



Appendix H

Traffic Study



Traffic Study

for the proposed:

Renaissance II Residential Project

In the City of Rialto



January 2026

Kimley»»Horn

**TRAFFIC STUDY
FOR THE PROPOSED
RENAISSANCE II RESIDENTIAL PROJECT
IN THE CITY OF RIALTO**

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**TRAFFIC STUDY
FOR THE PROPOSED
RENAISSANCE II RESIDENTIAL PROJECT
IN THE CITY OF RIALTO**

I. INTRODUCTION

A. Purpose of the TIA and Study Objectives

This Traffic Study has been prepared to address the traffic-related effects of the proposed Renaissance II Residential project in the City of Rialto.

This traffic study has been conducted in accordance with the traffic study requirements of the City of Rialto, based on the City's *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service Assessment (LOS)* (December 2024) and in accordance with San Bernardino Association of Governments (SANBAG) Congestion Management Program (CMP) requirements.

This study addresses existing and short-term future traffic conditions, taking into account the project trips to be generated by the project and potential project-related effects on the surrounding circulation system.

This report includes a description of existing traffic conditions in the surrounding area, estimated project trip generation and distribution, future traffic growth, and an assessment of project-related effects on the roadway system. Where necessary, circulation system improvements have been identified to achieve acceptable intersection operation in the vicinity of the project.

The project will be evaluated for the following conditions:

- Existing Conditions
- Opening Year 2026 – Existing Plus Growth
- Opening Year 2026 – Existing Plus Growth Plus Project
- Opening Year 2026 Cumulative
- Opening Year 2026 Cumulative – With Project

B. Site Plan Location and Study Area

The project is located in the northwestern area of the City of Rialto, and is shown in its regional setting on a vicinity map on **Figure 1**. The project site (approximately 24.11 acres) is bounded by a town center to the north, vacant land to the south, a planned residential project to the east, and Linden Avenue to the west. The project site is located within the Renaissance Specific Plan area.



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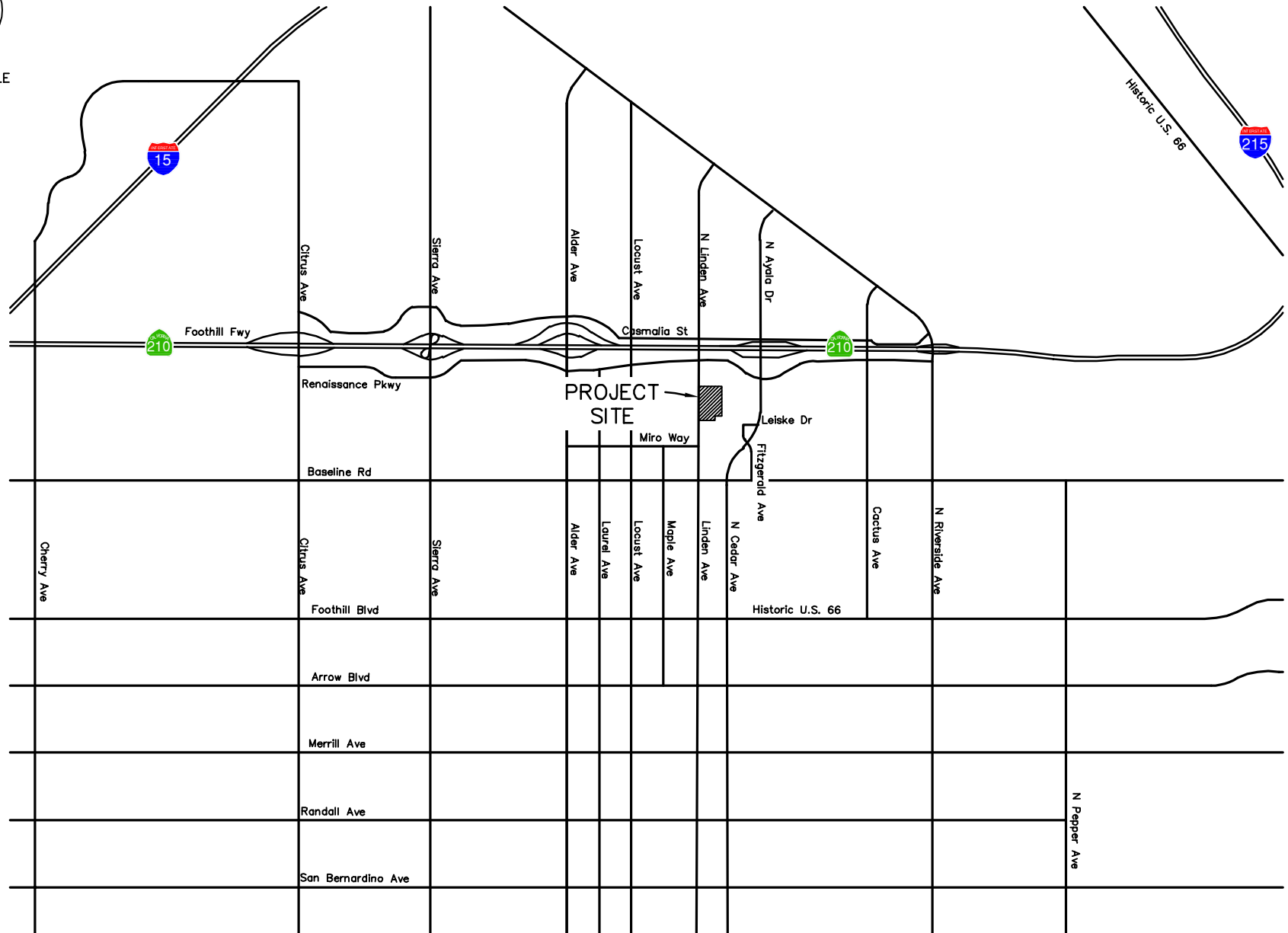


FIGURE 1
VICINITY MAP

C. Development Project Identification

Master Case No. 2024-0028 (Related Files: Tentative Tract Map No. 2024-0002 & Precise Plan of Design No. 2024-0024)

D. Development Project Description

The project will involve the construction of a 292-unit single-family attached and detached residential housing complex. A copy of the project site plan is provided on Figure 2. The site is located within the Renaissance Specific Plan, which is located generally between Casmalia Street on the north, Baseline Road on the south, Ayala Drive on the east, and Tamarind and Palmetto Avenues on the west. The Renaissance Specific Plan area covers 1,445 acres, with 81 separate Planning Areas, and is approved for a variety of land uses, including residential, commercial, industrial, and employment uses. The Specific Plan was approved for build-out in three separate phases, over a 20-year period. An amendment to the Specific Plan was approved in December 2016.

The Renaissance Place Residential project site is located within Planning Areas 113 and 117, as well as portions of 110, 111, and 129 of the Renaissance Specific Plan Amendment. The Renaissance Specific Plan Amendment classifies these planning areas as Low Density Residential (LDR), Recreation, Medium High Density Residential (MHDR), Slope/Buffer, and Slope/Buffer, respectively.

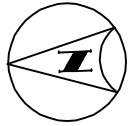
Primary vehicular access provisions for the project site would consist of the following:

- Two proposed full-movement driveways on Linden Avenue

Secondary vehicular access provisions for the project site would consist of the following two driveways from the adjacent approved residential development to the east.

- One proposed full-movement driveway on Ayala Drive
- One proposed exit-only driveway on Ayala Drive

The proposed opening year for the project is Year 2026. The project will be developed in a single project phase. The project site is located approximately 1 mile from the City of Rialto's border with the City of Fontana.



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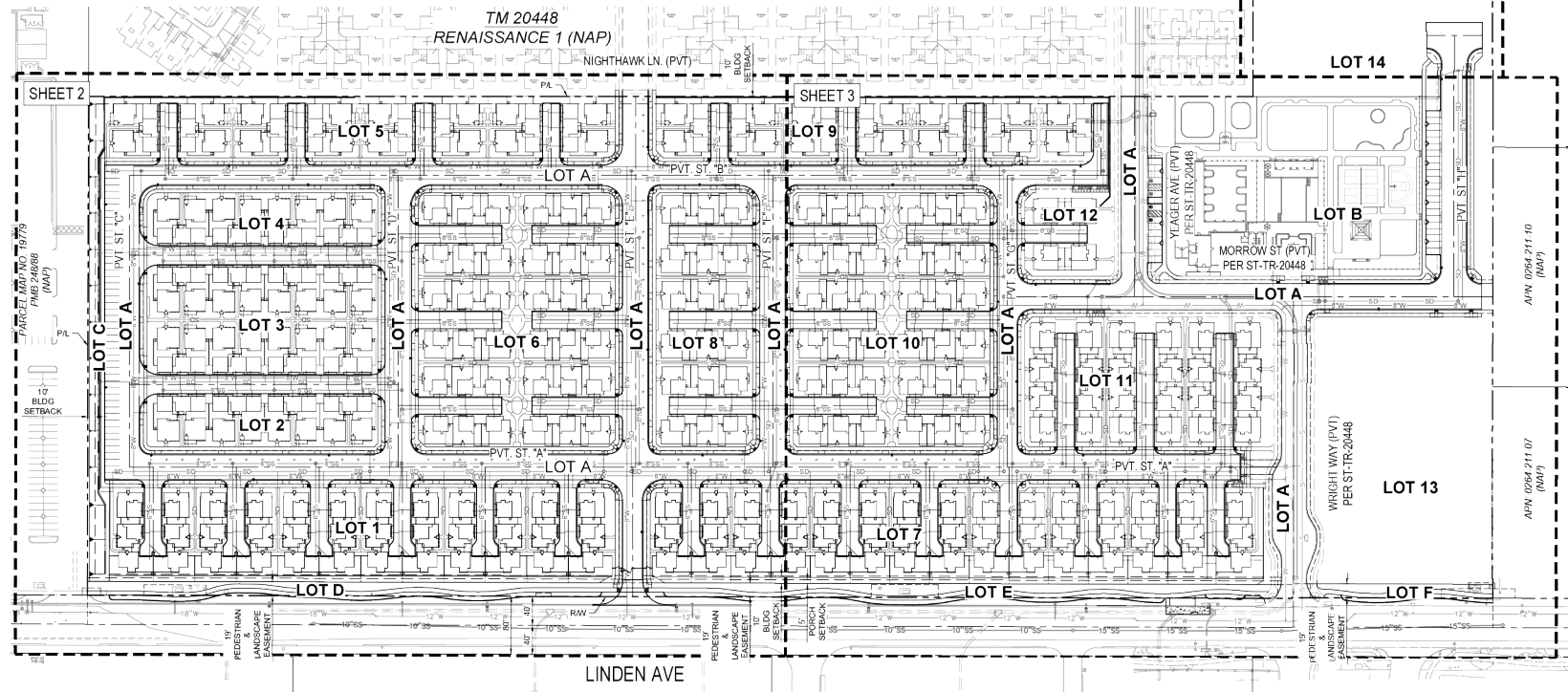
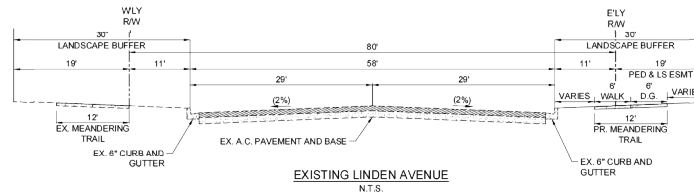
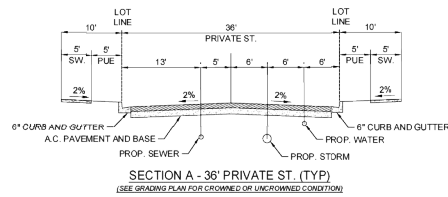
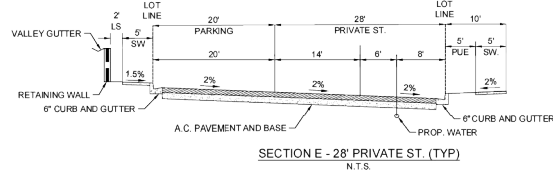
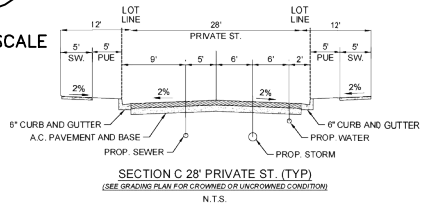


FIGURE 2
PROJECT SITE PLAN



E. Analysis Methodology

1. Intersection Analysis – HCM Methodology

Peak hour intersection operations at signalized and unsignalized intersections were evaluated using the methods prescribed in the Highway Capacity Manual (HCM) 7th Edition, consistent with the requirements of the City of Rialto and the San Bernardino County CMP.

The City of Rialto guidelines require analysis of traffic operations to be based on the vehicular delay methodologies of the HCM (Transportation Research Board Special Report 209). The intersection analysis for the proposed project has been accomplished using the VISTRO software program and using the specified input parameters outlined in the City's *Traffic Impact Analysis Report Guidelines and Requirements*.

Per the HCM Methodology, Level of Service (LOS) for signalized intersections is defined in terms of average vehicle delay. Specifically, LOS criteria are stated in terms of the average control delay per vehicle for the peak 15-minute period within the hour analyzed. The charts on the following page provide a description of the operating characteristics of each Level of Service and define the LOS in terms of average seconds of delay for signalized and unsignalized intersections.

2. Level of Service Standards and Measure of Significance

The City of Rialto, per the City of Rialto 2010 General Plan Update, establishes minimum Level of Service standards. According to Policy 4-1.20 of the General Plan document, the City requires that signalized intersections operate at LOS D or better during the morning and evening peak hours. The City's Traffic Study Guidelines require new development to mitigate project-related effects that cause the Level of Service to fall below LOS D, or cause the peak hour delay to increase as follows:

- LOS A/B – by 10.0 seconds
- LOS C – by 8.0 seconds
- LOS D – by 5.0 seconds
- LOS E – by 2.0 seconds
- LOS F – by 1.0 second

The City's traffic study guidelines require unsignalized intersections to operate with no vehicular movement having an average delay exceeding 120 seconds during the morning and evening peak hours.

LEVEL OF SERVICE DEFINITIONS	
Level of Service	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized, and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.
D	This level encompasses a zone of increasing restriction, approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS		
Level of Service	Signalized Intersection (Average delay per vehicle, in seconds) ¹	Unsignalized Intersections (Average delay per vehicle, in seconds) ²
A	≤ 10	0 - 10
B	> 10 - 20	> 10 - 15
C	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

¹ Source: Highway Capacity Manual (HCM 7th Edition) , Exhibit 19-8.

² Source: Highway Capacity Manual (HCM 7th Edition), Exhibit 20-2.

Roadway Segment Analysis

The roadway segment analysis will address the project's effect on daily operating conditions on roadway segments within the project vicinity. Roadway segments are evaluated by comparing the daily traffic volume on a roadway segment to the daily capacity of that segment, to determine the volume-to-capacity (v/c) ratio. Daily capacity is based on the roadway classification, as shown in the following chart:

CITY OF RIALTO ROADWAY CAPACITY ⁽¹⁾				
Roadway Classification	No. of Lanes	Two-Way Traffic Volume (ADT) ⁽²⁾		
		Service Level C	Service Level D	Service Level E
Local	2	2,500-2,799	2,800-3,099	3,100 +
Collector (60' or 64')	2	9,900-11,199	11,200-12,499	12,500 +
Industrial (45')	2	9,900-11,199	11,200-12,499	12,500 +
Arterial ⁽³⁾	2	14,400-16,199	16,200-17,999	18,000 +
Secondary Highway	4	16,900-19,399	19,400-21,999	22,000 +
Modified Arterial (100')	4	26,200-29,599	29,600-32,999	33,000 +
Arterial (120')	6	38,700-44,099	44,100-49,499	49,500 +
Notes:				
(1) All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only				
(2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables.				
(3) Two-lane roads designated as future arterials that conform to arterial design standards for vertical and horizontal alignments are analyzed as arterials.				

Source: City of Rialto *Traffic Impact Analysis Report Guidelines and Requirements* (2013)

II. AREA CONDITIONS

A. Identify Study Area and Intersections

This traffic study includes documentation of existing conditions, analysis of cumulative traffic conditions, and identification of project-related effects at the following study intersections:

Existing Intersections:

1. Ayala Drive at SR-210 Westbound Ramps
2. Ayala Drive at SR-210 Eastbound Ramps
3. Ayala Drive at Renaissance Parkway
4. Linden Avenue at Renaissance Parkway
5. Linden Avenue at Miro Way
6. Linden Avenue at Baseline Road
7. Ayala Drive at Baseline Road

Future Driveway Intersections:

- D1. Linden Avenue at North Project Driveway
- D2. Linden Avenue at South Project Driveway
- D3. Ayala Drive at Scholl Way
- D4. Ayala Drive at Project Driveway

In addition, the following roadway segments were analyzed:

1. Ayala Drive: SR-210 WB Ramps to SR-210 EB Ramps
2. Ayala Drive: SR-210 EB Ramps to Renaissance Parkway
3. Linden Avenue: Renaissance Parkway to Project Access
4. Linden Avenue: Miro Way to Baseline Road
5. Renaissance Parkway: Linden Avenue to Ayala Drive
6. Ayala Drive: Renaissance Parkway to Project Access
7. Ayala Drive: Project Access to Baseline Road

The study locations were established in conjunction with City staff through the Scoping Agreement process (Exhibit B of the City of Rialto *Traffic Impact Analysis Report Guidelines and Requirements*). A copy of the approved Scoping Agreement is provided in **Appendix A**.

Traffic counts were collected in October 2024 for study intersections 1 to 6 and in May 2025 for study intersection 7. ADTs were collected in October 2024 for study roadway segments 1 to 5 and in May 2025 for study roadway segments 6 and 7.

B. Description of Existing Roads, Traffic Control, and Intersection Geometrics

Regional access to the site is provided primarily by the State Route 210 (SR-210) Freeway, approximately 1/3-mile to the north of the project site. In addition, the I-215 Freeway is located approximately 4.5 miles to the east of the site; the I-15 Freeway is approximately 6 miles to the west of the site, and access to the I-10 Freeway is approximately 4.5 miles to the south.

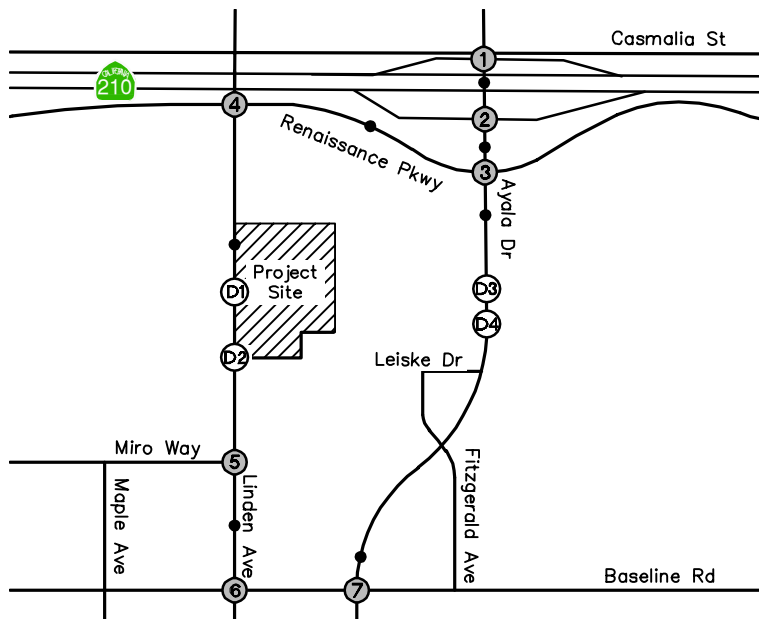
Existing lane configurations and intersection controls at the study intersections at the time the traffic counts were collected are shown on **Figure 3**. The following provides a description of the roadways surrounding the project site.

Ayala Drive – Ayala Drive is designated as a Secondary Arterial and would provide four travel lanes and a bike lane in each direction. Ayala Drive is designated as a truck route throughout the Renaissance Specific Plan area with truck access restricted from Baseline Road to Renaissance Parkway. The posted speed limit along Ayala Drive is 45 miles per hour (mph).

Linden Avenue – Linden Avenue is designated as a Secondary Arterial and would provide four travel lanes within 80 feet of right-of-way. Linden Avenue is a designated truck route from Baseline Road to Miro Way and north of Casmalia Street, with truck access restricted to local deliveries between Casmalia Street and Miro Way. The posted speed limit along Linden Avenue is 35 mph. Linden Avenue would provide access to the project site via one full-movement driveway and one exit-only driveway.

Renaissance Parkway – Renaissance Parkway is designated as a Major Arterial, which would provide four travel lanes with bike lanes and a raised median within 108 feet of right-of-way. Renaissance Parkway extends in an east-west orientation through and beyond the boundaries of the City of Rialto, changing to Highland Avenue to the west and Easton Street to the east. Renaissance Parkway connects with north-south streets that have interchanges with the SR-210 Freeway to the north, and the I-10 Freeway to the south. Renaissance Parkway is a truck route between Alder Avenue and Locust Avenue, and east of Ayala Drive; with truck access restricted to local deliveries between Locust Avenue and Ayala Drive, and west of Alder Avenue. The posted speed limit along Renaissance Parkway is 45 mph.

Baseline Road – Baseline Road is designated as a Major Arterial. Baseline Road would provide four travel lanes and a bike lane in each direction within 80 feet of right-of-way. Baseline Road is a designated truck route from Ayala Drive to Linden Avenue. The posted speed limit along Baseline Road is 50 mph.



1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
			FUTURE INTERSECTION
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	
FUTURE INTERSECTION	FUTURE INTERSECTION	FUTURE INTERSECTION	



NOT TO SCALE

LEGEND:

- = Study Intersection
- = Turn or Through Lane
- = Signal
- = Study Roadway Segment

**FIGURE 3
EXISTING LANE CONFIGURATION
AND TRAFFIC CONTROL**

C. Existing Traffic Volumes

Traffic count data included vehicle classifications for passenger vehicles and trucks. Vehicle classifications are necessary to compute Passenger Car Equivalent (PCE) volumes, which are used in the traffic analysis to address the effects of truck traffic on intersection and roadway operation.

The PCE volumes were developed by applying a PCE factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with 4 or more axles. These factors are consistent with the City of Rialto's *Traffic Impact Analysis Guidelines and Requirements*. Traffic count data sheets with PCE volumes are provided in **Appendix B**. Existing morning and evening peak hour volumes and daily roadway volumes with the PCE factors applied are presented on **Figure 4**.

D. Existing Delay and Level of Service

Peak Hour Operating Conditions

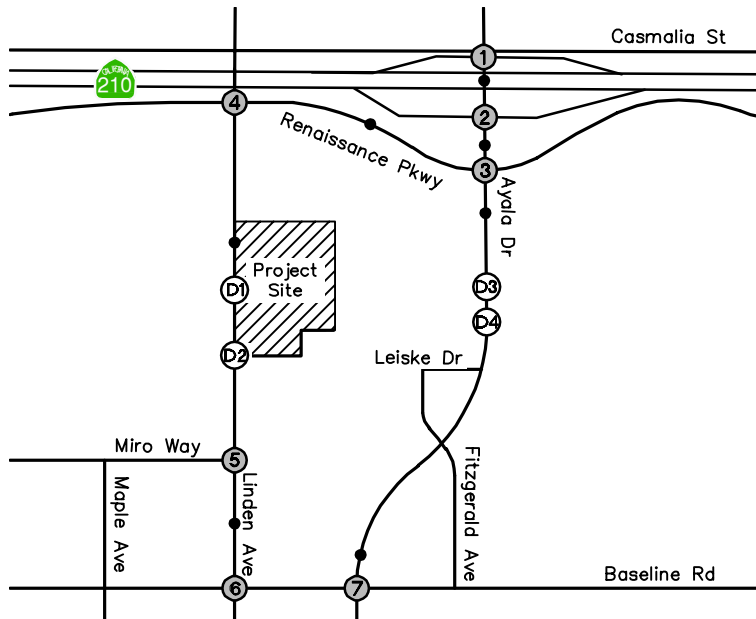
Intersection Level of Service analysis was conducted for the morning and evening peak hours using the analysis procedures and assumptions described previously in this report. The results of the intersection analysis for Existing Conditions are shown on **Table 1**. Review of this table indicates that all of the study intersections operate at an acceptable Level of Service.

Copies of Existing Conditions intersection analysis worksheets are provided in **Appendix C**.

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted based on the roadway capacities presented previously in this report. The results of the roadway analysis for Existing Conditions are shown on **Table 2**. Review of this table indicates that the following study roadway segment currently operates at an unacceptable LOS.

- Ayala Drive: SR-210 EB Ramps to Renaissance Parkway



1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
			FUTURE INTERSECTION
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	
FUTURE INTERSECTION	FUTURE INTERSECTION	FUTURE INTERSECTION	



NOT TO SCALE

LEGEND:

- = Study Intersection
- = Study Roadway Segment
- XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 4
EXISTING PEAK HOUR
TRAFFIC VOLUMES**



TABLE 1
SUMMARY OF INTERSECTION OPERATION
EXISTING CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Ayala Drive at SR-210 WB Ramps	S	26.8	C	26.4	C
2	Ayala Drive at SR-210 EB Ramps	S	16.6	B	19.6	B
3	Ayala Drive at Renaissance Parkway	S	20.5	C	24.5	C
4	Linden Avenue at Renaissance Parkway	S	27.1	C	34.1	C
5	Linden Avenue at Miro Way	S	7.9	A	10.5	B
6	Linden Avenue at Baseline Road	S	25.0	C	32.9	C
7	Ayala Drive at Baseline Road	S	27.7	C	29.1	C
D1	Linden Avenue at North Project Driveway	FUTURE INTERSECTION				
D2	Linden Avenue at South Project Driveway	FUTURE INTERSECTION				
D3	Ayala Drive at Scholl Way	FUTURE INTERSECTION				
D4	Ayala Drive at Project Driveway	FUTURE INTERSECTION				
D1	Linden Avenue at North Project Driveway	FUTURE INTERSECTION				

Notes:

- Bold and shaded values indicate intersections operating at LOS E or F or significant impact to intersection per City standards.
 - At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
 - At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst (highest delay) movement.
 - Delay values are based on the methodology outlined in the Highway Capacity Manual, (7th Edition).
- S = Signalized
U = Unsignalized

TABLE 2
SUMMARY OF ROADWAY ANALYSIS
EXISTING CONDITIONS

Roadway	Segment	Current Configuration	LOS D Capacity	Existing ADT	Existing ADT w/ PCE	LOS D or Better?
Ayala Drive	SR-210 WB Ramps to SR-210 EB Ramps	4 Lanes Divided	32,999	28,584	29,790	Yes
	SR-210 EB Ramps to Renaissance Parkway	4 Lanes Divided	32,999	41,020	42,295	No
	South of Renaissance Parkway	4 Lanes Divided	32,999	23,769	24,574	Yes
	North of Baseline Road	4 Lanes Divided	32,999	20,617	21,277	Yes
Linden Avenue	South of Renaissance Parkway	4 Lanes Divided	32,999	13,760	14,316	Yes
	Miro Way to Baseline Road	4 Lanes Divided	32,999	10,135	10,549	Yes
Renaissance Parkway	Linden Avenue to Ayala Drive	4 Lanes Divided	32,999	12,599	12,935	Yes

Notes: LOS = Level of Service
ADT = Average Daily Traffic
PCE = Passenger Car Equivalent

E. General Plan Circulation Element

The General Plan Circulation Element references the Renaissance Specific Plan for roadway designations for the project site and the surrounding vicinity. The original Renaissance Specific Plan was approved in 2010. An amendment to the specific plan – the Renaissance Specific Plan Amendment (RSPA) was approved in December 2016. A copy of the RSPA Vehicular Circulation Plan is provided on **Figure 5**. Designated truck routes in the RSPA area are shown on **Figure 6**.

Beyond the Specific Plan area, Alder Avenue, Locust Avenue, and Ayala Drive continue as truck routes to the north, with only Ayala Drive continuing as a truck route to the south (changing name to Cedar Avenue at Baseline Road). Baseline Road and Casmalia Avenue continue to the west as truck routes outside the Specific Plan area, and Baseline Road continues as a truck route to the east.

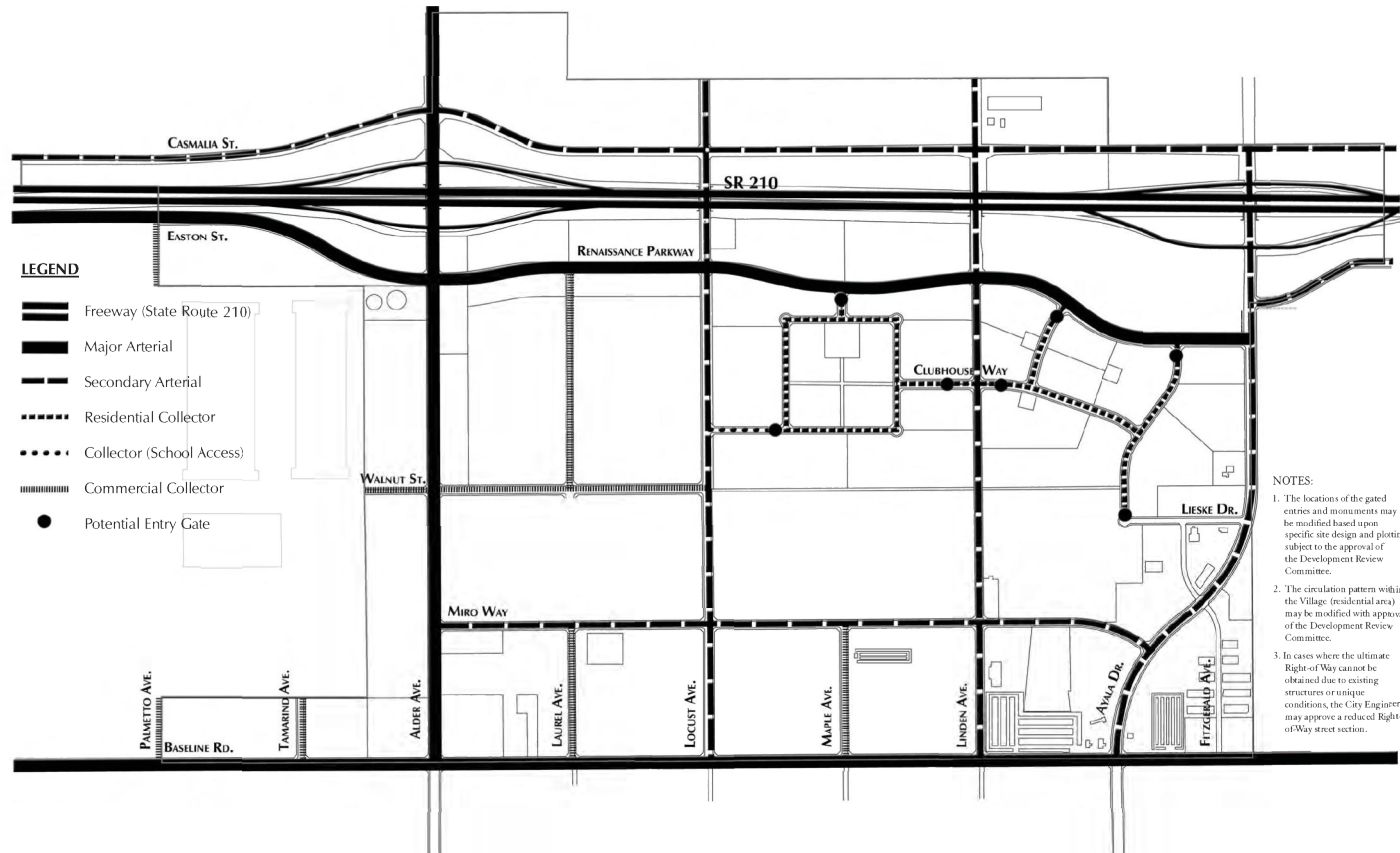
F. Transit Service

Transit service to the project area is provided via the OmniTrans transit lines, which serve various San Bernardino cities in the area. Bus stops in the project vicinity are located along Renaissance Parkway, approximately 1,300 ft to the north, Baseline Road, approximately $\frac{3}{4}$ mile to the south and Linden Avenue approximately 2,500 ft. A description of the bus routes serving the project area is provided below.

OmniTrans Route 10 operates between the City of Fontana and the City of San Bernardino, traveling through Rialto along Baseline Road in the project vicinity. Route 10 operates on weekdays from 6:30 AM to 7:30 PM with approximately 1-hour headways (the time between bus arrivals), on Saturdays from 6:20 AM to 7:00 PM with approximately 1-hour headways, and on Sundays from 7:10 AM to 6:00 PM with approximately 1-hour headways.

OmniTrans Route 22 operates between the City of Rialto and the City of Colton through Rialto along Renaissance Parkway in the project vicinity. Route 22 operates on weekdays from 5:00 AM to 9:40 PM with approximately 1-hour headways, on Saturdays from 7:15 AM to 6:30 PM with approximately 1-hour headways, and on Sundays from 7:30 AM to 6:40 PM with approximately 1-hour headways. Route 22 has a transfer point with Route 10 at the intersection of Riverside Avenue and Baseline Road.

OmniTrans Route 312 operates between the City of San Bernardino and the City of Fontana through Cal State San Bernardino and Rialto, along Renaissance Parkway and Linden Avenue in the project vicinity. Route 312 operates on weekdays from 5:20 AM to 10:30 PM with approximately 1-hour headways, on Saturdays and Sundays from 7:15 AM to 6:50 PM with approximately 1-hour headways.



**FIGURE 5
RENAISSANCE SPECIFIC PLAN
VEHICLE CIRCULATION PLAN**

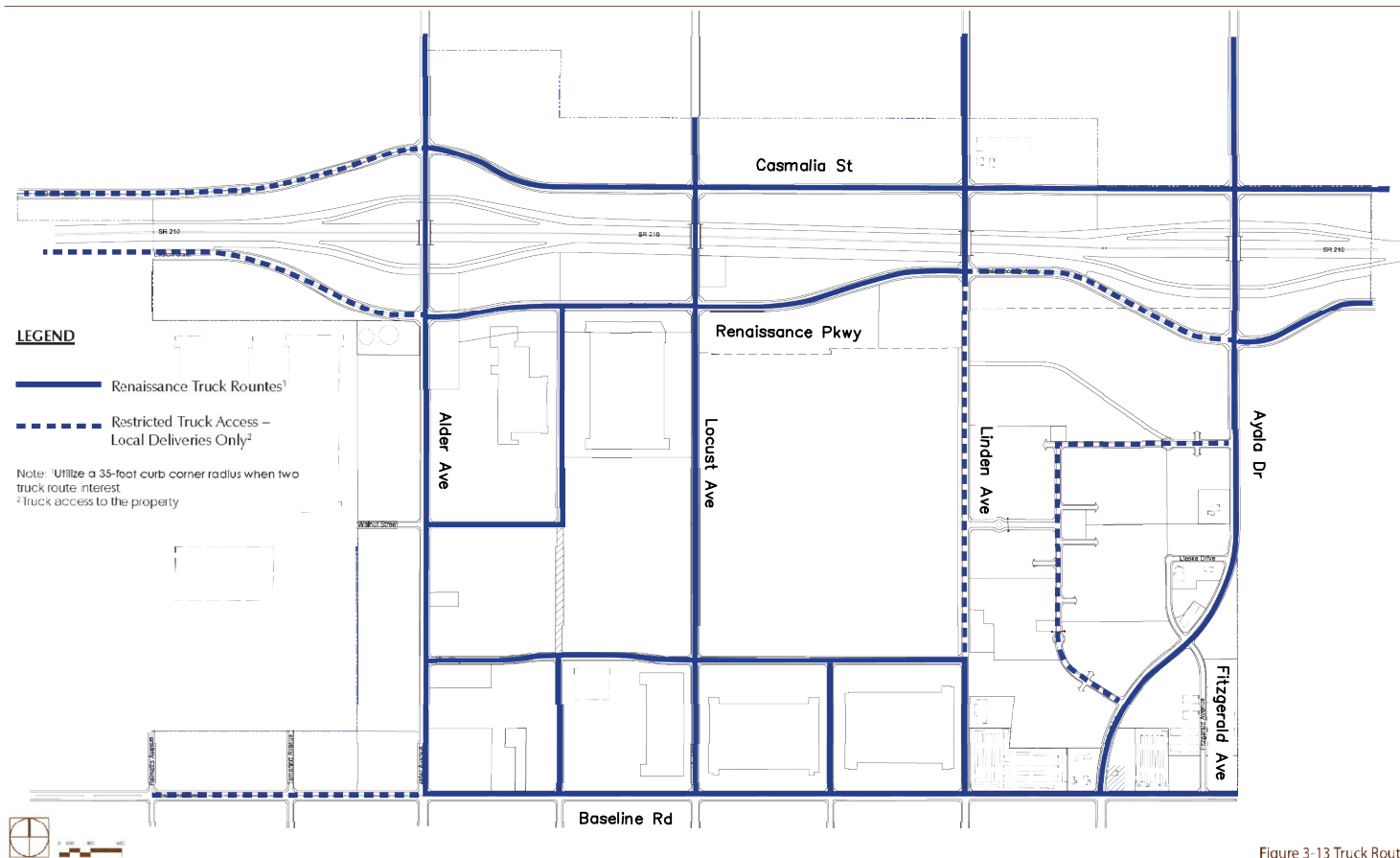


Figure 3-13 Truck Routes

**FIGURE 6
RENAISSANCE SPECIFIC PLAN
TRUCK ROUTES**

III. PROJECTED FUTURE TRAFFIC

A. Project Traffic

1. Approved RSPA Trip Generation

The proposed project is located within Planning Areas 110 and 113 of the Renaissance Specific Plan Amendment (RSPA). The RSPA Traffic Impact Analysis (dated: September 20, 2016), provides trip generation estimates, based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition), for the following land uses and quantities:

- PA 110 (Partial): Medium High Density Residential (MHDR) – Residential Condo/Townhouse (ITE Code 230) = 212 Dwelling Units (DU) (67% of PA)
- PA 113: LDR – Single-Family Detached Housing (ITE Code 210) = 186 DU

Based on the proposed land use quantities, the project planning area would generate approximately 3,005 daily trips, with 233 total trips (50 inbound and 183 outbound) during the morning peak hour and 296 total trips (191 inbound and 105 outbound) during the evening peak hour.

2. Project Trip Generation

Trip generation estimates for the Renaissance Place Residential project are based on daily and peak hourly trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition). ITE trip generation estimates for the project are based on the trip generation rates for ITE Land Use 215: Single-Family Attached Housing.

Trip generation rates and resulting trip generation estimates for the project are summarized on **Table 3**. The project is estimated to generate 2,102 vehicle trips on a daily basis, with 141 total trips (44 inbound and 97 outbound) in the morning peak hour, and 167 total trips (95 inbound and 72 outbound) in the evening peak hour.

3. Trip Distribution and Assignment

Trip distribution assumptions for the project were developed by considering the proposed site uses, the location of the site access points and assumed percentages in and out of each access points and the routes to and from nearby roadway gates and the freeway system. Trip distribution patterns are shown on **Figure 7**. Trip distribution percentages at each study intersection were applied to the project trip generation to determine the project trips through each intersection. The resulting project-related peak hour trips at the study intersections are shown on **Figure 8**.

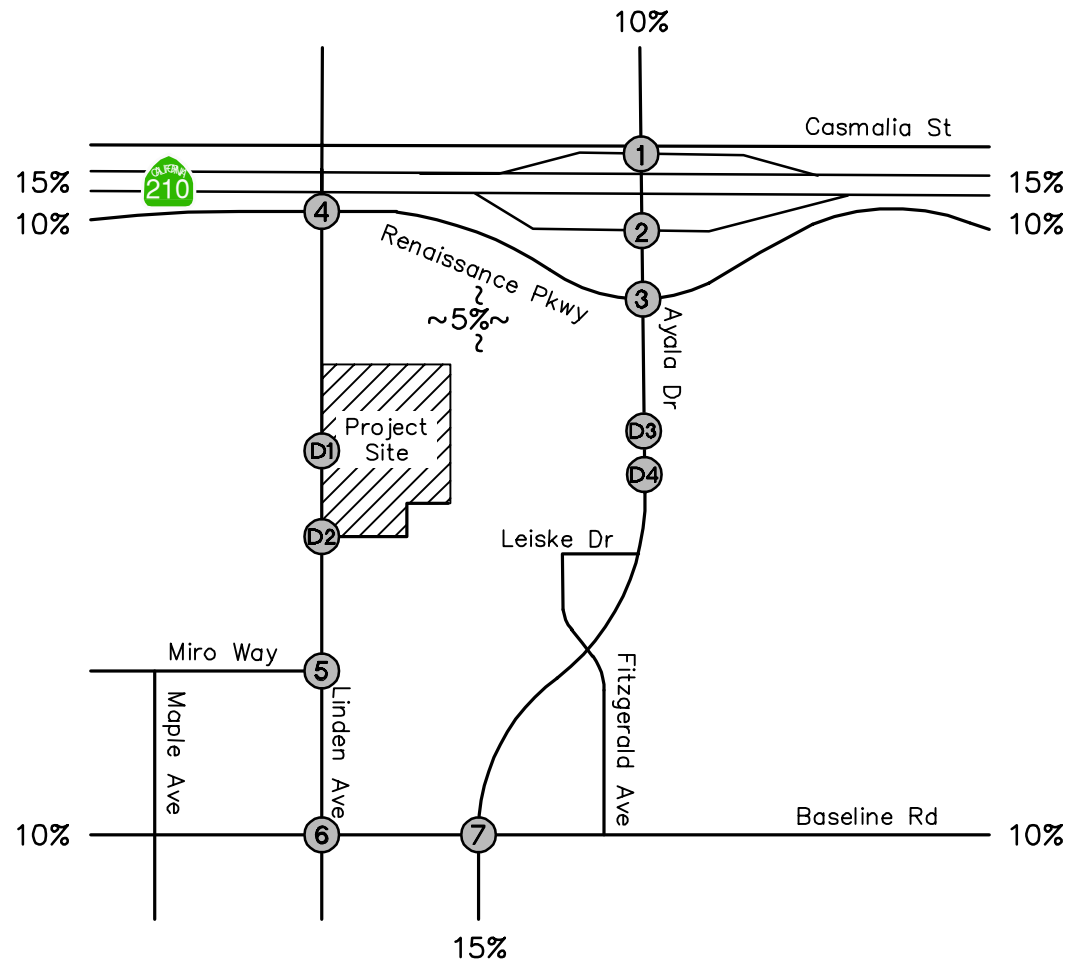
TABLE 3
SUMMARY OF PROJECT TRIP GENERATION
RENAISSANCE II RESIDENTIAL PROJECT

Land Use	ITE Code	Unit	Trip Generation Rates ¹						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Attached Housing	215	DU	7.200	0.149	0.331	0.48	0.325	0.245	0.57
Land Use	Quantity	Unit	Trip Generation Estimates						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Attached Housing	292	DU	2,102	44	97	141	95	72	167
Total Project Trips			2,102	44	97	141	95	72	167

¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition



NOT TO SCALE



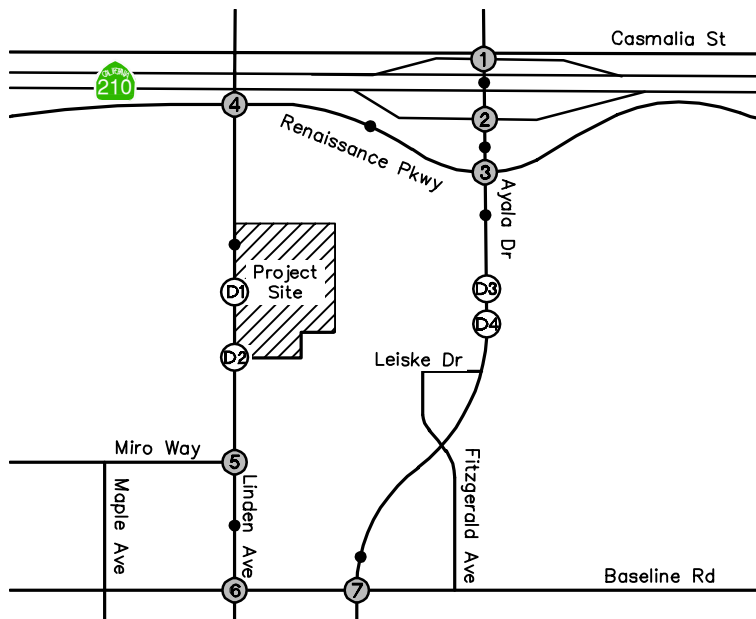
- 20 -

FIGURE 7
PROJECT TRIP DISTRIBUTION

LEGEND:

- ⊗ = Study Intersection
- XX% = Trip Distribution





1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	



NOT TO SCALE

LEGEND:

- ⊗ = Study Intersection
- = Study Roadway Segment
- XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 8
PROJECT-RELATED TRAFFIC VOLUMES**

B. Existing Plus Growth Plus Project Traffic (Opening Year 2026)

The project Opening Year is anticipated to be Year 2026. Local roadway and intersection improvements that are currently underway or have been conditioned on other projects are expected to be in place by the Project Opening Year 2026.

1. Ambient Growth Rate

An ambient growth rate of 2.0% per year to Opening Year 2026 was applied to existing peak hour traffic volumes to develop Existing Plus Growth forecasts. The resulting daily and peak hour Existing Plus Growth without the project (Opening Year 2026) traffic volumes are shown on **Figure 9**.

Project traffic was then added to develop Existing Plus Growth Plus Project (Opening Year 2026) traffic forecasts. Existing Plus Growth Plus Project daily and peak hour traffic volumes are shown on **Figure 10**.

2. Opening Year 2026 Existing Plus Growth

Peak Hour Operating Conditions

Intersection Level of Service analysis was conducted for Existing Plus Growth without the project (Opening Year 2026). The results are shown on **Table 4**. Intersection analysis worksheets for this scenario are provided in **Appendix C**.

Review of this table indicates that with the addition of ambient growth, all of the study intersections will operate at an acceptable LOS.

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted for the Existing Plus Growth conditions and the results are shown on **Table 5**. Review of this table indicates that the following study roadway segment will continue to operate at an unacceptable LOS:

- Ayala Drive: SR-210 EB Ramps to Renaissance Parkway

3. Opening Year 2026 Existing Plus Growth Plus Project

Peak Hour Operating Conditions

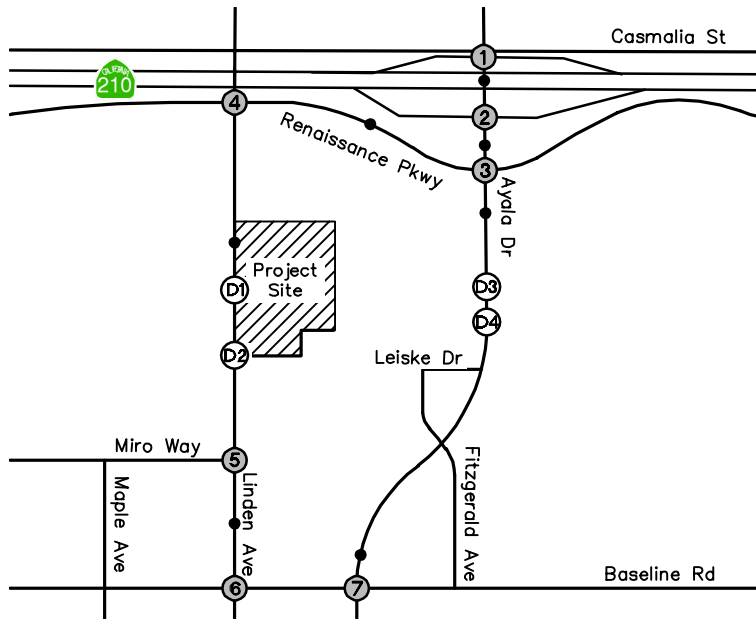
Intersection Level of Service analysis was conducted for the Existing Plus Growth Plus Project conditions. The results of the intersection analysis are shown on **Table 6**. Review of this table indicates that, with the addition of ambient growth and project traffic, none of the intersections would have a project-related effect attributable to an increase in peak hour delay beyond the measure of significance or a change in the Level of Service to fall below LOS D.

In this With Project analysis, each of the site driveways was also analyzed. The results indicate that the all four project driveways will operate at an acceptable LOS during both peak hours.

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted for the Existing Plus Growth Plus Project condition and the results are shown on **Table 7**. Review of this table indicates that the following study roadway segments will operate at an unacceptable LOS.

- Ayala Drive: SR-210 EB Ramps to Renaissance Parkway



1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
			FUTURE INTERSECTION
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	
FUTURE INTERSECTION	FUTURE INTERSECTION	FUTURE INTERSECTION	



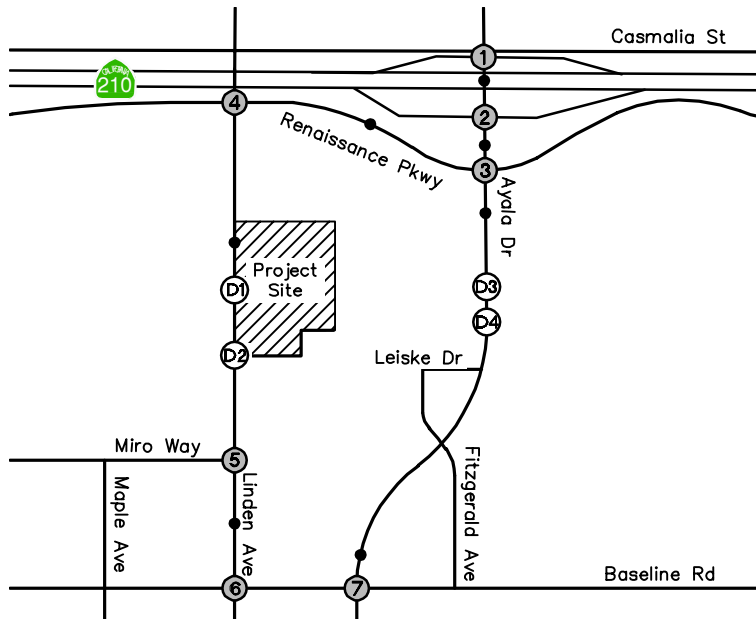
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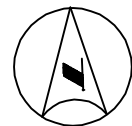
- = Study Intersection
- = Study Roadway Segment
- XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 9
OPENING YEAR 2026 - EXISTING PLUS GROWTH
TRAFFIC VOLUMES**





1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	



NOT TO SCALE

LEGEND:

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 10
OPENING YEAR 2026 - EXISTING PLUS GROWTH
PLUS PROJECT TRAFFIC VOLUMES**



TABLE 4
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2026 - EXISTING PLUS GROWTH

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Ayala Drive at SR-210 WB Ramps	S	27.2	C	26.8	C
2	Ayala Drive at SR-210 EB Ramps	S	16.8	B	20.3	C
3	Ayala Drive at Renaissance Parkway	S	20.8	C	24.9	C
4	Linden Avenue at Renaissance Parkway	S	27.7	C	34.5	C
5	Linden Avenue at Miro Way	S	8.1	A	10.6	B
6	Linden Avenue at Baseline Road	S	26.0	C	34.2	C
7	Ayala Drive at Baseline Road	S	28.0	C	29.2	C
D1	Linden Avenue at North Project Driveway	FUTURE INTERSECTION				
D2	Linden Avenue at South Project Driveway	FUTURE INTERSECTION				
D3	Ayala Drive at Scholl Way	FUTURE INTERSECTION				
D4	Ayala Drive at Project Driveway	FUTURE INTERSECTION				

Notes:

- Bold and shaded values indicate intersections operating at LOS E or F or significant impact to intersection per City standards.
 - At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
 - At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst (highest delay) movement.
 - Delay values are based on the methodology outlined in the Highway Capacity Manual, (6th Edition).
- S = Signalized
U = Unsignalized

TABLE 5
SUMMARY OF ROADWAY ANALYSIS
OPENING YEAR 2026 - EXISTING PLUS GROWTH

Roadway	Segment	LOS D Capacity	Existing ADT	Existing ADT w/ PCE	Existing Plus Growth ADT	LOS D or Better?
Ayala Drive	SR-210 WB Ramps to SR-210 EB Ramps	32,999	28,584	29,790	30,994	Yes
	SR-210 EB Ramps to Renaissance Parkway	32,999	41,020	42,295	44,004	No
	South of Renaissance Parkway	32,999	23,769	24,574	25,065	Yes
	North of Baseline Road	32,999	20,617	21,277	21,703	Yes
Linden Avenue	South of Renaissance Parkway	32,999	13,760	14,316	14,894	Yes
	Miro Way to Baseline Road	32,999	10,135	10,549	10,975	Yes
Renaissance Parkway	Linden Avenue to Ayala Drive	32,999	12,599	12,935	13,458	Yes

Notes: LOS = Level of Service
ADT = Average Daily Traffic
PCE = Passenger Car Equivalent

TABLE 6
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2026 - EXISTING PLUS GROWTH PLUS PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Effect	Sig Effect?	Without Project		With Project		Project Effect	Sig Effect?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Ayala Drive at SR-210 WB Ramps	S	27.2	C	27.2	C	0.0	No	26.8	C	27.1	C	0.3	No
2	Ayala Drive at SR-210 EB Ramps	S	16.8	B	16.8	B	0.0	No	20.3	C	20.4	C	0.1	No
3	Ayala Drive at Renaissance Parkway	S	20.8	C	21.4	C	0.6	No	24.9	C	25.5	C	0.6	No
4	Linden Avenue at Renaissance Parkway	S	27.7	C	27.9	C	0.2	No	35.6	D	35.6	D	0.0	No
5	Linden Avenue at Miro Way	S	8.1	A	7.8	A	-0.3	No	10.6	B	10.3	B	-0.3	No
6	Linden Avenue at Baseline Road	S	26.0	C	26.7	C	0.7	No	34.2	C	36.5	D	2.3	No
7	Ayala Drive at Baseline Road	S	28.0	C	28.4	C	0.4	No	29.2	C	29.6	C	0.4	No
D1	Linden Avenue at North Project Driveway	U	N/A		8.5	A	N/A		N/A		10.7	B	N/A	
D2	Linden Avenue at South Project Driveway	U	N/A		16.2	C	N/A		N/A		18.0	C	N/A	
D3	Ayala Drive at Scholl Way	U	N/A		3.6	A	N/A		N/A		3.6	A	N/A	
D4	Ayala Drive at Project Driveway	U	N/A		11.8	B	N/A		N/A		11.7	B	N/A	

Notes:

- Bold and shaded values indicate intersections operating at LOS E or F or significant impact to intersection per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst (highest delay) movement.
- Delay values are based on the methodology outlined in the Highway Capacity Manual, (6th Edition).

S = Signalized

U = Unsignalized

TABLE 7
SUMMARY OF ROADWAY ANALYSIS
OPENING YEAR 2026 - EXISTING PLUS GROWTH PLUS PROJECT

Roadway	Segment	LOS D Capacity	Existing ADT	Existing ADT w/ PCE	Existing Plus Growth ADT	Daily Project Traffic	Existing + Growth + Project ADT	LOS D or Better?
Ayala Drive	SR-210 WB Ramps to SR-210 EB Ramps	32,999	28,584	29,790	30,994	526	31,520	Yes
	SR-210 EB Ramps to Renaissance Parkway	32,999	41,020	42,295	44,004	820	44,824	No
	South of Renaissance Parkway	32,999	23,769	24,574	25,065	105	25,170	Yes
	North of Baseline Road	32,999	20,617	21,277	21,703	105	21,808	Yes
Linden Avenue	South of Renaissance Parkway	32,999	13,760	14,316	14,894	1,358	16,252	Yes
	Miro Way to Baseline Road	32,999	10,135	10,549	10,975	746	11,721	Yes
Renaissance Parkway	Linden Avenue to Ayala Drive	32,999	12,599	12,935	13,458	1,158	14,616	Yes

Notes: LOS = Level of Service
ADT = Average Daily Traffic
PCE = Passenger Car Equivalent

C. Cumulative Conditions (Existing Plus Growth Plus Cumulative Projects)

1. Cumulative Projects

In addition to ambient growth, traffic volumes for Cumulative Projects (approved and pending projects) were added to the Existing Plus Growth traffic volumes. Cumulative Projects consist of any project that has been approved and is not yet occupied, and projects that are in various stages of the application and approval process but have not yet been approved.

A summary of Cumulative Projects in the project vicinity and the trip generation associated with each is provided on **Table 8**. The locations of the Cumulative Projects are shown on **Figure 11**. Cumulative Project traffic volumes are shown on **Figure 12**.

2. Background Growth Rate

As discussed earlier, an ambient growth rate of 2.0% per year from Existing Year to Opening Year 2026 was assumed for this analysis.

3. Cumulative Projects Trip Generation

Trip generation information for the Cumulative Projects was derived either from approved traffic studies, where available; or developed by Kimley-Horn if approved traffic studies were not available. Project information and trip generation assumptions for Cumulative Projects are provided in **Appendix D**.

4. Cumulative Projects Trip Distribution and Assignment

Likewise, trip distribution and assignment for the Cumulative Projects were either derived from approved traffic studies, where available; or were developed by Kimley-Horn if approved traffic studies were not available. Trip distribution assumptions for Cumulative Projects are provided in **Appendix D**.

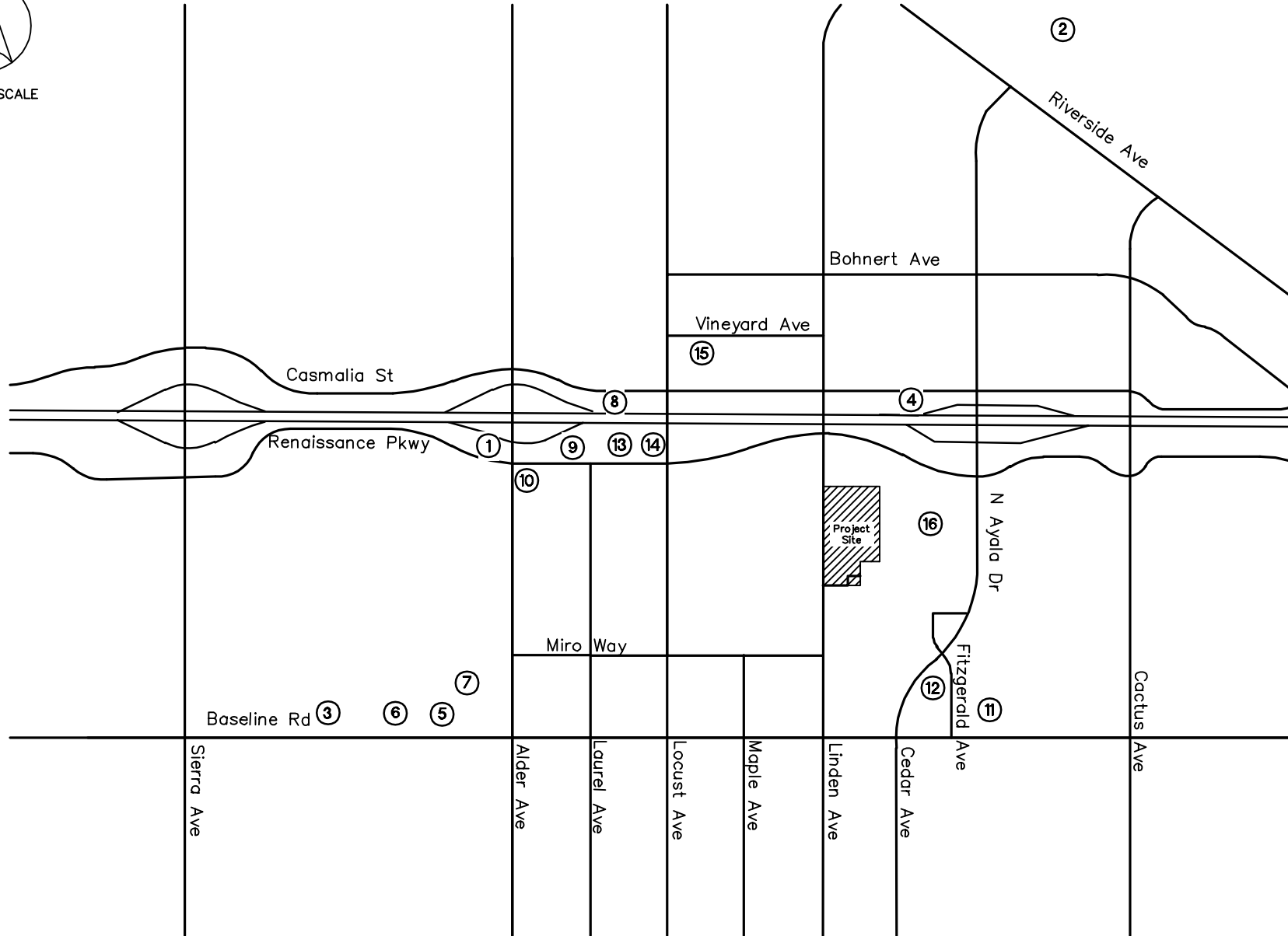
TABLE 8
SUMMARY OF CUMULATIVE PROJECTS

Project #	Land Use	Quantity	Units	Trip Generation Estimates							
				Daily	AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	
1	Stater Bros										
	Hotel	100	ROOMS	817	31	22	53	31	29	60	
	High-Turnover (Sit-Down) Restaurant	2.000	KSF	254	12	11	23	13	9	22	
	Pass-by High-Turn (Sit-Down) Restaurant			-57	0	0	0	-2	-2	-4	
	Fast-Food Restaurant w/o D.T.	1.000	KSF	716	26	18	44	13	13	26	
	Pass-by Fast-Food Restaurant			-161	-6	-4	-10	-3	-3	-6	
	Fast-Food Restaurant w/ D.T.	5.440	KSF	2,699	126	121	247	92	85	177	
	Pass-by Fast-Food Restaurant			-638	-31	-30	-61	-20	-20	-40	
	Gasoline Station w/ Conv. Mkt. & Car Wash	16	VFP	2,445	97	93	190	113	109	222	
	Pass-by Gasoline/Service Station			-572	-21	-21	-42	-26	-26	-52	
	Site Internal Capture (10%)			-693	-29	-27	-56	-26	-25	-51	
2	Lytle Creek SP (10% of Capacity)										
	Single-Family Detached Housing	504	DU	4,823	95	284	379	321	188	509	
	Condominium	336	DU	1,952	25	123	148	117	58	175	
3	B+B Plastics*	150.27	KSF	963	64	17	81	22	64	86	
4	Fuel Station/Fast Food at SWC of Casmalia / Ayala	7.000	KSF	4,419	202	188	390	174	164	338	
5	NWC Baseline / Tamarind Warehouse	156.500	KSF	935	65	18	83	23	65	88	
6	Baseline / Palmetto Warehouse	99.999	KSF	599	41	12	53	13	41	54	
7	Warehouse	78.680	KSF	698	32	31	63	34	35	67	
8	Warehouse	87.189	KSF	524	25	24	49	26	25	51	
9	Animal Hospital*	8.732	KSF	279	24	23	47	23	23	46	
10	Fuel / FF / Market		FUELING POSITIONS	9,993	557	556	1,113	454	454	908	
11	Fuel / Market / Donut		FUELING POSITIONS	3,941	156	155	311	124	123	247	
12	Crow Holdings (N/S Baseline E/O Ayala)	668.524	KSF	1,163	88	26	114	34	93	127	
13	Orbis (NEC Renaissance and Laurel)	135.408	KSF	236	18	5	23	7	19	26	
14	Warehouse II (Baseline and Palmetto NEC)	90.726	KSF	158	12	4	16	5	13	18	
15	Warehouse (2271 Locust Avenue)	191.000	KSF	332	25	7	32	10	27	37	
16	Renaissance Place Residential	435	DU	3,132	65	144	209	141	107	248	
Total Project Trips				38,957	1,699	1,801	3,499	1,713	1,669	3,379	

DU = Dwelling Units, KSF = 1,000 square feet, VFP = Vehicle Fueling Positions, DT = Drive-through



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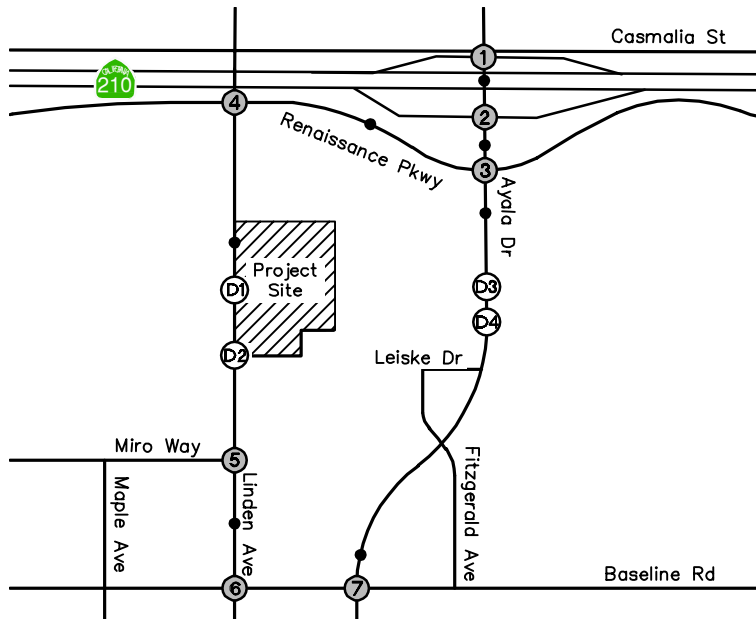


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FIGURE 11
LOCATION OF CUMULATIVE PROJECTS

LEGEND:
 (X) = Cumulative Project





1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	



NOT TO SCALE

LEGEND:

- = Study Intersection
- = Study Roadway Segment
- XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 12
CUMULATIVE PROJECTS
TRAFFIC VOLUMES**



5. Opening Year 2026 Cumulative Without Project Conditions

Peak Hour Operating Conditions

Daily and peak hour traffic volumes for Opening Year 2026 Cumulative Without Project Conditions are shown on **Figure 13**. Intersection Level of Service results are shown on **Table 9**. Review of this table indicates that, with the addition of Cumulative Projects traffic, all study intersections will operate at an acceptable Level of Service.

Copies of intersection analysis worksheets for this scenario are provided in **Appendix C**.

Daily Roadway Operating Conditions

Roadway Level of Service analysis was conducted for Opening Year 2026 Cumulative without Project conditions and the results are shown on **Table 10**. Review of this table indicates that the following study roadway segments will operate at an unacceptable LOS:

- Ayala Drive: SR-210 WB Ramps to SR-210 EB Ramps
- Ayala Drive: SR-210 EB Ramps to Renaissance Parkway

6. Opening Year 2026 Cumulative Plus Project Conditions

Peak Hour Operating Conditions

Project traffic was added to Opening Year 2026 Cumulative traffic volumes to develop Opening Year 2026 Cumulative plus Project traffic forecast volumes. The resulting daily and peak hour traffic volumes are shown on **Figure 14**.

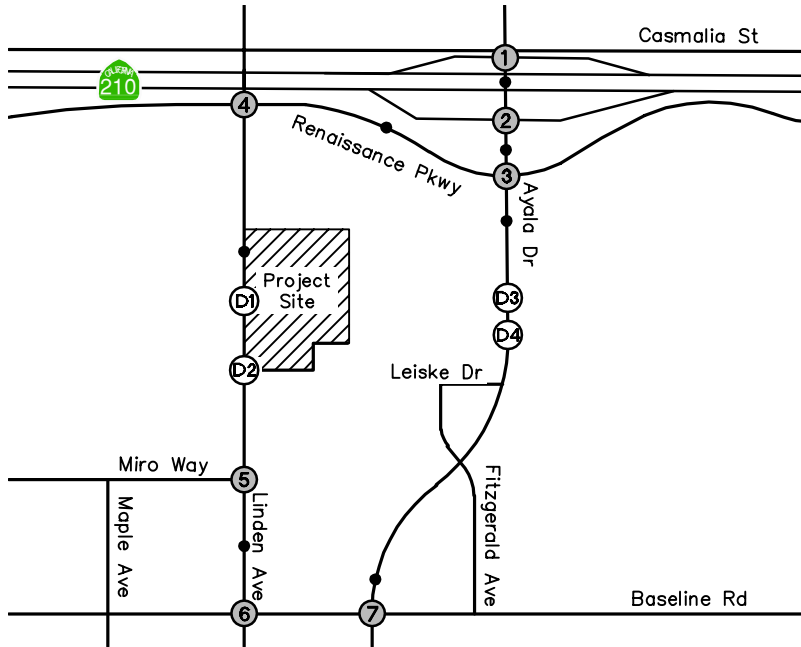
Intersection Level of Service analysis results are shown on **Table 11**. As this table indicates, with the addition of project traffic, none of the study intersections would have a project-related effect attributable to an increase in peak hour delay beyond the measure of significance, or a change in the Level of Service to fall below LOS D.

In this With Project analysis, all project driveways were analyzed. The results indicate that all driveways will operate at an acceptable Level of Service during both peak hours.

Daily Roadway Operating Conditions

Roadway Level of Service analysis results for Opening Year 2026 Cumulative Plus Project conditions are shown on **Table 12**. Review of this table indicates that the following study roadway segments would operate at an unacceptable LOS:

- Ayala Drive: SR-210 WB Ramps to SR-210 EB Ramps
- Ayala Drive: SR-210 EB Ramps to Renaissance Parkway



1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
			FUTURE INTERSECTION
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	
FUTURE INTERSECTION	FUTURE INTERSECTION	FUTURE INTERSECTION	



NOT TO SCALE

LEGEND:

- = Study Intersection
- = Study Roadway Segment
- XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 13
OPENING YEAR 2026 - CUMULATIVE WITHOUT
PROJECT TRAFFIC VOLUMES**



TABLE 9
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2026 CUMULATIVE WITHOUT PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	Ayala Drive at SR-210 WB Ramps	S	32.4	C	31.0	C
2	Ayala Drive at SR-210 EB Ramps	S	20.4	C	30.9	C
3	Ayala Drive at Renaissance Parkway	S	22.8	C	34.3	C
4	Linden Avenue at Renaissance Parkway	S	30.7	C	36.3	D
5	Linden Avenue at Miro Way	S	7.9	A	10.4	B
6	Linden Avenue at Baseline Road	S	26.9	C	36.2	D
7	Ayala Drive at Baseline Road	S	32.0	C	35.2	D
D1	Linden Avenue at North Project Driveway	FUTURE INTERSECTION				
D2	Linden Avenue at South Project Driveway	FUTURE INTERSECTION				
D3	Ayala Drive at Scholl Way	FUTURE INTERSECTION				
D4	Ayala Drive at Project Driveway	FUTURE INTERSECTION				

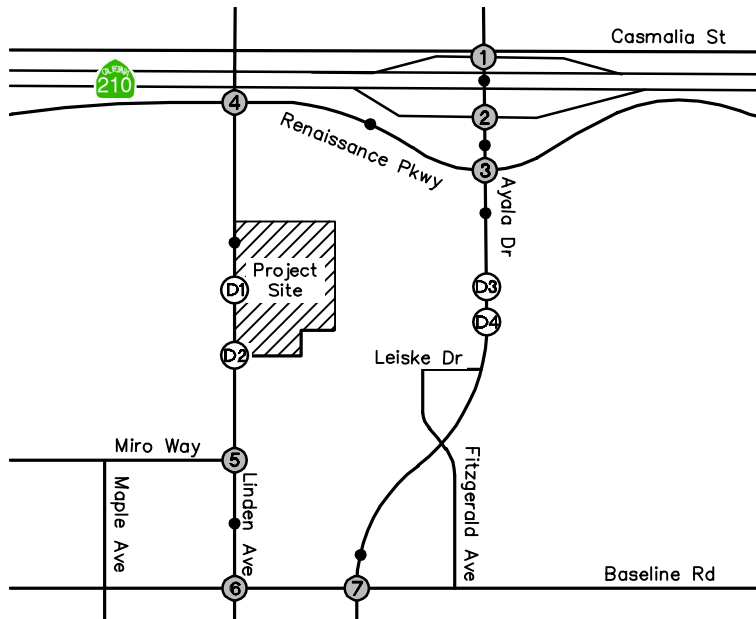
Notes:

- Bold and shaded values indicate intersections operating at LOS E or F or significant impact to intersection per City standards.
 - At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
 - At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst (highest delay) movement.
 - Delay values are based on the methodology outlined in the Highway Capacity Manual, (7th Edition).
- S = Signalized
U = Unsignalized

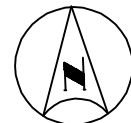
TABLE 10
SUMMARY OF ROADWAY ANALYSIS
OPENING YEAR 2026 CUMULATIVE WITHOUT PROJECT

Roadway	Segment	LOS D Capacity	Existing Plus Growth ADT	Cumulative Projects ADT	Opening Year + Cum. Projects ADT	LOS D or Better?
Ayala Drive	SR-210 WB Ramps to SR-210 EB Ramps	32,999	30,994	6,615	37,609	No
	SR-210 EB Ramps to Renaissance Parkway	32,999	44,004	6,410	50,414	No
	South of Renaissance Parkway	32,999	25,065	3,210	28,275	Yes
	North of Baseline Road	32,999	21,703	3,210	24,913	Yes
Linden Avenue	South of Renaissance Parkway	32,999	14,894	35	14,929	Yes
	Miro Way to Baseline Road	32,999	10,975	35	11,010	Yes
Renaissance Parkway	Linden Avenue to Ayala Drive	32,999	13,458	3,200	16,658	Yes

Notes: LOS = Level of Service
ADT = Average Daily Traffic



1. Ayala Dr at SR-210 WB Ramps	2. Ayala Dr at SR-210 EB Ramps	3. Ayala Dr at Renaissance Pkwy	4. Linden Ave at Renaissance Pkwy
5. Linden Ave at Miro Way	6. Linden Ave at Baseline Rd	7. Ayala Dr at Baseline Rd	D1. Linden Ave at North Project Driveway
D2. Linden Ave at South Project Driveway	D3. Ayala Drive at Scholl Way	D4. Ayala Drive at Project Driveway	



NOT TO SCALE

LEGEND:

- ⊗ = Study Intersection
- = Study Roadway Segment
- XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 14
OPENING YEAR 2026 CUMULATIVE PLUS PROJECT
TRAFFIC VOLUMES**

TABLE 11
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2026 CUMULATIVE PLUS PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Effect	Sig Effect?	Without Project		With Project		Project Effect	Sig Effect?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	Ayala Drive at SR-210 WB Ramps	S	32.4	C	32.9	C	0.5	No	31.0	C	31.8	C	0.8	No
2	Ayala Drive at SR-210 EB Ramps	S	20.4	C	20.4	C	0.0	No	30.9	C	31.9	C	1.0	No
3	Ayala Drive at Renaissance Parkway	S	22.8	C	23.1	C	0.3	No	34.3	C	37.8	D	3.5	No
4	Linden Avenue at Renaissance Parkway	S	30.7	C	30.6	C	-0.1	No	36.3	D	37.8	D	1.5	No
5	Linden Avenue at Miro Way	S	7.9	A	7.6	A	-0.3	No	10.4	B	10.1	B	-0.3	No
6	Linden Avenue at Baseline Road	S	26.9	C	27.5	C	0.6	No	36.2	D	39.0	D	2.8	No
7	Ayala Drive at Baseline Road	S	32.0	C	32.3	C	0.3	No	35.2	D	35.4	D	0.2	No
D1	Linden Avenue at North Project Driveway	U	N/A		8.5	A	N/A		N/A		10.7	B	N/A	
D2	Linden Avenue at South Project Driveway	U	N/A		18.0	C	N/A		N/A		20.7	C	N/A	
D3	Ayala Drive at Scholl Way	U	N/A		6.6	A	N/A		N/A		6.3	A	N/A	
D4	Ayala Drive at Project Driveway	U	N/A		13.3	B	N/A		N/A		12.4	B	N/A	

Notes:

- Bold and shaded values indicate intersections operating at LOS E or F or significant impact to intersection per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At a two-way stop-controlled intersection, delay refers to the average vehicle delay on the worst (highest delay) movement.
- Delay values are based on the methodology outlined in the Highway Capacity Manual, (7th Edition).

S = Signalized

U = Unsignalized

TABLE 12
SUMMARY OF ROADWAY ANALYSIS
OPENING YEAR 2026 CUMULATIVE PLUS PROJECT

Roadway	Segment	LOS D Capacity	Opening Year + Cum. Projects ADT	Daily Project Traffic	Opening Year + Cum. Project + Project ADT	LOS D or Better?
Ayala Drive	SR-210 WB Ramps to SR-210 EB Ramps	32,999	37,609	526	38,135	No
	SR-210 EB Ramps to Renaissance Parkway	32,999	50,414	820	51,234	No
	South of Renaissance Parkway	32,999	28,275	105	28,380	Yes
	North of Baseline Road	32,999	24,913	105	25,018	Yes
Linden Avenue	South of Renaissance Parkway	32,999	14,929	1,358	16,287	Yes
	Miro Way to Baseline Road	32,999	11,010	746	11,756	Yes
Renaissance Parkway	Linden Avenue to Ayala Drive	32,999	16,658	1,158	17,816	Yes

Notes: LOS = Level of Service
ADT = Average Daily Traffic

IV. RECOMMENDED IMPROVEMENTS

A. Intersection Improvements

Based on the significance thresholds and LOS standards presented in the report, none of the study intersections require intersection improvements.

B. Roadway Improvements

The following study roadway segments would exceed their daily LOS D roadway capacity based on a four-lane cross-section:

- Ayala Drive: SR-210 WB Ramps to SR-210 EB Ramps
- Ayala Drive: SR-210 EB Ramps to Renaissance Parkway

It should be noted that Ayala Drive is currently built to its ultimate roadway configuration as a Secondary Arterial, with two through lanes in each direction at these roadway segments.

However, when the turn lane capacity is included at these segments, these segments would have the daily capacity of a six-lane roadway (49,499). When analyzed with the daily capacity of a six-lane roadway, the roadway segment of Ayala Drive: SR-210 WB Ramps to SR-210 EB Ramps is expected to operate at LOS D or better.

V. VEHICLE MILES TRAVELED ANALYSIS

A. Introduction

Senate Bill 743 (SB 743) was approved by California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor’s Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular “Level of Service” (LOS) for evaluating transportation projects. OPR has prepared a technical advisory (“OPR Technical Advisory”) for evaluating transportation impacts in CEQA and has recommended that Vehicle Miles Traveled (VMT) replace LOS as the primary measure of transportation impacts. The Natural Resources Agency has adopted updates to CEQA Guidelines to incorporate SB 743 that requires VMT for the purposes of determining a significant transportation impact under CEQA.

B. VMT Analysis

In September 2016, LSA analyzed trip generation estimates and traffic impacts associated with the Renaissance Specific Plan Amendment. Level of service was the applicable threshold when the City approved the RSPA in 2016. The mandate requiring lead agencies to use VMT as a threshold for evaluating traffic impacts was adopted in 2018 and effective in 2020. It does not constitute “new information” requiring additional environmental review nor does it affect the assessment of project environmental impacts or mitigation measures compared to those analyzed in the Renaissance Specific Plan Amendment. The project will comply with all previous conditions of approval for the Renaissance Specific Plan Amendment, including Mitigation Monitoring and Reporting Plan (MMRP), and no changes are proposed.

As noted previously the project trip generation table (see Table 3), compared to the assumed Planning Area land use for the project site, the proposed project would generate 903 fewer trips on a daily basis, with 92 fewer trips in the morning peak hour, and 129 fewer trips in the evening peak hour.

The proposed project would generate significantly less trips than the land use assumptions noted in the RSPA Traffic Impact Analysis (September 20, 2016) for the project site. The proposed project would not change the Specific Plan DEIR determination regarding impacts associated with increased traffic volumes. Therefore, the proposed project would create a less-than-significant VMT impact, and no further analysis is required. A VMT Analysis Memo has been provided in **Appendix E**.

VI. FINDINGS AND RECOMMENDATIONS

A. Site Circulation

Primary vehicular access provisions for the project site would consist of the following:

- Two proposed full-movement driveways on Linden Avenue

Secondary vehicular access provisions for the project site would consist of the following two driveways from the adjacent proposed residential development to the east.

- One proposed full-movement driveway on Ayala Drive
- One proposed exit-only driveway on Ayala Drive

The cumulative intersection analysis for the With Project condition indicates that all project driveways will operate at acceptable Level of Service during both peak hour periods.

Bicycle racks will be provided within the recreation area of the project site. Pedestrian facilities such as sidewalks will be provided on site.

B. Safety and Operational Improvements

The site driveways and project improvements must be designed so that adequate sight distance for drivers entering and exiting the site is maintained.

The line of sight – a straight line between the driver’s eye and oncoming vehicles on the adjacent roadway defines the Limited Use Area. The Limited Use Area for each driveway must be kept clear of visual obstructions, including project signs, building structures, and landscaping, in order to maintain adequate sight distance.

C. Specific Plan Signalization

Not Applicable.

D. General Plan Conformance

The proposed Renaissance Place Residential project is anticipated to conform on the Renaissance Specific Plan and the City of Rialto General Plan.

APPENDIX A

APPROVED SCOPING AGREEMENT



Exhibit A

SCOPING AGREEMENT FOR TRAFFIC IMPACT ANALYSIS

This following form shall be used to acknowledge preliminary approval of the scope for the traffic impact analysis (TIA) of the following project. The TIA must follow the City of Rialto Traffic Impact Analysis – Report Guidelines and Requirements, adopted by the City Council on _____.

City of Rialto

Traffic Impact Analysis

Scoping Agreement

Case No. MC 2024-0028

Related Cases -

SP No. TTM 2024-0002

EIR No. _____

GPA No. _____

ZC No. PPD 2024-0024

Project Name: Renaissance II Residential Project (See Attachment 1 - Site Plan)

Project Address: East side of Linden Ave, approx 900 ft south of Renaissance Pkwy

Project Description: 292 Single-Family Attached and Detached Dwelling Units

Consultant

Developer

Name: Kimley-Horn and Associates, Inc.

Lewis Community Developers

Address: 3880 Lemon St #420, Riverside, CA 92501

1156 N. Mountain Ave. Upland, CA 91785

Telephone: (951) 543-9868

(909) 985-0971

Fax: _____



1. **Trip Generation Source:** ITE Trip Generation Manual, 11th Edition

Existing GP Land Use Vacant Proposed Land Use Single-Family Residential

Current Zoning: Rialto RSP - MHDR, LDR, MDR Proposed Zoning: MDR (12.5 du/ac)

Total Daily Project Trips: 2,102 **(See Attachment 2)**

	Current Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>44</u>	<u>97</u>	<u>141</u>
PM Trips	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>95</u>	<u>72</u>	<u>167</u>
Internal Trip Allowance	Yes	<u>No</u>	(<u> </u> % Trip Discount)			
Pass-By Trip Allowance	Yes	<u>No</u>	(<u> </u> % Trip Discount)			

For appropriate land uses, a pass-by trip discount may be allowed not to exceed 25%. Discount trips shall be indicated on a report figure for intersections and access locations.

2. **Trip Geographic Distribution:** N 15 % S 0 % E 50 % W 35 %

(Detailed exhibits of trip distribution must be attached with Trucks as a separate exhibit)
(See Attachment 3)

3. **Background Growth Traffic**

Project Completion Year: 2026 Annual Background Growth Rate: 2 %

Other Phase Years N/A

Other area projects to be considered: We will request the Cumulative Projects list from the Planning Department

(Contact Planning for Lists. Correlate projects to exhibit map and also indicate which projects have been included in study area forecasts for existing + background growth + project + cumulative)

Model/Forecast methodology: Existing + Growth + Cumulative Projects + Project to Opening Year

4. **Study Intersections:** (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies received.)

- | | |
|--|--|
| 1. <u>Ayala Drive at SR-210 WB Ramps</u> | 6. <u>Linden Avenue at Baseline Road</u> |
| 2. <u>Ayala Drive at SR-210 EB Ramps</u> | 7. <u>Ayala Drive at Baseline Road</u> |
| 3. <u>Ayala Drive at Renaissance Parkway</u> | 8. <u>Linden Avenue at North Project Driveway</u> |
| 4. <u>Linden Avenue at Renaissance Parkway</u> | 9. <u>Linden Avenue at South Project Driveway</u> |
| 5. <u>Linden Avenue at Miro Way</u> | 10. <u>Ayala Drive at Scholl Way (Project Access)</u> |
| | 11. <u>Ayala Drive at Project Driveway (Exit-Only)</u> |



5. Study Roadway Segments: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies received.)

- | | |
|--|--|
| 1. <u>Ayala Drive: SR-210 WB Ramps to SR-210 EB Ramps</u> | 6. <u>Ayala Drive: Renaissance Parkway to Project Access</u> |
| 2. <u>Ayala Drive: SR-210 EB Ramps to Renaissance Parkway</u> | 7. <u>Ayala Drive: Project Access to Baseline Road</u> |
| 3. <u>Linden Avenue: Renaissance Parkway to Project Access</u> | 8. _____ |
| 4. <u>Linden Avenue - Miro Way to Baseline Road</u> | 9. _____ |
| 5. <u>Renaissance Parkway - Linden Avenue to Ayala Drive</u> | 10. _____ |

6. Other Jurisdictional Impacts

Is this project within any other Agency's Sphere of Influence or within one-mile of another jurisdictional boundary?

_____ **YES**
 _____ **NO**

If so, name of Jurisdiction: City of Fontana

7. Site Plan (please attach 11" x 17" legible copy) **See Attachment A**

8. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (to be filled out by the City of Rialto Public Works Department) (NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing un-signalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

9. Existing Conditions

Traffic count data must be new or within one year. Provide traffic count dates if using other than new counts.

Date of counts: _____

NOTE Fees are due and must be submitted with, or prior to submittal of this form. The City will not process the Scoping Agreement prior to the receipt of the processing fee.

Fees Paid: _____ Date _____



Recommended:

Scoping Agreement Submittal date 09/25/2024

Scoping Agreement Resubmittal date 03/21/2025

Kimley-Horn and Associates, Inc. 03/21/2025

Applicant/Engineer Date

Land Use Concurrence:

Development Services Department Date

Approved by:

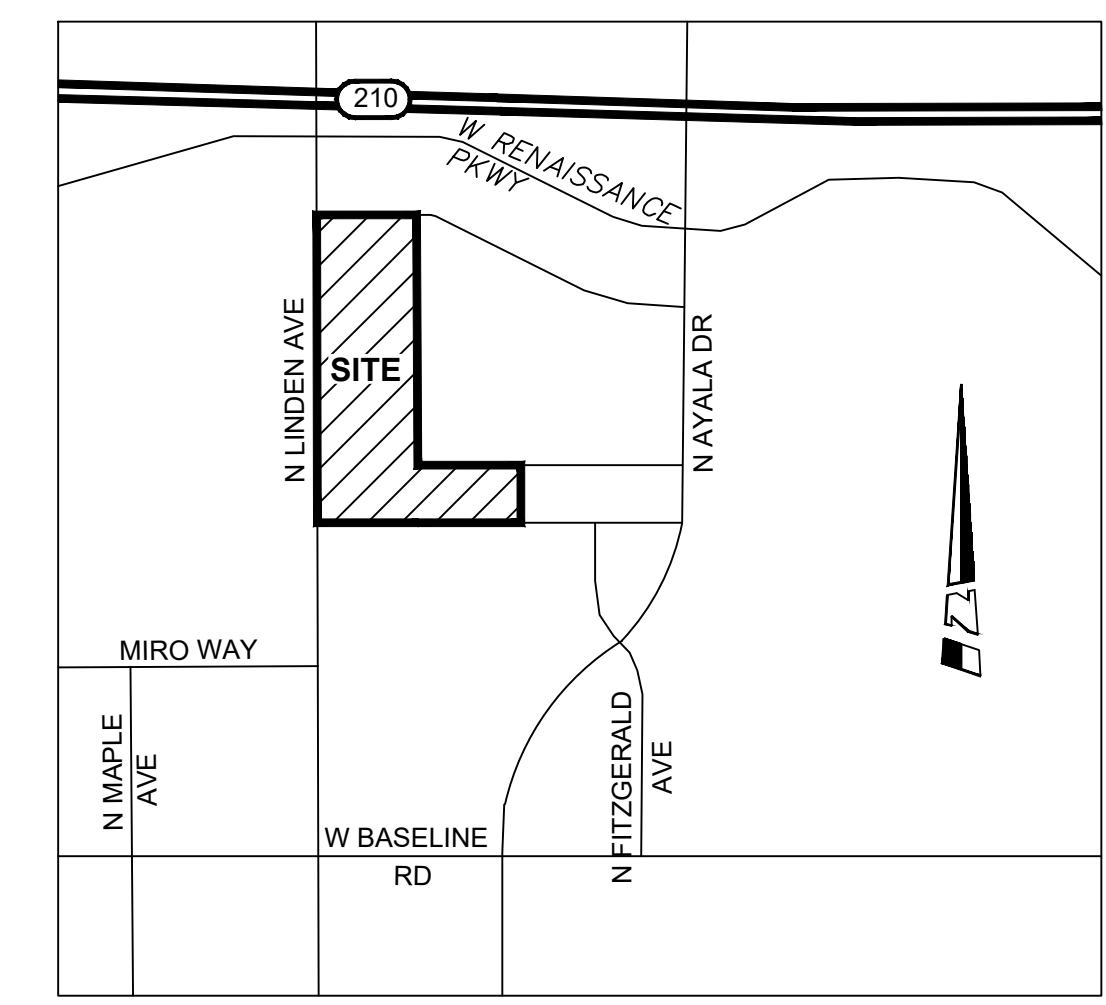
Justin P. Schlaefli *Justin Schlaefli* 5/6/2025

Public Works Department Date

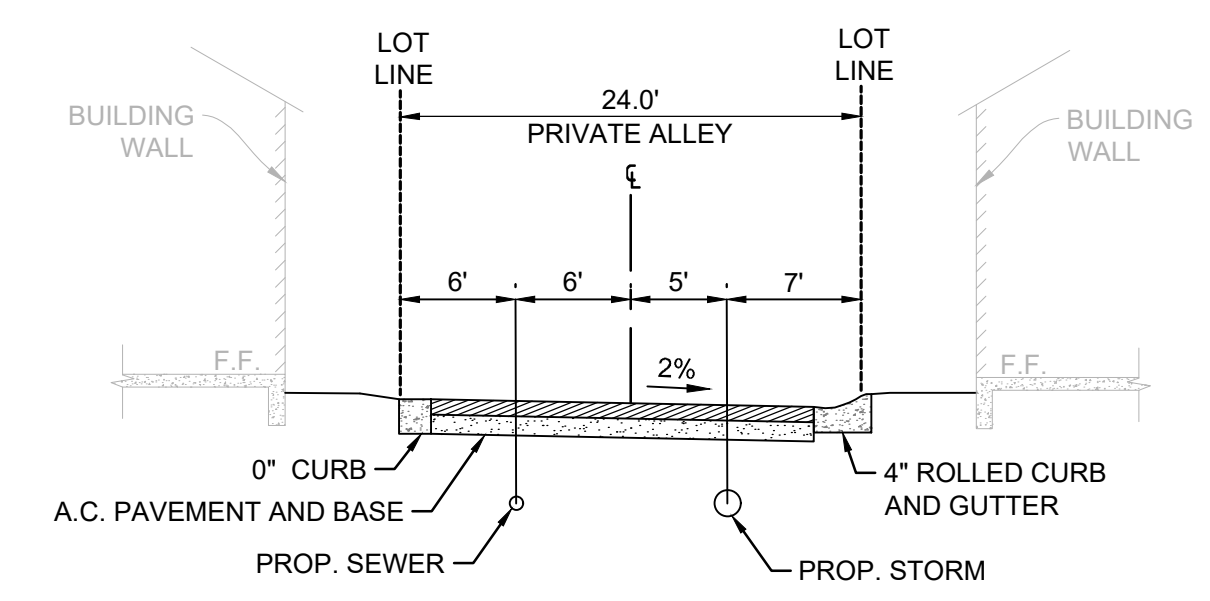
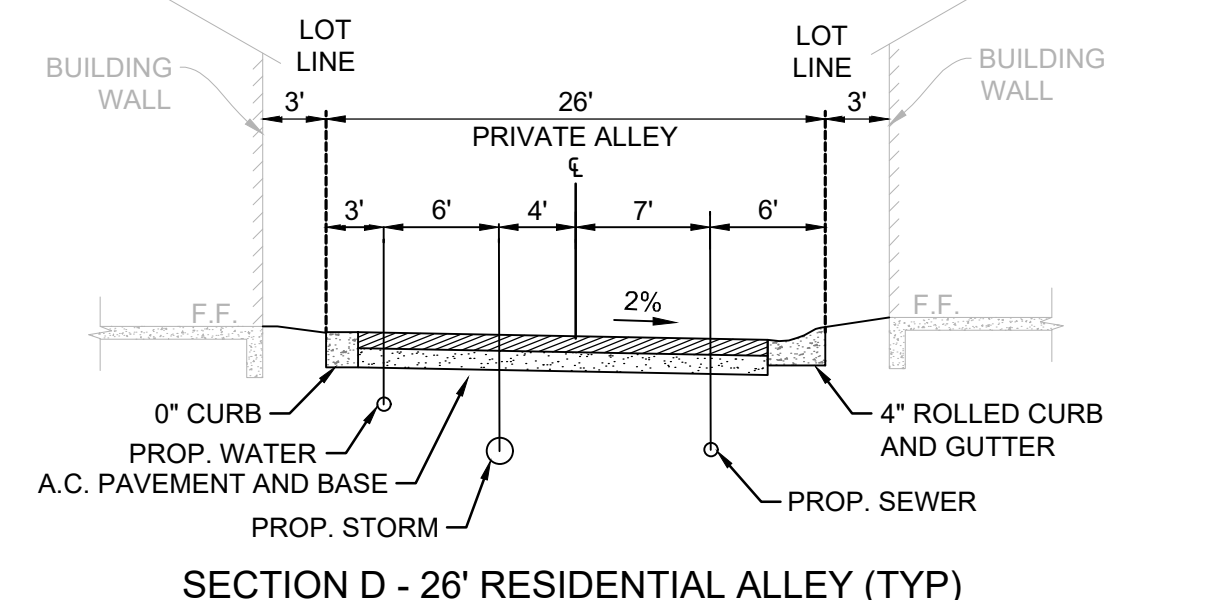
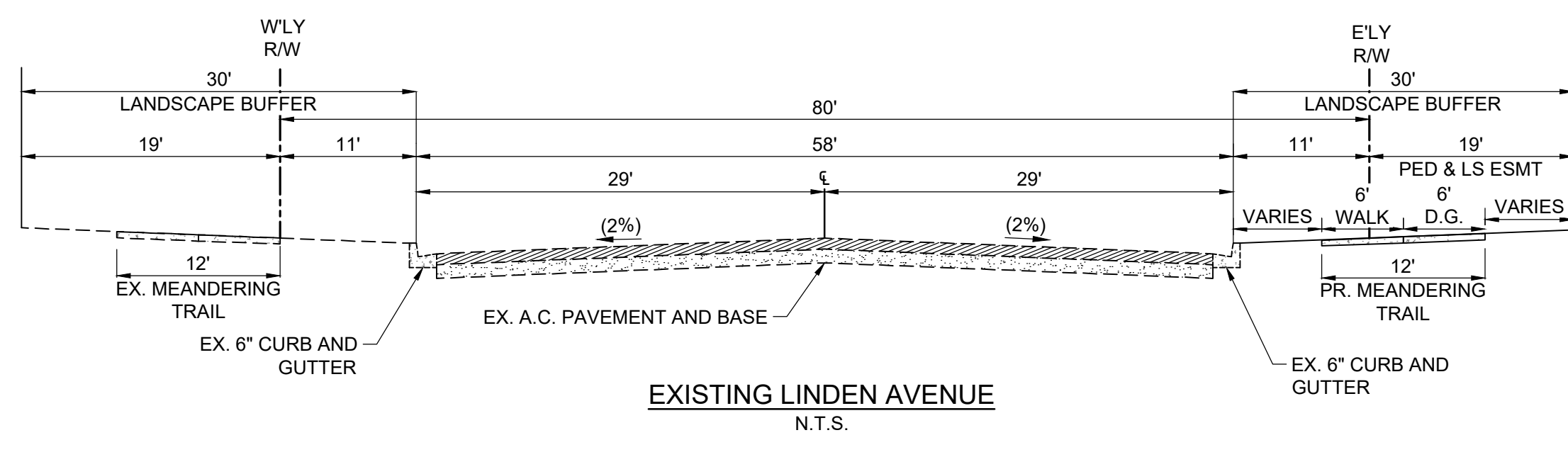
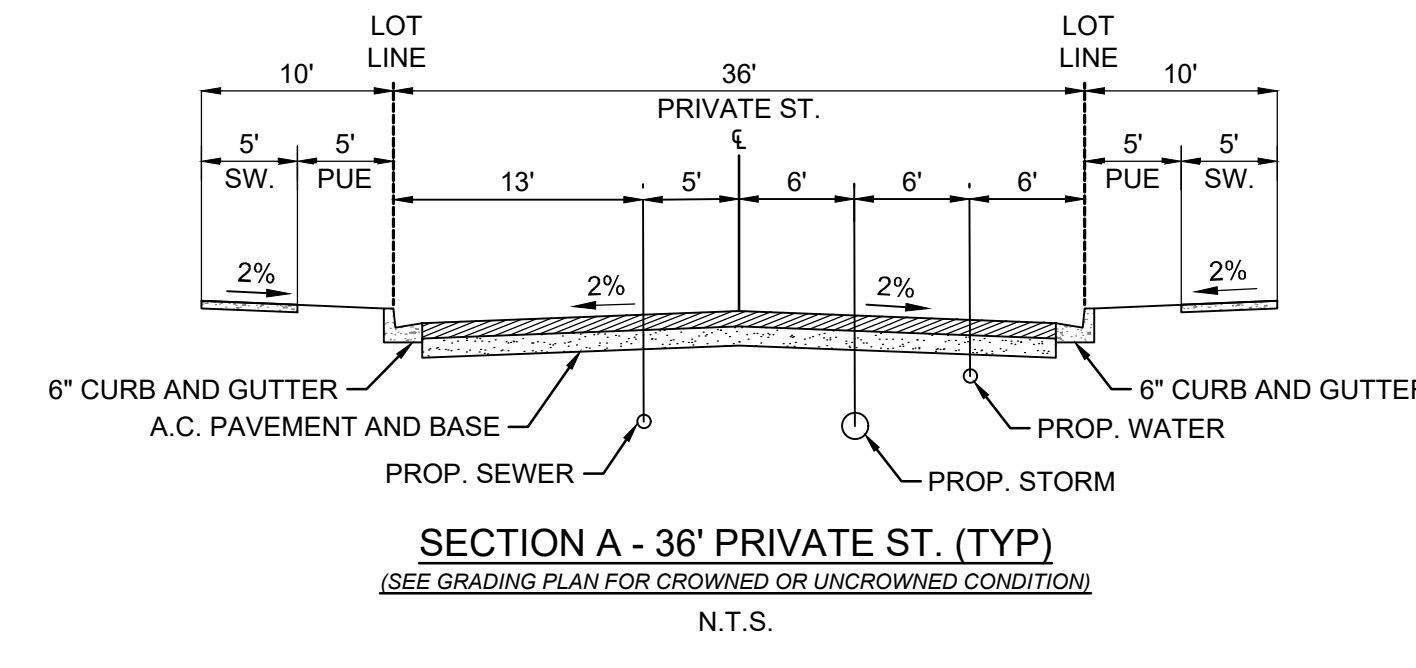
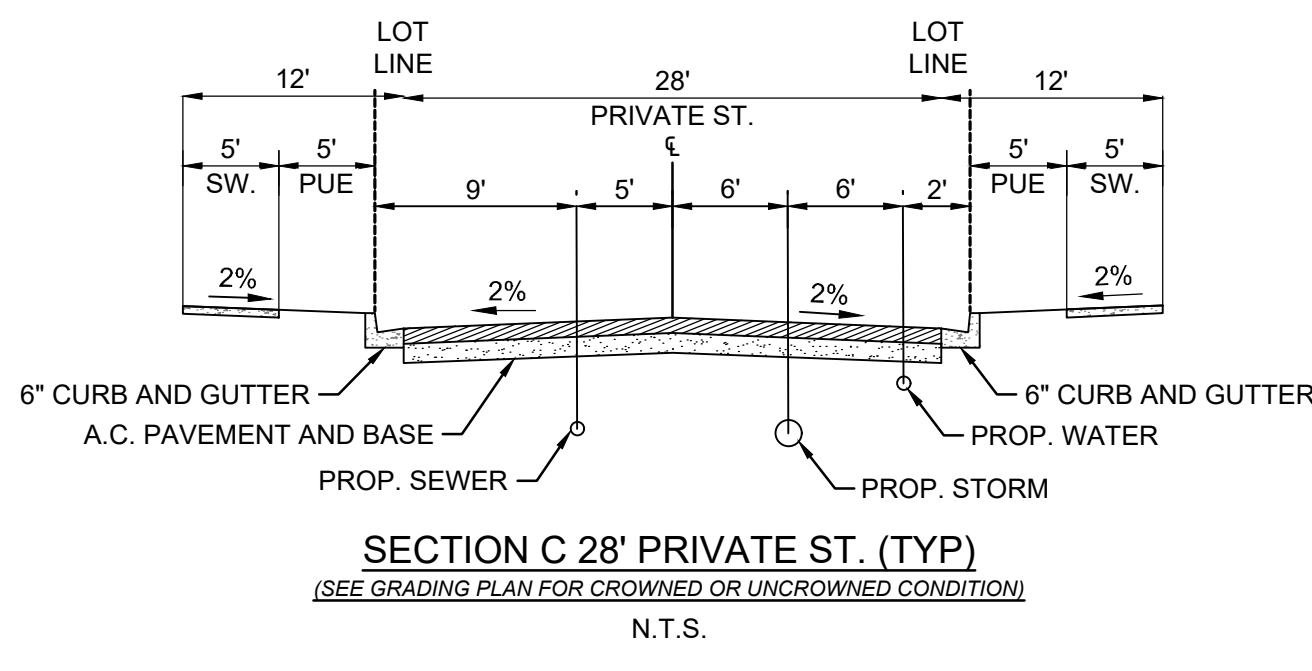
NOTE:

The Applicant/Engineer acknowledges that the Scoping Agreement is intended to assist in the preparation of any required TIA. It is preliminary in nature and the City does not have sufficient data to determine the ultimate conditions that may be imposed for the project. It does not provide nor limit the requirements imposed on the Project but is intended only to provide initial input into the parameters for review of the traffic generated by the Project and the initial areas to be considered and studied. Subsequent changes to scope of required analysis to be included in the TIA may be required by the Transportation Commission, Planning Commission, and/or the City Council upon Public Works Director/City Engineer review and approval.

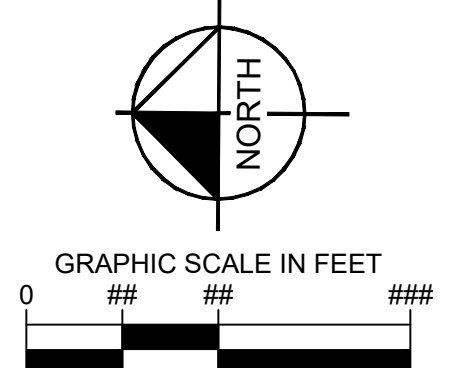
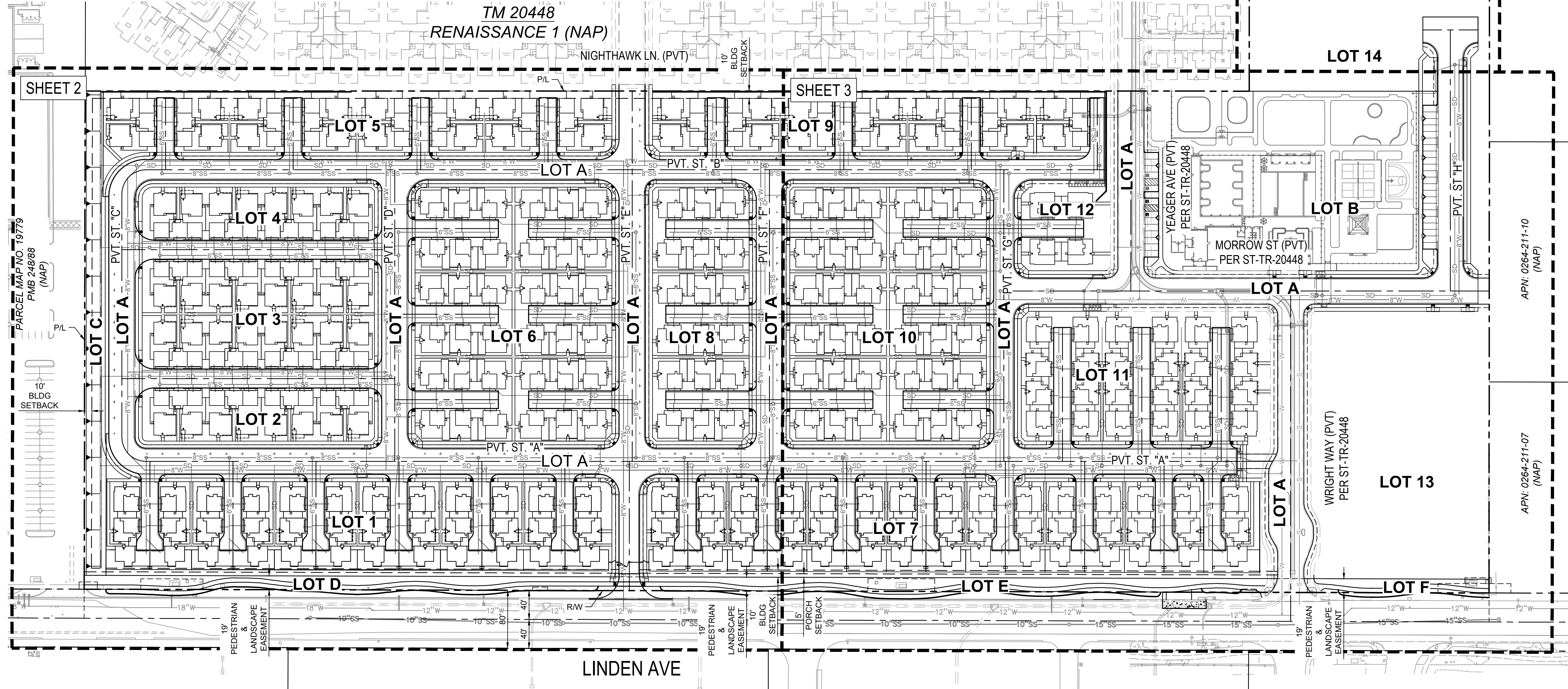
ATTACHMENT 1 - PROJECT SITE PLAN



VICINITY MAP



- ABBREVIATIONS
- AC ACRES
 - APN ASSESSOR'S PARCEL NUMBER
 - DG DECOMPOSED GRAVEL
 - ESMT EASEMENT
 - EX EXISTING
 - LL LOT LINE
 - LS LANDSCAPE
 - PED PEDESTRIAN
 - PL PROPERTY LINE
 - PR PROPOSED
 - PUE PUBLIC UTILITY EASEMENT
 - R/W RIGHT-OF-WAY
 - SF SQUARE FEET
 - TYP TYPICAL



Prepared by: Smith, Kevin (San Diego) Sheet Set: Rha Layout: 1 PRELIMINARY SITE PLAN February 17, 2024 09:53:02am K:\SND\DEV\095968142 - Lewis Renaissance\CAD\preliminary\precise site plan\PRECISE SITE PLAN - COVER.dwg
 This document, together with the contracts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of any information contained herein without the written authorization of Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

UNDERGROUND SERVICE ALERT

call: TOLL FREE
1-800-422-4133

TWO WORKING DAYS BEFORE YOU DIG

MARK	REVISIONS	APPR.	DATE
DESIGNED BY: KPS	DRAWN BY: MS	CHECKED BY: RO	

SEAL-DESIGN ENGINEER

PRELIMINARY

FOR REVIEW ONLY
Prepared for Concept Plan submittal
Not for construction purposes or permits.

Kimley-Horn

Kevin Patrick Smith
RCE No. 34289 exp. 2/17/2025

PREPARED UNDER THE SUPERVISION OF:

KEVIN PATRICK SMITH, RCE 94269	2/17/2025
DATE	
RECOMMENDED FOR APPROVAL BY ENGINEERING RESOURCES OF SOUTHERN CALIFORNIA:	
JOHN M. BRUDIN, RCE No. 41836	2/17/2025
DATE	
APPROVED BY:	
MICHAEL ACKERMAN, ACTING CITY ENGINEER, RCE 64663	2/17/2025
DATE	

Kimley-Horn

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BENCHMARK: CITY OF RIALTO No. 061-88 Elev: 1466.765 (NAV '29)

DESCRIPTION:
FD CAL-TRANS BRASS DISC SET IN TOP OF CURB AT END NORTHWEST RETURN 32 FT. NORTH OF CENTERLINE CASMALIA 67 FT WEST OF CENTERLINE AYALA

401 B STREET, SUITE 600
SAN DIEGO, CA 92101
PHONE: 619-234-9411
WWW.KIMLEY-HORN.COM

CITY OF RIALTO
TTM NO 20737
LEWIS RENAISSANCE 2
PRECISE SITE PLAN

SHEET
1
OF 3 SHEETS

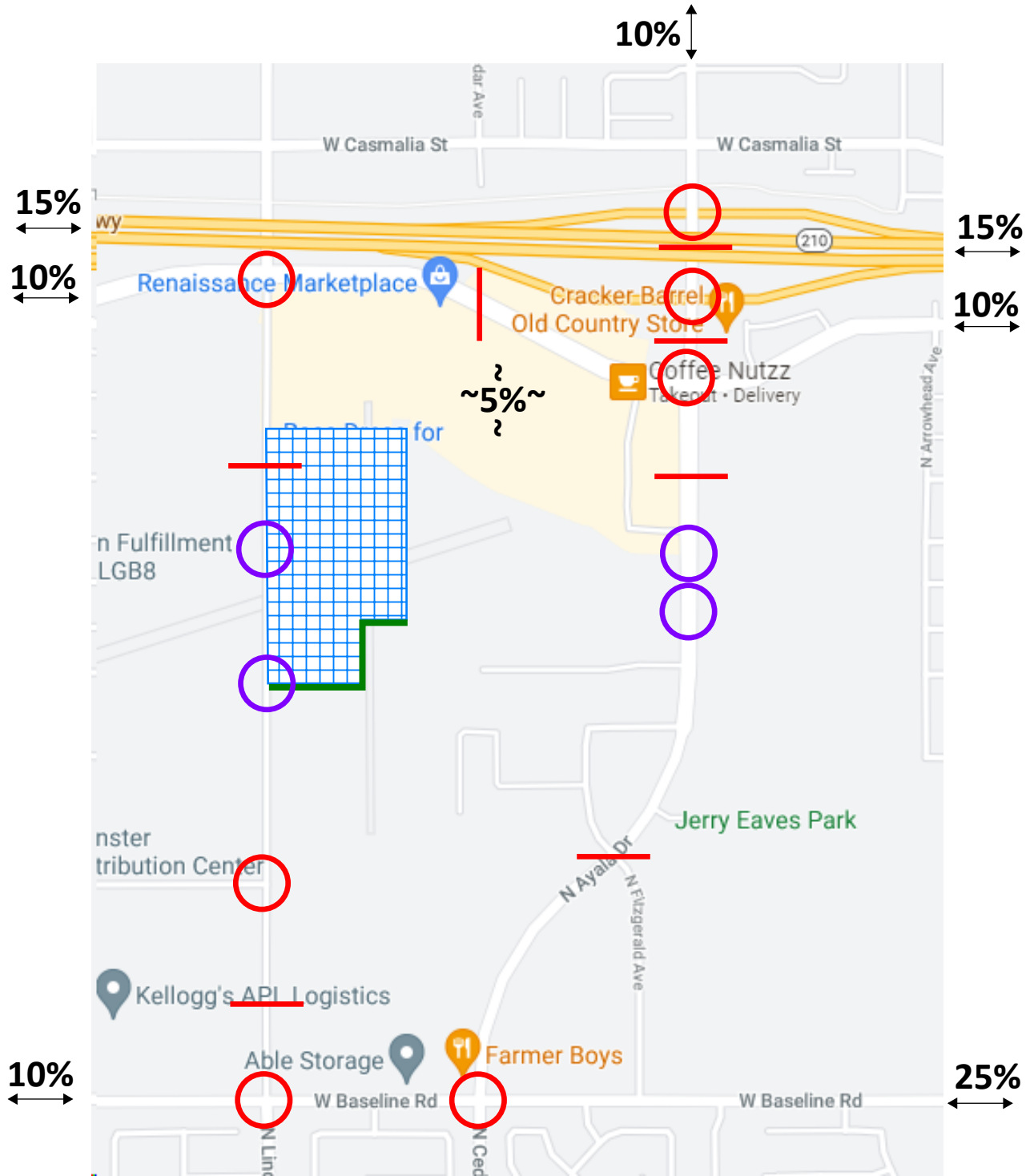
FOR: LEWIS RENAISSANCE 2 TTM 20737 PLAN No. _____

ATTACHMENT 2
SUMMARY OF PROJECT TRIP GENERATION
RENAISSANCE II RESIDENTIAL PROJECT

Land Use	ITE Code	Unit	Trip Generation Rates ¹						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Attached Housing	215	DU	7.200	0.149	0.331	0.48	0.325	0.245	0.57
Land Use	Quantity	Unit	Trip Generation Estimates						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Attached Housing	292	DU	2,102	44	97	141	95	72	167
Total Project Trips			2,102	44	97	141	95	72	167

¹ Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

ATTACHMENT 3-A RENAISSANCE II PLACE RESIDENTIAL - TRIP DISTRIBUTION AND SUGGESTED STUDY AREA



STUDY INTERSECTION



PROJECT ACCESS



STUDY ROADWAY SEGMENT



PROJECT TRIP DISTRIBUTION



FUTURE ROADWAY CONNECTION



PROJECT SITE

APPENDIX B

TRAFFIC COUNT DATA SHEETS

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 10/8/24 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Rialto N Ayala Dr SR-210 WB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4945 1 SIGNAL
-----------------------------	---	---	---------------------------------------	-----------------------

PCE	Adjusted	NOTES:						AM PM MD OTHER OTHER	W	N S	E
		Class	1	2	3	4	5				
				1.5							

LANES:	NORTHBOUND N Ayala Dr			SOUTHBOUND N Ayala Dr			EASTBOUND SR-210 WB Ramps			WESTBOUND SR-210 WB Ramps			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL
	2	2	X	X	2	0	X	X	X	1.3	0.3	1.3						

		NORTHBOUND						SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	
		N Ayala Dr			N Ayala Dr			SR-210 WB Ramps			SR-210 WB Ramps							
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR					
		2	2	X	X	2	0	X	X	X	1.3	0.3	1.3					
AM	7:00 AM	159	43	0	0	88	82	0	0	0	120	0	36				528	
	7:15 AM	124	66	0	0	121	94	0	0	0	167	0	67				638	
	7:30 AM	143	76	0	0	103	74	0	0	0	111	0	81				587	
	7:45 AM	99	76	0	0	121	105	0	0	0	159	0	87				646	
	8:00 AM	120	80	0	0	111	81	0	0	0	89	2	81				563	
	8:15 AM	116	69	0	0	126	54	0	0	0	123	0	57				544	
	8:30 AM	111	59	0	0	124	64	0	0	0	100	1	50				509	
	8:45 AM	103	46	0	0	105	59	0	0	0	109	1	38				460	
	VOLUMES		972	515	0	0	898	612	0	0	0	978	4	494				4,472
	APPROACH %		65%	35%	0%	0%	59%	41%	0%	0%	0%	66%	0%	33%				
	APP/DEPART		1,487	/	1,009	1,510	/	1,876	0	/	0	1,476	/	1,588				0
	BEGIN PEAK HR		7:15 AM															
	VOLUMES		484	298	0	0	456	353	0	0	0	526	2	315				2,433
	APPROACH %		62%	38%	0%	0%	56%	44%	0%	0%	0%	62%	0%	37%				
	PEAK HR FACTOR		0.894															
APP/DEPART		782	/	612	809	/	982	0	/	0	843	/	839				0	
PM	4:00 PM	112	135	0	0	174	56	0	0	0	180	0	79				735	
	4:15 PM	126	109	0	0	123	55	0	0	0	191	0	55				659	
	4:30 PM	130	105	0	0	126	59	0	0	0	164	5	81				668	
	4:45 PM	114	101	0	0	102	57	0	0	0	163	0	86				622	
	5:00 PM	133	107	0	0	111	41	0	0	0	186	1	71				649	
	5:15 PM	115	85	0	0	87	62	0	0	0	146	0	49				544	
	5:30 PM	143	109	0	0	61	55	0	0	0	179	1	61				608	
	5:45 PM	133	101	0	0	105	43	0	0	0	187	1	75				644	
	VOLUMES		1,006	851	0	0	888	426	0	0	0	1,395	8	556				5,128
	APPROACH %		54%	46%	0%	0%	68%	32%	0%	0%	0%	71%	0%	28%				
	APP/DEPART		1,856	/	1,407	1,314	/	2,283	0	/	0	1,958	/	1,439				0
	BEGIN PEAK HR		4:00 PM															
	VOLUMES		482	449	0	0	525	226	0	0	0	697	5	301				2,683
	APPROACH %		52%	48%	0%	0%	70%	30%	0%	0%	0%	70%	0%	30%				
	PEAK HR FACTOR		0.942															
APP/DEPART		931	/	750	750	/	1,222	0	/	0	1,002	/	712				0	

														0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AMTD LLC, Tel: 714 253 7888 cs@amtd.com

LOCATION: Rialto
N Avila Dr
SR-210 EB Ramps

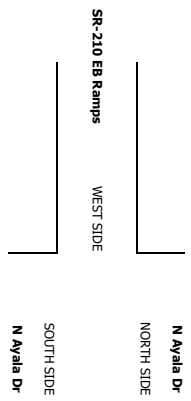
PROJECT #: SC4945
LOCATION #: 2
CONTROL: SIGNAL

DATE: 10/8/24
TUESDAY

PCE	NOTES:								PRT	N	E
	CLASS	1	2	3	4	5	6	7			
Adjusted	Factor	1	1.5	2	3	2	2		W	S	

LANES:	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				U-TURNS			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	WL	WT	WR	TTL				
	X	2	1	2	2	X	1.3	0.3	1.3	X	X	X								

TIME	APPROACH %	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	WL	WT	WR		
7:00 AM	0	165	140	50	158	0	17	1	89	0	0	0	0	0	0	619		
7:15 AM	0	170	121	85	203	0	40	1	106	0	0	0	0	0	0	725		
7:30 AM	0	162	135	68	146	0	38	0	105	0	0	0	0	0	0	653		
7:45 AM	0	150	131	68	214	0	24	0	115	0	0	0	0	0	0	701		
8:00 AM	0	164	121	56	144	0	36	0	115	0	0	0	0	0	0	635		
8:15 AM	0	163	125	82	167	0	45	0	114	0	0	0	0	0	0	694		
8:30 AM	0	142	128	59	166	0	31	0	117	0	0	0	0	0	0	641		
8:45 AM	0	129	108	56	156	0	18	0	99	0	0	0	0	0	0	565		
APPROACH %	0	1.242	1.008	522	1.353	0	247	2	859	0	0	0	0	0	0	5,231		
APPROACH %	0%	55%	45%	28%	72%	0%	22%	0%	78%	0%	0%	0%	0%	0%	0%	0		
APPROACH %	2.249	1.489	1.875	2.211	1.108	1.532	0	0	0	0	0	0	0	0	0	0		
BEGIN PEAK HR	0	645	508	277	706	0	137	1	441	0	0	0	0	0	0	2,713		
VOLUMES	0	56%	44%	28%	72%	0%	24%	0%	76%	0%	0%	0%	0%	0%	0%	0.936		
APPROACH %	0%	0.970	0.852	0.951	0.961	0	0.961	0	0.961	0	0.000	0.000	0	0	0	0.936		
PEAK HR FACTOR	1.153	782	982	982	1,146	579	286	0	0	0	0	0	0	0	0	0		
APP/DEPART	0	195	200	90	265	0	49	0	135	0	0	0	0	0	0	932		
4:15 PM	0	178	209	79	235	0	59	0	151	0	0	0	0	0	0	910		
4:30 PM	0	174	178	81	209	0	61	1	181	0	0	0	0	0	0	884		
4:45 PM	0	146	168	47	213	0	71	0	159	0	0	0	0	0	0	803		
5:00 PM	0	186	153	59	240	0	59	0	168	0	0	0	0	0	0	863		
5:15 PM	0	146	155	49	182	0	54	2	154	0	0	0	0	0	0	741		
5:30 PM	0	193	176	53	189	0	59	1	161	0	0	0	0	0	0	831		
5:45 PM	0	178	160	53	239	0	56	1	172	0	0	0	0	0	0	858		
VOLUMES	0	1.394	1.398	508	1,271	0	467	5	1,279	0	0	0	0	0	0	6,821		
APPROACH %	0%	50%	50%	22%	78%	0%	22%	0%	73%	0%	0%	0%	0%	0%	0%	0		
APPROACH %	2.792	1.861	2.279	3.050	1.751	1.910	1.751	1.910	1.910	0	0	0	0	0	0	0		
BEGIN PEAK HR	0	692	754	296	922	0	239	1	625	0	0	0	0	0	0	3,529		
VOLUMES	0	48%	52%	24%	76%	0%	28%	0%	72%	0%	0%	0%	0%	0%	0%	0.947		
APPROACH %	0.918	0.931	0.859	0.859	0.859	0	0.892	0	0.892	0	0.000	0.000	0	0	0	0.947		
PEAK HR FACTOR	1.446	931	1,218	1,547	865	865	1,051	0	1,051	0	0	0	0	0	0	0		
APP/DEPART	1.446	931	1,218	1,547	865	865	1,051	0	1,051	0	0	0	0	0	0	0		



SR-210 EB Ramps WEST SIDE SOUTH SIDE EAST SIDE SR-210 EB Ramps

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AMTD LLC, tel: 714 253 7888, cs@amtd.com

DATE: 10/8/24
TUESDAY

LOCATION: NORTH & SOUTH
EAST & WEST:

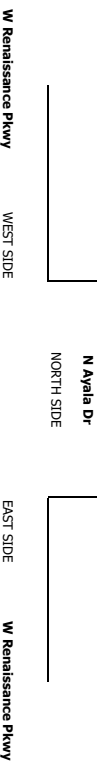
Railo
N Ayalá Dr
W Renaissance Pkwy

PROJECT #: SC9445
LOCATION #: 3
CONTROL: SIGNAL

PCE Adjusted	NOTES:						AVT	N	E
	THRU	THRU	THRU	THRU	THRU	THRU			
	1	2	3	4	5	6	PN	W	N
	Factor	1.3	2	3	2	2	HD	W	E
							OTHER	S	W
							OTHER	S	W

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS					
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TL	SL	SL	SL	TL	
	2	2	1	2	2	1	2	2	1	2	2	1						

	NORTHBOUND						SOUTHBOUND						EASTBOUND						WESTBOUND					
	N Ayalá Dr			N Ayalá Dr			W Renaissance Pkwy			W Renaissance Pkwy			W Renaissance Pkwy			W Renaissance Pkwy								
AM																								
VOLUMES	79	1253	64	332	1233	646	389	203	91	47	198	611	5143											
APPROACH %	6%	90%	5%	15%	56%	29%	57%	30%	13%	5%	23%	71%												
APPROACH PART	1,996	/	2,252	2,210	/	1,971	683	/	599	855	/	922	0											
BEGIN PEAK HR	7:45 AM																							
VOLUMES	46	651	31	205	625	321	196	113	56	29	104	278	2,651											
APPROACH %	6%	89%	4%	18%	54%	28%	54%	31%	15%	7%	25%	68%	68%											
PEAK HR FACTOR	0.892																							
APPROACH PART	728	/	1,124	1,150	1,124	709	364	/	348	410	/	470	0											
PM																								
VOLUMES	12	184	10	125	175	150	129	98	30	6	49	81	998											
APPROACH %	9%	85%	6%	18%	47%	35%	53%	34%	13%	8%	38%	54%	54%											
APPROACH PART	1,598	/	2,797	3,047	/	1,719	1,627	/	1,189	1,050	/	1,616	0											
BEGIN PEAK HR	4:00 PM																							
VOLUMES	65	710	42	264	720	564	463	295	106	31	202	279	3,739											
APPROACH %	8%	67%	5%	17%	47%	36%	54%	34%	12%	6%	39%	54%	54%											
PEAK HR FACTOR	0.854																							
APPROACH PART	817	/	1,451	1,547	/	857	864	/	601	512	/	831	0											



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AirtTD LLC tel: 714 253 7888 cs@airtd.com

DATE:
10/8/24
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Ratio
N Linden Ave
W Renaissance Pkwy

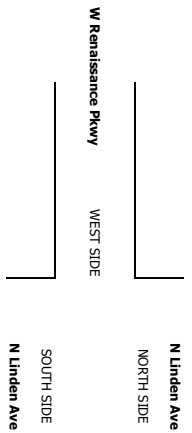
PROJECT #:
LOCATION #:
CONTROL:

SC4945
4
SIGNAL

PCE Adjusted	NOTES:								A/T	P/M	M/D	O/THER	S	N	E
	CHAS	1	2	3	4	5	6	7							

LANES:	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				U-TURNS			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL		
1	2	0	1	2	2	0	1	2	0	1	2	0								

TIME	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL					
AM																		
7:00 AM	16	34	30	7	11	30	4	2	24	18	42	30	6	241				
7:15 AM	9	48	25	11	11	37	4	4	14	18	34	29	2	236				
7:30 AM	8	60	22	14	52	9	7	6	25	11	24	42	8	281				
7:45 AM	13	48	22	11	53	1	6	3	33	11	32	38	11	277				
8:00 AM	15	53	21	26	43	9	7	32	15	25	24	19	287					
8:15 AM	5	98	18	20	43	4	8	30	15	27	14	22	303					
8:30 AM	5	54	18	32	69	4	13	37	21	30	14	11	308					
8:45 AM	4	23	14	15	34	4	6	26	10	26	23	7	182					
VOLUMES	75	417	169	136	361	42	53	221	117	229	212	86	2,114					
APPROACH %	11%	63%	26%	25%	67%	8%	13%	57%	30%	43%	40%	16%						
APP/DEPART	660	555	538	707	390	525	526	328					0					
BEGIN PEAK HR	7:45 AM																	
VOLUMES	38	252	78	89	208	18	34	132	61	114	89	63	1,174					
APPROACH %	10%	69%	21%	28%	66%	6%	15%	58%	27%	43%	34%	24%						
PEAK HR FACTOR	0.762																	
APP/DEPART	368	348	315	383	227	299	266	145	0				0					
PM																		
4:00 PM	34	110	91	23	63	3	3	82	37	55	42	21	563					
4:15 PM	15	59	46	15	67	2	16	80	37	65	49	26	474					
4:30 PM	18	53	52	25	61	1	7	66	23	50	47	26	428					
4:45 PM	11	51	29	35	70	2	10	72	20	40	59	21	418					
5:00 PM	14	63	34	18	66	4	7	36	32	48	47	20	409					
5:15 PM	23	59	39	20	72	5	9	65	37	56	34	21	437					
5:30 PM	26	91	59	16	102	1	9	60	49	49	48	20	525					
5:45 PM	28	52	43	14	112	4	2	54	59	51	52	16	486					
VOLUMES	169	536	393	166	611	22	63	534	289	414	376	170	3,739					
APPROACH %	15%	49%	36%	21%	77%	3%	7%	60%	33%	43%	39%	18%						
APP/DEPART	1,097	768	798	1,313	885	1,092	960	567	0				0					
BEGIN PEAK HR	4:00 PM																	
VOLUMES	78	272	218	98	260	8	36	299	116	210	196	93	1,882					
APPROACH %	14%	48%	38%	27%	71%	2%	8%	66%	26%	42%	39%	19%						
PEAK HR FACTOR	0.604																	
APP/DEPART	568	401	366	586	451	615	498	282	0				0					



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AmtD LLC, Tel: 714 253 7888 cs@amtnd.com

DATE:
10/8/24
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Rialto
N Linden Ave
Miro Way

PROJECT #: SC9945
LOCATION #: 5
CONTROL: SIGNAL

PCE Adjusted	NOTES:								Signal		
	Class	1	2	3	4	5	6	7	PM	NO	OTHER
	Female	1	15	2	3	2	2		▲	W	▲
									▼	S	▼

LANES:	NORTHBOUND				SOUTHBOUND				EASTBOUND			WESTBOUND			U-TURNS				
	NL	WT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	
1	2	X	X	X	2	0	1	X	1	X	X	X							

TIME	NORTHBOUND				SOUTHBOUND				EASTBOUND			WESTBOUND			U-TURNS				
	NL	WT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL	
7:00 AM	7	53	0	0	56	20	19	0	7	0	0	0	162						
7:15 AM	2	63	0	0	37	12	8	0	5	0	0	0	127						
7:30 AM	4	85	0	0	52	26	14	0	4	0	0	0	183						
7:45 AM	3	64	0	0	60	25	14	0	6	0	0	0	171						
8:00 AM	9	86	0	0	51	8	14	0	5	0	0	0	171						
8:15 AM	3	117	0	0	66	7	20	0	7	0	0	0	220						
8:30 AM	3	50	0	0	87	12	15	0	7	0	0	0	173						
8:45 AM	6	37	0	0	45	4	14	0	0	0	0	0	106						
VOLUMES	37	554	0	0	452	114	116	0	40	0	0	0	1312						
APPROACH %	6%	94%	0%	0%	80%	20%	72%	0%	26%	0%	0%	0%	151						
APPROACH	590	669	0	0	566	492	156	0	0	0	0	0	0						
BEGIN PEAK HR	7:30 AM				7:30 AM				Miro Way			Miro Way							
VOLUMES	19	351	0	0	228	66	61	0	21	0	0	0	745						
APPROACH %	5%	95%	0%	0%	78%	22%	74%	0%	26%	0%	0%	0%	0.848						
PEAK HR FACTOR	0.770				0.868				0.769			0.000			0.848				
APPROACH	370	412	294	82	35	0	6	0	0	0	0	0	85						
4:00 PM	0	100	0	0	175	30	45	0	14	0	0	0	345						
4:15 PM	3	114	0	0	103	25	45	0	6	0	0	0	302						
4:30 PM	5	94	0	0	98	22	36	0	18	0	0	0	272						
4:45 PM	5	66	0	0	68	13	16	0	8	0	0	0	175						
5:00 PM	1	75	0	0	78	15	18	0	11	0	0	0	197						
5:15 PM	3	103	0	0	78	12	34	0	10	0	0	0	239						
5:30 PM	5	95	0	0	129	27	29	0	8	0	0	0	281						
5:45 PM	13	117	0	0	104	21	32	0	13	0	0	0	290						
VOLUMES	33	761	0	0	831	164	236	0	97	0	0	0	2,111						
APPROACH %	4%	96%	0%	0%	84%	16%	73%	0%	27%	0%	0%	0%	197						
APPROACH	794	997	995	0	844	917	323	0	0	0	0	0	0						
BEGIN PEAK HR	4:00 PM				4:00 PM				Miro Way			Miro Way							
VOLUMES	13	372	0	0	444	90	131	0	45	0	0	0	1,094						
APPROACH %	3%	97%	0%	0%	83%	17%	74%	0%	26%	0%	0%	0%	0.793						
PEAK HR FACTOR	0.826				0.650				0.752			0.000			0.793				
APPROACH	385	503	533	489	176	0	0	0	0	0	0	0	0						



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AintD LLC, Tel: 714 253 7888 ca@aintd.com

DATE:
10/07/24
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

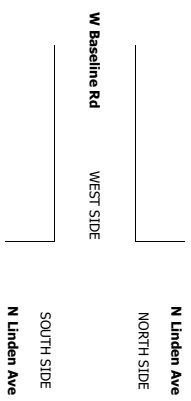
Railro
N Linden Ave
W Baseline Rd

PROJECT #:
SC4945
LOCATION #:
6
SIGNAL
CONTROL:

PCE Adjusted	NOTES:					APP OTHER	N E	S W
	Class Factor	1	2	3	4			

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			U-TURNS					
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB	TTL
LANES:	0.5	0.5	1	1	1	0	1	1	0.5	1	1.5	0.5						

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL					
	N Linden Ave	N Linden Ave	N Linden Ave	N Linden Ave	N Linden Ave	N Linden Ave	W Baseline Rd	W Baseline Rd	W Baseline Rd	W Baseline Rd	W Baseline Rd							
AM																		
7:00 AM	4	10	14	36	11	13	14	68	1	0	79	39	288					
7:15 AM	11	30	10	21	13	8	8	63	3	1	98	29	294					
7:30 AM	10	41	17	23	24	13	11	111	8	1	151	34	442					
7:45 AM	12	43	17	21	26	16	4	96	8	7	123	24	396					
8:00 AM	9	43	15	19	22	11	13	114	4	4	107	36	395					
8:15 AM	14	56	23	26	22	22	14	82	2	12	77	54	402					
8:30 AM	4	18	12	30	36	22	7	105	2	7	75	25	340					
8:45 AM	6	15	7	32	19	9	12	67	0	6	74	16	261					
VOLUMES	70	256	113	206	173	112	83	703	28	37	782	255	2,815					
APPROACH %	16%	58%	26%	42%	35%	23%	10%	86%	3%	73%	24%	24%						
APP/DEPART	438	/	593	491	/	238	814	/	1,021	1,074	963	0						
BEGIN PEAK HR	45	183	71	88	94	62	42	402	22	24	457	147	1,634					
VOLUMES	15%	61%	24%	36%	39%	25%	9%	86%	5%	4%	73%	23%						
APPROACH %	0.804	0.804	0.876	0.876	0.876	0.892	0.892	0.892	0.843	0.843	0.843	0.924	0.924					
PEAK HR FACTOR	298	/	372	244	/	140	466	/	560	627	563	0						
APP/DEPART	2	33	8	98	39	54	17	112	5	18	106	50	541					
4:15 PM	5	34	11	46	40	33	29	135	4	8	99	60	503					
4:30 PM	2	46	11	36	49	28	18	113	6	13	88	29	438					
4:45 PM	3	29	13	30	32	17	14	125	10	7	78	27	383					
5:00 PM	5	29	13	40	31	23	10	115	9	7	104	36	435					
5:15 PM	7	37	13	35	31	23	20	106	7	11	100	48	436					
5:30 PM	3	35	16	48	50	37	27	96	13	9	78	46	455					
5:45 PM	5	33	16	44	37	32	25	93	4	8	93	64	453					
VOLUMES	32	274	104	376	308	246	159	892	57	81	745	360	3,631					
APPROACH %	8%	67%	25%	40%	33%	26%	14%	81%	5%	7%	63%	30%						
APP/DEPART	410	/	793	929	/	445	1,108	/	1,372	1,185	1,023	0						
BEGIN PEAK HR	12	141	43	209	160	132	78	484	24	46	371	166	1,864					
VOLUMES	6%	72%	22%	42%	32%	26%	13%	83%	4%	8%	64%	28%						
APPROACH %	0.831	0.831	0.655	0.655	0.655	0.655	0.871	0.871	0.736	0.836	0.836	0.862	0.862					
PEAK HR FACTOR	196	/	384	501	/	229	585	/	736	582	515	0						
APP/DEPART																		



INTERSECTION TURNING MOVEMENT COUNTS

T020624

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

DATE:
Thu, May 8, 25

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Rialto
N Ayala Dr
W Baseline Rd

PROJECT #: SC5388
LOCATION #: 1
CONTROL: SIGNAL

NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
	OTHER		▼	

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	N Cedar Ave			N Ayala Dr			W Baseline Rd			W Baseline Rd			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	0	2	2	0	1	2	0	1	2	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	

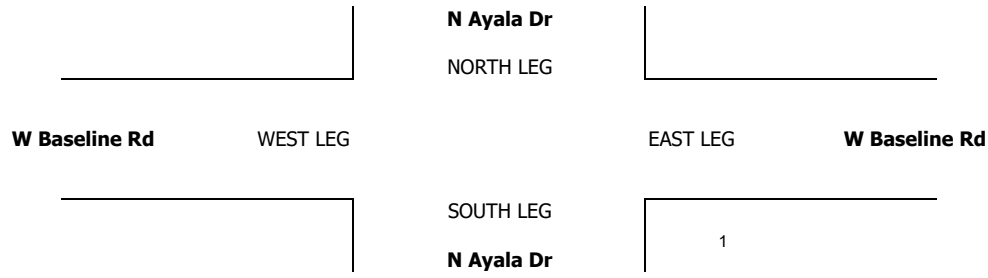
AM	7:00 AM	32	86	5	6	88	10	13	43	13	19	55	4	374
	7:15 AM	40	99	15	8	118	11	25	56	15	12	87	7	493
	7:30 AM	27	131	15	10	132	20	32	66	27	10	91	8	569
	7:45 AM	38	126	23	6	126	14	31	66	24	21	107	6	588
	8:00 AM	44	162	22	14	108	12	30	71	27	7	91	13	601
	8:15 AM	32	119	13	9	110	7	15	62	28	21	63	8	487
	8:30 AM	16	111	17	11	113	13	24	56	18	20	69	7	475
	8:45 AM	16	94	9	9	77	16	14	55	22	18	63	9	402
	VOLUMES	245	928	119	73	872	103	184	475	174	128	626	62	4,037
	APPROACH %	19%	72%	9%	7%	81%	10%	22%	56%	21%	15%	76%	8%	
APP/DEPART	1,293	/	1,199	1,073	/	1,175	845	/	677	826	/	986	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	149	518	75	38	484	57	118	259	93	50	376	34	2,270	
APPROACH %	20%	70%	10%	6%	82%	10%	25%	55%	20%	11%	81%	7%		
PEAK HR FACTOR	0.811			0.900			0.919			0.863			0.938	
APP/DEPART	743	/	678	587	/	628	474	/	378	466	/	586	0	
PM	4:00 PM	27	113	23	27	128	20	29	108	36	20	81	12	624
	4:15 PM	25	137	27	28	134	17	22	79	27	14	95	11	616
	4:30 PM	25	116	13	27	127	7	36	115	39	14	87	20	626
	4:45 PM	19	145	26	26	142	14	17	99	35	17	79	13	632
	5:00 PM	22	131	22	18	107	28	34	135	36	23	91	12	659
	5:15 PM	25	136	27	32	139	24	30	120	29	19	85	9	675
	5:30 PM	27	117	10	14	116	19	30	164	35	26	97	14	669
	5:45 PM	37	149	23	32	128	21	29	105	35	15	100	3	677
	VOLUMES	207	1,044	171	204	1,021	150	227	925	272	148	715	94	5,252
	APPROACH %	15%	73%	12%	15%	73%	11%	16%	63%	19%	15%	74%	10%	
APP/DEPART	1,422	/	1,394	1,404	/	1,441	1,459	/	1,310	967	/	1,107	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	111	533	82	96	490	92	123	524	135	83	373	38	2,724	
APPROACH %	15%	73%	11%	14%	70%	13%	15%	65%	17%	17%	75%	8%		
PEAK HR FACTOR	0.868			0.877			0.866			0.905			0.988	
APP/DEPART	726	/	714	698	/	708	804	/	704	496	/	598	0	

0	11	3	1	15
0	5	1	2	8
0	1	1	2	4
0	1	1	1	3
1	1	1	1	4
0	2	0	1	3
0	2	1	0	3
0	2	4	2	8
1	25	12	10	48

1	8	4	6
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0	1	4	1	6
0	3	3	2	8
0	4	3	3	10
0	1	3	2	6
0	5	10	1	16
0	4	3	0	7
0	6	3	0	9
0	5	6	1	12
0	29	35	10	74

0	20	22	2
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24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS7 Ayala Dr between SR-210 WB Ramps and SR-210 EB Ramps

AM TIME	NORTHBOUND							TOTAL	PM Time	NORTHBOUND							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	28	0	0	1	0	0	0	29	12:00	176	8	1	1	0	2	188	
0:15	29	0	0	0	0	0	0	29	12:15	153	11	1	1	0	0	166	
0:30	30	0	0	1	0	0	0	31	12:30	163	3	0	1	0	1	168	
0:45	28	1	0	0	0	0	0	29	12:45	161	2	2	4	0	0	169	
1:00	19	0	0	0	0	0	0	19	13:00	166	10	0	2	0	1	179	
1:15	16	1	0	0	0	0	0	17	13:15	162	7	1	2	0	0	172	
1:30	25	0	0	0	0	0	0	25	13:30	162	7	1	2	0	2	174	
1:45	20	0	0	0	0	0	0	20	13:45	183	6	0	1	0	1	191	
2:00	20	0	0	0	0	0	0	20	14:00	220	13	3	1	0	2	239	
2:15	15	1	0	0	0	0	0	16	14:15	186	11	0	3	0	1	201	
2:30	15	0	0	0	0	0	0	15	14:30	208	12	0	4	0	1	225	
2:45	28	0	0	0	0	0	0	28	14:45	212	7	1	1	0	0	221	
3:00	30	2	0	1	0	0	0	33	15:00	228	7	1	0	0	2	238	
3:15	51	1	0	0	0	0	0	52	15:15	228	9	0	0	0	0	237	
3:30	49	2	0	0	0	0	0	51	15:30	230	10	2	1	0	1	244	
3:45	66	2	0	0	0	0	0	68	15:45	221	5	1	1	0	1	229	
4:00	75	5	0	1	0	0	0	81	16:00	238	2	0	0	0	1	241	
4:15	98	6	0	1	0	0	0	105	16:15	224	5	0	1	0	1	231	
4:30	112	2	0	0	0	0	0	114	16:30	225	7	0	0	0	0	232	
4:45	132	10	1	1	0	0	0	144	16:45	201	4	2	2	0	0	209	
5:00	111	6	0	0	0	0	0	117	17:00	237	5	0	0	0	0	242	
5:15	136	8	2	0	0	0	0	146	17:15	184	8	1	0	0	1	194	
5:30	146	12	0	2	0	0	0	160	17:30	244	4	0	0	0	1	249	
5:45	102	5	1	1	0	1	1	110	17:45	230	1	1	0	0	0	232	
6:00	122	6	0	2	0	0	0	130	18:00	223	8	0	0	0	1	232	
6:15	111	10	0	2	0	0	0	123	18:15	184	5	1	2	0	0	192	
6:30	116	5	0	0	0	0	0	121	18:30	204	1	1	0	0	1	207	
6:45	159	13	0	1	0	0	0	173	18:45	192	4	0	0	0	0	196	
7:00	159	7	1	2	0	2	2	171	19:00	195	5	1	0	0	1	202	
7:15	189	12	1	0	0	0	0	202	19:15	181	3	0	0	0	0	184	
7:30	181	10	1	0	0	1	1	193	19:30	152	3	0	1	0	0	156	
7:45	160	5	2	0	0	1	1	168	19:45	172	0	0	2	0	0	174	
8:00	184	6	2	0	0	1	1	193	20:00	164	3	1	2	0	1	171	
8:15	196	4	1	1	0	0	0	202	20:15	149	1	1	1	0	0	152	
8:30	149	6	0	4	0	1	1	160	20:30	115	3	0	1	0	0	119	
8:45	142	3	0	0	0	0	0	145	20:45	106	1	0	0	0	0	107	
9:00	131	8	0	0	0	3	3	142	21:00	104	1	0	0	0	1	106	
9:15	140	11	0	0	0	0	0	151	21:15	104	4	0	1	0	0	109	
9:30	135	5	0	1	0	1	1	142	21:30	116	1	1	1	0	0	119	
9:45	92	7	1	3	0	0	0	103	21:45	89	0	0	2	0	1	92	
10:00	130	7	1	1	0	2	2	141	22:00	88	2	0	0	0	0	90	
10:15	122	7	0	1	0	0	0	130	22:15	63	1	0	0	0	0	64	
10:30	148	12	0	1	0	2	2	163	22:30	64	0	0	2	0	0	66	
10:45	152	6	1	2	0	0	0	161	22:45	54	3	0	0	0	0	57	
11:00	169	15	1	0	0	0	0	185	23:00	46	0	0	0	0	0	46	
11:15	158	13	1	3	0	1	1	176	23:15	44	2	0	0	0	0	46	
11:30	141	11	1	1	0	1	1	155	23:30	41	0	0	0	0	0	41	
11:45	158	14	2	4	0	0	0	178	23:45	31	0	0	1	0	0	32	
TOTAL	4,925	267	20	38	0	17		5,267	TOTAL	7,723	215	24	44	0	25	8,031	

AM PEAK HOUR 7:30 AM
AM PEAK VOLUME 756

AM PEAK HOUR 3:15 PM
AM PEAK VOLUME 951

CLASS	DESCRIPTION	TOTAL: AM+PM	1	2	3	4	5	6	TOTAL
CLASS 1	PASSENGER VEHICLES	12,648	482	44	82	0	42		13,298
CLASS 2	2-AXLE TRUCKS	95.1%	3.6%	0.3%	0.6%	0.0%	0.3%		100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								
TOTAL: ALL		27,196	898	132	266	0	92		28,584
% OF TOTAL		95.1%	3.1%	0.5%	0.9%	0.0%	0.3%		100.0%

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS7 Ayala Dr between SR-210 WB Ramps and SR-210 EB Ramps

AM TIME	SOUTHBOUND								TOTAL	PM Time	SOUTHBOUND								TOTAL
	1	2	3	4	5	6					1	2	3	4	5	6			
0:00	32	1	0	0	0	0	0	33	12:00	214	5	3	7	0	1	230			
0:15	34	1	0	1	0	0	0	36	12:15	206	10	1	3	0	0	220			
0:30	26	0	0	0	0	0	0	26	12:30	187	12	5	3	0	1	208			
0:45	32	0	0	0	0	0	0	32	12:45	175	7	1	3	0	0	186			
1:00	42	1	0	0	0	0	0	43	13:00	165	8	0	2	0	2	177			
1:15	54	0	1	0	0	0	0	55	13:15	170	3	3	2	0	1	179			
1:30	62	0	0	1	0	0	0	63	13:30	217	4	2	4	0	1	228			
1:45	36	0	0	1	0	0	0	37	13:45	210	15	4	6	0	1	236			
2:00	23	1	0	0	0	0	0	24	14:00	203	9	3	2	0	1	218			
2:15	19	1	0	0	0	0	0	20	14:15	192	5	3	2	0	0	202			
2:30	21	1	0	0	0	0	0	22	14:30	234	11	0	2	0	3	250			
2:45	39	1	0	1	0	0	0	41	14:45	269	4	1	4	0	2	280			
3:00	23	0	0	2	0	0	0	25	15:00	195	8	2	1	0	2	208			
3:15	32	0	1	1	0	0	0	34	15:15	203	11	3	0	0	1	218			
3:30	40	1	0	1	0	0	0	42	15:30	235	8	2	4	0	2	251			
3:45	49	0	0	1	0	0	0	50	15:45	359	8	0	3	0	2	372			
4:00	54	0	0	1	0	0	0	55	16:00	325	13	1	2	0	1	342			
4:15	50	0	2	4	0	0	0	56	16:15	295	8	2	1	0	0	306			
4:30	81	3	0	4	0	0	0	88	16:30	273	3	2	3	0	0	281			
4:45	121	5	0	6	0	0	0	132	16:45	253	3	0	0	0	1	257			
5:00	91	7	0	2	0	0	0	100	17:00	288	4	1	0	0	1	294			
5:15	113	4	0	2	0	1	0	120	17:15	224	4	0	0	0	0	228			
5:30	135	3	0	1	0	0	0	139	17:30	218	7	1	3	0	1	230			
5:45	186	7	1	1	0	0	0	195	17:45	282	3	0	1	0	1	287			
6:00	177	10	1	1	0	1	0	190	18:00	272	5	1	1	0	0	279			
6:15	170	7	1	6	0	1	0	185	18:15	301	5	0	0	0	1	307			
6:30	154	4	2	2	0	1	0	163	18:30	243	2	2	2	0	1	250			
6:45	247	9	1	2	0	0	0	259	18:45	232	4	0	0	0	0	236			
7:00	179	10	0	4	0	1	0	194	19:00	211	0	0	3	0	0	214			
7:15	258	8	2	4	0	1	0	273	19:15	190	1	0	0	0	0	191			
7:30	207	1	0	1	0	1	0	210	19:30	176	2	0	0	0	1	179			
7:45	253	12	1	2	0	1	0	269	19:45	187	1	0	1	0	0	189			
8:00	170	3	1	7	0	1	0	182	20:00	154	2	0	0	0	0	156			
8:15	223	7	3	3	0	0	0	236	20:15	158	0	0	2	0	0	160			
8:30	205	5	2	2	0	1	0	215	20:30	132	1	1	2	0	1	137			
8:45	200	1	1	2	0	1	0	205	20:45	114	1	0	0	0	0	115			
9:00	169	9	2	2	0	1	0	183	21:00	111	2	0	0	0	0	113			
9:15	126	7	1	4	0	1	0	139	21:15	123	1	0	1	0	0	125			
9:30	127	7	1	2	0	1	0	138	21:30	101	1	0	1	0	1	104			
9:45	155	10	1	1	0	0	0	167	21:45	98	0	0	0	0	0	98			
10:00	139	7	3	2	0	1	0	152	22:00	87	1	0	0	0	0	88			
10:15	164	4	2	6	0	0	0	176	22:15	83	0	0	1	0	0	84			
10:30	137	9	0	5	0	2	0	153	22:30	60	1	0	2	0	0	63			
10:45	159	7	2	4	0	1	0	173	22:45	60	0	0	0	0	0	60			
11:00	162	8	2	4	0	1	0	177	23:00	56	1	0	1	0	0	58			
11:15	164	6	2	5	0	0	0	177	23:15	53	0	1	2	0	0	56			
11:30	160	13	3	4	0	1	0	181	23:30	48	0	0	1	0	0	49			
11:45	176	11	4	1	0	0	0	192	23:45	30	0	0	0	0	0	30			
TOTAL	5,676	212	43	106	0	20	0	6,057	TOTAL	8,872	204	45	78	0	30	9,229			

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 946

AM PEAK HOUR 3:45 PM
AM PEAK VOLUME 1,301

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	14,548	416	88	184	0	50	15,286
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.2%	2.7%	0.6%	1.2%	0.0%	0.3%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS1 Ayala Dr between SR-210 EB Ramps and Renaissance Pkwy

AM TIME	NORTHBOUND							TOTAL	PM Time	NORTHBOUND							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	52	0	0	0	0	0	0	52	12:00	264	9	1	1	0	0	1	276
0:15	54	2	0	0	0	0	0	56	12:15	265	12	1	0	0	0	0	278
0:30	44	0	0	0	0	0	0	44	12:30	259	8	3	1	0	0	1	272
0:45	41	2	0	0	0	0	0	43	12:45	229	4	2	4	0	0	0	239
1:00	101	0	0	1	0	0	0	102	13:00	249	13	2	1	0	0	1	266
1:15	52	0	0	0	0	0	0	52	13:15	240	8	1	2	0	0	0	251
1:30	54	1	0	0	0	0	0	55	13:30	258	7	2	3	0	0	2	272
1:45	28	0	0	0	0	0	0	28	13:45	276	11	1	0	0	0	1	289
2:00	37	0	1	0	0	0	0	38	14:00	311	16	4	2	0	0	2	335
2:15	22	1	0	0	0	0	0	23	14:15	266	15	0	1	0	0	1	283
2:30	41	0	1	0	0	0	0	42	14:30	320	15	0	2	0	0	1	338
2:45	38	0	1	0	0	0	0	39	14:45	321	11	0	0	0	0	0	332
3:00	44	2	0	1	0	0	0	47	15:00	334	11	2	2	0	0	1	350
3:15	54	1	0	0	0	0	0	55	15:15	330	7	1	0	0	0	0	338
3:30	73	2	0	0	0	0	0	75	15:30	347	12	2	1	0	0	2	364
3:45	83	4	0	0	0	0	0	87	15:45	327	8	2	2	0	0	2	341
4:00	113	6	0	1	0	0	0	120	16:00	386	4	0	0	0	0	1	391
4:15	135	6	0	1	0	0	0	142	16:15	364	9	2	1	0	0	1	377
4:30	206	2	0	1	0	0	0	209	16:30	335	10	0	0	0	0	1	346
4:45	187	10	1	1	0	0	0	199	16:45	298	7	1	1	0	0	0	307
5:00	167	5	1	0	0	0	0	173	17:00	322	9	0	1	0	0	0	332
5:15	183	9	2	0	0	0	0	194	17:15	286	5	1	1	0	0	1	294
5:30	243	14	0	2	0	0	0	259	17:30	358	6	0	0	0	0	1	365
5:45	173	10	1	3	0	0	1	188	17:45	328	3	1	1	0	0	0	333
6:00	197	9	0	5	0	0	0	211	18:00	360	8	0	0	0	0	1	369
6:15	238	12	1	2	0	0	0	253	18:15	332	3	0	1	0	0	0	336
6:30	224	8	0	0	0	0	0	232	18:30	287	1	0	0	0	0	1	289
6:45	229	15	0	5	0	0	0	249	18:45	284	6	0	0	0	0	0	290
7:00	270	12	3	2	0	0	2	289	19:00	302	2	0	0	0	0	1	305
7:15	275	9	1	0	0	0	0	285	19:15	274	2	0	0	0	0	0	276
7:30	270	14	2	0	0	0	1	287	19:30	222	2	0	0	0	0	0	224
7:45	252	13	2	1	0	0	1	269	19:45	249	2	0	3	0	0	0	254
8:00	260	9	3	1	0	0	1	274	20:00	245	3	2	1	0	0	1	252
8:15	275	6	0	1	0	0	0	282	20:15	223	1	1	1	0	0	0	226
8:30	244	8	0	3	0	0	2	257	20:30	183	5	0	2	0	0	0	190
8:45	217	11	0	1	0	0	0	229	20:45	188	0	1	0	0	0	0	189
9:00	197	8	0	0	0	0	3	208	21:00	179	2	0	0	0	0	1	182
9:15	195	17	0	1	0	0	0	213	21:15	185	1	0	1	0	0	0	187
9:30	202	10	0	0	0	0	1	213	21:30	186	3	1	0	0	0	0	190
9:45	149	9	2	0	0	0	0	160	21:45	158	0	0	0	0	0	1	159
10:00	196	12	1	3	0	0	2	214	22:00	160	2	0	0	0	0	0	162
10:15	184	13	0	4	0	0	0	201	22:15	118	0	0	0	0	0	0	118
10:30	197	13	1	3	0	0	1	215	22:30	100	0	0	2	0	0	0	102
10:45	229	5	3	1	0	0	0	238	22:45	77	2	0	0	0	0	0	79
11:00	221	19	1	0	0	0	1	242	23:00	97	1	0	1	0	0	0	99
11:15	215	16	1	3	0	0	1	236	23:15	81	2	0	0	0	0	0	83
11:30	214	12	1	2	0	0	1	230	23:30	60	1	0	0	0	0	0	61
11:45	238	13	2	4	0	0	0	257	23:45	53	0	0	1	0	0	0	54
TOTAL	7,613	350	32	53	0	18	8,066	8,066	TOTAL	11,876	269	34	40	0	26	12,245	

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 1,130

AM PEAK HOUR 3:30 PM
AM PEAK VOLUME 1,473

CLASS	DESCRIPTION	TOTAL: AM+PM	19,489	619	66	93	0	44	20,311
CLASS 1	PASSENGER VEHICLES	% OF TOTAL	96.0%	3.0%	0.3%	0.5%	0.0%	0.2%	100.0%
CLASS 2	2-AXLE TRUCKS								
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	TOTAL: ALL	39,304	1,294	125	206	0	91	41,020
CLASS 6	Buses	% OF TOTAL	95.8%	3.2%	0.3%	0.5%	0.0%	0.2%	100.0%

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS1 Ayala Dr between SR-210 EB Ramps and Renaissance Pkwy

AM TIME	SOUTHBOUND								TOTAL	PM Time	SOUTHBOUND								TOTAL
	1	2	3	4	5	6					1	2	3	4	5	6			
0:00	52	1	0	0	0	0	0	53	12:00	273	7	1	4	0	1	286			
0:15	47	1	0	1	0	0	0	49	12:15	289	21	0	0	0	0	310			
0:30	42	0	0	0	0	0	0	42	12:30	294	16	3	1	0	1	315			
0:45	47	0	0	0	0	0	0	47	12:45	261	12	1	5	0	0	279			
1:00	57	3	0	0	0	0	0	60	13:00	242	7	0	1	0	2	252			
1:15	68	0	1	0	0	0	0	69	13:15	255	12	1	4	0	1	273			
1:30	75	1	0	1	0	0	0	77	13:30	280	8	1	1	0	1	291			
1:45	38	0	0	2	0	0	0	40	13:45	300	27	3	3	0	1	334			
2:00	30	1	0	0	0	0	0	31	14:00	289	17	2	2	0	1	311			
2:15	21	1	0	0	0	0	0	22	14:15	278	10	2	0	0	0	290			
2:30	29	1	0	0	0	0	0	30	14:30	308	13	0	2	0	3	326			
2:45	40	1	0	1	0	0	0	42	14:45	389	8	1	1	0	1	400			
3:00	31	0	0	2	0	0	0	33	15:00	324	14	1	0	0	1	340			
3:15	38	0	0	0	0	0	0	38	15:15	299	11	1	0	0	0	311			
3:30	41	1	0	0	0	0	0	42	15:30	321	13	0	2	0	1	337			
3:45	51	1	0	1	0	0	0	53	15:45	435	16	0	1	0	2	454			
4:00	58	0	0	2	0	0	0	60	16:00	370	13	1	2	0	1	387			
4:15	48	1	1	3	0	0	0	53	16:15	356	17	2	0	0	0	375			
4:30	88	3	0	0	0	0	0	91	16:30	361	16	1	1	0	0	379			
4:45	109	9	0	2	0	0	0	120	16:45	352	12	0	0	0	1	365			
5:00	102	5	0	0	0	0	0	107	17:00	388	10	1	0	0	1	400			
5:15	121	3	0	0	0	1	0	125	17:15	319	7	1	0	0	2	329			
5:30	168	4	0	2	0	0	0	174	17:30	321	11	2	2	0	1	337			
5:45	199	11	1	1	0	0	0	212	17:45	393	9	1	0	0	1	404			
6:00	182	13	0	2	0	0	0	197	18:00	383	6	1	1	0	0	391			
6:15	184	9	0	1	0	1	0	195	18:15	402	8	0	1	0	1	412			
6:30	162	6	1	1	0	1	0	171	18:30	368	9	1	1	0	1	380			
6:45	297	16	1	1	0	0	0	315	18:45	365	3	0	0	0	0	368			
7:00	225	11	0	1	0	1	0	238	19:00	334	3	0	0	0	0	337			
7:15	287	12	1	0	0	1	0	301	19:15	322	2	0	1	0	0	325			
7:30	235	4	2	1	0	1	0	243	19:30	299	7	0	0	0	1	307			
7:45	302	11	4	0	0	1	0	318	19:45	281	1	0	2	0	0	284			
8:00	224	9	1	5	0	2	0	241	20:00	253	5	1	0	0	0	259			
8:15	254	11	2	2	0	0	0	269	20:15	289	2	0	2	0	0	293			
8:30	259	12	2	0	0	1	0	274	20:30	213	5	1	1	0	1	221			
8:45	240	8	0	1	0	0	0	249	20:45	193	2	0	1	0	0	196			
9:00	211	8	1	1	0	1	0	222	21:00	176	2	0	0	0	0	178			
9:15	164	10	1	3	0	0	0	178	21:15	219	2	0	1	0	0	222			
9:30	177	10	0	4	0	1	0	192	21:30	168	2	0	1	0	1	172			
9:45	199	17	0	1	0	0	0	217	21:45	154	1	0	0	0	0	155			
10:00	194	11	2	3	0	1	0	211	22:00	146	0	0	1	0	0	147			
10:15	207	9	1	3	0	1	0	221	22:15	124	0	0	0	0	0	124			
10:30	202	13	0	4	0	2	0	221	22:30	95	0	0	2	0	0	97			
10:45	219	11	1	1	0	1	0	233	22:45	106	0	0	0	0	0	106			
11:00	223	12	1	4	0	1	0	241	23:00	79	4	0	2	0	0	85			
11:15	219	10	2	3	0	0	0	234	23:15	81	0	0	0	0	0	81			
11:30	235	12	1	2	0	1	0	251	23:30	84	0	0	1	0	0	85			
11:45	241	11	2	1	0	0	0	255	23:45	42	0	0	0	0	0	42			
TOTAL	6,942	304	29	63	0	19	0	7,357	TOTAL	12,873	371	30	50	0	28	13,352			

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 1,103

AM PEAK HOUR 3:45 PM
AM PEAK VOLUME 1,595

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	19,815	675	59	113	0	47	20,709
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.7%	3.3%	0.3%	0.5%	0.0%	0.2%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024

CITY: Rialto

JOB #: SC4945

LOCATION: CLASS1 Ayala Dr between SR-210 EB Ramps and Renaissance Pkwy

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	104	1	0	0	0	0	105	12:00	537	16	2	5	0	2	562
0:15	101	3	0	1	0	0	105	12:15	554	33	1	0	0	0	588
0:30	86	0	0	0	0	0	86	12:30	553	24	6	2	0	2	587
0:45	88	2	0	0	0	0	90	12:45	490	16	3	9	0	0	518
1:00	158	3	0	1	0	0	162	13:00	491	20	2	2	0	3	518
1:15	120	0	1	0	0	0	121	13:15	495	20	2	6	0	1	524
1:30	129	2	0	1	0	0	132	13:30	538	15	3	4	0	3	563
1:45	66	0	0	2	0	0	68	13:45	576	38	4	3	0	2	623
2:00	67	1	1	0	0	0	69	14:00	600	33	6	4	0	3	646
2:15	43	2	0	0	0	0	45	14:15	544	25	2	1	0	1	573
2:30	70	1	1	0	0	0	72	14:30	628	28	0	4	0	4	664
2:45	78	1	1	1	0	0	81	14:45	710	19	1	1	0	1	732
3:00	75	2	0	3	0	0	80	15:00	658	25	3	2	0	2	690
3:15	92	1	0	0	0	0	93	15:15	629	18	2	0	0	0	649
3:30	114	3	0	0	0	0	117	15:30	668	25	2	3	0	3	701
3:45	134	5	0	1	0	0	140	15:45	762	24	2	3	0	4	795
4:00	171	6	0	3	0	0	180	16:00	756	17	1	2	0	2	778
4:15	183	7	1	4	0	0	195	16:15	720	26	4	1	0	1	752
4:30	294	5	0	1	0	0	300	16:30	696	26	1	1	0	1	725
4:45	296	19	1	3	0	0	319	16:45	650	19	1	1	0	1	672
5:00	269	10	1	0	0	0	280	17:00	710	19	1	1	0	1	732
5:15	304	12	2	0	0	1	319	17:15	605	12	2	1	0	3	623
5:30	411	18	0	4	0	0	433	17:30	679	17	2	2	0	2	702
5:45	372	21	2	4	0	1	400	17:45	721	12	2	1	0	1	737
6:00	379	22	0	7	0	0	408	18:00	743	14	1	1	0	1	760
6:15	422	21	1	3	0	1	448	18:15	734	11	0	2	0	1	748
6:30	386	14	1	1	0	1	403	18:30	655	10	1	1	0	2	669
6:45	526	31	1	6	0	0	564	18:45	649	9	0	0	0	0	658
7:00	495	23	3	3	0	3	527	19:00	636	5	0	0	0	1	642
7:15	562	21	2	0	0	1	586	19:15	596	4	0	1	0	0	601
7:30	505	18	4	1	0	2	530	19:30	521	9	0	0	0	1	531
7:45	554	24	6	1	0	2	587	19:45	530	3	0	5	0	0	538
8:00	484	18	4	6	0	3	515	20:00	498	8	3	1	0	1	511
8:15	529	17	2	3	0	0	551	20:15	512	3	1	3	0	0	519
8:30	503	20	2	3	0	3	531	20:30	396	10	1	3	0	1	411
8:45	457	19	0	2	0	0	478	20:45	381	2	1	1	0	0	385
9:00	408	16	1	1	0	4	430	21:00	355	4	0	0	0	1	360
9:15	359	27	1	4	0	0	391	21:15	404	3	0	2	0	0	409
9:30	379	20	0	4	0	2	405	21:30	354	5	1	1	0	1	362
9:45	348	26	2	1	0	0	377	21:45	312	1	0	0	0	1	314
10:00	390	23	3	6	0	3	425	22:00	306	2	0	1	0	0	309
10:15	391	22	1	7	0	1	422	22:15	242	0	0	0	0	0	242
10:30	399	26	1	7	0	3	436	22:30	195	0	0	4	0	0	199
10:45	448	16	4	2	0	1	471	22:45	183	2	0	0	0	0	185
11:00	444	31	2	4	0	2	483	23:00	176	5	0	3	0	0	184
11:15	434	26	3	6	0	1	470	23:15	162	2	0	0	0	0	164
11:30	449	24	2	4	0	2	481	23:30	144	1	0	1	0	0	146
11:45	479	24	4	5	0	0	512	23:45	95	0	0	1	0	0	96
TOTAL	14,555	654	61	116	0	37	15,423	TOTAL	24,749	640	64	90	0	54	25,597

AM PEAK HOUR 7:00 AM
AM PEAK VOLUME 2,230

AM PEAK HOUR 3:45 PM
AM PEAK VOLUME 3,050

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	39,304	1,294	125	206	0	91	41,020
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.8%	3.2%	0.3%	0.5%	0.0%	0.2%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, May 08, 2025
JOB #: SC5388

CITY: Rialto
LOCATION: CLASS1 N Ayala Dr south of W Renaissance Pkwy

AM TIME	NORTHBOUND							TOTAL	PM Time	NORTHBOUND							TOTAL
	1	2	3	4	5	6	1			2	3	4	5	6			
0:00	23	0	0	0	0	0	0	23	12:00	120	6	1	0	0	0	0	127
0:15	14	0	0	0	0	0	0	14	12:15	154	7	1	0	0	0	0	162
0:30	21	0	0	0	0	0	0	21	12:30	136	8	2	0	0	0	0	146
0:45	19	1	1	0	0	0	0	21	12:45	140	6	3	3	0	1	0	153
1:00	14	0	0	0	0	0	0	14	13:00	159	10	2	2	0	0	0	173
1:15	14	0	0	0	0	0	0	14	13:15	157	9	0	4	0	0	0	170
1:30	14	0	0	0	0	0	0	14	13:30	133	8	0	2	0	0	1	144
1:45	11	2	0	0	0	0	0	13	13:45	168	7	1	1	0	0	1	178
2:00	15	1	0	0	0	0	0	16	14:00	165	6	0	0	1	0	0	172
2:15	11	0	0	0	0	0	0	11	14:15	179	6	0	3	0	0	0	188
2:30	9	0	0	0	0	0	0	9	14:30	207	10	1	0	0	0	2	220
2:45	16	0	0	0	0	0	0	16	14:45	206	6	1	0	0	0	0	213
3:00	26	0	0	0	0	0	0	26	15:00	190	5	0	3	0	0	2	200
3:15	32	1	0	0	0	0	0	33	15:15	204	3	0	1	0	0	0	208
3:30	37	0	0	0	0	0	0	37	15:30	243	4	0	6	0	0	0	253
3:45	45	1	0	0	0	0	0	46	15:45	201	1	1	0	0	0	0	203
4:00	45	2	0	0	1	0	0	48	16:00	199	8	0	0	0	0	0	207
4:15	52	0	0	0	0	0	0	52	16:15	192	6	0	0	0	0	1	199
4:30	68	2	0	0	0	0	0	70	16:30	197	4	1	0	0	0	0	202
4:45	95	1	0	1	0	0	0	97	16:45	183	2	1	1	0	0	0	187
5:00	85	6	0	2	0	0	0	93	17:00	215	1	0	0	0	0	0	216
5:15	106	2	0	0	0	0	0	108	17:15	187	0	0	0	0	0	0	187
5:30	100	0	0	4	0	0	0	104	17:30	200	10	0	1	0	0	0	211
5:45	80	2	0	0	0	0	0	82	17:45	171	1	2	1	0	0	0	175
6:00	110	2	3	4	0	0	0	119	18:00	182	1	0	0	0	0	0	183
6:15	116	5	0	1	0	0	0	122	18:15	154	2	0	1	0	0	0	157
6:30	116	7	1	1	0	0	0	125	18:30	178	1	0	0	0	0	0	179
6:45	121	4	3	2	0	0	0	130	18:45	155	1	0	0	0	0	0	156
7:00	139	6	2	2	0	1	0	150	19:00	133	4	1	1	0	0	0	139
7:15	163	4	0	1	0	0	0	168	19:15	143	2	0	0	0	0	0	145
7:30	228	4	1	1	0	0	0	234	19:30	130	1	0	0	0	0	0	131
7:45	191	8	1	4	0	0	0	204	19:45	104	2	0	0	0	1	0	107
8:00	194	5	1	2	0	0	0	202	20:00	118	1	0	0	0	0	0	119
8:15	177	9	2	1	0	1	0	190	20:15	131	0	0	0	0	0	0	131
8:30	160	8	0	1	0	1	0	170	20:30	129	1	0	0	0	0	0	130
8:45	120	4	2	1	0	0	0	127	20:45	93	3	0	0	0	0	0	96
9:00	124	8	2	0	0	0	0	134	21:00	77	1	0	0	0	0	0	78
9:15	123	7	1	5	0	0	0	136	21:15	103	1	0	1	0	0	0	105
9:30	132	5	1	1	0	0	0	139	21:30	72	1	0	1	0	0	0	74
9:45	117	7	0	1	0	0	0	125	21:45	68	0	0	1	0	0	0	69
10:00	126	7	0	1	0	0	0	134	22:00	58	0	0	0	0	0	0	58
10:15	147	6	1	1	0	0	0	155	22:15	63	0	0	0	0	0	0	63
10:30	110	10	2	0	0	0	0	122	22:30	44	1	1	1	0	0	0	47
10:45	112	2	0	0	0	0	0	114	22:45	38	0	0	0	0	0	0	38
11:00	124	4	1	1	0	0	0	130	23:00	41	0	0	1	0	0	0	42
11:15	116	5	3	2	0	0	0	126	23:15	30	1	0	0	0	0	0	31
11:30	146	6	1	1	0	0	0	154	23:30	23	0	0	0	0	0	0	23
11:45	131	5	0	3	0	0	0	139	23:45	12	0	0	0	0	0	0	12
TOTAL	4,295	159	29	44	1	3	4,531	TOTAL	6,585	158	19	35	2	8	6,807		

AM PEAK HOUR 7:30 AM
AM PEAK VOLUME 830

PM PEAK HOUR 2:45 PM
PM PEAK VOLUME 874

CLASS	DESCRIPTION	TOTAL: AM+PM	1	2	3	4	5	6	TOTAL
CLASS 1	PASSENGER VEHICLES	10,880	317	48	79	3	11	11,338	
CLASS 2	2-AXLE TRUCKS	96.0%	2.8%	0.4%	0.7%	0.0%	0.1%	100.0%	
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV	22,802	667	95	171	5	29	23,769	
CLASS 6	Buses	95.9%	2.8%	0.4%	0.7%	0.0%	0.1%	100.0%	

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, May 08, 2025
JOB #: SC5388

CITY: Rialto
LOCATION: CLASS1 N Ayala Dr south of W Renaissance Pkwy

AM TIME	SOUTHBOUND							TOTAL	PM Time	SOUTHBOUND							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	44	0	0	1	0	0	0	45	12:00	153	10	0	2	0	1	166	
0:15	32	0	0	0	0	0	0	32	12:15	185	5	0	2	0	0	192	
0:30	24	1	0	1	0	0	0	26	12:30	143	7	1	2	0	0	153	
0:45	29	0	0	0	0	0	0	29	12:45	200	5	2	2	0	0	209	
1:00	19	0	1	1	0	0	0	21	13:00	181	11	2	3	0	0	197	
1:15	23	0	0	0	0	0	0	23	13:15	163	9	0	1	0	1	174	
1:30	23	0	0	0	0	0	0	23	13:30	160	8	1	0	0	0	169	
1:45	19	1	0	0	0	0	0	20	13:45	206	5	1	1	0	1	214	
2:00	18	0	0	0	0	0	0	18	14:00	180	8	0	1	0	0	189	
2:15	14	0	0	0	0	0	0	14	14:15	162	3	2	0	0	1	168	
2:30	18	0	0	0	0	0	0	18	14:30	213	3	0	3	0	3	222	
2:45	17	0	0	2	0	0	0	19	14:45	204	7	0	0	0	1	212	
3:00	18	0	0	1	0	0	0	19	15:00	188	9	1	0	0	1	199	
3:15	12	0	0	2	0	0	0	14	15:15	191	1	0	1	0	0	193	
3:30	23	0	0	0	0	0	0	23	15:30	234	8	2	2	0	0	246	
3:45	29	0	0	0	0	0	0	29	15:45	269	4	0	2	0	0	275	
4:00	19	1	0	0	0	0	0	20	16:00	220	6	2	0	0	0	228	
4:15	24	0	0	1	0	0	0	25	16:15	199	5	0	0	0	0	204	
4:30	44	0	0	0	0	0	0	44	16:30	163	5	0	3	0	1	172	
4:45	46	4	0	0	0	0	0	50	16:45	192	3	0	2	0	0	197	
5:00	41	0	0	0	0	0	0	41	17:00	233	7	0	2	0	0	242	
5:15	48	2	0	0	0	0	0	50	17:15	177	7	2	0	0	0	186	
5:30	54	4	0	1	0	0	0	59	17:30	211	6	0	0	0	0	217	
5:45	100	3	0	4	0	0	0	107	17:45	217	8	0	3	0	0	228	
6:00	80	5	0	2	0	0	0	87	18:00	198	5	0	1	0	0	204	
6:15	67	8	0	0	0	1	0	76	18:15	201	2	1	0	0	0	204	
6:30	104	3	5	1	0	0	0	113	18:30	222	4	0	0	0	0	226	
6:45	150	4	1	2	0	2	0	159	18:45	187	4	1	0	1	0	193	
7:00	153	6	0	2	0	0	0	161	19:00	175	2	0	1	0	0	178	
7:15	165	5	0	0	0	0	0	170	19:15	153	2	3	2	0	0	160	
7:30	211	3	2	1	0	0	0	217	19:30	205	5	0	2	0	0	212	
7:45	213	8	0	2	0	0	0	223	19:45	188	2	0	0	0	0	190	
8:00	166	6	0	1	0	0	0	173	20:00	188	2	0	1	0	0	191	
8:15	140	7	1	1	0	1	0	150	20:15	172	1	0	0	0	0	173	
8:30	138	6	3	0	0	0	0	147	20:30	158	2	1	1	0	0	162	
8:45	153	7	1	1	0	1	0	163	20:45	179	1	0	0	0	0	180	
9:00	126	3	0	0	0	2	0	131	21:00	132	2	0	1	0	0	135	
9:15	86	7	2	1	0	1	0	97	21:15	120	0	0	0	0	0	120	
9:30	114	3	1	3	0	0	0	121	21:30	140	1	0	0	0	0	141	
9:45	96	2	0	2	0	0	0	100	21:45	120	1	0	1	0	0	122	
10:00	112	5	0	0	0	0	0	117	22:00	98	2	1	0	0	0	101	
10:15	121	6	1	0	0	0	0	128	22:15	89	2	0	0	0	0	91	
10:30	133	4	0	1	0	0	0	138	22:30	65	1	1	0	0	0	67	
10:45	141	9	3	3	0	0	0	156	22:45	67	2	0	0	0	0	69	
11:00	143	5	1	1	0	0	0	150	23:00	71	0	0	1	0	0	72	
11:15	141	6	0	3	1	0	0	151	23:15	66	2	0	2	0	0	70	
11:30	134	11	1	1	0	0	0	147	23:30	53	0	0	0	0	0	53	
11:45	162	10	0	5	0	0	0	177	23:45	44	0	0	0	0	0	44	
TOTAL	3,987	155	23	47	1	8	0	4,221	TOTAL	7,935	195	24	45	1	10	8,210	

AM PEAK HOUR 7:15 AM
AM PEAK VOLUME 783

PM PEAK HOUR 3:30 PM
PM PEAK VOLUME 953

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	11,922	350	47	92	2	18	12,431
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.9%	2.8%	0.4%	0.7%	0.0%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Thursday, May 08, 2025

CITY: Rialto

JOB #: SC5388

LOCATION: CLASS1 N Ayala Dr south of W Renaissance Pkwy

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	67	0	0	1	0	0	68	12:00	273	16	1	2	0	1	293
0:15	46	0	0	0	0	0	46	12:15	339	12	1	2	0	0	354
0:30	45	1	0	1	0	0	47	12:30	279	15	3	2	0	0	299
0:45	48	1	1	0	0	0	50	12:45	340	11	5	5	0	1	362
1:00	33	0	1	1	0	0	35	13:00	340	21	4	5	0	0	370
1:15	37	0	0	0	0	0	37	13:15	320	18	0	5	0	1	344
1:30	37	0	0	0	0	0	37	13:30	293	16	1	2	0	1	313
1:45	30	3	0	0	0	0	33	13:45	374	12	2	2	0	2	392
2:00	33	1	0	0	0	0	34	14:00	345	14	0	1	1	0	361
2:15	25	0	0	0	0	0	25	14:15	341	9	2	3	0	1	356
2:30	27	0	0	0	0	0	27	14:30	420	13	1	3	0	5	442
2:45	33	0	0	2	0	0	35	14:45	410	13	1	0	0	1	425
3:00	44	0	0	1	0	0	45	15:00	378	14	1	3	0	3	399
3:15	44	1	0	2	0	0	47	15:15	395	4	0	2	0	0	401
3:30	60	0	0	0	0	0	60	15:30	477	12	2	8	0	0	499
3:45	74	1	0	0	0	0	75	15:45	470	5	1	2	0	0	478
4:00	64	3	0	0	1	0	68	16:00	419	14	2	0	0	0	435
4:15	76	0	0	1	0	0	77	16:15	391	11	0	0	0	1	403
4:30	112	2	0	0	0	0	114	16:30	360	9	1	3	0	1	374
4:45	141	5	0	1	0	0	147	16:45	375	5	1	3	0	0	384
5:00	126	6	0	2	0	0	134	17:00	448	8	0	2	0	0	458
5:15	154	4	0	0	0	0	158	17:15	364	7	2	0	0	0	373
5:30	154	4	0	5	0	0	163	17:30	411	16	0	1	0	0	428
5:45	180	5	0	4	0	0	189	17:45	388	9	2	4	0	0	403
6:00	190	7	3	6	0	0	206	18:00	380	6	0	1	0	0	387
6:15	183	13	0	1	0	1	198	18:15	355	4	1	1	0	0	361
6:30	220	10	6	2	0	0	238	18:30	400	5	0	0	0	0	405
6:45	271	8	4	4	0	2	289	18:45	342	5	1	0	1	0	349
7:00	292	12	2	4	0	1	311	19:00	308	6	1	2	0	0	317
7:15	328	9	0	1	0	0	338	19:15	296	4	3	2	0	0	305
7:30	439	7	3	2	0	0	451	19:30	335	6	0	2	0	0	343
7:45	404	16	1	6	0	0	427	19:45	292	4	0	0	1	0	297
8:00	360	11	1	3	0	0	375	20:00	306	3	0	1	0	0	310
8:15	317	16	3	2	0	2	340	20:15	303	1	0	0	0	0	304
8:30	298	14	3	1	0	1	317	20:30	287	3	1	1	0	0	292
8:45	273	11	3	2	0	1	290	20:45	272	4	0	0	0	0	276
9:00	250	11	2	0	0	2	265	21:00	209	3	0	1	0	0	213
9:15	209	14	3	6	0	1	233	21:15	223	1	0	1	0	0	225
9:30	246	8	2	4	0	0	260	21:30	212	2	0	1	0	0	215
9:45	213	9	0	3	0	0	225	21:45	188	1	0	2	0	0	191
10:00	238	12	0	1	0	0	251	22:00	156	2	1	0	0	0	159
10:15	268	12	2	1	0	0	283	22:15	152	2	0	0	0	0	154
10:30	243	14	2	1	0	0	260	22:30	109	2	2	1	0	0	114
10:45	253	11	3	3	0	0	270	22:45	105	2	0	0	0	0	107
11:00	267	9	2	2	0	0	280	23:00	112	0	0	2	0	0	114
11:15	257	11	3	5	1	0	277	23:15	96	3	0	2	0	0	101
11:30	280	17	2	2	0	0	301	23:30	76	0	0	0	0	0	76
11:45	293	15	0	8	0	0	316	23:45	56	0	0	0	0	0	56
TOTAL	8,282	314	52	91	2	11	8,752	TOTAL	14,520	353	43	80	3	18	15,017

AM PEAK HOUR 7:30 AM
AM PEAK VOLUME 1,593

PM PEAK HOUR 3:30 PM
PM PEAK VOLUME 1,815

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	22,802	667	95	171	5	29	23,769
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.9%	2.8%	0.4%	0.7%	0.0%	0.1%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS3 N Linden Ave between Miro Way and W Baseline Rd

AM TIME	NORTHBOUND							TOTAL	PM Time	NORTHBOUND							TOTAL
	1	2	3	4	5	6	1			2	3	4	5	6			
0:00	9	0	0	0	0	0	9	12:00	52	1	0	0	0	0	53		
0:15	7	0	0	0	0	0	7	12:15	48	3	1	0	0	0	52		
0:30	0	0	0	0	0	0	0	12:30	47	5	0	1	0	0	53		
0:45	18	0	0	1	0	0	19	12:45	46	0	0	2	0	1	49		
1:00	27	0	0	0	0	0	27	13:00	28	2	1	0	0	0	31		
1:15	66	0	0	2	0	0	68	13:15	51	0	0	0	0	0	51		
1:30	74	0	1	0	0	0	75	13:30	49	4	0	0	0	0	53		
1:45	24	0	0	0	0	0	24	13:45	50	3	0	0	0	1	54		
2:00	4	0	0	0	0	0	4	14:00	39	3	1	0	0	0	43		
2:15	4	0	0	0	0	0	4	14:15	64	1	1	2	0	0	68		
2:30	9	1	0	0	0	0	10	14:30	68	3	0	0	0	1	72		
2:45	21	2	0	0	0	0	23	14:45	78	1	2	1	0	2	84		
3:00	6	0	0	0	0	0	6	15:00	56	2	0	1	0	3	62		
3:15	10	0	1	0	0	0	11	15:15	66	1	1	0	0	1	69		
3:30	23	0	0	1	0	0	24	15:30	96	1	1	1	0	0	99		
3:45	44	1	0	0	0	0	45	15:45	85	2	2	0	0	1	90		
4:00	17	0	0	0	0	0	17	16:00	92	1	2	0	0	1	96		
4:15	15	0	0	0	0	0	15	16:15	113	1	1	0	0	0	115		
4:30	38	0	0	0	0	0	38	16:30	97	1	0	0	0	0	98		
4:45	52	1	0	0	0	0	53	16:45	64	3	0	0	0	1	68		
5:00	47	0	1	0	0	0	48	17:00	74	1	0	0	0	0	75		
5:15	63	0	0	0	0	0	63	17:15	102	1	1	0	0	0	104		
5:30	50	1	0	1	0	0	52	17:30	97	2	0	0	0	0	99		
5:45	100	0	0	0	0	1	101	17:45	126	1	0	0	0	0	127		
6:00	68	3	1	0	0	0	72	18:00	85	0	0	0	0	1	86		
6:15	82	2	1	0	0	0	85	18:15	62	0	0	0	0	0	62		
6:30	64	2	0	2	0	0	68	18:30	85	1	0	0	0	0	86		
6:45	64	1	1	0	0	2	68	18:45	57	1	0	2	0	2	62		
7:00	53	2	0	0	0	2	57	19:00	40	0	0	1	0	0	41		
7:15	63	0	1	0	0	0	64	19:15	37	0	2	0	0	0	39		
7:30	78	2	1	1	0	1	83	19:30	46	0	0	0	0	0	46		
7:45	65	0	0	0	0	1	66	19:45	31	0	0	0	0	1	32		
8:00	69	1	1	4	0	5	80	20:00	39	0	0	0	0	0	39		
8:15	92	4	0	2	0	8	106	20:15	41	1	0	1	0	0	43		
8:30	45	1	0	2	0	0	48	20:30	41	0	0	0	0	1	42		
8:45	36	2	1	0	0	1	40	20:45	52	0	1	0	0	0	53		
9:00	45	2	0	0	0	0	47	21:00	34	0	1	0	0	0	35		
9:15	49	2	0	1	0	0	52	21:15	16	0	0	0	0	0	16		
9:30	56	2	1	1	0	0	60	21:30	24	0	0	0	0	1	25		
9:45	37	1	1	0	0	0	39	21:45	23	1	0	0	0	0	24		
10:00	34	1	0	0	0	0	35	22:00	28	0	0	0	0	0	28		
10:15	41	1	2	1	0	1	46	22:15	24	0	0	0	0	0	24		
10:30	39	5	1	1	0	0	46	22:30	31	0	0	0	0	0	31		
10:45	42	1	1	0	0	0	44	22:45	20	0	0	0	0	0	20		
11:00	44	0	2	0	0	1	47	23:00	24	0	0	0	0	0	24		
11:15	47	1	0	1	0	1	50	23:15	19	0	0	0	0	0	19		
11:30	67	2	1	2	0	0	72	23:30	11	0	0	0	0	0	11		
11:45	52	2	0	1	0	1	56	23:45	10	0	0	0	0	0	10		
TOTAL	2,060	46	19	24	0	25	2,174	TOTAL	2,568	47	18	12	0	18	2,663		

AM PEAK HOUR 7:30 AM
AM PEAK VOLUME 335

AM PEAK HOUR 5:15 PM
AM PEAK VOLUME 416

CLASS	DESCRIPTION	TOTAL: AM+PM	1	2	3	4	5	6	TOTAL
CLASS 1	PASSENGER VEHICLES	4,628	93	37	36	0	43		4,837
CLASS 2	2-AXLE TRUCKS	95.7%	1.9%	0.8%	0.7%	0.0%	0.9%		100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								
TOTAL: ALL		9,715	184	79	85	2	70		10,135
% OF TOTAL		95.9%	1.8%	0.8%	0.8%	0.0%	0.7%		100.0%

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS N Linden Ave between Miro Way and W Baseline Rd

AM TIME	SOUTHBOUND								TOTAL	PM Time	SOUTHBOUND								TOTAL
	1	2	3	4	5	6					1	2	3	4	5	6			
0:00	22	0	0	0	0	0	0	22	22	12:00	57	3	0	0	0	1	61		
0:15	16	0	1	1	0	0	0	18	18	12:15	50	1	1	0	0	0	52		
0:30	1	0	0	0	0	0	0	1	1	12:30	41	2	0	2	0	0	45		
0:45	27	0	0	0	0	0	0	27	27	12:45	55	1	2	0	0	0	58		
1:00	127	0	0	1	0	0	0	128	128	13:00	56	3	0	1	0	1	61		
1:15	37	0	0	0	0	0	0	37	37	13:15	39	0	2	0	0	0	41		
1:30	41	0	1	0	0	0	0	42	42	13:30	63	0	0	2	0	0	65		
1:45	18	0	0	1	0	0	0	19	19	13:45	51	2	0	1	0	0	54		
2:00	9	0	0	0	0	0	0	9	9	14:00	47	2	0	0	0	0	49		
2:15	5	1	0	1	0	0	0	7	7	14:15	60	2	0	0	0	2	64		
2:30	11	0	0	0	0	0	0	11	11	14:30	74	3	0	0	0	0	77		
2:45	10	0	0	0	0	0	0	10	10	14:45	72	1	2	1	1	1	78		
3:00	18	0	0	1	0	0	0	19	19	15:00	65	4	1	1	0	1	72		
3:15	14	0	0	0	0	0	0	14	14	15:15	54	3	0	0	0	0	57		
3:30	10	0	0	0	0	0	0	10	10	15:30	99	4	2	0	0	0	105		
3:45	16	0	0	0	0	0	0	16	16	15:45	113	7	2	2	0	2	126		
4:00	52	0	0	0	0	0	0	52	52	16:00	174	2	2	0	0	0	178		
4:15	20	0	0	0	0	0	0	20	20	16:15	109	2	1	0	0	1	113		
4:30	72	0	0	0	0	0	0	72	72	16:30	106	1	2	0	0	2	111		
4:45	45	0	0	0	0	0	0	45	45	16:45	69	0	2	1	0	0	72		
5:00	29	2	0	0	0	0	0	31	31	17:00	87	1	0	0	0	0	88		
5:15	22	0	0	1	0	0	0	23	23	17:15	71	1	1	3	0	2	78		
5:30	85	0	0	1	0	0	0	86	86	17:30	130	2	0	1	0	0	133		
5:45	51	0	0	0	0	0	0	51	51	17:45	112	3	0	0	0	0	115		
6:00	73	0	0	0	1	0	0	74	74	18:00	149	0	0	0	0	0	149		
6:15	124	1	0	0	0	1	0	126	126	18:15	128	2	0	0	0	1	131		
6:30	70	1	0	0	0	0	0	71	71	18:30	80	0	0	0	0	0	80		
6:45	34	0	0	0	0	0	0	34	34	18:45	53	0	0	0	0	0	53		
7:00	58	0	0	1	0	1	0	60	60	19:00	50	1	0	1	0	1	53		
7:15	39	0	0	1	0	0	0	40	40	19:15	47	0	2	1	0	0	50		
7:30	54	1	0	0	0	0	0	55	55	19:30	51	1	0	0	0	0	52		
7:45	59	1	1	1	0	0	0	62	62	19:45	46	1	0	0	0	0	47		
8:00	50	2	1	0	0	0	0	53	53	20:00	39	0	0	0	0	1	40		
8:15	59	1	1	2	0	2	0	65	65	20:15	46	0	0	0	0	0	46		
8:30	80	5	1	0	0	2	0	88	88	20:30	83	0	0	0	0	0	83		
8:45	45	0	0	0	0	0	0	45	45	20:45	44	1	0	0	0	0	45		
9:00	38	1	0	0	0	0	0	39	39	21:00	48	0	1	1	0	1	51		
9:15	32	1	2	2	0	0	0	37	37	21:15	43	0	0	0	0	0	43		
9:30	33	2	0	1	0	0	0	36	36	21:30	46	0	0	0	0	0	46		
9:45	39	1	1	0	0	1	0	42	42	21:45	51	0	0	0	0	0	51		
10:00	43	0	0	2	0	0	0	45	45	22:00	46	0	0	0	0	1	47		
10:15	37	3	0	1	0	0	0	41	41	22:15	40	0	1	0	0	0	41		
10:30	46	3	0	4	0	1	0	54	54	22:30	36	2	0	0	0	0	38		
10:45	36	4	1	0	0	0	0	41	41	22:45	29	0	0	0	0	0	29		
11:00	44	1	1	1	0	1	0	48	48	23:00	37	0	1	1	0	0	39		
11:15	37	0	2	2	0	0	0	41	41	23:15	21	0	0	0	0	0	21		
11:30	48	2	1	4	0	0	0	55	55	23:30	27	0	0	0	0	0	27		
11:45	39	0	3	1	0	0	0	43	43	23:45	18	0	0	0	0	0	18		
TOTAL	1,975	33	17	30	1	9		2,065	2,065	TOTAL	3,112	58	25	19	1	18	3,233		

AM PEAK HOUR 5:30 AM
AM PEAK VOLUME 337

AM PEAK HOUR 5:30 PM
AM PEAK VOLUME 528

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	5,087	91	42	49	2	27	5,298
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	96.0%	1.7%	0.8%	0.9%	0.0%	0.5%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024

CITY: Rialto

JOB #: SC4945

LOCATION: CLASS3 N Linden Ave between Miro Way and W Baseline Rd

AM TIME	COMBINED						TOTAL	PM Time	COMBINED						TOTAL
	1	2	3	4	5	6			1	2	3	4	5	6	
0:00	31	0	0	0	0	0	31	12:00	109	4	0	0	0	1	114
0:15	23	0	1	1	0	0	25	12:15	98	4	2	0	0	0	104
0:30	1	0	0	0	0	0	1	12:30	88	7	0	3	0	0	98
0:45	45	0	0	1	0	0	46	12:45	101	1	2	2	0	1	107
1:00	154	0	0	1	0	0	155	13:00	84	5	1	1	0	1	92
1:15	103	0	0	2	0	0	105	13:15	90	0	2	0	0	0	92
1:30	115	0	2	0	0	0	117	13:30	112	4	0	2	0	0	118
1:45	42	0	0	1	0	0	43	13:45	101	5	0	1	0	1	108
2:00	13	0	0	0	0	0	13	14:00	86	5	1	0	0	0	92
2:15	9	1	0	1	0	0	11	14:15	124	3	1	2	0	2	132
2:30	20	1	0	0	0	0	21	14:30	142	6	0	0	0	1	149
2:45	31	2	0	0	0	0	33	14:45	150	2	4	2	1	3	162
3:00	24	0	0	1	0	0	25	15:00	121	6	1	2	0	4	134
3:15	24	0	1	0	0	0	25	15:15	120	4	1	0	0	1	126
3:30	33	0	0	1	0	0	34	15:30	195	5	3	1	0	0	204
3:45	60	1	0	0	0	0	61	15:45	198	9	4	2	0	3	216
4:00	69	0	0	0	0	0	69	16:00	266	3	4	0	0	1	274
4:15	35	0	0	0	0	0	35	16:15	222	3	2	0	0	1	228
4:30	110	0	0	0	0	0	110	16:30	203	2	2	0	0	2	209
4:45	97	1	0	0	0	0	98	16:45	133	3	2	1	0	1	140
5:00	76	2	1	0	0	0	79	17:00	161	2	0	0	0	0	163
5:15	85	0	0	1	0	0	86	17:15	173	2	2	3	0	2	182
5:30	135	1	0	2	0	0	138	17:30	227	4	0	1	0	0	232
5:45	151	0	0	0	0	1	152	17:45	238	4	0	0	0	0	242
6:00	141	3	1	0	1	0	146	18:00	234	0	0	0	0	1	235
6:15	206	3	1	0	0	1	211	18:15	190	2	0	0	0	1	193
6:30	134	3	0	2	0	0	139	18:30	165	1	0	0	0	0	166
6:45	98	1	1	0	0	2	102	18:45	110	1	0	2	0	2	115
7:00	111	2	0	1	0	3	117	19:00	90	1	0	2	0	1	94
7:15	102	0	1	1	0	0	104	19:15	84	0	4	1	0	0	89
7:30	132	3	1	1	0	1	138	19:30	97	1	0	0	0	0	98
7:45	124	1	1	1	0	1	128	19:45	77	1	0	0	0	1	79
8:00	119	3	2	4	0	5	133	20:00	78	0	0	0	0	1	79
8:15	151	5	1	4	0	10	171	20:15	87	1	0	1	0	0	89
8:30	125	6	1	2	0	2	136	20:30	124	0	0	0	0	1	125
8:45	81	2	1	0	0	1	85	20:45	96	1	1	0	0	0	98
9:00	83	3	0	0	0	0	86	21:00	82	0	2	1	0	1	86
9:15	81	3	2	3	0	0	89	21:15	59	0	0	0	0	0	59
9:30	89	4	1	2	0	0	96	21:30	70	0	0	0	0	1	71
9:45	76	2	2	0	0	1	81	21:45	74	1	0	0	0	0	75
10:00	77	1	0	2	0	0	80	22:00	74	0	0	0	0	1	75
10:15	78	4	2	2	0	1	87	22:15	64	0	1	0	0	0	65
10:30	85	8	1	5	0	1	100	22:30	67	2	0	0	0	0	69
10:45	78	5	2	0	0	0	85	22:45	49	0	0	0	0	0	49
11:00	88	1	3	1	0	2	95	23:00	61	0	1	1	0	0	63
11:15	84	1	2	3	0	1	91	23:15	40	0	0	0	0	0	40
11:30	115	4	2	6	0	0	127	23:30	38	0	0	0	0	0	38
11:45	91	2	3	2	0	1	99	23:45	28	0	0	0	0	0	28
TOTAL	4,035	79	36	54	1	34	4,239	TOTAL	5,680	105	43	31	1	36	5,896

AM PEAK HOUR 5:45 AM
AM PEAK VOLUME 648

AM PEAK HOUR 3:45 PM
AM PEAK VOLUME 927

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	9,715	184	79	85	2	70	10,135
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.9%	1.8%	0.8%	0.8%	0.0%	0.7%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS4 W Renaissance Pkwy between N Linden Ave and Ayala Dr

AM TIME	EASTBOUND							TOTAL	PM Time	EASTBOUND							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	18	0	0	0	0	0	0	18	12:00	85	2	0	0	0	0	2	89
0:15	14	1	0	0	0	0	0	15	12:15	101	5	0	0	0	0	0	106
0:30	16	1	0	0	0	0	0	17	12:30	94	4	0	0	0	0	1	99
0:45	20	0	0	0	0	0	0	20	12:45	82	1	0	0	0	0	0	83
1:00	89	0	0	0	0	0	0	89	13:00	61	2	1	1	0	0	2	67
1:15	30	0	0	0	0	0	0	30	13:15	68	2	0	0	0	0	0	70
1:30	27	0	0	0	0	0	0	27	13:30	71	3	0	1	0	0	1	76
1:45	16	0	0	0	0	0	0	16	13:45	66	1	0	0	0	0	0	67
2:00	12	0	1	0	0	0	0	13	14:00	75	3	0	0	0	0	2	80
2:15	3	0	0	0	0	0	0	3	14:15	67	2	0	0	0	0	1	70
2:30	18	0	1	0	0	0	0	19	14:30	102	1	0	0	0	0	2	105
2:45	8	0	0	0	0	0	0	8	14:45	111	2	0	0	0	0	1	114
3:00	11	1	0	0	0	0	0	12	15:00	113	3	0	0	0	0	2	118
3:15	6	0	1	0	0	0	0	7	15:15	94	4	0	0	0	0	0	98
3:30	9	1	0	0	0	0	0	10	15:30	125	5	0	0	0	0	1	131
3:45	22	0	0	0	0	0	0	22	15:45	166	1	0	0	0	0	2	169
4:00	37	1	0	0	0	0	0	38	16:00	185	1	1	1	0	2	2	190
4:15	31	0	0	0	0	0	0	31	16:15	138	1	1	0	0	0	0	140
4:30	85	0	0	0	0	0	0	85	16:30	134	4	1	0	0	0	1	140
4:45	49	0	0	0	0	0	0	49	16:45	135	1	0	0	0	0	0	136
5:00	43	1	1	1	0	0	0	46	17:00	101	2	1	1	0	2	2	107
5:15	33	0	0	0	0	0	0	33	17:15	121	2	0	0	0	0	0	123
5:30	73	0	0	0	0	0	0	73	17:30	135	0	0	0	0	0	1	136
5:45	43	0	0	0	0	2	0	45	17:45	112	0	1	0	0	0	0	113
6:00	66	1	1	0	0	1	0	69	18:00	152	0	0	1	0	2	2	155
6:15	96	1	0	0	0	0	0	97	18:15	173	1	0	0	0	0	0	174
6:30	63	0	0	1	0	0	0	64	18:30	118	2	0	0	0	0	1	121
6:45	38	1	1	0	0	1	0	41	18:45	109	0	1	0	0	0	1	111
7:00	57	1	1	0	0	1	0	60	19:00	82	0	0	0	0	0	1	83
7:15	47	2	0	0	0	1	0	50	19:15	86	0	0	0	0	0	0	86
7:30	56	1	0	1	0	0	0	58	19:30	88	2	0	0	0	0	0	90
7:45	60	3	1	0	0	0	0	64	19:45	54	0	0	1	0	0	1	56
8:00	74	2	1	0	0	2	0	79	20:00	76	1	0	1	0	0	1	79
8:15	63	2	0	0	0	1	0	66	20:15	51	1	1	0	0	0	0	53
8:30	80	2	0	1	0	1	0	84	20:30	78	0	0	0	0	0	1	79
8:45	52	0	1	0	0	1	0	54	20:45	43	1	0	0	0	0	0	44
9:00	53	4	0	1	0	1	0	59	21:00	59	1	0	0	0	0	1	61
9:15	44	1	1	0	0	0	0	46	21:15	34	0	0	0	0	0	0	34
9:30	53	5	1	0	0	1	0	60	21:30	71	0	0	0	0	0	1	72
9:45	52	5	0	0	0	0	0	57	21:45	37	0	0	0	0	0	1	38
10:00	57	6	1	1	0	1	0	66	22:00	59	0	0	0	0	0	0	59
10:15	64	5	1	0	0	1	0	71	22:15	21	0	0	0	0	0	0	21
10:30	67	1	0	0	0	1	0	69	22:30	39	0	0	0	0	0	0	39
10:45	71	4	0	0	0	0	0	75	22:45	26	0	0	0	0	0	0	26
11:00	102	1	0	0	0	2	0	105	23:00	46	0	0	0	0	0	0	46
11:15	84	5	3	2	0	0	0	94	23:15	20	0	0	0	0	0	0	20
11:30	92	3	0	0	0	1	0	96	23:30	23	1	0	0	0	0	0	24
11:45	84	3	0	1	0	0	0	88	23:45	15	0	0	0	0	0	0	15
TOTAL	2,288	65	17	9	0	19	0	2,398	TOTAL	4,102	62	8	7	0	34	4,213	

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 383

AM PEAK HOUR 3:45 PM
AM PEAK VOLUME 639

CLASS	DESCRIPTION	TOTAL: AM+PM	1	2	3	4	5	6	TOTAL
CLASS 1	PASSENGER VEHICLES	6,390	127	25	16	0	53	6,611	
CLASS 2	2-AXLE TRUCKS	96.7%	1.9%	0.4%	0.2%	0.0%	0.8%	100.0%	
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								
TOTAL: ALL		12,187	229	43	38	0	102	12,599	
% OF TOTAL		96.7%	1.8%	0.3%	0.3%	0.0%	0.8%	100.0%	

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS4 W Renaissance Pkwy between N Linden Ave and Ayala Dr

AM TIME	WESTBOUND							TOTAL	PM Time	WESTBOUND							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	10	1	0	0	0	0	0	11	12:00	74	3	0	1	0	2	80	
0:15	12	0	0	0	0	0	0	12	12:15	83	1	0	0	0	0	84	
0:30	11	0	0	0	0	0	0	11	12:30	73	6	1	0	0	1	81	
0:45	16	0	0	0	0	0	0	16	12:45	92	3	1	2	0	0	98	
1:00	27	0	0	0	0	0	0	27	13:00	65	3	0	0	0	2	70	
1:15	36	1	1	0	0	0	0	38	13:15	64	0	0	1	0	0	65	
1:30	68	1	0	0	0	0	0	69	13:30	65	0	0	0	0	1	66	
1:45	29	0	0	0	0	0	0	29	13:45	86	1	0	0	0	0	87	
2:00	7	0	0	0	0	0	0	7	14:00	77	2	0	1	0	2	82	
2:15	10	0	0	0	0	0	0	10	14:15	81	2	0	0	0	0	83	
2:30	10	0	0	0	0	0	0	10	14:30	64	2	0	0	0	1	67	
2:45	19	0	0	0	0	0	0	19	14:45	71	1	0	0	0	0	72	
3:00	10	1	0	1	0	0	0	12	15:00	59	0	0	0	0	2	61	
3:15	11	1	0	0	0	0	0	12	15:15	82	2	0	0	0	0	84	
3:30	20	0	0	0	0	0	0	20	15:30	78	2	0	0	0	1	81	
3:45	24	0	0	1	0	0	0	25	15:45	117	1	0	1	0	0	119	
4:00	18	0	0	0	0	0	0	18	16:00	116	1	0	0	0	0	117	
4:15	15	1	0	0	0	0	0	16	16:15	133	2	0	0	0	2	137	
4:30	27	0	0	0	0	0	0	27	16:30	122	1	0	0	0	0	123	
4:45	60	0	0	0	0	0	0	60	16:45	115	2	0	0	0	1	118	
5:00	44	0	0	0	0	0	0	44	17:00	118	0	0	0	0	1	119	
5:15	76	0	0	0	0	0	0	76	17:15	110	0	0	0	0	1	111	
5:30	55	0	0	0	0	0	1	56	17:30	117	0	0	0	0	1	118	
5:45	102	2	0	0	0	0	0	104	17:45	120	1	0	0	0	0	121	
6:00	77	3	1	0	0	0	0	81	18:00	123	1	0	0	0	1	125	
6:15	94	2	0	0	0	0	1	97	18:15	90	0	0	0	0	1	91	
6:30	63	1	0	2	0	0	1	67	18:30	97	1	1	0	0	0	99	
6:45	113	2	1	0	0	0	1	117	18:45	84	2	0	0	0	1	87	
7:00	69	4	0	0	0	0	2	75	19:00	84	0	0	1	0	1	86	
7:15	63	2	0	0	0	0	0	65	19:15	66	0	0	0	0	0	66	
7:30	65	1	1	1	0	0	1	69	19:30	72	0	1	0	0	1	74	
7:45	73	3	1	0	0	0	1	78	19:45	76	0	0	0	0	1	77	
8:00	62	1	0	1	0	0	3	67	20:00	65	1	0	0	0	0	66	
8:15	58	3	0	0	0	0	0	61	20:15	72	1	0	0	0	0	73	
8:30	54	0	0	0	0	0	1	55	20:30	50	0	1	0	0	1	52	
8:45	45	0	1	0	0	0	0	46	20:45	63	0	0	1	0	0	64	
9:00	50	3	1	1	0	0	1	56	21:00	56	1	0	0	0	1	58	
9:15	49	4	0	3	0	0	0	56	21:15	51	0	0	1	0	0	52	
9:30	37	1	1	0	0	0	1	40	21:30	37	0	0	0	0	1	38	
9:45	50	3	0	0	0	0	1	54	21:45	56	0	0	0	0	0	56	
10:00	43	3	0	0	0	0	1	47	22:00	45	0	0	0	0	1	46	
10:15	52	3	0	0	0	0	0	55	22:15	42	0	0	0	0	0	42	
10:30	59	1	1	0	0	0	0	62	22:30	26	0	0	0	0	0	26	
10:45	71	1	1	0	0	0	1	74	22:45	40	0	0	0	0	0	40	
11:00	56	4	0	1	0	0	2	63	23:00	21	1	0	1	0	0	23	
11:15	78	1	0	0	0	0	0	79	23:15	14	1	0	0	0	0	15	
11:30	85	2	1	0	0	0	1	89	23:30	12	0	0	0	0	0	12	
11:45	73	1	2	1	0	0	0	77	23:45	17	0	0	0	0	0	17	
TOTAL	2,256	57	13	12	0	0	21	2,359	TOTAL	3,541	45	5	10	0	28	3,629	

AM PEAK HOUR 6:00 AM
AM PEAK VOLUME 362

AM PEAK HOUR 4:15 PM
AM PEAK VOLUME 497

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	5,797	102	18	22	0	49	5,988
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	96.8%	1.7%	0.3%	0.4%	0.0%	0.8%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024

CITY: Rialto

JOB #: SC4945

LOCATION: CLASS4 W Renaissance Pkwy between N Linden Ave and Ayala Dr

AM TIME	COMBINED							TOTAL	PM Time	COMBINED							TOTAL
	1	2	3	4	5	6	1			2	3	4	5	6			
0:00	28	1	0	0	0	0	0	29	12:00	159	5	0	1	0	4	169	
0:15	26	1	0	0	0	0	0	27	12:15	184	6	0	0	0	0	190	
0:30	27	1	0	0	0	0	0	28	12:30	167	10	1	0	0	2	180	
0:45	36	0	0	0	0	0	0	36	12:45	174	4	1	2	0	0	181	
1:00	116	0	0	0	0	0	0	116	13:00	126	5	1	1	0	4	137	
1:15	66	1	1	0	0	0	0	68	13:15	132	2	0	1	0	0	135	
1:30	95	1	0	0	0	0	0	96	13:30	136	3	0	1	0	2	142	
1:45	45	0	0	0	0	0	0	45	13:45	152	2	0	0	0	0	154	
2:00	19	0	1	0	0	0	0	20	14:00	152	5	0	1	0	4	162	
2:15	13	0	0	0	0	0	0	13	14:15	148	4	0	0	0	1	153	
2:30	28	0	1	0	0	0	0	29	14:30	166	3	0	0	0	3	172	
2:45	27	0	0	0	0	0	0	27	14:45	182	3	0	0	0	1	186	
3:00	21	2	0	1	0	0	0	24	15:00	172	3	0	0	0	4	179	
3:15	17	1	1	0	0	0	0	19	15:15	176	6	0	0	0	0	182	
3:30	29	1	0	0	0	0	0	30	15:30	203	7	0	0	0	2	212	
3:45	46	0	0	1	0	0	0	47	15:45	283	2	0	1	0	2	288	
4:00	55	1	0	0	0	0	0	56	16:00	301	2	1	1	0	2	307	
4:15	46	1	0	0	0	0	0	47	16:15	271	3	1	0	0	2	277	
4:30	112	0	0	0	0	0	0	112	16:30	256	5	1	0	0	1	263	
4:45	109	0	0	0	0	0	0	109	16:45	250	3	0	0	0	1	254	
5:00	87	1	1	1	0	0	0	90	17:00	219	2	1	1	0	3	226	
5:15	109	0	0	0	0	0	0	109	17:15	231	2	0	0	0	1	234	
5:30	128	0	0	0	0	0	1	129	17:30	252	0	0	0	0	2	254	
5:45	145	2	0	0	0	0	2	149	17:45	232	1	1	0	0	0	234	
6:00	143	4	2	0	0	1	1	150	18:00	275	1	0	1	0	3	280	
6:15	190	3	0	0	0	0	1	194	18:15	263	1	0	0	0	1	265	
6:30	126	1	0	3	0	0	1	131	18:30	215	3	1	0	0	1	220	
6:45	151	3	2	0	0	0	2	158	18:45	193	2	1	0	0	2	198	
7:00	126	5	1	0	0	3	1	135	19:00	166	0	0	1	0	2	169	
7:15	110	4	0	0	0	1	1	115	19:15	152	0	0	0	0	0	152	
7:30	121	2	1	2	0	1	1	127	19:30	160	2	1	0	0	1	164	
7:45	133	6	2	0	0	1	1	142	19:45	130	0	0	1	0	2	133	
8:00	136	3	1	1	0	5	1	146	20:00	141	2	0	1	0	1	145	
8:15	121	5	0	0	0	1	1	127	20:15	123	2	1	0	0	0	126	
8:30	134	2	0	1	0	2	1	139	20:30	128	0	1	0	0	2	131	
8:45	97	0	2	0	0	1	1	100	20:45	106	1	0	1	0	0	108	
9:00	103	7	1	2	0	2	1	115	21:00	115	2	0	0	0	2	119	
9:15	93	5	1	3	0	0	0	102	21:15	85	0	0	1	0	0	86	
9:30	90	6	2	0	0	2	0	100	21:30	108	0	0	0	0	2	110	
9:45	102	8	0	0	0	1	1	111	21:45	93	0	0	0	0	1	94	
10:00	100	9	1	1	0	2	1	113	22:00	104	0	0	0	0	1	105	
10:15	116	8	1	0	0	1	1	126	22:15	63	0	0	0	0	0	63	
10:30	126	2	1	0	0	2	1	131	22:30	65	0	0	0	0	0	65	
10:45	142	5	1	0	0	1	1	149	22:45	66	0	0	0	0	0	66	
11:00	158	5	0	1	0	4	1	168	23:00	67	1	0	1	0	0	69	
11:15	162	6	3	2	0	0	0	173	23:15	34	1	0	0	0	0	35	
11:30	177	5	1	0	0	2	0	185	23:30	35	1	0	0	0	0	36	
11:45	157	4	2	2	0	0	0	165	23:45	32	0	0	0	0	0	32	
TOTAL	4,544	122	30	21	0	40	4,757	TOTAL	7,643	107	13	17	0	62	7,842		

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 691

AM PEAK HOUR 3:45 PM
AM PEAK VOLUME 1,135

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	12,187	229	43	38	0	102	12,599
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	96.7%	1.8%	0.3%	0.3%	0.0%	0.8%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS2 N Linden Ave south of W Renaissance Pkwy

AM TIME	NORTHBOUND							TOTAL	PM Time	NORTHBOUND							TOTAL
	1	2	3	4	5	6	1			2	3	4	5	6			
0:00	21	0	0	0	0	0	0	21	12:00	80	3	1	0	0	0	1	85
0:15	19	0	0	0	0	0	0	19	12:15	58	2	1	1	0	0	0	62
0:30	33	1	0	0	0	0	0	34	12:30	55	4	1	1	0	0	0	61
0:45	31	0	0	0	0	0	0	31	12:45	54	0	0	3	0	0	0	57
1:00	175	1	0	1	0	0	0	177	13:00	37	5	1	1	0	0	1	45
1:15	65	0	0	3	0	0	0	68	13:15	53	4	0	0	0	0	0	57
1:30	58	1	1	0	0	0	0	60	13:30	72	6	0	0	0	0	0	78
1:45	25	0	0	0	0	0	0	25	13:45	51	1	1	1	0	0	0	54
2:00	17	0	0	0	0	0	0	17	14:00	61	5	1	0	0	0	1	68
2:15	9	0	0	0	0	0	0	9	14:15	69	4	1	3	0	0	0	77
2:30	32	1	0	0	0	0	0	33	14:30	103	2	0	0	0	0	1	106
2:45	16	0	0	0	0	0	0	16	14:45	92	3	2	1	0	0	2	100
3:00	25	0	0	0	0	0	0	25	15:00	98	5	0	1	0	0	1	105
3:15	15	0	0	1	0	0	0	16	15:15	100	4	2	1	0	0	3	110
3:30	24	2	1	1	0	0	0	28	15:30	150	7	0	1	0	0	0	158
3:45	29	1	0	1	0	0	0	31	15:45	105	2	2	0	0	0	1	110
4:00	80	0	0	0	0	0	0	80	16:00	226	2	2	0	0	0	1	231
4:15	64	1	0	0	0	0	0	65	16:15	113	3	1	0	0	0	0	117
4:30	168	0	0	0	0	0	0	168	16:30	118	3	0	0	0	0	0	121
4:45	73	0	0	0	0	0	0	73	16:45	89	1	0	0	0	0	0	90
5:00	54	0	1	0	0	0	0	55	17:00	101	4	1	0	0	0	1	107
5:15	56	0	1	0	0	0	0	57	17:15	114	2	0	1	0	0	0	117
5:30	140	0	0	1	0	1	0	142	17:30	174	1	0	0	0	0	0	175
5:45	82	0	0	0	0	0	1	83	17:45	121	0	1	0	0	0	0	122
6:00	95	3	0	0	0	0	0	98	18:00	187	0	0	0	0	0	1	188
6:15	144	2	0	0	0	0	0	146	18:15	168	2	0	0	0	0	0	170
6:30	71	1	1	2	0	0	0	75	18:30	88	1	0	0	0	0	0	89
6:45	37	0	0	0	0	0	1	38	18:45	57	1	0	1	0	0	1	60
7:00	76	0	0	0	0	0	2	78	19:00	67	0	0	0	0	0	0	67
7:15	75	3	1	0	0	0	0	79	19:15	51	0	1	0	0	0	0	52
7:30	84	1	1	0	0	0	1	87	19:30	48	0	0	1	0	0	0	49
7:45	70	5	1	0	0	0	1	77	19:45	40	0	0	0	0	0	1	41
8:00	74	3	3	0	0	0	2	82	20:00	39	0	0	0	0	0	0	39
8:15	81	7	0	3	0	0	10	101	20:15	60	0	0	1	0	0	0	61
8:30	67	0	1	2	0	1	0	71	20:30	76	0	0	0	0	0	1	77
8:45	33	4	0	0	0	0	1	38	20:45	29	0	0	1	0	0	0	30
9:00	53	2	0	0	0	0	0	55	21:00	36	0	1	0	0	0	0	37
9:15	41	2	1	1	0	0	0	45	21:15	29	0	0	1	0	0	0	30
9:30	55	5	1	0	0	0	0	61	21:30	63	0	0	0	0	0	1	64
9:45	46	3	0	1	0	0	0	50	21:45	38	1	0	0	0	0	0	39
10:00	56	1	1	0	0	0	0	58	22:00	68	0	0	0	0	0	0	68
10:15	39	1	3	1	0	1	0	45	22:15	28	0	1	0	0	0	0	29
10:30	55	5	1	2	0	0	0	63	22:30	67	0	0	0	0	0	0	67
10:45	42	3	1	1	0	0	0	47	22:45	37	0	0	0	0	0	0	37
11:00	81	1	2	2	0	1	0	87	23:00	55	1	0	0	0	0	0	56
11:15	55	3	0	2	0	1	0	61	23:15	26	0	0	0	0	0	0	26
11:30	71	5	1	0	0	0	0	77	23:30	30	0	0	0	0	0	0	30
11:45	53	3	0	1	0	0	0	57	23:45	26	0	0	0	0	0	0	26
TOTAL	2,865	71	23	26	0	24	3,009	TOTAL	3,707	79	21	20	0	18	3,845		

AM PEAK HOUR 5:30 AM
AM PEAK VOLUME 469

AM PEAK HOUR 5:30 PM
AM PEAK VOLUME 655

CLASS	DESCRIPTION	TOTAL: AM+PM	1	2	3	4	5	6	TOTAL
CLASS 1	PASSENGER VEHICLES	6,572	150	44	46	0	42		6,854
CLASS 2	2-AXLE TRUCKS	95.9%	2.2%	0.6%	0.7%	0.0%	0.6%		100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								
TOTAL: ALL		13,177	299	91	122	1	70		13,760
% OF TOTAL		95.8%	2.2%	0.7%	0.9%	0.0%	0.5%		100.0%

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024
JOB #: SC4945

CITY: Rialto
LOCATION: CLASS2 N Linden Ave south of W Renaissance Pkwy

AM TIME	SOUTHBOUND							TOTAL	PM Time	SOUTHBOUND							TOTAL
	1	2	3	4	5	6				1	2	3	4	5	6		
0:00	12	0	0	0	0	0	0	12	12:00	48	6	0	0	0	0	1	55
0:15	15	0	0	0	0	0	0	15	12:15	71	2	2	1	0	0	0	76
0:30	13	1	1	0	0	0	0	15	12:30	52	2	1	3	0	0	0	58
0:45	30	0	1	1	0	0	0	32	12:45	78	3	3	2	0	0	0	86
1:00	42	1	0	0	0	0	0	43	13:00	49	6	0	2	0	1	1	58
1:15	73	0	0	0	0	0	0	73	13:15	37	3	1	2	0	0	0	43
1:30	100	1	1	0	0	0	0	102	13:30	46	2	0	0	0	0	0	48
1:45	45	0	0	1	0	0	0	46	13:45	65	0	0	1	0	0	0	66
2:00	11	0	0	0	0	0	0	11	14:00	47	4	0	0	0	1	1	52
2:15	11	0	1	1	0	0	0	13	14:15	64	2	1	0	0	0	1	68
2:30	10	0	0	0	0	0	0	10	14:30	76	4	1	1	0	0	0	82
2:45	14	0	1	0	0	0	0	15	14:45	89	1	1	1	1	1	1	94
3:00	12	1	0	1	0	0	0	14	15:00	55	2	0	2	0	1	1	60
3:15	11	0	0	1	0	0	0	12	15:15	65	1	1	0	0	0	0	67
3:30	25	0	0	1	0	0	0	26	15:30	88	3	1	0	0	0	0	92
3:45	29	1	0	1	0	0	0	31	15:45	138	6	2	1	0	0	2	149
4:00	24	0	0	0	0	0	0	24	16:00	149	1	2	0	0	0	0	152
4:15	37	0	0	0	0	0	0	37	16:15	158	2	1	1	0	1	1	163
4:30	51	1	0	0	0	0	0	52	16:30	126	1	1	0	0	0	2	130
4:45	99	2	0	0	0	0	0	101	16:45	119	1	3	1	0	0	0	124
5:00	107	2	1	1	0	0	0	111	17:00	142	1	0	0	0	1	1	144
5:15	137	0	0	2	0	0	0	139	17:15	156	3	1	0	0	1	1	161
5:30	140	3	0	0	0	0	1	144	17:30	191	1	0	1	0	0	0	193
5:45	221	4	0	0	0	0	0	225	17:45	214	3	0	1	0	0	0	218
6:00	163	3	0	0	0	0	0	166	18:00	135	1	0	0	0	1	1	137
6:15	180	4	0	0	0	0	1	185	18:15	82	1	0	0	0	0	0	83
6:30	101	2	0	1	0	0	0	104	18:30	88	1	0	0	0	0	0	89
6:45	140	3	0	1	0	0	0	144	18:45	58	0	0	1	0	0	0	59
7:00	81	2	0	1	0	0	1	85	19:00	47	0	0	1	0	1	1	49
7:15	82	2	0	1	0	0	0	85	19:15	36	0	0	1	0	0	0	37
7:30	82	1	0	1	0	0	0	84	19:30	52	1	0	0	0	0	0	53
7:45	84	5	2	0	0	0	0	91	19:45	54	0	0	0	0	1	1	55
8:00	71	1	0	2	0	0	2	76	20:00	52	0	0	0	0	0	0	52
8:15	80	2	1	0	0	0	0	83	20:15	59	0	0	1	0	0	0	60
8:30	107	2	0	2	0	0	2	113	20:30	45	1	0	0	0	0	0	46
8:45	60	0	0	0	0	0	0	60	20:45	59	0	0	0	0	0	0	59
9:00	44	2	0	1	0	0	0	47	21:00	48	1	0	0	0	1	1	50
9:15	44	4	2	3	0	0	0	53	21:15	27	2	0	2	0	0	0	31
9:30	29	3	0	3	0	0	0	35	21:30	38	1	1	0	0	0	0	40
9:45	45	1	1	1	0	0	1	49	21:45	37	0	0	1	0	0	0	38
10:00	48	1	1	2	0	0	0	52	22:00	47	0	0	1	0	1	1	49
10:15	45	4	0	2	0	0	0	51	22:15	51	0	1	1	0	0	0	53
10:30	49	3	0	4	0	1	1	57	22:30	41	0	0	1	0	0	0	42
10:45	57	3	1	2	0	0	0	63	22:45	47	0	0	0	0	0	0	47
11:00	48	4	1	2	0	1	1	56	23:00	34	1	1	1	0	0	0	37
11:15	61	2	1	2	0	0	0	66	23:15	26	2	1	1	0	0	0	30
11:30	63	2	3	1	0	0	0	69	23:30	19	0	0	1	0	0	0	20
11:45	52	4	2	1	0	0	0	59	23:45	15	0	0	0	0	0	0	15
TOTAL	3,085	77	21	43	0	10		3,236	TOTAL	3,520	72	26	33	1	18		3,670

AM PEAK HOUR 5:30 AM
AM PEAK VOLUME 720

AM PEAK HOUR 5:00 PM
AM PEAK VOLUME 716

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	6,605	149	47	76	1	28	6,906
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.6%	2.2%	0.7%	1.1%	0.0%	0.4%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	BUS								

A31224

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, October 08, 2024

CITY: Rialto

JOB #: SC4945

LOCATION: CLASS2 N Linden Ave south of W Renaissance Pkwy

AM TIME	COMBINED							TOTAL	PM Time	COMBINED							TOTAL
	1	2	3	4	5	6	1			2	3	4	5	6			
0:00	33	0	0	0	0	0	0	33	12:00	128	9	1	0	0	0	2	140
0:15	34	0	0	0	0	0	0	34	12:15	129	4	3	2	0	0	0	138
0:30	46	2	1	0	0	0	0	49	12:30	107	6	2	4	0	0	0	119
0:45	61	0	1	1	0	0	0	63	12:45	132	3	3	5	0	0	0	143
1:00	217	2	0	1	0	0	0	220	13:00	86	11	1	3	0	0	2	103
1:15	138	0	0	3	0	0	0	141	13:15	90	7	1	2	0	0	0	100
1:30	158	2	2	0	0	0	0	162	13:30	118	8	0	0	0	0	0	126
1:45	70	0	0	1	0	0	0	71	13:45	116	1	1	2	0	0	0	120
2:00	28	0	0	0	0	0	0	28	14:00	108	9	1	0	0	0	2	120
2:15	20	0	1	1	0	0	0	22	14:15	133	6	2	3	0	0	1	145
2:30	42	1	0	0	0	0	0	43	14:30	179	6	1	1	0	0	1	188
2:45	30	0	1	0	0	0	0	31	14:45	181	4	3	2	1	3	3	194
3:00	37	1	0	1	0	0	0	39	15:00	153	7	0	3	0	0	2	165
3:15	26	0	0	2	0	0	0	28	15:15	165	5	3	1	0	0	3	177
3:30	49	2	1	2	0	0	0	54	15:30	238	10	1	1	0	0	0	250
3:45	58	2	0	2	0	0	0	62	15:45	243	8	4	1	0	0	3	259
4:00	104	0	0	0	0	0	0	104	16:00	375	3	4	0	0	0	1	383
4:15	101	1	0	0	0	0	0	102	16:15	271	5	2	1	0	0	1	280
4:30	219	1	0	0	0	0	0	220	16:30	244	4	1	0	0	0	2	251
4:45	172	2	0	0	0	0	0	174	16:45	208	2	3	1	0	0	0	214
5:00	161	2	2	1	0	0	0	166	17:00	243	5	1	0	0	0	2	251
5:15	193	0	1	2	0	0	0	196	17:15	270	5	1	1	0	0	1	278
5:30	280	3	0	1	0	2	0	286	17:30	365	2	0	1	0	0	0	368
5:45	303	4	0	0	0	1	0	308	17:45	335	3	1	1	0	0	0	340
6:00	258	6	0	0	0	0	0	264	18:00	322	1	0	0	0	0	2	325
6:15	324	6	0	0	0	0	1	331	18:15	250	3	0	0	0	0	0	253
6:30	172	3	1	3	0	0	0	179	18:30	176	2	0	0	0	0	0	178
6:45	177	3	0	1	0	1	0	182	18:45	115	1	0	2	0	0	1	119
7:00	157	2	0	1	0	0	3	163	19:00	114	0	0	1	0	0	1	116
7:15	157	5	1	1	0	0	0	164	19:15	87	0	1	1	0	0	0	89
7:30	166	2	1	1	0	0	1	171	19:30	100	1	0	1	0	0	0	102
7:45	154	10	3	0	0	0	1	168	19:45	94	0	0	0	0	0	2	96
8:00	145	4	3	2	0	0	4	158	20:00	91	0	0	0	0	0	0	91
8:15	161	9	1	3	0	10	0	184	20:15	119	0	0	2	0	0	0	121
8:30	174	2	1	4	0	3	0	184	20:30	121	1	0	0	0	0	1	123
8:45	93	4	0	0	0	0	1	98	20:45	88	0	0	1	0	0	0	89
9:00	97	4	0	1	0	0	0	102	21:00	84	1	1	0	0	0	1	87
9:15	85	6	3	4	0	0	0	98	21:15	56	2	0	3	0	0	0	61
9:30	84	8	1	3	0	0	0	96	21:30	101	1	1	0	0	0	1	104
9:45	91	4	1	2	0	1	0	99	21:45	75	1	0	1	0	0	0	77
10:00	104	2	2	2	0	0	0	110	22:00	115	0	0	1	0	0	1	117
10:15	84	5	3	3	0	1	0	96	22:15	79	0	2	1	0	0	0	82
10:30	104	8	1	6	0	1	0	120	22:30	108	0	0	1	0	0	0	109
10:45	99	6	2	3	0	0	0	110	22:45	84	0	0	0	0	0	0	84
11:00	129	5	3	4	0	2	0	143	23:00	89	2	1	1	0	0	0	93
11:15	116	5	1	4	0	1	0	127	23:15	52	2	1	1	0	0	0	56
11:30	134	7	4	1	0	0	0	146	23:30	49	0	0	1	0	0	0	50
11:45	105	7	2	2	0	0	0	116	23:45	41	0	0	0	0	0	0	41
TOTAL	5,950	148	44	69	0	34	0	6,245	TOTAL	7,227	151	47	53	1	36	0	7,515

AM PEAK HOUR
5:30 AM
AM PEAK VOLUME
1,189

AM PEAK HOUR
5:15 PM
AM PEAK VOLUME
1,311

CLASS 1	PASSENGER VEHICLES	TOTAL: AM+PM	13,177	299	91	122	1	70	13,760
CLASS 2	2-AXLE TRUCKS	% OF TOTAL	95.8%	2.2%	0.7%	0.9%	0.0%	0.5%	100.0%
CLASS 3	3-AXLE TRUCKS								
CLASS 4	4 OR MORE AXLE TRUCKS								
CLASS 5	RV								
CLASS 6	Buses								

APPENDIX C

INTERSECTION ANALYSIS WORKSHEETS

APPENDIX C-1

INTERSECTION ANALYSIS
WORKSHEETS –
EXISTING CONDITIONS

Renaissance II Residential Project

Vistro File: K:\...\Renaissance Res II_AM.vistro

Scenario 1 EX AM

Report File: K:\...\1 EX AM.pdf

6/9/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	WB Left	0.509	26.8	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	EB Right	0.396	16.6	B
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	WB Left	0.469	20.5	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	NB Left	0.271	27.1	C
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.165	7.9	A
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.461	25.0	C
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	EB Left	0.422	27.7	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.509

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	484	298	0	0	456	353	0	0	0	526	2	315
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	484	298	0	0	456	213	0	0	0	526	2	185
Peak Hour Factor	0.9420	0.9420	1.0000	1.0000	0.9420	0.9420	1.0000	1.0000	1.0000	0.9420	0.9420	0.9420
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]	128	79	0	0	121	57	0	0	0	140	1	49
Total Analysis Volume [veh/h]	514	316	0	0	484	226	0	0	0	558	2	196
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	31	0	0	0	0	0	32	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	28	63	0	0	35	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	16	65	45	45		17	17	17
g / C, Green / Cycle	0.18	0.72	0.50	0.50		0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.15	0.09	0.19	0.21		0.15	0.15	0.12
s, saturation flow rate [veh/h]	3514	3618	1900	1708		1810	1810	1615
c, Capacity [veh/h]	620	2621	957	860		338	338	301
d1, Uniform Delay [s]	35.74	3.74	13.64	14.01		35.22	35.22	33.88
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	2.92	0.09	1.11	1.46		5.23	5.22	2.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.12	0.37	0.41		0.83	0.83	0.65
d, Delay for Lane Group [s/veh]	38.66	3.84	14.75	15.47		40.45	40.44	36.25
Lane Group LOS	D	A	B	B		D	D	D
Critical Lane Group	Yes	No	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.58	0.73	4.45	4.61		6.27	6.27	4.09
50th-Percentile Queue Length [ft/ln]	139.56	18.16	111.21	115.36		156.80	156.82	102.29
95th-Percentile Queue Length [veh/ln]	9.46	1.31	7.91	8.14		10.38	10.38	7.37
95th-Percentile Queue Length [ft/ln]	236.43	32.69	197.69	203.43		259.47	259.51	184.13

Movement, Approach, & Intersection Results

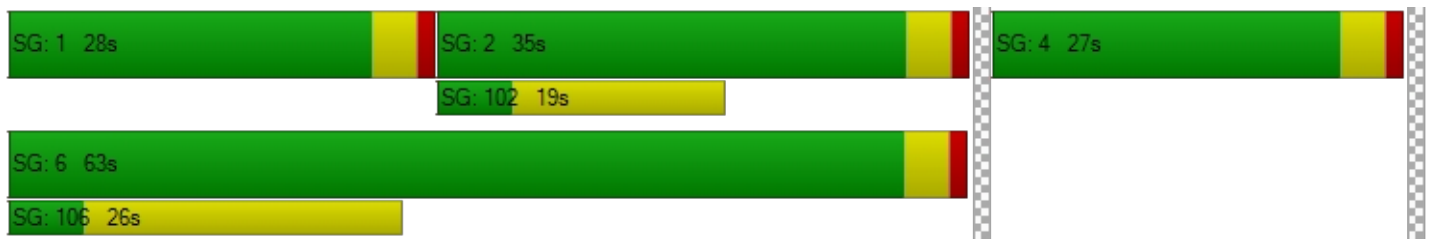
d_M, Delay for Movement [s/veh]	38.66	3.84	0.00	0.00	14.94	15.47	0.00	0.00	0.00	40.44	40.44	36.25
Movement LOS	D	A			B	B				D	D	D
d_A, Approach Delay [s/veh]	25.40			15.11			0.00			39.36		
Approach LOS	C			B			A			D		
d_I, Intersection Delay [s/veh]	26.81											
Intersection LOS	C											
Intersection V/C	0.509											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.146	2.415
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1311	689	0	511
d_b, Bicycle Delay [s]	5.34	19.34	45.00	24.94
I_b,int, Bicycle LOS Score for Intersection	2.244	2.261	4.132	3.022
Bicycle LOS	B	B	D	C

Sequence




Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	16.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.396

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	645	508	277	706	0	137	1	441	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	645	328	277	706	0	137	1	281	0	0	0
Peak Hour Factor	1.0000	0.9330	0.9330	0.9330	0.9330	1.0000	0.9330	0.9330	0.9330	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]	0	173	88	74	189	0	37	0	75	0	0	0
Total Analysis Volume [veh/h]	0	691	352	297	757	0	147	1	301	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	39	0	23	62	0	0	28	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	57	57	10	71	11	11	11	
g / C, Green / Cycle	0.63	0.63	0.11	0.79	0.12	0.12	0.12	
(v / s)_i Volume / Saturation Flow Rate	0.19	0.22	0.08	0.21	0.08	0.09	0.09	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1617	1615	
c, Capacity [veh/h]	2283	1019	391	2846	225	201	201	
d1, Uniform Delay [s]	7.57	7.83	38.83	2.59	37.56	38.07	38.07	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.34	0.93	3.06	0.23	3.20	5.59	5.59	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.30	0.35	0.76	0.27	0.65	0.75	0.75	
d, Delay for Lane Group [s/veh]	7.91	8.76	41.89	2.82	40.76	43.65	43.66	
Lane Group LOS	A	A	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	2.81	3.11	3.30	1.26	3.24	3.48	3.48	
50th-Percentile Queue Length [ft/ln]	70.23	77.74	82.58	31.44	81.06	87.02	86.94	
95th-Percentile Queue Length [veh/ln]	5.06	5.60	5.95	2.26	5.84	6.27	6.26	
95th-Percentile Queue Length [ft/ln]	126.42	139.93	148.65	56.58	145.90	156.63	156.49	

Movement, Approach, & Intersection Results

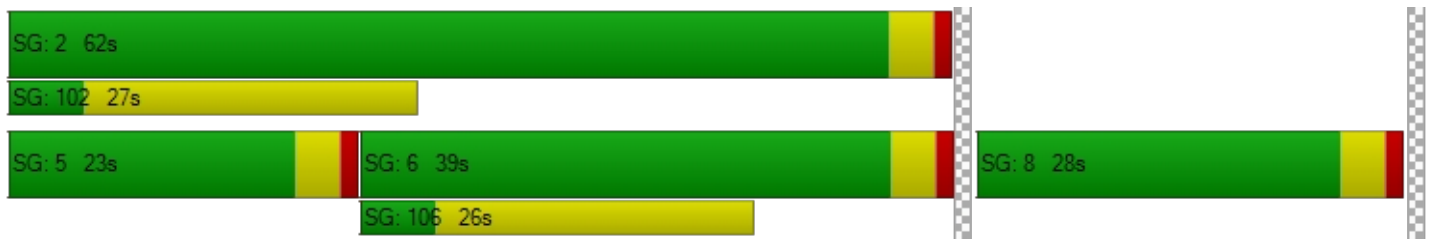
d_M, Delay for Movement [s/veh]	0.00	7.91	8.76	41.89	2.82	0.00	40.76	43.65	43.66	0.00	0.00	0.00
Movement LOS		A	A	D	A		D	D	D			
d_A, Approach Delay [s/veh]	8.20			13.83			42.71			0.00		
Approach LOS	A			B			D			A		
d_I, Intersection Delay [s/veh]	16.61											
Intersection LOS	B											
Intersection V/C	0.396											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			0.000			2.367			2.121		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	778			1289			533			0		
d_b, Bicycle Delay [s]	16.81			5.69			24.20			45.00		
I_b,int, Bicycle LOS Score for Intersection	2.569			2.429			2.564			4.132		
Bicycle LOS	B			B			B			D		

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	20.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.469

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	46	651	31	205	625	321	196	113	56	29	104	278
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	651	31	205	625	321	196	113	56	29	104	278
Peak Hour Factor	0.9360	0.9360	0.9360	0.9460	0.9360	0.9460	0.9460	0.9460	0.9360	0.9360	0.9460	0.9460
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	174	8	54	167	85	52	30	15	8	27	73
Total Analysis Volume [veh/h]	49	696	33	217	668	339	207	119	60	31	110	294
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	32	32	15	38	38	12	34	34	9	31	31
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	4	45	52	11	52	64	8	15	23	3	10	25
g / C, Green / Cycle	0.04	0.50	0.57	0.12	0.58	0.72	0.09	0.17	0.25	0.03	0.11	0.28
(v / s)_i Volume / Saturation Flow Rate	0.01	0.19	0.02	0.06	0.18	0.21	0.06	0.03	0.04	0.01	0.03	0.18
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	138	1803	926	430	2103	1154	312	620	412	106	407	451
d1, Uniform Delay [s]	42.11	14.01	8.37	36.95	9.67	4.64	39.69	31.95	25.93	42.70	36.55	28.58
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.12
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.53	0.63	0.07	0.92	0.40	0.65	2.41	0.15	0.16	1.51	0.35	1.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.39	0.04	0.51	0.32	0.29	0.66	0.19	0.15	0.29	0.27	0.65
d, Delay for Lane Group [s/veh]	43.65	14.64	8.44	37.88	10.07	5.28	42.10	32.10	26.09	44.21	36.90	30.32
Lane Group LOS	D	B	A	D	B	A	D	C	C	D	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.55	4.31	0.28	2.26	3.21	2.02	2.29	1.11	1.00	0.36	1.12	5.66
50th-Percentile Queue Length [ft/ln]	13.86	107.70	7.01	56.48	80.34	50.54	57.31	27.77	25.01	8.91	27.90	141.60
95th-Percentile Queue Length [veh/ln]	1.00	7.71	0.50	4.07	5.78	3.64	4.13	2.00	1.80	0.64	2.01	9.57
95th-Percentile Queue Length [ft/ln]	24.96	192.80	12.61	101.66	144.61	90.97	103.15	49.99	45.01	16.03	50.21	239.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.65	14.64	8.44	37.88	10.07	5.28	42.10	32.10	26.09	44.21	36.90	30.32
Movement LOS	D	B	A	D	B	A	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	16.20			13.67			36.53			32.97		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	20.47											
Intersection LOS	C											
Intersection V/C	0.469											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.809	2.933	2.719	2.707
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	756	667	600
d_b, Bicycle Delay [s]	21.36	17.42	20.00	22.05
I_b,int, Bicycle LOS Score for Intersection	2.201	2.569	1.878	1.918
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	27.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.271

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	38	252	78	89	208	18	0	34	132	61	0	114	89	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	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	0	0
Diverted Trips [veh/h]	0	0	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	0	0
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	252	78	89	208	18	0	34	132	61	0	114	89	63
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	0.760	0.954	0.954	0.954	0.760	0.954	0.954	0.954
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	10	66	20	23	55	5	0	9	35	16	0	30	23	17
Total Analysis Volume [veh/h]	40	264	82	93	218	19	0	36	138	64	0	119	93	66
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	11	34	0	0	11	29	0	0	16	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	51	51	6	53	53	3	10	10	7	15	15
g / C, Green / Cycle	0.04	0.56	0.56	0.07	0.59	0.59	0.03	0.11	0.11	0.08	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.02	0.09	0.10	0.05	0.06	0.06	0.02	0.05	0.06	0.07	0.04	0.05
s, saturation flow rate [veh/h]	1810	1900	1750	1810	1900	1847	1810	1900	1705	1810	1900	1649
c, Capacity [veh/h]	64	1066	982	119	1124	1093	60	212	190	151	307	267
d1, Uniform Delay [s]	42.81	9.55	9.58	41.40	8.01	8.01	42.90	37.55	37.69	40.47	33.05	33.16
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.51	0.34	0.38	10.49	0.19	0.20	9.10	1.73	2.17	8.80	0.46	0.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.62	0.17	0.17	0.78	0.11	0.11	0.60	0.49	0.52	0.79	0.27	0.29
d, Delay for Lane Group [s/veh]	52.32	9.89	9.96	51.89	8.20	8.21	52.01	39.28	39.86	49.27	33.51	33.75
Lane Group LOS	D	A	A	D	A	A	D	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.04	1.68	1.61	2.35	0.99	0.98	0.93	2.22	2.14	2.92	1.60	1.50
50th-Percentile Queue Length [ft/ln]	25.95	41.99	40.15	58.86	24.75	24.42	23.36	55.43	53.45	73.02	39.91	37.43
95th-Percentile Queue Length [veh/ln]	1.87	3.02	2.89	4.24	1.78	1.76	1.68	3.99	3.85	5.26	2.87	2.70
95th-Percentile Queue Length [ft/ln]	46.71	75.58	72.26	105.94	44.54	43.95	42.05	99.78	96.22	131.44	71.84	67.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.32	9.91	9.96	51.89	8.20	8.21	52.01	52.01	39.43	39.86	49.27	49.27	33.54	33.75
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	14.32			20.52			41.44			40.32				
Approach LOS	B			C			D			D				
d_I, Intersection Delay [s/veh]	27.09													
Intersection LOS	C													
Intersection V/C	0.271													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0			
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00			
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00			
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45			
I_p,int, Pedestrian LOS Score for Intersectio	2.455			2.437			2.377			2.417			
Crosswalk LOS	B			B			B			B			
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000			
c_b, Capacity of the bicycle lane [bicycles/h]	667			667			556			667			
d_b, Bicycle Delay [s]	20.00			20.00			23.47			20.00			
I_b,int, Bicycle LOS Score for Intersection	1.878			1.832			1.726			1.691			
Bicycle LOS	A			A			A			A			

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	7.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.165

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	19	351	228	66	61	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	351	228	66	61	21
Peak Hour Factor	0.8480	0.7930	0.7930	0.7930	0.7930	0.8480
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	111	72	21	19	6
Total Analysis Volume [veh/h]	22	443	288	83	77	25
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	10	60	50	0	30	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	76	70	70	6	6
g / C, Green / Cycle	0.02	0.85	0.78	0.78	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.01	0.12	0.10	0.11	0.04	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1761	1810	1615
c, Capacity [veh/h]	43	3071	1483	1375	113	100
d1, Uniform Delay [s]	43.41	1.17	2.40	2.42	41.34	40.20
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.01	0.10	0.17	0.20	7.14	1.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.14	0.13	0.13	0.68	0.25
d, Delay for Lane Group [s/veh]	52.42	1.27	2.57	2.62	48.48	41.48
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.59	0.26	0.60	0.61	1.88	0.56
50th-Percentile Queue Length [ft/ln]	14.68	6.57	15.03	15.31	46.95	13.96
95th-Percentile Queue Length [veh/ln]	1.06	0.47	1.08	1.10	3.38	1.00
95th-Percentile Queue Length [ft/ln]	26.43	11.83	27.06	27.56	84.51	25.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.42	1.27	2.59	2.62	48.48	41.48
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	3.69		2.60		46.76	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	7.94					
Intersection LOS	A					
Intersection V/C	0.165					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.453	2.350	2.009
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	1022	578
d_b, Bicycle Delay [s]	6.42	10.76	22.76
I_b,int, Bicycle LOS Score for Intersection	1.943	1.866	1.560
Bicycle LOS	A	A	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd

Control Type:	Signalized	Delay (sec / veh):	25.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	183	71	88	94	62	42	402	22	24	457	147
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	183	71	88	94	62	42	402	22	24	457	147
Peak Hour Factor	0.9110	0.9110	0.8650	0.8650	0.9110	0.9110	0.9110	0.8650	0.9110	0.8650	0.8650	0.8650
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	50	21	25	26	17	12	116	6	7	132	42
Total Analysis Volume [veh/h]	49	201	82	102	103	68	46	465	24	28	528	170
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	22	0	5	25	0	5	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	26	0	9	25	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	14	12	12	3	45	45	3	44	44
g / C, Green / Cycle	0.16	0.16	0.13	0.13	0.04	0.50	0.50	0.03	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.13	0.05	0.11	0.04	0.03	0.13	0.13	0.02	0.19	0.19
s, saturation flow rate [veh/h]	1882	1615	1854	1615	1810	1900	1867	1810	1900	1744
c, Capacity [veh/h]	300	258	251	218	69	949	933	51	930	854
d1, Uniform Delay [s]	36.67	33.49	37.85	35.14	42.72	12.96	12.96	43.16	14.49	14.51
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.00	0.70	6.48	0.80	10.56	0.66	0.68	8.81	1.23	1.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83	0.32	0.82	0.31	0.67	0.26	0.26	0.55	0.39	0.39
d, Delay for Lane Group [s/veh]	42.67	34.20	44.33	35.94	53.28	13.62	13.64	51.97	15.73	15.87
Lane Group LOS	D	C	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.73	1.62	4.77	1.38	1.20	2.90	2.86	0.73	4.75	4.41
50th-Percentile Queue Length [ft/ln]	143.20	40.42	119.27	34.48	30.03	72.38	71.51	18.36	118.66	110.30
95th-Percentile Queue Length [veh/ln]	9.65	2.91	8.35	2.48	2.16	5.21	5.15	1.32	8.32	7.86
95th-Percentile Queue Length [ft/ln]	241.33	72.76	208.83	62.07	54.06	130.29	128.71	33.04	207.99	196.42

Movement, Approach, & Intersection Results

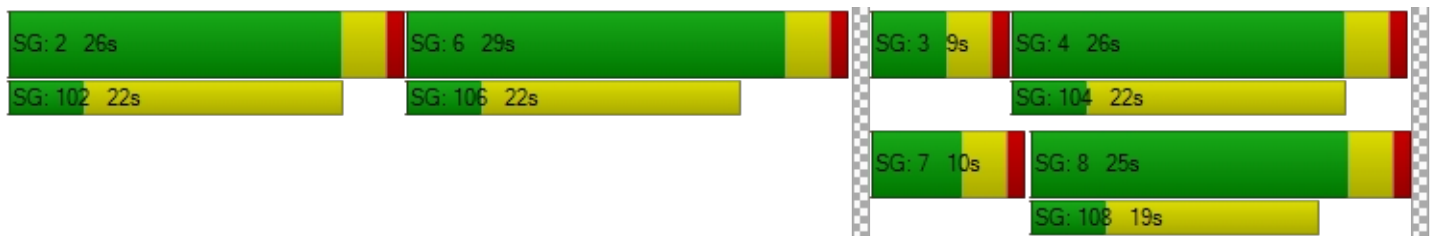
d_M, Delay for Movement [s/veh]	42.67	42.67	34.20	44.33	44.33	35.94	53.28	13.63	13.64	51.97	15.77	15.87
Movement LOS	D	D	C	D	D	D	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	40.58			42.24			17.04			17.19		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	24.97											
Intersection LOS	C											
Intersection V/C	0.461											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.251	2.301	2.531	2.569
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	489	467	489
d_b, Bicycle Delay [s]	23.47	25.69	26.45	25.69
I_b,int, Bicycle LOS Score for Intersection	2.107	2.010	2.001	2.159
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	27.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.422

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name																
Base Volume Input [veh/h]	214	559	76	0	46	598	57	0	99	263	169	0	46	333	31	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Growth Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
In-Process Volume [veh/h]	0	0	0	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	0	0	0	
Diverted Trips [veh/h]	0	0	0	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	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0	
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	214	559	76	0	46	598	57	0	99	263	169	0	46	333	31	
Peak Hour Factor	0.9210	0.9210	0.9210	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Total 15-Minute Volume [veh/h]	58	152	21	0	12	162	15	0	27	71	46	0	12	90	8	
Total Analysis Volume [veh/h]	232	607	83	0	50	649	62	0	107	286	183	0	50	362	34	
Presence of On-Street Parking	No		No	No			No	No			No	No			No	
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
v_do, Outbound Pedestrian Volume crossing	0			0				0				0				
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0				
v_co, Outbound Pedestrian Volume crossing	0			0				0				0				
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0				
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0				
Bicycle Volume [bicycles/h]	0			0				0				0				

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	0	9	32	0	0	10	36	0	0	11	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	52	52	4	49	49	6	15	15	4	12	12
g / C, Green / Cycle	0.08	0.58	0.58	0.04	0.54	0.54	0.07	0.16	0.16	0.04	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.07	0.19	0.19	0.01	0.19	0.19	0.06	0.13	0.13	0.03	0.11	0.11
s, saturation flow rate [veh/h]	3514	1900	1821	3514	1900	1842	1810	1900	1658	1810	1900	1844
c, Capacity [veh/h]	273	1098	1052	140	1026	995	121	312	272	73	262	254
d1, Uniform Delay [s]	40.98	9.85	9.85	42.08	11.76	11.76	41.66	36.14	36.26	42.63	37.38	37.42
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.22	0.77	0.81	1.53	0.95	0.98	18.54	4.58	5.76	10.87	4.60	4.91
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.32	0.32	0.36	0.35	0.35	0.89	0.79	0.81	0.69	0.76	0.77
d, Delay for Lane Group [s/veh]	48.20	10.62	10.65	43.61	12.71	12.74	60.20	40.73	42.02	53.50	41.99	42.33
Lane Group LOS	D	B	B	D	B	B	E	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.78	3.54	3.40	0.57	4.10	3.99	2.95	5.54	5.03	1.31	4.52	4.44
50th-Percentile Queue Length [ft/ln]	69.49	88.54	85.12	14.14	102.42	99.70	73.67	138.44	125.81	32.64	112.90	111.08
95th-Percentile Queue Length [veh/ln]	5.00	6.38	6.13	1.02	7.37	7.18	5.30	9.40	8.71	2.35	8.00	7.90
95th-Percentile Queue Length [ft/ln]	125.08	159.38	153.22	25.45	184.36	179.47	132.61	234.92	217.79	58.76	200.04	197.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.20	10.63	10.65	43.61	43.61	12.72	12.74	60.20	60.20	40.90	42.02	53.50	53.50	42.14	42.33
Movement LOS	D	B	B	D	D	B	B	E	E	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	20.09			14.75				44.84				43.43			
Approach LOS	C			B				D				D			
d_I, Intersection Delay [s/veh]	27.71														
Intersection LOS	C														
Intersection V/C	0.422														

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.748	2.700	2.542	2.470
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	622	711	733
d_b, Bicycle Delay [s]	20.00	21.36	18.69	18.05
I_b,int, Bicycle LOS Score for Intersection	2.320	2.146	1.947	1.928
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Renaissance II Residential Project

Vistro File: C:\...\Renaissance Res II_PM.vistro

Scenario 1 EX PM

Report File: C:\...\1 EX PM.pdf

6/4/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	NB Left	0.547	26.4	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	SB Left	0.618	19.6	B
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	WB Left	0.620	24.5	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.509	34.1	C
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.288	10.5	B
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.548	32.9	C
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	WB Left	0.439	29.1	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	26.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.547

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	482	449	0	0	525	226	0	0	0	697	5	301
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	482	449	0	0	525	86	0	0	0	697	5	171
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	132	123	0	0	144	24	0	0	0	191	1	47
Total Analysis Volume [veh/h]	528	492	0	0	575	94	0	0	0	763	5	187
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	25	50	0	0	25	0	0	0	0	0	40	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	16	59	39	39		23	23	23
g / C, Green / Cycle	0.18	0.66	0.44	0.44		0.25	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.15	0.14	0.18	0.18		0.21	0.21	0.12
s, saturation flow rate [veh/h]	3514	3618	1900	1810		1810	1811	1615
c, Capacity [veh/h]	627	2388	830	791		454	455	405
d1, Uniform Delay [s]	35.74	6.02	17.30	17.49		32.04	32.03	28.55
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.16	0.20	1.45	1.66		4.47	4.45	0.82
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.21	0.40	0.42		0.85	0.84	0.46
d, Delay for Lane Group [s/veh]	38.90	6.22	18.76	19.15		36.51	36.48	29.36
Lane Group LOS	D	A	B	B		D	D	C
Critical Lane Group	Yes	No	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.76	1.66	4.87	4.94		8.29	8.29	3.45
50th-Percentile Queue Length [ft/ln]	144.08	41.47	121.67	123.59		207.32	207.23	86.13
95th-Percentile Queue Length [veh/ln]	9.70	2.99	8.48	8.59		13.02	13.01	6.20
95th-Percentile Queue Length [ft/ln]	242.51	74.65	212.11	214.75		325.39	325.27	155.04

Movement, Approach, & Intersection Results

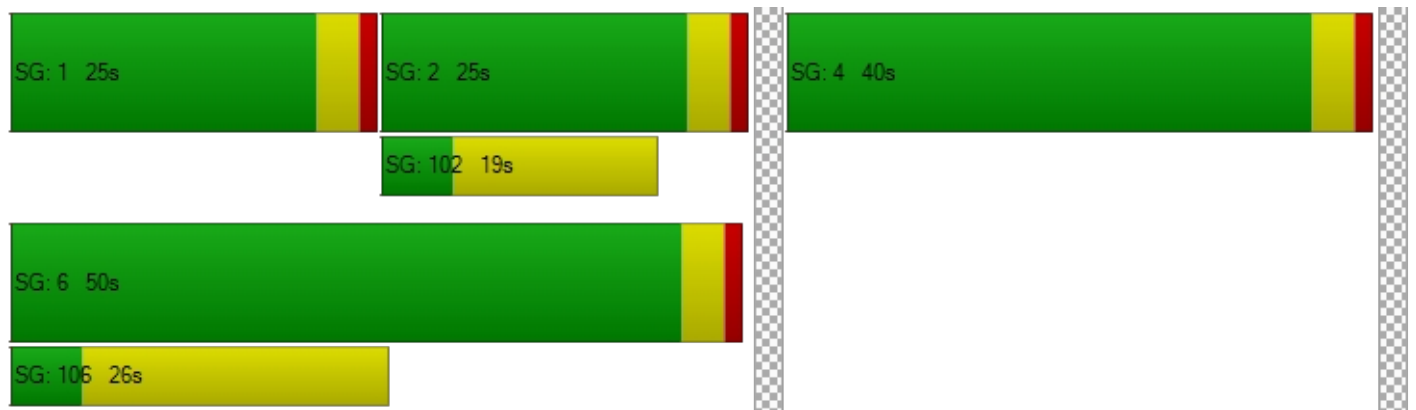
d_M, Delay for Movement [s/veh]	38.90	6.22	0.00	0.00	18.92	19.15	0.00	0.00	0.00	36.50	36.48	29.36
Movement LOS	D	A			B	B				D	D	C
d_A, Approach Delay [s/veh]	23.13				18.95		0.00		35.10			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	26.40											
Intersection LOS	C											
Intersection V/C	0.547											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.090	2.479
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1022	467	0	800
d_b, Bicycle Delay [s]	10.76	26.45	45.00	16.20
I_b,int, Bicycle LOS Score for Intersection	2.401	2.227	4.132	3.350
Bicycle LOS	B	B	D	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	19.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.618

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	692	754	296	922	0	239	1	625	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	692	574	296	922	0	239	1	465	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	183	152	78	244	0	63	0	123	0	0	0
Total Analysis Volume [veh/h]	0	732	607	313	976	0	253	1	492	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0			0			0			
v_di, Inbound Pedestrian Volume crossing m	0		0			0			0			
v_co, Outbound Pedestrian Volume crossing	0		0			0			0			
v_ci, Inbound Pedestrian Volume crossing mi	0		0			0			0			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	0		0			0			0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	42	0	15	57	0	0	33	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	51	51	10	65	17	17	17	
g / C, Green / Cycle	0.57	0.57	0.11	0.72	0.19	0.19	0.19	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.38	0.09	0.27	0.14	0.15	0.15	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1616	1615	
c, Capacity [veh/h]	2047	914	389	2609	344	307	307	
d1, Uniform Delay [s]	10.63	13.58	39.06	4.79	34.33	34.84	34.84	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.49	3.80	3.93	0.41	3.07	4.90	4.90	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.36	0.66	0.80	0.37	0.74	0.80	0.80	
d, Delay for Lane Group [s/veh]	11.12	17.38	43.00	5.20	37.40	39.74	39.75	
Lane Group LOS	B	B	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.78	8.69	3.54	2.87	5.41	5.48	5.48	
50th-Percentile Queue Length [ft/ln]	94.56	217.16	88.42	71.63	135.21	136.93	136.88	
95th-Percentile Queue Length [veh/ln]	6.81	13.52	6.37	5.16	9.22	9.32	9.31	
95th-Percentile Queue Length [ft/ln]	170.20	338.00	159.16	128.93	230.56	232.88	232.82	

Movement, Approach, & Intersection Results

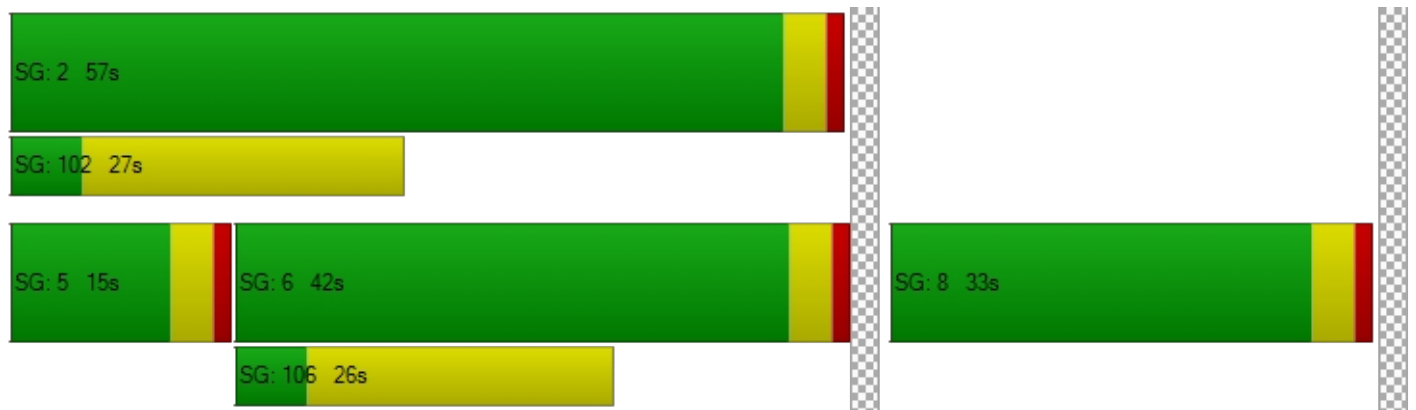
d_M, Delay for Movement [s/veh]	0.00	11.12	17.38	43.00	5.20	0.00	37.44	39.74	39.74	0.00	0.00	0.00
Movement LOS		B	B	D	A		D	D	D			
d_A, Approach Delay [s/veh]		13.96		14.38			38.95			0.00		
Approach LOS		B		B			D			A		
d_I, Intersection Delay [s/veh]		19.64										
Intersection LOS		B										
Intersection V/C		0.618										

Other Modes

g_Walk,mi, Effective Walk Time [s]		0.0		0.0		9.0		9.0
M_corner, Corner Circulation Area [ft ² /ped]		0.00		0.00		0.00		0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]		0.00		0.00		0.00		0.00
d_p, Pedestrian Delay [s]		0.00		0.00		36.45		36.45
I_p,int, Pedestrian LOS Score for Intersectio		0.000		0.000		2.464		2.253
Crosswalk LOS		F		F		B		B
s_b, Saturation Flow Rate of the bicycle lane		2000		2000		2000		2000
c_b, Capacity of the bicycle lane [bicycles/h]		844		1178		644		0
d_b, Bicycle Delay [s]		15.02		7.61		20.67		45.00
I_b,int, Bicycle LOS Score for Intersection		2.813		2.623		3.055		4.132
Bicycle LOS		C		B		C		D

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	24.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	710	42	264	720	564	463	295	106	31	202	279
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	65	710	42	264	720	564	463	295	106	31	202	279
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	17	190	11	71	192	151	124	79	28	8	54	75
Total Analysis Volume [veh/h]	69	759	45	282	769	603	495	315	113	33	216	298
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	29	29	13	33	33	19	39	39	9	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	40	47	9	44	63	15	22	31	3	10	23
g / C, Green / Cycle	0.06	0.44	0.52	0.10	0.49	0.70	0.17	0.25	0.35	0.03	0.11	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.21	0.03	0.08	0.21	0.37	0.14	0.09	0.07	0.01	0.06	0.18
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	195	1603	838	351	1764	1128	586	896	561	110	407	415
d1, Uniform Delay [s]	40.95	17.66	10.71	39.63	15.00	6.52	36.37	27.90	20.59	42.62	37.70	30.47
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.12
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.09	1.01	0.12	4.29	0.79	1.81	3.45	0.24	0.17	1.50	1.08	2.66
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.47	0.05	0.80	0.44	0.53	0.85	0.35	0.20	0.30	0.53	0.72
d, Delay for Lane Group [s/veh]	42.04	18.66	10.83	43.92	15.79	8.33	39.83	28.13	20.77	44.12	38.78	33.14
Lane Group LOS	D	B	B	D	B	A	D	C	C	D	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.76	5.52	0.45	3.22	5.03	5.03	5.45	2.78	1.66	0.38	2.28	6.05
50th-Percentile Queue Length [ft/ln]	18.97	137.92	11.27	80.41	125.78	125.64	136.29	69.47	41.50	9.46	57.00	151.20
95th-Percentile Queue Length [veh/ln]	1.37	9.37	0.81	5.79	8.71	8.70	9.28	5.00	2.99	0.68	4.10	10.08
95th-Percentile Queue Length [ft/ln]	34.15	234.22	20.29	144.74	217.74	217.55	232.02	125.05	74.70	17.02	102.61	252.04

Movement, Approach, & Intersection Results

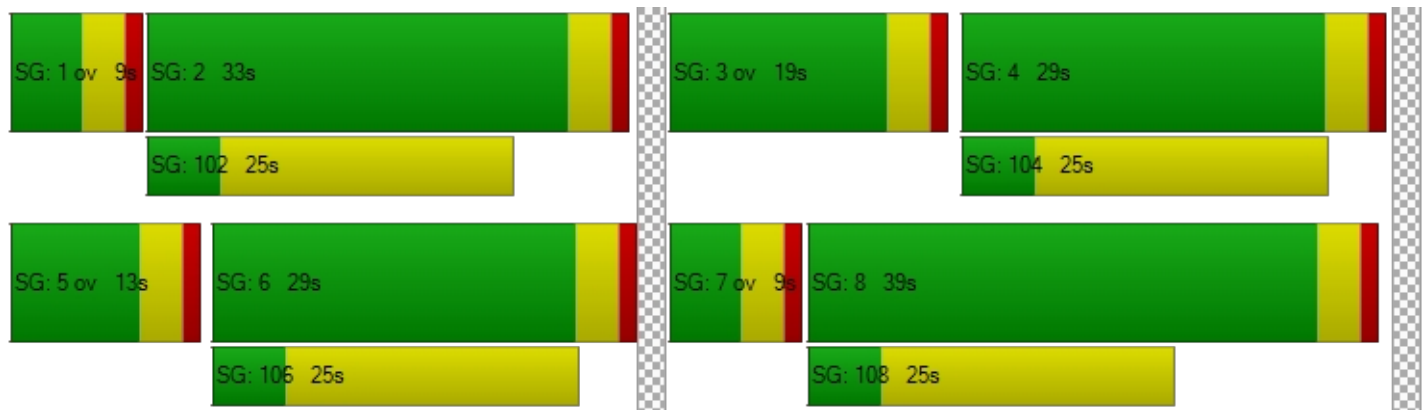
d_M, Delay for Movement [s/veh]	42.04	18.66	10.83	43.92	15.79	8.33	39.83	28.13	20.77	44.12	38.78	33.14
Movement LOS	D	B	B	D	B	A	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	20.11			17.87			33.50			36.03		
Approach LOS	C			B			C			D		
d_I, Intersection Delay [s/veh]	24.45											
Intersection LOS	C											
Intersection V/C	0.620											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.844	3.042	2.848	2.761
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	644	778	556
d_b, Bicycle Delay [s]	23.47	20.67	16.81	23.47
I_b,int, Bicycle LOS Score for Intersection	2.280	2.924	2.321	2.011
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	34.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.509

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	78	272	218	98	260	8	0	36	299	116	0	210	196	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	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	0	0
Diverted Trips [veh/h]	0	0	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	0	0
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	78	272	218	98	260	8	0	36	299	116	0	210	196	93
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	23	81	65	29	78	2	0	11	89	35	0	63	59	28
Total Analysis Volume [veh/h]	93	325	261	117	311	10	0	43	358	139	0	251	234	111
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	36	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	34	0	12	34	0	0	14	29	0	0	25	40	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	44	44	8	45	45	4	17	17	16	29	29
g / C, Green / Cycle	0.07	0.44	0.44	0.08	0.45	0.45	0.04	0.17	0.17	0.16	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.05	0.17	0.17	0.06	0.08	0.09	0.02	0.14	0.14	0.14	0.10	0.10
s, saturation flow rate [veh/h]	1810	1900	1625	1810	1900	1879	1810	1900	1723	1810	1900	1697
c, Capacity [veh/h]	119	829	709	145	856	847	65	314	285	287	547	489
d1, Uniform Delay [s]	46.02	19.04	19.09	45.25	16.49	16.50	47.61	40.32	40.43	41.11	28.01	28.06
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.69	1.32	1.57	10.13	0.49	0.49	10.96	5.37	6.48	8.27	0.35	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.38	0.38	0.81	0.19	0.19	0.66	0.82	0.84	0.87	0.33	0.34
d, Delay for Lane Group [s/veh]	56.71	20.36	20.67	55.38	16.98	16.99	58.57	45.69	46.91	49.38	28.37	28.46
Lane Group LOS	E	C	C	E	B	B	E	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.61	5.10	4.48	3.24	2.29	2.28	1.25	6.54	6.14	6.63	3.43	3.12
50th-Percentile Queue Length [ft/ln]	65.37	127.61	112.05	81.08	57.31	56.92	31.27	163.52	153.47	165.80	85.72	78.12
95th-Percentile Queue Length [veh/ln]	4.71	8.81	7.95	5.84	4.13	4.10	2.25	10.73	10.20	10.86	6.17	5.62
95th-Percentile Queue Length [ft/ln]	117.66	220.25	198.84	145.95	103.16	102.46	56.29	268.37	255.06	271.38	154.30	140.61

Movement, Approach, & Intersection Results

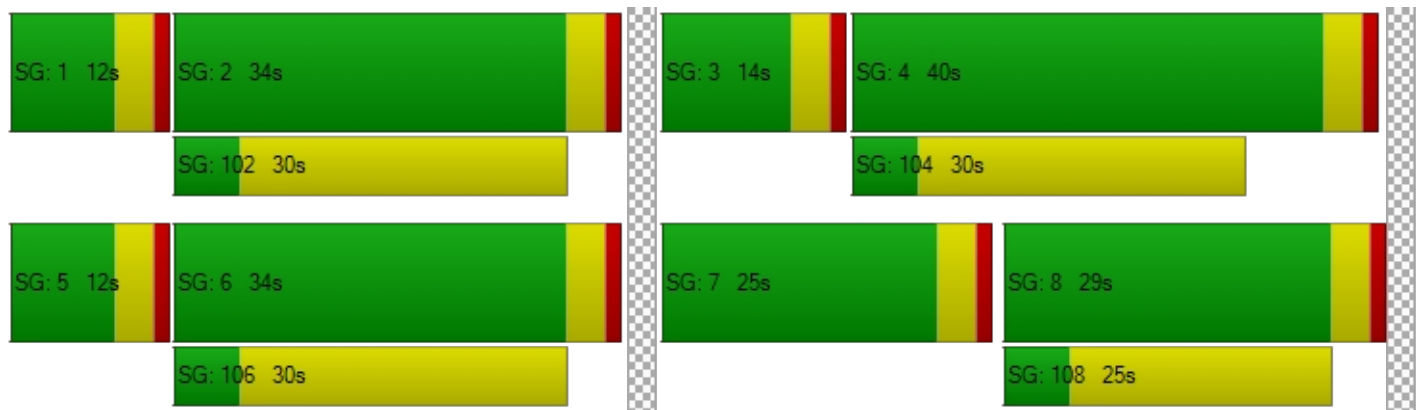
d_M, Delay for Movement [s/veh]	56.71	20.37	20.67	55.38	16.99	16.99	58.57	58.57	46.03	46.91	49.38	49.38	28.39	28.46
Movement LOS	E	C	C	E	B	B	E	E	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	25.46			27.24			47.26			37.24				
Approach LOS	C			C			D			D				
d_I, Intersection Delay [s/veh]	34.15													
Intersection LOS	C													
Intersection V/C	0.509													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersectio	2.576	2.485	2.477	2.566
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	500	720
d_b, Bicycle Delay [s]	24.50	24.50	28.13	20.48
I_b,int, Bicycle LOS Score for Intersection	2.120	1.921	1.970	2.051
Bicycle LOS	B	A	A	B

Sequence




Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	10.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.288

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	13	372	444	90	131	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	372	444	90	131	45
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	117	140	28	41	14
Total Analysis Volume [veh/h]	16	469	560	113	165	57
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	9	58	49	0	32	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	72	66	66	10	10
g / C, Green / Cycle	0.02	0.80	0.73	0.73	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.13	0.18	0.19	0.09	0.04
s, saturation flow rate [veh/h]	1810	3618	1900	1794	1810	1615
c, Capacity [veh/h]	34	2875	1390	1312	211	188
d1, Uniform Delay [s]	43.73	2.18	3.94	3.99	38.66	36.42
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.03	0.12	0.41	0.47	6.29	0.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.16	0.24	0.26	0.78	0.30
d, Delay for Lane Group [s/veh]	53.76	2.30	4.35	4.46	44.95	37.32
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.44	0.65	1.72	1.75	3.86	1.18
50th-Percentile Queue Length [ft/ln]	11.08	16.28	42.93	43.75	96.42	29.56
95th-Percentile Queue Length [veh/ln]	0.80	1.17	3.09	3.15	6.94	2.13
95th-Percentile Queue Length [ft/ln]	19.95	29.31	77.27	78.75	173.56	53.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.76	2.30	4.39	4.46	44.95	37.32
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	4.00		4.40		42.99	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	10.47					
Intersection LOS	B					
Intersection V/C	0.288					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.516	2.451	2.056
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1000	622
d_b, Bicycle Delay [s]	7.20	11.25	21.36
I_b,int, Bicycle LOS Score for Intersection	1.960	2.115	1.560
Bicycle LOS	A	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	32.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	141	43	209	160	132	78	484	24	46	371	166
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	141	43	209	160	132	78	484	24	46	371	166
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	3	41	12	60	46	38	23	140	7	13	107	48
Total Analysis Volume [veh/h]	14	163	50	242	185	153	90	560	28	53	429	192
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	25	0	5	19	0	8	22	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	29	0	9	23	0	12	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	23	23	5	37	37	4	36	36
g / C, Green / Cycle	0.12	0.12	0.25	0.25	0.06	0.41	0.41	0.04	0.40	0.40
(v / s)_i Volume / Saturation Flow Rate	0.09	0.03	0.23	0.09	0.05	0.16	0.16	0.03	0.17	0.17
s, saturation flow rate [veh/h]	1893	1615	1848	1615	1810	1900	1868	1810	1900	1704
c, Capacity [veh/h]	224	191	467	408	101	778	765	75	751	674
d1, Uniform Delay [s]	38.57	36.08	32.69	27.76	42.24	18.59	18.60	42.59	19.85	19.89
k, delay calibration	0.11	0.11	0.32	0.11	0.22	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.09	0.72	18.00	0.57	37.19	1.42	1.44	11.39	1.82	2.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.26	0.91	0.37	0.90	0.38	0.38	0.71	0.43	0.44
d, Delay for Lane Group [s/veh]	44.66	36.80	50.69	28.33	79.43	20.01	20.04	53.98	21.67	21.95
Lane Group LOS	D	D	D	C	E	C	C	D	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.12	1.03	11.11	2.74	3.00	4.47	4.40	1.39	5.18	4.75
50th-Percentile Queue Length [ft/ln]	103.06	25.68	277.73	68.38	75.04	111.65	110.12	34.73	129.59	118.66
95th-Percentile Queue Length [veh/ln]	7.42	1.85	16.58	4.92	5.40	7.93	7.85	2.50	8.92	8.32
95th-Percentile Queue Length [ft/ln]	185.50	46.22	414.39	123.08	135.07	198.30	196.17	62.51	222.93	207.98

Movement, Approach, & Intersection Results

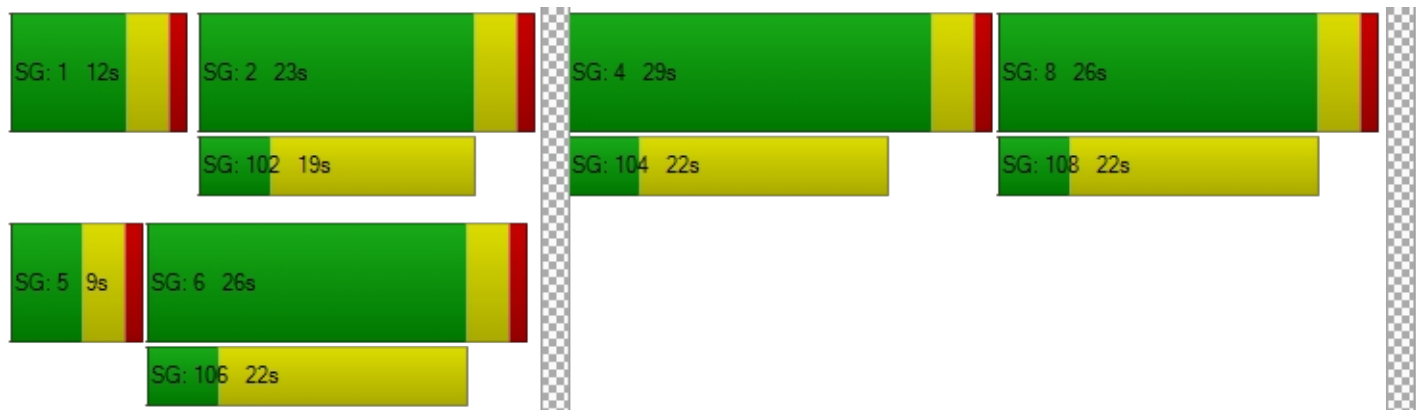
d_M, Delay for Movement [s/veh]	44.66	44.66	36.80	50.69	50.69	28.33	79.43	20.02	20.04	53.98	21.74	21.95
Movement LOS	D	D	D	D	D	C	E	C	C	D	C	C
d_A, Approach Delay [s/veh]	42.93			44.79			27.91			24.34		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	32.91											
Intersection LOS	C											
Intersection V/C	0.548											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.253	2.382	2.550	2.599
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	556	422	489
d_b, Bicycle Delay [s]	25.69	23.47	28.01	25.69
I_b,int, Bicycle LOS Score for Intersection	1.934	2.517	2.119	2.116
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	29.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.439

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name															
Base Volume Input [veh/h]	132	539	83	0	98	495	94	0	123	537	156	0	84	380	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	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	0	0	0
Diverted Trips [veh/h]	0	0	0	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	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	132	539	83	0	98	495	94	0	123	537	156	0	84	380	38
Peak Hour Factor	0.9880	0.9880	0.9880	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	33	136	21	0	25	125	24	0	31	136	39	0	21	96	10
Total Analysis Volume [veh/h]	134	546	84	0	99	501	95	0	124	544	158	0	85	385	38
Presence of On-Street Parking	No		No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0			
v_co, Outbound Pedestrian Volume crossing	0			0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0			
Bicycle Volume [bicycles/h]	0			0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	9	32	0	0	9	32	0	0	12	39	0	0	10	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	44	44	5	43	43	8	20	20	5	18	18
g / C, Green / Cycle	0.06	0.49	0.49	0.05	0.48	0.48	0.09	0.23	0.23	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.17	0.03	0.16	0.16	0.07	0.19	0.19	0.05	0.11	0.11
s, saturation flow rate [veh/h]	3514	1900	1813	3514	1900	1796	1810	1900	1755	1810	1900	1841
c, Capacity [veh/h]	195	921	878	179	912	862	155	430	397	109	382	370
d1, Uniform Delay [s]	41.73	14.39	14.40	41.70	14.50	14.51	40.40	33.35	33.37	41.68	32.37	32.40
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.23	1.05	1.10	2.64	0.99	1.06	9.18	4.75	5.17	11.10	1.29	1.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.35	0.35	0.55	0.34	0.34	0.80	0.85	0.85	0.78	0.56	0.56
d, Delay for Lane Group [s/veh]	45.96	15.44	15.50	44.34	15.49	15.56	49.57	38.11	38.54	52.78	33.66	33.76
Lane Group LOS	D	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.56	4.14	3.97	1.13	3.93	3.75	3.05	8.01	7.46	2.18	4.27	4.17
50th-Percentile Queue Length [ft/ln]	38.96	103.42	99.23	28.18	98.19	93.67	76.35	200.13	186.38	54.39	106.64	104.29
95th-Percentile Queue Length [veh/ln]	2.81	7.45	7.14	2.03	7.07	6.74	5.50	12.65	11.93	3.92	7.65	7.51
95th-Percentile Queue Length [ft/ln]	70.13	186.15	178.62	50.73	176.73	168.61	137.43	316.14	298.33	97.89	191.31	187.72

Movement, Approach, & Intersection Results

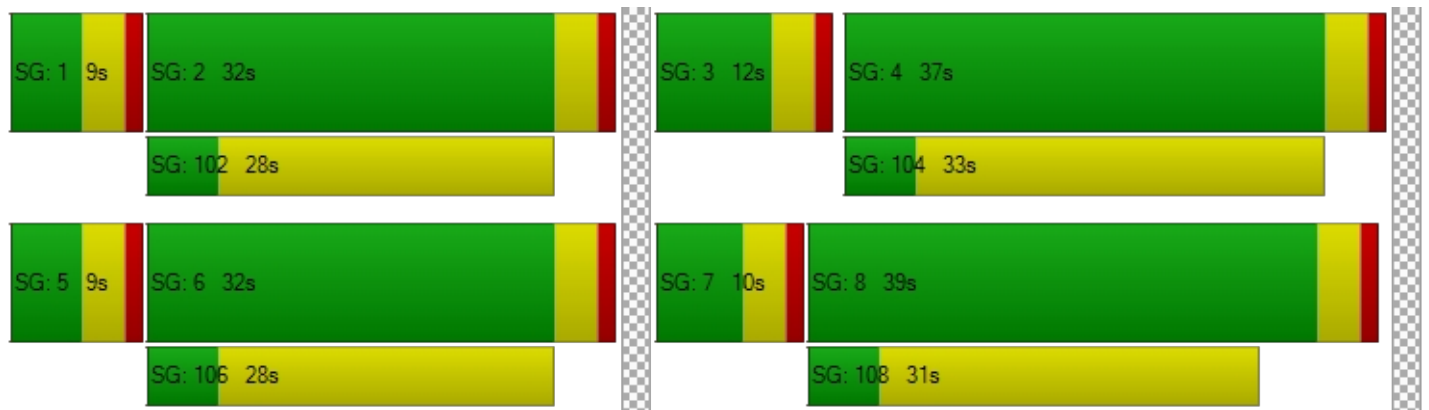
d_M, Delay for Movement [s/veh]	45.96	15.47	15.50	44.34	44.34	15.52	15.56	49.57	49.57	38.25	38.54	52.78	52.78	33.70	33.76
Movement LOS	D	B	B	D	D	B	B	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	20.82			19.63				40.01				36.90			
Approach LOS	C			B				D				D			
d_I, Intersection Delay [s/veh]	29.12														
Intersection LOS	C														
Intersection V/C	0.439														

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.699	2.682	2.582	2.542
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	622	778	733
d_b, Bicycle Delay [s]	21.36	21.36	16.81	18.05
I_b,int, Bicycle LOS Score for Intersection	2.190	2.051	2.139	1.979
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-2

INTERSECTION ANALYSIS
WORKSHEETS –
OPENING YEAR 2026

Renaissance II Residential Project

Vistro File: C:\...\Renaissance Res II_AM.vistro

Scenario 2 OY 26 AM

Report File: C:\...\2 OY 2026 AM.pdf

6/4/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	WB Left	0.548	27.2	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	EB Right	0.413	16.8	B
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	WB Left	0.484	20.8	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	NB Left	0.322	27.7	C
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.171	8.1	A
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.492	26.0	C
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	EB Left	0.430	28.0	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.548

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	484	298	0	0	456	353	0	0	0	526	2	315
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	503	310	0	0	474	227	0	0	0	547	2	198
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	138	85	0	0	130	62	0	0	0	150	1	54
Total Analysis Volume [veh/h]	551	340	0	0	519	249	0	0	0	599	2	217
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	23	0	0	0	0	0	32	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	28	63	0	0	35	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	17	64	43	43		18	18	18
g / C, Green / Cycle	0.19	0.71	0.48	0.48		0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.16	0.09	0.20	0.23		0.17	0.17	0.13
s, saturation flow rate [veh/h]	3514	3618	1900	1705		1810	1810	1615
c, Capacity [veh/h]	659	2579	914	820		358	359	320
d1, Uniform Delay [s]	35.23	4.09	15.19	15.64		34.70	34.70	33.43
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	2.90	0.11	1.42	1.92		5.25	5.24	2.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.13	0.42	0.47		0.84	0.84	0.68
d, Delay for Lane Group [s/veh]	38.12	4.20	16.61	17.56		39.94	39.94	35.95
Lane Group LOS	D	A	B	B		D	D	D
Critical Lane Group	Yes	No	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.96	0.84	5.20	5.43		6.71	6.71	4.53
50th-Percentile Queue Length [ft/ln]	149.09	21.03	130.12	135.64		167.75	167.76	113.23
95th-Percentile Queue Length [veh/ln]	9.97	1.51	8.95	9.25		10.96	10.96	8.02
95th-Percentile Queue Length [ft/ln]	249.22	37.85	223.65	231.14		273.95	273.97	200.48

Movement, Approach, & Intersection Results

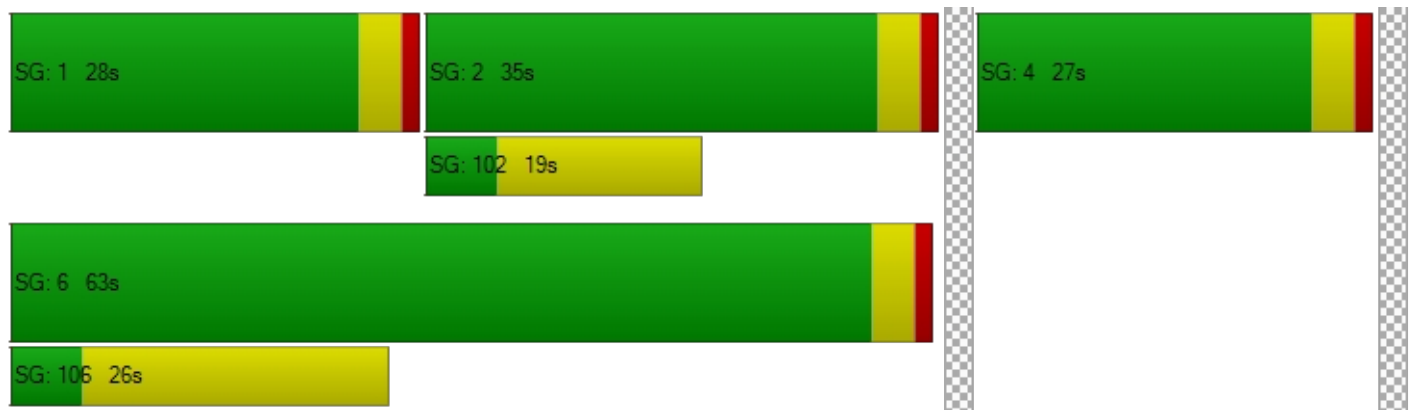
d_M, Delay for Movement [s/veh]	38.12	4.20	0.00	0.00	16.86	17.56	0.00	0.00	0.00	39.94	39.94	35.95
Movement LOS	D	A			B	B				D	D	D
d_A, Approach Delay [s/veh]	25.18			17.08			0.00			38.88		
Approach LOS	C			B			A			D		
d_I, Intersection Delay [s/veh]	27.19											
Intersection LOS	C											
Intersection V/C	0.548											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.176	2.435
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1311	689	0	511
d_b, Bicycle Delay [s]	5.34	19.34	45.00	24.94
I_b,int, Bicycle LOS Score for Intersection	2.295	2.309	4.132	3.124
Bicycle LOS	B	B	D	C

Sequence







Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	16.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.413

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	645	508	277	706	0	137	1	441	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	671	348	288	734	0	142	1	299	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	178	92	76	194	0	38	0	79	0	0	0
Total Analysis Volume [veh/h]	0	710	368	305	777	0	150	1	316	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0			0			0			
v_di, Inbound Pedestrian Volume crossing m	0		0			0			0			
v_co, Outbound Pedestrian Volume crossing	0		0			0			0			
v_ci, Inbound Pedestrian Volume crossing mi	0		0			0			0			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	0		0			0			0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	39	0	23	62	0	0	28	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	56	56	10	70	12	12	12	
g / C, Green / Cycle	0.62	0.62	0.11	0.78	0.13	0.13	0.13	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.23	0.09	0.21	0.08	0.10	0.10	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1617	1615	
c, Capacity [veh/h]	2253	1006	401	2827	235	210	209	
d1, Uniform Delay [s]	7.96	8.29	38.68	2.74	37.16	37.79	37.79	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.37	1.03	3.01	0.24	2.88	5.48	5.48	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.32	0.37	0.76	0.27	0.64	0.76	0.76	
d, Delay for Lane Group [s/veh]	8.33	9.32	41.68	2.98	40.04	43.27	43.27	
Lane Group LOS	A	A	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	2.99	3.39	3.39	1.36	3.28	3.64	3.64	
50th-Percentile Queue Length [ft/ln]	74.83	84.83	84.66	34.10	81.93	91.00	90.92	
95th-Percentile Queue Length [veh/ln]	5.39	6.11	6.10	2.46	5.90	6.55	6.55	
95th-Percentile Queue Length [ft/ln]	134.69	152.69	152.39	61.39	147.47	163.80	163.66	

Movement, Approach, & Intersection Results

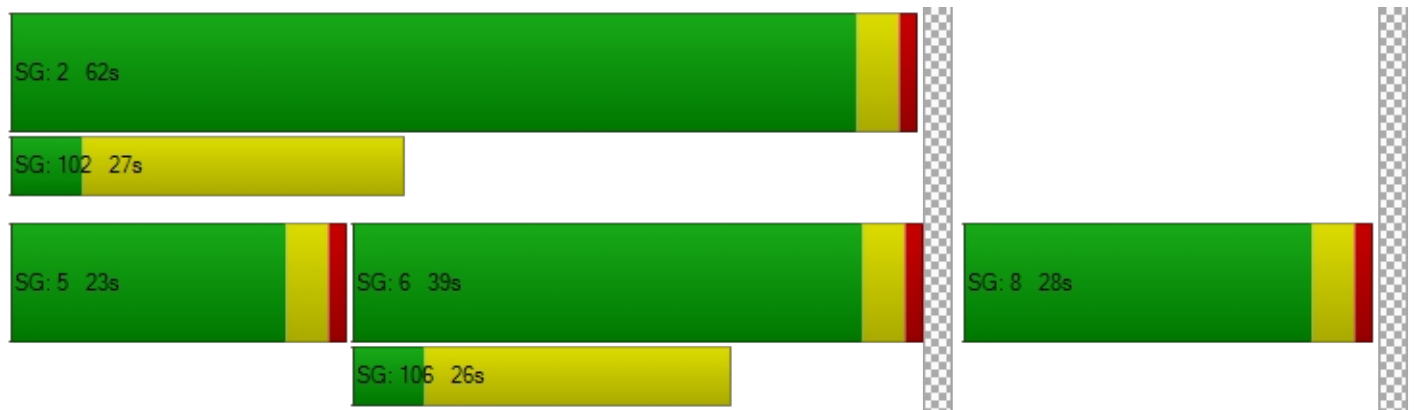
d_M, Delay for Movement [s/veh]	0.00	8.33	9.32	41.68	2.98	0.00	40.04	43.27	43.27	0.00	0.00	0.00
Movement LOS		A	A	D	A		D	D	D			
d_A, Approach Delay [s/veh]		8.67		13.89			42.23			0.00		
Approach LOS		A		B			D			A		
d_I, Intersection Delay [s/veh]	16.79											
Intersection LOS	B											
Intersection V/C	0.413											

Other Modes

g_Walk,mi, Effective Walk Time [s]		0.0		0.0		9.0		9.0
M_corner, Corner Circulation Area [ft ² /ped]		0.00		0.00		0.00		0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]		0.00		0.00		0.00		0.00
d_p, Pedestrian Delay [s]		0.00		0.00		36.45		36.45
I_p,int, Pedestrian LOS Score for Intersectio		0.000		0.000		2.373		2.133
Crosswalk LOS		F		F		B		B
s_b, Saturation Flow Rate of the bicycle lane		2000		2000		2000		2000
c_b, Capacity of the bicycle lane [bicycles/h]		778		1289		533		0
d_b, Bicycle Delay [s]		16.81		5.69		24.20		45.00
I_b,int, Bicycle LOS Score for Intersection		2.597		2.452		2.594		4.132
Bicycle LOS		B		B		B		D

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	20.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	46	651	31	205	625	321	196	113	56	29	104	278
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	677	32	213	650	334	204	118	58	30	108	289
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	13	181	9	57	174	89	54	32	15	8	29	77
Total Analysis Volume [veh/h]	51	723	34	228	694	357	218	126	62	32	115	309
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	32	32	15	38	38	12	34	34	9	31	31
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	4	45	52	11	52	64	8	15	23	3	10	25
g / C, Green / Cycle	0.04	0.50	0.57	0.12	0.58	0.71	0.09	0.17	0.25	0.03	0.11	0.28
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.02	0.06	0.19	0.22	0.06	0.03	0.04	0.01	0.03	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	141	1803	927	430	2100	1153	312	617	412	108	407	451
d1, Uniform Delay [s]	42.07	14.14	8.35	37.08	9.79	4.73	39.83	32.07	25.95	42.66	36.60	28.91
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.55	0.67	0.07	1.02	0.42	0.70	2.82	0.16	0.17	1.50	0.38	2.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.40	0.04	0.53	0.33	0.31	0.70	0.20	0.15	0.30	0.28	0.69
d, Delay for Lane Group [s/veh]	43.62	14.81	8.43	38.10	10.22	5.43	42.64	32.23	26.12	44.16	36.98	31.26
Lane Group LOS	D	B	A	D	B	A	D	C	C	D	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.58	4.52	0.29	2.38	3.38	2.17	2.43	1.18	1.03	0.37	1.17	6.09
50th-Percentile Queue Length [ft/ln]	14.42	112.99	7.21	59.61	84.46	54.26	60.85	29.50	25.87	9.18	29.21	152.13
95th-Percentile Queue Length [veh/ln]	1.04	8.01	0.52	4.29	6.08	3.91	4.38	2.12	1.86	0.66	2.10	10.13
95th-Percentile Queue Length [ft/ln]	25.95	200.15	12.98	107.30	152.02	97.67	109.53	53.10	46.56	16.53	52.59	253.27

Movement, Approach, & Intersection Results

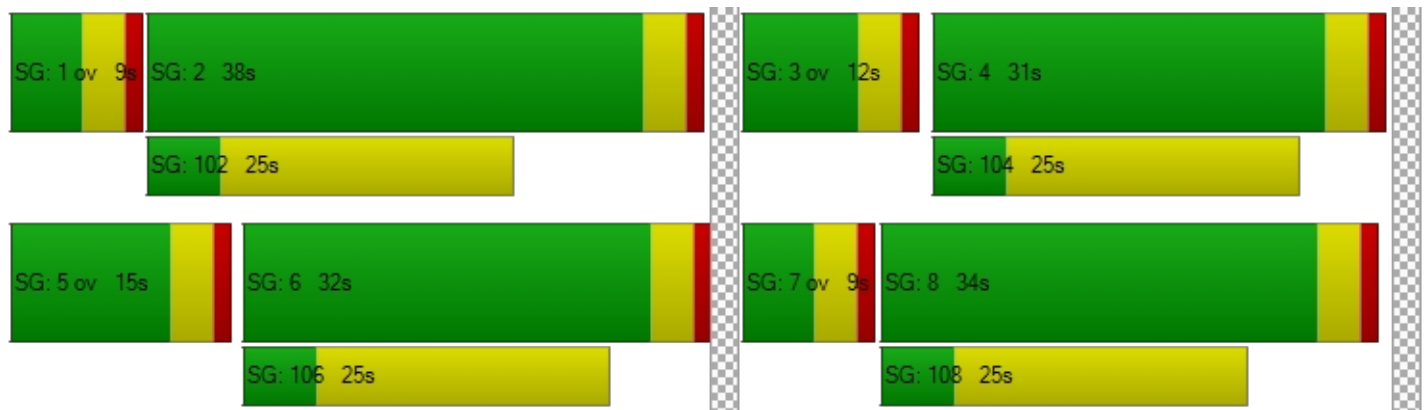
d_M, Delay for Movement [s/veh]	43.62	14.81	8.43	38.10	10.22	5.43	42.64	32.23	26.12	44.16	36.98	31.26
Movement LOS	D	B	A	D	B	A	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	16.36			13.85			36.89			33.61		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	20.76											
Intersection LOS	C											
Intersection V/C	0.484											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.818	2.948	2.725	2.713
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	756	667	600
d_b, Bicycle Delay [s]	21.36	17.42	20.00	22.05
I_b,int, Bicycle LOS Score for Intersection	2.226	2.615	1.895	1.936
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	27.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.322

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	38	252	78	89	208	18	0	34	132	61	0	114	89	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040
In-Process Volume [veh/h]	0	0	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	0	0
Diverted Trips [veh/h]	0	0	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	0	0
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	262	81	93	216	19	0	35	137	63	0	119	93	66
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	12	78	24	28	65	6	0	10	41	19	0	36	28	20
Total Analysis Volume [veh/h]	48	313	97	111	258	23	0	42	164	75	0	142	111	79
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	11	34	0	0	11	29	0	0	16	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	48	48	7	52	52	3	10	10	9	16	16
g / C, Green / Cycle	0.04	0.54	0.54	0.08	0.57	0.57	0.04	0.11	0.11	0.10	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.03	0.11	0.11	0.06	0.07	0.08	0.02	0.06	0.07	0.08	0.05	0.06
s, saturation flow rate [veh/h]	1810	1900	1749	1810	1900	1846	1810	1900	1706	1810	1900	1648
c, Capacity [veh/h]	71	1017	937	140	1090	1059	66	213	191	176	329	285
d1, Uniform Delay [s]	42.68	10.92	10.96	40.81	8.84	8.84	42.77	37.92	38.07	39.80	32.47	32.58
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.76	0.46	0.52	9.63	0.25	0.26	9.76	2.45	3.09	8.42	0.51	0.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.21	0.21	0.79	0.13	0.13	0.64	0.58	0.61	0.81	0.30	0.32
d, Delay for Lane Group [s/veh]	53.44	11.39	11.47	50.44	9.08	9.10	52.54	40.38	41.16	48.21	32.98	33.22
Lane Group LOS	D	B	B	D	A	A	D	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.25	2.20	2.09	2.76	1.26	1.24	1.09	2.68	2.58	3.45	1.91	1.77
50th-Percentile Queue Length [ft/ln]	31.35	55.00	52.22	69.03	31.56	31.06	27.27	67.05	64.38	86.13	47.63	44.17
95th-Percentile Queue Length [veh/ln]	2.26	3.96	3.76	4.97	2.27	2.24	1.96	4.83	4.64	6.20	3.43	3.18
95th-Percentile Queue Length [ft/ln]	56.44	99.01	93.99	124.25	56.81	55.91	49.09	120.69	115.89	155.03	85.73	79.51

Movement, Approach, & Intersection Results

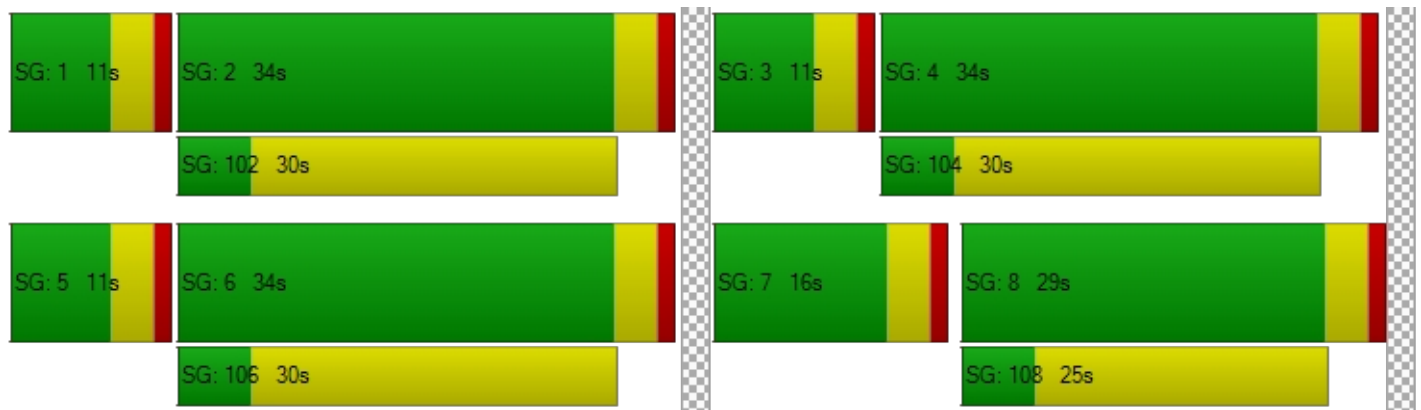
d_M, Delay for Movement [s/veh]	53.44	11.42	11.47	50.44	9.09	9.10	52.54	52.54	40.57	41.16	48.21	48.21	33.01	33.22
Movement LOS	D	B	B	D	A	A	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	15.83			20.80			42.52			39.56				
Approach LOS	B			C			D			D				
d_I, Intersection Delay [s/veh]	27.67													
Intersection LOS	C													
Intersection V/C	0.322													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.483	2.462	2.392	2.439
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	556	667
d_b, Bicycle Delay [s]	20.00	20.00	23.47	20.00
I_b,int, Bicycle LOS Score for Intersection	1.937	1.883	1.757	1.716
Bicycle LOS	A	A	A	A

Sequence




Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	8.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.171

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	19	351	228	66	61	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	365	237	69	63	22
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	115	75	22	20	7
Total Analysis Volume [veh/h]	25	460	299	87	79	28
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	10	60	50	0	30	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	76	70	70	6	6
g / C, Green / Cycle	0.03	0.85	0.78	0.78	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.01	0.13	0.10	0.11	0.04	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1760	1810	1615
c, Capacity [veh/h]	47	3065	1476	1367	116	103
d1, Uniform Delay [s]	43.28	1.20	2.50	2.52	41.24	40.13
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.85	0.10	0.18	0.22	6.94	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.53	0.15	0.13	0.14	0.68	0.27
d, Delay for Lane Group [s/veh]	52.13	1.31	2.68	2.74	48.17	41.53
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.66	0.29	0.65	0.66	1.92	0.63
50th-Percentile Queue Length [ft/ln]	16.51	7.15	16.26	16.57	47.98	15.63
95th-Percentile Queue Length [veh/ln]	1.19	0.51	1.17	1.19	3.45	1.13
95th-Percentile Queue Length [ft/ln]	29.72	12.86	29.27	29.82	86.36	28.14

Movement, Approach, & Intersection Results

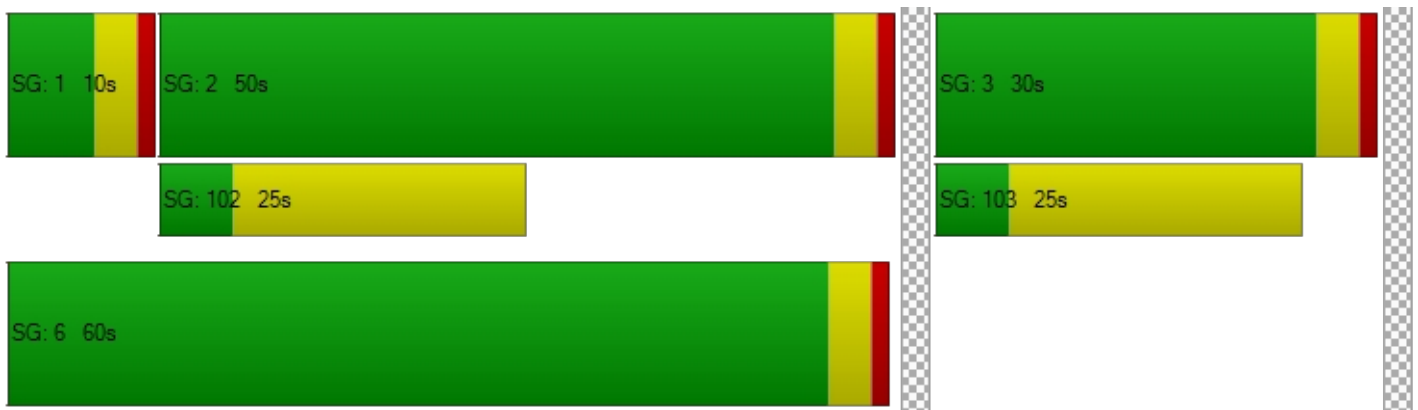
d_M, Delay for Movement [s/veh]	52.13	1.31	2.70	2.74	48.17	41.53
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	3.93		2.71		46.44	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	8.10					
Intersection LOS	A					
Intersection V/C	0.171					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.460	2.358	2.013
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	1022	578
d_b, Bicycle Delay [s]	6.42	10.76	22.76
I_b,int, Bicycle LOS Score for Intersection	1.960	1.878	1.560
Bicycle LOS	A	A	A

Sequence





Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	26.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.492

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	183	71	88	94	62	42	402	22	24	457	147
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	190	74	92	98	64	44	418	23	25	475	153
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	14	55	21	27	28	18	13	121	7	7	137	44
Total Analysis Volume [veh/h]	54	220	86	106	113	74	51	483	27	29	549	177
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	22	0	5	25	0	5	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	26	0	9	25	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	13	13	4	43	43	3	42	42
g / C, Green / Cycle	0.17	0.17	0.14	0.14	0.04	0.48	0.48	0.03	0.47	0.47
(v / s)_i Volume / Saturation Flow Rate	0.15	0.05	0.12	0.05	0.03	0.14	0.14	0.02	0.20	0.20
s, saturation flow rate [veh/h]	1881	1615	1855	1615	1810	1900	1865	1810	1900	1744
c, Capacity [veh/h]	325	279	265	231	73	907	890	53	886	813
d1, Uniform Delay [s]	36.06	32.54	37.47	34.63	42.65	14.22	14.22	43.10	16.00	16.02
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.96	0.62	6.40	0.79	11.47	0.78	0.80	8.55	1.50	1.65
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.31	0.83	0.32	0.70	0.28	0.28	0.55	0.43	0.43
d, Delay for Lane Group [s/veh]	42.02	33.16	43.87	35.42	54.12	15.00	15.02	51.65	17.50	17.66
Lane Group LOS	D	C	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.25	1.67	5.08	1.49	1.34	3.22	3.17	0.76	5.29	4.91
50th-Percentile Queue Length [ft/ln]	156.22	41.64	126.95	37.23	33.50	80.39	79.30	18.90	132.32	122.83
95th-Percentile Queue Length [veh/ln]	10.35	3.00	8.77	2.68	2.41	5.79	5.71	1.36	9.07	8.55
95th-Percentile Queue Length [ft/ln]	258.71	74.96	219.34	67.02	60.30	144.70	142.75	34.03	226.64	213.71

Movement, Approach, & Intersection Results

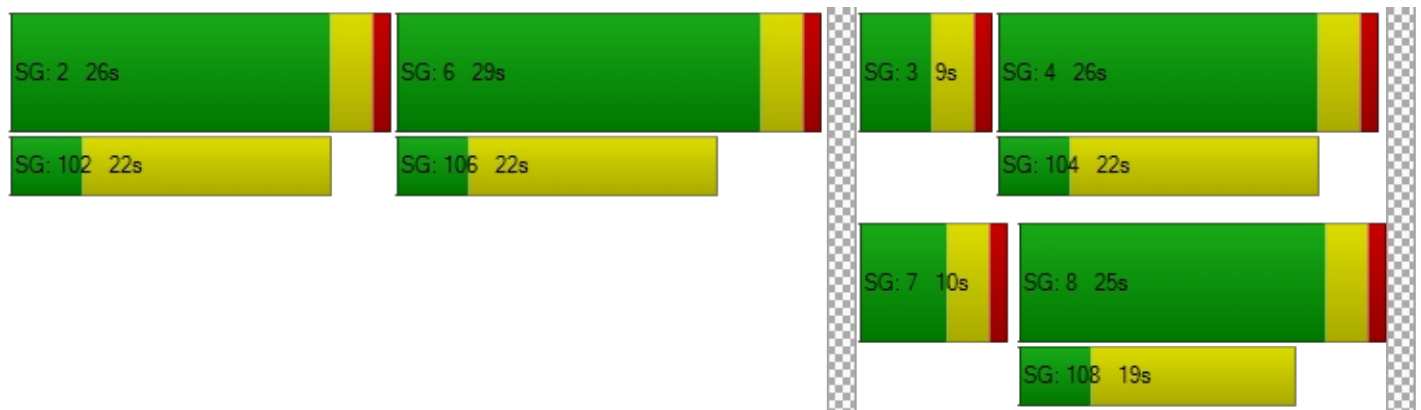
d_M, Delay for Movement [s/veh]	42.02	42.02	33.16	43.87	43.87	35.42	54.12	15.01	15.02	51.65	17.55	17.66
Movement LOS	D	D	C	D	D	D	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	39.90			41.74			18.57			18.89		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	26.04											
Intersection LOS	C											
Intersection V/C	0.492											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.262	2.313	2.543	2.580
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	489	467	489
d_b, Bicycle Delay [s]	23.47	25.69	26.45	25.69
I_b,int, Bicycle LOS Score for Intersection	2.154	2.043	2.022	2.182
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	28.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.430

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name															
Base Volume Input [veh/h]	214	559	76	0	46	598	57	0	99	263	169	0	46	333	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020
In-Process Volume [veh/h]	0	0	0	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	0	0	0
Diverted Trips [veh/h]	0	0	0	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	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	218	570	78	0	47	610	58	0	101	268	172	0	47	340	32
Peak Hour Factor	0.9210	0.9210	0.9210	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	59	155	21	0	13	166	16	0	27	73	47	0	13	92	9
Total Analysis Volume [veh/h]	237	619	85	0	51	662	63	0	110	291	187	0	51	369	35
Presence of On-Street Parking	No		No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0			
v_co, Outbound Pedestrian Volume crossing	0			0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0			
Bicycle Volume [bicycles/h]	0			0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	0	9	32	0	0	10	35	0	0	12	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	52	52	4	48	48	6	15	15	4	13	13
g / C, Green / Cycle	0.08	0.58	0.58	0.04	0.54	0.54	0.07	0.17	0.17	0.04	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.07	0.19	0.19	0.01	0.19	0.19	0.06	0.13	0.14	0.03	0.11	0.11
s, saturation flow rate [veh/h]	3514	1900	1821	3514	1900	1843	1810	1900	1657	1810	1900	1843
c, Capacity [veh/h]	273	1091	1046	142	1020	989	121	317	276	74	268	260
d1, Uniform Delay [s]	41.04	10.06	10.06	42.06	11.97	11.97	41.74	36.04	36.15	42.60	37.21	37.25
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.17	0.81	0.84	1.54	0.99	1.02	21.59	4.62	5.77	10.92	4.48	4.77
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.33	0.33	0.36	0.36	0.36	0.91	0.80	0.81	0.69	0.76	0.77
d, Delay for Lane Group [s/veh]	49.21	10.86	10.90	43.60	12.96	13.00	63.33	40.65	41.92	53.52	41.69	42.02
Lane Group LOS	D	B	B	D	B	B	E	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.87	3.67	3.53	0.58	4.24	4.12	3.12	5.65	5.12	1.33	4.59	4.52
50th-Percentile Queue Length [ft/ln]	71.83	91.81	88.24	14.41	105.90	103.08	77.96	141.16	128.03	33.29	114.82	112.89
95th-Percentile Queue Length [veh/ln]	5.17	6.61	6.35	1.04	7.61	7.42	5.61	9.54	8.83	2.40	8.11	8.00
95th-Percentile Queue Length [ft/ln]	129.30	165.26	158.83	25.94	190.29	185.54	140.33	238.58	220.81	59.92	202.68	200.02

Movement, Approach, & Intersection Results

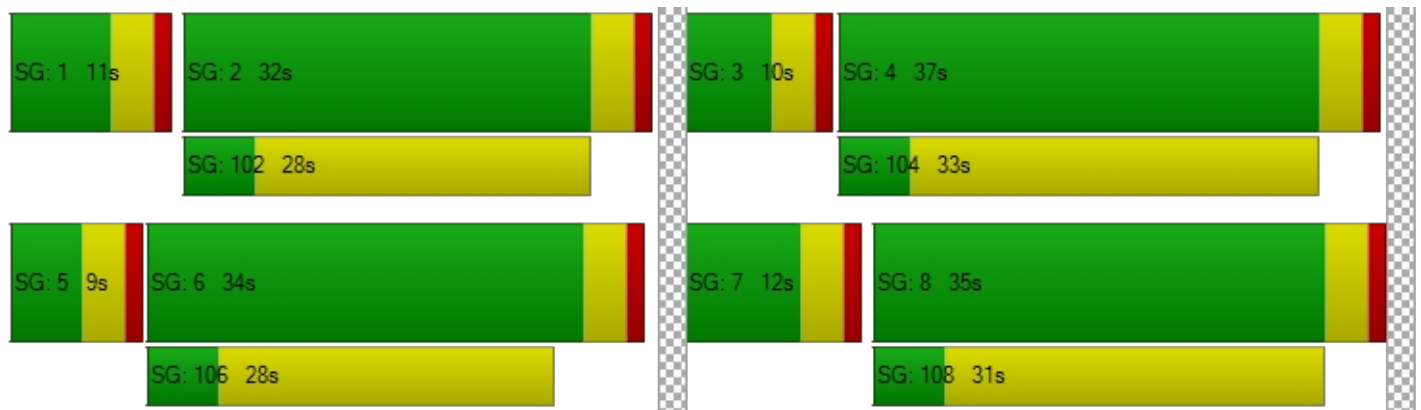
d_M, Delay for Movement [s/veh]	49.21	10.88	10.90	43.60	43.60	12.98	13.00	63.33	63.33	40.82	41.92	53.52	53.52	41.84	42.02
Movement LOS	D	B	B	D	D	B	B	E	E	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	20.53			14.99			45.38			43.16					
Approach LOS	C			B			D			D					
d_I, Intersection Delay [s/veh]	28.00														
Intersection LOS	C														
Intersection V/C	0.430														

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.754	2.705	2.546	2.473
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	622	689	733
d_b, Bicycle Delay [s]	20.00	21.36	19.34	18.05
I_b,int, Bicycle LOS Score for Intersection	2.336	2.158	1.954	1.935
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Renaissance II Residential Project

Vistro File: C:\...\Renaissance Res II_PM.vistro

Scenario 2 OY 26 PM

Report File: C:\...\2 OY 2026 PM.pdf

6/4/2025

Intersection Analysis Summary




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	NB Left	0.605	26.8	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	SB Left	0.649	20.3	C
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	SB Left	0.639	24.9	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.530	34.5	C
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.301	10.6	B
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.569	34.2	C
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	WB Left	0.448	29.2	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.605

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	482	449	0	0	525	226	0	0	0	697	5	301
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	501	467	0	0	546	95	0	0	0	725	5	183
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	137	128	0	0	150	26	0	0	0	199	1	50
Total Analysis Volume [veh/h]	549	512	0	0	598	104	0	0	0	794	5	200
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0		0	
v_di, Inbound Pedestrian Volume crossing m	0				0				0		0	
v_co, Outbound Pedestrian Volume crossing	0				0				0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0		0	
Bicycle Volume [bicycles/h]	0				0				0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	25	50	0	0	25	0	0	0	0	0	40	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	17	56	35	35		26	26	26
g / C, Green / Cycle	0.18	0.62	0.39	0.39		0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.16	0.14	0.18	0.19		0.19	0.25	0.12
s, saturation flow rate [veh/h]	3514	3618	1900	1806		1810	1810	1615
c, Capacity [veh/h]	647	2244	744	707		526	526	470
d1, Uniform Delay [s]	35.51	7.56	20.42	20.66		27.83	30.37	25.83
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.19	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.22	0.24	2.14	2.48		1.32	8.01	0.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.23	0.47	0.50		0.64	0.88	0.43
d, Delay for Lane Group [s/veh]	38.73	7.79	22.55	23.14		29.15	38.38	26.45
Lane Group LOS	D	A	C	C		C	D	C
Critical Lane Group	Yes	No	No	Yes		No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.99	2.04	5.74	5.85		6.37	10.36	3.47
50th-Percentile Queue Length [ft/ln]	149.76	51.05	143.47	146.18		159.13	259.03	86.77
95th-Percentile Queue Length [veh/ln]	10.00	3.68	9.67	9.81		10.50	15.64	6.25
95th-Percentile Queue Length [ft/ln]	250.10	91.88	241.69	245.33		262.57	391.00	156.18

Movement, Approach, & Intersection Results

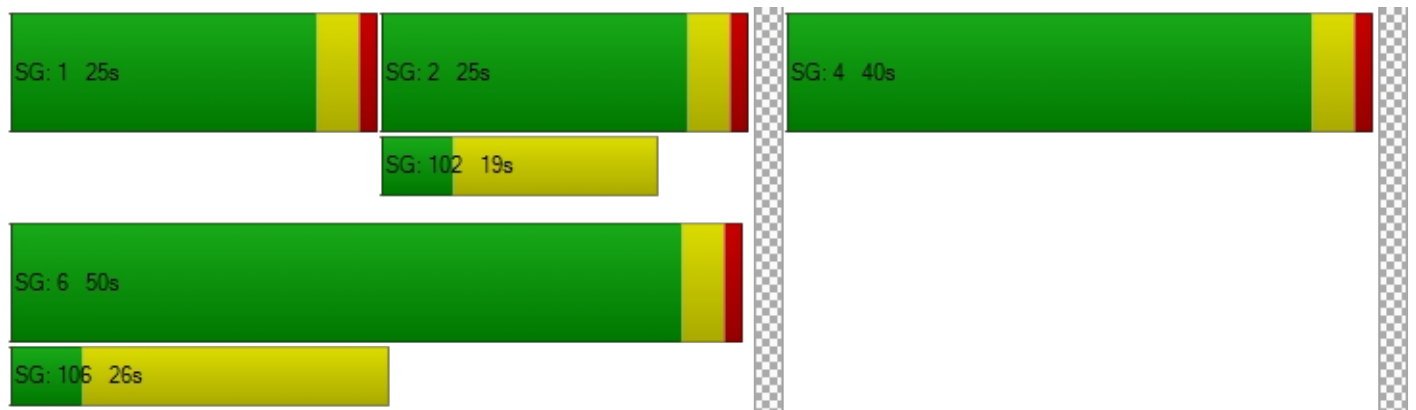
d_M, Delay for Movement [s/veh]	38.73	7.79	0.00	0.00	22.80	23.14	0.00	0.00	0.00	34.45	38.38	26.45
Movement LOS	D	A			C	C				C	D	C
d_A, Approach Delay [s/veh]	23.80				22.85		0.00		32.87			
Approach LOS	C				C		A		C			
d_I, Intersection Delay [s/veh]	26.84											
Intersection LOS	C											
Intersection V/C	0.605											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.105	2.494
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1022	467	0	800
d_b, Bicycle Delay [s]	10.76	26.45	45.00	16.20
I_b,int, Bicycle LOS Score for Intersection	2.435	2.254	4.132	3.422
Bicycle LOS	B	B	D	C

Sequence




Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.649

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	692	754	296	922	0	239	1	625	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	720	604	308	959	0	249	1	490	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	190	160	81	254	0	66	0	130	0	0	0
Total Analysis Volume [veh/h]	0	762	639	326	1015	0	263	1	519	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0			0			0			
v_di, Inbound Pedestrian Volume crossing m	0		0			0			0			
v_co, Outbound Pedestrian Volume crossing	0		0			0			0			
v_ci, Inbound Pedestrian Volume crossing mi	0		0			0			0			
v_ab, Corner Pedestrian Volume [ped/h]	0		0			0			0			
Bicycle Volume [bicycles/h]	0		0			0			0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	42	0	15	57	0	0	33	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	50	50	10	64	18	18	18	
g / C, Green / Cycle	0.56	0.56	0.11	0.71	0.20	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.21	0.40	0.09	0.28	0.15	0.16	0.16	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1616	1615	
c, Capacity [veh/h]	2005	895	401	2578	359	321	321	
d1, Uniform Delay [s]	11.33	14.80	38.94	5.17	33.82	34.45	34.45	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.55	4.84	4.04	0.45	2.89	4.91	4.92	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.38	0.71	0.81	0.39	0.73	0.81	0.81	
d, Delay for Lane Group [s/veh]	11.88	19.64	42.98	5.62	36.72	39.36	39.37	
Lane Group LOS	B	B	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	4.13	9.91	3.69	3.18	5.57	5.76	5.76	
50th-Percentile Queue Length [ft/ln]	103.24	247.86	92.17	79.52	139.34	144.01	143.97	
95th-Percentile Queue Length [veh/ln]	7.43	15.08	6.64	5.73	9.45	9.70	9.69	
95th-Percentile Queue Length [ft/ln]	185.83	376.96	165.90	143.14	236.13	242.41	242.36	

Movement, Approach, & Intersection Results

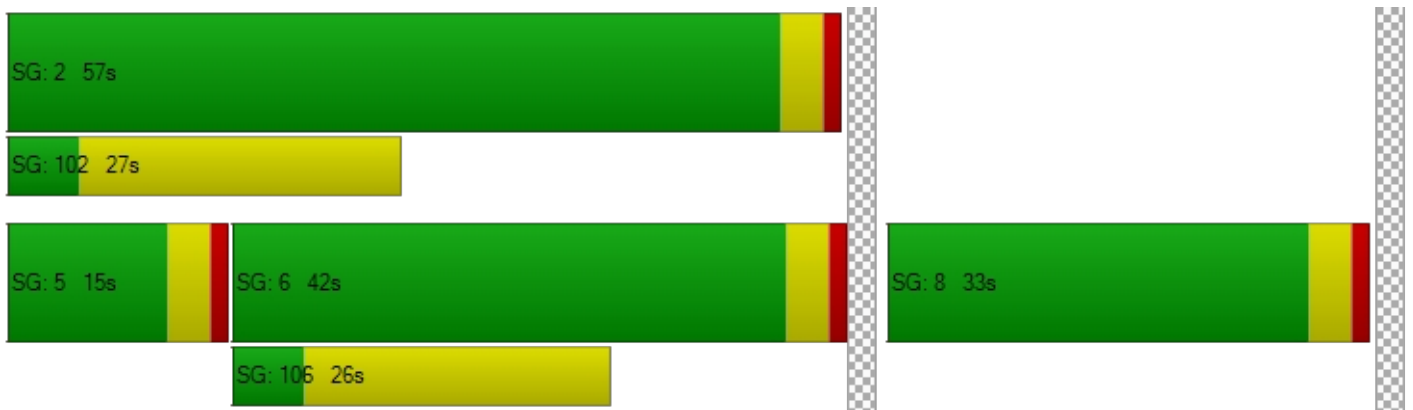
d_M, Delay for Movement [s/veh]	0.00	11.88	19.64	42.98	5.62	0.00	36.74	39.36	39.37	0.00	0.00	0.00
Movement LOS		B	B	D	A		D	D	D			
d_A, Approach Delay [s/veh]		15.42		14.70			38.48			0.00		
Approach LOS		B		B			D			A		
d_I, Intersection Delay [s/veh]	20.27											
Intersection LOS	C											
Intersection V/C	0.649											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.476	2.275
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	844	1178	644	0
d_b, Bicycle Delay [s]	15.02	7.61	20.67	45.00
I_b,int, Bicycle LOS Score for Intersection	2.864	2.666	3.116	4.132
Bicycle LOS	C	B	C	D

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	24.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.639

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	710	42	264	720	564	463	295	106	31	202	279
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	68	738	44	275	749	587	482	307	110	32	210	290
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	18	197	12	73	200	157	129	82	29	9	56	77
Total Analysis Volume [veh/h]	73	788	47	294	800	627	515	328	118	34	224	310
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	29	29	13	33	33	19	39	39	9	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	40	47	9	44	63	15	22	31	3	10	23
g / C, Green / Cycle	0.06	0.44	0.52	0.10	0.49	0.70	0.17	0.25	0.35	0.03	0.11	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.03	0.08	0.22	0.39	0.15	0.09	0.07	0.01	0.06	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	195	1603	839	351	1764	1128	586	894	561	112	407	415
d1, Uniform Delay [s]	40.99	17.84	10.70	39.78	15.17	6.68	36.62	28.05	20.70	42.58	37.79	30.76
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.19	1.08	0.13	5.29	0.84	1.98	4.47	0.25	0.18	1.49	1.17	3.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.49	0.06	0.84	0.45	0.56	0.88	0.37	0.21	0.30	0.55	0.75
d, Delay for Lane Group [s/veh]	42.18	18.92	10.82	45.07	16.01	8.65	41.09	28.31	20.88	44.07	38.96	34.22
Lane Group LOS	D	B	B	D	B	A	D	C	C	D	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.80	5.79	0.47	3.40	5.30	5.37	5.78	2.91	1.74	0.39	2.37	6.43
50th-Percentile Queue Length [ft/ln]	20.12	144.80	11.77	85.12	132.40	134.16	144.48	72.71	43.53	9.73	59.32	160.67
95th-Percentile Queue Length [veh/ln]	1.45	9.74	0.85	6.13	9.07	9.17	9.72	5.24	3.13	0.70	4.27	10.58
95th-Percentile Queue Length [ft/ln]	36.21	243.48	21.18	153.22	226.75	229.13	243.04	130.88	78.36	17.52	106.77	264.61

Movement, Approach, & Intersection Results

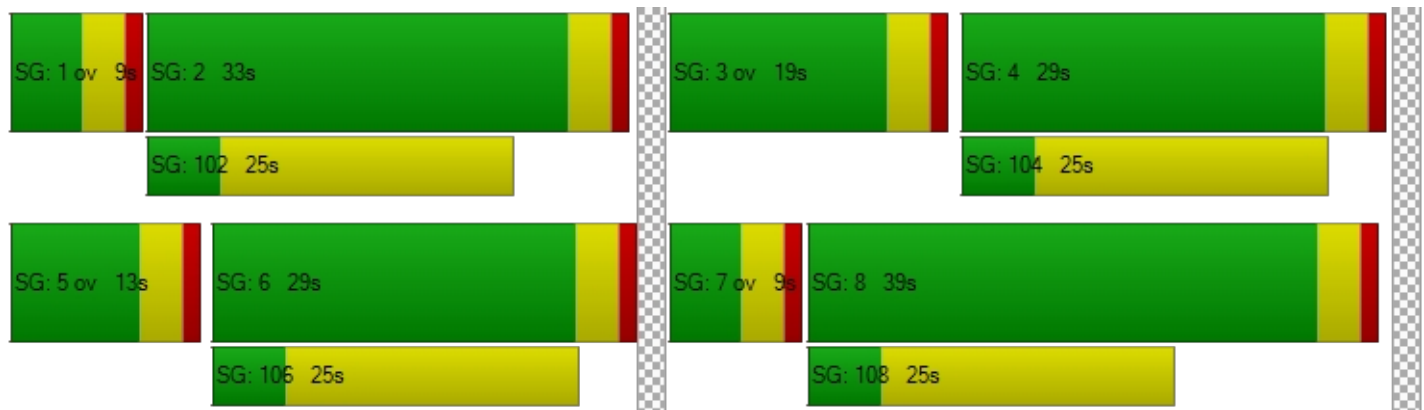
d_M, Delay for Movement [s/veh]	42.18	18.92	10.82	45.07	16.01	8.65	41.09	28.31	20.88	44.07	38.96	34.22
Movement LOS	D	B	B	D	B	A	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	20.37			18.29			34.24			36.68		
Approach LOS	C			B			C			D		
d_I, Intersection Delay [s/veh]	24.95											
Intersection LOS	C											
Intersection V/C	0.639											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.854	3.060	2.858	2.768
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	644	778	556
d_b, Bicycle Delay [s]	23.47	20.67	16.81	23.47
I_b,int, Bicycle LOS Score for Intersection	2.309	2.979	2.352	2.028
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	34.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.530

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	78	272	218	98	260	8	0	36	299	116	0	210	196	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040
In-Process Volume [veh/h]	0	0	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	0	0
Diverted Trips [veh/h]	0	0	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	0	0
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	81	283	227	102	270	8	0	37	311	121	0	218	204	97
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	24	85	68	31	81	2	0	11	93	36	0	65	61	29
Total Analysis Volume [veh/h]	97	339	272	122	323	10	0	44	372	145	0	261	244	116
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	36	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	34	0	12	34	0	0	14	29	0	0	25	40	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	43	43	8	44	44	4	17	17	16	30	30
g / C, Green / Cycle	0.07	0.43	0.43	0.08	0.44	0.44	0.04	0.17	0.17	0.16	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.05	0.17	0.17	0.07	0.09	0.09	0.02	0.14	0.14	0.14	0.10	0.10
s, saturation flow rate [veh/h]	1810	1900	1625	1810	1900	1880	1810	1900	1722	1810	1900	1697
c, Capacity [veh/h]	123	808	691	145	831	822	66	325	294	297	567	506
d1, Uniform Delay [s]	45.88	19.95	20.00	45.38	17.36	17.37	47.59	40.05	40.16	40.85	27.33	27.37
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.51	1.51	1.80	12.27	0.54	0.55	11.19	5.42	6.50	8.35	0.34	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.41	0.41	0.84	0.20	0.20	0.67	0.83	0.84	0.88	0.33	0.34
d, Delay for Lane Group [s/veh]	56.39	21.47	21.80	57.65	17.91	17.92	58.79	45.47	46.66	49.19	27.67	27.76
Lane Group LOS	E	C	C	E	B	B	E	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.72	5.51	4.83	3.46	2.46	2.44	1.28	6.80	6.37	6.89	3.54	3.21
50th-Percentile Queue Length [ft/ln]	67.94	137.87	120.72	86.48	61.49	61.08	32.05	170.12	159.26	172.32	88.40	80.35
95th-Percentile Queue Length [veh/ln]	4.89	9.37	8.43	6.23	4.43	4.40	2.31	11.08	10.51	11.20	6.36	5.79
95th-Percentile Queue Length [ft/ln]	122.29	234.15	210.82	155.67	110.69	109.94	57.69	277.07	262.74	279.96	159.12	144.63

Movement, Approach, & Intersection Results

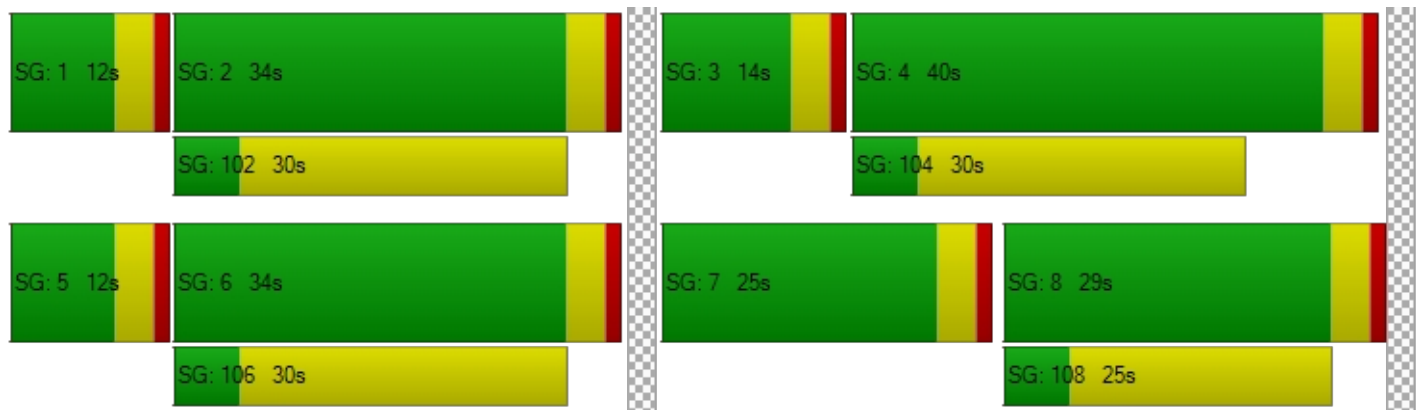
d_M, Delay for Movement [s/veh]	56.39	21.48	21.80	57.65	17.91	17.92	58.79	58.79	45.80	46.66	49.19	49.19	27.69	27.76
Movement LOS	E	C	C	E	B	B	E	E	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	26.38			28.57			47.04			36.74				
Approach LOS	C			C			D			D				
d_I, Intersection Delay [s/veh]	34.49													
Intersection LOS	C													
Intersection V/C	0.530													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersectio	2.587	2.493	2.484	2.577
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	500	720
d_b, Bicycle Delay [s]	24.50	24.50	28.13	20.48
I_b,int, Bicycle LOS Score for Intersection	2.144	1.935	1.986	2.072
Bicycle LOS	B	A	A	B

Sequence




Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	10.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.301

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	13	372	444	90	131	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	387	462	94	136	47
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	122	146	30	43	15
Total Analysis Volume [veh/h]	18	488	583	119	172	59
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	9	58	49	0	32	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	71	65	65	11	11
g / C, Green / Cycle	0.02	0.79	0.73	0.73	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.13	0.18	0.20	0.10	0.04
s, saturation flow rate [veh/h]	1810	3618	1900	1793	1810	1615
c, Capacity [veh/h]	37	2861	1379	1301	218	194
d1, Uniform Delay [s]	43.62	2.28	4.15	4.20	38.48	36.14
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.61	0.13	0.44	0.51	6.30	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.17	0.25	0.27	0.79	0.30
d, Delay for Lane Group [s/veh]	53.23	2.41	4.59	4.71	44.78	37.01
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.49	0.71	1.87	1.91	4.01	1.22
50th-Percentile Queue Length [ft/ln]	12.29	17.76	46.83	47.76	100.36	30.44
95th-Percentile Queue Length [veh/ln]	0.88	1.28	3.37	3.44	7.23	2.19
95th-Percentile Queue Length [ft/ln]	22.12	31.97	84.29	85.97	180.65	54.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.23	2.41	4.64	4.71	44.78	37.01
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	4.21		4.65		42.79	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	10.62					
Intersection LOS	B					
Intersection V/C	0.301					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.525	2.465	2.061
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1000	622
d_b, Bicycle Delay [s]	7.20	11.25	21.36
I_b,int, Bicycle LOS Score for Intersection	1.977	2.139	1.560
Bicycle LOS	A	B	A

Sequence





Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	34.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.569

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	141	43	209	160	132	78	484	24	46	371	166
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	147	45	217	166	137	81	503	25	48	386	173
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	3	42	13	63	48	40	23	145	7	14	112	50
Total Analysis Volume [veh/h]	14	170	52	251	192	158	94	582	29	55	446	200
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	25	0	5	19	0	8	22	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	29	0	9	23	0	12	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	23	23	5	36	36	4	35	35
g / C, Green / Cycle	0.12	0.12	0.26	0.26	0.06	0.40	0.40	0.04	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.10	0.03	0.24	0.10	0.05	0.16	0.16	0.03	0.18	0.18
s, saturation flow rate [veh/h]	1893	1615	1848	1615	1810	1900	1868	1810	1900	1704
c, Capacity [veh/h]	231	197	481	420	101	755	743	76	730	655
d1, Uniform Delay [s]	38.41	35.83	32.40	27.30	42.34	19.49	19.49	42.57	20.77	20.80
k, delay calibration	0.11	0.11	0.34	0.11	0.24	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.14	0.70	19.44	0.56	47.23	1.63	1.66	11.92	2.12	2.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.26	0.92	0.38	0.94	0.41	0.41	0.72	0.46	0.47
d, Delay for Lane Group [s/veh]	44.55	36.53	51.84	27.86	89.57	21.11	21.15	54.49	22.89	23.20
Lane Group LOS	D	D	D	C	F	C	C	D	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.28	1.06	11.69	2.80	3.37	4.81	4.74	1.45	5.59	5.11
50th-Percentile Queue Length [ft/ln]	107.05	26.59	292.32	69.98	84.35	120.15	118.48	36.21	139.75	127.74
95th-Percentile Queue Length [veh/ln]	7.68	1.91	17.30	5.04	6.07	8.40	8.31	2.61	9.47	8.82
95th-Percentile Queue Length [ft/ln]	191.90	47.86	432.52	125.96	151.83	210.04	207.74	65.17	236.69	220.42

Movement, Approach, & Intersection Results

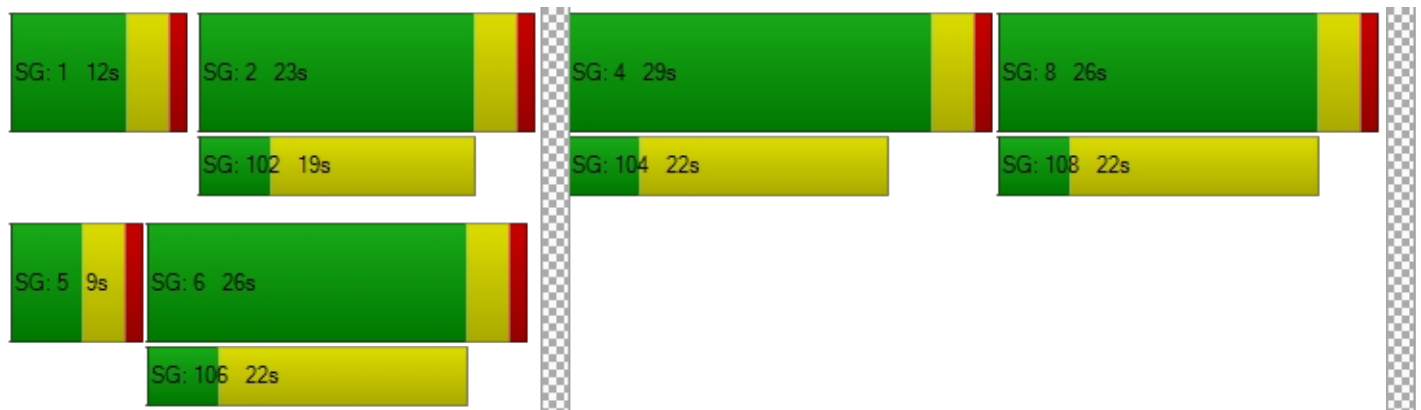
d_M, Delay for Movement [s/veh]	44.55	44.55	36.53	51.84	51.84	27.86	89.57	21.13	21.15	54.49	22.96	23.20
Movement LOS	D	D	D	D	D	C	F	C	C	D	C	C
d_A, Approach Delay [s/veh]	42.78			45.53			30.26			25.50		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	34.18											
Intersection LOS	C											
Intersection V/C	0.569											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.257	2.392	2.559	2.611
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	556	422	489
d_b, Bicycle Delay [s]	25.69	23.47	28.01	25.69
I_b,int, Bicycle LOS Score for Intersection	1.949	2.551	2.141	2.138
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	29.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name															
Base Volume Input [veh/h]	132	539	83	0	98	495	94	0	123	537	156	0	84	380	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020
In-Process Volume [veh/h]	0	0	0	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	0	0	0
Diverted Trips [veh/h]	0	0	0	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	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	550	85	0	100	505	96	0	125	548	159	0	86	388	39
Peak Hour Factor	0.9880	0.9880	0.9880	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	34	139	22	0	25	128	24	0	32	139	40	0	22	98	10
Total Analysis Volume [veh/h]	137	557	86	0	101	511	97	0	127	555	161	0	87	393	39
Presence of On-Street Parking	No		No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0			
v_co, Outbound Pedestrian Volume crossing	0			0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0			
Bicycle Volume [bicycles/h]	0			0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	9	32	0	0	9	32	0	0	12	39	0	0	10	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	43	43	5	43	43	8	21	21	6	18	18
g / C, Green / Cycle	0.06	0.48	0.48	0.05	0.48	0.48	0.09	0.23	0.23	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.17	0.03	0.16	0.16	0.07	0.20	0.20	0.05	0.12	0.12
s, saturation flow rate [veh/h]	3514	1900	1812	3514	1900	1796	1810	1900	1755	1810	1900	1841
c, Capacity [veh/h]	195	911	869	180	902	853	158	437	403	112	388	376
d1, Uniform Delay [s]	41.77	14.76	14.76	41.70	14.84	14.85	40.31	33.18	33.19	41.61	32.19	32.22
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.53	1.11	1.17	2.72	1.05	1.12	9.12	4.77	5.17	10.96	1.28	1.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.36	0.36	0.56	0.35	0.35	0.80	0.85	0.85	0.78	0.56	0.57
d, Delay for Lane Group [s/veh]	46.30	15.87	15.93	44.43	15.89	15.97	49.44	37.95	38.37	52.56	33.47	33.56
Lane Group LOS	D	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.60	4.30	4.13	1.15	4.08	3.89	3.12	8.16	7.59	2.22	4.35	4.25
50th-Percentile Queue Length [ft/ln]	40.01	107.54	103.14	28.79	101.94	97.20	78.08	203.94	189.83	55.52	108.66	106.21
95th-Percentile Queue Length [veh/ln]	2.88	7.70	7.43	2.07	7.34	7.00	5.62	12.84	12.11	4.00	7.77	7.63
95th-Percentile Queue Length [ft/ln]	72.01	192.58	185.66	51.81	183.50	174.97	140.54	321.04	302.80	99.93	194.14	190.72

Movement, Approach, & Intersection Results

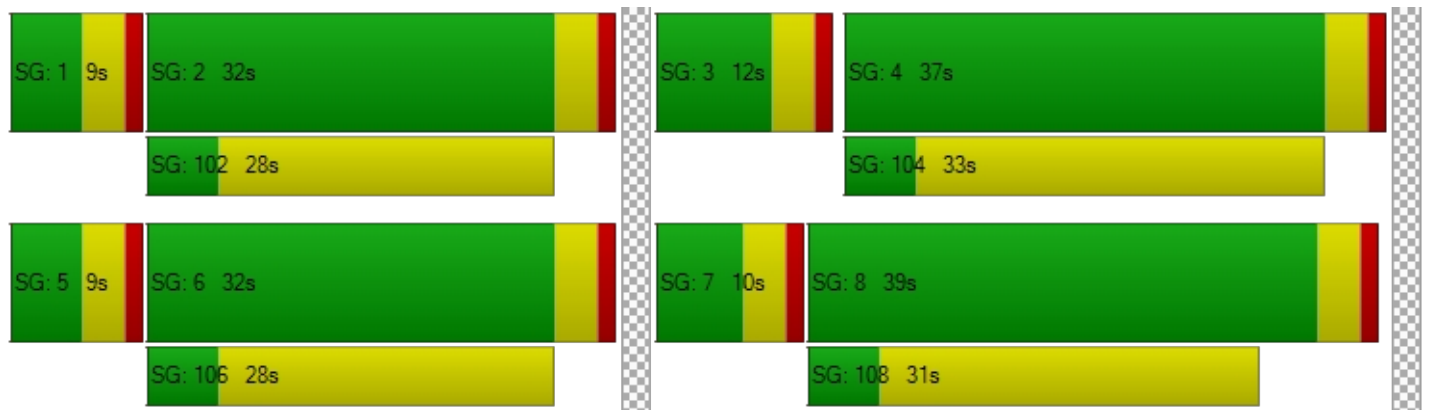
d_M, Delay for Movement [s/veh]	46.30	15.90	15.93	44.43	44.43	15.92	15.97	49.44	49.44	38.09	38.37	52.56	52.56	33.51	33.56
Movement LOS	D	B	B	D	D	B	B	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	21.24			19.99				39.85				36.71			
Approach LOS	C			B				D				D			
d_I, Intersection Delay [s/veh]	29.25														
Intersection LOS	C														
Intersection V/C	0.448														

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.704	2.687	2.588	2.547
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	622	778	733
d_b, Bicycle Delay [s]	21.36	21.36	16.81	18.05
I_b,int, Bicycle LOS Score for Intersection	2.203	2.061	2.150	1.988
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-3

INTERSECTION ANALYSIS
WORKSHEETS –
OPENING YEAR 2026 PLUS PROJECT

Renaissance II Residential Project

Vistro File: C:\...\Renaissance Res II_AM.vistro

Scenario 3 OY 26 WP AM

Report File: C:\...\3 OY 2026 WP AM.pdf

6/4/2025

Intersection Analysis Summary




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	WB Left	0.556	27.2	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	EB Right	0.424	16.8	B
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.496	21.4	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	NB Left	0.357	27.9	C
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.176	7.8	A
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.506	26.7	C
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	EB Left	0.434	28.4	C
101	Ayala Dr / Project Driveway	Two-way stop	HCM 7th Edition	WB Right	0.060	8.5	A
102	Linden Ave / South Project Driveway	Two-way stop	HCM 7th Edition	WB Left	0.067	16.2	C
103	Ayala Dr / Scholl Wy	Signalized	HCM 6th Edition	NB Left	0.286	3.6	A
104	Ayala Dr / Project Driveway (Exit Only)	Two-way stop	HCM 6th Edition	EB Right	0.020	11.8	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.556

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	484	298	0	0	456	353	0	0	0	526	2	315
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	11	0	0	5	0	0	0	0	6	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	517	321	0	0	479	227	0	0	0	553	2	198
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	142	88	0	0	131	62	0	0	0	151	1	54
Total Analysis Volume [veh/h]	566	352	0	0	525	249	0	0	0	606	2	217
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	23	0	0	0	0	0	32	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	28	63	0	0	35	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	17	64	43	43		18	18	18
g / C, Green / Cycle	0.19	0.71	0.48	0.48		0.20	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.16	0.10	0.20	0.23		0.17	0.17	0.13
s, saturation flow rate [veh/h]	3514	3618	1900	1706		1810	1810	1615
c, Capacity [veh/h]	674	2573	903	811		362	362	323
d1, Uniform Delay [s]	35.05	4.16	15.57	16.03		34.63	34.63	33.28
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	2.92	0.11	1.49	2.01		5.28	5.27	2.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.14	0.43	0.48		0.84	0.84	0.67
d, Delay for Lane Group [s/veh]	37.97	4.27	17.06	18.04		39.91	39.90	35.71
Lane Group LOS	D	A	B	B		D	D	D
Critical Lane Group	Yes	No	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.12	0.88	5.34	5.57		6.79	6.79	4.51
50th-Percentile Queue Length [ft/ln]	153.04	22.07	133.43	139.14		169.71	169.72	112.80
95th-Percentile Queue Length [veh/ln]	10.18	1.59	9.13	9.43		11.06	11.06	8.00
95th-Percentile Queue Length [ft/ln]	254.48	39.73	228.15	235.86		276.53	276.55	199.89

Movement, Approach, & Intersection Results

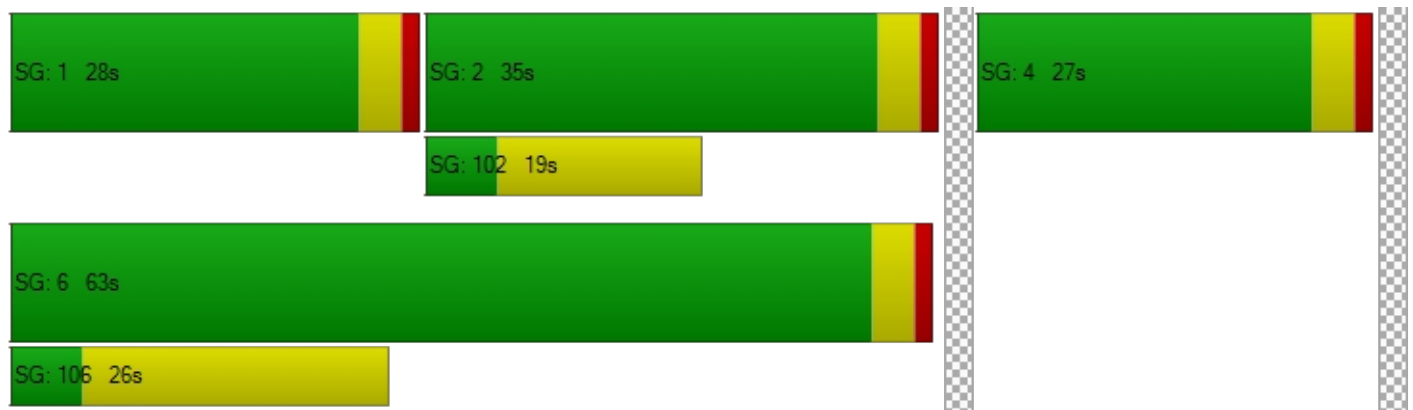
d_M, Delay for Movement [s/veh]	37.97	4.27	0.00	0.00	17.32	18.04	0.00	0.00	0.00	39.90	39.90	35.71
Movement LOS	D	A			B	B				D	D	D
d_A, Approach Delay [s/veh]	25.04				17.55		0.00		38.80			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	27.25											
Intersection LOS	C											
Intersection V/C	0.556											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.183	2.437
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1311	689	0	511
d_b, Bicycle Delay [s]	5.34	19.34	45.00	24.94
I_b,int, Bicycle LOS Score for Intersection	2.317	2.314	4.132	3.135
Bicycle LOS	B	B	D	C

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	16.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.424

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	645	508	277	706	0	137	1	441	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	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	25	14	0	11	0	0	0	6	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	696	362	288	745	0	142	1	305	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	184	96	76	197	0	38	0	81	0	0	0
Total Analysis Volume [veh/h]	0	737	383	305	788	0	150	1	323	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	39	0	23	62	0	0	28	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	56	56	10	70	12	12	12	
g / C, Green / Cycle	0.62	0.62	0.11	0.78	0.13	0.13	0.13	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.24	0.09	0.22	0.08	0.10	0.10	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1616	1615	
c, Capacity [veh/h]	2245	1002	401	2819	239	213	213	
d1, Uniform Delay [s]	8.13	8.49	38.68	2.81	36.98	37.69	37.69	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.39	1.11	3.01	0.25	2.71	5.50	5.50	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.33	0.38	0.76	0.28	0.63	0.76	0.76	
d, Delay for Lane Group [s/veh]	8.52	9.59	41.68	3.05	39.69	43.19	43.19	
Lane Group LOS	A	A	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.16	3.61	3.39	1.42	3.26	3.72	3.71	
50th-Percentile Queue Length [ft/ln]	79.08	90.19	84.66	35.43	81.50	92.95	92.87	
95th-Percentile Queue Length [veh/ln]	5.69	6.49	6.10	2.55	5.87	6.69	6.69	
95th-Percentile Queue Length [ft/ln]	142.35	162.33	152.39	63.78	146.70	167.31	167.17	

Movement, Approach, & Intersection Results

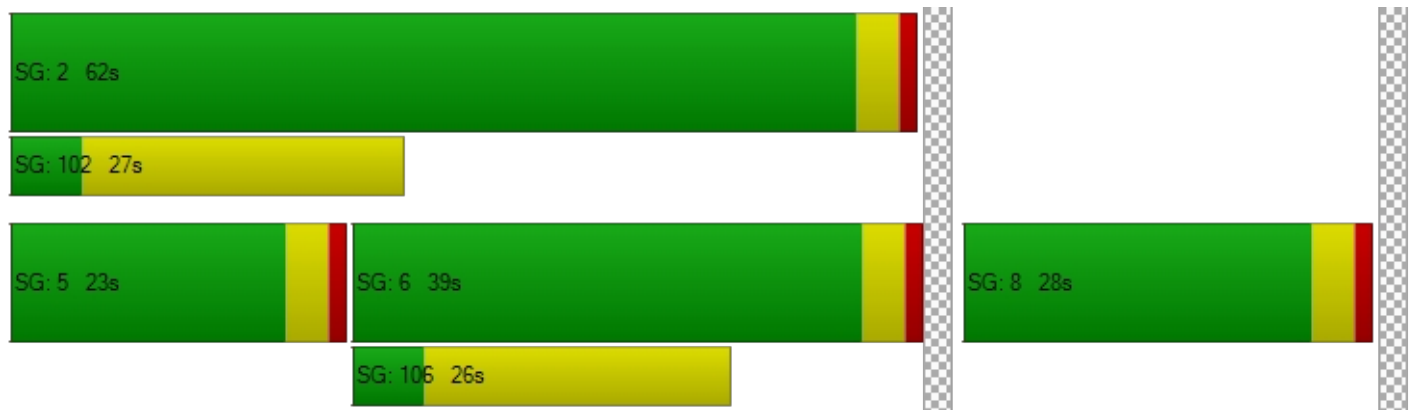
d_M, Delay for Movement [s/veh]	0.00	8.52	9.59	41.68	3.05	0.00	39.69	43.19	43.19	0.00	0.00	0.00
Movement LOS		A	A	D	A		D	D	D			
d_A, Approach Delay [s/veh]		8.89		13.83			42.08			0.00		
Approach LOS		A		B			D			A		
d_I, Intersection Delay [s/veh]	16.75											
Intersection LOS	B											
Intersection V/C	0.424											

Other Modes

g_Walk,mi, Effective Walk Time [s]		0.0		0.0		9.0		9.0
M_corner, Corner Circulation Area [ft ² /ped]		0.00		0.00		0.00		0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]		0.00		0.00		0.00		0.00
d_p, Pedestrian Delay [s]		0.00		0.00		36.45		36.45
I_p,int, Pedestrian LOS Score for Intersectio		0.000		0.000		2.375		2.140
Crosswalk LOS		F		F		B		B
s_b, Saturation Flow Rate of the bicycle lane		2000		2000		2000		2000
c_b, Capacity of the bicycle lane [bicycles/h]		778		1289		533		0
d_b, Bicycle Delay [s]		16.81		5.69		24.20		45.00
I_b,int, Bicycle LOS Score for Intersection		2.632		2.461		2.606		4.132
Bicycle LOS		B		B		B		D

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	21.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	46	651	31	205	625	321	196	113	56	29	104	278
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	17	39	11	0	5	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	677	32	213	650	351	243	129	58	35	108	289
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	13	181	9	57	174	94	65	34	15	9	29	77
Total Analysis Volume [veh/h]	51	723	34	228	694	375	260	138	62	37	115	309
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	32	32	15	38	38	12	34	34	9	31	31
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	4	45	52	11	52	64	8	15	23	3	10	25
g / C, Green / Cycle	0.04	0.50	0.58	0.12	0.58	0.71	0.09	0.17	0.25	0.03	0.11	0.28
(v / s)_i Volume / Saturation Flow Rate	0.01	0.20	0.02	0.06	0.19	0.23	0.07	0.04	0.04	0.01	0.03	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	141	1803	931	430	2100	1153	312	607	408	118	407	451
d1, Uniform Delay [s]	42.07	14.14	8.24	37.08	9.79	4.80	40.34	32.40	26.16	42.47	36.60	28.91
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.55	0.67	0.07	1.02	0.42	0.75	5.74	0.19	0.17	1.49	0.38	2.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.40	0.04	0.53	0.33	0.33	0.83	0.23	0.15	0.31	0.28	0.69
d, Delay for Lane Group [s/veh]	43.62	14.81	8.31	38.10	10.22	5.55	46.08	32.59	26.33	43.95	36.98	31.26
Lane Group LOS	D	B	A	D	B	A	D	C	C	D	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.58	4.52	0.29	2.38	3.38	2.31	3.04	1.30	1.04	0.42	1.17	6.09
50th-Percentile Queue Length [ft/ln]	14.42	112.99	7.14	59.61	84.46	57.87	76.05	32.57	25.99	10.56	29.21	152.13
95th-Percentile Queue Length [veh/ln]	1.04	8.01	0.51	4.29	6.08	4.17	5.48	2.34	1.87	0.76	2.10	10.13
95th-Percentile Queue Length [ft/ln]	25.95	200.15	12.86	107.30	152.02	104.17	136.89	58.62	46.78	19.00	52.59	253.27

Movement, Approach, & Intersection Results

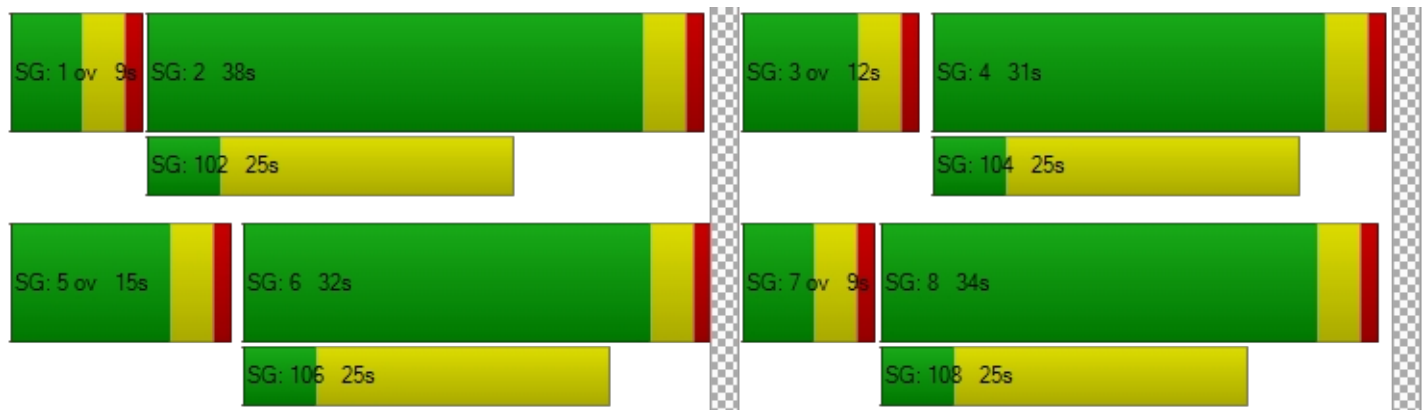
d_M, Delay for Movement [s/veh]	43.62	14.81	8.31	38.10	10.22	5.55	46.08	32.59	26.33	43.95	36.98	31.26
Movement LOS	D	B	A	D	B	A	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	16.35			13.77			39.37			33.71		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	21.39											
Intersection LOS	C											
Intersection V/C	0.496											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.818	2.956	2.735	2.715
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	756	667	600
d_b, Bicycle Delay [s]	21.36	17.42	20.00	22.05
I_b,int, Bicycle LOS Score for Intersection	2.226	2.630	1.939	1.940
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	27.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.357

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	38	252	78	89	208	18	0	34	132	61	0	114	89	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	55	0	0	0	0	0	0	4	0	19	0	0
Diverted Trips [veh/h]	0	0	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	0	0
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	262	136	93	216	19	0	35	137	67	0	138	93	66
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	15	78	41	28	65	6	0	10	41	20	0	41	28	20
Total Analysis Volume [veh/h]	60	313	163	111	258	23	0	42	164	80	0	165	111	79
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	11	34	0	0	11	29	0	0	16	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	47	47	7	50	50	3	10	10	10	17	17
g / C, Green / Cycle	0.04	0.52	0.52	0.08	0.56	0.56	0.04	0.11	0.11	0.11	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.03	0.13	0.13	0.06	0.07	0.08	0.02	0.07	0.07	0.09	0.05	0.06
s, saturation flow rate [veh/h]	1810	1900	1686	1810	1900	1846	1810	1900	1698	1810	1900	1647
c, Capacity [veh/h]	79	992	880	140	1057	1027	66	213	190	200	354	307
d1, Uniform Delay [s]	42.59	11.83	11.87	40.81	9.58	9.59	42.77	37.98	38.13	39.18	31.44	31.54
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.11	0.61	0.71	9.63	0.26	0.27	9.76	2.58	3.30	8.31	0.43	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.25	0.26	0.79	0.13	0.14	0.64	0.59	0.62	0.83	0.28	0.30
d, Delay for Lane Group [s/veh]	56.69	12.43	12.57	50.44	9.84	9.86	52.54	40.56	41.43	47.49	31.87	32.07
Lane Group LOS	E	B	B	D	A	A	D	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.61	2.76	2.54	2.76	1.33	1.31	1.09	2.75	2.64	3.98	1.87	1.73
50th-Percentile Queue Length [ft/ln]	40.33	69.12	63.48	69.03	33.32	32.79	27.27	68.77	65.89	99.39	46.75	43.14
95th-Percentile Queue Length [veh/ln]	2.90	4.98	4.57	4.97	2.40	2.36	1.96	4.95	4.74	7.16	3.37	3.11
95th-Percentile Queue Length [ft/ln]	72.59	124.42	114.27	124.25	59.97	59.02	49.09	123.79	118.61	178.91	84.16	77.64

Movement, Approach, & Intersection Results

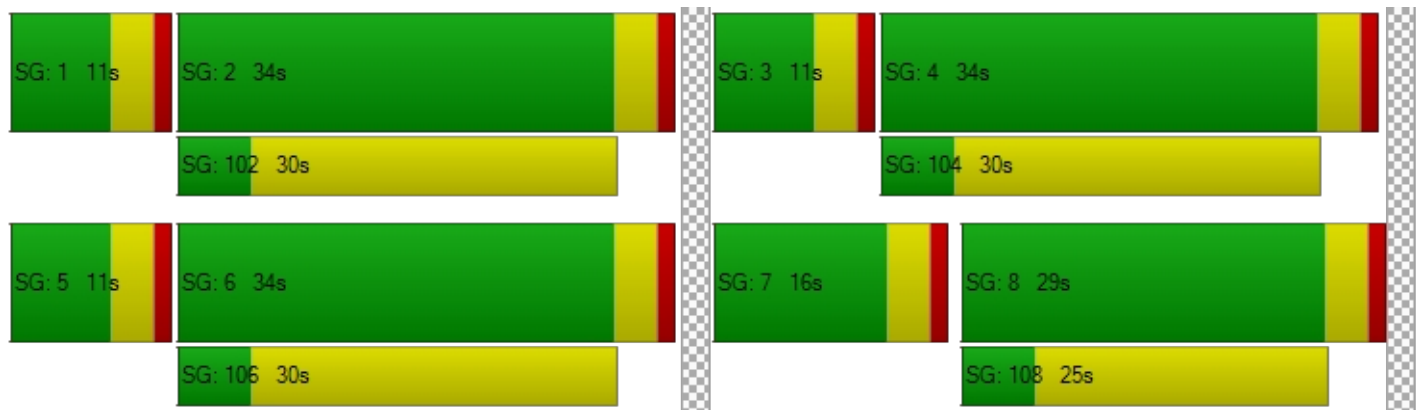
d_M, Delay for Movement [s/veh]	56.69	12.46	12.57	50.44	9.85	9.86	52.54	52.54	40.76	41.43	47.49	47.49	31.89	32.07
Movement LOS	E	B	B	D	A	A	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	17.45			21.35			42.68			39.18				
Approach LOS	B			C			D			D				
d_I, Intersection Delay [s/veh]	27.94													
Intersection LOS	C													
Intersection V/C	0.357													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.504	2.462	2.395	2.456
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	556	667
d_b, Bicycle Delay [s]	20.00	20.00	23.47	20.00
I_b,int, Bicycle LOS Score for Intersection	2.002	1.883	1.761	1.716
Bicycle LOS	B	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	7.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.176

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	19	351	228	66	61	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	16	22	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	381	259	69	63	22
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	120	82	22	20	7
Total Analysis Volume [veh/h]	25	480	327	87	79	28
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	10	60	50	0	30	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	76	70	70	6	6
g / C, Green / Cycle	0.03	0.85	0.78	0.78	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.01	0.13	0.11	0.12	0.04	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1769	1810	1615
c, Capacity [veh/h]	47	3065	1476	1374	116	103
d1, Uniform Delay [s]	43.28	1.21	2.52	2.54	41.24	40.13
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.85	0.11	0.20	0.23	6.94	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.53	0.16	0.14	0.15	0.68	0.27
d, Delay for Lane Group [s/veh]	52.13	1.32	2.72	2.77	48.17	41.53
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.66	0.30	0.70	0.72	1.92	0.63
50th-Percentile Queue Length [ft/ln]	16.51	7.51	17.59	17.91	47.98	15.63
95th-Percentile Queue Length [veh/ln]	1.19	0.54	1.27	1.29	3.45	1.13
95th-Percentile Queue Length [ft/ln]	29.72	13.51	31.66	32.24	86.36	28.14

Movement, Approach, & Intersection Results

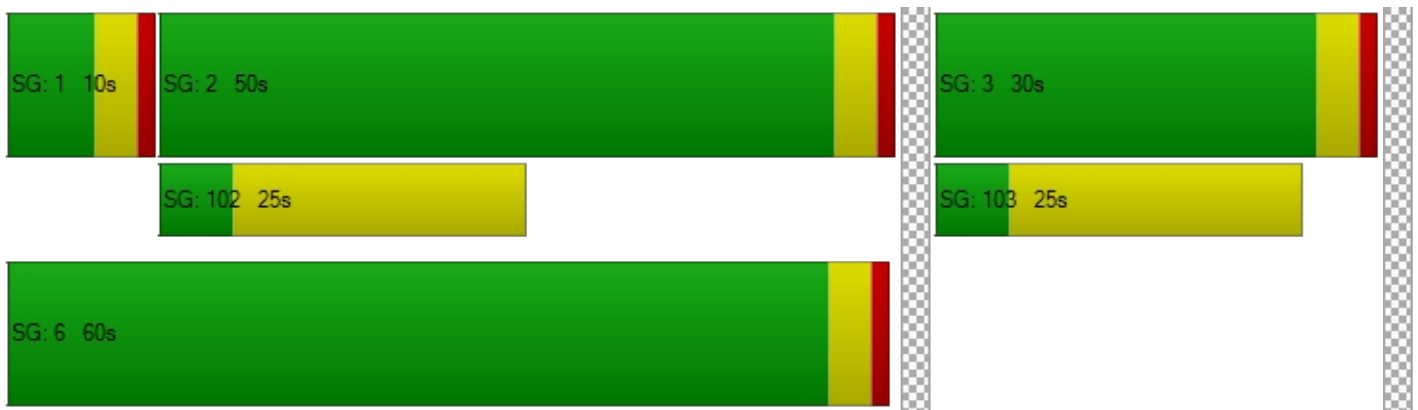
d_M, Delay for Movement [s/veh]	52.13	1.32	2.74	2.77	48.17	41.53
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	3.83		2.75		46.44	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	7.84					
Intersection LOS	A					
Intersection V/C	0.176					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.469	2.370	2.013
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	1022	578
d_b, Bicycle Delay [s]	6.42	10.76	22.76
I_b,int, Bicycle LOS Score for Intersection	1.976	1.901	1.560
Bicycle LOS	A	A	A

Sequence





Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.506

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	183	71	88	94	62	42	402	22	24	457	147
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	11	0	11	5	0	0	0	0	11
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	190	74	103	98	75	49	418	23	25	475	164
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	14	55	21	30	28	22	14	121	7	7	137	47
Total Analysis Volume [veh/h]	54	220	86	119	113	87	57	483	27	29	549	190
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	22	0	5	25	0	5	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	26	0	9	25	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	14	14	4	42	42	3	41	41
g / C, Green / Cycle	0.17	0.17	0.15	0.15	0.04	0.47	0.47	0.03	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate	0.15	0.05	0.13	0.05	0.03	0.14	0.14	0.02	0.20	0.20
s, saturation flow rate [veh/h]	1881	1615	1852	1615	1810	1900	1865	1810	1900	1735
c, Capacity [veh/h]	325	279	279	243	77	893	877	53	868	793
d1, Uniform Delay [s]	36.06	32.54	37.14	34.33	42.61	14.61	14.62	43.10	16.65	16.67
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.97	0.62	6.41	0.89	13.15	0.81	0.83	8.55	1.65	1.81
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.31	0.83	0.36	0.74	0.29	0.29	0.55	0.44	0.45
d, Delay for Lane Group [s/veh]	42.03	33.16	43.55	35.23	55.76	15.43	15.45	51.65	18.30	18.48
Lane Group LOS	D	C	D	D	E	B	B	D	B	B
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.25	1.67	5.37	1.75	1.52	3.27	3.23	0.76	5.56	5.14
50th-Percentile Queue Length [ft/ln]	156.25	41.65	134.17	43.72	37.99	81.86	80.74	18.90	138.99	128.45
95th-Percentile Queue Length [veh/ln]	10.35	3.00	9.17	3.15	2.74	5.89	5.81	1.36	9.43	8.86
95th-Percentile Queue Length [ft/ln]	258.75	74.96	229.15	78.70	68.38	147.35	145.34	34.03	235.67	221.38

Movement, Approach, & Intersection Results

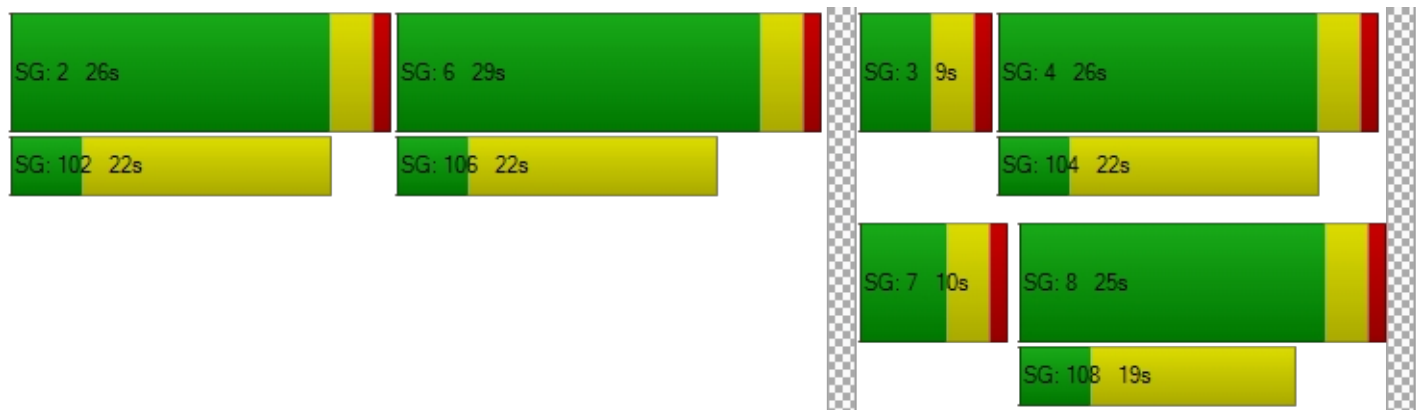
d_M, Delay for Movement [s/veh]	42.03	42.03	33.16	43.55	43.55	35.23	55.76	15.44	15.45	51.65	18.35	18.48
Movement LOS	D	D	C	D	D	D	E	B	B	D	B	B
d_A, Approach Delay [s/veh]	39.91			41.28			19.49			19.64		
Approach LOS	D			D			B			B		
d_I, Intersection Delay [s/veh]	26.65											
Intersection LOS	C											
Intersection V/C	0.506											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.262	2.324	2.546	2.585
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	489	467	489
d_b, Bicycle Delay [s]	23.47	25.69	26.45	25.69
I_b,int, Bicycle LOS Score for Intersection	2.154	2.086	2.027	2.193
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.434

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name															
Base Volume Input [veh/h]	214	559	76	0	46	598	57	0	99	263	169	0	46	333	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	10	0	0	0	0	0	11	0	0	4	0
Diverted Trips [veh/h]	0	0	0	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	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	225	570	78	0	57	610	58	0	101	268	183	0	47	344	32
Peak Hour Factor	0.9210	0.9210	0.9210	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	61	155	21	0	15	166	16	0	27	73	50	0	13	93	9
Total Analysis Volume [veh/h]	244	619	85	0	62	662	63	0	110	291	199	0	51	374	35
Presence of On-Street Parking	No		No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0			
v_co, Outbound Pedestrian Volume crossing	0			0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0			
Bicycle Volume [bicycles/h]	0			0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	0	9	32	0	0	10	35	0	0	12	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No				No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	51	51	4	48	48	6	15	15	4	13	13
g / C, Green / Cycle	0.08	0.57	0.57	0.04	0.53	0.53	0.07	0.17	0.17	0.04	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.07	0.19	0.19	0.02	0.19	0.19	0.06	0.14	0.14	0.03	0.11	0.11
s, saturation flow rate [veh/h]	3514	1900	1821	3514	1900	1843	1810	1900	1648	1810	1900	1844
c, Capacity [veh/h]	273	1077	1032	154	1013	982	121	324	281	74	275	267
d1, Uniform Delay [s]	41.13	10.41	10.41	41.87	12.17	12.17	41.74	35.86	35.97	42.60	36.93	36.97
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.84	0.84	0.87	1.68	1.01	1.04	21.59	4.61	5.79	10.92	4.12	4.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.33	0.33	0.40	0.36	0.36	0.91	0.80	0.82	0.69	0.75	0.76
d, Delay for Lane Group [s/veh]	50.97	11.25	11.29	43.55	13.18	13.22	63.33	40.47	41.77	53.52	41.06	41.35
Lane Group LOS	D	B	B	D	B	B	E	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.02	3.76	3.61	0.70	4.28	4.17	3.12	5.80	5.23	1.33	4.61	4.53
50th-Percentile Queue Length [ft/ln]	75.45	94.03	90.37	17.48	107.10	104.22	77.96	144.90	130.70	33.29	115.28	113.31
95th-Percentile Queue Length [veh/ln]	5.43	6.77	6.51	1.26	7.68	7.50	5.61	9.74	8.98	2.40	8.13	8.02
95th-Percentile Queue Length [ft/ln]	135.81	169.26	162.67	31.47	191.95	187.60	140.33	243.60	224.45	59.92	203.32	200.60

Movement, Approach, & Intersection Results

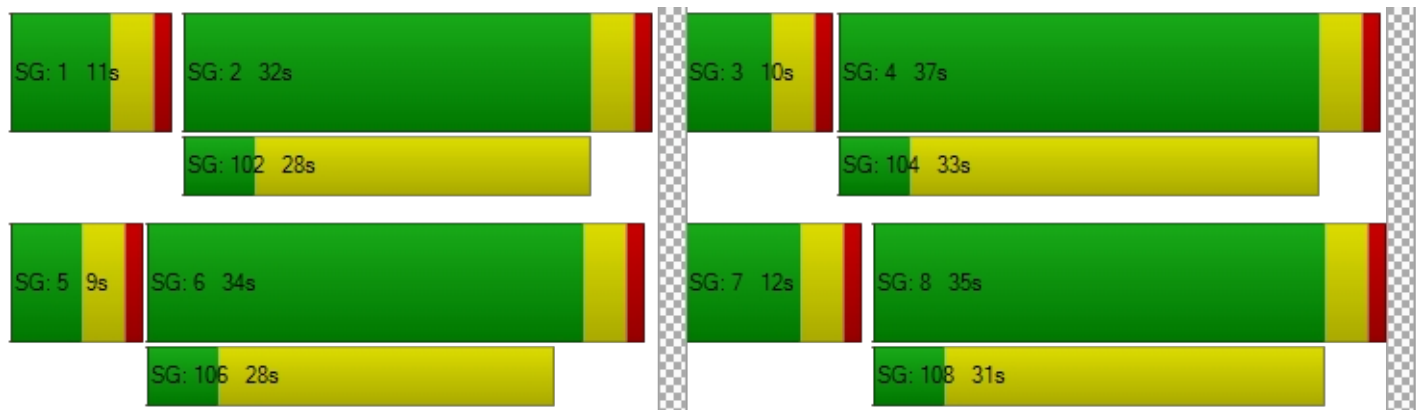
d_M, Delay for Movement [s/veh]	50.97	11.26	11.29	43.55	43.55	13.20	13.22	63.33	63.33	40.61	41.77	53.52	53.52	41.19	41.35
Movement LOS	D	B	B	D	D	B	B	E	E	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	21.48			15.59				45.16				42.57			
Approach LOS	C			B				D				D			
d_I, Intersection Delay [s/veh]	28.38														
Intersection LOS	C														
Intersection V/C	0.434														

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.757	2.706	2.551	2.476
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	622	689	733
d_b, Bicycle Delay [s]	20.00	21.36	19.34	18.05
I_b,int, Bicycle LOS Score for Intersection	2.342	2.158	1.964	1.939
Bicycle LOS	B	B	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 101: Ayala Dr / Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.060

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Westbound	
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	17	6	0	65
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	0	17	6	0	65
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	0	0	4	2	0	16
Total Analysis Volume [veh/h]	0	0	17	6	0	65
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	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.24	0.00	8.96	8.53
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.01	0.19	0.19
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.71	0.36	4.78	4.78
d_A, Approach Delay [s/veh]	0.00		5.35		8.53	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.70					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 102: Linden Ave / South Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	16.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.067

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	412	0	0	383	0	0	0	0	0	0	
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	
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	16	6	0	0	0	0	0	22	0	
Diverted Trips [veh/h]	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	
Existing Site Adjustment Volume [veh/h]	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	
Total Hourly Volume [veh/h]	0	428	16	6	398	0	0	0	0	22	0	
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	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	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	113	4	2	105	0	0	0	0	6	0	
Total Analysis Volume [veh/h]	0	451	17	6	419	0	0	0	0	23	0	
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
d_M, Delay for Movement [s/veh]	8.13	0.00	0.00	8.23	0.00	0.00	15.21	17.60	9.49	16.24	18.35	10.34
Movement LOS	A	A		A	A		C	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.21
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	5.36	5.36	5.36
d_A, Approach Delay [s/veh]	0.00			0.12			14.10			16.24		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	0.47											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 103: Ayala Dr / Scholl Wy**

Control Type:	Signalized	Delay (sec / veh):	3.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.286

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	3	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	33	783	849	19	4	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	5	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	814	883	25	4	29
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	210	228	6	1	7
Total Analysis Volume [veh/h]	35	842	913	26	4	30
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Overlap
Signal Group	1	6	2	0	3	8
Auxiliary Signal Groups						1,8
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	9	49	40	0	41	41
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	10	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	3	79	72	72	3	10
g / C, Green / Cycle	0.03	0.88	0.80	0.80	0.03	0.11
(v / s)_i Volume / Saturation Flow Rate	0.02	0.23	0.25	0.25	0.00	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1882	1810	1615
c, Capacity [veh/h]	59	3185	1526	1512	56	174
d1, Uniform Delay [s]	42.95	0.84	2.31	2.32	42.36	36.50
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.26	0.20	0.52	0.54	0.54	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.26	0.31	0.31	0.07	0.17
d, Delay for Lane Group [s/veh]	52.22	1.04	2.83	2.85	42.90	36.97
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.91	0.14	1.48	1.48	0.09	0.62
50th-Percentile Queue Length [ft/ln]	22.79	3.47	36.90	37.08	2.35	15.42
95th-Percentile Queue Length [veh/ln]	1.64	0.25	2.66	2.67	0.17	1.11
95th-Percentile Queue Length [ft/ln]	41.02	6.25	66.43	66.75	4.23	27.76

Movement, Approach, & Intersection Results

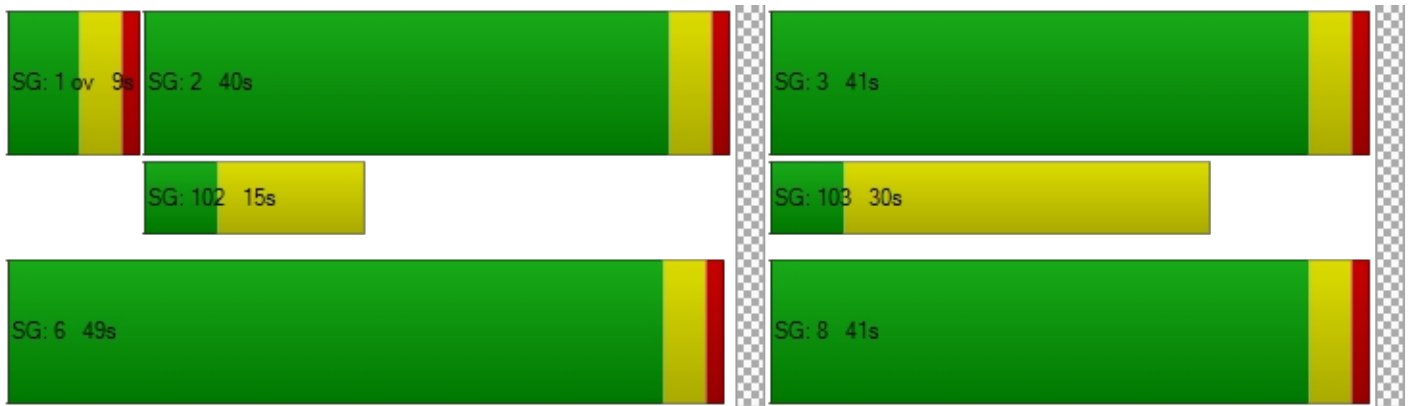
d_M, Delay for Movement [s/veh]	52.22	1.04	2.84	2.85	42.90	36.97
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	3.09		2.84		37.67	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	3.60					
Intersection LOS	A					
Intersection V/C	0.286					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.649	1.973
Crosswalk LOS	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	800	822
d_b, Bicycle Delay [s]	11.25	16.20	15.61
I_b,int, Bicycle LOS Score for Intersection	2.283	2.334	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 104: Ayala Dr / Project Driveway (Exit Only)

Control Type:	Two-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	↑↑		↑↑		↗	
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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	0	793	877	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	10
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	825	912	0	0	10
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	217	240	0	0	3
Total Analysis Volume [veh/h]	0	868	960	0	0	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
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	0.01	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	11.84
Movement LOS		A	A			B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.57
d_A, Approach Delay [s/veh]	0.00		0.00		11.84	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.07					
Intersection LOS	B					

Renaissance II Residential Project

Vistro File: C:\...\Renaissance Res II_PM.vistro

Scenario 3 OY 26 WP PM

Report File: C:\...\3 OY 2026 WP PM.pdf

6/4/2025

Intersection Analysis Summary




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	NB Left	0.617	27.1	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	SB Left	0.660	20.4	C
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	SB Left	0.667	25.5	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.584	35.6	D
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.307	10.3	B
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.590	36.5	D
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	WB Left	0.455	29.6	C
101	Ayala Dr / North Project Driveway	Two-way stop	HCM 7th Edition	WB Right	0.072	10.7	B
102	Linden Ave / South Project Driveway	Two-way stop	HCM 7th Edition	WB Left	0.064	18.0	C
103	Ayala Dr / Scholl Wy	Signalized	HCM 6th Edition	NB Left	0.296	3.6	A
104	Ayala Dr / Project Driveway (Exit Only)	Two-way stop	HCM 6th Edition	EB Right	0.013	11.7	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	27.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.617

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	482	449	0	0	525	226	0	0	0	697	5	301
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	8	0	0	10	0	0	0	0	13	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	511	475	0	0	556	95	0	0	0	738	5	183
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	140	130	0	0	152	26	0	0	0	202	1	50
Total Analysis Volume [veh/h]	560	520	0	0	609	104	0	0	0	808	5	200
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	25	50	0	0	25	0	0	0	0	0	40	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	17	55	35	35		27	27	27
g / C, Green / Cycle	0.19	0.62	0.38	0.38		0.30	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.16	0.14	0.19	0.20		0.19	0.26	0.12
s, saturation flow rate [veh/h]	3514	3618	1900	1807		1810	1810	1615
c, Capacity [veh/h]	657	2226	730	694		535	535	478
d1, Uniform Delay [s]	35.39	7.77	21.02	21.27		27.53	30.16	25.48
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.20	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.26	0.25	2.33	2.71		1.28	8.41	0.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.85	0.23	0.49	0.51		0.64	0.88	0.42
d, Delay for Lane Group [s/veh]	38.64	8.02	23.35	23.98		28.82	38.57	26.06
Lane Group LOS	D	A	C	C		C	D	C
Critical Lane Group	Yes	No	No	Yes		No	Yes	No
50th-Percentile Queue Length [veh/ln]	6.11	2.12	5.96	6.07		6.42	10.61	3.44
50th-Percentile Queue Length [ft/ln]	152.74	52.94	148.96	151.84		160.41	265.34	86.00
95th-Percentile Queue Length [veh/ln]	10.16	3.81	9.96	10.12		10.57	15.96	6.19
95th-Percentile Queue Length [ft/ln]	254.09	95.30	249.04	252.88		264.26	398.91	154.80

Movement, Approach, & Intersection Results

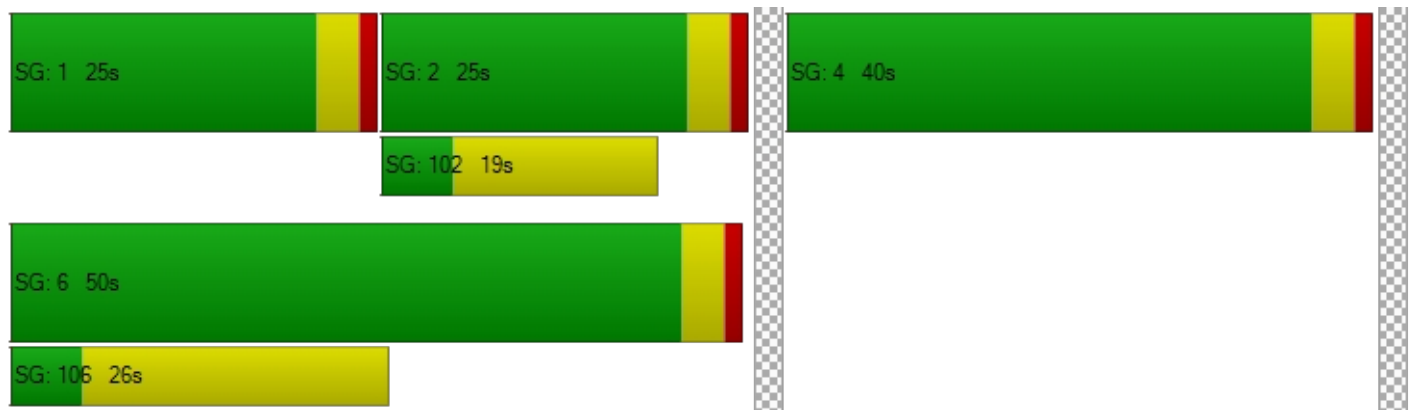
d_M, Delay for Movement [s/veh]	38.64	8.02	0.00	0.00	23.61	23.98	0.00	0.00	0.00	34.43	38.57	26.06
Movement LOS	D	A			C	C				C	D	C
d_A, Approach Delay [s/veh]	23.90				23.67		0.00				32.80	
Approach LOS	C				C		A				C	
d_I, Intersection Delay [s/veh]	27.06											
Intersection LOS	C											
Intersection V/C	0.617											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.111	2.498
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1022	467	0	800
d_b, Bicycle Delay [s]	10.76	26.45	45.00	16.20
I_b,int, Bicycle LOS Score for Intersection	2.451	2.263	4.132	3.446
Bicycle LOS	B	B	D	C

Sequence







Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	20.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.660

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	692	754	296	922	0	239	1	625	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	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	18	10	0	23	0	0	0	13	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	738	614	308	982	0	249	1	503	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	195	162	81	260	0	66	0	133	0	0	0
Total Analysis Volume [veh/h]	0	781	650	326	1039	0	263	1	532	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0			
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0			
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0			
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0			
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0			
Bicycle Volume [bicycles/h]	0		0		0		0		0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	42	0	15	57	0	0	33	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	50	50	10	64	18	18	18	
g / C, Green / Cycle	0.55	0.55	0.11	0.71	0.20	0.20	0.20	
(v / s)_i Volume / Saturation Flow Rate	0.22	0.40	0.09	0.29	0.15	0.16	0.16	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1616	1615	
c, Capacity [veh/h]	1990	889	401	2564	366	327	327	
d1, Uniform Delay [s]	11.61	15.24	38.94	5.36	33.49	34.28	34.28	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.58	5.29	4.04	0.48	2.65	4.94	4.94	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.39	0.73	0.81	0.41	0.72	0.81	0.81	
d, Delay for Lane Group [s/veh]	12.19	20.53	42.98	5.84	36.14	39.21	39.22	
Lane Group LOS	B	C	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	4.31	10.38	3.69	3.36	5.52	5.90	5.90	
50th-Percentile Queue Length [ft/ln]	107.86	259.42	92.17	84.06	138.08	147.46	147.43	
95th-Percentile Queue Length [veh/ln]	7.72	15.66	6.64	6.05	9.38	9.88	9.88	
95th-Percentile Queue Length [ft/ln]	193.01	391.50	165.90	151.30	234.44	247.04	247.00	

Movement, Approach, & Intersection Results

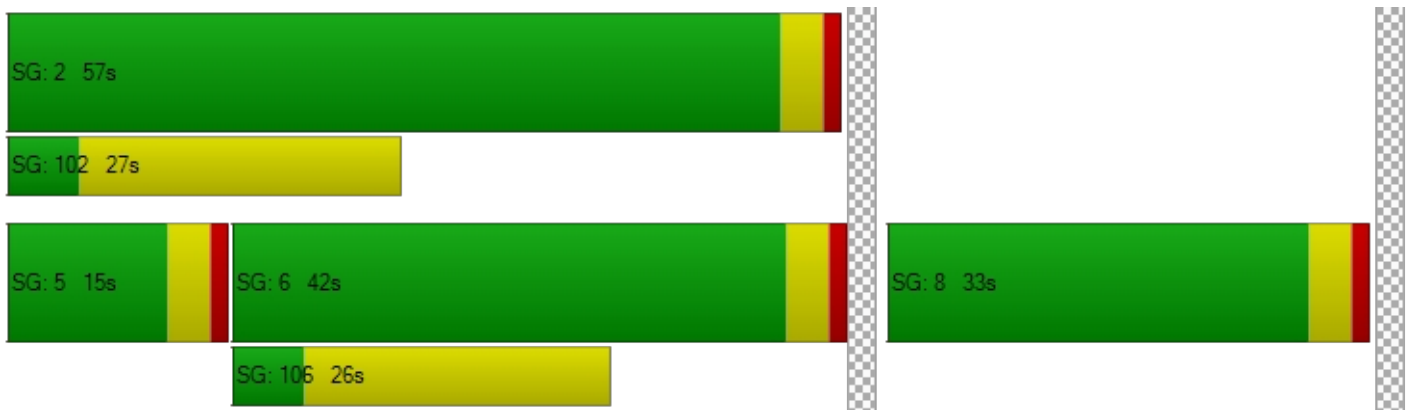
d_M, Delay for Movement [s/veh]	0.00	12.19	20.53	42.98	5.84	0.00	36.14	39.21	39.22	0.00	0.00	0.00
Movement LOS		B	C	D	A		D	D	D			
d_A, Approach Delay [s/veh]	15.98			14.71			38.20			0.00		
Approach LOS	B			B			D			A		
d_I, Intersection Delay [s/veh]	20.42											
Intersection LOS	C											
Intersection V/C	0.660											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.480	2.280
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	844	1178	644	0
d_b, Bicycle Delay [s]	15.02	7.61	20.67	45.00
I_b,int, Bicycle LOS Score for Intersection	2.889	2.686	3.137	4.132
Bicycle LOS	C	B	C	D

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	25.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.667

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	710	42	264	720	564	463	295	106	31	202	279
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	36	28	8	0	10	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	68	738	44	275	749	623	510	315	110	42	210	290
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	18	197	12	73	200	166	136	84	29	11	56	77
Total Analysis Volume [veh/h]	73	788	47	294	800	666	545	337	118	45	224	310
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	29	29	13	33	33	19	39	39	9	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	40	47	9	44	63	15	22	31	3	10	23
g / C, Green / Cycle	0.06	0.44	0.53	0.10	0.49	0.70	0.17	0.24	0.34	0.04	0.11	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.03	0.08	0.22	0.41	0.16	0.09	0.07	0.01	0.06	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	195	1603	848	351	1764	1128	586	873	551	132	407	415
d1, Uniform Delay [s]	40.99	17.84	10.45	39.78	15.17	6.95	36.99	28.56	21.06	42.21	37.79	30.76
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.19	1.08	0.12	5.29	0.84	2.27	7.23	0.28	0.19	1.51	1.17	3.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.49	0.06	0.84	0.45	0.59	0.93	0.39	0.21	0.34	0.55	0.75
d, Delay for Lane Group [s/veh]	42.18	18.92	10.57	45.07	16.01	9.22	44.21	28.83	21.25	43.72	38.96	34.22
Lane Group LOS	D	B	B	D	B	A	D	C	C	D	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.80	5.79	0.46	3.40	5.30	5.96	6.38	3.02	1.76	0.51	2.37	6.43
50th-Percentile Queue Length [ft/ln]	20.12	144.80	11.59	85.12	132.40	149.02	159.42	75.61	44.00	12.76	59.32	160.67
95th-Percentile Queue Length [veh/ln]	1.45	9.74	0.83	6.13	9.07	9.97	10.52	5.44	3.17	0.92	4.27	10.58
95th-Percentile Queue Length [ft/ln]	36.21	243.48	20.86	153.22	226.75	249.13	262.95	136.10	79.20	22.96	106.77	264.61

Movement, Approach, & Intersection Results

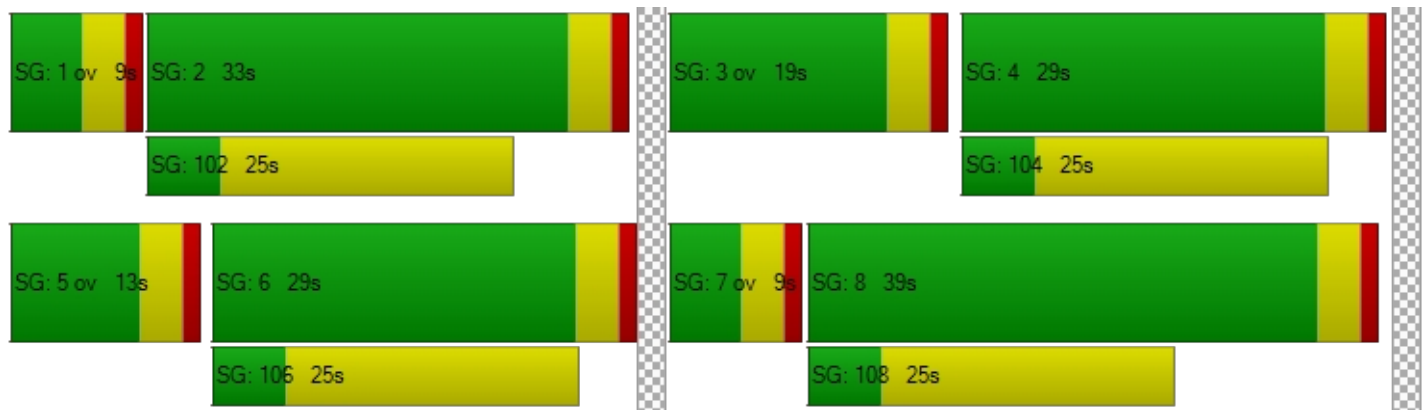
d_M, Delay for Movement [s/veh]	42.18	18.92	10.57	45.07	16.01	9.22	44.21	28.83	21.25	43.72	38.96	34.22
Movement LOS	D	B	B	D	B	A	D	C	C	D	D	C
d_A, Approach Delay [s/veh]	20.36			18.30			36.32			36.79		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	25.50											
Intersection LOS	C											
Intersection V/C	0.667											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.856	3.069	2.869	2.770
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	644	778	556
d_b, Bicycle Delay [s]	23.47	20.67	16.81	23.47
I_b,int, Bicycle LOS Score for Intersection	2.309	3.012	2.385	2.037
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	35.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.584

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	78	272	218	98	260	8	0	36	299	116	0	210	196	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	40	0	0	0	0	0	0	10	0	41	0	0
Diverted Trips [veh/h]	0	0	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	0	0
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	283	267	102	270	8	0	37	311	131	0	259	204	97
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	26	85	80	31	81	2	0	11	93	39	0	77	61	29
Total Analysis Volume [veh/h]	105	339	319	122	323	10	0	44	372	157	0	310	244	116
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	34	0	12	34	0	0	14	29	0	0	25	40	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	40	40	8	40	40	4	17	17	19	33	33
g / C, Green / Cycle	0.07	0.40	0.40	0.08	0.40	0.40	0.04	0.17	0.17	0.19	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.06	0.18	0.20	0.07	0.09	0.09	0.02	0.15	0.15	0.17	0.10	0.10
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1880	1810	1900	1712	1810	1900	1697
c, Capacity [veh/h]	132	753	640	145	767	759	66	331	298	343	622	555
d1, Uniform Delay [s]	45.61	22.16	22.69	45.38	19.51	19.51	47.59	39.92	40.03	39.64	25.14	25.17
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.14	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.23	1.94	2.76	12.27	0.65	0.66	11.19	5.54	6.69	10.75	0.27	0.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.45	0.50	0.84	0.22	0.22	0.67	0.84	0.85	0.90	0.30	0.31
d, Delay for Lane Group [s/veh]	55.83	24.10	25.45	57.65	20.16	20.18	58.79	45.46	46.72	50.38	25.41	25.48
Lane Group LOS	E	C	C	E	C	C	E	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.92	6.13	6.00	3.46	2.65	2.63	1.28	6.99	6.51	8.37	3.37	3.05
50th-Percentile Queue Length [ft/ln]	73.11	153.23	150.11	86.48	66.14	65.69	32.05	174.73	162.77	209.19	84.19	76.19
95th-Percentile Queue Length [veh/ln]	5.26	10.19	10.02	6.23	4.76	4.73	2.31	11.32	10.70	13.11	6.06	5.49
95th-Percentile Queue Length [ft/ln]	131.59	254.74	250.57	155.67	119.05	118.25	57.69	283.12	267.39	327.78	151.55	137.14

Movement, Approach, & Intersection Results

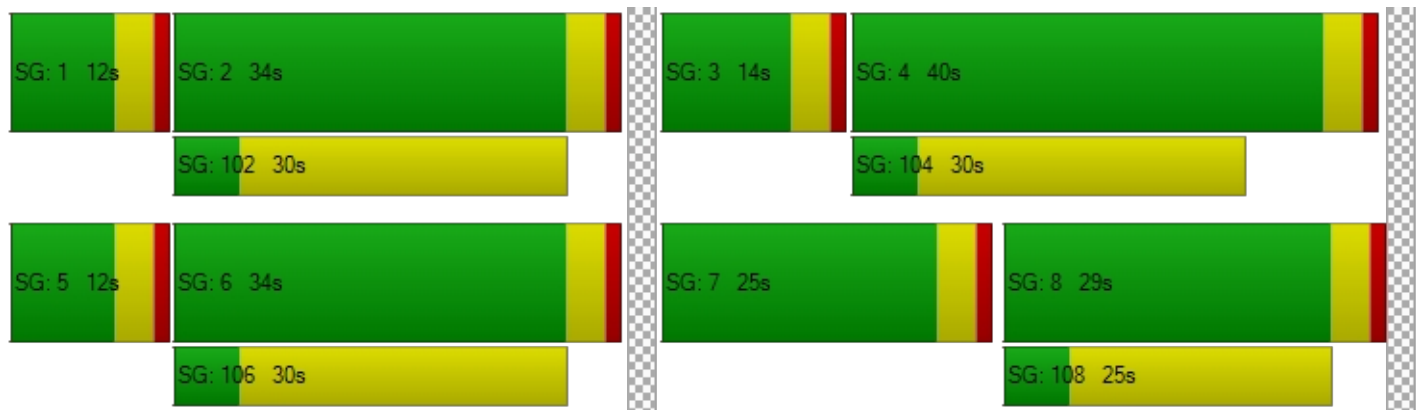
d_M, Delay for Movement [s/veh]	55.83	24.10	25.45	57.65	20.17	20.18	58.79	58.79	45.79	46.72	50.38	50.38	25.43	25.48
Movement LOS	E	C	C	E	C	C	E	E	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	29.03			30.22			47.04			36.98				
Approach LOS	C			C			D			D				
d_I, Intersection Delay [s/veh]	35.61													
Intersection LOS	D													
Intersection V/C	0.584													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersectio	2.609	2.493	2.488	2.596
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	500	720
d_b, Bicycle Delay [s]	24.50	24.50	28.13	20.48
I_b,int, Bicycle LOS Score for Intersection	2.189	1.935	1.996	2.112
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.307

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	13	372	444	90	131	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	34	18	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	421	480	94	136	47
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	133	151	30	43	15
Total Analysis Volume [veh/h]	18	531	605	119	172	59
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	9	58	49	0	32	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	71	65	65	11	11
g / C, Green / Cycle	0.02	0.79	0.73	0.73	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.15	0.19	0.20	0.10	0.04
s, saturation flow rate [veh/h]	1810	3618	1900	1796	1810	1615
c, Capacity [veh/h]	37	2861	1379	1304	218	194
d1, Uniform Delay [s]	43.62	2.31	4.18	4.23	38.48	36.14
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.61	0.14	0.46	0.53	6.30	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.19	0.26	0.28	0.79	0.30
d, Delay for Lane Group [s/veh]	53.23	2.45	4.64	4.76	44.78	37.01
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.49	0.78	1.95	1.98	4.01	1.22
50th-Percentile Queue Length [ft/ln]	12.29	19.60	48.65	49.62	100.36	30.44
95th-Percentile Queue Length [veh/ln]	0.88	1.41	3.50	3.57	7.23	2.19
95th-Percentile Queue Length [ft/ln]	22.12	35.28	87.58	89.32	180.65	54.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.23	2.45	4.69	4.76	44.78	37.01
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	4.12		4.70		42.79	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	10.34					
Intersection LOS	B					
Intersection V/C	0.307					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.538	2.480	2.061
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1000	622
d_b, Bicycle Delay [s]	7.20	11.25	21.36
I_b,int, Bicycle LOS Score for Intersection	2.013	2.157	1.560
Bicycle LOS	B	B	A

Sequence





Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	36.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	141	43	209	160	132	78	484	24	46	371	166
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	10	0	8	10	0	0	0	0	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	147	45	227	166	145	91	503	25	48	386	197
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	3	42	13	66	48	42	26	145	7	14	112	57
Total Analysis Volume [veh/h]	14	170	52	262	192	168	105	582	29	55	446	228
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	25	0	5	19	0	8	22	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	29	0	9	23	0	12	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	24	24	5	35	35	4	34	34
g / C, Green / Cycle	0.12	0.12	0.27	0.27	0.06	0.39	0.39	0.04	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.10	0.03	0.25	0.10	0.06	0.16	0.16	0.03	0.19	0.19
s, saturation flow rate [veh/h]	1893	1615	1847	1615	1810	1900	1868	1810	1900	1687
c, Capacity [veh/h]	231	197	490	429	101	746	733	76	721	640
d1, Uniform Delay [s]	38.42	35.83	32.20	27.11	42.50	19.82	19.82	42.57	21.34	21.37
k, delay calibration	0.11	0.11	0.36	0.11	0.30	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.16	0.70	20.50	0.58	81.87	1.69	1.72	11.92	2.41	2.75
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.26	0.93	0.39	1.04	0.41	0.41	0.72	0.49	0.50
d, Delay for Lane Group [s/veh]	44.57	36.54	52.70	27.69	124.37	21.50	21.54	54.49	23.75	24.13
Lane Group LOS	D	D	D	C	F	C	C	D	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.28	1.06	12.11	2.97	4.49	4.86	4.79	1.45	6.01	5.44
50th-Percentile Queue Length [ft/ln]	107.08	26.59	302.76	74.32	112.31	121.52	119.82	36.21	150.23	135.94
95th-Percentile Queue Length [veh/ln]	7.68	1.91	17.82	5.35	8.07	8.48	8.38	2.61	10.03	9.26
95th-Percentile Queue Length [ft/ln]	191.94	47.86	445.45	133.77	201.70	211.92	209.58	65.17	250.73	231.55

Movement, Approach, & Intersection Results

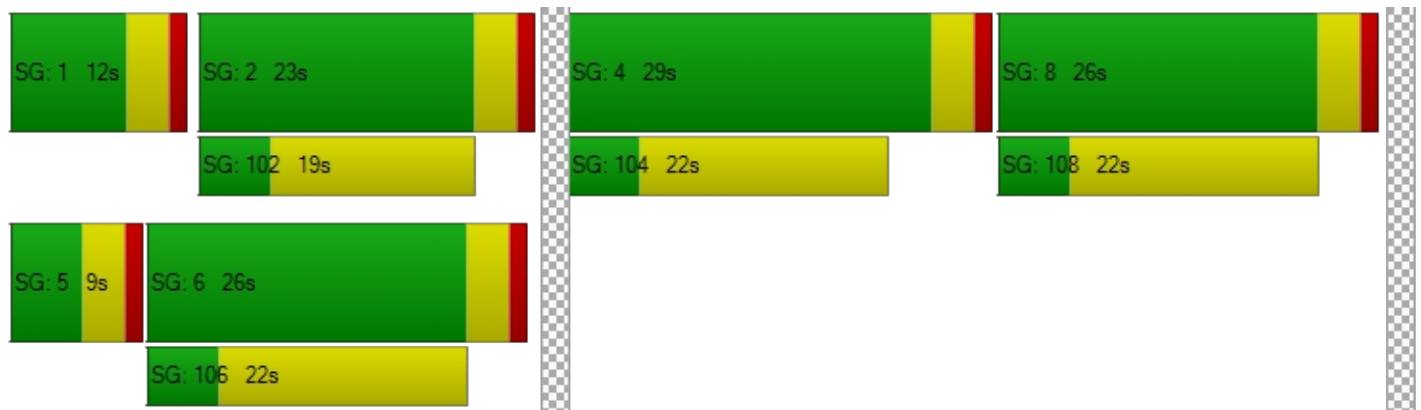
d_M, Delay for Movement [s/veh]	44.57	44.57	36.54	52.70	52.70	27.69	124.37	21.52	21.54	54.49	23.83	24.13
Movement LOS	D	D	D	D	D	C	F	C	C	D	C	C
d_A, Approach Delay [s/veh]	42.80			45.95			36.61			26.23		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	36.48											
Intersection LOS	D											
Intersection V/C	0.590											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.257	2.407	2.563	2.618
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	556	422	489
d_b, Bicycle Delay [s]	25.69	23.47	28.01	25.69
I_b,int, Bicycle LOS Score for Intersection	1.949	2.586	2.150	2.161
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	29.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.455

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name															
Base Volume Input [veh/h]	132	539	83	0	98	495	94	0	123	537	156	0	84	380	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	0	0	0	7	0	0	0	0	0	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	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	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	149	550	85	0	107	505	96	0	125	548	169	0	86	398	39
Peak Hour Factor	0.9880	0.9880	0.9880	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	38	139	22	0	27	128	24	0	32	139	43	0	22	101	10
Total Analysis Volume [veh/h]	151	557	86	0	108	511	97	0	127	555	171	0	87	403	39
Presence of On-Street Parking	No		No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0			
v_co, Outbound Pedestrian Volume crossing	0			0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0			
Bicycle Volume [bicycles/h]	0			0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	9	32	0	0	9	32	0	0	12	39	0	0	10	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	43	43	5	43	43	8	21	21	6	19	19
g / C, Green / Cycle	0.06	0.48	0.48	0.05	0.47	0.47	0.09	0.23	0.23	0.06	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.04	0.17	0.17	0.03	0.16	0.16	0.07	0.20	0.20	0.05	0.12	0.12
s, saturation flow rate [veh/h]	3514	1900	1812	3514	1900	1796	1810	1900	1748	1810	1900	1842
c, Capacity [veh/h]	195	903	862	183	896	847	158	443	407	112	394	382
d1, Uniform Delay [s]	41.94	14.97	14.98	41.73	15.02	15.03	40.31	33.04	33.05	41.61	32.03	32.06
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.40	1.14	1.19	3.04	1.07	1.14	9.12	4.77	5.19	10.96	1.29	1.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.36	0.36	0.59	0.35	0.35	0.80	0.85	0.85	0.78	0.57	0.57
d, Delay for Lane Group [s/veh]	48.34	16.11	16.17	44.77	16.09	16.17	49.44	37.81	38.24	52.56	33.32	33.41
Lane Group LOS	D	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.81	4.34	4.17	1.24	4.11	3.92	3.12	8.28	7.68	2.22	4.44	4.34
50th-Percentile Queue Length [ft/ln]	45.22	108.61	104.13	30.92	102.76	97.96	78.08	206.97	191.93	55.52	110.96	108.49
95th-Percentile Queue Length [veh/ln]	3.26	7.76	7.50	2.23	7.40	7.05	5.62	13.00	12.22	4.00	7.89	7.76
95th-Percentile Queue Length [ft/ln]	81.39	194.07	187.44	55.66	184.97	176.33	140.54	324.94	305.53	99.93	197.34	193.89

Movement, Approach, & Intersection Results

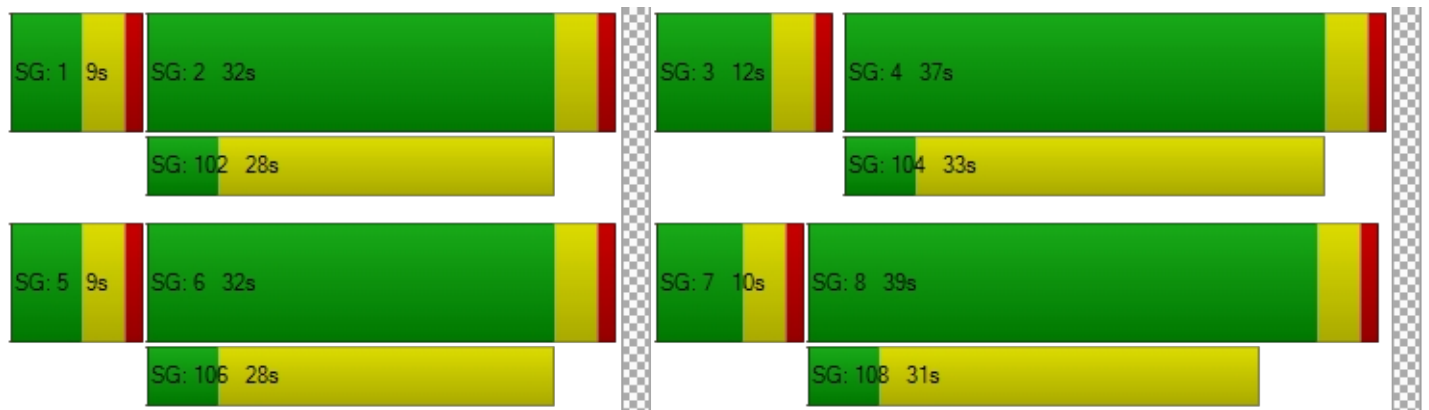
d_M, Delay for Movement [s/veh]	48.34	16.14	16.17	44.77	44.77	16.12	16.17	49.44	49.44	37.95	38.24	52.56	52.56	33.36	33.41
Movement LOS	D	B	B	D	D	B	B	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	22.26			20.45				39.72				36.52			
Approach LOS	C			C				D				D			
d_I, Intersection Delay [s/veh]	29.57														
Intersection LOS	C														
Intersection V/C	0.455														

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.708	2.688	2.595	2.551
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	622	778	733
d_b, Bicycle Delay [s]	21.36	21.36	16.81	18.05
I_b,int, Bicycle LOS Score for Intersection	2.215	2.061	2.159	1.996
Bicycle LOS	B	B	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 101: Ayala Dr / North Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.072

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	568	0	0	586	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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	51	0	0	47
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]	591	0	51	609	0	47
Peak Hour Factor	0.9500	1.0000	1.0000	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]	156	0	13	160	0	12
Total Analysis Volume [veh/h]	622	0	51	641	0	49
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	0.05	0.01	0.00	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.83	0.00	22.57	10.66
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.04	0.23	0.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.19	1.09	5.76	5.76
d_A, Approach Delay [s/veh]	0.00		0.65		10.66	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.71					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 102: Linden Ave / South Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	18.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.064

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↵			↵			+			+		
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	0	0	0	0	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	417	0	0	534	0	0	0	0	0	0	
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	
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	
Site-Generated Trips [veh/h]	0	0	34	0	0	0	0	0	0	18	0	
Diverted Trips [veh/h]	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	
Existing Site Adjustment Volume [veh/h]	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	
Total Hourly Volume [veh/h]	0	434	34	0	555	0	0	0	0	18	0	
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	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	1.0000	1.0000	1.0000	1.0000	1.0000	
Total 15-Minute Volume [veh/h]	0	114	9	0	146	0	0	0	0	5	0	
Total Analysis Volume [veh/h]	0	457	36	0	584	0	0	0	0	19	0	
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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




Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.06	0.00	0.00
d_M, Delay for Movement [s/veh]	8.60	0.00	0.00	8.33	0.00	0.00	18.15	21.31	10.07	18.03	21.75	10.57
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.21
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.13	5.13	5.13
d_A, Approach Delay [s/veh]	0.00			0.00			16.51			18.03		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	0.31											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 103: Ayala Dr / Scholl Wy**

Control Type:	Signalized	Delay (sec / veh):	3.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.296

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	0	0	0	0	1
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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	33	817	857	19	4	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	10	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	850	891	30	4	29
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]	9	224	234	8	1	8
Total Analysis Volume [veh/h]	36	895	938	32	4	31
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Overlap
Signal Group	1	6	2	0	3	8
Auxiliary Signal Groups						1,8
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	9	49	40	0	41	41
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	10	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	3	79	72	72	3	10
g / C, Green / Cycle	0.03	0.88	0.80	0.80	0.03	0.11
(v / s)_i Volume / Saturation Flow Rate	0.02	0.25	0.26	0.26	0.00	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1878	1810	1615
c, Capacity [veh/h]	60	3182	1524	1507	57	176
d1, Uniform Delay [s]	42.93	0.87	2.37	2.37	42.31	36.43
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.34	0.22	0.55	0.57	0.52	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.28	0.32	0.32	0.07	0.18
d, Delay for Lane Group [s/veh]	52.27	1.09	2.92	2.94	42.82	36.90
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	0.94	0.16	1.56	1.57	0.09	0.64
50th-Percentile Queue Length [ft/ln]	23.43	4.01	39.07	39.30	2.34	15.92
95th-Percentile Queue Length [veh/ln]	1.69	0.29	2.81	2.83	0.17	1.15
95th-Percentile Queue Length [ft/ln]	42.17	7.23	70.33	70.75	4.22	28.65

Movement, Approach, & Intersection Results

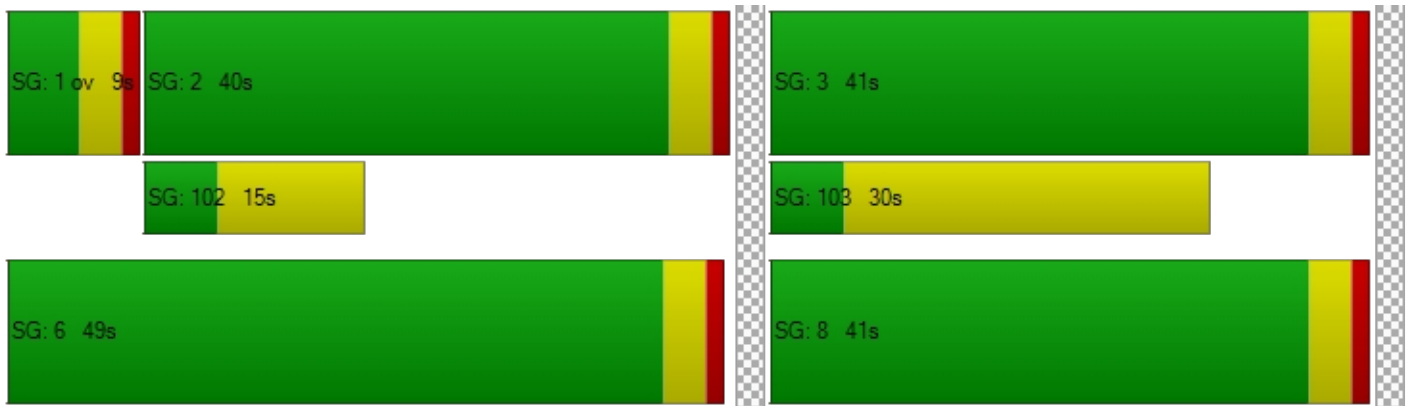
d_M, Delay for Movement [s/veh]	52.27	1.09	2.93	2.94	42.82	36.90
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	3.07		2.93		37.58	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	3.62					
Intersection LOS	A					
Intersection V/C	0.296					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.666	1.975
Crosswalk LOS	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	800	822
d_b, Bicycle Delay [s]	11.25	16.20	15.61
I_b,int, Bicycle LOS Score for Intersection	2.328	2.360	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 104: Ayala Dr / Project Driveway (Exit Only)

Control Type:	Two-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach	↑↑		↑↑		↗	
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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	0	817	857	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	7
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	850	891	0	0	7
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	224	234	0	0	2
Total Analysis Volume [veh/h]	0	895	938	0	0	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
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	0.01	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	11.68
Movement LOS		A	A			B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.04
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.97
d_A, Approach Delay [s/veh]	0.00		0.00		11.68	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.04					
Intersection LOS	B					

APPENDIX C-4

INTERSECTION ANALYSIS
WORKSHEETS –
OPENING YEAR 2026 CUMULATIVE

Renaissance II Residential Project

Vistro File: K:\...\Renaissance Res II_AM.vistro

Scenario 4 OY 26 CUM AM

Report File: K:\...4 OY 2026 CUM AM.pdf

6/13/2025

Intersection Analysis Summary




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	WB Thru	0.760	32.4	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	EB Right	0.590	20.4	C
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	SB Left	0.580	22.8	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	NB Left	0.380	30.7	C
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.175	7.9	A
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.537	26.9	C
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	EB Left	0.496	32.0	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	32.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.760

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	484	298	0	0	456	353	0	0	0	526	2	315
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	133	142	0	0	207	138	0	0	0	150	0	89
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	636	452	0	0	681	365	0	0	0	697	2	287
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	174	124	0	0	186	100	0	0	0	191	1	79
Total Analysis Volume [veh/h]	697	495	0	0	746	400	0	0	0	763	2	314
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	23	0	0	0	0	0	32	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	28	63	0	0	35	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	20	60	36	36		22	22	22
g / C, Green / Cycle	0.23	0.67	0.39	0.39		0.25	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.20	0.14	0.30	0.34		0.20	0.22	0.19
s, saturation flow rate [veh/h]	3514	3618	1900	1692		1810	1810	1615
c, Capacity [veh/h]	798	2407	748	666		445	445	397
d1, Uniform Delay [s]	33.54	5.84	23.67	25.00		31.99	32.94	31.77
k, delay calibration	0.11	0.50	0.50	0.50		0.13	0.18	0.12
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.20	0.19	7.35	13.64		4.38	11.12	3.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.21	0.77	0.86		0.81	0.91	0.79
d, Delay for Lane Group [s/veh]	36.74	6.03	31.02	38.64		36.37	44.06	35.71
Lane Group LOS	D	A	C	D		D	D	D
Critical Lane Group	Yes	No	No	Yes		No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.51	1.64	11.58	13.14		7.76	9.67	6.66
50th-Percentile Queue Length [ft/ln]	187.70	40.89	289.43	328.48		194.03	241.63	166.52
95th-Percentile Queue Length [veh/ln]	12.00	2.94	17.16	19.08		12.33	14.76	10.89
95th-Percentile Queue Length [ft/ln]	300.05	73.61	428.93	477.10		308.25	369.09	272.33

Movement, Approach, & Intersection Results

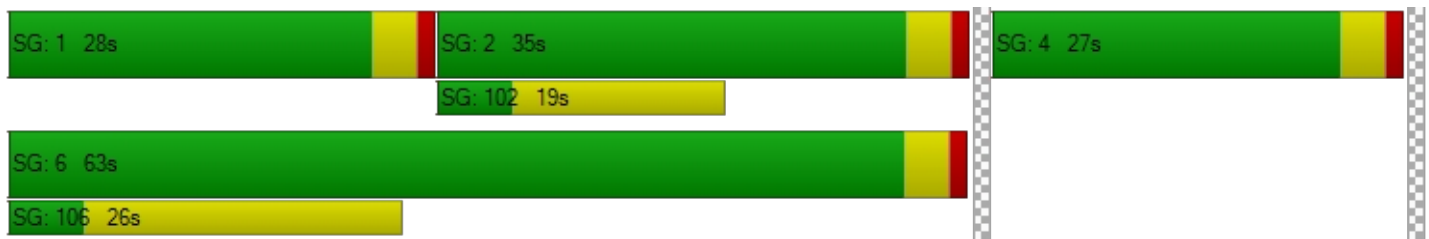
d_M, Delay for Movement [s/veh]	36.74	6.03	0.00	0.00	32.79	38.64	0.00	0.00	0.00	40.41	44.06	35.71
Movement LOS	D	A			C	D				D	D	D
d_A, Approach Delay [s/veh]	23.99				34.83		0.00		39.05			
Approach LOS	C				C		A		D			
d_I, Intersection Delay [s/veh]	32.38											
Intersection LOS	C											
Intersection V/C	0.760											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.320	2.520
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1311	689	0	511
d_b, Bicycle Delay [s]	5.34	19.34	45.00	24.94
I_b,int, Bicycle LOS Score for Intersection	2.543	2.621	4.132	3.554
Bicycle LOS	B	B	D	D

Sequence




Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	20.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	645	508	277	706	0	137	1	441	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	186	137	138	218	0	89	0	140	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	857	485	426	952	0	231	1	439	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	227	128	113	252	0	61	0	116	0	0	0
Total Analysis Volume [veh/h]	0	907	513	451	1007	0	244	1	465	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	39	0	23	62	0	0	28	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	48	48	14	66	16	16	16	
g / C, Green / Cycle	0.53	0.53	0.16	0.73	0.18	0.18	0.18	
(v / s)_i Volume / Saturation Flow Rate	0.25	0.32	0.13	0.28	0.13	0.14	0.14	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1616	1615	
c, Capacity [veh/h]	1930	862	546	2653	322	287	287	
d1, Uniform Delay [s]	13.07	14.35	36.84	4.44	35.16	35.54	35.54	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.82	3.02	3.26	0.41	3.66	5.45	5.46	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.47	0.60	0.83	0.38	0.76	0.81	0.81	
d, Delay for Lane Group [s/veh]	13.89	17.37	40.10	4.85	38.82	40.99	41.00	
Lane Group LOS	B	B	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.53	7.31	4.97	2.79	5.31	5.25	5.25	
50th-Percentile Queue Length [ft/ln]	138.15	182.83	124.14	69.71	132.82	131.23	131.17	
95th-Percentile Queue Length [veh/ln]	9.38	11.75	8.62	5.02	9.09	9.01	9.00	
95th-Percentile Queue Length [ft/ln]	234.53	293.71	215.51	125.48	227.32	225.16	225.09	

Movement, Approach, & Intersection Results

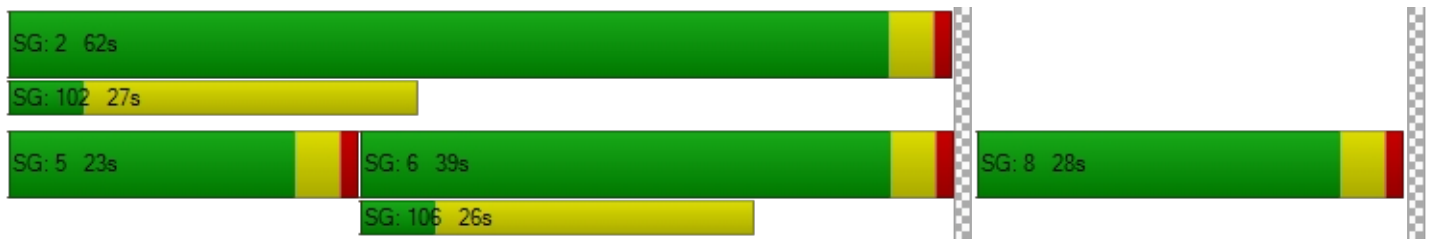
d_M, Delay for Movement [s/veh]	0.00	13.89	17.37	40.10	4.85	0.00	38.88	40.99	40.99	0.00	0.00	0.00
Movement LOS		B	B	D	A		D	D	D			
d_A, Approach Delay [s/veh]		15.15		15.76			40.25		0.00			
Approach LOS		B		B			D		A			
d_I, Intersection Delay [s/veh]	20.36											
Intersection LOS	C											
Intersection V/C	0.590											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0		0.0		9.0		9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00		0.00		0.00		0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00		0.00		0.00		0.00
d_p, Pedestrian Delay [s]	0.00		0.00		36.45		36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000		0.000		2.452		2.275
Crosswalk LOS	F		F		B		B
s_b, Saturation Flow Rate of the bicycle lane	2000		2000		2000		2000
c_b, Capacity of the bicycle lane [bicycles/h]	778		1289		533		0
d_b, Bicycle Delay [s]	16.81		5.69		24.20		45.00
I_b,int, Bicycle LOS Score for Intersection	2.880		2.762		2.995		4.132
Bicycle LOS	C		C		C		D

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	46	651	31	205	625	321	196	113	56	29	104	278
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	14	163	7	0	189	168	159	7	7	4	4	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	840	39	213	839	502	363	125	65	34	112	289
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	17	224	10	57	224	134	97	33	17	9	30	77
Total Analysis Volume [veh/h]	66	897	42	228	896	536	388	134	69	36	120	309
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	34	34	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	32	32	11	34	34	18	38	38	9	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	4	43	50	7	46	64	14	21	29	3	10	21
g / C, Green / Cycle	0.04	0.48	0.55	0.08	0.51	0.71	0.16	0.23	0.32	0.03	0.11	0.23
(v / s)_i Volume / Saturation Flow Rate	0.02	0.25	0.03	0.06	0.25	0.33	0.11	0.04	0.04	0.01	0.03	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	158	1724	895	273	1842	1145	547	849	524	116	407	379
d1, Uniform Delay [s]	41.83	16.40	9.19	40.93	14.40	5.69	36.07	27.36	21.47	42.50	36.67	32.60
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.75	1.13	0.10	6.58	0.92	1.37	1.72	0.09	0.11	1.49	0.40	5.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.52	0.05	0.83	0.49	0.47	0.71	0.16	0.13	0.31	0.30	0.82
d, Delay for Lane Group [s/veh]	43.58	17.53	9.29	47.51	15.32	7.07	37.79	27.45	21.58	43.99	37.07	38.03
Lane Group LOS	D	B	A	D	B	A	D	C	C	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.74	6.35	0.38	2.71	5.81	3.94	4.11	1.14	1.03	0.41	1.22	6.79
50th-Percentile Queue Length [ft/ln]	18.61	158.64	9.51	67.72	145.33	98.50	102.63	28.53	25.68	10.28	30.54	169.69
95th-Percentile Queue Length [veh/ln]	1.34	10.48	0.68	4.88	9.77	7.09	7.39	2.05	1.85	0.74	2.20	11.06
95th-Percentile Queue Length [ft/ln]	33.50	261.92	17.12	121.90	244.19	177.31	184.74	51.36	46.23	18.51	54.98	276.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.58	17.53	9.29	47.51	15.32	7.07	37.79	27.45	21.58	43.99	37.07	38.03
Movement LOS	D	B	A	D	B	A	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	18.89			17.08			33.55			38.24		
Approach LOS	B			B			C			D		
d_I, Intersection Delay [s/veh]	22.83											
Intersection LOS	C											
Intersection V/C	0.580											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.875	3.049	2.778	2.716
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	667	756	556
d_b, Bicycle Delay [s]	21.36	20.00	17.42	23.47
I_b,int, Bicycle LOS Score for Intersection	2.389	2.929	2.047	1.943
Bicycle LOS	B	C	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	30.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.380

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	38	252	78	89	208	18	0	34	132	61	0	114	89	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040
In-Process Volume [veh/h]	7	3	7	0	1	0	0	0	163	4	0	4	175	0
Site-Generated Trips [veh/h]	0	0	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	0	0
Pass-by Trips [veh/h]	0	0	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	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	265	88	93	217	19	0	35	300	67	0	123	268	66
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	14	79	26	28	65	6	0	10	90	20	0	37	80	20
Total Analysis Volume [veh/h]	56	317	105	111	260	23	0	42	359	80	0	147	321	79
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	11	34	0	0	11	29	0	0	16	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	45	45	7	48	48	3	13	13	9	19	19
g / C, Green / Cycle	0.04	0.50	0.50	0.08	0.53	0.53	0.04	0.15	0.15	0.10	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.03	0.11	0.12	0.06	0.08	0.08	0.02	0.12	0.12	0.08	0.11	0.11
s, saturation flow rate [veh/h]	1810	1900	1742	1810	1900	1847	1810	1900	1783	1810	1900	1773
c, Capacity [veh/h]	77	941	862	140	1007	979	67	284	266	182	405	378
d1, Uniform Delay [s]	42.58	12.96	13.00	40.81	10.75	10.76	42.74	36.92	37.00	39.64	31.25	31.30
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.41	0.58	0.65	9.63	0.30	0.31	9.47	4.94	5.63	8.30	0.99	1.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.73	0.23	0.24	0.79	0.14	0.14	0.63	0.79	0.80	0.81	0.51	0.51
d, Delay for Lane Group [s/veh]	54.99	13.54	13.64	50.44	11.04	11.06	52.21	41.86	42.63	47.94	32.24	32.39
Lane Group LOS	D	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.48	2.54	2.40	2.76	1.45	1.43	1.09	5.08	4.90	3.56	3.98	3.78
50th-Percentile Queue Length [ft/ln]	37.04	63.59	60.08	69.03	36.20	35.63	27.17	126.93	122.38	88.91	99.61	94.52
95th-Percentile Queue Length [veh/ln]	2.67	4.58	4.33	4.97	2.61	2.57	1.96	8.77	8.52	6.40	7.17	6.81
95th-Percentile Queue Length [ft/ln]	66.68	114.45	108.15	124.25	65.16	64.13	48.90	219.32	213.10	160.04	179.30	170.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.99	13.57	13.64	50.44	11.05	11.06	52.21	52.21	42.15	42.63	47.94	47.94	32.29	32.39
Movement LOS	D	B	B	D	B	B	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	18.44			22.15			43.11			36.51				
Approach LOS	B			C			D			D				
d_I, Intersection Delay [s/veh]	30.66													
Intersection LOS	C													
Intersection V/C	0.380													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.490	2.464	2.473	2.520
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	556	667
d_b, Bicycle Delay [s]	20.00	20.00	23.47	20.00
I_b,int, Bicycle LOS Score for Intersection	1.954	1.885	1.922	1.890
Bicycle LOS	A	A	A	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	7.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.175

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	19	351	228	66	61	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	12	22	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	377	259	69	63	22
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	119	82	22	20	7
Total Analysis Volume [veh/h]	25	475	327	87	79	28
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	10	60	50	0	30	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	76	70	70	6	6
g / C, Green / Cycle	0.03	0.85	0.78	0.78	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.01	0.13	0.11	0.12	0.04	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1769	1810	1615
c, Capacity [veh/h]	47	3065	1476	1374	116	103
d1, Uniform Delay [s]	43.28	1.21	2.52	2.54	41.24	40.13
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.85	0.11	0.20	0.23	6.94	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.53	0.15	0.14	0.15	0.68	0.27
d, Delay for Lane Group [s/veh]	52.13	1.32	2.72	2.77	48.17	41.53
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.66	0.30	0.70	0.72	1.92	0.63
50th-Percentile Queue Length [ft/ln]	16.51	7.42	17.59	17.91	47.98	15.63
95th-Percentile Queue Length [veh/ln]	1.19	0.53	1.27	1.29	3.45	1.13
95th-Percentile Queue Length [ft/ln]	29.72	13.35	31.66	32.24	86.36	28.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.13	1.32	2.74	2.77	48.17	41.53
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	3.86		2.75		46.44	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	7.87					
Intersection LOS	A					
Intersection V/C	0.175					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.468	2.369	2.013
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	1022	578
d_b, Bicycle Delay [s]	6.42	10.76	22.76
I_b,int, Bicycle LOS Score for Intersection	1.972	1.901	1.560
Bicycle LOS	A	A	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	26.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.537

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	183	71	88	94	62	42	402	22	24	457	147
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	3	12	15	1	7	4	64	0	9	95	8
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	193	86	107	99	71	48	482	23	34	570	161
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	14	56	25	31	29	21	14	139	7	10	165	47
Total Analysis Volume [veh/h]	54	223	99	124	114	82	55	557	27	39	659	186
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	22	0	5	25	0	5	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	26	0	9	25	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	14	14	4	41	41	3	41	41
g / C, Green / Cycle	0.17	0.17	0.15	0.15	0.04	0.46	0.46	0.03	0.45	0.45
(v / s)_i Volume / Saturation Flow Rate	0.15	0.06	0.13	0.05	0.03	0.15	0.16	0.02	0.23	0.23
s, saturation flow rate [veh/h]	1882	1615	1852	1615	1810	1900	1869	1810	1900	1758
c, Capacity [veh/h]	328	282	284	248	76	873	858	64	860	796
d1, Uniform Delay [s]	35.96	32.67	37.00	33.97	42.62	15.57	15.58	42.82	17.53	17.54
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.91	0.75	6.48	0.77	12.53	1.05	1.07	9.25	2.16	2.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.35	0.84	0.33	0.73	0.34	0.34	0.61	0.51	0.51
d, Delay for Lane Group [s/veh]	41.87	33.42	43.49	34.75	55.15	16.62	16.64	52.07	19.69	19.87
Lane Group LOS	D	C	D	C	E	B	B	D	B	B
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.31	1.93	5.51	1.63	1.46	3.95	3.90	1.01	6.67	6.21
50th-Percentile Queue Length [ft/ln]	157.70	48.29	137.65	40.83	36.46	98.66	97.39	25.25	166.70	155.32
95th-Percentile Queue Length [veh/ln]	10.43	3.48	9.35	2.94	2.62	7.10	7.01	1.82	10.90	10.30
95th-Percentile Queue Length [ft/ln]	260.67	86.92	233.85	73.49	65.62	177.59	175.31	45.45	272.57	257.51

Movement, Approach, & Intersection Results

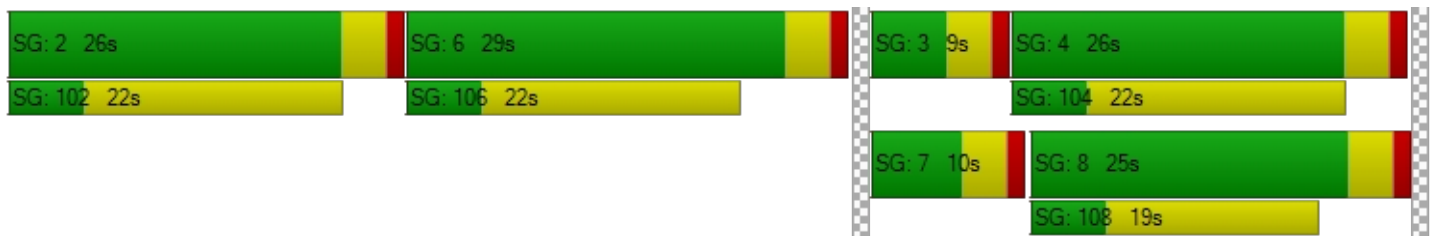
d_M, Delay for Movement [s/veh]	41.87	41.87	33.42	43.49	43.49	34.75	55.15	16.63	16.64	52.07	19.75	19.87
Movement LOS	D	D	C	D	D	C	E	B	B	D	B	B
d_A, Approach Delay [s/veh]	39.65			41.25			19.94			21.20		
Approach LOS	D			D			B			C		
d_I, Intersection Delay [s/veh]	26.86											
Intersection LOS	C											
Intersection V/C	0.537											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.268	2.324	2.581	2.626
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	489	467	489
d_b, Bicycle Delay [s]	23.47	25.69	26.45	25.69
I_b,int, Bicycle LOS Score for Intersection	2.180	2.088	2.087	2.289
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	32.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name																
Base Volume Input [veh/h]	214	559	76	0	46	598	57	0	99	263	169	0	46	333	31	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	
In-Process Volume [veh/h]	0	50	36	0	16	57	49	0	28	37	0	0	40	27	26	
Site-Generated Trips [veh/h]	0	0	0	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	0	0	0	
Pass-by Trips [veh/h]	0	0	0	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	0	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	218	620	114	0	63	667	107	0	129	305	172	0	87	367	58	
Peak Hour Factor	0.9210	0.9210	0.9210	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Total 15-Minute Volume [veh/h]	59	168	31	0	17	181	29	0	35	83	47	0	24	100	16	
Total Analysis Volume [veh/h]	237	673	124	0	68	724	116	0	140	331	187	0	94	398	63	
Presence of On-Street Parking	No		No	No			No	No			No	No			No	
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
v_do, Outbound Pedestrian Volume crossing	0			0				0				0				
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0				
v_co, Outbound Pedestrian Volume crossing	0			0				0				0				
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0				
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0				
Bicycle Volume [bicycles/h]	0			0				0				0				

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	0	9	32	0	0	10	36	0	0	11	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	48	48	4	45	45	6	16	16	6	16	16
g / C, Green / Cycle	0.08	0.53	0.53	0.05	0.50	0.50	0.07	0.18	0.18	0.07	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.07	0.22	0.22	0.02	0.23	0.23	0.08	0.14	0.15	0.05	0.12	0.12
s, saturation flow rate [veh/h]	3514	1900	1798	3514	1900	1810	1810	1900	1674	1810	1900	1811
c, Capacity [veh/h]	273	1013	959	160	951	906	121	336	296	120	336	321
d1, Uniform Delay [s]	41.04	12.51	12.51	41.80	14.50	14.50	42.00	35.60	35.68	41.36	34.78	34.82
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.17	1.20	1.27	1.78	1.55	1.63	90.78	4.77	5.72	10.38	2.63	2.84
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.40	0.40	0.42	0.45	0.45	1.16	0.81	0.82	0.78	0.70	0.70
d, Delay for Lane Group [s/veh]	49.21	13.71	13.78	43.58	16.05	16.13	132.78	40.37	41.40	51.74	37.41	37.66
Lane Group LOS	D	B	B	D	B	B	F	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.87	4.92	4.67	0.77	5.74	5.49	5.69	6.11	5.53	2.38	4.99	4.82
50th-Percentile Queue Length [ft/ln]	71.83	122.91	116.82	19.17	143.46	137.15	142.13	152.70	138.33	59.38	124.87	120.60
95th-Percentile Queue Length [veh/ln]	5.17	8.55	8.22	1.38	9.67	9.33	10.03	10.16	9.39	4.28	8.66	8.43
95th-Percentile Queue Length [ft/ln]	129.30	213.82	205.45	34.51	241.67	233.19	250.68	254.03	234.77	106.89	216.50	210.65

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.21	13.74	13.78	43.58	43.58	16.08	16.13	132.7	132.7	40.55	41.40	51.74	51.74	37.52	37.66	
Movement LOS	D	B	B	D	D	B	B	F	F	D	D	D	D	D	D	
d_A, Approach Delay [s/veh]	21.87			18.15				60.42				39.94				
Approach LOS	C			B				E				D				
d_I, Intersection Delay [s/veh]	32.02															
Intersection LOS	C															
Intersection V/C	0.496															

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.786	2.744	2.576	2.512
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	622	711	733
d_b, Bicycle Delay [s]	20.00	21.36	18.69	18.05
I_b,int, Bicycle LOS Score for Intersection	2.413	2.253	1.987	2.017
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Renaissance II Residential Project

Vistro File: K:\...\Renaissance Res II_PM.vistro

Scenario 4 OY 26 CUM PM

Report File: K:\...4 OY 2026 CUM PM.pdf

6/13/2025

Intersection Analysis Summary




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	SB Right	0.752	31.0	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	SB Left	0.829	30.9	C
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.761	34.3	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.586	36.3	D
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.308	10.4	B
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.606	36.2	D
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	WB Left	0.512	35.2	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 1: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	31.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.752

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	482	449	0	0	525	226	0	0	0	697	5	301
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	128	214	0	0	161	102	0	0	0	123	0	142
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	629	681	0	0	707	197	0	0	0	848	5	325
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	172	186	0	0	194	54	0	0	0	232	1	89
Total Analysis Volume [veh/h]	689	746	0	0	774	216	0	0	0	929	5	356
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	25	50	0	0	25	0	0	0	0	0	40	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	20	54	30	30		28	28	28
g / C, Green / Cycle	0.22	0.60	0.33	0.33		0.32	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.20	0.21	0.26	0.28		0.24	0.28	0.22
s, saturation flow rate [veh/h]	3514	3618	1900	1764		1810	1810	1615
c, Capacity [veh/h]	769	2151	629	584		573	573	511
d1, Uniform Delay [s]	34.15	9.32	27.22	27.97		27.67	29.03	26.97
k, delay calibration	0.11	0.50	0.50	0.50		0.16	0.23	0.13
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	4.00	0.44	9.58	14.15		3.13	8.47	2.00
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.35	0.79	0.85		0.76	0.87	0.70
d, Delay for Lane Group [s/veh]	38.15	9.76	36.79	42.12		30.81	37.50	28.96
Lane Group LOS	D	A	D	D		C	D	C
Critical Lane Group	Yes	No	No	Yes		No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.56	3.53	10.92	11.80		8.64	11.15	6.78
50th-Percentile Queue Length [ft/ln]	189.04	88.29	273.00	295.00		216.01	278.67	169.43
95th-Percentile Queue Length [veh/ln]	12.07	6.36	16.34	17.43		13.46	16.62	11.05
95th-Percentile Queue Length [ft/ln]	301.78	158.92	408.49	435.84		336.52	415.56	276.17

Movement, Approach, & Intersection Results

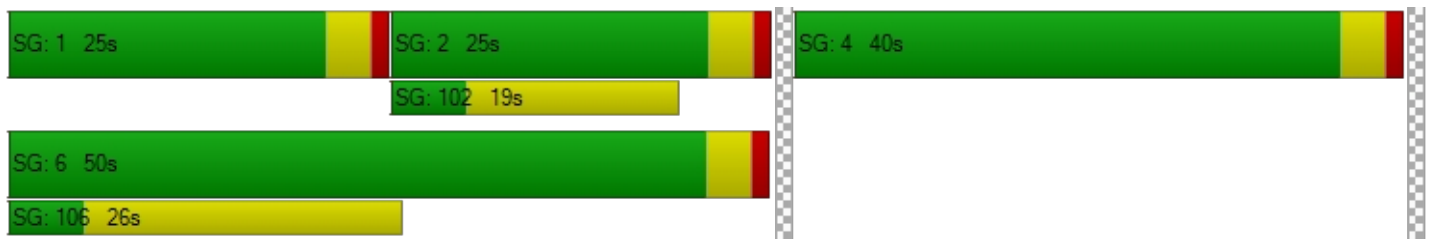
d_M, Delay for Movement [s/veh]	38.15	9.76	0.00	0.00	38.72	42.12	0.00	0.00	0.00	34.37	37.50	28.96
Movement LOS	D	A			D	D				C	D	C
d_A, Approach Delay [s/veh]	23.39				39.46		0.00		32.89			
Approach LOS	C				D		A		C			
d_I, Intersection Delay [s/veh]	30.97											
Intersection LOS	C											
Intersection V/C	0.752											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.228	2.588
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1022	467	0	800
d_b, Bicycle Delay [s]	10.76	26.45	45.00	16.20
I_b,int, Bicycle LOS Score for Intersection	2.743	2.492	4.132	3.903
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	30.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.829

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↑↑↑			↑↑↑			↑↑↑					
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	692	754	296	922	0	239	1	625	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	200	139	102	180	0	142	0	119	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	920	743	410	1139	0	391	1	609	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	243	197	108	301	0	103	0	161	0	0	0
Total Analysis Volume [veh/h]	0	974	786	434	1205	0	414	1	644	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	42	0	15	57	0	0	33	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	44	44	11	59	23	23	23	
g / C, Green / Cycle	0.49	0.49	0.12	0.66	0.26	0.26	0.26	
(v / s)_i Volume / Saturation Flow Rate	0.27	0.49	0.12	0.33	0.20	0.21	0.22	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1646	1615	
c, Capacity [veh/h]	1766	788	430	2369	464	422	414	
d1, Uniform Delay [s]	16.13	22.96	39.50	8.04	30.93	31.69	31.86	
k, delay calibration	0.50	0.50	0.11	0.50	0.15	0.19	0.20	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.25	31.30	22.78	0.78	3.51	7.50	8.82	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.55	1.00	1.01	0.51	0.76	0.84	0.85	
d, Delay for Lane Group [s/veh]	17.37	54.27	62.28	8.82	34.43	39.19	40.68	
Lane Group LOS	B	D	F	A	C	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.90	22.00	6.02	5.43	7.35	7.95	8.12	
50th-Percentile Queue Length [ft/ln]	172.40	549.97	150.56	135.69	183.77	198.69	203.01	
95th-Percentile Queue Length [veh/ln]	11.20	29.69	10.09	9.25	11.80	12.57	12.79	
95th-Percentile Queue Length [ft/ln]	280.06	742.27	252.23	231.21	294.93	314.28	319.85	

Movement, Approach, & Intersection Results

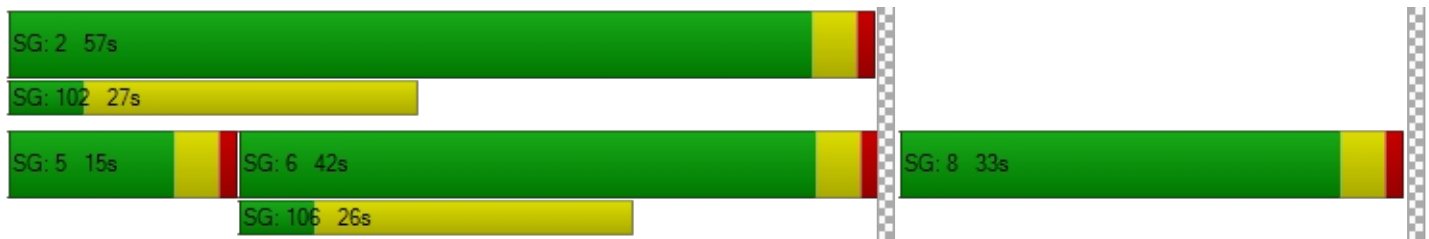
d_M, Delay for Movement [s/veh]	0.00	17.37	54.27	62.28	8.82	0.00	35.13	39.19	40.01	0.00	0.00	0.00
Movement LOS		B	D	F	A		D	D	D			
d_A, Approach Delay [s/veh]	33.85			22.98			38.10			0.00		
Approach LOS	C			C			D			A		
d_I, Intersection Delay [s/veh]	30.86											
Intersection LOS	C											
Intersection V/C	0.829											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			0.000			2.565			2.399		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	844			1178			644			0		
d_b, Bicycle Delay [s]	15.02			7.61			20.67			45.00		
I_b,int, Bicycle LOS Score for Intersection	3.160			2.912			3.571			4.132		
Bicycle LOS	C			C			D			D		

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	34.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.761

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	⤵			⤵			⤵			⤵		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	710	42	264	720	564	463	295	106	31	202	279
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	11	199	6	0	157	140	141	6	14	8	8	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	937	50	275	906	727	623	313	124	40	218	290
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	21	250	13	73	242	194	166	84	33	11	58	77
Total Analysis Volume [veh/h]	84	1001	53	294	968	777	666	334	132	43	233	310
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	29	29	13	33	33	19	39	39	9	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	40	47	9	44	63	15	22	31	3	10	23
g / C, Green / Cycle	0.06	0.44	0.52	0.10	0.49	0.70	0.17	0.24	0.34	0.04	0.11	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.28	0.03	0.08	0.27	0.48	0.19	0.09	0.08	0.01	0.06	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	195	1603	847	351	1764	1128	586	877	553	129	407	415
d1, Uniform Delay [s]	41.12	19.29	10.53	39.78	16.13	7.87	37.50	28.46	21.20	42.27	37.89	30.76
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.50	1.85	0.14	5.29	1.23	3.44	66.80	0.27	0.22	1.50	1.27	3.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.43	0.62	0.06	0.84	0.55	0.69	1.14	0.38	0.24	0.33	0.57	0.75
d, Delay for Lane Group [s/veh]	42.62	21.14	10.67	45.07	17.37	11.32	104.30	28.73	21.42	43.77	39.17	34.22
Lane Group LOS	D	C	B	D	B	B	F	C	C	D	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.93	8.04	0.53	3.40	6.85	8.02	11.74	2.99	1.98	0.49	2.48	6.43
50th-Percentile Queue Length [ft/ln]	23.31	200.93	13.15	85.12	171.27	200.38	293.53	74.76	49.62	12.21	61.95	160.67
95th-Percentile Queue Length [veh/ln]	1.68	12.69	0.95	6.13	11.14	12.66	18.41	5.38	3.57	0.88	4.46	10.58
95th-Percentile Queue Length [ft/ln]	41.96	317.17	23.68	153.22	278.59	316.46	460.35	134.56	89.32	21.97	111.51	264.61

Movement, Approach, & Intersection Results

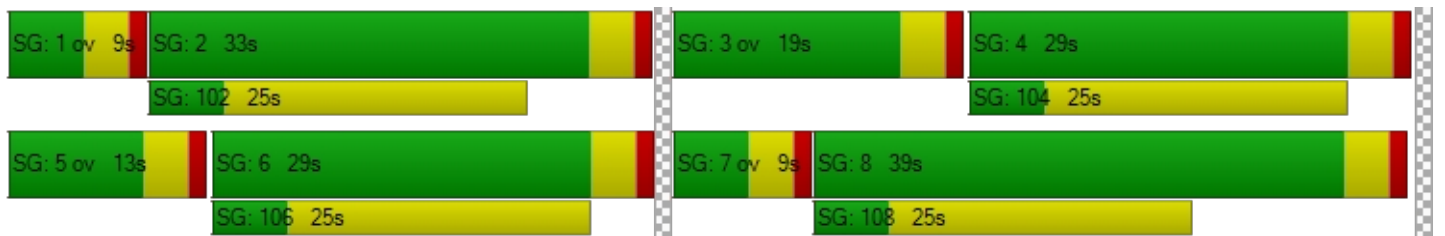
d_M, Delay for Movement [s/veh]	42.62	21.14	10.67	45.07	17.37	11.32	104.30	28.73	21.42	43.77	39.17	34.22
Movement LOS	D	C	B	D	B	B	F	C	C	D	D	C
d_A, Approach Delay [s/veh]	22.24			19.05			72.34			36.89		
Approach LOS	C			B			E			D		
d_I, Intersection Delay [s/veh]	34.25											
Intersection LOS	C											
Intersection V/C	0.761											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.913	3.155	2.905	2.772
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	644	778	556
d_b, Bicycle Delay [s]	23.47	20.67	16.81	23.47
I_b,int, Bicycle LOS Score for Intersection	2.498	3.242	2.494	2.043
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	36.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.586

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name															
Base Volume Input [veh/h]	78	272	218	98	260	8	0	36	299	116	0	210	196	93	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Proportion of CAVs [%]	0.00														
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040	
In-Process Volume [veh/h]	6	1	6	0	3	0	0	0	148	7	0	8	146	0	
Site-Generated Trips [veh/h]	0	0	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	0	0	
Pass-by Trips [veh/h]	0	0	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	0	0	
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	87	284	233	102	273	8	0	37	459	128	0	226	350	97	
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Total 15-Minute Volume [veh/h]	26	85	70	31	82	2	0	11	137	38	0	68	105	29	
Total Analysis Volume [veh/h]	104	340	279	122	327	10	0	44	549	153	0	270	419	116	
Presence of On-Street Parking	No		No	No		No	No			No	No			No	
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
v_do, Outbound Pedestrian Volume crossing	0			0			0				0				
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0				
v_co, Outbound Pedestrian Volume crossing	0			0			0				0				
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0				
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0				
Bicycle Volume [bicycles/h]	0			0			0				0				

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	34	0	12	34	0	0	14	28	0	0	26	40	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	37	37	8	38	38	4	22	22	17	35	35
g / C, Green / Cycle	0.07	0.37	0.37	0.08	0.38	0.38	0.04	0.22	0.22	0.17	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.06	0.17	0.18	0.07	0.09	0.09	0.02	0.19	0.19	0.15	0.15	0.15
s, saturation flow rate [veh/h]	1810	1900	1621	1810	1900	1880	1810	1900	1760	1810	1900	1760
c, Capacity [veh/h]	131	707	603	145	721	714	66	416	385	306	668	619
d1, Uniform Delay [s]	45.64	23.89	23.94	45.38	21.12	21.12	47.59	37.74	37.78	40.58	24.62	24.63
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.19	0.19	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.26	2.24	2.67	12.27	0.76	0.77	11.19	9.59	10.60	8.27	0.41	0.45
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79	0.47	0.47	0.84	0.23	0.24	0.67	0.88	0.88	0.88	0.42	0.42
d, Delay for Lane Group [s/veh]	55.90	26.13	26.61	57.65	21.88	21.90	58.79	47.33	48.38	48.84	25.03	25.08
Lane Group LOS	E	C	C	E	C	C	E	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.90	6.30	5.51	3.46	2.82	2.80	1.28	9.57	9.01	7.11	4.99	4.64
50th-Percentile Queue Length [ft/ln]	72.46	157.61	137.78	86.48	70.38	69.92	32.05	239.32	225.31	177.84	124.70	115.96
95th-Percentile Queue Length [veh/ln]	5.22	10.42	9.36	6.23	5.07	5.03	2.31	14.65	13.94	11.49	8.65	8.17
95th-Percentile Queue Length [ft/ln]	130.43	260.56	234.03	155.67	126.69	125.85	57.69	366.18	348.39	287.19	216.26	204.26

Movement, Approach, & Intersection Results

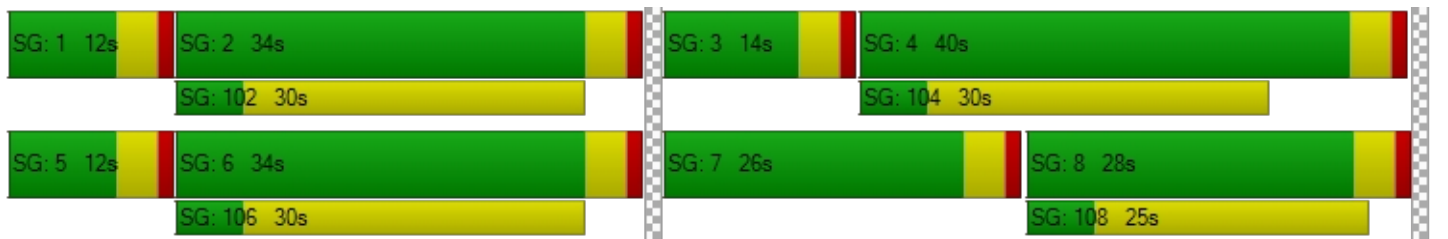
d_M, Delay for Movement [s/veh]	55.90	26.14	26.61	57.65	21.89	21.90	58.79	58.79	47.69	48.38	48.84	48.84	25.05	25.08
Movement LOS	E	C	C	E	C	C	E	E	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	30.60			31.39			48.48			33.03				
Approach LOS	C			C			D			C				
d_I, Intersection Delay [s/veh]	36.33													
Intersection LOS	D													
Intersection V/C	0.586													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0			
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00			
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00			
d_p, Pedestrian Delay [s]	41.41			41.41			41.41			41.41			
I_p,int, Pedestrian LOS Score for Intersectio	2.594			2.493			2.556			2.649			
Crosswalk LOS	B			B			B			B			
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000			
c_b, Capacity of the bicycle lane [bicycles/h]	600			600			480			720			
d_b, Bicycle Delay [s]	24.50			24.50			28.88			20.48			
I_b,int, Bicycle LOS Score for Intersection	2.156			1.938			2.139			2.224			
Bicycle LOS	B			A			B			B			

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	10.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	13	372	444	90	131	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	25	21	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	412	483	94	136	47
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	130	152	30	43	15
Total Analysis Volume [veh/h]	18	520	609	119	172	59
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	9	58	49	0	32	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	71	65	65	11	11
g / C, Green / Cycle	0.02	0.79	0.73	0.73	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.14	0.19	0.20	0.10	0.04
s, saturation flow rate [veh/h]	1810	3618	1900	1796	1810	1615
c, Capacity [veh/h]	37	2861	1379	1304	218	194
d1, Uniform Delay [s]	43.62	2.30	4.18	4.24	38.48	36.14
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.61	0.14	0.47	0.53	6.30	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.18	0.26	0.28	0.79	0.30
d, Delay for Lane Group [s/veh]	53.23	2.44	4.65	4.77	44.78	37.01
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.49	0.77	1.96	2.00	4.01	1.22
50th-Percentile Queue Length [ft/ln]	12.29	19.13	48.99	49.96	100.36	30.44
95th-Percentile Queue Length [veh/ln]	0.88	1.38	3.53	3.60	7.23	2.19
95th-Percentile Queue Length [ft/ln]	22.12	34.43	88.18	89.94	180.65	54.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.23	2.44	4.70	4.77	44.78	37.01
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	4.14		4.71		42.79	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	10.38					
Intersection LOS	B					
Intersection V/C	0.308					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.537	2.479	2.061
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1000	622
d_b, Bicycle Delay [s]	7.20	11.25	21.36
I_b,int, Bicycle LOS Score for Intersection	2.003	2.160	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd

Control Type:	Signalized	Delay (sec / veh):	36.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.606

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	141	43	209	160	132	78	484	24	46	371	166
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	1	8	10	3	11	8	94	0	11	60	17
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	148	53	227	169	148	89	597	25	59	446	190
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	3	43	15	66	49	43	26	173	7	17	129	55
Total Analysis Volume [veh/h]	14	171	61	262	195	171	103	690	29	68	516	220
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	25	0	5	19	0	8	22	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	29	0	9	23	0	12	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	24	24	5	35	35	4	34	34
g / C, Green / Cycle	0.12	0.12	0.27	0.27	0.06	0.38	0.38	0.05	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.10	0.04	0.25	0.11	0.06	0.19	0.19	0.04	0.20	0.20
s, saturation flow rate [veh/h]	1893	1615	1847	1615	1810	1900	1873	1810	1900	1710
c, Capacity [veh/h]	233	198	493	431	101	729	718	89	717	645
d1, Uniform Delay [s]	38.37	35.98	32.16	27.07	42.50	21.13	21.13	42.27	21.92	21.94
k, delay calibration	0.11	0.11	0.36	0.11	0.29	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.09	0.87	20.78	0.59	74.92	2.41	2.45	12.59	2.91	3.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.31	0.93	0.40	1.02	0.50	0.50	0.76	0.54	0.54
d, Delay for Lane Group [s/veh]	44.46	36.85	52.94	27.66	117.42	23.55	23.58	54.86	24.83	25.19
Lane Group LOS	D	D	D	C	F	C	C	D	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.30	1.26	12.22	3.03	4.30	6.08	6.01	1.79	6.73	6.14
50th-Percentile Queue Length [ft/ln]	107.53	31.40	305.62	75.64	107.46	152.06	150.15	44.69	168.36	153.56
95th-Percentile Queue Length [veh/ln]	7.70	2.26	17.96	5.45	7.74	10.13	10.03	3.22	10.99	10.21
95th-Percentile Queue Length [ft/ln]	192.56	56.52	448.97	136.16	193.43	253.18	250.63	80.45	274.76	255.17

Movement, Approach, & Intersection Results

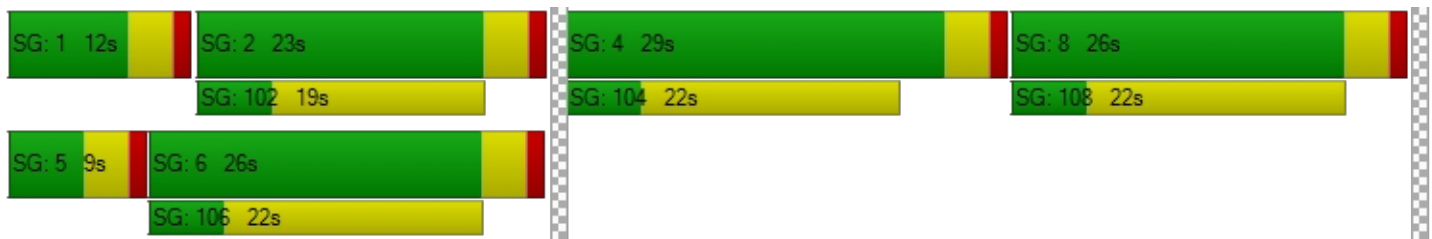
d_M, Delay for Movement [s/veh]	44.46	44.46	36.85	52.94	52.94	27.66	117.42	23.56	23.58	54.86	24.92	25.19
Movement LOS	D	D	D	D	D	C	F	C	C	D	C	C
d_A, Approach Delay [s/veh]	42.57			46.05			35.33			27.52		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	36.22											
Intersection LOS	D											
Intersection V/C	0.606											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.264	2.406	2.598	2.656
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	556	422	489
d_b, Bicycle Delay [s]	25.69	23.47	28.01	25.69
I_b,int, Bicycle LOS Score for Intersection	1.966	2.596	2.238	2.223
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	35.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.512

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name															
Base Volume Input [veh/h]	132	539	83	0	98	495	94	0	123	537	156	0	84	380	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020
In-Process Volume [veh/h]	0	55	41	0	26	50	29	0	49	24	0	0	43	32	19
Site-Generated Trips [veh/h]	0	0	0	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	0	0	0
Pass-by Trips [veh/h]	0	0	0	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	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	605	126	0	126	555	125	0	174	572	159	0	129	420	58
Peak Hour Factor	0.9880	0.9880	0.9880	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	34	153	32	0	32	140	32	0	44	145	40	0	33	106	15
Total Analysis Volume [veh/h]	137	612	128	0	128	562	127	0	176	579	161	0	131	425	59
Presence of On-Street Parking	No		No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0			
v_co, Outbound Pedestrian Volume crossing	0			0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0			
Bicycle Volume [bicycles/h]	0			0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	9	32	0	0	9	32	0	0	12	39	0	0	10	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	42	42	5	42	42	8	21	21	6	19	19
g / C, Green / Cycle	0.06	0.46	0.46	0.06	0.46	0.46	0.09	0.24	0.24	0.07	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.04	0.20	0.20	0.04	0.19	0.19	0.10	0.20	0.20	0.07	0.13	0.13
s, saturation flow rate [veh/h]	3514	1900	1787	3514	1900	1780	1810	1900	1760	1810	1900	1820
c, Capacity [veh/h]	195	881	829	195	881	826	161	449	415	121	406	389
d1, Uniform Delay [s]	41.77	16.18	16.18	41.66	15.91	15.92	41.00	32.91	32.92	42.00	31.95	31.98
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.53	1.55	1.65	3.70	1.37	1.47	61.69	4.81	5.17	63.48	1.46	1.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.43	0.43	0.66	0.40	0.40	1.09	0.86	0.86	1.09	0.61	0.61
d, Delay for Lane Group [s/veh]	46.30	17.73	17.83	45.36	17.28	17.38	102.69	37.72	38.09	105.48	33.42	33.53
Lane Group LOS	D	B	B	D	B	B	F	D	D	F	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.60	5.39	5.09	1.48	4.93	4.65	6.27	8.41	7.84	4.77	4.92	4.75
50th-Percentile Queue Length [ft/ln]	40.01	134.65	127.33	36.93	123.18	116.18	156.71	210.37	195.92	119.26	123.00	118.81
95th-Percentile Queue Length [veh/ln]	2.88	9.19	8.79	2.66	8.57	8.18	10.70	13.17	12.43	8.56	8.56	8.33
95th-Percentile Queue Length [ft/ln]	72.01	229.80	219.85	66.47	214.18	204.57	267.54	329.30	310.70	214.01	213.94	208.20

Movement, Approach, & Intersection Results

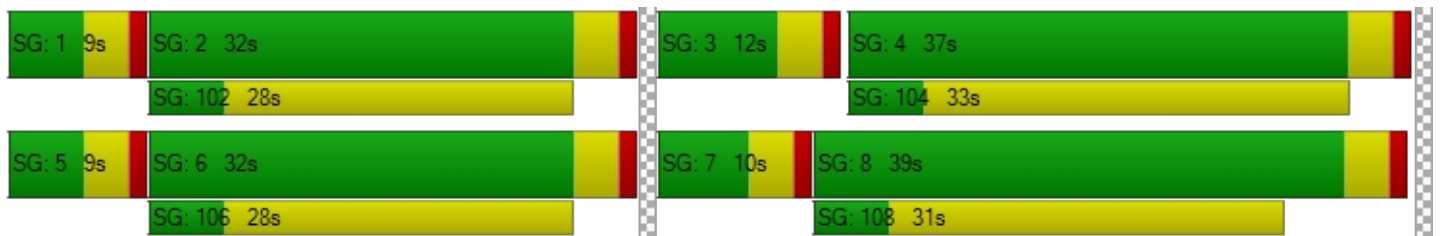
d_M, Delay for Movement [s/veh]	46.30	17.76	17.83	45.36	45.36	17.32	17.38	102.6	102.6	37.85	38.09	105.4	105.4	33.46	33.53	
Movement LOS	D	B	B	D	D	B	B	F	F	D	D	F	F	C	C	
d_A, Approach Delay [s/veh]	22.23			21.72				50.35				48.81				
Approach LOS	C			C				D				D				
d_I, Intersection Delay [s/veh]	35.16															
Intersection LOS	D															
Intersection V/C	0.512															

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.736	2.725	2.614	2.584
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	622	778	733
d_b, Bicycle Delay [s]	21.36	21.36	16.81	18.05
I_b,int, Bicycle LOS Score for Intersection	2.283	2.128	2.170	2.067
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



APPENDIX C-5

INTERSECTION ANALYSIS
WORKSHEETS –
OPENING YEAR 2026 CUMULATIVE PLUS
PROJECT

Renaissance II Residential Project

Vistro File: K:\...\Renaissance Res II_AM.vistro

Scenario 5 OY 26 CUM WP AM

Report File: K:\...\15 OY 2026 CUM WP AM.pdf

6/13/2025

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	WB Thru	0.768	32.9	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	EB Right	0.601	20.4	C
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	SB Left	0.592	23.1	C
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	NB Left	0.415	30.6	C
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.182	7.6	A
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.551	27.5	C
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	EB Left	0.499	32.3	C
101	Ayala Dr / Project Driveway	Two-way stop	HCM 7th Edition	WB Right	0.060	8.5	A
102	Linden Ave / South Project Driveway	Two-way stop	HCM 7th Edition	WB Left	0.143	18.0	C
103	Ayala Dr / Scholl Wy	Signalized	HCM 6th Edition	NB Left	0.381	6.6	A
104	Ayala Dr / Project Driveway (Exit Only)	Two-way stop	HCM 6th Edition	EB Right	0.072	13.3	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	32.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.768

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	484	298	0	0	456	353	0	0	0	526	2	315
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	133	142	0	0	207	138	0	0	0	150	0	89
Site-Generated Trips [veh/h]	14	11	0	0	5	0	0	0	0	6	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	650	463	0	0	686	365	0	0	0	703	2	287
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	178	127	0	0	188	100	0	0	0	192	1	79
Total Analysis Volume [veh/h]	712	507	0	0	751	400	0	0	0	770	2	314
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	23	0	0	0	0	0	32	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	28	63	0	0	35	0	0	0	0	0	27	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	21	60	35	35		22	22	22
g / C, Green / Cycle	0.23	0.66	0.39	0.39		0.25	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.20	0.14	0.30	0.34		0.20	0.23	0.19
s, saturation flow rate [veh/h]	3514	3618	1900	1692		1810	1810	1615
c, Capacity [veh/h]	811	2401	738	657		448	448	400
d1, Uniform Delay [s]	33.40	5.92	24.14	25.50		31.90	32.90	31.63
k, delay calibration	0.11	0.50	0.50	0.50		0.13	0.18	0.12
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.27	0.20	7.99	15.14		4.42	11.71	3.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.88	0.21	0.78	0.88		0.81	0.91	0.79
d, Delay for Lane Group [s/veh]	36.67	6.12	32.13	40.64		36.32	44.60	35.42
Lane Group LOS	D	A	C	D		D	D	D
Critical Lane Group	Yes	No	No	Yes		No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.67	1.70	11.86	13.57		7.81	9.85	6.63
50th-Percentile Queue Length [ft/ln]	191.83	42.38	296.60	339.17		195.23	246.22	165.77
95th-Percentile Queue Length [veh/ln]	12.22	3.05	17.51	19.61		12.39	15.00	10.85
95th-Percentile Queue Length [ft/ln]	305.40	76.28	437.82	490.19		309.80	374.89	271.35

Movement, Approach, & Intersection Results

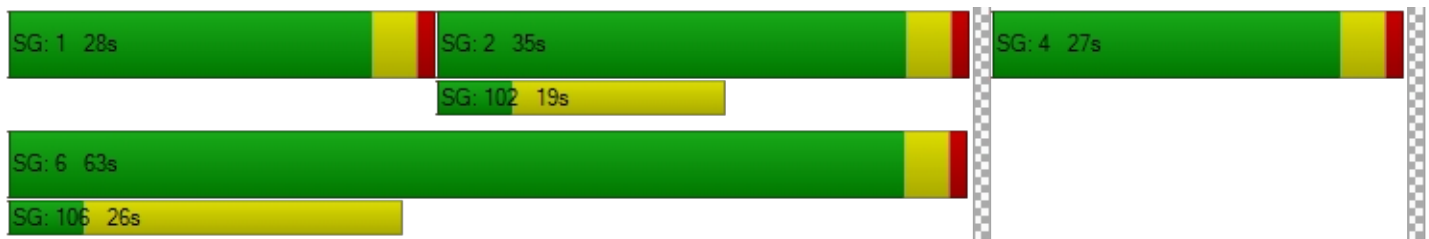
d_M, Delay for Movement [s/veh]	36.67	6.12	0.00	0.00	34.12	40.64	0.00	0.00	0.00	40.69	44.60	35.42
Movement LOS	D	A			C	D				D	D	D
d_A, Approach Delay [s/veh]	23.97				36.38		0.00		39.17			
Approach LOS	C				D		A		D			
d_I, Intersection Delay [s/veh]	32.88											
Intersection LOS	C											
Intersection V/C	0.768											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.328	2.522
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1311	689	0	511
d_b, Bicycle Delay [s]	5.34	19.34	45.00	24.94
I_b,int, Bicycle LOS Score for Intersection	2.565	2.625	4.132	3.566
Bicycle LOS	B	B	D	D

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	20.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.601

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	645	508	277	706	0	137	1	441	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	186	137	138	218	0	89	0	140	0	0	0
Site-Generated Trips [veh/h]	0	25	14	0	11	0	0	0	6	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	882	499	426	963	0	231	1	445	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	233	132	113	255	0	61	0	118	0	0	0
Total Analysis Volume [veh/h]	0	933	528	451	1019	0	244	1	471	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	39	0	23	62	0	0	28	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	48	48	14	66	16	16	16	
g / C, Green / Cycle	0.53	0.53	0.16	0.73	0.18	0.18	0.18	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.33	0.13	0.28	0.13	0.15	0.15	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1616	1615	
c, Capacity [veh/h]	1924	859	546	2646	325	290	290	
d1, Uniform Delay [s]	13.30	14.66	36.84	4.52	35.00	35.46	35.46	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.88	3.28	3.26	0.43	3.49	5.47	5.47	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.49	0.61	0.83	0.39	0.75	0.81	0.81	
d, Delay for Lane Group [s/veh]	14.18	17.94	40.10	4.94	38.49	40.93	40.94	
Lane Group LOS	B	B	D	A	D	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.77	7.69	4.97	2.87	5.29	5.31	5.31	
50th-Percentile Queue Length [ft/ln]	144.33	192.37	124.14	71.70	132.19	132.87	132.82	
95th-Percentile Queue Length [veh/ln]	9.71	12.24	8.62	5.16	9.06	9.10	9.09	
95th-Percentile Queue Length [ft/ln]	242.84	306.11	215.51	129.05	226.47	227.40	227.32	

Movement, Approach, & Intersection Results

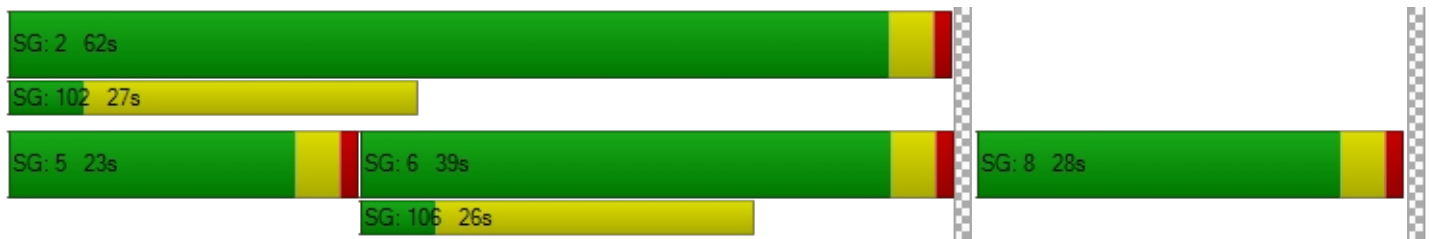
d_M, Delay for Movement [s/veh]	0.00	14.18	17.94	40.10	4.94	0.00	38.54	40.93	40.93	0.00	0.00	0.00
Movement LOS		B	B	D	A		D	D	D			
d_A, Approach Delay [s/veh]		15.54		15.73			40.10		0.00			
Approach LOS		B		B			D		A			
d_I, Intersection Delay [s/veh]	20.44											
Intersection LOS	C											
Intersection V/C	0.601											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.454	2.282
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	1289	533	0
d_b, Bicycle Delay [s]	16.81	5.69	24.20	45.00
I_b,int, Bicycle LOS Score for Intersection	2.913	2.772	3.005	4.132
Bicycle LOS	C	C	C	D

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	23.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.592

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	46	651	31	205	625	321	196	113	56	29	104	278
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	14	163	7	0	189	168	159	7	7	4	4	0
Site-Generated Trips [veh/h]	0	0	0	0	0	17	39	11	0	5	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	840	39	213	839	519	402	136	65	39	112	289
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	17	224	10	57	224	139	107	36	17	10	30	77
Total Analysis Volume [veh/h]	66	897	42	228	896	554	429	145	69	42	120	309
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	32	32	11	34	34	18	38	38	9	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	4	43	50	7	46	64	14	21	29	3	10	21
g / C, Green / Cycle	0.04	0.48	0.56	0.08	0.51	0.71	0.16	0.23	0.32	0.04	0.11	0.23
(v / s)_i Volume / Saturation Flow Rate	0.02	0.25	0.03	0.06	0.25	0.34	0.12	0.04	0.04	0.01	0.03	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	158	1724	900	273	1842	1145	547	838	519	127	407	379
d1, Uniform Delay [s]	41.83	16.40	9.06	40.93	14.40	5.79	36.55	27.67	21.67	42.30	36.67	32.60
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.75	1.13	0.10	6.58	0.92	1.46	2.53	0.10	0.12	1.49	0.40	5.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.52	0.05	0.83	0.49	0.48	0.78	0.17	0.13	0.33	0.30	0.82
d, Delay for Lane Group [s/veh]	43.58	17.53	9.16	47.51	15.32	7.25	39.08	27.77	21.78	43.79	37.07	38.03
Lane Group LOS	D	B	A	D	B	A	D	C	C	D	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.74	6.35	0.38	2.71	5.81	4.15	4.65	1.25	1.03	0.48	1.22	6.79
50th-Percentile Queue Length [ft/ln]	18.61	158.64	9.42	67.72	145.33	103.68	116.13	31.13	25.83	11.93	30.54	169.69
95th-Percentile Queue Length [veh/ln]	1.34	10.48	0.68	4.88	9.77	7.47	8.18	2.24	1.86	0.86	2.20	11.06
95th-Percentile Queue Length [ft/ln]	33.50	261.92	16.96	121.90	244.19	186.63	204.50	56.04	46.49	21.48	54.98	276.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.58	17.53	9.16	47.51	15.32	7.25	39.08	27.77	21.78	43.79	37.07	38.03
Movement LOS	D	B	A	D	B	A	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	18.89			17.03			34.67			38.30		
Approach LOS	B			B			C			D		
d_I, Intersection Delay [s/veh]	23.15											
Intersection LOS	C											
Intersection V/C	0.592											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.876	3.057	2.788	2.719
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	667	756	556
d_b, Bicycle Delay [s]	21.36	20.00	17.42	23.47
I_b,int, Bicycle LOS Score for Intersection	2.389	2.944	2.090	1.948
Bicycle LOS	B	C	B	A

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	30.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.415

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name														
Base Volume Input [veh/h]	38	252	78	89	208	18	0	34	132	61	0	114	89	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040
In-Process Volume [veh/h]	7	3	7	0	1	0	0	0	163	4	0	4	175	0
Site-Generated Trips [veh/h]	10	0	55	0	0	0	0	0	0	4	0	19	0	0
Diverted Trips [veh/h]	0	0	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	0	0
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	57	265	143	93	217	19	0	35	300	71	0	142	268	66
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	17	79	43	28	65	6	0	10	90	21	0	42	80	20
Total Analysis Volume [veh/h]	68	317	171	111	260	23	0	42	359	85	0	170	321	79
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	11	34	0	0	11	29	0	0	16	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	43	43	7	46	46	3	14	14	10	20	20
g / C, Green / Cycle	0.05	0.48	0.48	0.08	0.51	0.51	0.04	0.15	0.15	0.11	0.23	0.23
(v / s)_i Volume / Saturation Flow Rate	0.04	0.13	0.14	0.06	0.08	0.08	0.02	0.12	0.12	0.09	0.11	0.11
s, saturation flow rate [veh/h]	1810	1900	1681	1810	1900	1847	1810	1900	1777	1810	1900	1773
c, Capacity [veh/h]	89	913	808	140	967	940	67	287	268	205	432	403
d1, Uniform Delay [s]	42.29	14.04	14.08	40.81	11.73	11.74	42.74	36.86	36.94	39.04	30.11	30.16
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.83	0.77	0.89	9.63	0.32	0.34	9.47	4.96	5.69	8.28	0.81	0.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.28	0.29	0.79	0.15	0.15	0.63	0.79	0.81	0.83	0.48	0.48
d, Delay for Lane Group [s/veh]	55.12	14.80	14.98	50.44	12.06	12.08	52.21	41.82	42.63	47.32	30.93	31.05
Lane Group LOS	E	B	B	D	B	B	D	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.79	3.18	2.91	2.76	1.53	1.51	1.09	5.14	4.95	4.09	3.89	3.68
50th-Percentile Queue Length [ft/ln]	44.81	79.59	72.78	69.03	38.35	37.74	27.17	128.53	123.65	102.25	97.25	92.11
95th-Percentile Queue Length [veh/ln]	3.23	5.73	5.24	4.97	2.76	2.72	1.96	8.86	8.59	7.36	7.00	6.63
95th-Percentile Queue Length [ft/ln]	80.66	143.26	131.01	124.25	69.04	67.94	48.90	221.50	214.83	184.04	175.05	165.80

Movement, Approach, & Intersection Results

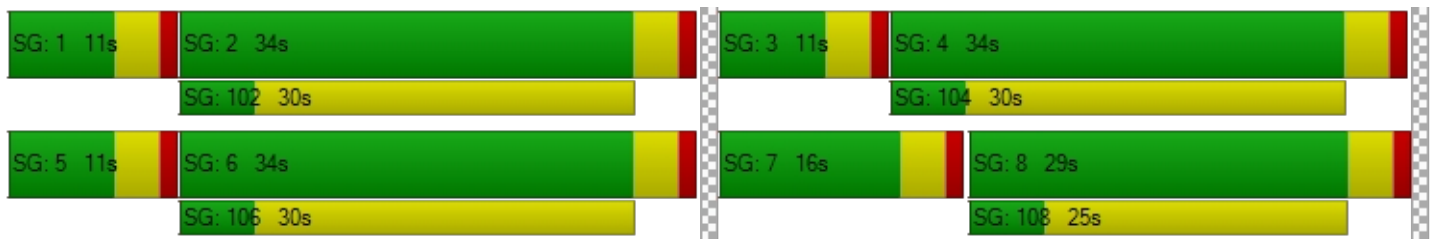
d_M, Delay for Movement [s/veh]	55.12	14.84	14.98	50.44	12.07	12.08	52.21	52.21	42.11	42.63	47.32	47.32	30.97	31.05
Movement LOS	E	B	B	D	B	B	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	19.81			22.88			43.08			35.86				
Approach LOS	B			C			D			D				
d_I, Intersection Delay [s/veh]	30.61													
Intersection LOS	C													
Intersection V/C	0.415													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0			
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00			
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00			
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45			
I_p,int, Pedestrian LOS Score for Intersectio	2.510			2.464			2.476			2.538			
Crosswalk LOS	B			B			B			B			
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000			
c_b, Capacity of the bicycle lane [bicycles/h]	667			667			556			667			
d_b, Bicycle Delay [s]	20.00			20.00			23.47			20.00			
I_b,int, Bicycle LOS Score for Intersection	2.018			1.885			1.926			1.890			
Bicycle LOS	B			A			A			A			

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.182

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	19	351	228	66	61	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	12	22	0	0	0
Site-Generated Trips [veh/h]	0	16	22	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	393	281	69	63	22
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	124	89	22	20	7
Total Analysis Volume [veh/h]	25	496	354	87	79	28
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	10	60	50	0	30	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	76	70	70	6	6
g / C, Green / Cycle	0.03	0.85	0.78	0.78	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.01	0.14	0.12	0.12	0.04	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1776	1810	1615
c, Capacity [veh/h]	47	3065	1476	1380	116	103
d1, Uniform Delay [s]	43.28	1.22	2.54	2.56	41.24	40.13
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.85	0.11	0.21	0.25	6.94	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.53	0.16	0.15	0.16	0.68	0.27
d, Delay for Lane Group [s/veh]	52.13	1.33	2.75	2.81	48.17	41.53
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.66	0.31	0.76	0.77	1.92	0.63
50th-Percentile Queue Length [ft/ln]	16.51	7.80	18.90	19.23	47.98	15.63
95th-Percentile Queue Length [veh/ln]	1.19	0.56	1.36	1.38	3.45	1.13
95th-Percentile Queue Length [ft/ln]	29.72	14.04	34.01	34.62	86.36	28.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	52.13	1.33	2.77	2.81	48.17	41.53
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	3.77		2.78		46.44	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	7.63					
Intersection LOS	A					
Intersection V/C	0.182					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.477	2.380	2.013
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	1022	578
d_b, Bicycle Delay [s]	6.42	10.76	22.76
I_b,int, Bicycle LOS Score for Intersection	1.989	1.923	1.560
Bicycle LOS	A	A	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	27.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	↔			↔			↔			↔		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	45	183	71	88	94	62	42	402	22	24	457	147
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	3	12	15	1	7	4	64	0	9	95	8
Site-Generated Trips [veh/h]	0	0	0	11	0	11	5	0	0	0	0	11
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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	193	86	118	99	82	53	482	23	34	570	172
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	14	56	25	34	29	24	15	139	7	10	165	50
Total Analysis Volume [veh/h]	54	223	99	136	114	95	61	557	27	39	659	199
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	6	0	0	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	22	0	5	25	0	5	25	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	29	0	0	26	0	9	25	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	14	14	4	41	41	3	40	40
g / C, Green / Cycle	0.17	0.17	0.16	0.16	0.04	0.45	0.45	0.03	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.15	0.06	0.14	0.06	0.03	0.15	0.16	0.02	0.23	0.24
s, saturation flow rate [veh/h]	1882	1615	1850	1615	1810	1900	1869	1810	1900	1751
c, Capacity [veh/h]	328	282	296	259	80	860	846	64	842	776
d1, Uniform Delay [s]	35.97	32.68	36.70	33.72	42.54	15.96	15.96	42.82	18.23	18.23
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.92	0.75	6.79	0.87	13.71	1.08	1.11	9.25	2.38	2.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.35	0.84	0.37	0.76	0.34	0.34	0.61	0.53	0.53
d, Delay for Lane Group [s/veh]	41.89	33.42	43.49	34.59	56.24	17.04	17.07	52.07	20.61	20.81
Lane Group LOS	D	C	D	C	E	B	B	D	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.31	1.93	5.80	1.89	1.63	4.01	3.96	1.01	6.99	6.48
50th-Percentile Queue Length [ft/ln]	157.73	48.30	144.91	47.28	40.79	100.26	98.97	25.25	174.65	162.11
95th-Percentile Queue Length [veh/ln]	10.43	3.48	9.74	3.40	2.94	7.22	7.13	1.82	11.32	10.66
95th-Percentile Queue Length [ft/ln]	260.72	86.93	243.62	85.11	73.42	180.48	178.14	45.45	283.02	266.51

Movement, Approach, & Intersection Results

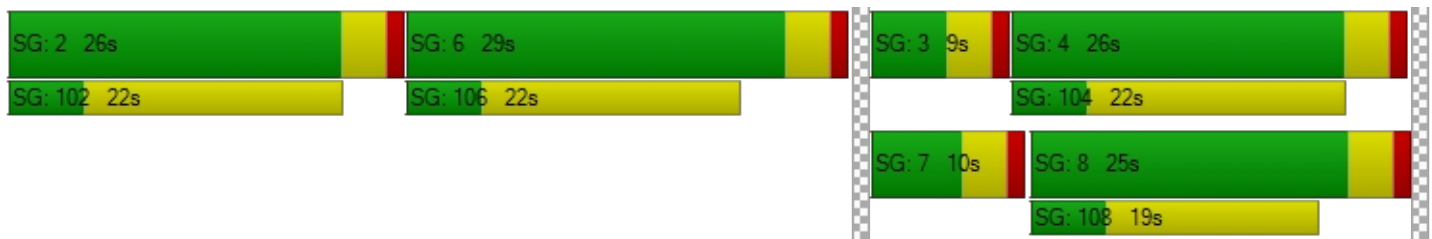
d_M, Delay for Movement [s/veh]	41.89	41.89	33.42	43.49	43.49	34.59	56.24	17.05	17.07	52.07	20.67	20.81
Movement LOS	D	D	C	D	D	C	E	B	B	D	C	C
d_A, Approach Delay [s/veh]	39.66			41.04			20.76			22.07		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	27.51											
Intersection LOS	C											
Intersection V/C	0.551											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.268	2.334	2.585	2.631
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	489	467	489
d_b, Bicycle Delay [s]	23.47	25.69	26.45	25.69
I_b,int, Bicycle LOS Score for Intersection	2.180	2.129	2.092	2.300
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	32.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.499

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name																
Base Volume Input [veh/h]	214	559	76	0	46	598	57	0	99	263	169	0	46	333	31	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	
In-Process Volume [veh/h]	0	50	36	0	16	57	49	0	28	37	0	0	40	27	26	
Site-Generated Trips [veh/h]	7	0	0	0	10	0	0	0	0	0	11	0	0	4	0	
Diverted Trips [veh/h]	0	0	0	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	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0	
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	225	620	114	0	73	667	107	0	129	305	183	0	87	371	58	
Peak Hour Factor	0.9210	0.9210	0.9210	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	0.920	0.921	0.921	0.921	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Total 15-Minute Volume [veh/h]	61	168	31	0	20	181	29	0	35	83	50	0	24	101	16	
Total Analysis Volume [veh/h]	244	673	124	0	79	724	116	0	140	331	199	0	94	403	63	
Presence of On-Street Parking	No		No	No			No	No			No	No			No	
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
v_do, Outbound Pedestrian Volume crossing	0			0				0				0				
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0				
v_co, Outbound Pedestrian Volume crossing	0			0				0				0				
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0				
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0				
Bicycle Volume [bicycles/h]	0			0				0				0				

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	11	34	0	0	9	32	0	0	10	36	0	0	11	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	47	47	4	45	45	6	16	16	6	16	16
g / C, Green / Cycle	0.08	0.53	0.53	0.05	0.50	0.50	0.07	0.18	0.18	0.07	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.07	0.22	0.22	0.02	0.23	0.23	0.08	0.15	0.15	0.05	0.13	0.13
s, saturation flow rate [veh/h]	3514	1900	1798	3514	1900	1810	1810	1900	1665	1810	1900	1812
c, Capacity [veh/h]	273	1001	947	169	944	899	121	344	301	120	344	328
d1, Uniform Delay [s]	41.13	12.85	12.85	41.72	14.72	14.72	42.00	35.43	35.50	41.36	34.51	34.55
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.84	1.24	1.31	2.02	1.59	1.66	90.78	4.77	5.74	10.38	2.49	2.68
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.89	0.41	0.41	0.47	0.46	0.46	1.16	0.82	0.83	0.78	0.69	0.70
d, Delay for Lane Group [s/veh]	50.97	14.08	14.16	43.74	16.31	16.39	132.78	40.20	41.24	51.74	37.00	37.24
Lane Group LOS	D	B	B	D	B	B	F	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.02	5.00	4.76	0.89	5.80	5.54	5.69	6.26	5.64	2.38	5.02	4.85
50th-Percentile Queue Length [ft/ln]	75.45	125.12	118.93	22.31	144.94	138.56	142.13	156.45	140.97	59.38	125.47	121.18
95th-Percentile Queue Length [veh/ln]	5.43	8.67	8.33	1.61	9.75	9.40	10.03	10.36	9.53	4.28	8.69	8.46
95th-Percentile Queue Length [ft/ln]	135.81	216.84	208.36	40.16	243.66	235.09	250.68	259.02	238.32	106.89	217.32	211.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.97	14.11	14.16	43.74	43.74	16.34	16.39	132.7	132.7	40.36	41.24	51.74	51.74	37.10	37.24
Movement LOS	D	B	B	D	D	B	B	F	F	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	22.76			18.70				59.93				39.57			
Approach LOS	C			B				E				D			
d_I, Intersection Delay [s/veh]	32.35														
Intersection LOS	C														
Intersection V/C	0.499														

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.789	2.746	2.581	2.515
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	622	711	733
d_b, Bicycle Delay [s]	20.00	21.36	18.69	18.05
I_b,int, Bicycle LOS Score for Intersection	2.418	2.253	1.997	2.022
Bicycle LOS	B	B	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 101: Ayala Dr / Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.060

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration	⇌		⇌		⇌	
Turning Movement	Thru	Right	Left	Thru	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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Northbound		Southbound		Westbound	
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	3	0	0	1	0	0
Site-Generated Trips [veh/h]	0	0	17	6	0	65
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]	3	0	17	7	0	65
Peak Hour Factor	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
Total 15-Minute Volume [veh/h]	1	0	4	2	0	16
Total Analysis Volume [veh/h]	3	0	17	7	0	65
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	0.00	0.00	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	7.24	0.00	8.98	8.54
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.01	0.19	0.19
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.71	0.36	4.79	4.79
d_A, Approach Delay [s/veh]	0.00		5.13		8.54	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.37					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 102: Linden Ave / South Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	18.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.143

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	412	0	0	383	0	0	0	0	0	0	0
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	3	12	7	1	0	0	0	0	22	0	14
Site-Generated Trips [veh/h]	0	0	16	6	0	0	0	0	0	22	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]	0	431	28	13	399	0	0	0	0	44	0	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	113	7	3	105	0	0	0	0	12	0	4
Total Analysis Volume [veh/h]	0	454	29	14	420	0	0	0	0	46	0	15
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.02
d_M, Delay for Movement [s/veh]	8.13	0.00	0.00	8.35	0.00	0.00	15.82	18.56	9.49	18.02	20.15	11.55
Movement LOS	A	A	A	A	A	A	C	C	A	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.57	0.57	0.57
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.00	0.00	14.33	14.33	14.33
d_A, Approach Delay [s/veh]	0.00			0.27			14.62			16.43		
Approach LOS	A			A			B			C		
d_I, Intersection Delay [s/veh]	1.14											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 103: Ayala Dr / Scholl Wy

Control Type:	Signalized	Delay (sec / veh):	6.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.381

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	3	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	33	783	849	19	4	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	12	105	164	35	79	8
Site-Generated Trips [veh/h]	0	0	0	5	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	919	1047	60	83	37
Peak Hour Factor	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	238	271	16	21	10
Total Analysis Volume [veh/h]	48	950	1083	62	86	38
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Overlap
Signal Group	1	6	2	0	3	8
Auxiliary Signal Groups						1,8
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	9	49	40	0	41	41
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	10	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	3	76	69	69	6	13
g / C, Green / Cycle	0.04	0.85	0.76	0.76	0.06	0.15
(v / s)_i Volume / Saturation Flow Rate	0.03	0.26	0.30	0.31	0.05	0.02
s, saturation flow rate [veh/h]	1810	3618	1900	1864	1810	1615
c, Capacity [veh/h]	70	3062	1450	1423	117	239
d1, Uniform Delay [s]	42.70	1.44	3.61	3.64	41.34	33.45
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.94	0.26	0.81	0.85	8.63	0.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.68	0.31	0.39	0.40	0.74	0.16
d, Delay for Lane Group [s/veh]	53.64	1.70	4.42	4.49	49.97	33.76
Lane Group LOS	D	A	A	A	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.26	0.71	2.79	2.82	2.13	0.74
50th-Percentile Queue Length [ft/ln]	31.42	17.74	69.80	70.57	53.34	18.45
95th-Percentile Queue Length [veh/ln]	2.26	1.28	5.03	5.08	3.84	1.33
95th-Percentile Queue Length [ft/ln]	56.56	31.93	125.64	127.02	96.02	33.22

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.64	1.70	4.46	4.49	49.97	33.76
Movement LOS	D	A	A	A	D	C
d_A, Approach Delay [s/veh]	4.20		4.46		45.00	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	6.56					
Intersection LOS	A					
Intersection V/C	0.381					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.727	2.018
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	800	822
d_b, Bicycle Delay [s]	11.25	16.20	15.61
I_b,int, Bicycle LOS Score for Intersection	2.383	2.504	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 104: Ayala Dr / Project Driveway (Exit Only)

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.072

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	0	793	877	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	117	172	0	0	22
Site-Generated Trips [veh/h]	0	0	0	0	0	10
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	942	1084	0	0	32
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	248	285	0	0	8
Total Analysis Volume [veh/h]	0	992	1141	0	0	34
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
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	0.01	0.01	0.00	0.00	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	13.27
Movement LOS		A	A			B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	5.83
d_A, Approach Delay [s/veh]	0.00		0.00		13.27	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.21					
Intersection LOS	B					

Renaissance II Residential Project

Vistro File: K:\...\Renaissance Res II_PM.vistro

Scenario 5 OY 26 CUM WP PM

Report File: K:\...\15 OY 2026 CUM WP PM.pdf

6/13/2025

Intersection Analysis Summary




ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Ayala Dr / SR-210 WB Ramps	Signalized	HCM 7th Edition	SB Right	0.764	31.8	C
2	Ayala Dr / SR-210 EB Ramps	Signalized	HCM 7th Edition	SB Left	0.838	31.9	C
3	Ayala Dr / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.788	37.8	D
4	Linden Ave / Renaissance Pkwy	Signalized	HCM 7th Edition	EB Left	0.642	37.8	D
5	Linden Ave / Miro Way	Signalized	HCM 7th Edition	NB Left	0.314	10.1	B
6	Linden Ave / Baseline Rd	Signalized	HCM 7th Edition	EB Left	0.627	39.0	D
7	Ayala Dr / Baseline Rd	Signalized	HCM 6th Edition	WB Left	0.517	35.4	D
101	Ayala Dr / North Project Driveway	Two-way stop	HCM 7th Edition	WB Right	0.072	10.7	B
102	Linden Ave / South Project Driveway	Two-way stop	HCM 7th Edition	WB Left	0.153	20.7	C
103	Ayala Dr / Scholl Wy	Signalized	HCM 6th Edition	NB Left	0.386	6.3	A
104	Ayala Dr / Project Driveway (Exit Only)	Two-way stop	HCM 6th Edition	EB Right	0.026	12.4	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: Ayala Dr / SR-210 WB Ramps

Control Type:	Signalized	Delay (sec / veh):	31.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.764

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	0	0	1	0	1
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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	482	449	0	0	525	226	0	0	0	697	5	301
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 [%]	0.00	0.00	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	128	214	0	0	161	102	0	0	0	123	0	142
Site-Generated Trips [veh/h]	10	8	0	0	10	0	0	0	0	13	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	140	0	0	0	0	0	130
Total Hourly Volume [veh/h]	639	689	0	0	717	197	0	0	0	861	5	325
Peak Hour Factor	0.9130	0.9130	1.0000	1.0000	0.9130	0.9130	1.0000	1.0000	1.0000	0.9130	0.9130	0.9130
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]	175	189	0	0	196	54	0	0	0	236	1	89
Total Analysis Volume [veh/h]	700	755	0	0	785	216	0	0	0	943	5	356
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0		0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0		0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0		0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	25	50	0	0	25	0	0	0	0	0	40	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	5	0
Pedestrian Clearance [s]	0	21	0	0	14	0	0	0	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	No	No			No						No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C		L	C	R
C, Cycle Length [s]	90	90	90	90		90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	20	53	29	29		29	29	29
g / C, Green / Cycle	0.22	0.59	0.33	0.33		0.32	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.20	0.21	0.26	0.28		0.24	0.28	0.22
s, saturation flow rate [veh/h]	3514	3618	1900	1766		1810	1810	1615
c, Capacity [veh/h]	778	2134	616	572		581	581	519
d1, Uniform Delay [s]	34.07	9.56	27.90	28.68		27.39	28.84	26.60
k, delay calibration	0.11	0.50	0.50	0.50		0.17	0.24	0.13
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	4.12	0.46	11.18	16.87		3.13	8.89	1.88
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.90	0.35	0.81	0.87		0.76	0.87	0.69
d, Delay for Lane Group [s/veh]	38.19	10.02	39.09	45.55		30.52	37.73	28.48
Lane Group LOS	D	B	D	D		C	D	C
Critical Lane Group	Yes	No	No	Yes		No	Yes	No
50th-Percentile Queue Length [veh/ln]	7.70	3.64	11.42	12.45		8.69	11.41	6.71
50th-Percentile Queue Length [ft/ln]	192.38	91.09	285.51	311.36		217.35	285.14	167.77
95th-Percentile Queue Length [veh/ln]	12.24	6.56	16.96	18.24		13.53	16.94	10.96
95th-Percentile Queue Length [ft/ln]	306.11	163.96	424.06	456.05		338.25	423.60	273.98

Movement, Approach, & Intersection Results

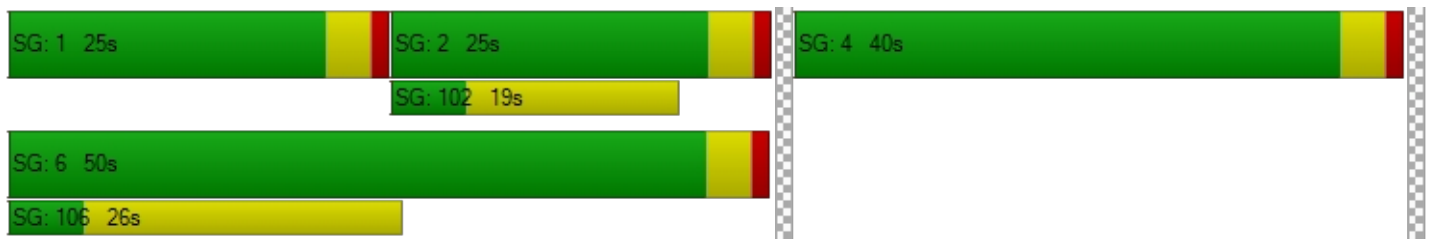
d_M, Delay for Movement [s/veh]	38.19	10.02	0.00	0.00	41.43	45.55	0.00	0.00	0.00	34.37	37.73	28.48
Movement LOS	D	B			D	D				C	D	C
d_A, Approach Delay [s/veh]	23.58			42.32			0.00			32.77		
Approach LOS	C			D			A			C		
d_I, Intersection Delay [s/veh]	31.76											
Intersection LOS	C											
Intersection V/C	0.764											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			36.45			36.45		
l_p,int, Pedestrian LOS Score for Intersectio	0.000			0.000			2.234			2.593		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1022			467			0			800		
d_b, Bicycle Delay [s]	10.76			26.45			45.00			16.20		
l_b,int, Bicycle LOS Score for Intersection	2.760			2.501			4.132			3.926		
Bicycle LOS	C			B			D			D		

Sequence




Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Ayala Dr / SR-210 EB Ramps

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.838

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach												
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	1	0	0	1	0	1	0	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	0	692	754	296	922	0	239	1	625	0	0	0
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	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	200	139	102	180	0	142	0	119	0	0	0
Site-Generated Trips [veh/h]	0	18	10	0	23	0	0	0	13	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
Right Turn on Red Volume [veh/h]	0	0	180	0	0	0	0	0	160	0	0	0
Total Hourly Volume [veh/h]	0	938	753	410	1162	0	391	1	622	0	0	0
Peak Hour Factor	1.0000	0.9450	0.9450	0.9450	0.9450	1.0000	0.9450	0.9450	0.9450	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]	0	248	199	108	307	0	103	0	165	0	0	0
Total Analysis Volume [veh/h]	0	993	797	434	1230	0	414	1	658	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	5	10	0	0	10	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	0	30	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	42	0	15	57	0	0	33	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	21	0	0	22	0	0	10	0	0	0	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		No		No	No			No				
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	L	C	L	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	44	44	11	59	23	23	23	
g / C, Green / Cycle	0.49	0.49	0.12	0.65	0.26	0.26	0.26	
(v / s)_i Volume / Saturation Flow Rate	0.27	0.49	0.12	0.34	0.20	0.22	0.22	
s, saturation flow rate [veh/h]	3618	1615	3514	3618	1810	1644	1615	
c, Capacity [veh/h]	1756	784	430	2359	469	426	418	
d1, Uniform Delay [s]	16.42	23.15	39.50	8.25	30.80	31.59	31.75	
k, delay calibration	0.50	0.50	0.11	0.50	0.15	0.20	0.20	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.32	36.30	22.78	0.83	3.64	7.87	9.13	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.57	1.02	1.01	0.52	0.76	0.84	0.86	
d, Delay for Lane Group [s/veh]	17.74	59.45	62.28	9.08	34.44	39.46	40.87	
Lane Group LOS	B	F	F	A	C	D	D	
Critical Lane Group	No	Yes	Yes	No	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	7.14	23.08	6.02	5.67	7.46	8.09	8.26	
50th-Percentile Queue Length [ft/ln]	178.43	577.09	150.56	141.67	186.41	202.28	206.40	
95th-Percentile Queue Length [veh/ln]	11.52	31.36	10.09	9.57	11.93	12.76	12.97	
95th-Percentile Queue Length [ft/ln]	287.96	784.00	252.23	239.27	298.36	318.90	324.20	

Movement, Approach, & Intersection Results

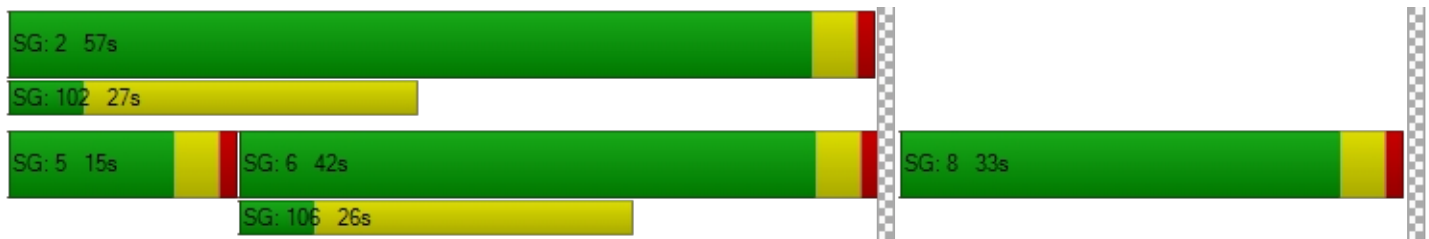
d_M, Delay for Movement [s/veh]	0.00	17.74	59.45	62.28	9.08	0.00	35.13	39.46	40.23	0.00	0.00	0.00
Movement LOS		B	F	F	A		D	D	D			
d_A, Approach Delay [s/veh]	36.31			22.95			38.26			0.00		
Approach LOS	D			C			D			A		
d_I, Intersection Delay [s/veh]	31.86											
Intersection LOS	C											
Intersection V/C	0.838											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersectio	0.000			0.000			2.570			2.405		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	844			1178			644			0		
d_b, Bicycle Delay [s]	15.02			7.61			20.67			45.00		
I_b,int, Bicycle LOS Score for Intersection	3.185			2.932			3.594			4.132		
Bicycle LOS	C			C			D			D		

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Ayala Dr / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	37.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.788

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	←			←			←			←		
Lane Configuration	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Turning Movement												
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	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	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	65	710	42	264	720	564	463	295	106	31	202	279
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	11	199	6	0	157	140	141	6	14	8	8	0
Site-Generated Trips [veh/h]	0	0	0	0	0	36	28	8	0	10	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	79	937	50	275	906	763	651	321	124	50	218	290
Peak Hour Factor	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360	0.9360
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]	21	250	13	73	242	204	174	86	33	13	58	77
Total Analysis Volume [veh/h]	84	1001	53	294	968	815	696	343	132	53	233	310
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	1	6	6	5	2	2	3	8	8	7	4	4
Auxiliary Signal Groups			6,7			2,3			1,8			4,5
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	10	5	10	10	5	10	10	5	10	10
Maximum Green [s]	30	30	30	30	30	30	30	30	30	30	30	30
Amber [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All red [s]	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Split [s]	9	29	29	13	33	33	19	39	39	9	29	29
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Walk [s]	0	5	5	0	5	5	0	5	5	0	5	5
Pedestrian Clearance [s]	0	20	20	0	20	20	0	20	20	0	20	20
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Maximum Recall	No	No	No	No	No	No	No	No	No	No	No	No
Pedestrian Recall	No	No	No	No	No	No	No	No	No	No	No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	5	40	48	9	44	63	15	21	30	4	10	23
g / C, Green / Cycle	0.06	0.44	0.53	0.10	0.49	0.70	0.17	0.24	0.34	0.04	0.11	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.28	0.03	0.08	0.27	0.50	0.20	0.09	0.08	0.02	0.06	0.19
s, saturation flow rate [veh/h]	3514	3618	1615	3514	3618	1615	3514	3618	1615	3514	3618	1615
c, Capacity [veh/h]	195	1603	854	351	1764	1128	586	862	546	144	407	415
d1, Uniform Delay [s]	41.12	19.29	10.34	39.78	16.13	8.25	37.50	28.85	21.46	42.03	37.89	30.76
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.50	1.85	0.14	5.29	1.23	4.02	88.76	0.30	0.23	1.57	1.27	3.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.43	0.62	0.06	0.84	0.55	0.72	1.19	0.40	0.24	0.37	0.57	0.75
d, Delay for Lane Group [s/veh]	42.62	21.14	10.48	45.07	17.37	12.27	126.26	29.15	21.69	43.60	39.17	34.22
Lane Group LOS	D	C	B	D	B	B	F	C	C	D	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.93	8.04	0.52	3.40	6.85	8.88	13.53	3.10	2.00	0.60	2.48	6.43
50th-Percentile Queue Length [ft/ln]	23.31	200.93	13.00	85.12	171.27	222.02	338.19	77.51	50.01	14.97	61.95	160.67
95th-Percentile Queue Length [veh/ln]	1.68	12.69	0.94	6.13	11.14	13.77	21.15	5.58	3.60	1.08	4.46	10.58
95th-Percentile Queue Length [ft/ln]	41.96	317.17	23.41	153.22	278.59	344.20	528.70	139.52	90.02	26.95	111.51	264.61

Movement, Approach, & Intersection Results

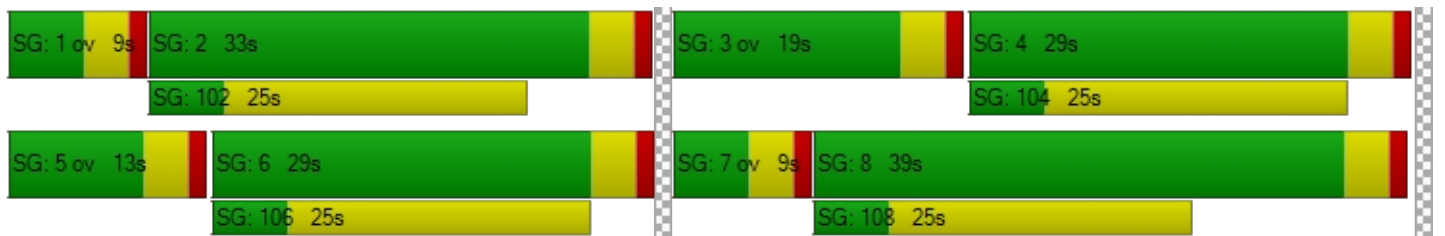
d_M, Delay for Movement [s/veh]	42.62	21.14	10.48	45.07	17.37	12.27	126.26	29.15	21.69	43.60	39.17	34.22
Movement LOS	D	C	B	D	B	B	F	C	C	D	D	C
d_A, Approach Delay [s/veh]	22.23			19.29			86.03			36.99		
Approach LOS	C			B			F			D		
d_I, Intersection Delay [s/veh]	37.76											
Intersection LOS	D											
Intersection V/C	0.788											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.915	3.164	2.916	2.775
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	556	644	778	556
d_b, Bicycle Delay [s]	23.47	20.67	16.81	23.47
I_b,int, Bicycle LOS Score for Intersection	2.498	3.273	2.526	2.051
Bicycle LOS	B	C	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Linden Ave / Renaissance Pkwy

Control Type:	Signalized	Delay (sec / veh):	37.8
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.642

Intersection Setup

Name	Northbound			Southbound			Eastbound				Westbound			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration	T T T			T T T			T T T				T T T			
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	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	0.00	0.00	49.21
Speed [mph]	30.00			30.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name																
Base Volume Input [veh/h]	78	272	218	98	260	8	0	36	299	116	0	210	196	93		
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Proportion of CAVs [%]	0.00															
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.000	1.040	1.040	1.040	1.000	1.040	1.040	1.040		
In-Process Volume [veh/h]	6	1	6	0	3	0	0	0	148	7	0	8	146	0		
Site-Generated Trips [veh/h]	7	0	40	0	0	0	0	0	0	10	0	41	0	0		
Diverted Trips [veh/h]	0	0	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	0	0		
Existing Site Adjustment Volume [veh/h]	0	0	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	0	0		
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total Hourly Volume [veh/h]	94	284	273	102	273	8	0	37	459	138	0	267	350	97		
Peak Hour Factor	0.8360	0.8360	0.8360	0.8360	0.8360	0.8360	0.760	0.836	0.836	0.836	0.760	0.836	0.836	0.836		
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Total 15-Minute Volume [veh/h]	28	85	82	31	82	2	0	11	137	41	0	80	105	29		
Total Analysis Volume [veh/h]	112	340	327	122	327	10	0	44	549	165	0	319	419	116		
Presence of On-Street Parking	No		No	No		No	No			No	No			No		
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
v_do, Outbound Pedestrian Volume crossing	0			0			0				0					
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0					
v_co, Outbound Pedestrian Volume crossing	0			0			0				0					
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0					
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0					
Bicycle Volume [bicycles/h]	0			0			0				0					

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	100
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	Lead	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	12	34	0	12	34	0	0	14	29	0	0	25	40	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	25	0	0	25	0	0	0	20	0	0	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No			No	No			No	No	
Maximum Recall	No	No		No	No			No	No			No	No	
Pedestrian Recall	No	No		No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	100	100	100	100	100	100	100	100	100	100	100	100
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	35	35	8	35	35	4	22	22	19	38	38
g / C, Green / Cycle	0.08	0.35	0.35	0.08	0.35	0.35	0.04	0.22	0.22	0.19	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.06	0.18	0.20	0.07	0.09	0.09	0.02	0.20	0.20	0.18	0.15	0.15
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1880	1810	1900	1751	1810	1900	1760
c, Capacity [veh/h]	140	656	558	145	661	654	66	419	386	351	719	666
d1, Uniform Delay [s]	45.38	26.10	26.87	45.38	23.33	23.34	47.59	37.75	37.78	39.42	22.63	22.63
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.19	0.20	0.15	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.04	2.91	4.47	12.27	0.93	0.95	11.19	10.65	11.78	11.69	0.34	0.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.52	0.59	0.84	0.26	0.26	0.67	0.89	0.89	0.91	0.39	0.39
d, Delay for Lane Group [s/veh]	55.42	29.01	31.33	57.65	24.26	24.28	58.79	48.40	49.56	51.12	22.97	23.00
Lane Group LOS	E	C	C	E	C	C	E	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.11	6.87	6.96	3.46	3.00	2.98	1.28	9.89	9.27	8.69	4.74	4.40
50th-Percentile Queue Length [ft/ln]	77.65	171.64	174.11	86.48	74.94	74.45	32.05	247.20	231.85	217.34	118.49	110.03
95th-Percentile Queue Length [veh/ln]	5.59	11.16	11.29	6.23	5.40	5.36	2.31	15.05	14.27	13.53	8.31	7.84
95th-Percentile Queue Length [ft/ln]	139.77	279.07	282.32	155.67	134.90	134.01	57.69	376.13	356.71	338.23	207.75	196.05

Movement, Approach, & Intersection Results

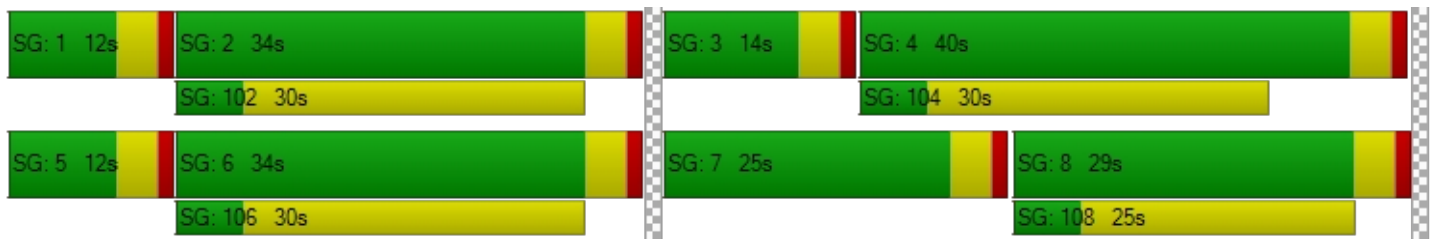
d_M, Delay for Movement [s/veh]	55.42	29.01	31.33	57.65	24.27	24.28	58.79	58.79	48.78	49.56	51.12	51.12	22.98	23.00
Movement LOS	E	C	C	E	C	C	E	E	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	33.78			33.14			49.53			33.49				
Approach LOS	C			C			D			C				
d_I, Intersection Delay [s/veh]	37.78													
Intersection LOS	D													
Intersection V/C	0.642													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	41.41	41.41	41.41	41.41
I_p,int, Pedestrian LOS Score for Intersectio	2.617	2.493	2.560	2.668
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	500	720
d_b, Bicycle Delay [s]	24.50	24.50	28.13	20.48
I_b,int, Bicycle LOS Score for Intersection	2.202	1.938	2.149	2.264
Bicycle LOS	B	A	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: Linden Ave / Miro Way**

Control Type:	Signalized	Delay (sec / veh):	10.1
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.314

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
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	1	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	1	0	0	0	0
Exit Pocket Length [ft]	0.00	49.21	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	13	372	444	90	131	45
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	25	21	0	0	0
Site-Generated Trips [veh/h]	0	34	18	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	446	501	94	136	47
Peak Hour Factor	0.7930	0.7930	0.7930	0.7930	0.7930	0.7930
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	141	158	30	43	15
Total Analysis Volume [veh/h]	18	562	632	119	172	59
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Permissive	Permissive
Signal Group	1	6	2	0	3	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	0
Maximum Green [s]	30	30	30	0	30	0
Amber [s]	3.0	3.0	3.0	0.0	3.0	0.0
All red [s]	1.0	1.0	1.0	0.0	1.0	0.0
Split [s]	9	58	49	0	32	0
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	0.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	20	0	20	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	0.0
Minimum Recall	No	No	No		No	
Maximum Recall	No	No	No		No	
Pedestrian Recall	No	No	No		No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	71	65	65	11	11
g / C, Green / Cycle	0.02	0.79	0.73	0.73	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.16	0.20	0.21	0.10	0.04
s, saturation flow rate [veh/h]	1810	3618	1900	1799	1810	1615
c, Capacity [veh/h]	37	2861	1379	1306	218	194
d1, Uniform Delay [s]	43.62	2.33	4.21	4.27	38.48	36.14
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.61	0.15	0.49	0.56	6.30	0.87
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.20	0.27	0.29	0.79	0.30
d, Delay for Lane Group [s/veh]	53.23	2.49	4.70	4.83	44.78	37.01
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.49	0.84	2.04	2.08	4.01	1.22
50th-Percentile Queue Length [ft/ln]	12.29	20.96	50.94	51.95	100.36	30.44
95th-Percentile Queue Length [veh/ln]	0.88	1.51	3.67	3.74	7.23	2.19
95th-Percentile Queue Length [ft/ln]	22.12	37.73	91.69	93.51	180.65	54.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.23	2.49	4.75	4.83	44.78	37.01
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	4.06		4.76		42.79	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	10.13					
Intersection LOS	B					
Intersection V/C	0.314					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.549	2.495	2.061
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1000	622
d_b, Bicycle Delay [s]	7.20	11.25	21.36
I_b,int, Bicycle LOS Score for Intersection	2.038	2.179	1.560
Bicycle LOS	B	B	A

Sequence





Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: Linden Ave / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	39.0
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.627

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	1	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	12	141	43	209	160	132	78	484	24	46	371	166
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	1	8	10	3	11	8	94	0	11	60	17
Site-Generated Trips [veh/h]	0	0	0	10	0	8	10	0	0	0	0	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	148	53	237	169	156	99	597	25	59	446	214
Peak Hour Factor	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650	0.8650
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]	3	43	15	68	49	45	29	173	7	17	129	62
Total Analysis Volume [veh/h]	14	171	61	274	195	180	114	690	29	68	516	247
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	5	10	0	5	10	0
Maximum Green [s]	0	22	0	0	25	0	5	19	0	8	22	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	26	0	0	29	0	9	23	0	12	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	14	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	R	C	R	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	11	24	24	5	34	34	4	34	34
g / C, Green / Cycle	0.12	0.12	0.27	0.27	0.06	0.38	0.38	0.05	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.10	0.04	0.25	0.11	0.06	0.19	0.19	0.04	0.21	0.21
s, saturation flow rate [veh/h]	1893	1615	1846	1615	1810	1900	1873	1810	1900	1695
c, Capacity [veh/h]	232	198	502	439	101	718	708	89	706	630
d1, Uniform Delay [s]	38.38	35.98	31.97	26.84	42.50	21.50	21.50	42.27	22.54	22.55
k, delay calibration	0.11	0.11	0.38	0.11	0.35	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.11	0.87	22.06	0.61	115.73	2.52	2.55	12.59	3.32	3.74
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.80	0.31	0.93	0.41	1.13	0.50	0.50	0.76	0.57	0.57
d, Delay for Lane Group [s/veh]	44.49	36.85	54.03	27.45	158.23	24.02	24.06	54.86	25.86	26.29
Lane Group LOS	D	D	D	C	F	C	C	D	C	C
Critical Lane Group	Yes	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.30	1.26	12.71	3.18	5.44	6.16	6.08	1.79	7.20	6.51
50th-Percentile Queue Length [ft/ln]	107.57	31.40	317.67	79.43	135.95	153.90	151.96	44.69	179.99	162.80
95th-Percentile Queue Length [veh/ln]	7.70	2.26	18.55	5.72	9.60	10.23	10.12	3.22	11.60	10.70
95th-Percentile Queue Length [ft/ln]	192.61	56.52	463.82	142.97	239.88	255.63	253.04	80.45	290.00	267.42

Movement, Approach, & Intersection Results

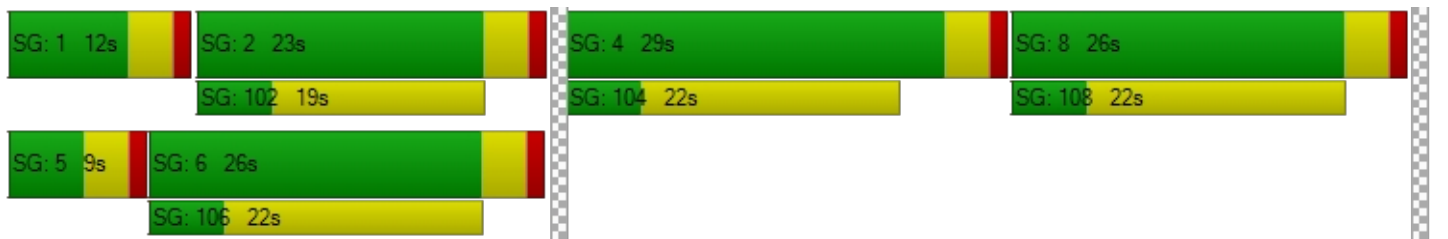
d_M, Delay for Movement [s/veh]	44.49	44.49	36.85	54.03	54.03	27.45	158.23	24.03	24.06	54.86	25.96	26.29
Movement LOS	D	D	D	D	D	C	F	C	C	D	C	C
d_A, Approach Delay [s/veh]	42.60			46.66			42.40			28.42		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	38.96											
Intersection LOS	D											
Intersection V/C	0.627											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.264	2.420	2.602	2.663
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	556	422	489
d_b, Bicycle Delay [s]	25.69	23.47	28.01	25.69
I_b,int, Bicycle LOS Score for Intersection	1.966	2.630	2.247	2.245
Bicycle LOS	A	B	B	B

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Ayala Dr / Baseline Rd**

Control Type:	Signalized	Delay (sec / veh):	35.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name	Northbound				Southbound				Eastbound				Westbound			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration	T T T				T T T				T T				T T			
Turning Movement	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	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	12.00	12.00	12.00	
No. of Lanes in Entry Pocket	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
Entry Pocket Length [ft]	100.00	100.00	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of Lanes in Exit Pocket	0	0	0	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	0.00	0.00	0.00	
Speed [mph]	30.00				30.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name																
Base Volume Input [veh/h]	132	539	83	0	98	495	94	0	123	537	156	0	84	380	38	
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Growth Factor	1.0200	1.0200	1.0200	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	1.000	1.020	1.020	1.020	
In-Process Volume [veh/h]	0	55	41	0	26	50	29	0	49	24	0	0	43	32	19	
Site-Generated Trips [veh/h]	14	0	0	0	7	0	0	0	0	0	10	0	0	10	0	
Diverted Trips [veh/h]	0	0	0	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	0	0	0	
Existing Site Adjustment Volume [veh/h]	0	0	0	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	0	0	0	
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hourly Volume [veh/h]	149	605	126	0	133	555	125	0	174	572	169	0	129	430	58	
Peak Hour Factor	0.9880	0.9880	0.9880	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988	0.920	0.988	0.988	0.988	
Other Adjustment Factor	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Total 15-Minute Volume [veh/h]	38	153	32	0	34	140	32	0	44	145	43	0	33	109	15	
Total Analysis Volume [veh/h]	151	612	128	0	135	562	127	0	176	579	171	0	131	435	59	
Presence of On-Street Parking	No		No	No			No	No			No	No			No	
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
v_do, Outbound Pedestrian Volume crossing	0			0				0				0				
v_di, Inbound Pedestrian Volume crossing m	0			0				0				0				
v_co, Outbound Pedestrian Volume crossing	0			0				0				0				
v_ci, Inbound Pedestrian Volume crossing mi	0			0				0				0				
v_ab, Corner Pedestrian Volume [ped/h]	0			0				0				0				
Bicycle Volume [bicycles/h]	0			0				0				0				

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups															
Lead / Lag	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	9	32	0	0	9	32	0	0	12	39	0	0	10	37	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	23	0	0	0	23	0	0	0	26	0	0	0	28	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No		
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No			No	No			No	No			No	No	
Maximum Recall	No	No			No	No			No	No			No	No	
Pedestrian Recall	No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	42	42	5	42	42	8	21	21	6	19	19
g / C, Green / Cycle	0.06	0.46	0.46	0.06	0.46	0.46	0.09	0.24	0.24	0.07	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.04	0.20	0.20	0.04	0.19	0.19	0.10	0.21	0.21	0.07	0.13	0.13
s, saturation flow rate [veh/h]	3514	1900	1787	3514	1900	1780	1810	1900	1753	1810	1900	1822
c, Capacity [veh/h]	195	875	824	195	875	820	161	455	419	121	412	395
d1, Uniform Delay [s]	41.94	16.37	16.37	41.74	16.10	16.10	41.00	32.77	32.77	42.00	31.80	31.82
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.40	1.58	1.68	4.33	1.40	1.50	61.69	4.81	5.19	63.48	1.46	1.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.44	0.44	0.69	0.41	0.41	1.09	0.86	0.86	1.09	0.61	0.61
d, Delay for Lane Group [s/veh]	48.34	17.95	18.05	46.07	17.49	17.60	102.69	37.58	37.97	105.48	33.26	33.37
Lane Group LOS	D	B	B	D	B	B	F	D	D	F	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.81	5.43	5.13	1.57	4.97	4.68	6.27	8.54	7.92	4.77	5.01	4.84
50th-Percentile Queue Length [ft/ln]	45.22	135.72	128.31	39.31	124.15	117.08	156.71	213.38	198.02	119.26	125.29	121.07
95th-Percentile Queue Length [veh/ln]	3.26	9.25	8.85	2.83	8.62	8.23	10.70	13.33	12.54	8.56	8.68	8.45
95th-Percentile Queue Length [ft/ln]	81.39	231.24	221.20	70.76	215.51	205.81	267.54	333.16	313.41	214.01	217.07	211.29

Movement, Approach, & Intersection Results

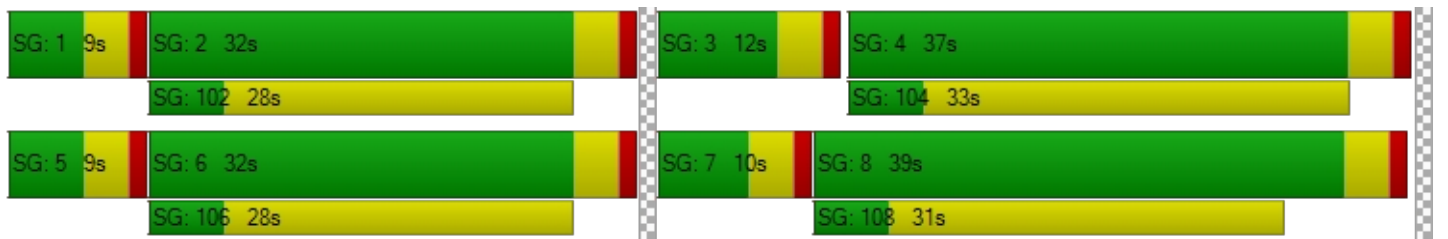
d_M, Delay for Movement [s/veh]	48.34	17.98	18.05	46.07	46.07	17.53	17.60	102.6	102.6	37.71	37.97	105.4	105.4	33.31	33.37	
Movement LOS	D	B	B	D	D	B	B	F	F	D	D	F	F	C	C	
d_A, Approach Delay [s/veh]	23.14			22.22				50.11				48.44				
Approach LOS	C			C				D				D				
d_I, Intersection Delay [s/veh]	35.39															
Intersection LOS	D															
Intersection V/C	0.517															

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	2.740	2.726	2.621	2.587
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	622	778	733
d_b, Bicycle Delay [s]	21.36	21.36	16.81	18.05
I_b,int, Bicycle LOS Score for Intersection	2.295	2.128	2.178	2.075
Bicycle LOS	B	B	B	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 101: Ayala Dr / North Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.072

Intersection Setup

Name	Northbound		Southbound		Westbound	
Approach						
Lane Configuration					T	
Turning Movement	Thru	Right	Left	Thru	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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	568	0	0	586	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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	1	0	0	3	0	0
Site-Generated Trips [veh/h]	0	0	51	0	0	47
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]	592	0	51	612	0	47
Peak Hour Factor	0.9500	1.0000	1.0000	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]	156	0	13	161	0	12
Total Analysis Volume [veh/h]	623	0	51	644	0	49
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	0.05	0.01	0.00	0.07
d_M, Delay for Movement [s/veh]	0.00	0.00	8.83	0.00	22.63	10.67
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.09	0.04	0.23	0.23
95th-Percentile Queue Length [ft/ln]	0.00	0.00	2.19	1.09	5.77	5.77
d_A, Approach Delay [s/veh]	0.00		0.65		10.67	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.71					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 102: Linden Ave / South Project Driveway

Control Type:	Two-way stop	Delay (sec / veh):	20.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.153

Intersection Setup

Name	Northbound			Southbound			Eastbound			Westbound		
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	0	0	0	0	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	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]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	0	417	0	0	534	0	0	0	0	0	0	0
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	1	25	15	3	0	0	0	0	21	0	11
Site-Generated Trips [veh/h]	0	0	34	0	0	0	0	0	0	18	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]	0	435	59	15	558	0	0	0	0	39	0	11
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	114	16	4	147	0	0	0	0	10	0	3
Total Analysis Volume [veh/h]	0	458	62	16	587	0	0	0	0	41	0	12
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.15	0.00	0.02
d_M, Delay for Movement [s/veh]	8.61	0.00	0.00	8.46	0.00	0.00	19.39	23.01	10.08	20.71	24.58	12.14
Movement LOS	A	A	A	A	A	A	C	C	B	C	C	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.60	0.60	0.60
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00	14.94	14.94	14.94
d_A, Approach Delay [s/veh]	0.00			0.22			17.50			18.77		
Approach LOS	A			A			C			C		
d_I, Intersection Delay [s/veh]	0.96											
Intersection LOS	C											

**Intersection Level Of Service Report
Intersection 103: Ayala Dr / Scholl Wy**

Control Type:	Signalized	Delay (sec / veh):	6.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.386

Intersection Setup

Name	Northbound		Southbound		Eastbound	
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	1	0	0	0	0	1
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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name						
Base Volume Input [veh/h]	33	817	857	19	4	28
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	25	156	101	78	59	11
Site-Generated Trips [veh/h]	0	0	0	10	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
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	59	1006	992	108	63	40
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]	16	265	261	28	17	11
Total Analysis Volume [veh/h]	62	1059	1044	114	66	42
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Active Pattern	Pattern 1
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protected	Permissive	Permissive	Permissive	Split	Overlap
Signal Group	1	6	2	0	3	8
Auxiliary Signal Groups						1,8
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	10	10	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	9	49	40	0	41	41
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	0	5	5	0	5	0
Pedestrian Clearance [s]	0	20	10	0	25	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	C	L	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00
g_i, Effective Green Time [s]	4	78	70	70	4	12
g / C, Green / Cycle	0.04	0.86	0.77	0.77	0.05	0.14
(v / s)_i Volume / Saturation Flow Rate	0.03	0.29	0.30	0.32	0.04	0.03
s, saturation flow rate [veh/h]	1810	3618	1900	1836	1810	1615
c, Capacity [veh/h]	80	3118	1469	1420	89	223
d1, Uniform Delay [s]	42.56	1.22	3.33	3.38	42.21	34.33
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.57	0.30	0.79	0.87	11.30	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.34	0.39	0.41	0.74	0.19
d, Delay for Lane Group [s/veh]	57.13	1.51	4.13	4.25	53.51	34.73
Lane Group LOS	E	A	A	A	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.67	0.54	2.63	2.69	1.71	0.83
50th-Percentile Queue Length [ft/ln]	41.82	13.62	65.84	67.21	42.79	20.77
95th-Percentile Queue Length [veh/ln]	3.01	0.98	4.74	4.84	3.08	1.50
95th-Percentile Queue Length [ft/ln]	75.28	24.51	118.51	120.97	77.02	37.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.13	1.51	4.18	4.25	53.51	34.73
Movement LOS	E	A	A	A	D	C
d_A, Approach Delay [s/veh]	4.59		4.19		46.21	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	6.28					
Intersection LOS	A					
Intersection V/C	0.386					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersectio	0.000	2.747	2.034
Crosswalk LOS	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	800	822
d_b, Bicycle Delay [s]	11.25	16.20	15.61
I_b,int, Bicycle LOS Score for Intersection	2.484	2.515	1.560
Bicycle LOS	B	B	A

Sequence

Ring 1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 104: Ayala Dr / Project Driveway (Exit Only)

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Northbound		Southbound		Eastbound	
Approach						
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]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	Northbound		Southbound		Eastbound	
Base Volume Input [veh/h]	0	817	857	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	2.00	2.00	0.00
Growth Factor	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400
In-Process Volume [veh/h]	0	181	112	0	0	5
Site-Generated Trips [veh/h]	0	0	0	0	0	7
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	1031	1003	0	0	12
Peak Hour Factor	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	271	264	0	0	3
Total Analysis Volume [veh/h]	0	1085	1056	0	0	13
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
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	0.01	0.01	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.39
Movement LOS		A	A			B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.08
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.00
d_A, Approach Delay [s/veh]	0.00		0.00		12.39	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.07					
Intersection LOS	B					

APPENDIX D

**CUMULATIVE PROJECTS
INFORMATION**

TOTAL CUMULATIVE PROJECTS TRAFFIC

		AM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Ayala Drive at SR-210 WB Ramps	133	142	0	0	207	138	0	0	0	150	0	89
2	Ayala Drive at SR-210 EB Ramps	0	186	137	138	218	0	89	0	140	0	0	0
3	Ayala Drive at Renaissance Parkway	14	163	7	0	189	168	159	7	7	4	4	0
4	Linden Avenue at Renaissance Parkway	7	3	7	0	1	0	0	163	4	4	175	0
5	Linden Avenue at Miro Way	0	12	0	0	22	0	0	0	0	0	0	0
6	Linden Avenue at Baseline Road	0	3	12	15	1	7	4	64	0	9	95	8
7	Ayala Drive at Baseline Road	5	55	24	16	72	56	32	44	8	18	31	16
8	Linden Avenue at North Project Driveway	0	17	0	0	8	0	0	0	0	0	0	0
9	Linden Avenue at South Project Driveway	0	3	12	7	1	0	0	0	0	22	0	14
10	Ayala Drive at Scholl Way	0	117	0	0	172	0	0	0	0	0	0	0
11	Ayala Drive at Project Driveway	0	117	0	0	172	0	0	0	22	0	0	0

		PM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Ayala Drive at SR-210 WB Ramps	128	214	0	0	161	102	0	0	0	123	0	142
2	Ayala Drive at SR-210 EB Ramps	0	200	139	102	180	0	142	0	119	0	0	0
3	Ayala Drive at Renaissance Parkway	11	199	6	0	157	140	141	6	14	8	8	0
4	Linden Avenue at Renaissance Parkway	6	1	6	0	3	0	0	148	7	8	146	0
5	Linden Avenue at Miro Way	0	25	0	0	21	0	0	0	0	0	0	0
6	Linden Avenue at Baseline Road	0	1	8	10	3	11	8	94	0	11	60	17
7	Ayala Drive at Baseline Road	10	65	16	17	60	29	57	30	5	22	39	15
8	Linden Avenue at North Project Driveway	0	12	0	0	18	0	0	0	0	0	0	0
9	Linden Avenue at South Project Driveway	0	1	25	15	3	0	0	0	0	21	0	11

Int. #: 1 Ayala Drive at SR-210 WB Ramps

Mirror distribution? **N** Entire Intersection

Mirror distribution?

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	115	0	0	22	0	0	0	0	141	0	89	
AM Out	111	13	0	0	178	138	0	0	0	0	0	0	
AM Tot	111	128	0	0	200	138	0	0	0	141	0	89	
PM In	0	182	0	0	13	0	0	0	0	103	0	142	
PM Out	112	21	0	0	132	102	0	0	0	0	0	0	
PM Tot	112	203	0	0	145	102	0	0	0	103	0	142	

Zone # 1 Cumulative Projects #1,8,9,10,13,14

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In										10%		
N	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out	10%											
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%
PM Out	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	841	0	0	0	0	0	0	0	0	0	84	0	0
AM Out	796	80	0	0	0	0	0	0	0	0	0	0	0
PM In	700	0	0	0	0	0	0	0	0	0	70	0	0
PM Out	704	70	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 Cumulative Project #2

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		25%										20%
N	0%	0%	0%	0%	25%	20%	0%	0%	0%	0%	0%	0%
AM Out					25%	20%						
PM In	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%
PM Out	0%	0%	0%	0%	25%	20%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	120	0	30	0	0	0	0	0	0	0	0	0	24
AM Out	407	0	0	0	0	102	81	0	0	0	0	0	0
PM In	438	0	110	0	0	0	0	0	0	0	0	0	88
PM Out	246	0	0	0	0	62	49	0	0	0	0	0	0

Zone # 3 Cumulative Projects #3,5,6,7

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					5%					10%		
N	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out	5%	5%										
PM In	0%	0%	0%	0%	5%	0%	0%	0%	0%	10%	0%	0%
PM Out	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	0	0	0	10	0	0	0	0	20	0	0
AM Out	78	4	4	0	0	0	0	0	0	0	0	0	0
PM In	92	0	0	0	0	5	0	0	0	0	9	0	0
PM Out	205	10	10	0	0	0	0	0	0	0	0	0	0

Zone # 4 Cumulative Project #4

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		40%										30%
N	0%	0%	0%	0%	40%	30%	0%	0%	0%	0%	0%	0%
AM Out					40%	30%						
PM In	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%
PM Out	0%	0%	0%	0%	40%	30%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	81	0	0	0	0	0	0	0	0	0	61
AM Out	188	0	0	0	0	75	56	0	0	0	0	0	0
PM In	174	0	70	0	0	0	0	0	0	0	0	0	52
PM Out	164	0	0	0	0	66	49	0	0	0	0	0	0

Int. #: 2 Ayala Drive at SR-210 EB Ramps

Mirror distribution? **N** Entire Intersection

Mirror distribution?

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		0	26	0	0	163	0	89	0	131	0	0	0
AM Out		0	124	115	138	39	0	0	0	0	0	0	0
AM Tot		0	150	115	138	202	0	89	0	131	0	0	0
PM In		0	39	0	0	116	0	142	0	99	0	0	0
PM Out		0	134	123	102	28	0	0	0	0	0	0	0
PM Tot		0	173	123	102	144	0	142	0	99	0	0	0

Zone # 1 Cumulative Projects #1,8,9,10,13,14

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					10%				10%			
N	0%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out		10%	10%									
PM In	0%	0%	0%	0%	10%	0%	0%	0%	10%		0%	0%
PM Out	0%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	841	0	0	0	0	84	0	0	0	84	0	0	0
AM Out	796	0	80	80	0	0	0	0	0	0	0	0	0
PM In	700	0	0	0	0	70	0	0	0	70	0	0	0
PM Out	704	0	70	70	0	0	0	0	0	0	0	0	0

Zone # 2 Cumulative Project #2

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		5%					20%					
N	0%	0%	0%	20%	5%	0%	0%	0%	0%	0%	0%	0%
AM Out				20%	5%							
PM In	0%	5%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	20%	5%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	120	0	6	0	0	0	0	24	0	0	0	0	0
AM Out	407	0	0	0	81	20	0	0	0	0	0	0	0
PM In	438	0	22	0	0	0	0	88	0	0	0	0	0
PM Out	246	0	0	0	49	12	0	0	0	0	0	0	0

Zone # 3 Cumulative Projects #3,5,6,7

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					15%				5%			
N	0%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out		10%	10%									
PM In	0%	0%	0%	0%	15%	0%	0%	0%	5%	0%	0%	0%
PM Out	0%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	0	0	0	30	0	0	0	10	0	0	0
AM Out	78	0	8	8	0	0	0	0	0	0	0	0	0
PM In	92	0	0	0	0	14	0	0	0	5	0	0	0
PM Out	205	0	21	21	0	0	0	0	0	0	0	0	0

Zone # 4 Cumulative Project #4

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		10%					30%					
N	0%	0%	0%	30%	10%	0%	0%	0%	0%	0%	0%	0%
AM Out				30%	10%							
PM In	0%	10%	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	30%	10%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	20	0	0	0	0	61	0	0	0	0	0
AM Out	188	0	0	0	56	19	0	0	0	0	0	0	0
PM In	174	0	17	0	0	0	0	52	0	0	0	0	0
PM Out	164	0	0	0	49	16	0	0	0	0	0	0	0

Int. #: 3 Ayala Drive at Renaissance Parkway

Mirror distribution? **Y** Entire Intersection

Mirror distribution? **Y**

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		0	26	0	0	125	168	0	0	0	0	0	0
AM Out		0	79	0	0	39	0	159	0	0	0	0	0
AM Tot		0	105	0	0	164	168	159	0	0	0	0	0
PM In		0	39	0	0	73	140	0	0	0	0	0	0
PM Out		0	117	0	0	28	0	141	0	0	0	0	0
PM Tot		0	156	0	0	101	140	141	0	0	0	0	0

Zone # 1 Cumulative Projects #1,8,9,10,13,14

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						20%						
Y	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	20%	0%	0%	0%		0%	0%
PM Out	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	841	0	0	0	0	0	168	0	0	0	0	0	0
AM Out	796	0	0	0	0	0	0	159	0	0	0	0	0
PM In	700	0	0	0	0	0	140	0	0	0	0	0	0
PM Out	704	0	0	0	0	0	0	141	0	0	0	0	0

Zone # 2 Cumulative Project #2

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		5%										
Y	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	120	0	6	0	0	0	0	0	0	0	0	0	0
AM Out	407	0	0	0	0	20	0	0	0	0	0	0	0
PM In	438	0	22	0	0	0	0	0	0	0	0	0	0
PM Out	246	0	0	0	0	12	0	0	0	0	0	0	0

Zone # 3 Cumulative Projects #3,5,6,7

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In					20%							
Y	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	0	0	0	40	0	0	0	0	0	0	0
AM Out	78	0	16	0	0	0	0	0	0	0	0	0	0
PM In	92	0	0	0	0	18	0	0	0	0	0	0	0
PM Out	205	0	41	0	0	0	0	0	0	0	0	0	0

Zone # 4 Cumulative Project #4

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		10%										
Y	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	20	0	0	0	0	0	0	0	0	0	0
AM Out	188	0	0	0	0	19	0	0	0	0	0	0	0
PM In	174	0	17	0	0	0	0	0	0	0	0	0	0
PM Out	164	0	0	0	0	16	0	0	0	0	0	0	0

Int. #: 7 Ayala Drive at Baseline Road

Mirror distribution? Y Entire Intersection

Mirror distribution? [Pink Box]

TOTAL CUMULATIVE PROJECTS TRAFFIC													
Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM In	0	50	24	0	0	40	12	37	0	0	0	12	
AM Out	0	0	0	9	57	9	16	0	0	18	27	0	
AM Tot	0	50	24	9	57	49	28	37	0	18	27	12	
PM In	0	55	16	0	0	18	8	24	0	0	0	8	
PM Out	0	0	0	11	50	11	41	0	0	22	32	0	
PM Tot	0	55	16	11	50	29	49	24	0	22	32	8	

Zone # 1 Cumulative Projects #1,8,9,10,13,14

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In												
Y	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	841	0	0	0	0	0	0	0	0	0	0	0	0
AM Out	796	0	0	0	0	0	0	0	0	0	0	0	0
PM In	700	0	0	0	0	0	0	0	0	0	0	0	0
PM Out	704	0	0	0	0	0	0	0	0	0	0	0	0

Zone # 2 Cumulative Project #2

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		5%										
Y	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	120	0	6	0	0	0	0	0	0	0	0	0	0
AM Out	407	0	0	0	0	20	0	0	0	0	0	0	0
PM In	438	0	22	0	0	0	0	0	0	0	0	0	0
PM Out	246	0	0	0	0	12	0	0	0	0	0	0	0

Zone # 3 Cumulative Projects #3,5,6,7

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In						20%						
Y	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	0	0	0	0	40	0	0	0	0	0	0
AM Out	78	0	0	0	0	0	0	16	0	0	0	0	0
PM In	92	0	0	0	0	0	18	0	0	0	0	0	0
PM Out	205	0	0	0	0	0	0	41	0	0	0	0	0

Zone # 4 Cumulative Project #4

Pk Hr	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In		10%										
Y	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
AM Out												
PM In	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PM Out	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%

Pk Hr	T Gen	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
AM In	202	0	20	0	0	0	0	0	0	0	0	0	0
AM Out	188	0	0	0	0	19	0	0	0	0	0	0	0
PM In	174	0	17	0	0	0	0	0	0	0	0	0	0
PM Out	164	0	0	0	0	16	0	0	0	0	0	0	0

APPENDIX E

**VEHICLE MILES TRAVELED
MEMORANDUM**



VMT Analysis Project Scoping Form

This scoping form shall be submitted to the City of Rialto to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Renaissance II Residential Project
Project Address:	East side of Linden Avenue, approximately 900 feet south of Renaissance Parkway
Project Opening Year:	2026
Project Description:	292 Single-Family Attached and Detached Dwelling Units

	Consultant:	Developer:
Name:	Kimley-Horn and Associates, Inc.	Lewis-Hillwood Rialto Company, LLC
Address:	3801 University Avenue #300 Riverside, CA 92501	1156 North Mountain Avenue Upland, CA 91785-0670
Telephone:	(951) 543-9868	(909) 985-0971
Fax/Email:		

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual, 11th Edition

Current General Plan Land Use:
Vacant

Proposed General Plan Land Use:
Single-Family Residential

Current Zoning:
Rialto RSP – (MHDR, LDR)

Proposed Zoning:
MDR (12.73 du/ac)



	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	NA	NA	NA	44	97	141
PM Trips	NA	NA	NA	95	72	167

Trip Internalization: Yes No (0% % Trip Discount)

Pass-By Allowance: Yes No (0% % Trip Discount)

Potential Screening Checks

Is the project screened from VMT assessment? Yes No

VMT screening justification _____

VMT Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used _____
- Attach SBCTA Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

The proposed project would generate significantly less trips than the land use assumptions noted in the RSPA Traffic Impact Analysis (dated September 20, 2016) for the project site. The proposed project would generate 903 fewer trips on a daily basis, with 92 fewer trips in the morning peak hour, and 129 fewer trips in the evening peak hour. The proposed project would not change the Specific Plan DEIR determination regarding impacts associated with increased traffic volumes. Therefore, the proposed project would create a less-than-significant VMT impact, and no further VMT analysis is needed (See attached VMT Memo).



Approved by:

Justin Schlaefli

3/10/2025

Public Works Department

Date

NOTE:

The Applicant/Engineer acknowledges that the Scoping Agreement is intended to assist in the preparation of any required TIA. It is preliminary in nature and the City does not have sufficient data to determine the ultimate conditions that may be imposed for the project. It does not provide nor limit the requirements imposed on the Project but is intended only to provide initial input into the parameters for review of the traffic generated by the Project and the initial areas to be considered and studied. Subsequent changes to scope of required analysis to be included in the TIA may be required by the Transportation Commission, Planning Commission, and/or the City Council upon Public Works Director/City Engineer review and approval



October 10, 2024

Daniel Casey
Senior Planner
City of Rialto
150 S. Palm Avenue
Rialto, Ca 92376

Subject: *Vehicle Miles Traveled Memorandum for Renaissance II Residential Project in the City of Rialto*

Dear Mr. Casey:

Kimley-Horn and Associates, Inc. has prepared a Vehicle Miles Traveled (VMT) memorandum for the proposed Renaissance II Residential Project located east of Linden Avenue, approximately 900 feet south of Renaissance Parkway, in the City of Rialto. This VMT memorandum is based on the City of Rialto *Traffic Impact Analysis Guidelines for VMT and Level of Service (LOS) Assessment* (VMT Guidelines, October 2021).

PROJECT DESCRIPTION

The project site is located east of Linden Avenue, approximately 900 feet south of Renaissance Parkway, in the City of Rialto. The project site is bounded by Renaissance Marketplace to the north, Linden Avenue to the west, and vacant land to the south and east. The project site is located on 24.11 acres of vacant land. The project will involve the construction of 292 single-family dwelling units. A copy of the project site plan is provided on Figure 1.

Vehicular access provisions for the project site would be provided via one full-movement driveway and one right-out exit-only driveway on Linden Ave. All project driveways would have gated access and would be unsignalized.

TRIP GENERATION COMPARISON

A trip generation analysis has been prepared to evaluate the consistency of the trip generating characteristics for the proposed project, compared to the assumed land uses for the project site in the Rialto Renaissance Specific Plan Amendment (RSPA).



NOT TO SCALE

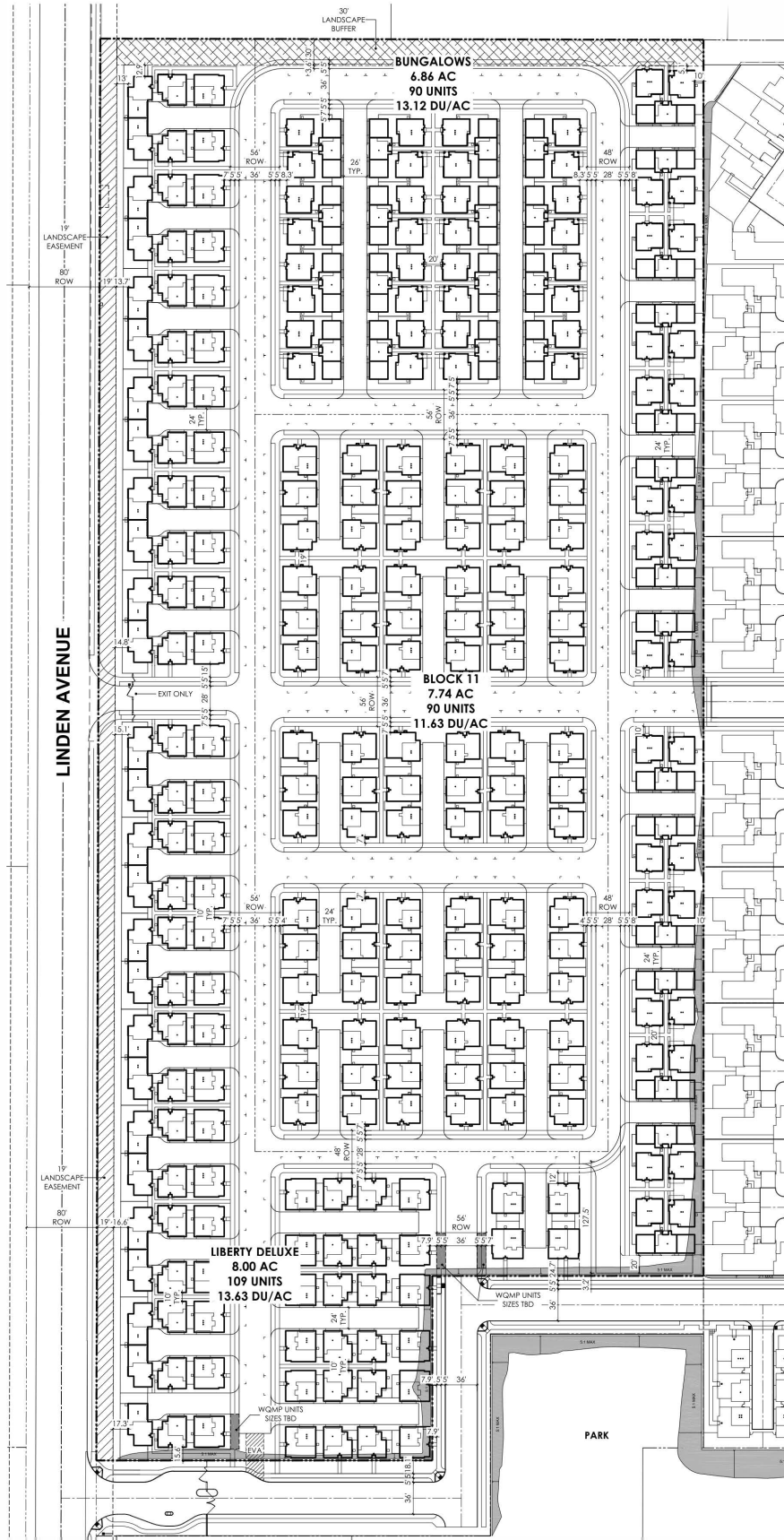


FIGURE 1
PROJECT SITE PLAN

Potential Planning Area Trips – Project Site

The RSPA Traffic Impact Analysis (dated: September 20, 2016), provides trip generation estimates, based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition), for the Renaissance Specific Plan Amendment.

The RSPA trip generation estimates for the project site include trips from the following Planning Areas (PA) and estimated quantities:

- PA 110 (Partial): MHDR – Residential Condo/Townhouse (ITE Code 230) = 212 DU (67% of PA)
- PA 113: LDR – Single-Family Detached Housing (ITE Code 210) = 186 DU

Based on the proposed land use quantities, the project planning area would generate approximately 3,005 daily trips, with 233 total trips (50 inbound and 183 outbound) during the morning peak hour and 296 total trips (191 inbound and 105 outbound) during the evening peak hour. Trip generation estimates are shown on Table 1.

Trip Generation – Proposed Project

Trip generation estimates for the proposed project were based on the current ITE Trip Generation Manual (11th Edition) trip rates for Single-Family Attached Housing (ITE Code – 215). Trip generation rates and the resulting trip generation estimates for the proposed project are summarized on Table 1 (previously mentioned). The project is estimated to generate approximately 2,102 daily trips, with 141 total trips (44 inbound and 97 outbound) in the morning peak hour and 167 total trips (95 inbound and 72 outbound) in the evening peak hour.

When comparing the proposed project trip generation to the estimated trip generation of the project site using the Renaissance Specific Plan Amendment assumed land uses, the proposed project would generate approximately 903 fewer trips on a daily basis, with 92 fewer total trips in the morning peak hour and 129 fewer total trips in the evening peak hour.

Based on the trip generation comparison, the proposed project trip generation estimates are materially less than the estimated trips for the proposed site based on the assumed land uses in the project site Planning Areas in the Renaissance Specific Plan Amendment.

ATTACHMENT 2
SUMMARY OF PROJECT TRIP GENERATION
RENAISSANCE II RESIDENTIAL PROJECT

Land Use	ITE Code	Unit	Trip Generation Rates ¹						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Attached Housing	215	DU	7.200	0.149	0.331	0.480	0.325	0.245	0.570
Trip Generation Estimates									
Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
			<i>Renaissance Specific Plan Amendment (RSPA) Trips - Project Site ²</i>						
PA 110 (MHDR; 67% of PA)	212	DU	1,234	15	78	93	74	36	110
PA 113 (LDR)	186	DU	1,771	35	105	140	117	69	186
<i>Total Approved Trips</i>			3,005	50	183	233	191	105	296
<i>Proposed Project</i>									
Single-Family Attached Housing	292	DU	2,102	44	97	141	95	72	167
<i>Total Proposed Project Trips</i>			2,102	44	97	141	95	72	167
Net Difference (Proposed Minus Existing)			-903	-6	-86	-92	-96	-33	-129

¹ Source: Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition (September, 2021)

² Source: LSA Associates, *RSPA Traffic Impact Analysis* (September 20, 2016)

VEHICLE MILES TRAVELED (VMT) ASSESSMENT

Senate Bill 743 (SB 743) was approved by California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular "Level of Service" (LOS) for evaluating transportation projects. OPR has prepared a technical advisory ("OPR Technical Advisory") for evaluating transportation impacts in CEQA and has recommended that Vehicle Miles Traveled (VMT) replace LOS as the primary measure of transportation impacts. The Natural Resources Agency has adopted updates to CEQA Guidelines to incorporate SB 743 that requires VMT for the purposes of determining a significant transportation impact under CEQA.

The City of Rialto *Traffic Impact Analysis Guidelines for VMT and Level of Service (LOS) Assessment* (October 2021) provide details on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed level analysis. Screening thresholds are broken down into the following four criteria:

1. Transit Priority Area (TPA) Screening
2. Low VMT Area Screening
3. Project Type Screening
4. Small Projects

Land development projects that meet one or more of the above screening thresholds may be presumed to create a less-than-significant impact on transportation and circulation. The screening thresholds were reviewed and evaluated for this project.

Transit Priority Area (TPA) Screening

A project located within a TPA as determined by the San Bernardino Transportation Analysis (SBTAM) VMT Screening would be considered to have a less-than-significant transportation impact. Based on the SBCTA VMT Screening Tool, the proposed project is not located within a TPA.

The Transit Priority Area threshold is not met.

Low VMT Area Screening

A project located within a low VMT generating area as determined by the SBCTA VMT Screening Tool and the City's VMT Guidelines would be considered to have a less-than-significant transportation impact. Based on the SBCTA VMT Screening Tool and the City's VMT Guidelines, the proposed project is not located within a low VMT area.

The Low VMT Area threshold is not met.

Project Type Screening

The City's VMT Guidelines identify that the following project types would be presumed to have a less-than-significant VMT impact:

- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving retail uses less than 50,000 square feet, including:
 - Gas stations
 - Banks
 - Restaurants
 - Shopping Center
- Local-serving hotels (e.g., non-destination hotels)
- Student housing projects on or adjacent to college campuses
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (Public libraries, fire stations, local government)
- Local-serving community colleges that are consistent with the assumptions noted in the RTP/SCS Affordable or supportive housing
- Assisted living facilities
- Senior housing as defined by the U.S. Department of Housing and Urban Development (HUD)
- Projects generating less than 110 daily vehicle trips
 - This generally corresponds to the following "typical" development potentials:
 - 11 single family housing units
 - 16 multi-family, condominiums, or townhouse housing units
 - 10,000 sq. ft. of office
 - 15,000 sq. ft. of light industrial
 - 63,000 sq. ft. of warehousing
 - 79,000 sq. ft. of high cube transload and short-term storage warehouse

The project will involve the construction of 292 single-family dwelling units that generates more than 110 daily trips; therefore, the project would not be screened out based on project type.

The Project Type Screening threshold is not met.

VMT Analysis

In September 2016, LSA analyzed trip generation estimates and traffic impacts associated with the Renaissance Specific Plan Amendment. As noted previously in this VMT memorandum, compared to the assumed Planning Area land uses for the project site, the proposed project would generate approximately 903 fewer trips on a daily basis, with 92 fewer total trips in the morning peak hour and 129 fewer total trips in the evening peak hour.

The proposed project would generate significantly less trips than the land use assumptions noted in the RSPA Traffic Impact Analysis (September 20, 2016) for the project site. The proposed project would not change the Specific Plan DEIR determination regarding impacts associated with increased traffic volumes. Therefore, the proposed project would create a less-than-significant VMT impact, and no further analysis is required.

FINDINGS AND CONCLUSIONS

Based on the VMT assessment noted in this memorandum, the proposed project would create a less-than-significant VMT impact, compared to the assumed land uses for the project site in the Renaissance Specific Plan Amendment. Therefore, no further analysis is required for the proposed project.

Please contact me if you have any questions or if you need additional information.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Trevor Briggs, P.E (C87664)