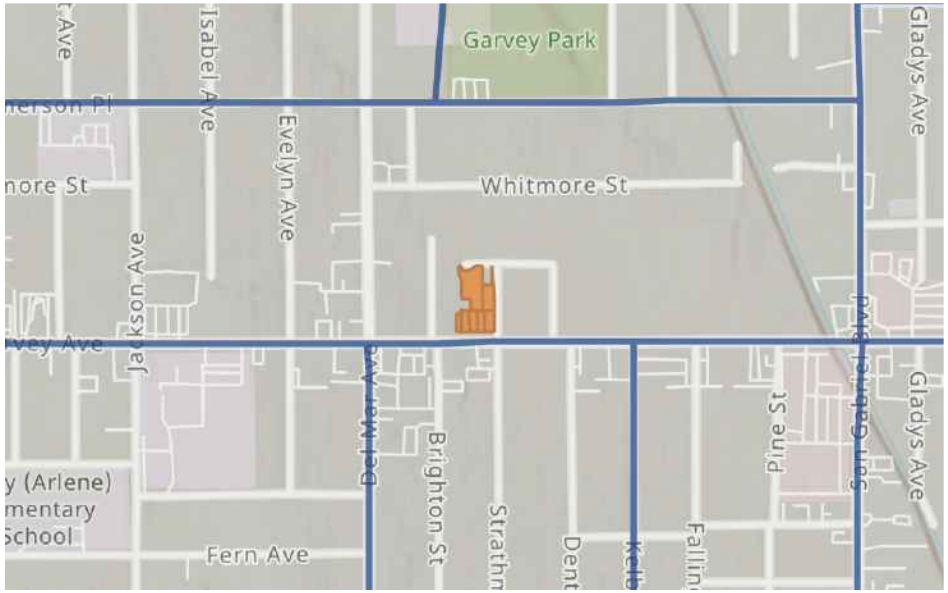
Project Location

jurisdiction: Rosemead

apn	TAZ	apn	TAZ	apn	TAZ
5287-038-020	22165100	5287-038-029	22165100	5287-038-030	22165100
5287-038-031	22165100	5287-038-033	22165100		

Inside a TPA?

No (Fail)



Analysis Details

Data Version: SCAG Regional Travel Demand Model 2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2022

Project Land Use

Residential:

Single Family DU:	26
Multifamily DU:	
Total DUs:	26

Non-Residential:

Office KSF:	12
Local Serving Retail KSF:	6
Industrial KSF:	

Residential Affordability (percent of all units):

Extremely Low Income:	0 %
Very Low Income:	0 %
Low Income:	0 %

Parking:

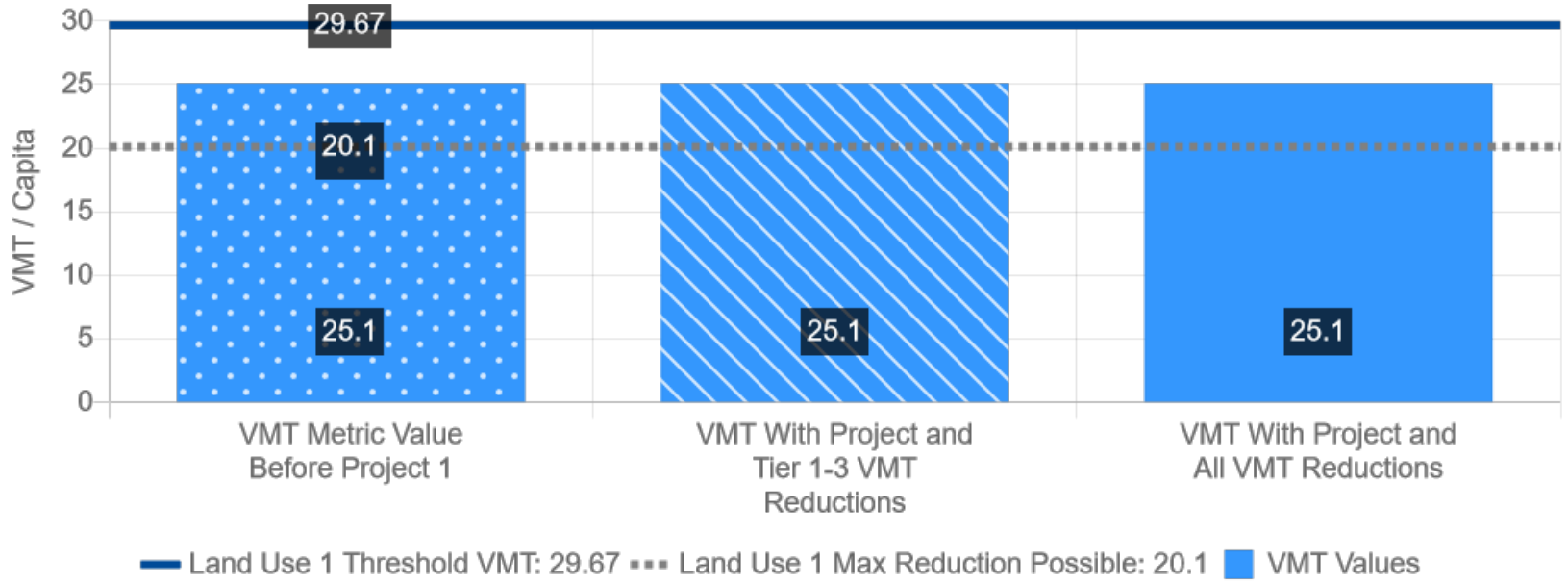
Motor Vehicle Parking:

Bicycle Parking:

Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Without Project 1:	Total VMT per Service Population
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	34.9
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

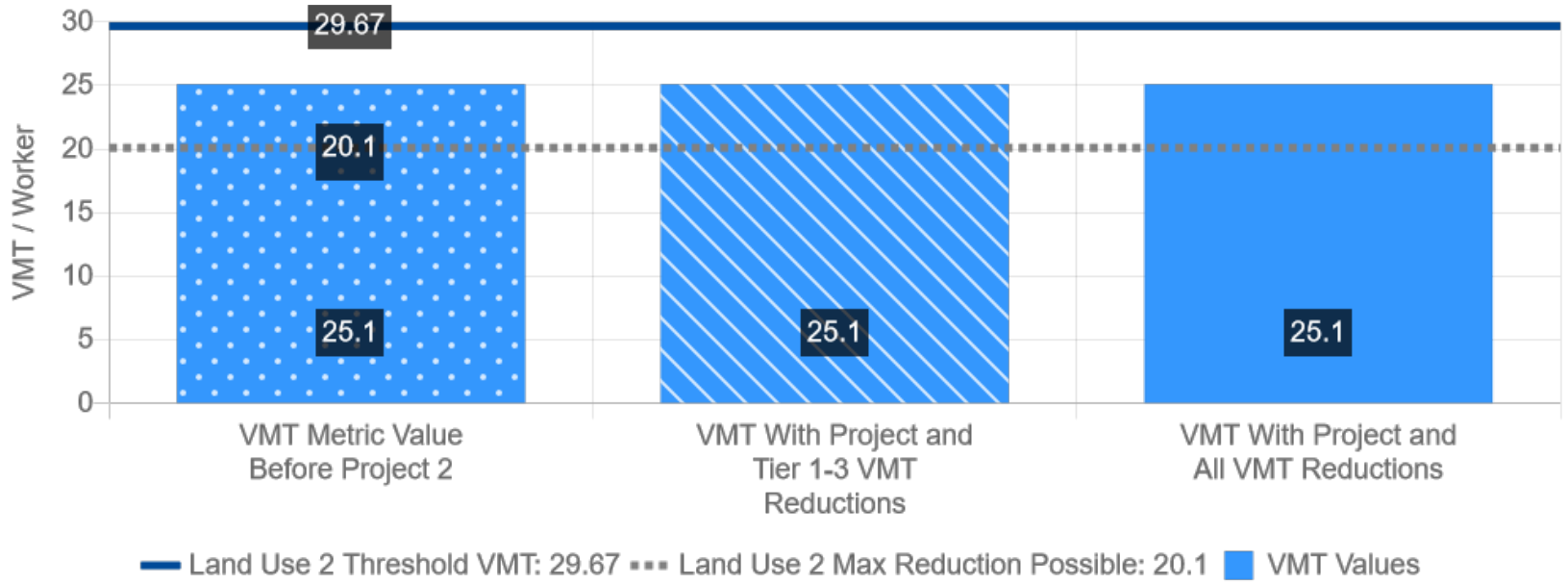
	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	25.1	25.1	25.1
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



Office Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 2:	Office
VMT Without Project 2:	Total VMT per Service Population
VMT Baseline Description 2:	SGVCOG Average
VMT Baseline Value 2:	34.9
VMT Threshold Description 2:	-15%
Land Use 2 has been Pre-Screened by the Local Jurisdiction:	N/A

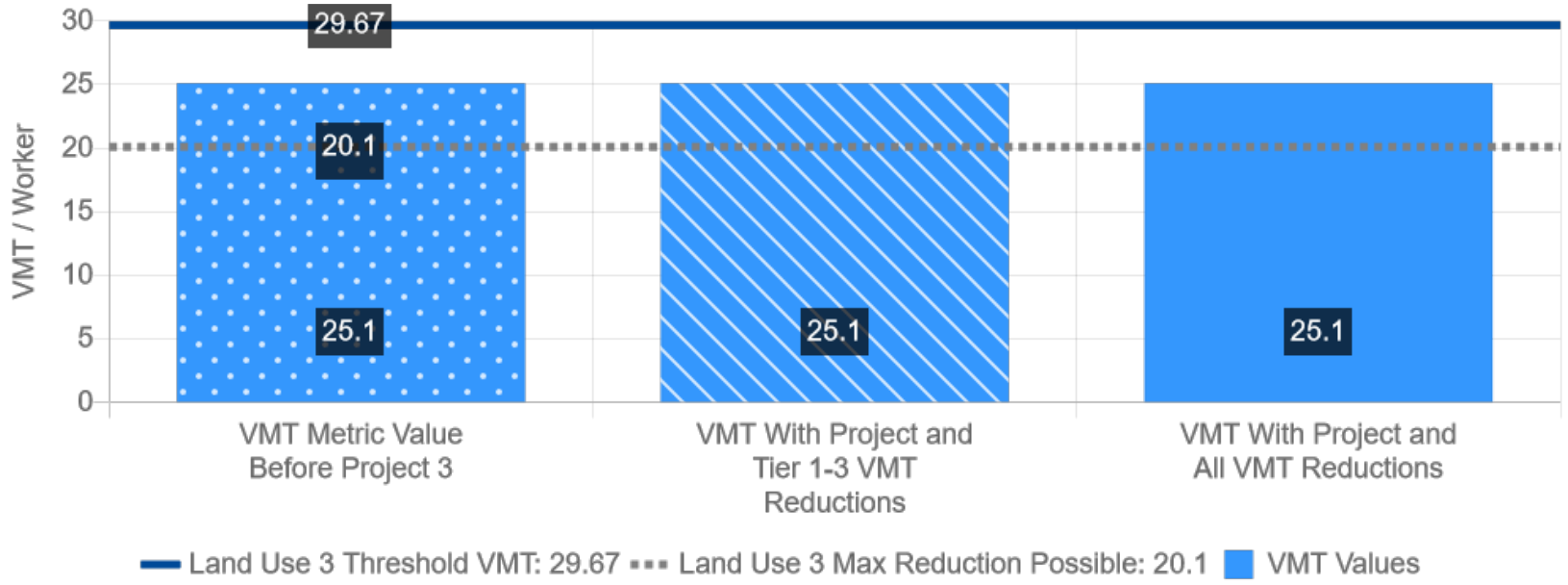
	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	25.1	25.1	25.1
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



Commercial Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 3:	Commercial
VMT Without Project 3:	Total VMT per Service Population
VMT Baseline Description 3:	SGVCOG Average
VMT Baseline Value 3:	34.9
VMT Threshold Description 3:	-15%
Land Use 3 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	25.1	25.1	25.1
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



APPENDIX C

VOLUME COUNT WORKSHEETS

INTERSECTION TURNING MOVEMENT COUNTS

T218

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

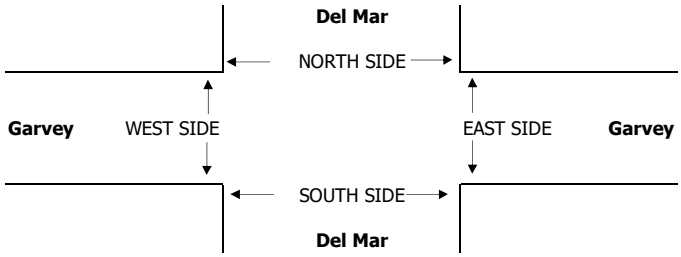
DATE:				
Tue, Aug 23, 22	LOCATION:	Rosemead	PROJECT #:	SC3570
	NORTH & SOUTH:	Del Mar	LOCATION #:	1
	EAST & WEST:	Garvey	CONTROL:	SIGNAL

NOTES:

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

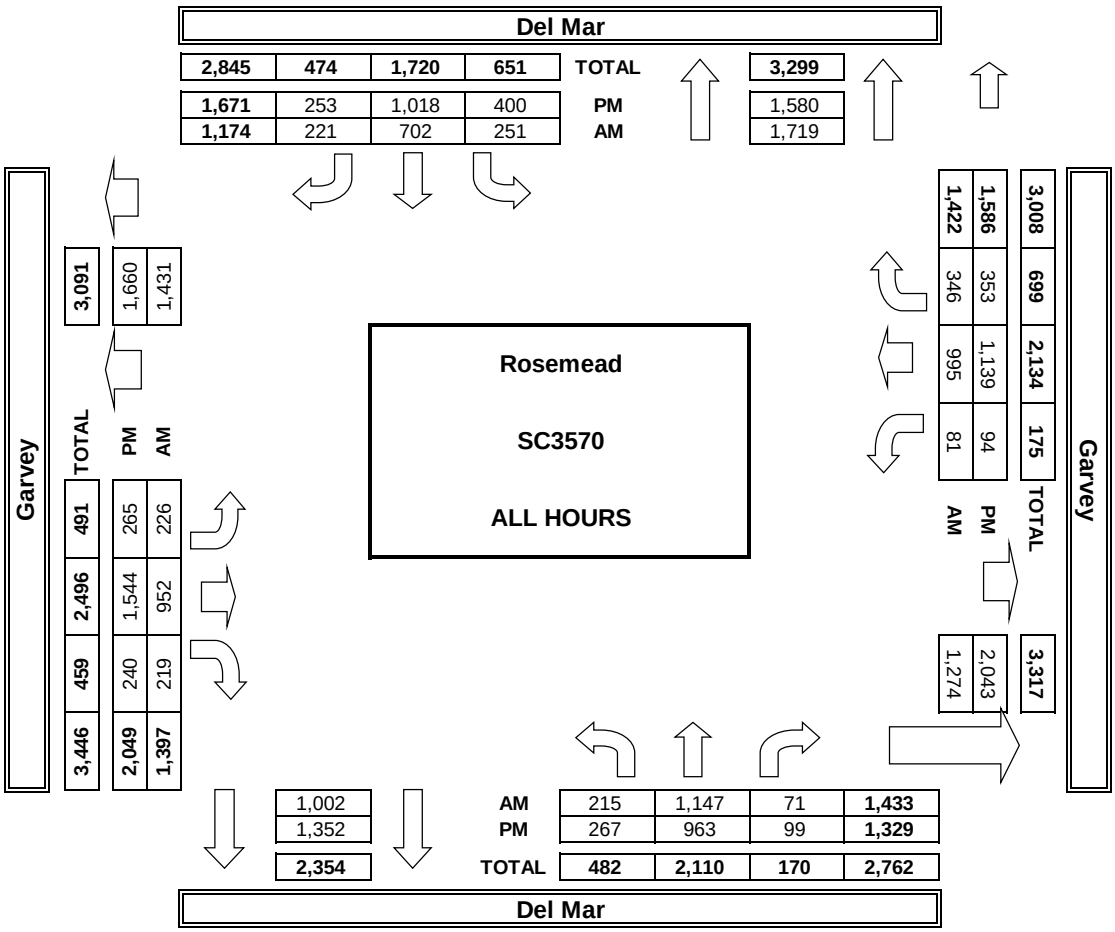
☑ Add U-Turns to Left Turns

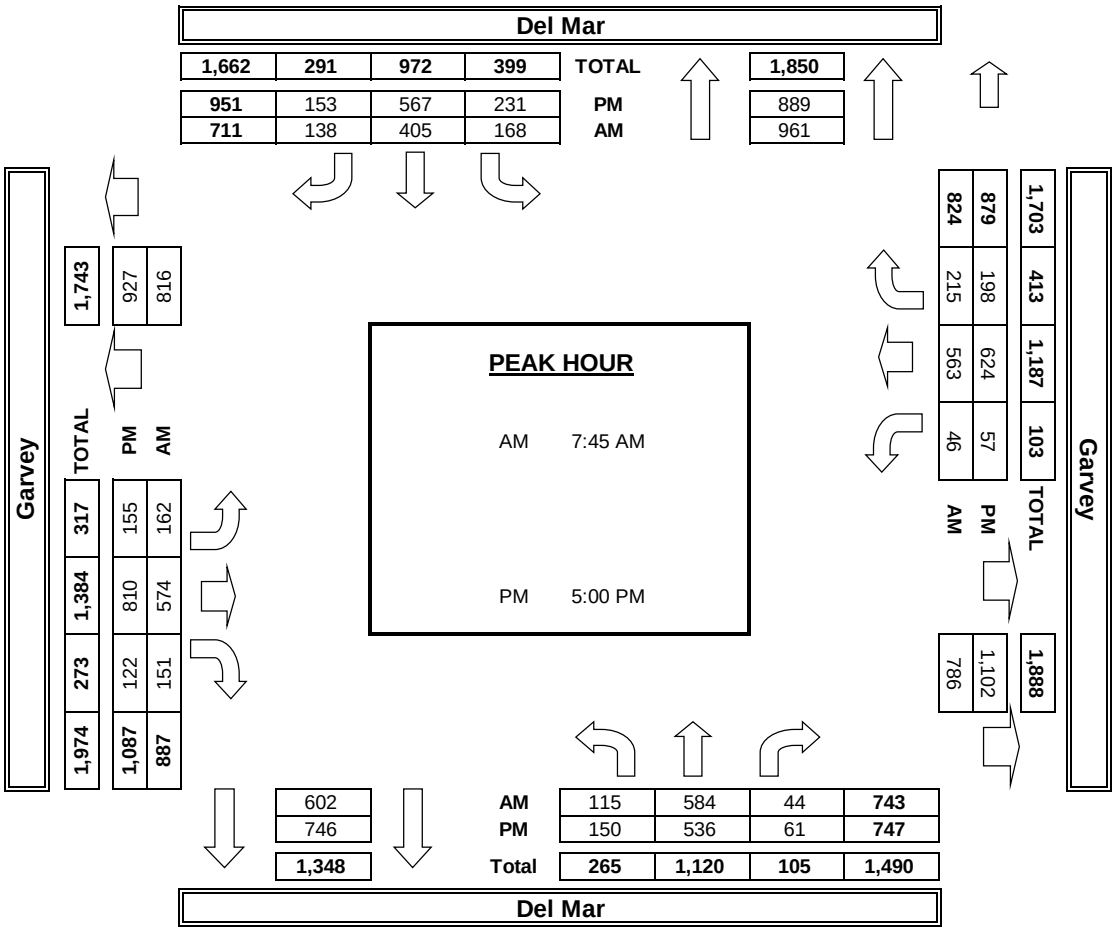
		NORTHBOUND Del Mar			SOUTHBOUND Del Mar			EASTBOUND Garvey			WESTBOUND Garvey				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	20	96	3	10	39	11	7	49	13	3	74	34	359	0	0	0	0	0
	7:15 AM	19	149	6	14	76	12	14	71	14	5	89	27	496	0	0	0	0	0
	7:30 AM	26	185	5	15	112	31	21	81	29	20	121	35	681	0	0	0	0	0
	7:45 AM	34	170	4	37	133	51	52	112	49	9	162	71	884	0	0	0	0	0
	8:00 AM	38	163	21	43	119	33	41	140	36	16	121	65	836	0	0	0	0	0
	8:15 AM	29	123	13	45	92	23	34	149	37	5	141	42	733	0	0	0	0	0
	8:30 AM	14	128	6	43	61	31	35	173	29	16	139	37	712	0	0	0	0	0
	8:45 AM	35	133	13	44	70	29	22	177	12	7	148	35	725	0	0	0	0	0
	VOLUMES	215	1,147	71	251	702	221	226	952	219	81	995	346	5,426	0	0	0	0	0
	APPROACH %	15%	80%	5%	21%	60%	19%	16%	68%	16%	6%	70%	24%						
	APP/DEPART	1,433	/	1,719	1,174	/	1,002	1,397	/	1,274	1,422	/	1,431	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	115	584	44	168	405	138	162	574	151	46	563	215	3,165					
	APPROACH %	15%	79%	6%	24%	57%	19%	18%	65%	17%	6%	68%	26%						
	PEAK HR FACTOR		0.837			0.804			0.936			0.851		0.895					
	APP/DEPART	743	/	961	711	/	602	887	/	786	824	/	816	0					
PM	4:00 PM	23	101	11	40	118	28	25	166	29	8	125	39	713	0	0	0	0	0
	4:15 PM	24	124	11	40	102	23	33	180	29	12	133	35	746	0	0	0	0	0
	4:30 PM	34	97	9	46	111	28	32	170	26	8	132	37	730	0	0	1	0	1
	4:45 PM	36	105	7	43	120	21	20	218	34	9	125	44	782	0	0	0	0	0
	5:00 PM	40	110	16	56	102	38	39	190	27	11	142	52	823	0	0	0	0	0
	5:15 PM	32	145	17	58	170	31	36	193	29	12	150	47	920	0	0	0	0	0
	5:30 PM	36	120	13	53	138	38	38	213	35	16	184	57	941	0	0	0	0	0
	5:45 PM	42	161	15	64	157	46	42	214	31	18	148	42	980	0	0	0	0	0
	VOLUMES	267	963	99	400	1,018	253	265	1,544	240	94	1,139	353	6,635	0	0	1	0	1
	APPROACH %	20%	72%	7%	24%	61%	15%	13%	75%	12%	6%	72%	22%						
	APP/DEPART	1,329	/	1,580	1,671	/	1,352	2,049	/	2,043	1,586	/	1,660	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	150	536	61	231	567	153	155	810	122	57	624	198	3,664					
	APPROACH %	20%	72%	8%	24%	60%	16%	14%	75%	11%	6%	71%	23%						
	PEAK HR FACTOR		0.857			0.890			0.947			0.855		0.935					
	APP/DEPART	747	/	889	951	/	746	1,087	/	1,102	879	/	927	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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

DATE: Wed, Aug 24, 22

LOCATION: Rosemead
NORTH & SOUTH: Brighton
EAST & WEST: Garvey

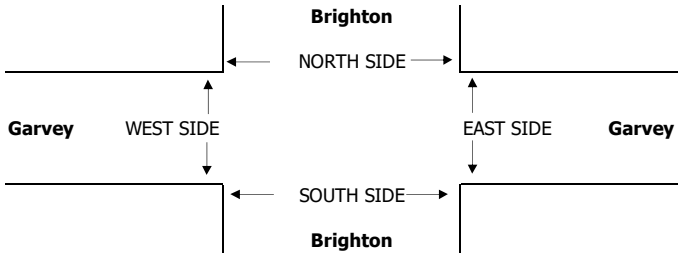
PROJECT #: SC3570
LOCATION #: 2
CONTROL: STOP N/S

NOTES:
Queue WB PM

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

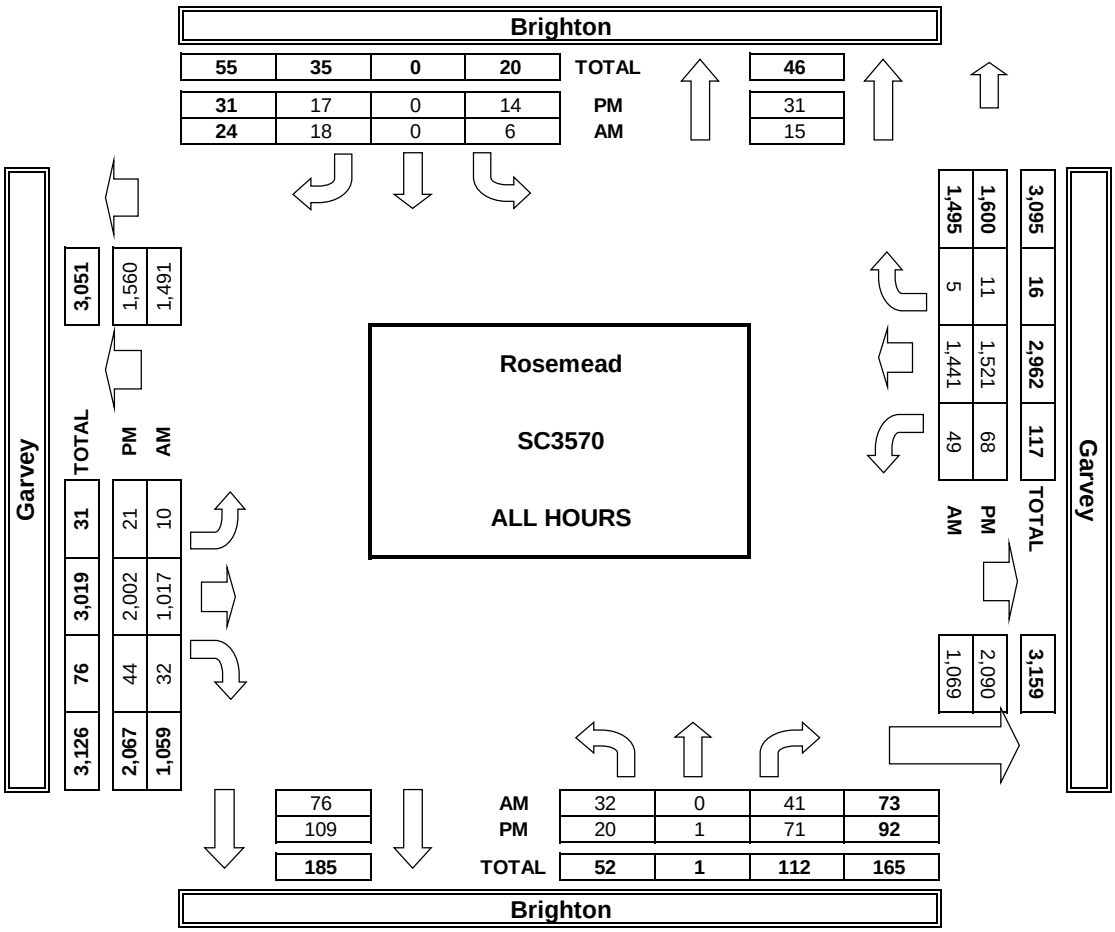
☑ Add U-Turns to Left Turns

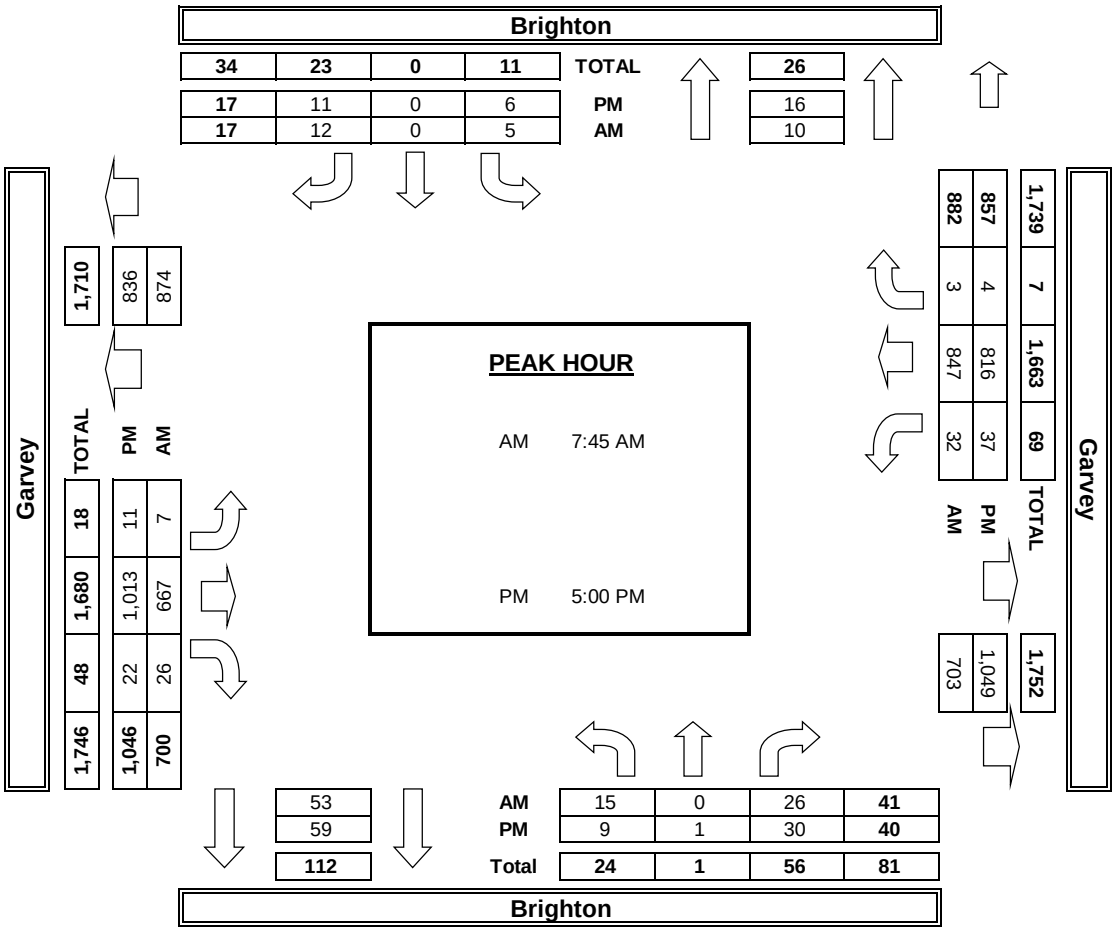
		NORTHBOUND Brighton			SOUTHBOUND Brighton			EASTBOUND Garvey			WESTBOUND Garvey				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	4	0	3	0	0	0	0	51	1	2	102	0	163	0	0	0	0	0
	7:15 AM	2	0	2	0	0	1	0	75	0	2	133	0	215	0	0	0	0	0
	7:30 AM	6	0	5	0	0	3	1	87	2	7	158	0	269	0	0	0	0	0
	7:45 AM	4	0	4	0	0	5	2	143	7	7	250	0	422	0	0	0	1	1
	8:00 AM	4	0	12	1	0	1	3	171	5	7	230	1	435	0	0	0	0	0
	8:15 AM	3	0	7	1	0	3	1	211	9	7	184	0	426	0	0	0	1	1
	8:30 AM	4	0	3	3	0	3	1	142	5	11	183	2	357	0	0	0	3	3
	8:45 AM	5	0	5	1	0	2	2	137	3	6	201	2	364	0	0	0	0	0
	VOLUMES	32	0	41	6	0	18	10	1,017	32	49	1,441	5	2,651	0	0	0	5	5
	APPROACH %	44%	0%	56%	25%	0%	75%	1%	96%	3%	3%	96%	0%						
	APP/DEPART	73	/	15	24	/	76	1,059	/	1,069	1,495	/	1,491	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	15	0	26	5	0	12	7	667	26	32	847	3	1,640					
	APPROACH %	37%	0%	63%	29%	0%	71%	1%	95%	4%	4%	96%	0%						
	PEAK HR FACTOR		0.641			0.708			0.792			0.858		0.943					
	APP/DEPART	41	/	10	17	/	53	700	/	703	882	/	874	0					
PM	4:00 PM	2	0	10	1	0	1	3	255	2	13	177	2	466	0	0	0	1	1
	4:15 PM	0	0	10	3	0	2	2	250	5	5	169	1	447	0	0	2	1	3
	4:30 PM	4	0	11	1	0	1	2	233	9	7	177	1	446	0	0	0	1	1
	4:45 PM	5	0	10	3	0	2	3	251	6	6	182	3	471	0	0	0	0	0
	5:00 PM	2	0	7	1	0	0	4	249	6	8	198	2	477	0	0	0	0	0
	5:15 PM	1	1	11	4	0	6	3	273	7	8	208	1	523	0	0	0	0	0
	5:30 PM	3	0	5	0	0	2	0	252	2	9	212	0	485	0	0	0	0	0
	5:45 PM	3	0	7	1	0	3	4	239	7	12	198	1	475	0	0	0	0	0
	VOLUMES	20	1	71	14	0	17	21	2,002	44	68	1,521	11	3,790	0	0	2	3	5
	APPROACH %	22%	1%	77%	45%	0%	55%	1%	97%	2%	4%	95%	1%						
	APP/DEPART	92	/	31	31	/	109	2,067	/	2,090	1,600	/	1,560	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	9	1	30	6	0	11	11	1,013	22	37	816	4	1,960					
	APPROACH %	23%	3%	75%	35%	0%	65%	1%	97%	2%	4%	95%	0%						
	PEAK HR FACTOR		0.769			0.425			0.924			0.969		0.937					
	APP/DEPART	40	/	16	17	/	59	1,046	/	1,049	857	/	836	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Wed, Aug 24, 22

LOCATION: Rosemead
NORTH & SOUTH: Strathmore
EAST & WEST: Virginia

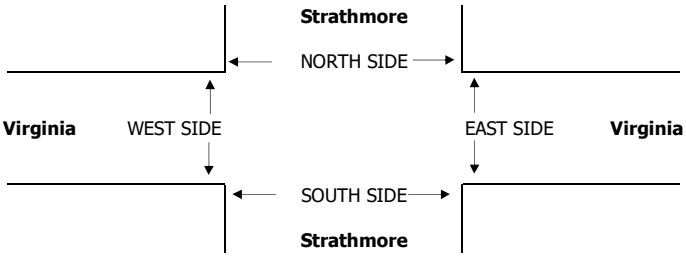
PROJECT #: SC3570
LOCATION #: 4
CONTROL: NO CONTROL

NOTES:

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

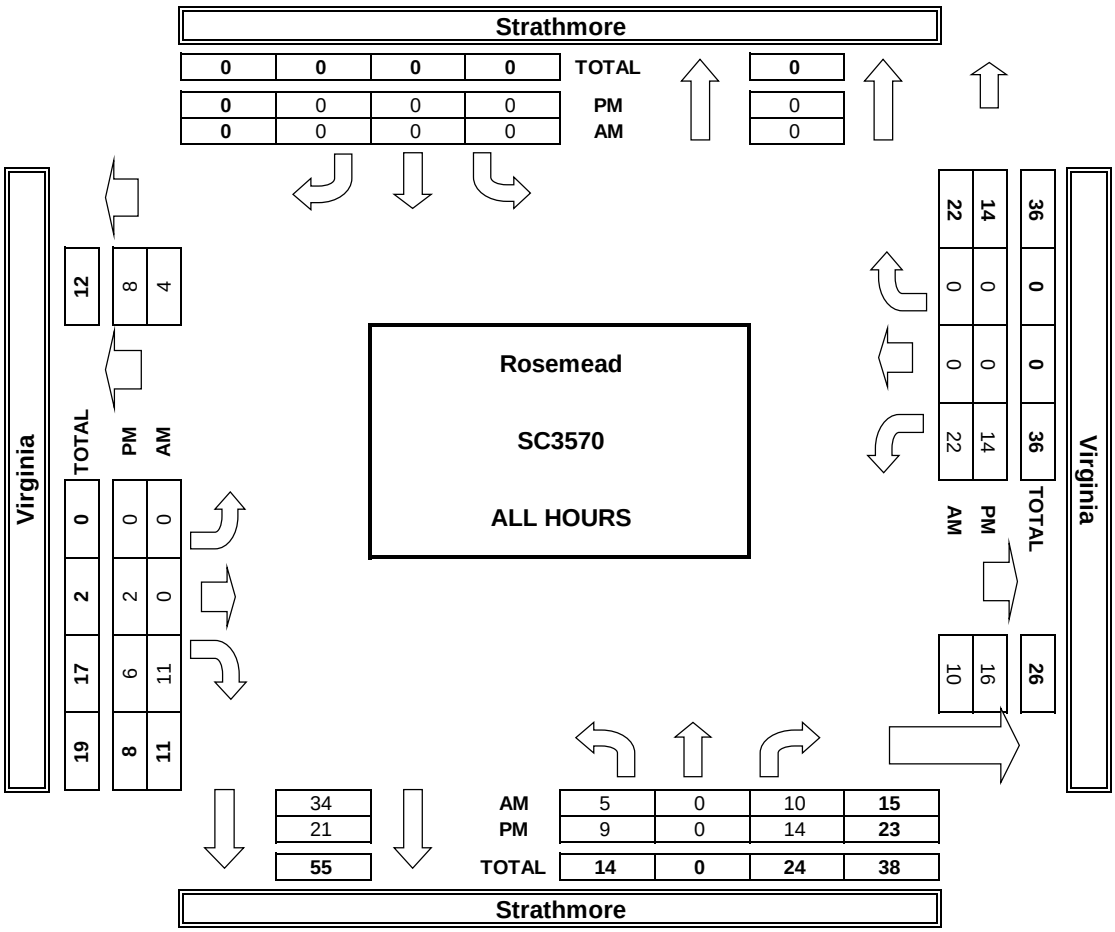
☑ Add U-Turns to Left Turns

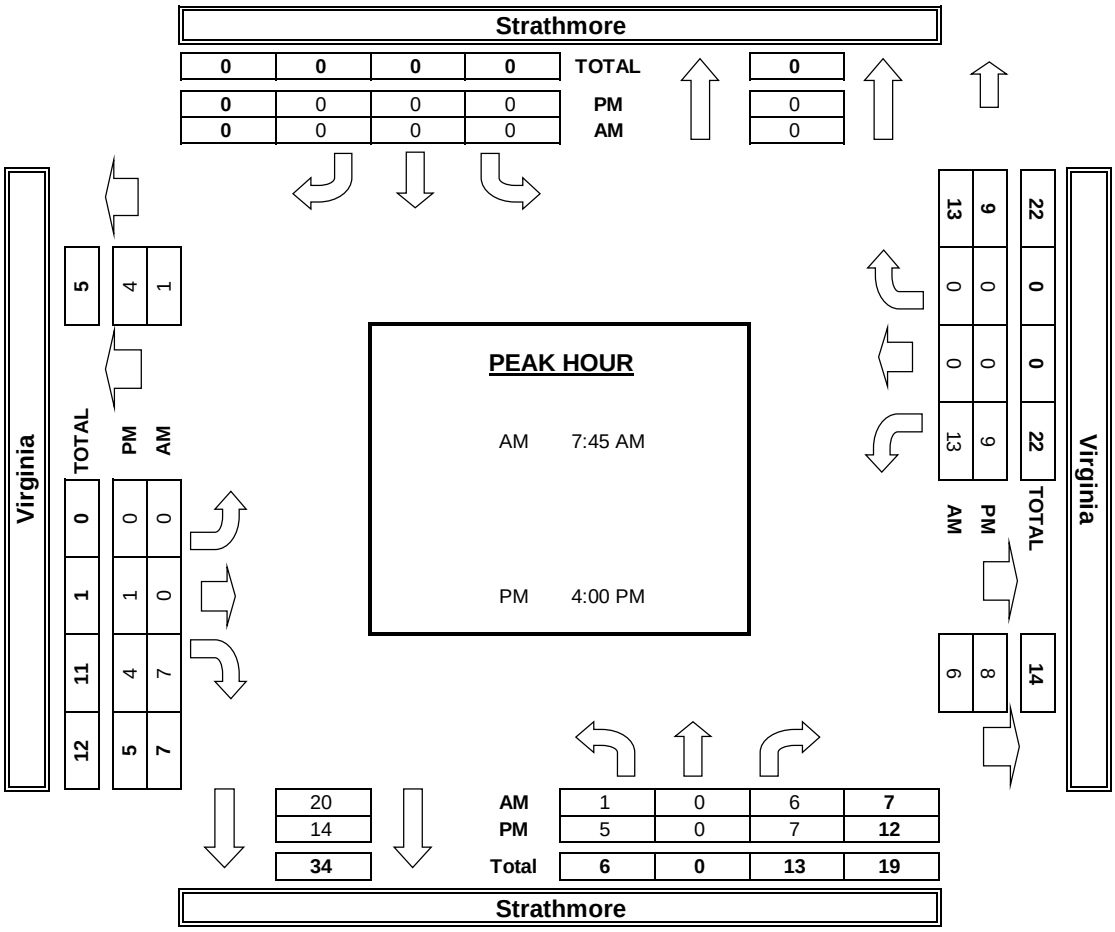
		NORTHBOUND Strathmore			SOUTHBOUND Strathmore			EASTBOUND Virginia			WESTBOUND Virginia				U-TURNS				
	LANES:	NL 0	NT X	NR 0	SL X	ST X	SR X	EL X	ET 1	ER 0	WL 0	WT 1	WR X	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0
	7:15 AM	0	0	2	0	0	0	0	0	0	3	0	0	5	0	0	0	0	0
	7:30 AM	0	0	1	0	0	0	0	0	0	4	0	0	5	0	0	0	0	0
	7:45 AM	0	0	4	0	0	0	0	0	2	5	0	0	11	0	0	0	0	0
	8:00 AM	1	0	1	0	0	0	0	0	0	3	0	0	5	0	0	0	0	0
	8:15 AM	0	0	1	0	0	0	0	0	4	1	0	0	6	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0
	8:45 AM	4	0	0	0	0	0	0	0	4	1	0	0	9	1	0	0	0	1
	VOLUMES	5	0	10	0	0	0	0	0	11	22	0	0	48	1	0	0	0	1
	APPROACH %	33%	0%	67%	0%	0%	0%	0%	0%	100%	100%	0%	0%						
	APP/DEPART	15	/	0	0	/	34	11	/	10	22	/	4	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	1	0	6	0	0	0	0	0	7	13	0	0	27					
	APPROACH %	14%	0%	86%	0%	0%	0%	0%	0%	100%	100%	0%	0%						
	PEAK HR FACTOR		0.438			0.000			0.438			0.650		0.614					
	APP/DEPART	7	/	0	0	/	20	7	/	6	13	/	1	0					
PM	4:00 PM	3	0	4	0	0	0	0	1	1	2	0	0	11	1	0	0	0	1
	4:15 PM	1	0	1	0	0	0	0	0	1	2	0	0	5	0	0	0	0	0
	4:30 PM	1	0	2	0	0	0	0	0	2	3	0	0	8	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
	5:00 PM	0	0	2	0	0	0	0	1	1	1	0	0	5	0	0	0	0	0
	5:15 PM	3	0	0	0	0	0	0	0	1	1	0	0	5	0	0	0	0	0
	5:30 PM	1	0	4	0	0	0	0	0	0	2	0	0	7	0	0	0	0	0
	5:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0
	VOLUMES	9	0	14	0	0	0	0	2	6	14	0	0	45	1	0	0	0	1
	APPROACH %	39%	0%	61%	0%	0%	0%	0%	25%	75%	100%	0%	0%						
	APP/DEPART	23	/	0	0	/	21	8	/	16	14	/	8	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	5	0	7	0	0	0	0	1	4	9	0	0	26					
	APPROACH %	42%	0%	58%	0%	0%	0%	0%	20%	80%	100%	0%	0%						
	PEAK HR FACTOR		0.429			0.000			0.625			0.750		0.591					
	APP/DEPART	12	/	0	0	/	14	5	/	8	9	/	4	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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

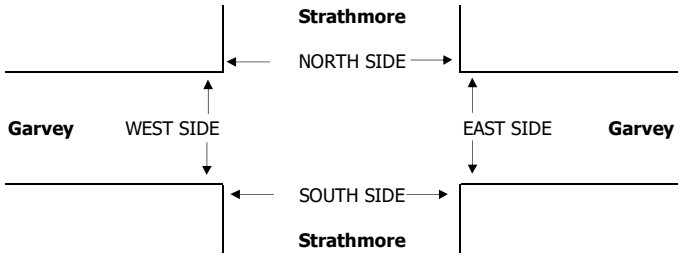
DATE:	LOCATION:	Rosemead	PROJECT #:	SC3570
Wed, Aug 24, 22	NORTH & SOUTH:	Strathmore	LOCATION #:	3
	EAST & WEST:	Garvey	CONTROL:	STOP N/S

NOTES:

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

☑ Add U-Turns to Left Turns

		NORTHBOUND (Strathmore)			SOUTHBOUND (Strathmore)			EASTBOUND (Garvey)			WESTBOUND (Garvey)				U-TURNS				
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	6	0	4	0	0	1	1	61	2	3	92	1	171	0	0	0	0	0
	7:15 AM	6	0	6	0	0	1	0	68	2	2	136	1	222	0	0	0	0	0
	7:30 AM	13	2	12	0	0	2	0	89	6	0	149	1	274	0	0	0	0	0
	7:45 AM	17	0	7	5	0	2	2	134	5	6	233	2	413	0	0	0	0	0
	8:00 AM	11	0	9	2	0	3	1	187	9	2	223	3	450	0	0	0	0	0
	8:15 AM	5	0	5	2	0	3	3	197	7	3	174	0	399	0	0	1	1	2
	8:30 AM	9	0	10	1	0	1	1	157	9	8	199	0	395	0	0	1	1	2
	8:45 AM	12	0	6	3	0	2	1	139	3	9	189	1	365	0	0	0	1	1
	VOLUMES	79	2	59	13	0	15	9	1,032	43	33	1,395	9	2,689	0	0	2	3	5
	APPROACH %	56%	1%	42%	46%	0%	54%	1%	95%	4%	2%	97%	1%						
	APP/DEPART	140	/	18	28	/	73	1,084	/	1,107	1,437	/	1,491	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	42	0	31	10	0	9	7	675	30	19	829	5	1,657					
	APPROACH %	58%	0%	42%	53%	0%	47%	1%	95%	4%	2%	97%	1%						
	PEAK HR FACTOR		0.760			0.679			0.860			0.885		0.921					
	APP/DEPART	73	/	10	19	/	47	712	/	718	853	/	882	0					
PM	4:00 PM	1	0	5	1	0	3	3	238	14	10	181	2	458	0	0	1	0	1
	4:15 PM	2	0	14	2	0	0	2	253	8	6	180	5	472	0	0	0	3	3
	4:30 PM	0	0	4	2	0	5	1	237	11	4	181	2	447	0	0	1	0	1
	4:45 PM	1	0	6	2	0	3	2	250	11	9	189	2	475	0	0	1	0	1
	5:00 PM	4	0	7	2	0	1	0	250	10	6	201	2	483	0	0	0	1	1
	5:15 PM	3	0	2	0	0	2	2	281	9	4	218	2	523	0	0	0	0	0
	5:30 PM	5	0	7	0	0	0	2	269	3	7	213	0	506	0	0	0	0	0
	5:45 PM	4	0	7	1	0	1	2	241	8	9	210	1	484	0	0	0	0	0
	VOLUMES	20	0	52	10	0	15	14	2,019	74	55	1,573	16	3,848	0	0	3	4	7
	APPROACH %	28%	0%	72%	40%	0%	60%	1%	96%	4%	3%	96%	1%						
	APP/DEPART	72	/	27	25	/	125	2,107	/	2,085	1,644	/	1,611	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	16	0	23	3	0	4	6	1,041	30	26	842	5	1,996					
	APPROACH %	41%	0%	59%	43%	0%	57%	1%	97%	3%	3%	96%	1%						
	PEAK HR FACTOR		0.813			0.583			0.922			0.974		0.954					
	APP/DEPART	39	/	11	7	/	55	1,077	/	1,068	873	/	862	0					



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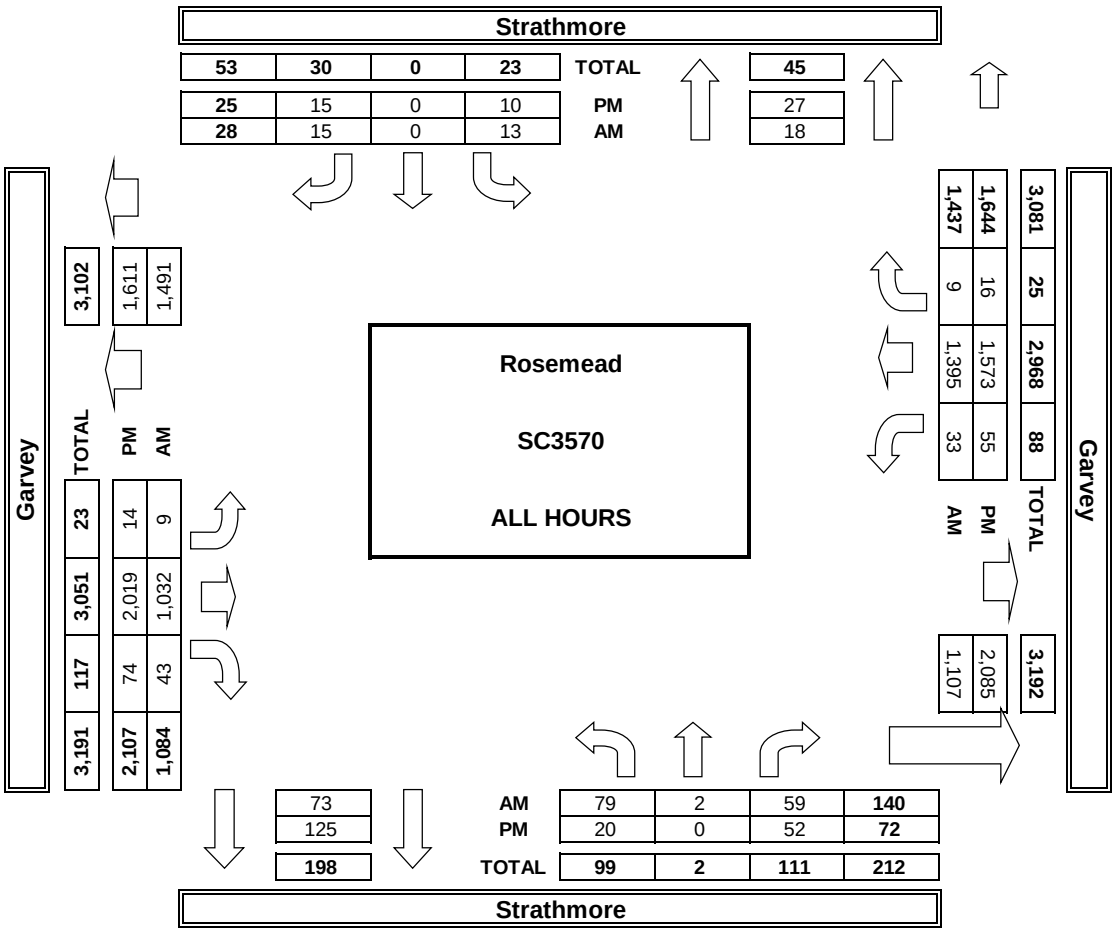
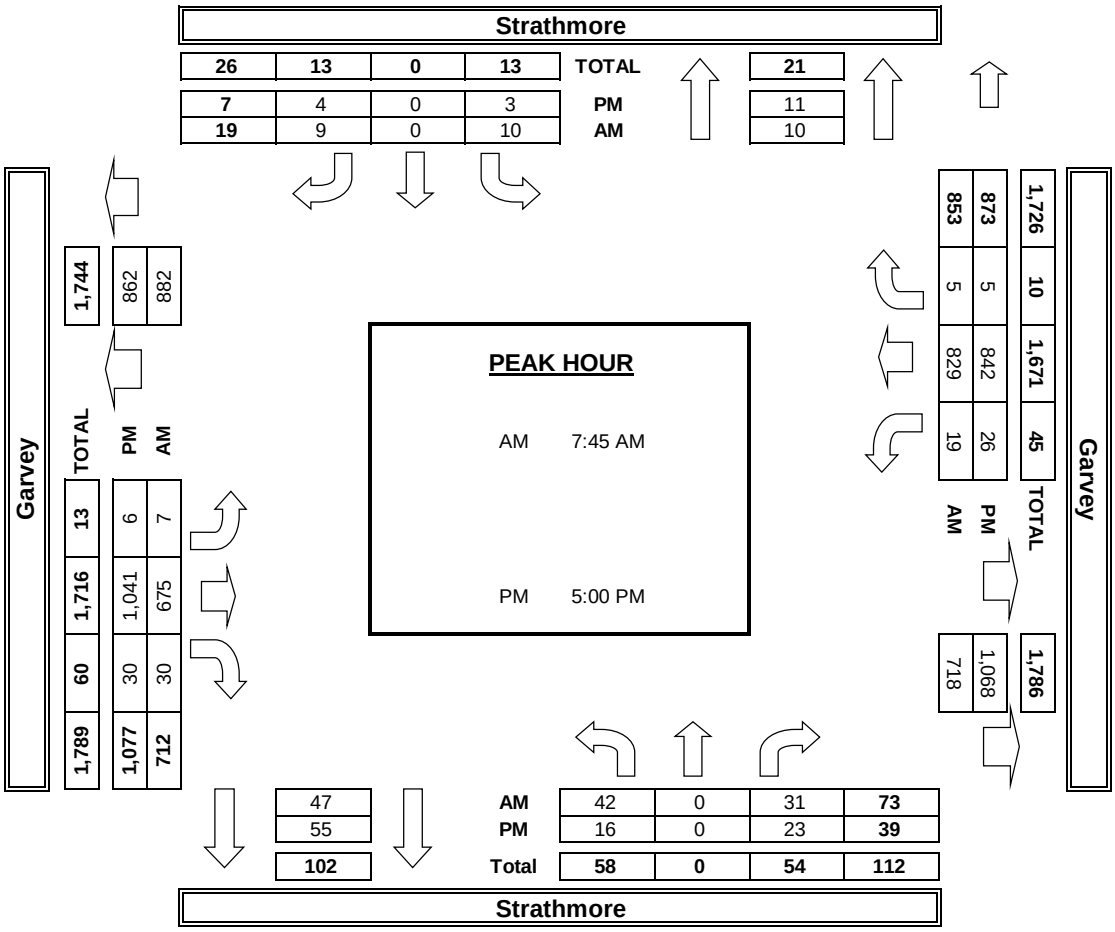
TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T218

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

DATE: Wed, Aug 24, 22

LOCATION: Rosemead
NORTH & SOUTH: San Gabriel
EAST & WEST: Garvey

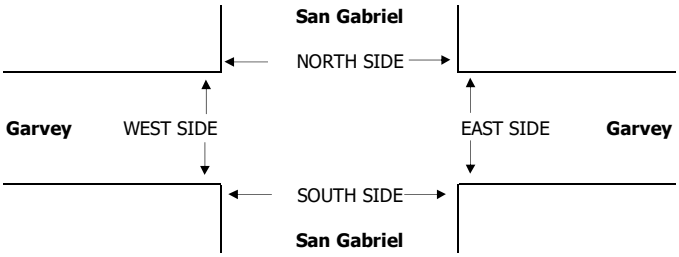
PROJECT #: SC3570
LOCATION #: 5
CONTROL: SIGNAL

NOTES:

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

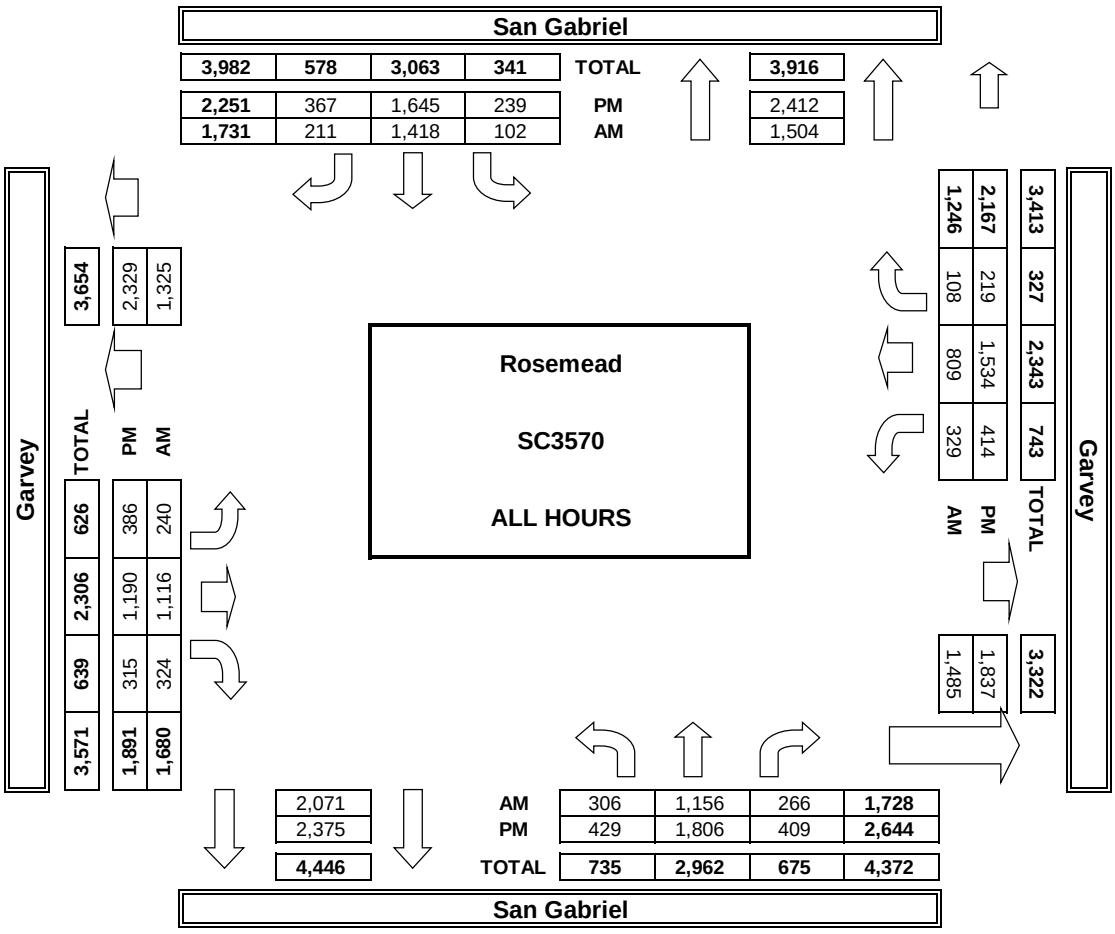
☑ Add U-Turns to Left Turns

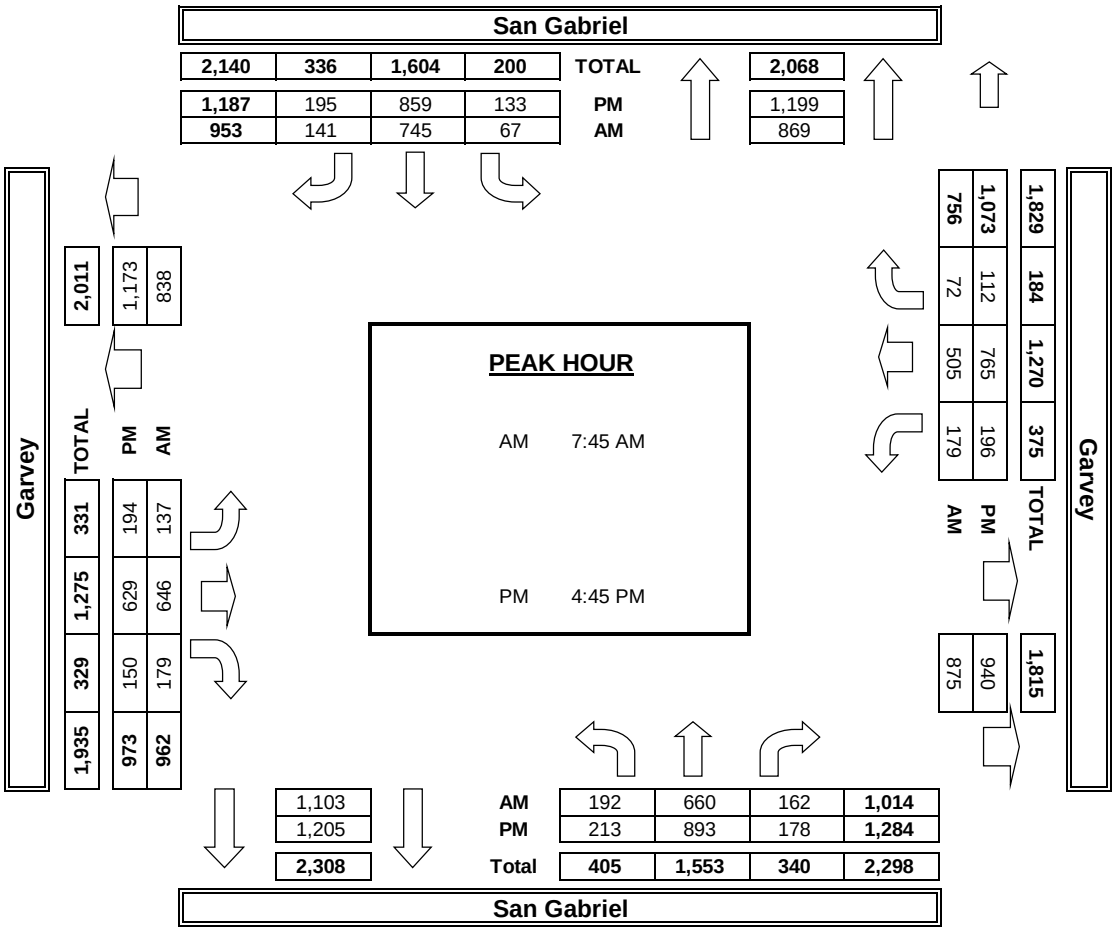
		NORTHBOUND San Gabriel			SOUTHBOUND San Gabriel			EASTBOUND Garvey			WESTBOUND Garvey				U-TURNS				
	LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	23	73	21	6	163	7	19	74	29	24	40	6	485	1	0	0	0	1
	7:15 AM	20	96	18	7	177	24	20	104	29	34	64	6	599	0	0	0	0	0
	7:30 AM	37	144	19	5	197	21	30	159	42	48	98	10	810	0	0	0	0	0
	7:45 AM	42	147	43	21	232	41	36	185	56	45	119	16	983	0	0	0	0	0
	8:00 AM	41	160	36	16	190	41	26	165	48	49	148	21	941	0	0	0	0	0
	8:15 AM	59	175	39	14	165	40	39	124	34	46	128	13	876	0	0	0	0	0
	8:30 AM	50	178	44	16	158	19	36	172	41	39	110	22	885	0	0	0	0	0
	8:45 AM	34	183	46	17	136	18	34	133	45	44	102	14	806	0	0	0	1	1
	VOLUMES	306	1,156	266	102	1,418	211	240	1,116	324	329	809	108	6,385	1	0	0	1	2
	APPROACH %	18%	67%	15%	6%	82%	12%	14%	66%	19%	26%	65%	9%						
	APP/DEPART	1,728	/	1,504	1,731	/	2,071	1,680	/	1,485	1,246	/	1,325	0					
	BEGIN PEAK HR		7:45 AM																
	VOLUMES	192	660	162	67	745	141	137	646	179	179	505	72	3,685					
	APPROACH %	19%	65%	16%	7%	78%	15%	14%	67%	19%	24%	67%	10%						
	PEAK HR FACTOR		0.929			0.810			0.868			0.867		0.937					
	APP/DEPART	1,014	/	869	953	/	1,103	962	/	875	756	/	838	0					
PM	4:00 PM	54	190	57	24	181	43	46	147	45	55	177	23	1,042	0	1	0	0	1
	4:15 PM	61	227	77	22	196	39	41	122	37	59	205	25	1,111	1	0	0	0	1
	4:30 PM	55	253	52	38	184	39	60	145	38	46	187	29	1,126	0	0	0	0	0
	4:45 PM	53	236	49	30	226	48	46	135	46	54	200	35	1,158	0	0	0	0	0
	5:00 PM	52	194	38	41	192	50	50	164	19	41	163	24	1,028	0	0	0	0	0
	5:15 PM	52	229	56	27	222	47	51	170	38	52	205	27	1,176	0	0	0	0	0
	5:30 PM	56	234	35	35	219	50	47	160	47	49	197	26	1,155	0	0	0	0	0
	5:45 PM	46	243	45	22	225	51	45	147	45	58	200	30	1,157	0	0	0	0	0
	VOLUMES	429	1,806	409	239	1,645	367	386	1,190	315	414	1,534	219	8,953	1	1	0	0	2
	APPROACH %	16%	68%	15%	11%	73%	16%	20%	63%	17%	19%	71%	10%						
	APP/DEPART	2,644	/	2,412	2,251	/	2,375	1,891	/	1,837	2,167	/	2,329	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	213	893	178	133	859	195	194	629	150	196	765	112	4,517					
	APPROACH %	17%	70%	14%	11%	72%	16%	20%	65%	15%	18%	71%	10%						
	PEAK HR FACTOR		0.950			0.976			0.939			0.928		0.960					
	APP/DEPART	1,284	/	1,199	1,187	/	1,205	973	/	940	1,073	/	1,173	0					



AimTD LLC

TURNING MOVEMENT COUNTS





APPENDIX D

LEVEL OF SERVICE WORKSHEETS

EXISTING

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\AME.vistro
Report File: G:\...\AME.pdf

Scenario 1 Existing AM Peak Hour
9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Thru	0.614	-	B
2	Brighton St (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	SB Left	0.023	21.9	C
4	Strathmore Ave (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.001	8.7	A
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Left	0.291	38.5	E
7	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	SB Thru	0.693	-	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.614

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	115	584	44	168	405	138	162	574	151	46	563	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	115	584	44	168	405	138	162	574	151	46	563	215
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	146	11	42	101	35	41	144	38	12	141	54
Total Analysis Volume [veh/h]	115	584	44	168	405	138	162	574	151	46	563	215
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.17	0.17	0.09	0.15	0.15	0.09	0.20	0.20	0.03	0.16	0.12
Intersection LOS	B											
Intersection V/C	0.614											

Intersection Level Of Service Report
Intersection 2: Brighton St (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	21.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.023

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	15	0	26	5	0	12	7	667	26	32	847	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	26	5	0	12	7	667	26	32	847	3
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	7	1	0	3	2	177	7	8	225	1
Total Analysis Volume [veh/h]	16	0	28	5	0	13	7	707	28	34	898	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.00	0.04	0.02	0.00	0.02	0.01	0.01	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	19.69	22.58	11.46	21.89	22.44	11.65	9.63	0.00	0.00	9.16	0.00	0.00
Movement LOS	C	C	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.32	0.32	0.32	0.14	0.14	0.14	0.03	0.00	0.00	0.11	0.00	0.00
95th-Percentile Queue Length [ft/ln]	8.08	8.08	8.08	3.42	3.42	3.42	0.68	0.00	0.00	2.77	0.00	0.00
d_A, Approach Delay [s/veh]	14.47			14.66			0.10			0.33		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.73											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Strathmore Ave (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	1	6	1	7	13	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	6	1	7	13	1
Peak Hour Factor	0.6140	0.6140	0.6140	0.6140	0.6140	0.6140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	0	3	5	0
Total Analysis Volume [veh/h]	2	10	2	11	21	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8.72	8.36	0.00	0.00	7.25	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.50	0.50	0.00	0.00	0.57	0.57
d_A, Approach Delay [s/veh]	8.41		0.00		6.73	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.28					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	38.5
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.291

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	42	0	31	10	0	9	7	675	30	19	829	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	31	10	0	9	7	675	30	19	829	5
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	8	3	0	2	2	183	8	5	225	1
Total Analysis Volume [veh/h]	46	0	34	11	0	10	8	733	33	21	900	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.29	0.00	0.05	0.04	0.00	0.02	0.01	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	38.45	47.75	19.11	21.17	21.97	11.84	9.54	0.00	0.00	9.14	0.00	0.00
Movement LOS	E	E	C	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.51	1.51	1.51	0.19	0.19	0.19	0.01	0.01	0.00	0.07	0.00	0.00
95th-Percentile Queue Length [ft/ln]	37.68	37.68	37.68	4.65	4.65	4.65	0.29	0.15	0.00	1.64	0.00	0.00
d_A, Approach Delay [s/veh]	30.24			16.75			0.09			0.20		
Approach LOS	D			C			A			A		
d_I, Intersection Delay [s/veh]	1.67											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 7: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.693

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	192	660	162	67	745	141	137	646	179	179	505	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	192	660	162	67	745	141	137	646	179	179	505	72
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	165	41	17	186	35	34	162	45	45	126	18
Total Analysis Volume [veh/h]	192	660	162	67	745	141	137	646	179	179	505	72
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.18	0.09	0.04	0.21	0.08	0.08	0.18	0.10	0.10	0.14	0.04
Intersection LOS	B											
Intersection V/C	0.693											

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\PME.vistro
Report File: G:\...\PME.pdf

Scenario 1 Existing PM Peak Hour
9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Thru	0.685	-	B
2	Brighton St (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Thru	0.006	27.6	D
4	Strathmore Ave (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.005	8.7	A
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Left	0.216	62.3	F
7	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	NB Thru	0.777	-	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.685

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	150	536	61	231	567	153	155	810	122	57	624	198
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	150	536	61	231	567	153	155	810	122	57	624	198
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	38	134	15	58	142	38	39	203	31	14	156	50
Total Analysis Volume [veh/h]	150	536	61	231	567	153	155	810	122	57	624	198
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.17	0.17	0.13	0.20	0.20	0.09	0.26	0.26	0.03	0.17	0.11
Intersection LOS	B											
Intersection V/C	0.685											

Intersection Level Of Service Report
Intersection 2: Brighton St (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	27.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.006

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	9	1	30	6	0	11	11	1013	22	37	816	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	1	30	6	0	11	11	1013	22	37	816	4
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	8	2	0	3	3	270	6	10	218	1
Total Analysis Volume [veh/h]	10	1	32	6	0	12	12	1081	23	39	871	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.01	0.06	0.03	0.00	0.02	0.01	0.01	0.00	0.06	0.01	0.00
d_M, Delay for Movement [s/veh]	26.89	27.56	13.55	24.24	28.00	11.65	9.54	0.00	0.00	10.71	0.00	0.00
Movement LOS	D	D	B	C	D	B	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	0.40	0.40	0.40	0.16	0.16	0.16	0.04	0.00	0.00	0.18	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.89	9.89	9.89	3.92	3.92	3.92	1.04	0.00	0.00	4.40	0.00	0.00
d_A, Approach Delay [s/veh]	16.90			16.09			0.10			0.46		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.74											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 4: Strathmore Ave (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.005

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	5	7	1	4	9	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	7	1	4	9	1
Peak Hour Factor	0.5910	0.5910	0.5910	0.5910	0.5910	0.5910
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	0	2	4	0
Total Analysis Volume [veh/h]	8	12	2	7	15	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8.68	8.37	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.87	0.87	0.00	0.00	0.38	0.38
d_A, Approach Delay [s/veh]	8.50		0.00		6.51	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.19					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	62.3
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.216

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	16	0	23	3	0	4	6	1041	30	26	842	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	0	23	3	0	4	6	1041	30	26	842	5
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	6	1	0	1	2	273	8	7	221	1
Total Analysis Volume [veh/h]	17	0	24	3	0	4	6	1091	31	27	883	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.00	0.05	0.02	0.00	0.01	0.01	0.01	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	62.27	74.70	20.98	23.55	27.56	11.48	9.59	0.00	0.00	10.80	0.00	0.00
Movement LOS	F	F	C	C	D	B	A	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	1.05	1.05	1.05	0.07	0.07	0.07	0.01	0.01	0.00	0.13	0.00	0.00
95th-Percentile Queue Length [ft/ln]	26.29	26.29	26.29	1.70	1.70	1.70	0.25	0.13	0.00	3.14	0.00	0.00
d_A, Approach Delay [s/veh]	37.92			16.65			0.05			0.32		
Approach LOS	E			C			A			A		
d_I, Intersection Delay [s/veh]	0.97											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.777

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	213	893	178	133	859	195	194	629	150	196	765	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	213	893	178	133	859	195	194	629	150	196	765	112
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	53	223	45	33	215	49	49	157	38	49	191	28
Total Analysis Volume [veh/h]	213	893	178	133	859	195	194	629	150	196	765	112
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.25	0.10	0.07	0.24	0.11	0.11	0.17	0.08	0.11	0.21	0.06
Intersection LOS	C											
Intersection V/C	0.777											

OPENING YEAR (2024) WITHOUT PROJECT

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\AME.vistro

Scenario 2 Opening Year (2024) Without Project AM Peak Hour

Report File: G:\...\AMOYWO.pdf

9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Thru	0.655	-	B
2	Brighton St (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	SB Left	0.026	24.6	C
4	Strathmore Ave (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.001	8.7	A
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Left	0.370	50.8	F
7	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	SB Thru	0.728	-	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.655

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	115	584	44	168	405	138	162	574	151	46	563	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	9	8	17	10	6	9	42	4	11	48	24
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	118	602	53	188	422	146	174	625	157	58	620	242
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	151	13	47	106	37	44	156	39	15	155	61
Total Analysis Volume [veh/h]	118	602	53	188	422	146	174	625	157	58	620	242
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.18	0.18	0.10	0.16	0.16	0.10	0.22	0.22	0.03	0.17	0.13
Intersection LOS	B											
Intersection V/C	0.655											

Intersection Level Of Service Report
Intersection 2: Brighton St (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	24.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.026

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	15	0	26	5	0	12	7	667	26	32	847	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	67	0	0	83	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	26	5	0	12	7	745	26	33	944	3
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	7	1	0	3	2	198	7	9	250	1
Total Analysis Volume [veh/h]	16	0	28	5	0	13	7	790	28	35	1001	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.00	0.04	0.03	0.00	0.02	0.01	0.01	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	21.72	25.12	12.01	24.60	24.98	12.23	10.05	0.00	0.00	9.46	0.00	0.00
Movement LOS	C	D	B	C	C	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.36	0.36	0.36	0.15	0.15	0.15	0.03	0.00	0.00	0.12	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.00	9.00	9.00	3.85	3.85	3.85	0.74	0.00	0.00	3.07	0.00	0.00
d_A, Approach Delay [s/veh]	15.56			15.87			0.09			0.32		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.71											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: Strathmore Ave (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	1	6	1	7	13	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	6	1	7	13	1
Peak Hour Factor	0.6140	0.6140	0.6140	0.6140	0.6140	0.6140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	2	0	3	5	0
Total Analysis Volume [veh/h]	2	10	2	11	21	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8.72	8.36	0.00	0.00	7.25	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.02	0.02	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.50	0.50	0.00	0.00	0.57	0.57
d_A, Approach Delay [s/veh]	8.41		0.00		6.73	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.28					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	50.8
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.370

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	42	0	31	10	0	9	7	675	30	19	829	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	67	0	0	83	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	43	0	31	10	0	9	7	753	30	19	925	5
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	8	3	0	2	2	204	8	5	251	1
Total Analysis Volume [veh/h]	47	0	34	11	0	10	8	818	33	21	1004	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.37	0.00	0.05	0.05	0.00	0.02	0.01	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	50.75	63.70	25.66	23.70	24.38	12.50	9.93	0.00	0.00	9.43	0.00	0.00
Movement LOS	F	F	D	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.10	2.10	2.10	0.21	0.21	0.21	0.01	0.01	0.00	0.07	0.00	0.00
95th-Percentile Queue Length [ft/ln]	52.48	52.48	52.48	5.29	5.29	5.29	0.29	0.15	0.00	1.75	0.00	0.00
d_A, Approach Delay [s/veh]	40.24			18.40			0.09			0.19		
Approach LOS	E			C			A			A		
d_I, Intersection Delay [s/veh]	1.95											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.728

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	192	660	162	67	745	141	137	646	179	179	505	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	23	8	24	24	27	30	40	5	13	44	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	197	694	173	92	781	170	169	696	187	195	557	103
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	174	43	23	195	43	42	174	47	49	139	26
Total Analysis Volume [veh/h]	197	694	173	92	781	170	169	696	187	195	557	103
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.19	0.10	0.05	0.22	0.09	0.09	0.19	0.10	0.11	0.15	0.06
Intersection LOS	C											
Intersection V/C	0.728											

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\PME.vistro

Scenario 2 Opening Year (2024) Without Project PM Peak Hour

Report File: G:\...\PMOYWO.pdf

9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Thru	0.744	-	C
2	Brighton St (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Thru	0.007	31.8	D
4	Strathmore Ave (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.005	8.7	A
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Left	0.294	87.9	F
7	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	NB Thru	0.843	-	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.744

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	150	536	61	231	567	153	155	810	122	57	624	198
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	22	12	31	19	14	14	57	3	11	58	32
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	156	567	74	266	595	169	171	880	127	69	692	233
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	142	19	67	149	42	43	220	32	17	173	58
Total Analysis Volume [veh/h]	156	567	74	266	595	169	171	880	127	69	692	233
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.18	0.18	0.15	0.21	0.21	0.10	0.28	0.28	0.04	0.19	0.13
Intersection LOS	C											
Intersection V/C	0.744											

Intersection Level Of Service Report
Intersection 2: Brighton St (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	31.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.007

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	9	1	30	6	0	11	11	1013	22	37	816	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	100	0	0	101	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	1	30	6	0	11	11	1129	22	38	930	4
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	8	2	0	3	3	301	6	10	248	1
Total Analysis Volume [veh/h]	10	1	32	6	0	12	12	1205	23	41	993	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.01	0.07	0.04	0.00	0.02	0.02	0.01	0.00	0.06	0.01	0.00
d_M, Delay for Movement [s/veh]	31.16	31.79	14.64	28.02	32.48	12.38	10.02	0.00	0.00	11.37	0.00	0.00
Movement LOS	D	D	B	D	D	B	B	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	0.46	0.46	0.46	0.18	0.18	0.18	0.05	0.00	0.00	0.20	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.45	11.45	11.45	4.56	4.56	4.56	1.15	0.00	0.00	5.04	0.00	0.00
d_A, Approach Delay [s/veh]	18.79			17.90			0.09			0.44		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.73											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 4: Strathmore Ave (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.005

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	5	7	1	4	9	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	7	1	4	9	1
Peak Hour Factor	0.5910	0.5910	0.5910	0.5910	0.5910	0.5910
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	0	2	4	0
Total Analysis Volume [veh/h]	8	12	2	7	15	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8.68	8.37	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.87	0.87	0.00	0.00	0.38	0.38
d_A, Approach Delay [s/veh]	8.50		0.00		6.51	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.19					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	87.9
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.294

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	16	0	23	3	0	4	6	1041	30	26	842	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	100	0	0	101	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	0	23	3	0	4	6	1158	30	26	957	5
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	6	1	0	1	2	303	8	7	251	1
Total Analysis Volume [veh/h]	17	0	24	3	0	4	6	1214	31	27	1003	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.29	0.00	0.05	0.02	0.00	0.01	0.01	0.01	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	87.88	107.82	29.67	27.03	31.72	12.12	10.07	0.00	0.00	11.46	0.00	0.00
Movement LOS	F	F	D	D	D	B	B	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	1.52	1.52	1.52	0.08	0.08	0.08	0.01	0.01	0.00	0.14	0.00	0.00
95th-Percentile Queue Length [ft/ln]	38.07	38.07	38.07	1.97	1.97	1.97	0.25	0.13	0.00	3.50	0.00	0.00
d_A, Approach Delay [s/veh]	53.55			18.51			0.05			0.30		
Approach LOS	F			C			A			A		
d_I, Intersection Delay [s/veh]	1.16											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.843

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	213	893	178	133	859	195	194	629	150	196	765	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	45	9	32	40	46	47	46	3	10	55	36
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	220	952	190	167	913	244	244	685	155	209	832	150
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	55	238	48	42	228	61	61	171	39	52	208	38
Total Analysis Volume [veh/h]	220	952	190	167	913	244	244	685	155	209	832	150
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.26	0.11	0.09	0.25	0.14	0.14	0.19	0.09	0.12	0.23	0.08
Intersection LOS	D											
Intersection V/C	0.843											

OPENING YEAR (2024) WITH PROJECT

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\AME.vistro
Report File: G:\...\AMOYW.pdf

Scenario 3 Opening Year (2024) With Project AM Peak Hour
9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Right	0.661	-	B
2	Brighton St (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	SB Left	0.027	25.1	D
3	Project Dwy (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition			0.0	
4	Strathmore Ave (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.012	8.8	A
5	Strathmore Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 7th Edition	EB Right	0.017	8.5	A
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Left	0.404	57.0	F
7	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	SB Thru	0.733	-	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.661

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	115	584	44	168	405	138	162	574	151	46	563	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	9	11	23	10	6	9	47	4	14	53	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	118	602	56	194	422	146	174	630	157	61	625	248
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	151	14	49	106	37	44	158	39	15	156	62
Total Analysis Volume [veh/h]	118	602	56	194	422	146	174	630	157	61	625	248
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.18	0.18	0.11	0.16	0.16	0.10	0.22	0.22	0.03	0.17	0.14
Intersection LOS	B											
Intersection V/C	0.661											

Intersection Level Of Service Report
Intersection 2: Brighton St (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	25.1
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.027

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	15	0	26	5	0	12	7	667	26	32	847	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	2	2	79	0	0	95	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	26	5	0	14	9	757	26	33	956	3
Peak Hour Factor	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	7	1	0	4	2	201	7	9	253	1
Total Analysis Volume [veh/h]	16	0	28	5	0	15	10	803	28	35	1014	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.04	0.03	0.00	0.03	0.01	0.01	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	22.19	25.64	12.11	25.05	25.45	12.33	10.11	0.00	0.00	9.51	0.00	0.00
Movement LOS	C	D	B	D	D	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.37	0.37	0.37	0.17	0.17	0.17	0.04	0.00	0.00	0.12	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.20	9.20	9.20	4.22	4.22	4.22	0.96	0.00	0.00	3.10	0.00	0.00
d_A, Approach Delay [s/veh]	15.80			15.68			0.11			0.32		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.73											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 3: Project Dwy (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	1 hour		

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0161	1.0000	1.0000	1.0161	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	11	0	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	11	0	0	11	0
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	0	0	3	0
Total Analysis Volume [veh/h]	0	12	0	0	12	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS						
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	-		-		-	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS						

Intersection Level Of Service Report
Intersection 4: Strathmore Ave (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.012

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	1	6	1	7	13	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	0	0	11	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	6	1	18	13	1
Peak Hour Factor	0.6140	0.6140	0.6140	0.6140	0.6140	0.6140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	0	7	5	0
Total Analysis Volume [veh/h]	20	10	2	29	21	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8.79	8.43	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	1.37	1.37	0.00	0.00	0.57	0.57
d_A, Approach Delay [s/veh]	8.67		0.00		6.75	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.91					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Strathmore Ave (NS) at Project Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.017

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	12	19	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	11	11	0	0	18
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	23	30	0	0	18
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	6	8	0	0	5
Total Analysis Volume [veh/h]	19	24	32	0	0	19
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	7.29	0.00	0.00	0.00	9.06	8.51
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.76	0.76	0.00	0.00	1.32	1.32
d_A, Approach Delay [s/veh]	3.20		0.00		8.51	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.20					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	57.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.404

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	42	0	31	10	0	9	7	675	30	19	829	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	17	0	12	12	67	0	0	83	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	43	0	31	27	0	21	19	753	30	19	925	22
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	8	7	0	6	5	204	8	5	251	6
Total Analysis Volume [veh/h]	47	0	34	29	0	23	21	818	33	21	1004	24
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.40	0.00	0.05	0.14	0.00	0.04	0.03	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	56.96	70.82	29.07	26.26	27.02	14.56	10.02	0.00	0.00	9.43	0.00	0.00
Movement LOS	F	F	D	D	D	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.38	2.38	2.38	0.64	0.64	0.64	0.03	0.02	0.00	0.07	0.00	0.00
95th-Percentile Queue Length [ft/ln]	59.43	59.43	59.43	16.05	16.05	16.05	0.80	0.40	0.00	1.75	0.00	0.00
d_A, Approach Delay [s/veh]	45.28			21.14			0.24			0.19		
Approach LOS	E			C			A			A		
d_I, Intersection Delay [s/veh]	2.51											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.733

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	192	660	162	67	745	141	137	646	179	179	505	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	23	8	24	24	33	36	46	10	13	50	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	202	694	173	92	781	176	175	702	192	195	563	103
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	174	43	23	195	44	44	176	48	49	141	26
Total Analysis Volume [veh/h]	202	694	173	92	781	176	175	702	192	195	563	103
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.19	0.10	0.05	0.22	0.10	0.10	0.20	0.11	0.11	0.16	0.06
Intersection LOS	C											
Intersection V/C	0.733											

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\PME.vistro
Report File: G:\...\PMOYW.pdf

Scenario 3 Opening Year (2024) With Project PM Peak Hour
9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Thru	0.753	-	C
2	Brighton St (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Thru	0.007	32.6	D
3	Project Dwy (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition			0.0	
4	Strathmore Ave (NS) at Virginia St (EW)	Two-way stop	HCM 7th Edition	NB Left	0.017	8.8	A
5	Strathmore Ave (NS) at Project Dwy (EW)	Two-way stop	HCM 7th Edition	EB Right	0.022	8.5	A
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Left	0.329	100.2	F
7	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	NB Thru	0.852	-	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.753

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	150	536	61	231	567	153	155	810	122	57	624	198
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	22	16	38	19	14	14	62	3	15	64	40
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	156	567	78	273	595	169	171	885	127	73	698	241
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	142	20	68	149	42	43	221	32	18	175	60
Total Analysis Volume [veh/h]	156	567	78	273	595	169	171	885	127	73	698	241
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.18	0.18	0.15	0.21	0.21	0.10	0.28	0.28	0.04	0.19	0.13
Intersection LOS	C											
Intersection V/C	0.753											

Intersection Level Of Service Report
Intersection 2: Brighton St (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	32.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.007

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	9	1	30	6	0	11	11	1013	22	37	816	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	2	2	114	0	0	117	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	1	30	6	0	13	13	1143	22	38	946	4
Peak Hour Factor	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	8	2	0	3	3	305	6	10	252	1
Total Analysis Volume [veh/h]	10	1	32	6	0	14	14	1220	23	41	1010	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.01	0.07	0.04	0.00	0.02	0.02	0.01	0.00	0.06	0.01	0.00
d_M, Delay for Movement [s/veh]	31.99	32.58	14.81	28.67	33.28	12.50	10.10	0.00	0.00	11.46	0.00	0.00
Movement LOS	D	D	B	D	D	B	B	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	0.47	0.47	0.47	0.20	0.20	0.20	0.06	0.00	0.00	0.20	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.72	11.72	11.72	4.98	4.98	4.98	1.38	0.00	0.00	5.11	0.00	0.00
d_A, Approach Delay [s/veh]	19.12			17.61			0.11			0.44		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	0.75											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 3: Project Dwy (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	
Analysis Period:	1 hour		

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0161	1.0000	1.0000	1.0161	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	0	12	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	14	0	0	12	0
Peak Hour Factor	1.0000	0.9500	1.0000	1.0000	0.9500	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	4	0	0	3	0
Total Analysis Volume [veh/h]	0	15	0	0	13	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS						
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	-		-		-	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS						

Intersection Level Of Service Report
Intersection 4: Strathmore Ave (NS) at Virginia St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.017

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	5	7	1	4	9	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	0	14	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	7	1	18	9	1
Peak Hour Factor	0.5910	0.5910	0.5910	0.5910	0.5910	0.5910
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	3	0	8	4	0
Total Analysis Volume [veh/h]	29	12	2	30	15	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	8.76	8.45	0.00	0.00	7.26	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	1.83	1.83	0.00	0.00	0.38	0.38
d_A, Approach Delay [s/veh]	8.67		0.00		6.54	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.16					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: Strathmore Ave (NS) at Project Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.022

Intersection Setup

Name						
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name						
Base Volume Input [veh/h]	0	11	7	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	12	14	0	0	23
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	23	21	0	0	23
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	6	6	0	0	6
Total Analysis Volume [veh/h]	22	24	22	0	0	24
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	7.28	0.00	0.00	0.00	9.06	8.48
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.07	0.07
95th-Percentile Queue Length [ft/ln]	0.89	0.89	0.00	0.00	1.67	1.67
d_A, Approach Delay [s/veh]	3.47		0.00		8.48	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.95					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	100.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.329

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	16	0	23	3	0	4	6	1041	30	26	842	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	16	14	100	0	0	101	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	0	23	24	0	20	20	1158	30	26	957	24
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	6	6	0	5	5	303	8	7	251	6
Total Analysis Volume [veh/h]	17	0	24	25	0	21	21	1214	31	27	1003	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.33	0.00	0.05	0.15	0.00	0.04	0.03	0.01	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	100.24	121.48	34.21	31.25	36.38	15.48	10.17	0.00	0.00	11.46	0.00	0.00
Movement LOS	F	F	D	D	E	C	B	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	1.75	1.75	1.75	0.69	0.69	0.69	0.03	0.02	0.00	0.14	0.00	0.00
95th-Percentile Queue Length [ft/ln]	43.67	43.67	43.67	17.37	17.37	17.37	0.84	0.42	0.00	3.50	0.00	0.00
d_A, Approach Delay [s/veh]	61.30			24.08			0.17			0.30		
Approach LOS	F			C			A			A		
d_I, Intersection Delay [s/veh]	1.72											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.852

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	213	893	178	133	859	195	194	629	150	196	765	112
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	45	9	32	40	53	55	53	9	10	62	36
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	225	952	190	167	913	251	252	692	161	209	839	150
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	238	48	42	228	63	63	173	40	52	210	38
Total Analysis Volume [veh/h]	225	952	190	167	913	251	252	692	161	209	839	150
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.26	0.11	0.09	0.25	0.14	0.14	0.19	0.09	0.12	0.23	0.08
Intersection LOS	D											
Intersection V/C	0.852											

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\AME.vistro

Scenario 4 Opening Year (2024) With Project AM Peak Hour - With Improvements

Report File: G:\...\AMOYWI.pdf

9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	SB Left	0.138	26.2	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	26.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.138

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	42	0	31	10	0	9	7	675	30	19	829	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	17	0	12	12	67	0	0	83	17
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	43	0	31	27	0	21	19	753	30	19	925	22
Peak Hour Factor	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210	0.9210
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	0	8	7	0	6	5	204	8	5	251	6
Total Analysis Volume [veh/h]	47	0	34	29	0	23	21	818	33	21	1004	24
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.00	0.05	0.14	0.00	0.04	0.03	0.01	0.00	0.02	0.01	0.00
d_M, Delay for Movement [s/veh]	24.76	28.02	14.68	26.18	26.92	14.54	10.13	0.00	0.00	9.43	0.00	0.00
Movement LOS	C	D	B	D	D	B	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.95	0.95	0.95	0.64	0.64	0.64	0.08	0.00	0.00	0.07	0.00	0.00
95th-Percentile Queue Length [ft/ln]	23.78	23.78	23.78	16.00	16.00	16.00	2.03	0.00	0.00	1.75	0.00	0.00
d_A, Approach Delay [s/veh]	20.54			21.09			0.24			0.19		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	1.54											
Intersection LOS	D											

Strathmore and Garvey Mixed Use Project

Vistro File: G:\...\PME.vistro

Scenario 4 Opening Year (2024) With Project PM Peak Hour - With Improvements

Report File: G:\...\PMOYWI.pdf

9/6/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	Strathmore Ave (NS) at Garvey Ave (EW)	Two-way stop	HCM 7th Edition	NB Left	0.116	34.2	D

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: Strathmore Ave (NS) at Garvey Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	34.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.116

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			No			No		

Volumes

Name												
Base Volume Input [veh/h]	16	0	23	3	0	4	6	1041	30	26	842	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161	1.0161
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	16	14	100	0	0	101	19
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	0	23	24	0	20	20	1158	30	26	957	24
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	6	6	0	5	5	303	8	7	251	6
Total Analysis Volume [veh/h]	17	0	24	25	0	21	21	1214	31	27	1003	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	Yes	Yes		
Number of Storage Spaces in Median	1	1	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.00	0.05	0.15	0.00	0.04	0.03	0.01	0.00	0.04	0.01	0.00
d_M, Delay for Movement [s/veh]	34.17	34.62	16.13	31.05	36.02	15.43	10.30	0.00	0.00	11.46	0.00	0.00
Movement LOS	D	D	C	D	E	C	B	A	A	B	A	A
95th-Percentile Queue Length [veh/ln]	0.60	0.60	0.60	0.69	0.69	0.69	0.09	0.00	0.00	0.14	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.97	14.97	14.97	17.25	17.25	17.25	2.21	0.00	0.00	3.50	0.00	0.00
d_A, Approach Delay [s/veh]	23.53			23.95			0.17			0.30		
Approach LOS	C			C			A			A		
d_I, Intersection Delay [s/veh]	1.08											
Intersection LOS	D											

APPENDIX E

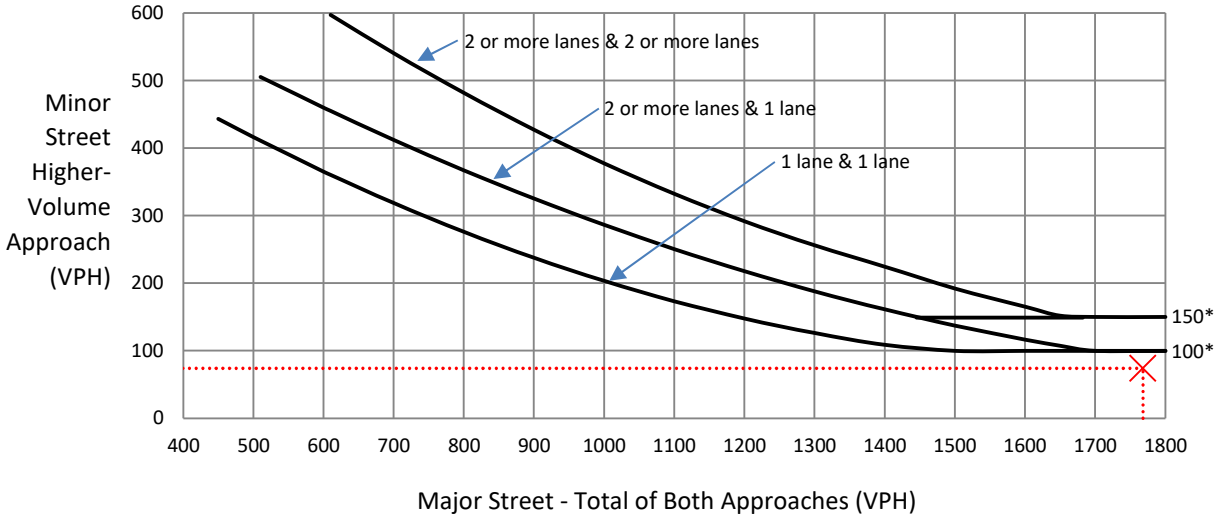
TRAFFIC SIGNAL WARRANT GRAPHS

Figure F-1

Strathmore Ave (NS) / Garvey Ave (EW) - #4
Opening Year With Project
AM Peak Hour

Major Street:	Garvey Ave	Volume:	1768
Minor Street:	Strathmore Ave	Volume:	74

Warrant 3, Peak Hour Vehicular Volume (100% Factor)



Traffic Signal Warrant Is NOT Satisfied

*Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.

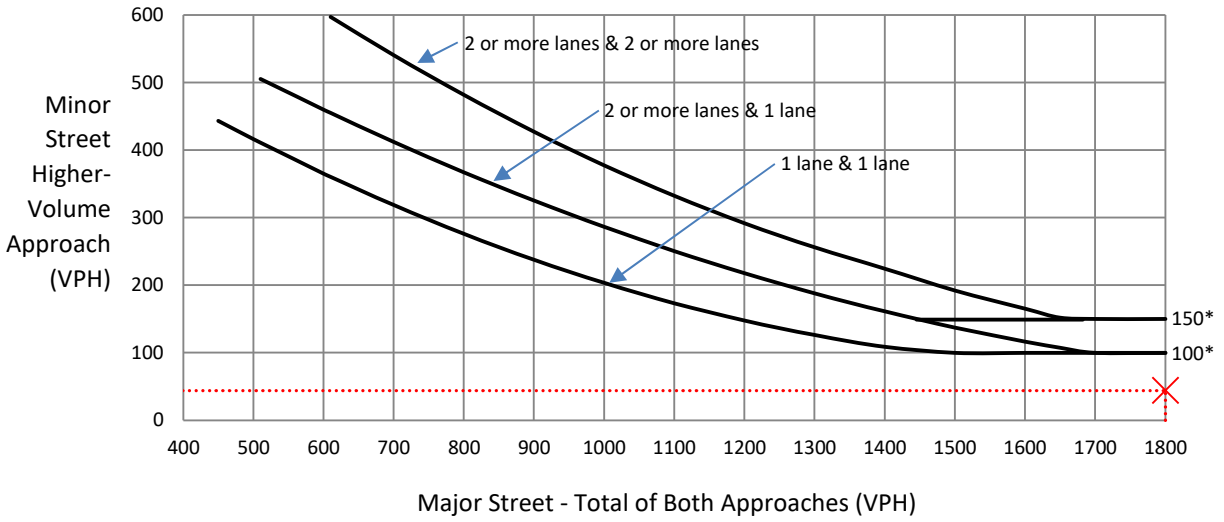
Figure F-2

Strathmore Ave (NS) / Garvey Ave (EW) - #4
Opening Year With Project
AM Peak Hour

Major Street: Garvey Ave Volume: 2215

Minor Street: Strathmore Ave Volume: 44

Warrant 3, Peak Hour Vehicular Volume (100% Factor)



Traffic Signal Warrant Is NOT Satisfied

*Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.

APPENDIX F

SGVCOG VMT EVALUATION TOOL

SGVCOG VMT Evaluation Tool Report

Project Details

Timestamp of Analysis: July 11, 2022, 11:15:49 AM

Project Name: Strathmore and Garvey Mized Use PRoject

Project Description: Seven-Story Mixed-Use Development

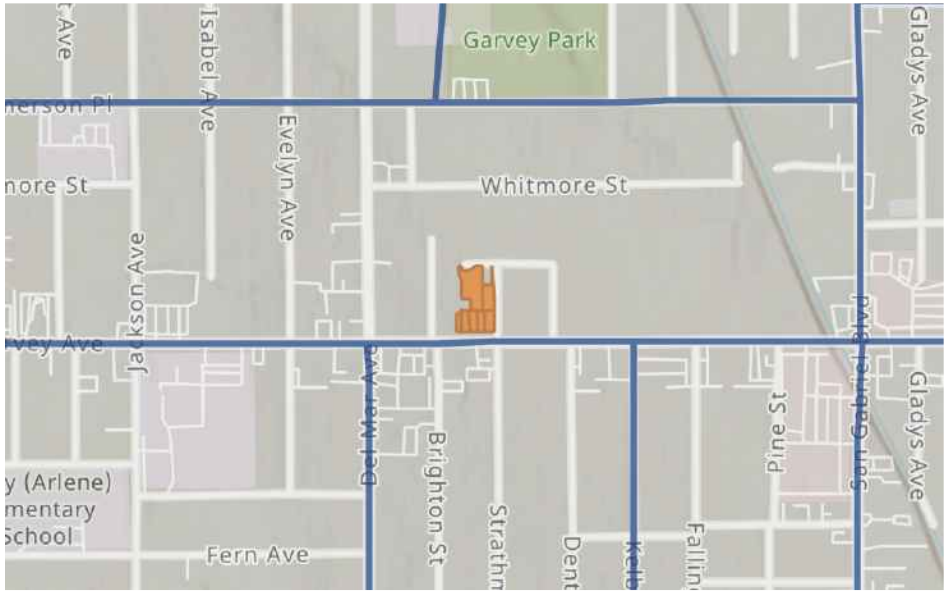
Project Location

jurisdiction: Rosemead

apn	TAZ				
5287-038-018	22165100	5287-038-019	22165100	5287-038-020	22165100
5287-038-029	22165100	5287-038-030	22165100	5287-038-031	22165100
5287-038-033	22165100				

Inside a TPA?

No (Fail)



Analysis Details

Data Version: SCAG Regional Travel Demand Model 2016 RTP Base Year 2012

Analysis Methodology: TAZ

Baseline Year: 2022

Project Land Use

Residential:

Single Family DU:	26
Multifamily DU:	
Total DUs:	26

Non-Residential:

Office KSF:	12
Local Serving Retail KSF:	6
Industrial KSF:	

Residential Affordability (percent of all units):

Extremely Low Income:	0 %
Very Low Income:	0 %
Low Income:	0 %

Parking:

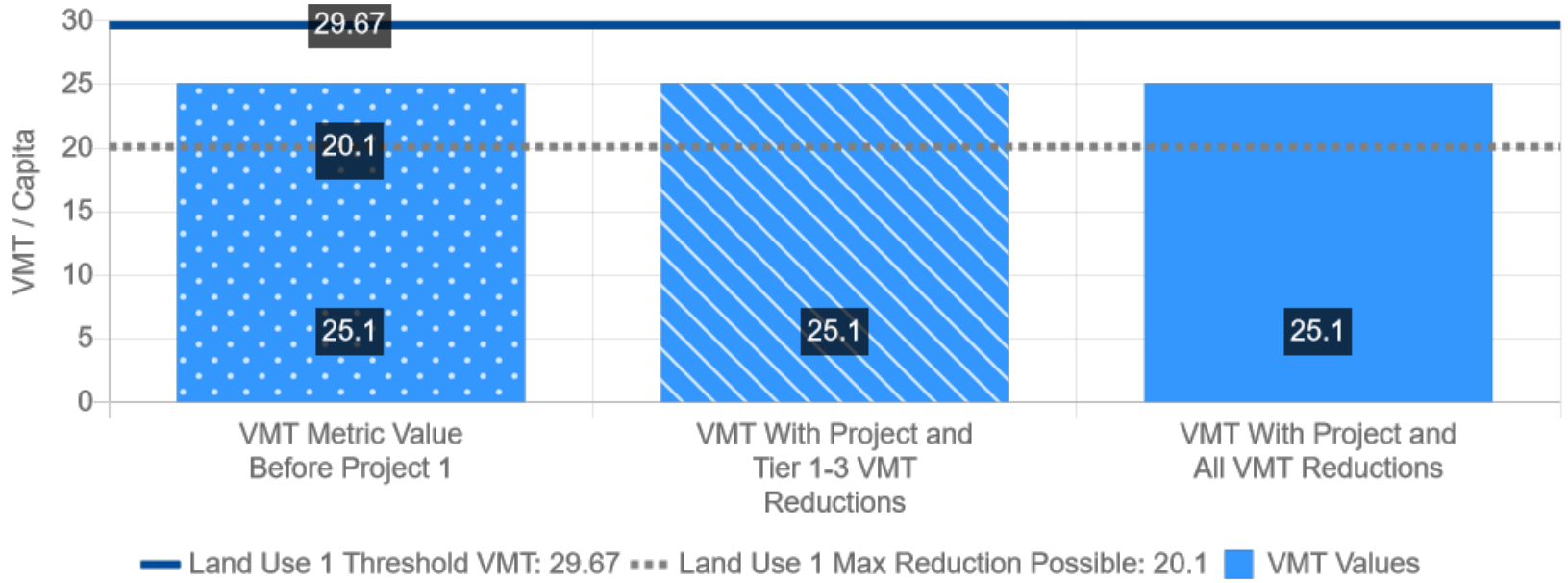
Motor Vehicle Parking:

Bicycle Parking:

Residential Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 1:	Residential
VMT Without Project 1:	Total VMT per Service Population
VMT Baseline Description 1:	SGVCOG Average
VMT Baseline Value 1:	34.9
VMT Threshold Description 1:	-15%
Land Use 1 has been Pre-Screened by the Local Jurisdiction:	N/A

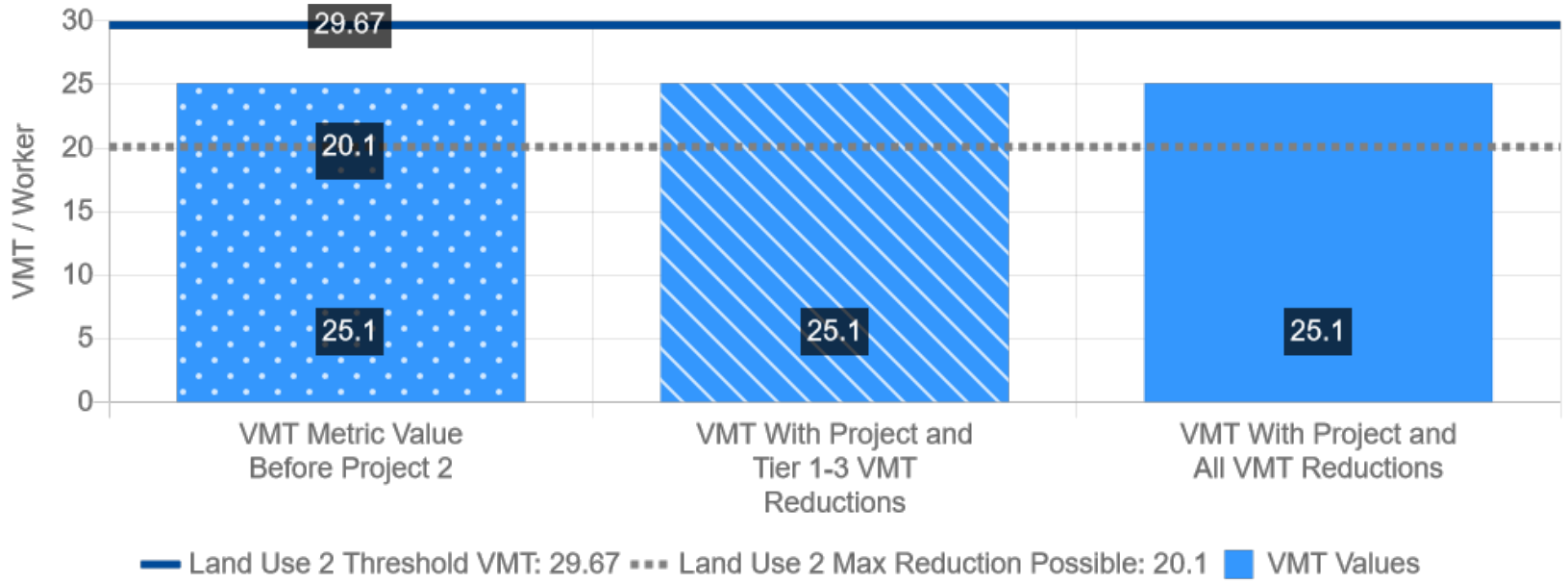
	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	25.1	25.1	25.1
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



Office Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 2:	Office
VMT Without Project 2:	Total VMT per Service Population
VMT Baseline Description 2:	SGVCOG Average
VMT Baseline Value 2:	34.9
VMT Threshold Description 2:	-15%
Land Use 2 has been Pre-Screened by the Local Jurisdiction:	N/A

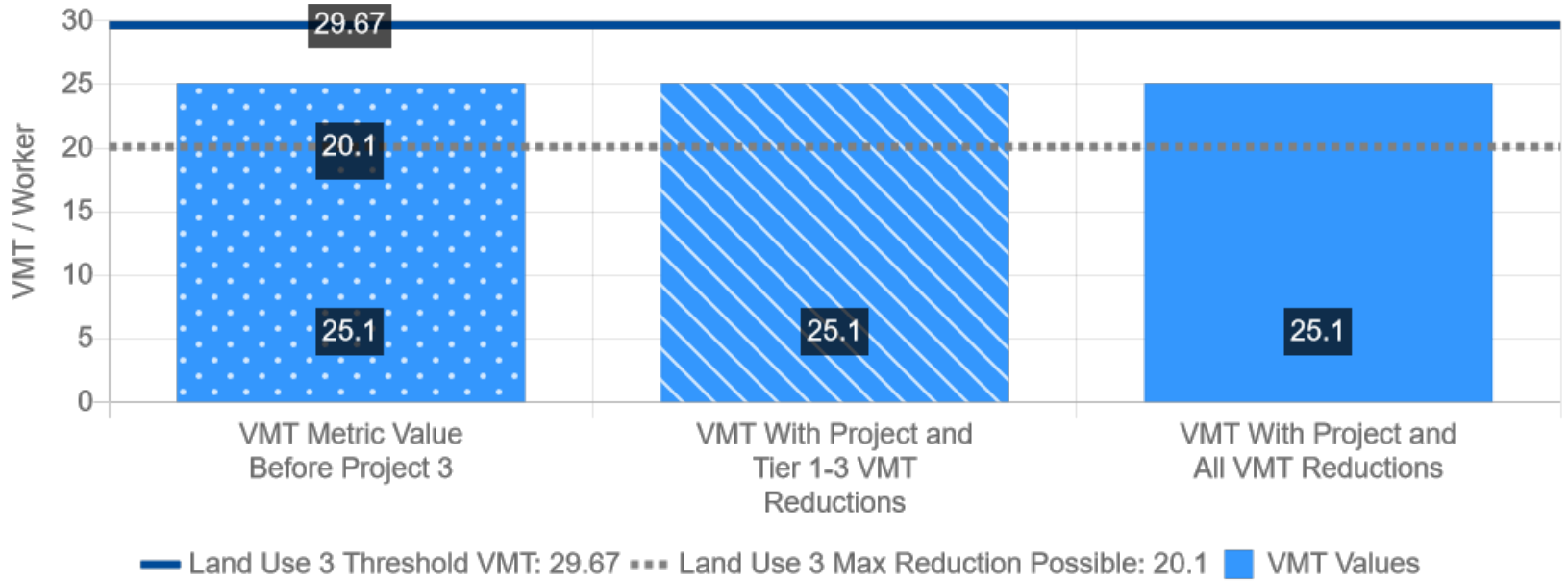
	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	25.1	25.1	25.1
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



Commercial Vehicle Miles Traveled (VMT) Screening Results

Land Use Type 3:	Commercial
VMT Without Project 3:	Total VMT per Service Population
VMT Baseline Description 3:	SGVCOG Average
VMT Baseline Value 3:	34.9
VMT Threshold Description 3:	-15%
Land Use 3 has been Pre-Screened by the Local Jurisdiction:	N/A

	Without Project	With Project & Tier 1-3 VMT Reductions	With Project & All VMT Reductions
Project Generated Vehicle Miles Traveled (VMT) Rate	25.1	25.1	25.1
Low VMT Screening Analysis	Yes (Pass)	Yes (Pass)	Yes (Pass)



APPENDIX G

LEVEL OF SERVICE WORKSHEETS FOR SPECIFIC PLAN AMENDMENT ANALYSIS

Strathmore and Garvey Mixed Use Project

Vistro File: Z:\...\SPA.vistro
Report File: Z:\...\SPAP AM.pdf

Scenario 3 Year 2035 With Project - AM
9/11/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
205	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	WB Thru	1.061	-	F
206	Kelburn Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Thru	0.845	-	D
207	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	WB Thru	1.161	-	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 205: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.061

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	161	533	156	375	545	191	166	1355	160	156	1487	438
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	3	6	0	0	0	5	0	3	5	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	161	533	159	381	545	191	166	1360	160	159	1492	444
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	40	133	40	95	136	48	42	340	40	40	373	111
Total Analysis Volume [veh/h]	161	533	159	381	545	191	166	1360	160	159	1492	444
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.22	0.22	0.24	0.23	0.23	0.10	0.32	0.32	0.10	0.40	0.40
Intersection LOS	F											
Intersection V/C	1.061											

Intersection Level Of Service Report
Intersection 206: Kelburn Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.845

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	19	171	51	15	53	69	1816	142	195	1884	66
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	17	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	220	19	171	51	15	53	69	1833	142	195	1901	66
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	55	5	43	13	4	13	17	458	36	49	475	17
Total Analysis Volume [veh/h]	220	19	171	51	15	53	69	1833	142	195	1901	66
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.15	0.11	0.03	0.07	0.07	0.04	0.41	0.41	0.12	0.41	0.41
Intersection LOS	D											
Intersection V/C	0.845											

Intersection Level Of Service Report
Intersection 207: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.161

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	242	697	202	285	923	440	488	1302	263	270	1480	373
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	6	6	6	5	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	247	697	202	285	923	446	494	1308	268	270	1486	373
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	174	51	71	231	112	124	327	67	68	372	93
Total Analysis Volume [veh/h]	247	697	202	285	923	446	494	1308	268	270	1486	373
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.22	0.13	0.18	0.29	0.28	0.31	0.27	0.17	0.17	0.31	0.23
Intersection LOS	F											
Intersection V/C	1.161											

Strathmore and Garvey Mixed Use Project

Vistro File: Z:\...\SPA.vistro
Report File: Z:\...\SPAP PM.pdf
Scenario 4 Year 2035 With Project - PM
9/11/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
205	Del Mar Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	WB Thru	0.946	-	E
206	Kelburn Ave (NS) at Garvey Ave (EW)	Signalized	ICU 1	EB Thru	0.720	-	C
207	San Gabriel Blvd (NS) at Garvey Ave (EW)	Signalized	ICU 1	NB Thru	1.079	-	F

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 205: Del Mar Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.946

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	190.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	193	547	113	349	483	184	169	1308	137	114	1200	277
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	7	0	0	0	5	0	4	6	8
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	193	547	117	356	483	184	169	1313	137	118	1206	285
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	48	137	29	89	121	46	42	328	34	30	302	71
Total Analysis Volume [veh/h]	193	547	117	356	483	184	169	1313	137	118	1206	285
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.21	0.21	0.22	0.21	0.21	0.11	0.30	0.30	0.07	0.31	0.31
Intersection LOS	E											
Intersection V/C	0.946											

Intersection Level Of Service Report
Intersection 206: Kelburn Ave (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	1 hour	Volume to Capacity (v/c):	0.720

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	1	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	155	12	113	38	11	39	45	1750	118	120	1536	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	21	0	0	19	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	155	12	113	38	11	39	45	1771	118	120	1555	42
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	3	28	10	3	10	11	443	30	30	389	11
Total Analysis Volume [veh/h]	155	12	113	38	11	39	45	1771	118	120	1555	42
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.10	0.07	0.02	0.06	0.06	0.03	0.39	0.39	0.08	0.33	0.33
Intersection LOS	C											
Intersection V/C	0.720											

Intersection Level Of Service Report
Intersection 207: San Gabriel Blvd (NS) at Garvey Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	1 hour	Volume to Capacity (v/c):	1.079

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	225.00	100.00	100.00	200.00	100.00	100.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			40.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	246	986	208	263	951	367	429	1171	230	229	1112	299
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	7	8	7	6	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	986	208	263	951	374	437	1178	236	229	1119	299
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	247	52	66	238	94	109	295	59	57	280	75
Total Analysis Volume [veh/h]	251	986	208	263	951	374	437	1178	236	229	1119	299
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	100
Lost time [s]	10.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.31	0.13	0.16	0.30	0.23	0.27	0.25	0.15	0.14	0.23	0.19
Intersection LOS	F											
Intersection V/C	1.079											

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