

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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**EXHIBIT A – SCOPING AGREEMENT****SCOPING AGREEMENT FOR CHINO'S TRAFFIC IMPACT ANALYSIS**

Project Name: Eden Mixed-Use

Address / Location: Northwest corner of Euclid Av. (SR-83) & Schaefer Av.

Project Description: 282 MF DUs, 145,000 SF self storage, 7,000 SF of fast-food, 12,500 of food/retail

Chino Project No.: _____ Specific Plan: East Chino SP

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>Urban Crossroads - Charlene So</u>	<u>Orbis Real Estate Group & Clark Investment Group</u>
Address:	<u>1133 Camelback St. #8329, Newport Beach</u>	<u>280 Newport Center, Suite 240, Newport Beach</u>
Telephone:	<u>949-861-0177</u>	
E-mail:	<u>cso@urbanxroads.com</u>	

A. Trip Generation

Source: ITE 10th Edition Other: ITE Trip Generation Manual (11th Edition, 2021)

Current Land Use: General Commercial - GC Proposed Land Use: MU - mixed use

Current Zoning: GG Proposed Zoning: MU

<u>One-Way Trip Ends in PCE</u>	<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>
Total Project Trips:			4,468
AM Peak Hour (-):	221	216	437
PM Peak Hour (-):	193	159	352
Other (-):			

Internal Capture: Yes / No Percentage: _____ % See attached

Pass-By Trips: Yes / No Percentage: Varies %

B. Trip Geographic Distribution

Attach exhibit showing detailed distribution

See attached memo

**C. Traffic Projections**

Existing:	2023	Count Year:	2023
Project Opening Year:	2024	Growth Rate:	2%
General Plan Horizon Year:	2045	Growth Rate:	SBTAM Model-Based
Other:		Growth Rate:	

D. Study Intersections

1. See attached memo	4.
2.	5.
3.	6.

E. Study Area Roadway Segments

1. See attached memo

2.

F. Other Jurisdictional Impacts

Is this project within a one-mile radius of the Sphere of Influence of another City or County boundary? ☒ Yes ☐ No If so, name of Jurisdiction(s): Caltrans, City of Ontario

G. Site Plan

Attach reduced site plan. See attached memo

H. SB-743: Vehicles per Mile Traveled

VMT analysis based on Chino's draft threshold and methodology. To be provided under separate cover

I. Specific Issues to be addressed

1. Traffic signal warrant analysis for unsignalized intersections

2. Site access queuing analysis

3. See also attached memo

Approved by:

City of Chino, Transportation Manager: _____

Date: _____



DATE: October 23, 2023
TO: Dennis Ralls, City of Chino
FROM: Charlene So, Urban Crossroads
JOB NO: 14698-07 TA Scope

EDEN MIXED-USE TRAFFIC STUDY SCOPING AGREEMENT

Urban Crossroads, Inc. is pleased to submit the following Traffic Study Scoping Agreement for the proposed Eden Mixed-Use development (**Project**), which is located on the northwest corner of Euclid Avenue (SR-83) and Schaefer Avenue in the City of Chino. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations. The following scope of work is based on the City of Chino’s Traffic Impact Analysis Guidelines (dated December 2020) (**City Guidelines**).

PROPOSED PROJECT

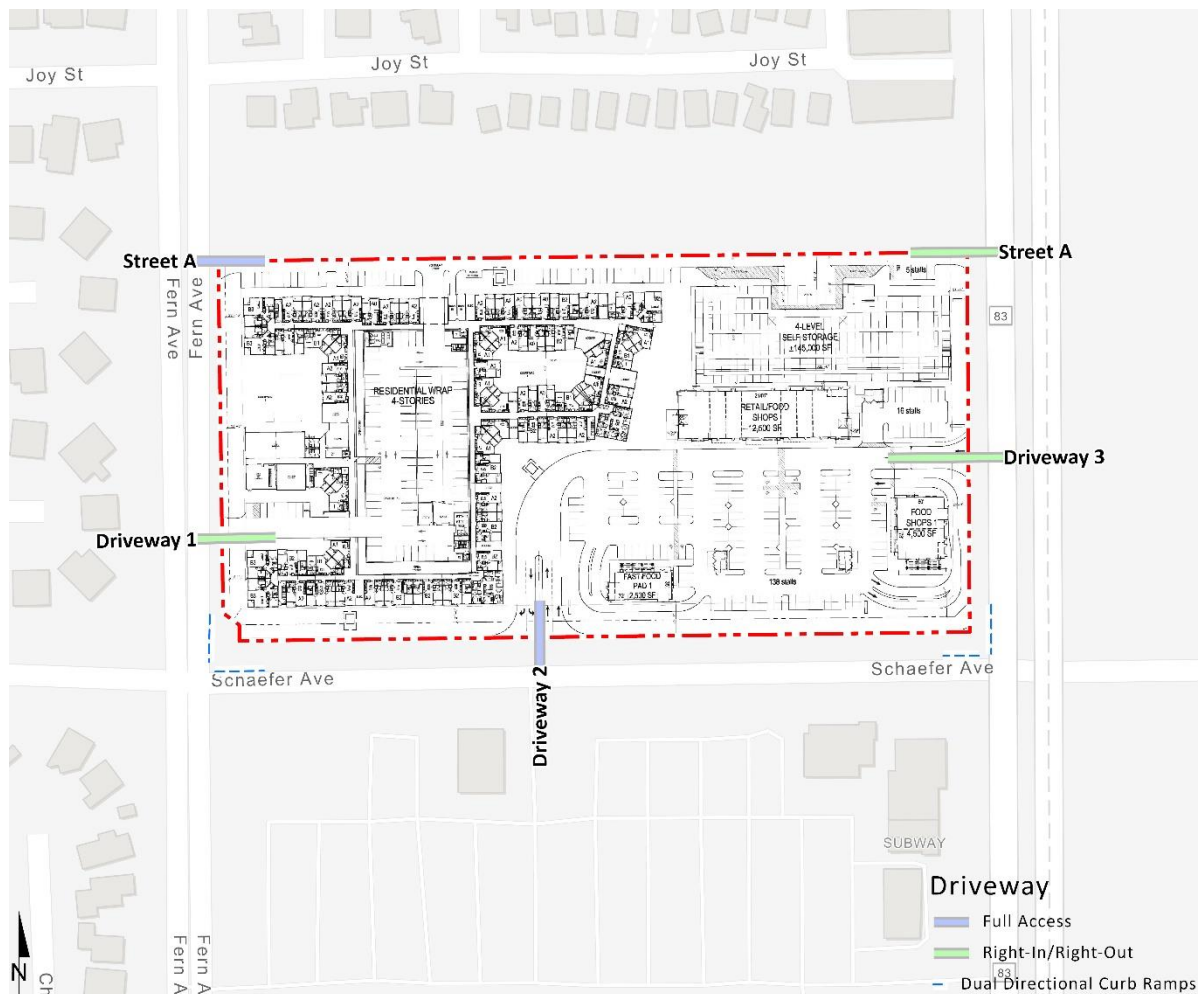
The proposed Project is to consist of the development of the following uses:

- Four-story residential component with 282 multifamily (mid-rise) residential dwelling units
- Four-story self-storage component with 145,000 square feet of self-storage use
- A retail component that consists of 2 fast-food restaurant with drive-through window pads totaling 7,000 square feet and a 12,500 square foot retail pad (assuming 9,400 square feet of fast-food restaurant without drive-through window use and 3,100 square feet of retail use)

A preliminary site plan for the proposed Project is shown on Exhibit 1. It is anticipated that the Project would be developed in a single phase with an anticipated Opening Year of 2024. As indicated on Exhibit 1, access to the Project site will be provided to the site fronting roadways of Fern Avenue, Schaefer Avenue, and Euclid Avenue (SR-83). Access to the site will be accommodated as follows:

- Fern Avenue at Street A – full access (no turn restrictions, would require existing median modifications)
- Fern Avenue at Driveway 1 – right-in/right-out access only
- Driveway 2 at Schaefer Avenue – full access (to align with existing driveway to the south)
- Euclid Avenue (SR-83) at Street A – right-in/right-out access only
- Euclid Avenue (SR-83) at Driveway 3 – right-in/right-out access only

EXHIBIT 1: PRELIMINARY SITE PLAN



The development of the Project is to include the reconstruction of the northeast corner of Fern Avenue & Schaefer Avenue to include two directional curb ramps with associated facilities (pedestrian push button, clear space).

TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates used to estimate Project traffic are shown in Table 1. The trip generation rates used for this analysis are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation Manual (11th Edition, 2021).



TABLE 1: TRIP GENERATION RATES

Land Use ¹	ITE		AM Peak Hour			PM Peak Hour			Weekday	Saturday Peak Hour		
	Code	Units ²	In	Out	Total	In	Out	Total	Daily	In	Out	Total
Mini-Warehouse (Self-Storage)	151	TSF	0.05	0.04	0.09	0.07	0.08	0.15	1.45	0.11	0.06	0.17
Multifamily (Mid-Rise) Residential (4-10 Floors)	221	DU	0.09	0.28	0.37	0.24	0.15	0.39	4.54	0.20	0.19	0.39
Strip Retail (<40,000 SF)	822	TSF	1.42	0.94	2.36	3.30	3.29	6.59	54.45	3.35	3.22	6.57
Fast-Food Restaurant without Drive-Thru	933	TSF	25.04	18.14	43.18	16.61	16.60	33.21	450.49	26.75	27.85	54.60
Fast-Food Restaurant with Drive-Thru	934	TSF	22.75	21.86	44.61	17.18	15.85	33.03	467.48	28.18	27.07	55.25

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

² TSF = thousand square feet; DU = Dwelling Units

Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site. In other words, trips may be made between individual retail, residential, and restaurant uses on-site and can be made either by walking or using internal roadways without using external streets. Internal capture reductions between the proposed land uses have been considered based on the National Cooperative Highway Research Program (**NCHRP**) 684 Internal Trip Capture Estimation Tool (see Attachment A).

The internal capture reduction accounts for the interconnected nature of the Project. Trips generated between different on-site land uses, such as retail, residential, and restaurant facilities can efficiently occur via walking or utilizing internal roadways within the site itself, without impacting or adding traffic volumes to the external streets. This reduction factor aligns with the established practices for estimating the true effect of the trip generation within mixed-use developments, where the close proximity of the various land uses encourages internal trips.

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. These types of trips are associated with retail and restaurant uses. As the Project is proposed to include both retail and restaurant uses, pass-by reduction percentages have been obtained and applied from the latest ITE Trip Generation Manual, 11th Edition (2021).

Pass-by trips are drawn from the passing traffic stream but are always included in the Project driveway movements. Therefore, while a reduction is shown in the trip generation, the pass-by trip reductions are reconfigured from the through traffic to instead enter and then exit the Project by utilizing Project driveways.

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project is shown on Table 2. As shown in Table 2, the proposed Project is anticipated to generate a total of 4,468 trip-ends per weekday, 437 AM peak hour trips, 352 PM peak hour trips, and 509 Saturday peak hour trips. Pass-by trip reductions will be added back to applicable driveway locations along Schaefer Avenue and Euclid Avenue (SR-83).



TABLE 2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Weekday Daily	Saturday Peak Hour ²		
		In	Out	Total	In	Out	Total		In	Out	Total
Self-Storage Facility	145,000 TSF	8	5	13	10	12	22	210	15	9	24
Multifamily (Mid-Rise) Residential	282 DU	24	80	104	67	43	110	1,280	56	54	110
Internal Capture (Retail):		0	-1	-1	-3	-1	-4	-48	-3	-1	-4
Internal Capture (Restaurant):		-1	-16	-17	-11	-9	-20	-234	-9	-11	-20
Residential Total		23	63	86	53	33	86	998	44	42	86
Retail Shops	3,100 TSF	4	3	7	10	10	20	169	10	10	20
Internal Capture (Restaurant):		0	0	0	-5	-3	-8	-68	-5	-3	-8
Internal Capture (Residential):		-1	0	-1	-1	-3	-4	-34	-1	-3	-4
Pass-by Reduction (40% PM/Daily):		0	0	0	-2	-2	-4	-28	-2	-2	-4
Commercial Retail Subtotal		3	3	6	2	2	4	40	2	2	4
Fast-Food Restaurant without Drive-Thru	7,000 TSF	175	127	302	116	116	232	3,154	187	195	382
Internal Capture (Retail):		0	0	0	-1	-2	-3	-46	-1	-2	-3
Internal Capture (Residential):		-7	0	-7	-5	-7	-12	-160	-6	-6	-12
Pass-by Reduction (50% AM; 55% PM/Daily):		-84	-84	-168	-59	-59	-118	-1,622	-103	-103	-206
Fast-Food Restaurant with Drive-Thru	9,400 TSF	214	205	419	161	149	310	4,394	265	254	519
Internal Capture (Retail):		0	0	0	-2	-3	-5	-66	-2	-3	-5
Internal Capture (Residential):		-9	-1	-10	-4	-4	-8	-118	-5	-3	-8
Pass-by Reduction (50% AM; 55% PM/Daily):		-102	-102	-204	-78	-78	-156	-2,316	-136	-136	-272
Restaurant Subtotal		187	145	332	128	112	240	3,220	199	196	395
Project Total:		221	216	437	193	159	352	4,468	260	249	509

¹ TSF = thousand square feet; DU = Dwelling Units

² The pass-by rate information for Saturday Peak Hour is not readily available within the ITE TG Manual. Therefore, pass-by rates for the PM peak hour have been used.

TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. Exhibit 2 shows the Project residential trip distribution patterns, self-storage distribution patterns on Exhibit 3, and retail distribution patterns on Exhibit 4.



Site plan showing the proposed development layout. The plan includes dimensions for setbacks and easements. Key features include: Street A to the north, Schooler Ave to the south, and Driveway 1 and Driveway 2. Dimensions shown are 20, 15, 30, 35, and 10 feet. A note indicates "See Note" for the 10-foot dimension.

EXHIBIT 3: PROJECT (SELF STORAGE) TRIP DISTRIBUTION

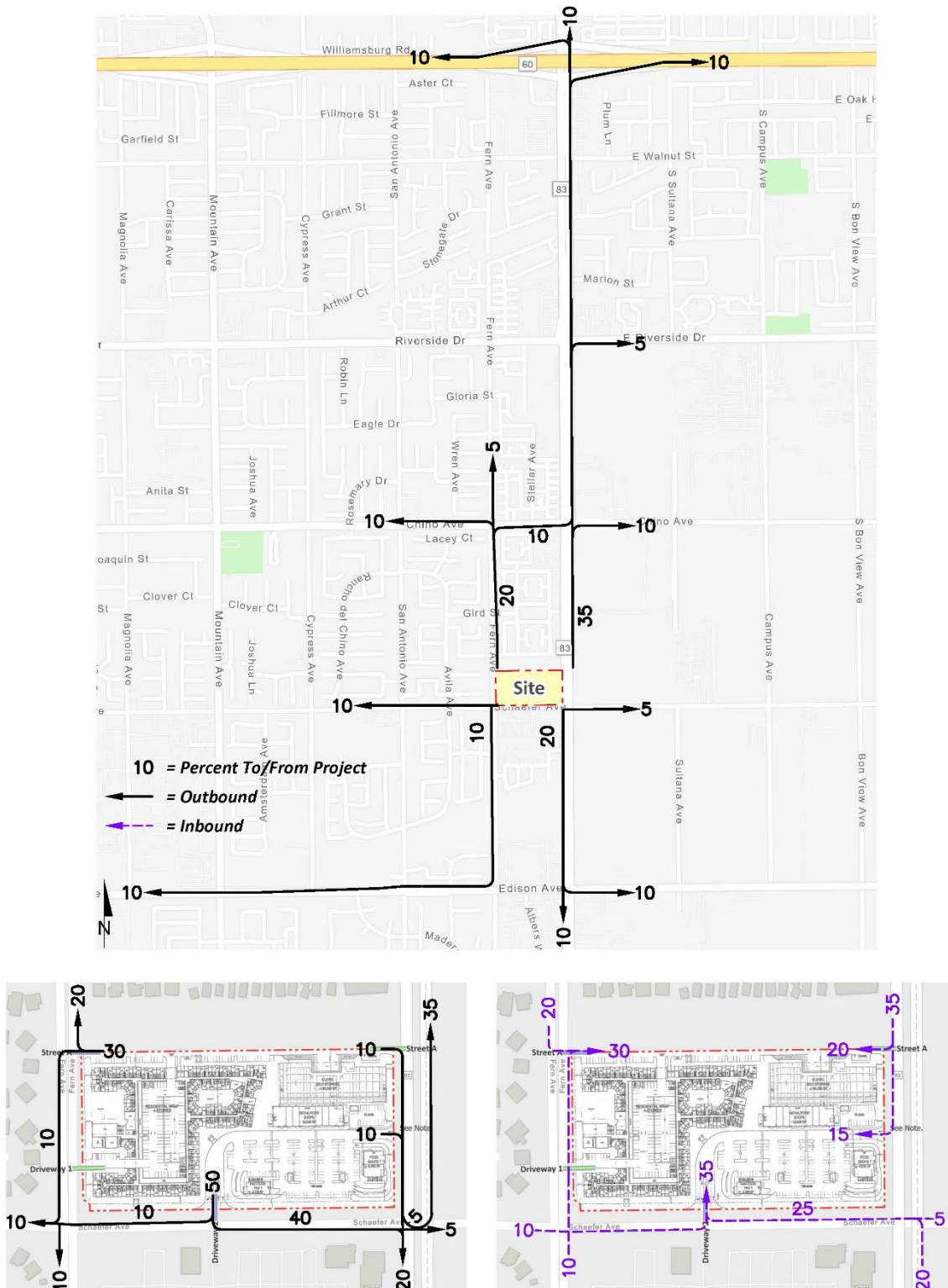


EXHIBIT 4: PROJECT (RETAIL) TRIP DISTRIBUTION





ANALYSIS SCENARIOS

Consistent with the City's Guidelines, intersection analysis will be provided for the following analysis scenarios:

- Existing (2023) Conditions
- Existing plus Project Conditions
- Opening Year Cumulative (2024) Without Project Conditions
- Opening Year Cumulative (2024) With Project conditions
- Horizon Year (2045) Without Project Conditions
- Horizon Year (2045) With Project Conditions

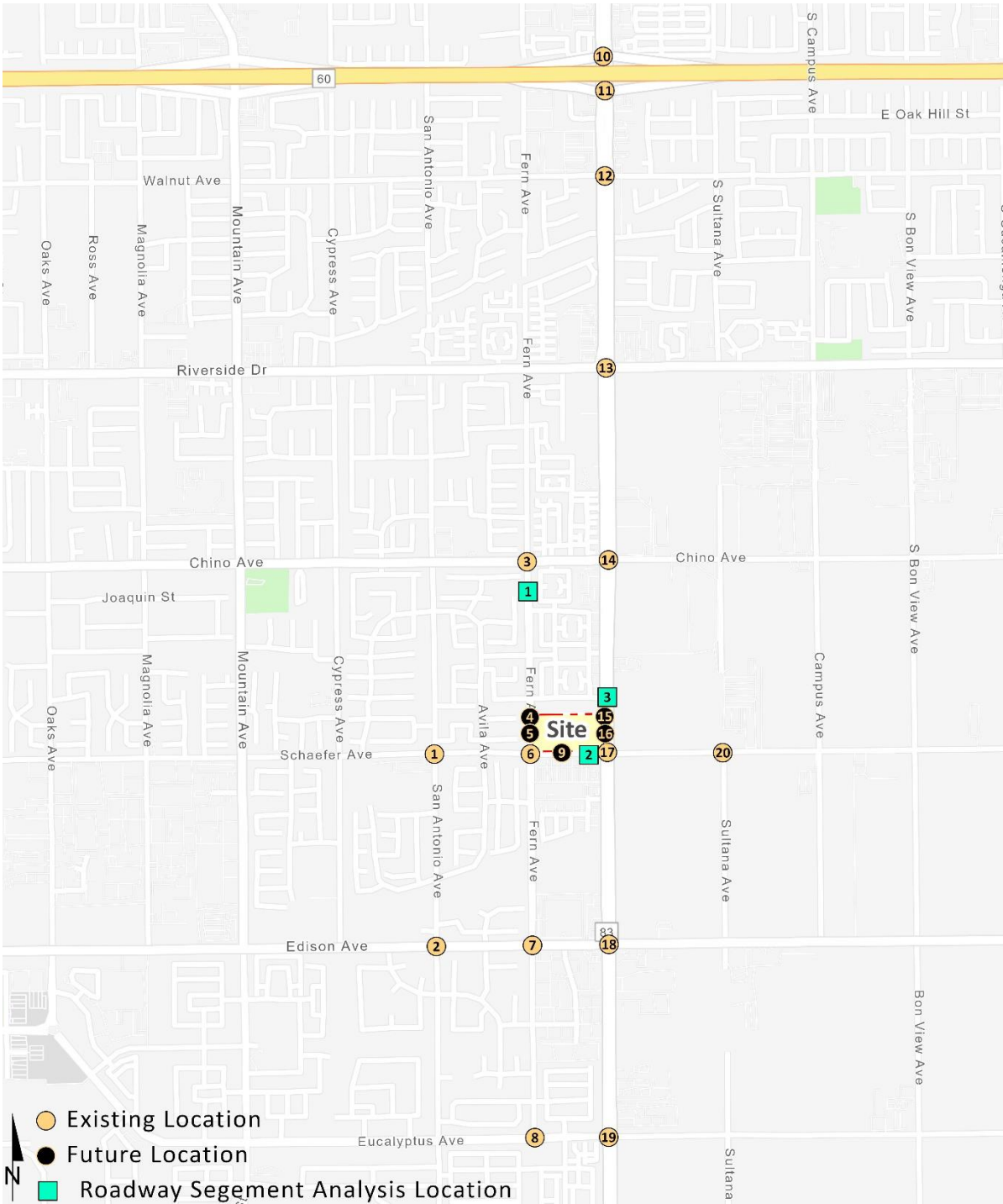
TABLE 3: STUDY AREA INTERSECTIONS & ROADWAY SEGMENTS

#	Intersection
1	San Antonio Av. & Schaefer Av.
2	San Antonio Av. & Edison Av.
3	Fern Av. & Chino Av.
4	Fern Av. & Street A
5	Fern Av. & Driveway 1
6	Fern Av. & Schaefer Av.
7	Fern Av. & Edison Av.
8	Fern Av. & Eucalyptus Av.
9	Driveway 2 & Schaefer Av.
10	Euclid Av. (SR-83) & SR-60 WB Ramps
11	Euclid Av. (SR-83) & SR-60 EB Ramps
12	Euclid Av. (SR-83) & Walnut Av.
13	Euclid Av. (SR-83) & Riverside Dr.
14	Euclid Av. (SR-83) & Chino Av.
15	Euclid Av. (SR-83) & Street A
16	Euclid Av. (SR-83) & Driveway 3
17	Euclid Av. (SR-83) & Schaefer Av.
18	Euclid Av. (SR-83) & Edison Av.
19	Euclid Av. (SR-83) & Eucalyptus Av.
20	Sultana Av. & Schaefer Av.

#	Roadway Segment
1	Fern Av., south of Chino Av.
2	Schaefer Av., west of Euclid Av. (SR-83)
3	Euclid Av. (SR-83), north of Schaefer Av.



EXHIBIT 5: STUDY AREA





All study area intersections and roadway segment analysis locations will be evaluated using the Highway Capacity Manual (HCM) 6th Edition analysis methodology. The study area and roadway segment analysis locations that are proposed to be evaluated is shown on Exhibit 5 and listed in Table 3. Under the circumstances that the analysis concludes a signalized intersection is required at Driveway 2 & Schaefer Avenue (#9), all four crosswalks and corners are to be improved by the Project to dual directional curb ramps.

EXISTING COUNT DATA

We are proposing to conduct new traffic counts on a typical weekday when local schools are open and operating on normal bell schedules (our understanding of the last day of school for the area schools is May 25, 2023). No additional adjustments are proposed for the purpose of establishing the existing baseline conditions (except for adjustments needed for volume balancing). The traffic counts will be collected once the scoping agreement has been approved by City staff and will be collected for the following peak hours:

- Weekday AM Peak Hour (6-9 AM)
- Weekday PM Peak Hour (4-7 PM)
- Saturday Mid-Day Peak Hour

AMBIENT GROWTH

Pursuant to discussion with City staff and consistent with other studies performed in the area, an ambient growth rate of 2% per year is proposed for the study area intersection to approximate background growth not identified by nearby cumulative development projects. As such, a total of 2% will be applied to the baseline for 2024 conditions.

CUMULATIVE PROJECTS

The Cities of Chino, Chino Hills, Ontario, and Eastvale will be contact to obtain the latest cumulative development projects list for each jurisdiction. These lists will be utilized for cumulative analysis in the traffic study.

SPECIAL ISSUES

The following special issues will also be addressed:

- Traffic Signal Warrant Analysis: Traffic signal warrant analysis will be performed for all full-access unsignalized study area intersections utilizing the California MUTCD peak-hour warrants for existing intersections, and the Caltrans daily (Planning level) warrant for new intersections.
- Site Access Evaluation: The turn pocket lengths will be determined through peak hour traffic simulations developed using Synchro and SimTraffic software in an effort to identify the required storage capacity for turn lanes at each Project driveway.
- Right Turn Pockets: Determine if right turn pockets are needed at project driveways.



- *Non-Vehicular Circulation:* Traffic study will include a discussion of bicycle and pedestrian connectivity and will be implemented with the development of the Project, consistent with the General Plan and 2016 Chino Bike & Pedestrian Master Plan. Project improvements for pedestrian facilities are to comply with the Americans with Disabilities Act (ADA) and the latest revision to the City of Chino Policy of Accessible Pedestrian Facilities.
- *Vehicle Miles Traveled (VMT):* A VMT analysis will be prepared under separate cover.
- *Truck Access:* At applicable driveways, prepare truck turning templates to address how Project truck traffic would enter and exit the applicable Project driveways.

If you have any questions or comments, I can be reached at cs0@urbanxroads.com.



ATTACHMENT A: INTERNAL CAPTURE WORKSHEETS

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	Euclid & Schaffer			Organization:	Urban Crossroads, Inc.
Project Location:	City of Chino			Performed By:	CS
Scenario Description:				Date:	4/5/2022
Analysis Year:				Checked By:	
Analysis Period:	AM Street Peak Hour			Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				401	224	177
Restaurant				487	256	231
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses ²				0		
				888	480	408

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		23	0	0	0
Restaurant	0	18		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	888	480	408
Internal Capture Percentage	9%	9%	10%
External Vehicle-Trips ⁵	806	439	367
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	13%
Restaurant	9%	8%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹ Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
³ Enter trips assuming no transit or non-motorized trips (as assumed in ITE <i>Trip Generation Manual</i>).
⁴ Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.
⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
⁶ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	Euclid and Schaffer			Organization:	Urban Crossroads, Inc.
Project Location:	City of Chino			Performed By:	CS
Scenario Description:				Date:	4/5/2022
Analysis Year:				Checked By:	
Analysis Period:	PM Street Peak Hour			Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				874	430	444
Restaurant				365	188	177
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses ²				0		
				1,239	618	621

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		55	0	0	0
Restaurant	0	73		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	1,239	618	621
Internal Capture Percentage	21%	21%	21%
External Vehicle-Trips ⁵	983	490	493
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	17%	12%
Restaurant	29%	41%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

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

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

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

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

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

⁶Person-Trips

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

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

APPENDIX 1.2: SITE ADJACENT QUEUES

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Intersection: 4: Fern Av. & Street A

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	54	14
Average Queue (ft)	26	0
95th Queue (ft)	49	7
Link Distance (ft)	906	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Fern Av. & Driveway 1

Movement	WB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	30	44	29
Average Queue (ft)	5	3	1
95th Queue (ft)	23	27	14
Link Distance (ft)	231	258	258
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Fern Av. & Schaefer Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	123	183	220	77	172	196	131	104	142	132	184	158
Average Queue (ft)	49	74	68	25	75	94	75	55	67	84	102	85
95th Queue (ft)	96	149	150	59	145	163	120	91	118	136	169	142
Link Distance (ft)		614	614		338	338		2613	2613		133	133
Upstream Blk Time (%)										2	3	1
Queuing Penalty (veh)										0	5	2
Storage Bay Dist (ft)	100			100			130			110		
Storage Blk Time (%)	1	5		1	6		0	0		5	5	
Queuing Penalty (veh)	1	3		1	2		0	0		4	5	

Intersection: 9: Driveway 2 & Schaefer Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	133	175	122	52	149	169	94	56	174	85
Average Queue (ft)	66	66	47	22	63	102	45	24	74	36
95th Queue (ft)	114	134	97	52	124	163	81	49	130	65
Link Distance (ft)		338	338		488	488	352	352	254	254
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	100			80						
Storage Blk Time (%)	2	2			4					
Queuing Penalty (veh)	3	3			1					

Intersection: 15: Euclid Av. (SR-83) & Street A

Movement	EB	SB	SB	SB
Directions Served	R	T	T	T
Maximum Queue (ft)	47	341	289	204
Average Queue (ft)	12	126	82	33
95th Queue (ft)	39	317	254	144
Link Distance (ft)	906	1038	1038	1038
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				2
Queuing Penalty (veh)				0

Intersection: 16: Euclid Av. (SR-83) & Driveway 3

Movement	EB	NB	SB	SB	SB
Directions Served	R	T	T	T	T
Maximum Queue (ft)	253	50	207	225	213
Average Queue (ft)	166	2	183	171	133
95th Queue (ft)	321	32	247	258	255
Link Distance (ft)	233	190	191	191	191
Upstream Blk Time (%)	57	0	20	11	5
Queuing Penalty (veh)	0	0	95	52	26
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 17: Euclid Av. (SR-83) & Schaefer Av.

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	TR	L	L	T	T	T	R
Maximum Queue (ft)	307	323	253	130	130	227	199	254	399	376	372	145
Average Queue (ft)	196	191	87	49	31	121	101	163	260	250	232	48
95th Queue (ft)	300	307	184	109	92	203	188	274	364	340	328	141
Link Distance (ft)			488	488		698			2603	2603	2603	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	320	320			100		185	185				55
Storage Blk Time (%)	0	1			1	21	0	5	22		44	0
Queuing Penalty (veh)	0	3			2	6	2	27	49		25	1

Intersection: 17: Euclid Av. (SR-83) & Schaefer Av.

Movement	SB	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	T	R
Maximum Queue (ft)	108	190	217	227	223	91
Average Queue (ft)	31	88	204	205	199	40
95th Queue (ft)	74	181	211	219	225	74
Link Distance (ft)			190	190	190	190
Upstream Blk Time (%)		0	43	38	28	
Queuing Penalty (veh)		0	203	180	130	
Storage Bay Dist (ft)	165	165				
Storage Blk Time (%)		0	51			
Queuing Penalty (veh)		0	52			

Network Summary

Network wide Queuing Penalty: 884

Intersection: 4: Fern Av. & Street A

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	36	30
Average Queue (ft)	20	3
95th Queue (ft)	44	17
Link Distance (ft)	906	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Fern Av. & Driveway 1

Movement	WB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	3
95th Queue (ft)	16
Link Distance (ft)	231
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Fern Av. & Schaefer Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	181	347	263	68	193	227	148	135	149	123	149	127
Average Queue (ft)	80	153	104	30	80	101	88	79	86	65	77	65
95th Queue (ft)	145	277	203	63	155	182	140	124	133	111	130	113
Link Distance (ft)		614	614		338	338		2613	2613		133	133
Upstream Blk Time (%)										0	1	0
Queuing Penalty (veh)										0	1	0
Storage Bay Dist (ft)	100			100			130			110		
Storage Blk Time (%)	4	19			6		2	0		2	2	
Queuing Penalty (veh)	14	17			2		2	0		2	1	

Intersection: 9: Driveway 2 & Schaefer Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	160	340	304	108	123	178	140	102	130	94
Average Queue (ft)	80	151	81	48	53	91	73	48	62	34
95th Queue (ft)	148	303	199	89	106	151	130	89	115	67
Link Distance (ft)		338	338		488	488	352	352	254	254
Upstream Blk Time (%)		1	0							
Queuing Penalty (veh)		2	0							
Storage Bay Dist (ft)	100			80						
Storage Blk Time (%)	4	13		4	2					
Queuing Penalty (veh)	11	12		6	1					

Intersection: 15: Euclid Av. (SR-83) & Street A

Movement	EB	NB	SB
Directions Served	R	T	T
Maximum Queue (ft)	41	11	52
Average Queue (ft)	6	0	3
95th Queue (ft)	27	7	22
Link Distance (ft)	906	191	1038
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Euclid Av. (SR-83) & Driveway 3

Movement	EB	NB	NB	SB	SB	SB
Directions Served	R	T	T	T	T	T
Maximum Queue (ft)	173	4	60	206	187	100
Average Queue (ft)	48	0	2	102	58	10
95th Queue (ft)	133	3	34	201	160	62
Link Distance (ft)	233	190	190	191	191	191
Upstream Blk Time (%)	0		0	1	0	
Queuing Penalty (veh)	0		0	2	0	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 17: Euclid Av. (SR-83) & Schaefer Av.

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	TR	L	L	T	T	T	R
Maximum Queue (ft)	325	344	354	72	180	737	193	255	1652	1606	1537	145
Average Queue (ft)	205	223	166	23	153	664	99	224	1185	1167	1125	51
95th Queue (ft)	319	341	307	58	226	878	170	321	1828	1799	1732	155
Link Distance (ft)			488	488		698			2603	2603	2603	
Upstream Blk Time (%)						60						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)	320	320			100		185	185				55
Storage Blk Time (%)	1	2	1		29	68	0	3	61		64	0
Queuing Penalty (veh)	3	6	3		143	98	3	16	152		43	1

Intersection: 17: Euclid Av. (SR-83) & Schaefer Av.

Movement	SB	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	T	R
Maximum Queue (ft)	114	190	211	224	212	117
Average Queue (ft)	41	90	201	196	173	49
95th Queue (ft)	97	180	214	227	222	94
Link Distance (ft)			190	190	190	190
Upstream Blk Time (%)		0	21	12	4	
Queuing Penalty (veh)		0	72	39	12	
Storage Bay Dist (ft)	165	165				
Storage Blk Time (%)		0	34			
Queuing Penalty (veh)		0	34			

Network Summary

Network wide Queuing Penalty: 703

Intersection: 4: Fern Av. & Street A

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	54	36
Average Queue (ft)	24	3
95th Queue (ft)	51	17
Link Distance (ft)	906	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Fern Av. & Driveway 1

Movement	WB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	231
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Fern Av. & Schaefer Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	85	182	128	90	166	189	90	102	128	130	140	120
Average Queue (ft)	34	64	53	28	68	86	47	54	62	76	63	46
95th Queue (ft)	77	136	111	66	140	162	83	85	108	119	118	95
Link Distance (ft)		614	614		338	338		2613	2613		133	133
Upstream Blk Time (%)										0	0	0
Queuing Penalty (veh)										0	0	0
Storage Bay Dist (ft)	100			100			130			110		
Storage Blk Time (%)	1	3		0	3			0		3	1	
Queuing Penalty (veh)	1	1		1	1			0		2	1	

Intersection: 9: Driveway 2 & Schaefer Av.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	143	162	149	100	189	218	137	58	170	95
Average Queue (ft)	74	55	54	42	53	100	65	32	92	40
95th Queue (ft)	124	119	110	81	123	183	114	56	149	71
Link Distance (ft)		338	338		488	488	352	352	254	254
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	100			80						
Storage Blk Time (%)	4	2		1	2					
Queuing Penalty (veh)	4	2		2	1					

Intersection: 15: Euclid Av. (SR-83) & Street A

Movement	EB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	906
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Euclid Av. (SR-83) & Driveway 3

Movement	EB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	92	113	84
Average Queue (ft)	38	24	7
95th Queue (ft)	70	86	46
Link Distance (ft)	233	191	191
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: Euclid Av. (SR-83) & Schaefer Av.

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	NB
Directions Served	L	L	T	R	L	TR	L	L	T	T	T	R
Maximum Queue (ft)	175	188	124	46	61	172	189	237	303	292	281	142
Average Queue (ft)	98	110	37	14	19	65	66	122	164	162	137	12
95th Queue (ft)	156	169	85	38	48	124	131	199	259	254	245	64
Link Distance (ft)			488	488		698			2603	2603	2603	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	320	320			100		185	185				55
Storage Blk Time (%)						4	0	1	5		30	0
Queuing Penalty (veh)						1	0	3	13		4	0

Intersection: 17: Euclid Av. (SR-83) & Schaefer Av.

Movement	SB	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	T	R
Maximum Queue (ft)	59	131	210	212	189	107
Average Queue (ft)	8	40	172	149	112	41
95th Queue (ft)	34	96	224	215	184	76
Link Distance (ft)			190	190	190	190
Upstream Blk Time (%)		0	6	1	0	
Queuing Penalty (veh)		0	18	4	1	
Storage Bay Dist (ft)	165	165				
Storage Blk Time (%)			13			
Queuing Penalty (veh)			6			

Network Summary

Network wide Queuing Penalty: 67

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APPENDIX 3.1: TRAFFIC COUNTS

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INTERSECTION TURNING MOVEMENT COUNTS

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

T816

DATE:
Sat, Sep 9, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Fern
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4199
2
STOP S

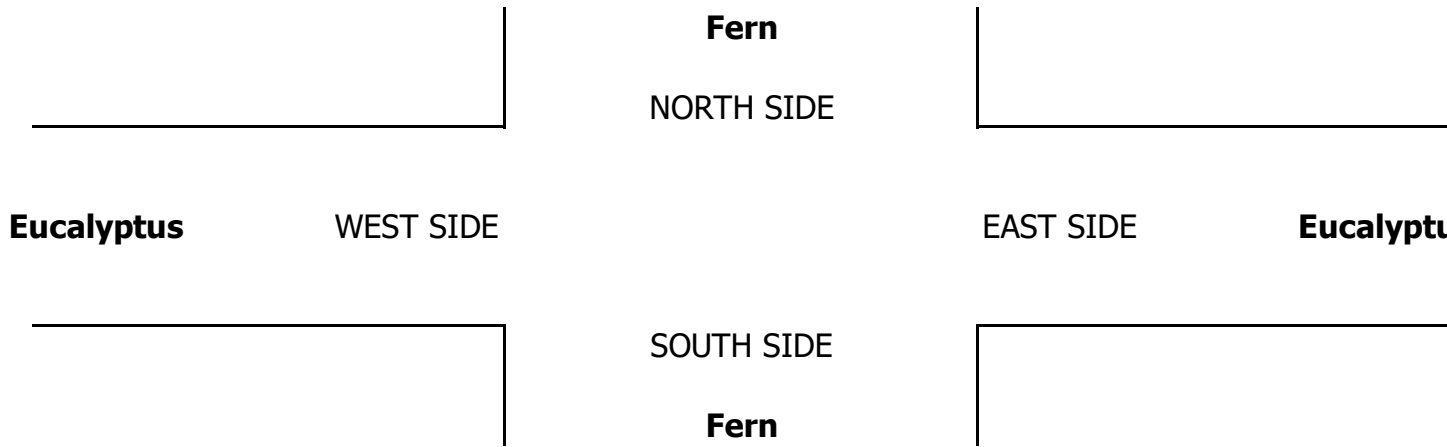
NOTES:

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Fern			Fern			Eucalyptus			Eucalyptus			
LANES:	NL X	NT X	NR X	SL 1	ST X	SR 1	EL 1	ET 2	ER X	WL X	WT 2	WR 0	TOTAL
6:00 AM	0	0	0	3	0	0	0	7	0	0	8	0	18
6:15 AM	0	0	0	2	0	0	2	12	0	0	13	0	29
6:30 AM	0	0	0	0	0	1	0	13	0	0	10	2	26
6:45 AM	0	0	0	5	0	3	1	15	0	0	13	2	39
7:00 AM	0	0	0	4	0	1	5	12	0	0	11	0	33
7:15 AM	0	0	0	2	0	0	2	18	0	0	20	2	44
7:30 AM	0	0	0	3	0	7	3	13	0	0	21	6	53
7:45 AM	0	0	0	7	0	5	1	20	0	0	36	3	72
8:00 AM	0	0	0	7	0	3	5	28	0	0	21	2	66
8:15 AM	0	0	0	4	0	4	4	18	0	0	26	3	59
8:30 AM	0	0	0	6	0	3	2	33	0	0	33	4	81
8:45 AM	0	0	0	6	0	8	4	28	0	0	32	6	84
VOLUMES	0	0	0	49	0	35	29	217	0	0	244	30	605
APPROACH %	0%	0%	0%	58%	0%	42%	12%	88%	0%	0%	89%	11%	
APP/DEPART	0	/	59	84	/	0	246	/	267	275	/	279	0
BEGIN PEAK HR	8:00 AM												
VOLUMES	0	0	0	23	0	18	15	107	0	0	112	15	290
APPROACH %	0%	0%	0%	56%	0%	44%	12%	88%	0%	0%	88%	12%	
PEAK HR FACTOR	0.000			0.732			0.871			0.836			0.863
APP/DEPART	0	/	30	41	/	0	122	/	130	127	/	130	0
04:00 PM	0	0	0	4	0	7	5	43	0	0	16	7	82
4:15 PM	0	0	0	9	0	14	2	41	0	0	34	5	105
4:30 PM	0	0	0	3	0	9	7	42	0	0	38	7	106
4:45 PM	0	0	0	7	0	10	5	38	0	0	41	5	106
5:00 PM	0	0	0	8	0	11	6	51	0	0	38	8	122
5:15 PM	0	0	0	7	0	11	9	33	0	0	37	4	101
5:30 PM	0	0	0	4	0	10	6	60	0	0	25	8	113
5:45 PM	0	0	0	11	0	5	7	44	0	0	40	9	116
6:00 PM	0	0	0	10	0	7	2	49	0	0	27	3	98
6:15 PM	0	0	0	6	0	11	3	35	0	0	27	3	85
6:30 PM	0	0	0	5	0	6	5	38	0	0	40	8	102
6:45 PM	0	0	0	4	0	7	8	29	0	0	34	6	88
VOLUMES	0	0	0	78	0	108	65	503	0	0	397	73	1,226
APPROACH %	0%	0%	0%	42%	0%	58%	11%	88%	0%	0%	84%	16%	
APP/DEPART	0	/	138	186	/	0	570	/	581	470	/	507	0
BEGIN PEAK HR	5:00 PM												
VOLUMES	0	0	0	30	0	37	28	188	0	0	140	29	452
APPROACH %	0%	0%	0%	45%	0%	55%	13%	87%	0%	0%	83%	17%	
PEAK HR FACTOR	0.000			0.882			0.818			0.862			0.926
APP/DEPART	0	/	57	67	/	0	216	/	218	169	/	177	0



AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
TOTAL	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	3	3
0	0	1	2	3
0	1	2	1	4
0	1	0	1	2
1	2	1	0	4
1	1	12	3	17
1	0	1	0	2
0	0	0	4	4
0	1	2	5	8
1	0	1	1	3
4	6	20	20	50
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	1	0	2
0	0	2	1	3
2	1	3	1	7

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	2	2
0	1	0	0	1
0	1	0	1	2
0	2	0	0	2
1	1	0	3	5
0	0	0	0	0
0	0	0	1	1
0	1	0	2	3
1	0	0	0	1
2	6	0	10	18
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	2	2
0	0	1	0	1
0	0	2	1	3
0	0	0	0	0
1	0	1	0	2
0	0	12	0	12
1	0	1	0	2
0	0	0	3	3
0	0	2	3	5
0	0	1	1	2
2	0	20	10	32
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	1	0	2
0	0	2	1	3
0	1	3	1	5

TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

T816

DATE:
Tue, Sep 12, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Fern
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4199
2
STOP S

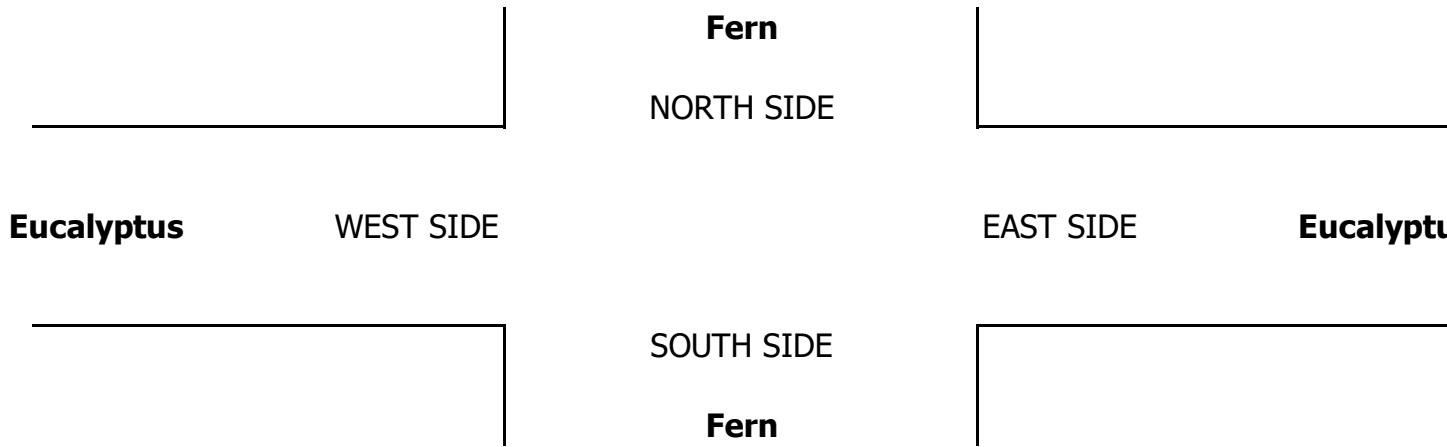
NOTES:

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Fern			Fern			Eucalyptus			Eucalyptus			
LANES:	NL X	NT X	NR X	SL 1	ST X	SR 1	EL 1	ET 2	ER X	WL X	WT 2	WR 0	TOTAL
6:00 AM	0	0	0	3	0	2	2	20	0	0	42	7	76
6:15 AM	0	0	0	6	0	4	0	20	0	0	61	2	93
6:30 AM	0	0	0	2	0	4	4	34	0	0	69	8	121
6:45 AM	0	0	0	10	0	6	3	41	0	0	87	5	152
7:00 AM	0	0	0	8	0	6	7	35	0	0	100	10	166
7:15 AM	0	0	0	6	0	4	6	31	0	0	120	19	186
7:30 AM	0	0	0	13	0	11	9	51	0	0	146	27	257
7:45 AM	0	0	0	24	0	31	4	54	0	0	169	16	298
8:00 AM	0	0	0	4	0	21	5	58	0	0	141	12	241
8:15 AM	0	0	0	5	0	18	11	36	0	0	109	11	190
8:30 AM	0	0	0	8	0	13	13	41	0	0	87	14	176
8:45 AM	0	0	0	7	0	14	11	47	0	0	79	20	178
VOLUMES	0	0	0	96	0	134	75	468	0	0	1,210	151	2,136
APPROACH %	0%	0%	0%	42%	0%	58%	14%	86%	0%	0%	89%	11%	
APP/DEPART	0	/	226	230	/	0	545	/	564	1,361	/	1,346	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	0	0	0	46	0	81	29	199	0	0	565	66	986
APPROACH %	0%	0%	0%	36%	0%	64%	13%	87%	0%	0%	90%	10%	
PEAK HR FACTOR	0.000			0.577			0.905			0.853			0.827
APP/DEPART	0	/	95	127	/	0	228	/	245	631	/	646	0
04:00 PM	0	0	0	18	0	12	18	97	0	0	58	13	216
4:15 PM	0	0	0	6	0	10	8	114	0	0	43	8	189
4:30 PM	0	0	0	16	0	8	14	135	0	0	50	11	234
4:45 PM	0	0	0	13	0	20	13	134	0	0	70	6	256
5:00 PM	0	0	0	9	0	11	16	150	0	0	60	8	254
5:15 PM	0	0	0	13	0	15	11	145	0	0	56	9	249
5:30 PM	0	0	0	6	0	18	10	127	0	0	58	7	226
5:45 PM	0	0	0	11	0	16	8	114	0	0	65	13	227
6:00 PM	0	0	0	11	0	11	13	102	0	0	59	10	206
6:15 PM	0	0	0	15	0	12	9	91	0	0	42	7	176
6:30 PM	0	0	0	11	0	7	14	87	0	0	28	10	157
6:45 PM	0	0	0	7	0	10	8	60	0	0	36	7	128
VOLUMES	0	0	0	136	0	150	142	1,356	0	0	625	109	2,525
APPROACH %	0%	0%	0%	47%	0%	52%	9%	90%	0%	0%	85%	15%	
APP/DEPART	0	/	253	288	/	0	1,503	/	1,492	734	/	780	0
BEGIN PEAK HR	4:30 PM												
VOLUMES	0	0	0	51	0	54	54	564	0	0	236	34	994
APPROACH %	0%	0%	0%	48%	0%	51%	9%	91%	0%	0%	87%	13%	
PEAK HR FACTOR	0.000			0.803			0.931			0.888			0.971
APP/DEPART	0	/	89	106	/	0	618	/	615	270	/	290	0



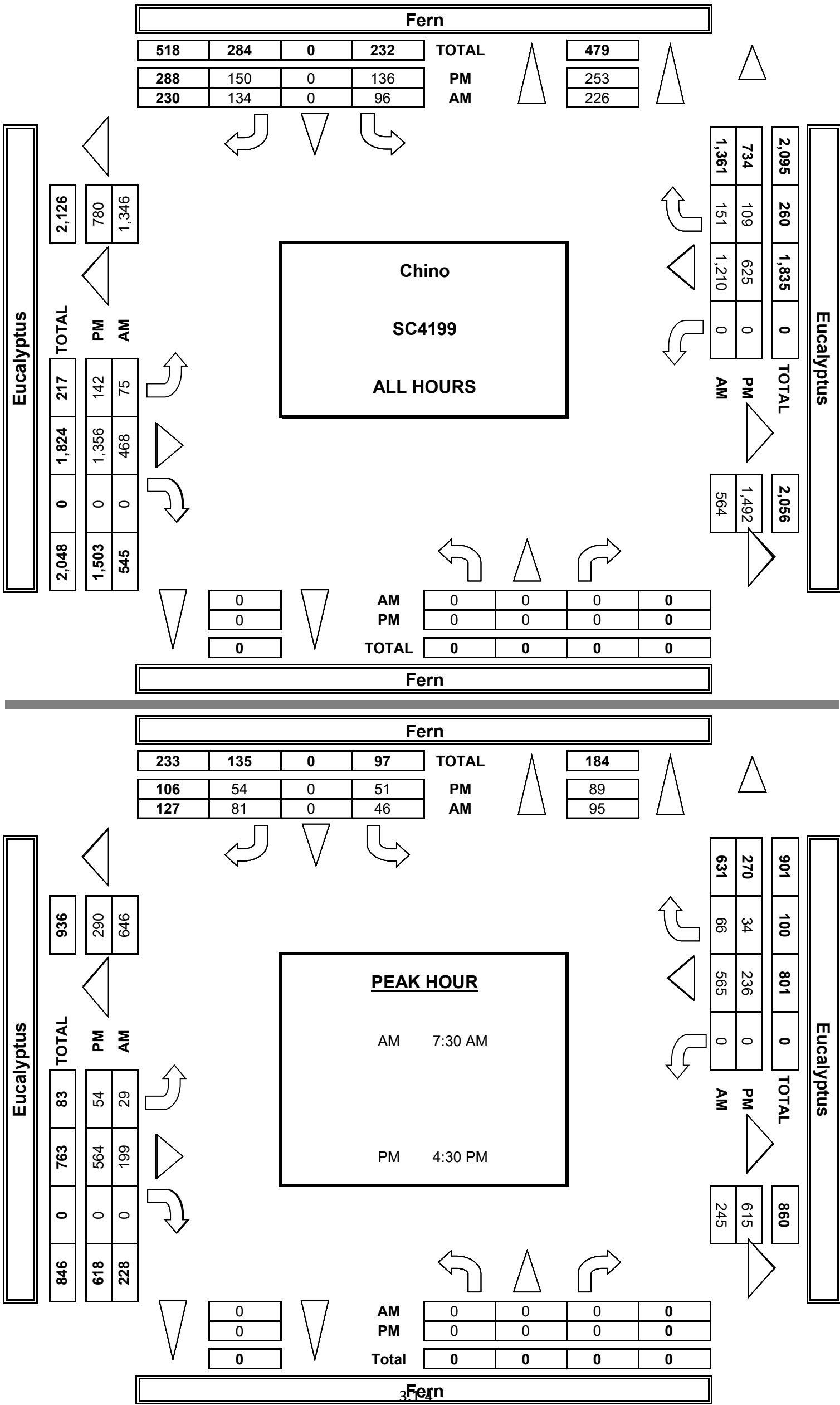
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
TOTAL	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	1	1	2
0	2	2	1	5
0	0	0	1	1
0	0	0	1	1
0	0	0	0	0
0	0	1	1	2
0	1	1	0	2
6	2	6	4	18
0	0	1	6	7
0	0	0	1	1
0	1	1	1	3
0	0	0	1	1
6	6	13	18	43
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	1	0	0	1
0	0	0	2	2
0	2	0	0	2
0	1	0	0	1
0	2	0	0	2
0	0	0	1	1
0	0	1	0	1
0	4	0	0	4
0	0	0	0	0
0	10	2	3	15

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
0	1	0	1	2
0	0	0	1	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	6	6
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	1	0	1	2
0	0	0	0	0
0	3	0	10	13
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	1	1
0	2	0	0	2
0	1	0	0	1
0	2	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	4	0	0	4
0	0	0	0	0
0	10	0	1	11

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
0	0	1	1	2
0	1	2	0	3
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	1	1	0	2
6	1	6	4	17
0	0	1	0	1
0	0	0	1	1
0	0	1	0	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	2	2	2	4

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Tue, May 23, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino San Antonio Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4049 4 SIGNAL

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

	NORTHBOUND San Antonio			SOUTHBOUND San Antonio			EASTBOUND Schaefer			WESTBOUND Schaefer			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL

AM	6:00 AM	2	6	1	2	3	6	0	30	1	3	45	1	100
	6:15 AM	4	1	0	3	1	9	1	28	1	0	53	1	102
	6:30 AM	2	4	3	2	4	1	1	37	1	1	64	1	121
	6:45 AM	6	3	4	4	5	5	0	33	5	2	74	2	143
	7:00 AM	5	9	6	3	6	9	2	41	0	3	66	1	151
	7:15 AM	17	2	5	2	5	9	2	43	10	1	102	0	198
	7:30 AM	20	5	7	1	9	14	9	61	30	7	107	2	272
	7:45 AM	32	16	27	3	9	19	18	118	55	25	106	3	431
	8:00 AM	13	8	5	3	9	8	6	81	7	2	120	4	266
	8:15 AM	16	8	6	2	8	7	3	61	8	1	100	2	222
	8:30 AM	5	5	3	2	3	9	1	70	6	2	74	3	183
	8:45 AM	10	7	5	0	3	5	6	45	9	3	74	3	170
	VOLUMES	132	74	72	27	65	101	49	648	133	50	985	23	2,359
APPROACH %		47%	27%	26%	14%	34%	52%	6%	78%	16%	5%	93%	2%	
APP/DEPART		278	/	146	193	/	248	830	/	747	1,058	/	1,218	0
BEGIN PEAK HR		7:30 AM												
VOLUMES		81	37	45	9	35	48	36	321	100	35	433	11	1,191
APPROACH %		50%	23%	28%	10%	38%	52%	8%	70%	22%	7%	90%	2%	
PEAK HR FACTOR		0.543												
APP/DEPART		163	/	84	92	/	170	457	/	375	479	/	562	0
PM	04:00 PM	7	9	2	7	3	4	7	187	19	6	62	7	320
	4:15 PM	6	11	7	3	8	5	6	151	9	2	67	5	280
	4:30 PM	8	8	1	2	9	6	7	178	12	7	71	8	317
	4:45 PM	7	15	2	4	4	3	7	168	18	2	71	2	303
	5:00 PM	4	14	7	5	10	4	12	161	16	5	62	6	306
	5:15 PM	7	15	7	10	8	5	3	185	14	5	75	7	341
	5:30 PM	5	13	7	2	9	9	2	153	18	3	63	3	287
	5:45 PM	9	8	3	7	7	5	7	133	16	10	69	8	282
	6:00 PM	7	14	3	3	8	9	9	138	17	2	57	2	269
	6:15 PM	6	12	6	3	9	3	6	130	11	5	71	3	265
	6:30 PM	4	6	3	7	9	9	8	108	10	2	64	4	234
	6:45 PM	2	9	2	1	1	3	5	100	13	2	40	5	183
	VOLUMES	72	134	50	54	85	65	79	1,792	173	51	772	60	3,387
APPROACH %		28%	52%	20%	26%	42%	32%	4%	88%	8%	6%	87%	7%	
APP/DEPART		256	/	273	204	/	309	2,044	/	1,896	883	/	909	0
BEGIN PEAK HR		4:30 PM												
VOLUMES		26	52	17	21	31	18	29	692	60	19	279	23	1,267
APPROACH %		27%	55%	18%	30%	44%	26%	4%	89%	8%	6%	87%	7%	
PEAK HR FACTOR		0.819												
APP/DEPART		95	/	104	70	/	110	781	/	730	321	/	323	0



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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	2	0	1
0	5	1	0
1	1	0	0
2	2	0	0
4	4	0	0
1	7	2	0
5	5	5	1
7	9	11	1
2	5	0	2
3	4	1	0
1	4	1	1
1	3	3	0
27	51	24	6

17	23	17	4

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

0	2	4	4
2	0	4	1
0	3	3	0
0	2	4	0
3	3	6	0
3	3	2	1
4	5	1	1
3	1	2	2
1	5	4	1
4	2	2	1
3	4	1	0
1	3	1	1
24	33	34	12

6	11	15	1

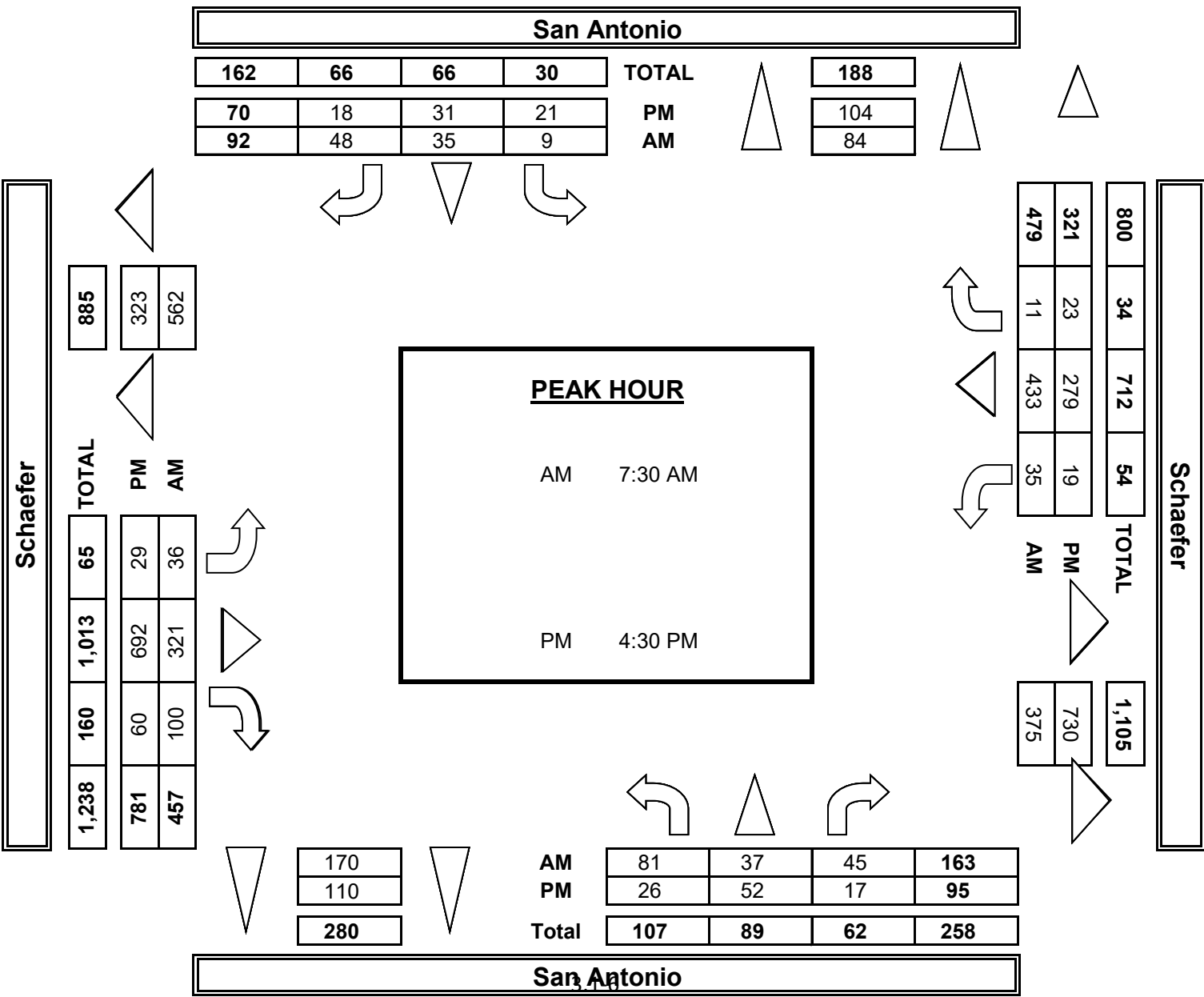
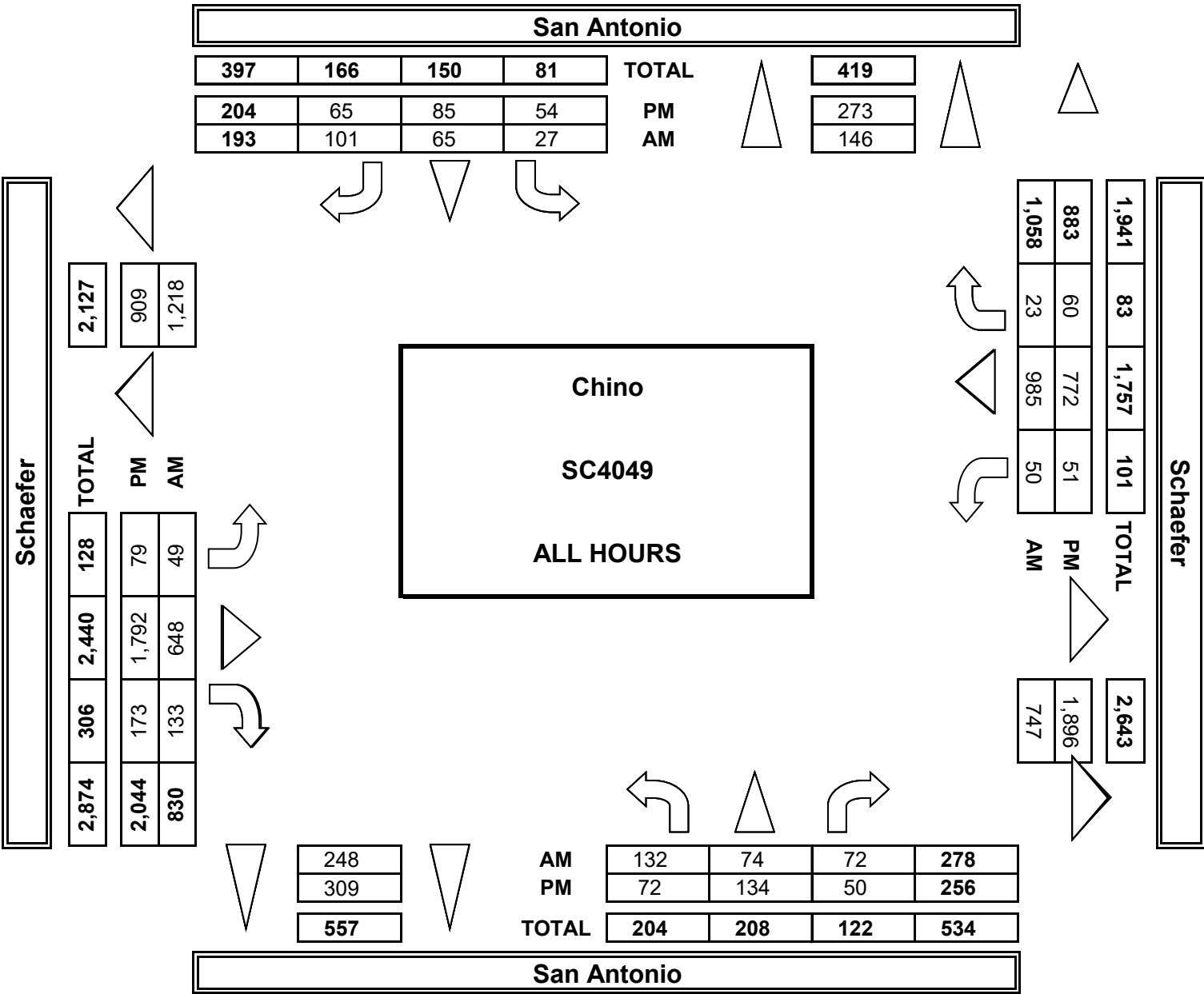
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
TOTAL	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	1	1
0	0	1	1	2
2	0	2	2	6
0	0	0	3	3
0	1	1	0	2
2	1	1	0	4
0	8	6	3	17
7	15	9	11	42
0	2	1	2	5
1	0	0	5	6
0	2	2	1	5
2	1	0	0	3
14	30	23	29	96
0	1	0	0	1
0	0	1	1	2
0	0	1	0	1
0	0	1	0	1
0	3	1	1	5
0	0	2	1	3
1	0	3	0	4
0	0	2	0	2
0	5	2	3	10
1	0	3	1	5
0	1	0	5	6
2	0	2	1	5
4	10	18	13	45

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	1	1
0	0	0	1	1
2	0	2	1	5
0	0	0	3	3
0	1	1	0	2
1	1	1	0	3
0	8	6	2	16
7	15	9	11	42
0	2	1	2	5
1	0	0	5	6
0	1	2	1	4
2	1	0	0	3
13	29	22	27	91
0	1	0	0	1
0	0	1	1	2
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2
0	0	2	1	3
1	0	2	0	3
0	0	1	0	1
0	5	2	3	10
0	0	2	1	3
0	1	0	5	6
2	0	2	1	5
3	9	12	12	36

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	0	0	0
0	0	1	0	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	1	1	1	3
0	0	0	0	0
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
1	0	1	0	2
0	0	0	0	0
0	0	0	0	0
1	1	6	1	9

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Tue, May 23, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino San Antonio Edison	PROJECT #: LOCATION #: CONTROL:	SC4049 5 SIGNAL

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

	NORTHBOUND San Antonio			SOUTHBOUND San Antonio			EASTBOUND Edison			WESTBOUND Edison			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL

AM	6:00 AM	0	4	1	1	4	6	1	37	1	0	79	1	135
	6:15 AM	4	2	2	0	1	4	0	55	1	0	106	1	176
	6:30 AM	0	1	1	1	3	8	2	54	0	0	124	1	195
	6:45 AM	5	5	0	0	6	7	0	48	6	0	116	1	194
	7:00 AM	4	7	0	1	3	19	0	61	0	1	103	2	201
	7:15 AM	8	13	1	1	7	10	3	71	4	0	129	5	252
	7:30 AM	21	56	1	2	27	27	20	63	5	5	150	11	388
	7:45 AM	5	12	3	9	61	52	11	83	5	1	125	6	373
	8:00 AM	8	3	1	6	14	13	2	64	11	2	119	2	245
	8:15 AM	3	4	2	0	7	9	5	69	6	3	116	3	227
	8:30 AM	7	0	3	6	2	4	11	80	4	6	104	3	230
	8:45 AM	8	3	2	2	3	3	2	84	3	3	122	4	239
	VOLUMES	73	110	17	29	138	162	57	769	46	21	1,393	40	2,855
	APPROACH %	37%	55%	9%	9%	42%	49%	7%	88%	5%	1%	96%	3%	
APP/DEPART		200	/	208	329	/	205	872	/	814	1,454	/	1,628	0
BEGIN PEAK HR		7:15 AM												
PM	VOLUMES	42	84	6	18	109	102	36	281	25	8	523	24	1,258
	APPROACH %	32%	64%	5%	8%	48%	45%	11%	82%	7%	1%	94%	4%	
	PEAK HR FACTOR	0.423												
	APP/DEPART	132	/	144	229	/	142	342	/	305	555	/	667	0
PM	04:00 PM	3	6	2	1	4	5	10	128	15	3	100	3	280
	4:15 PM	5	11	3	1	4	9	6	138	9	0	92	2	280
	4:30 PM	6	7	3	4	9	8	9	156	8	0	86	5	301
	4:45 PM	8	12	2	0	12	5	7	138	4	0	99	3	290
	5:00 PM	2	5	1	4	2	9	6	198	5	3	112	5	352
	5:15 PM	9	6	4	2	10	11	10	177	7	2	86	3	327
	5:30 PM	3	7	2	3	5	8	7	129	8	2	105	9	288
	5:45 PM	8	7	2	2	6	7	8	129	8	2	98	8	285
	6:00 PM	2	10	1	1	6	11	9	108	11	3	79	4	245
	6:15 PM	6	4	4	1	6	4	5	119	7	4	82	2	244
	6:30 PM	2	2	1	2	7	6	11	109	6	3	77	0	226
	6:45 PM	3	4	1	1	3	4	8	112	13	0	61	1	211
	VOLUMES	57	81	26	22	74	87	96	1,641	101	22	1,077	45	3,329
	APPROACH %	35%	49%	16%	12%	40%	48%	5%	89%	5%	2%	94%	4%	
APP/DEPART		164	/	222	183	/	196	1,838	/	1,690	1,144	/	1,221	0
BEGIN PEAK HR		4:30 PM												
PM	VOLUMES	25	30	10	10	33	33	32	669	24	5	383	16	1,270
	APPROACH %	38%	46%	15%	13%	43%	43%	4%	92%	3%	1%	95%	4%	
	PEAK HR FACTOR	0.739												
	APP/DEPART	65	/	78	76	/	62	725	/	689	404	/	441	0



U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
1	5	0	0
2	4	0	0
0	5	0	0
0	5	0	0
0	15	0	0
1	8	1	2
0	17	3	0
3	29	0	1
0	6	3	0
1	8	1	0
3	4	0	1
1	2	1	1
12	108	9	5

4	60	7	3

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1

2	2	0	0
3	6	1	0
3	5	1	0
2	2	1	1
1	6	0	2
4	6	0	0
2	6	1	2
0	3	2	0
1	9	2	0
2	4	0	0
1	4	1	0
0	2	1	0
21	55	10	5

10	19	2	3

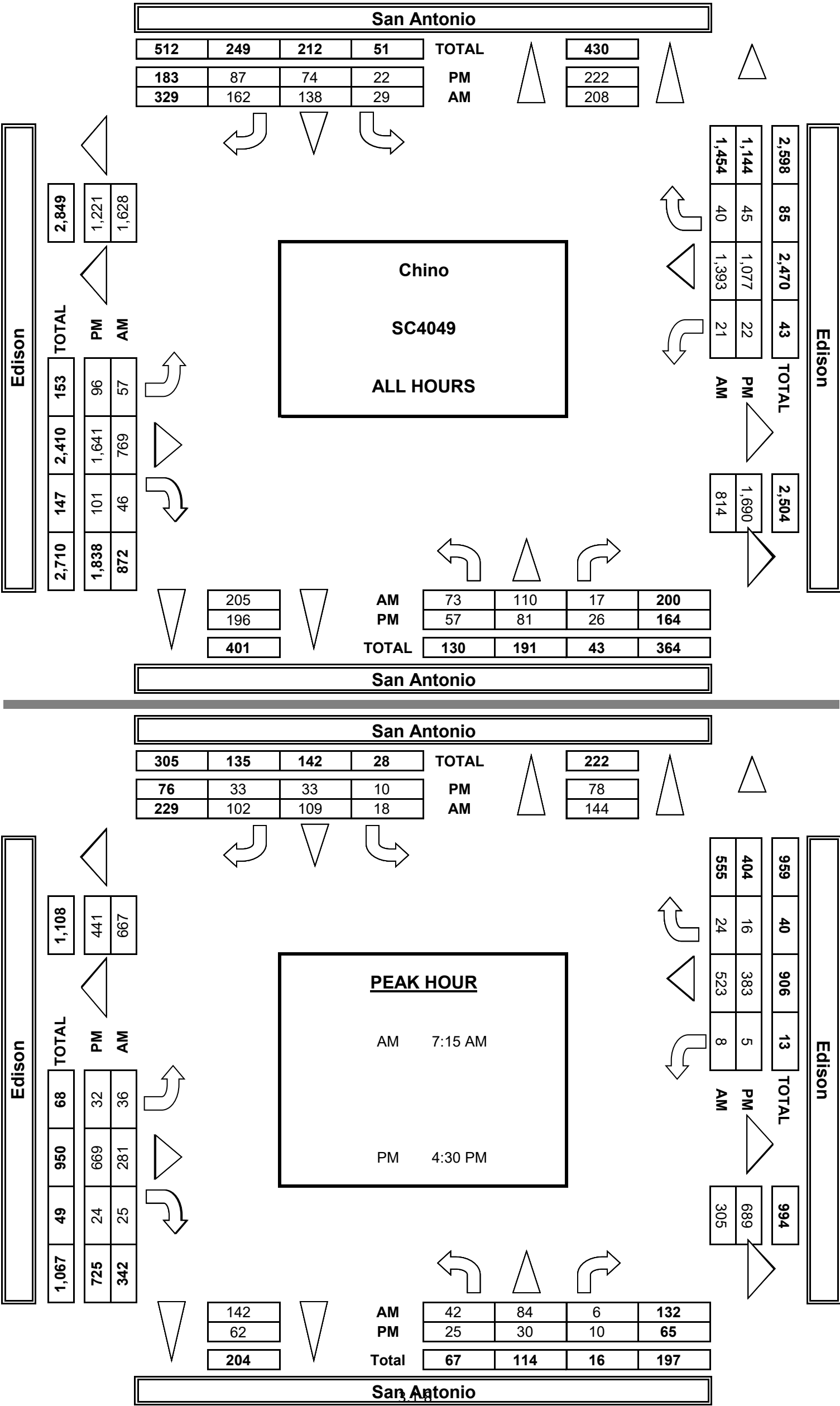
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
	8:30 AM	
	8:45 AM	
	TOTAL	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	0	0	0
1	1	0	0	2
0	0	1	0	1
0	2	0	0	2
0	0	0	1	1
0	3	0	0	3
2	1	1	0	4
2	1	2	0	5
1	1	1	0	3
0	1	1	0	2
0	0	0	0	0
6	10	6	1	23
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	1	0	0	1
0	0	1	0	1
0	0	0	0	0
1	0	2	1	4
0	2	0	0	2
0	0	0	0	0
2	0	2	0	4
0	2	2	2	6
3	6	8	5	22

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	0	0	0
1	1	0	0	2
0	0	1	0	1
0	2	0	0	2
0	0	0	1	1
0	0	0	0	0
2	1	1	0	4
2	1	0	0	3
1	1	1	0	3
0	0	0	0	0
0	0	0	0	0
6	6	3	1	16
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	1	0	1	2
1	0	2	0	3
0	2	0	0	2
0	0	0	0	0
2	0	0	0	2
0	0	2	0	2
3	4	5	2	14

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	3	0	0	3
0	0	0	0	0
0	0	2	0	2
0	0	0	0	0
0	1	1	0	2
0	0	0	0	0
0	4	3	0	7
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	2	0	2
0	2	0	2	4
0	2	3	3	8

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
Tue, May 23, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Fern
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4049
6
SIGNAL

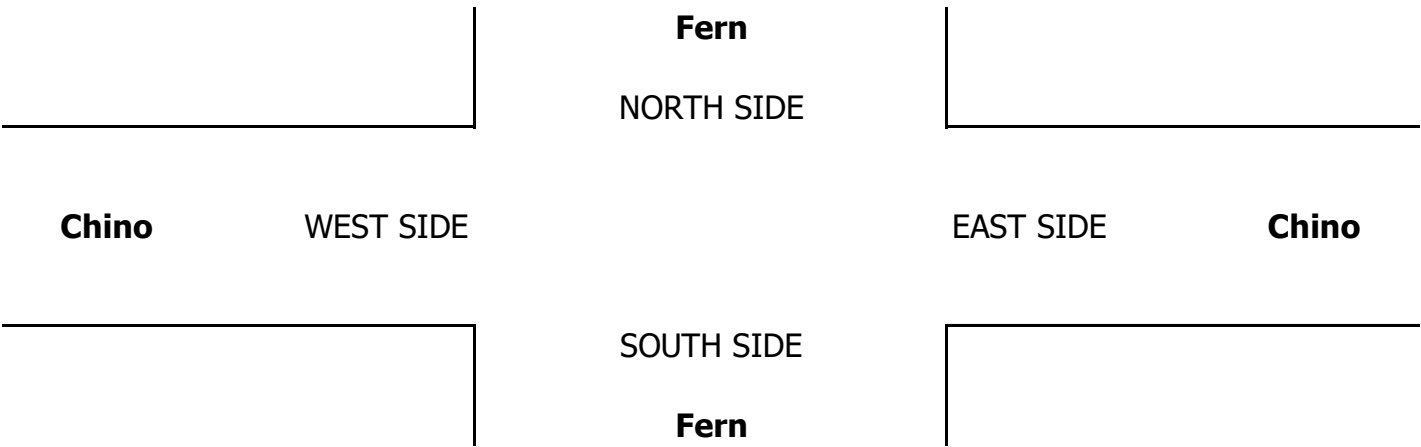
NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Fern			Fern			Chino			Chino			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	0	1	2	0	1	2	0	1	2	0	
6:00 AM	1	5	5	0	13	1	0	18	4	3	19	2	71
6:15 AM	1	7	7	2	14	0	2	27	1	3	27	1	92
6:30 AM	1	17	12	0	16	1	0	20	1	4	42	2	116
6:45 AM	6	20	9	3	24	2	2	31	1	12	57	2	169
7:00 AM	1	16	10	2	18	2	1	20	2	2	56	0	130
7:15 AM	4	21	16	3	23	6	3	34	3	10	78	7	208
7:30 AM	11	30	11	5	30	9	5	42	4	14	90	4	255
7:45 AM	12	34	15	3	37	9	5	52	14	11	90	6	288
8:00 AM	7	31	5	6	42	5	2	46	9	12	74	4	243
8:15 AM	6	29	11	2	39	2	1	33	5	12	63	2	205
8:30 AM	8	29	13	7	38	2	1	44	8	9	49	8	216
8:45 AM	4	29	10	2	34	2	2	36	11	6	49	6	191
VOLUMES	62	268	124	35	328	41	24	403	63	98	694	44	2,184
APPROACH %	14%	59%	27%	9%	81%	10%	5%	82%	13%	12%	83%	5%	
APP/DEPART	454	/	336	404	/	489	490	/	562	836	/	797	0
BEGIN PEAK HR	7:15 AM												
VOLUMES	34	116	47	17	132	29	15	174	30	47	332	21	994
APPROACH %	17%	59%	24%	10%	74%	16%	7%	79%	14%	12%	83%	5%	
PEAK HR FACTOR	0.807			0.840			0.771			0.926			0.863
APP/DEPART	197	/	152	178	/	209	219	/	238	400	/	395	0
04:00 PM	9	36	34	7	39	2	5	87	5	10	54	5	293
4:15 PM	5	33	19	5	24	4	10	83	10	12	37	3	245
4:30 PM	6	35	22	5	26	1	4	86	13	16	50	5	269
4:45 PM	7	46	23	11	26	3	4	102	17	6	53	3	301
5:00 PM	3	33	17	3	21	5	3	94	12	12	49	4	256
5:15 PM	11	36	16	7	33	4	2	89	9	8	48	4	267
5:30 PM	9	29	16	6	32	7	4	62	9	9	44	6	233
5:45 PM	17	29	16	5	36	3	5	68	10	9	44	4	246
6:00 PM	5	38	16	4	34	0	4	44	3	7	27	5	187
6:15 PM	6	34	12	5	26	5	1	41	10	9	28	2	179
6:30 PM	7	34	19	5	15	3	1	46	11	4	30	9	184
6:45 PM	5	25	10	1	17	0	3	26	8	9	22	3	129
VOLUMES	90	408	220	64	329	37	46	828	117	111	486	53	2,789
APPROACH %	13%	57%	31%	15%	77%	9%	5%	84%	12%	17%	75%	8%	
APP/DEPART	718	/	507	430	/	557	991	/	1,112	650	/	613	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	27	150	98	28	115	10	23	358	45	44	194	16	1,108
APPROACH %	10%	55%	36%	18%	75%	7%	5%	84%	11%	17%	76%	6%	
PEAK HR FACTOR	0.870			0.797			0.866			0.894			0.920
APP/DEPART	275	/	189	153	/	204	426	/	484	254	/	231	0



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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
4	0	1	2
5	0	0	1
4	1	0	0
5	1	0	1
9	1	0	0
12	3	1	2
8	3	1	0
6	1	3	0
3	3	1	2
5	0	3	1
7	2	3	0
7	0	1	2
75	15	14	11

29	10	6	4

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

16	2	3	0
7	3	3	1
9	1	0	2
13	2	6	0
9	4	2	0
9	4	2	0
9	4	7	1
8	1	4	1
7	0	1	2
3	0	2	1
9	3	5	4
5	0	5	0
104	24	40	12

45	8	12	3

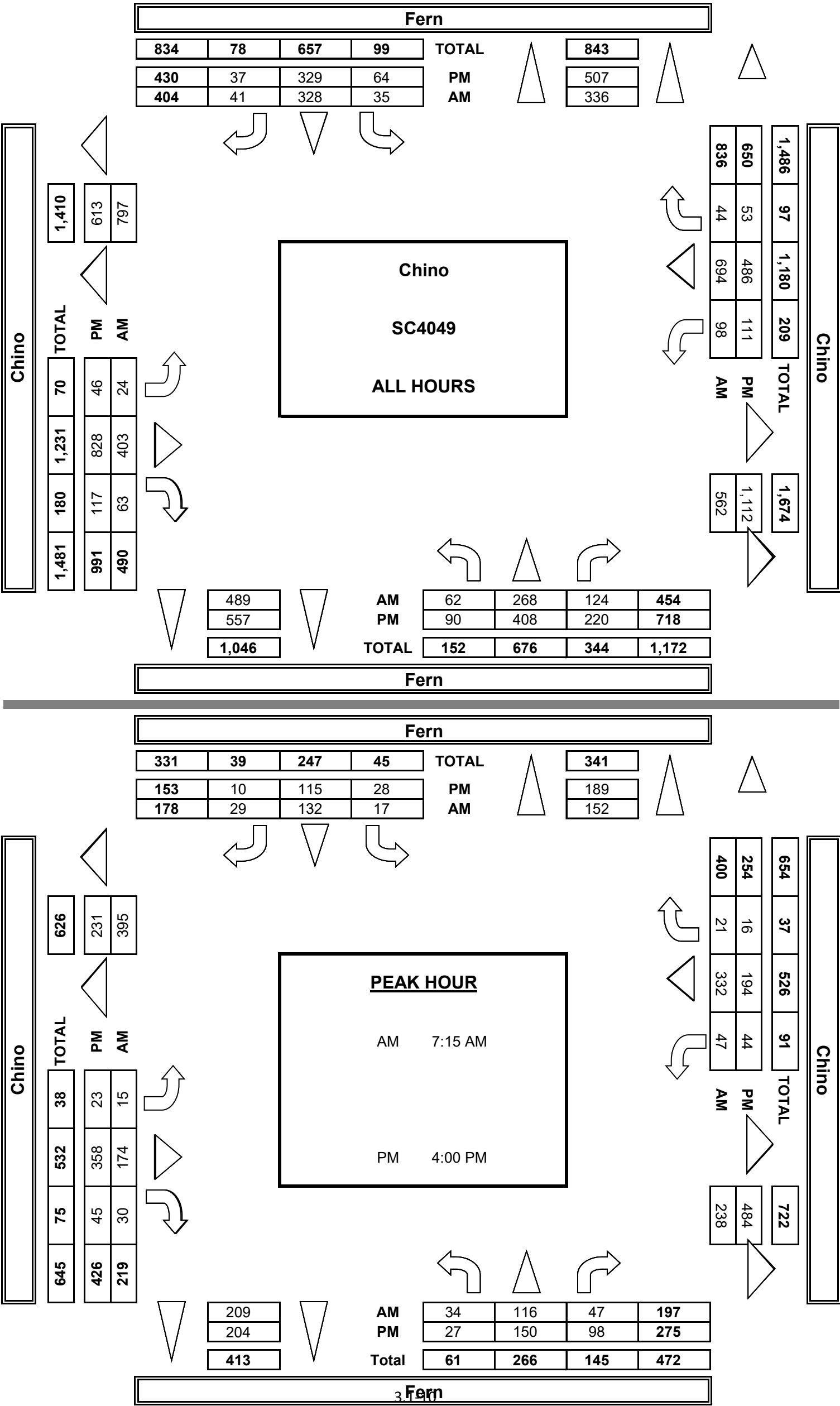
AM	6:00 AM
	6:15 AM
	6:30 AM
	6:45 AM
	7:00 AM
	7:15 AM
	7:30 AM
	7:45 AM
	8:00 AM
	8:15 AM
	8:30 AM
	8:45 AM
	TOTAL
PM	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
	5:00 PM
	5:15 PM
	5:30 PM
	5:45 PM
	6:00 PM
	6:15 PM
	6:30 PM
	6:45 PM
	TOTAL

ALL PED AND BIKE				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
1	0	0	1	2
1	1	1	3	6
2	0	2	2	6
1	1	0	1	3
1	1	1	0	3
0	2	0	2	4
1	0	0	2	3
0	4	0	0	4
1	1	1	0	3
3	3	1	2	9
1	0	0	0	1
3	2	1	2	8
15	15	7	15	52
1	2	1	0	4
1	0	2	0	3
2	4	0	1	7
3	3	1	6	13
2	1	0	2	5
2	5	2	0	9
5	2	0	1	8
0	5	0	4	9
1	5	1	1	8
8	2	1	3	14
7	2	0	3	12
9	7	2	4	22
41	38	10	25	114

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
1	0	0	1	2
1	1	1	3	6
2	0	2	2	6
1	1	0	1	3
1	1	1	0	3
0	2	0	2	4
0	0	0	2	2
0	4	0	0	4
1	1	1	0	3
2	3	1	2	8
0	0	0	0	0
3	1	1	2	7
12	14	7	15	48
1	2	1	0	4
1	0	2	0	3
2	3	0	1	6
3	3	0	6	12
2	1	0	2	5
2	5	2	0	9
5	2	0	1	8
0	5	0	4	9
1	4	1	1	7
8	2	0	3	13
6	0	0	1	7
9	6	2	3	20
40	33	8	22	103

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	1	0	1
0	0	0	0	0
0	1	0	0	1
1	2	0	2	5
0	1	0	1	2
1	5	2	3	11

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

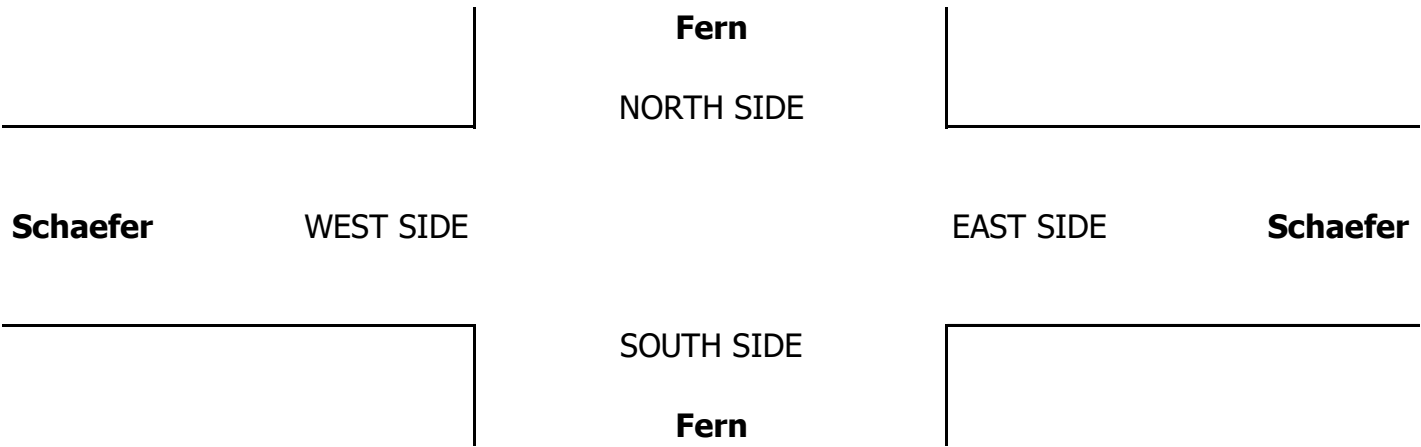
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 23, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Fern Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4049 7 SIGNAL

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Fern			Fern			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

AM	6:00 AM	1	1	1	2	12	9	0	24	4	2	41	1	98
	6:15 AM	2	5	4	1	15	9	0	35	2	1	28	1	103
	6:30 AM	7	12	1	1	12	15	1	37	3	1	41	1	132
	6:45 AM	4	16	5	4	27	14	5	39	5	0	53	1	173
	7:00 AM	9	14	7	4	19	10	3	47	4	1	45	1	164
	7:15 AM	18	19	3	5	18	16	5	36	10	1	55	3	189
	7:30 AM	29	27	9	7	28	29	6	60	18	2	62	8	285
	7:45 AM	19	32	6	8	34	23	16	98	42	5	70	2	355
	8:00 AM	15	25	9	8	39	24	8	58	16	5	75	10	292
	8:15 AM	15	26	6	8	35	10	6	54	12	1	58	11	242
	8:30 AM	14	31	1	12	32	7	3	49	17	3	49	9	227
	8:45 AM	15	22	6	7	33	12	5	43	8	1	40	9	201
	VOLUMES	148	230	58	67	304	178	58	580	141	23	617	57	2,461
APPROACH %		34%	53%	13%	12%	55%	32%	7%	74%	18%	3%	89%	8%	
APP/DEPART		436	/	345	549	/	468	779	/	705	697	/	943	0
BEGIN PEAK HR		7:30 AM												
VOLUMES		78	110	30	31	136	86	36	270	88	13	265	31	1,174
APPROACH %		36%	50%	14%	12%	54%	34%	9%	69%	22%	4%	86%	10%	
PEAK HR FACTOR		0.838												
APP/DEPART		218	/	177	253	/	237	394	/	331	309	/	429	0
PM	04:00 PM	8	46	8	7	29	5	24	156	12	3	59	14	371
	4:15 PM	18	37	5	14	30	15	14	116	11	5	52	8	325
	4:30 PM	19	41	9	6	32	12	18	137	15	5	54	11	359
	4:45 PM	9	47	7	6	31	6	22	130	13	2	50	11	334
	5:00 PM	21	32	7	9	22	14	17	147	12	5	55	14	355
	5:15 PM	27	41	2	8	28	10	14	149	22	0	46	9	356
	5:30 PM	11	24	5	14	21	9	19	126	16	4	46	10	305
	5:45 PM	9	43	5	11	31	8	9	101	14	7	62	12	312
	6:00 PM	18	35	4	7	20	5	12	105	17	6	44	15	288
	6:15 PM	10	26	5	5	27	8	25	101	10	3	49	15	284
	6:30 PM	10	36	3	7	16	5	12	99	11	4	48	5	256
	6:45 PM	9	18	5	4	14	5	12	66	4	2	42	9	190
	VOLUMES	169	426	65	98	301	102	198	1,433	157	46	607	133	3,735
APPROACH %		26%	65%	10%	20%	60%	20%	11%	80%	9%	6%	77%	17%	
APP/DEPART		660	/	757	501	/	504	1,788	/	1,596	786	/	878	0
BEGIN PEAK HR		4:30 PM												
VOLUMES		76	161	25	29	113	42	71	563	62	12	205	45	1,404
APPROACH %		29%	61%	10%	16%	61%	23%	10%	81%	9%	5%	78%	17%	
PEAK HR FACTOR		0.936												
APP/DEPART		262	/	277	184	/	187	696	/	617	262	/	323	0



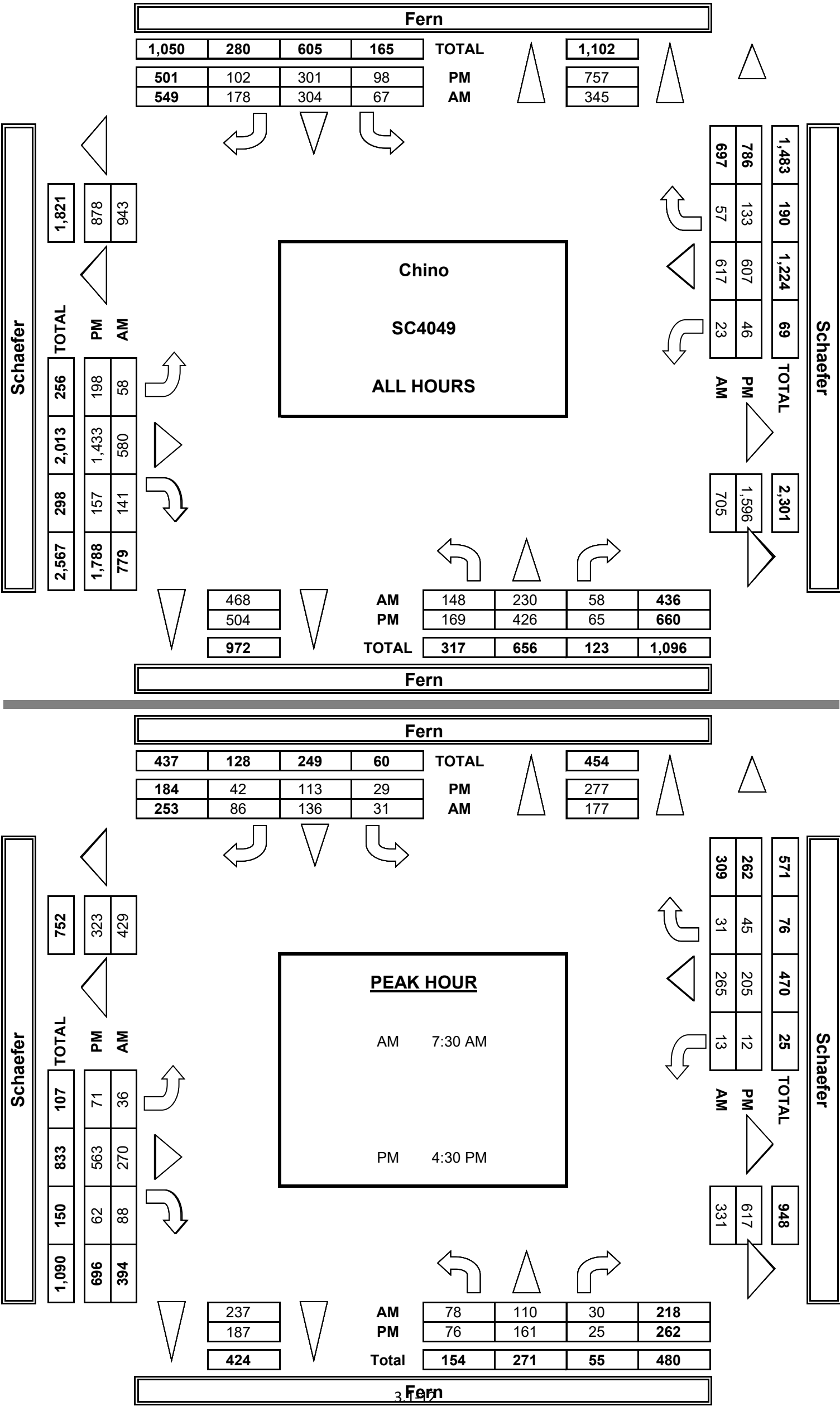
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
	8:30 AM	
	8:45 AM	
	TOTAL	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	0	0	1	1	1
0	0	2	2	4	4
0	1	0	0	1	1
0	0	0	0	0	0
0	3	0	1	4	4
1	1	0	1	3	3
0	3	3	0	6	6
0	1	0	0	1	1
1	2	1	3	7	7
4	0	2	3	9	9
3	1	1	0	5	5
1	3	0	2	6	6
10	15	9	13	47	47
1	0	1	0	2	2
0	3	3	0	6	6
2	1	1	0	4	4
6	2	1	2	11	11
1	0	3	0	4	4
2	4	0	0	6	6
3	1	5	0	9	9
2	1	1	0	4	4
2	2	5	0	9	9
1	2	2	2	7	7
6	3	0	0	9	9
3	1	2	0	6	6
29	20	24	4	77	77

PEDESTRIAN CROSSINGS					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	0	0	1	1	1
0	0	0	1	1	1
0	1	0	0	1	1
0	0	0	0	0	0
0	2	0	1	3	3
1	1	0	1	3	3
0	3	3	0	6	6
0	1	0	0	1	1
1	2	1	3	7	7
3	0	2	3	8	8
3	1	0	0	4	4
1	2	0	2	5	5
9	13	6	12	40	40
1	0	0	0	1	1
0	3	3	0	6	6
2	0	0	0	2	2
6	2	0	2	10	10
1	0	2	0	3	3
2	4	0	0	6	6
3	1	4	0	8	8
2	1	1	0	4	4
2	2	2	0	6	6
1	2	2	2	7	7
5	1	0	0	6	6
3	0	2	0	5	5
28	16	16	4	64	64

BICYCLE CROSSINGS					
ES	WS	SS	NS	TOTAL	
0	0	0	0	0	0
0	0	2	1	3	3
0	0	0	0	0	0
0	0	0	0	0	0
0	1	0	0	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	0	0	0	1	1
0	0	1	0	1	1
0	1	0	0	1	1
1	2	3	1	7	7
0	0	1	0	1	1
0	0	0	0	0	0
0	1	1	0	2	2
0	0	1	0	1	1
0	0	1	0	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1	2	0	0	3	3
0	1	0	0	1	1
1	4	8	0	13	13

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

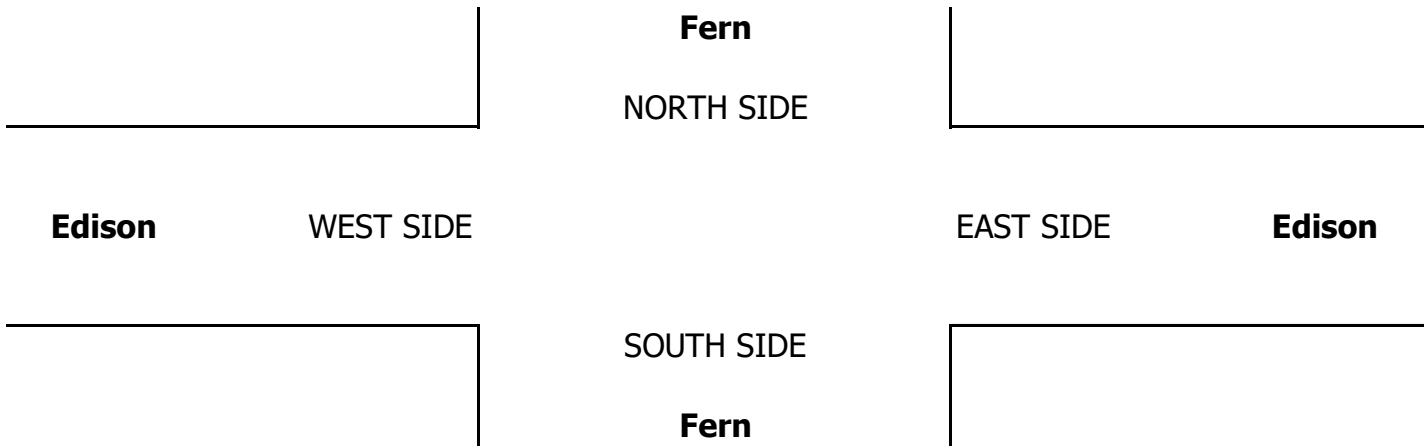
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 23, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Fern Edison	PROJECT #: LOCATION #: CONTROL:	SC4049 8 SIGNAL

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Fern			Fern			Edison			Edison			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	0	1	2	0	1	2	0	1	2	0	

AM	6:00 AM	2	2	2	1	10	5	1	37	2	1	69	1	133
	6:15 AM	0	3	0	3	8	6	3	49	1	4	99	2	178
	6:30 AM	5	12	2	3	11	6	3	53	0	0	113	5	213
	6:45 AM	1	8	1	2	14	14	10	41	2	1	97	1	192
	7:00 AM	5	10	2	4	9	9	10	50	0	1	93	3	196
	7:15 AM	7	27	2	0	14	14	10	63	3	1	102	5	248
	7:30 AM	17	31	0	3	22	12	9	55	4	3	138	6	300
	7:45 AM	8	29	0	2	46	20	17	57	19	4	91	4	297
	8:00 AM	3	23	2	2	34	20	20	48	2	5	92	4	255
	8:15 AM	0	21	4	4	22	14	15	53	6	3	99	3	244
	8:30 AM	6	13	1	2	31	15	22	68	6	1	93	9	267
	8:45 AM	4	20	2	3	19	14	15	68	8	3	100	9	265
	VOLUMES	58	199	18	29	240	149	135	642	53	27	1,186	52	2,788
	APPROACH %	21%	72%	7%	7%	57%	36%	16%	77%	6%	2%	94%	4%	
APP/DEPART		275	/	385	418	/	318	830	/	691	1,265	/	1,394	0
PM	BEGIN PEAK HR	7:15 AM												
	VOLUMES	35	110	4	7	116	66	56	223	28	13	423	19	1,100
	APPROACH %	23%	74%	3%	4%	61%	35%	18%	73%	9%	3%	93%	4%	
	PEAK HR FACTOR	0.776			0.695			0.825			0.774			0.917
	APP/DEPART	149	/	184	189	/	156	307	/	235	455	/	525	0
PM	04:00 PM	7	15	2	2	22	16	23	102	5	7	89	10	300
	4:15 PM	6	21	1	5	18	11	29	111	4	5	86	8	305
	4:30 PM	10	44	0	2	23	12	21	126	5	3	66	8	320
	4:45 PM	9	23	3	5	29	7	22	118	4	1	90	12	323
	5:00 PM	8	29	3	2	19	17	25	161	4	3	90	12	373
	5:15 PM	10	28	0	2	35	12	20	156	7	6	61	8	345
	5:30 PM	4	17	2	2	19	17	20	107	7	5	94	9	303
	5:45 PM	6	23	0	2	27	16	21	110	3	6	89	6	309
	6:00 PM	3	26	4	3	15	7	15	89	4	4	71	12	253
	6:15 PM	3	16	1	5	17	19	23	104	2	4	63	8	265
	6:30 PM	0	13	0	1	16	18	17	82	8	1	62	5	223
	6:45 PM	2	17	5	4	10	10	21	88	5	2	58	6	228
	VOLUMES	68	272	21	35	250	162	257	1,354	58	47	919	104	3,547
	APPROACH %	19%	75%	6%	8%	56%	36%	15%	81%	3%	4%	86%	10%	
APP/DEPART		361	/	633	447	/	353	1,669	/	1,412	1,070	/	1,149	0
PM	BEGIN PEAK HR	4:30 PM												
	VOLUMES	37	124	6	11	106	48	88	561	20	13	307	40	1,361
	APPROACH %	22%	74%	4%	7%	64%	29%	13%	84%	3%	4%	85%	11%	
	PEAK HR FACTOR	0.773			0.842			0.880			0.857			0.912
	APP/DEPART	167	/	252	165	/	138	669	/	579	360	/	392	0



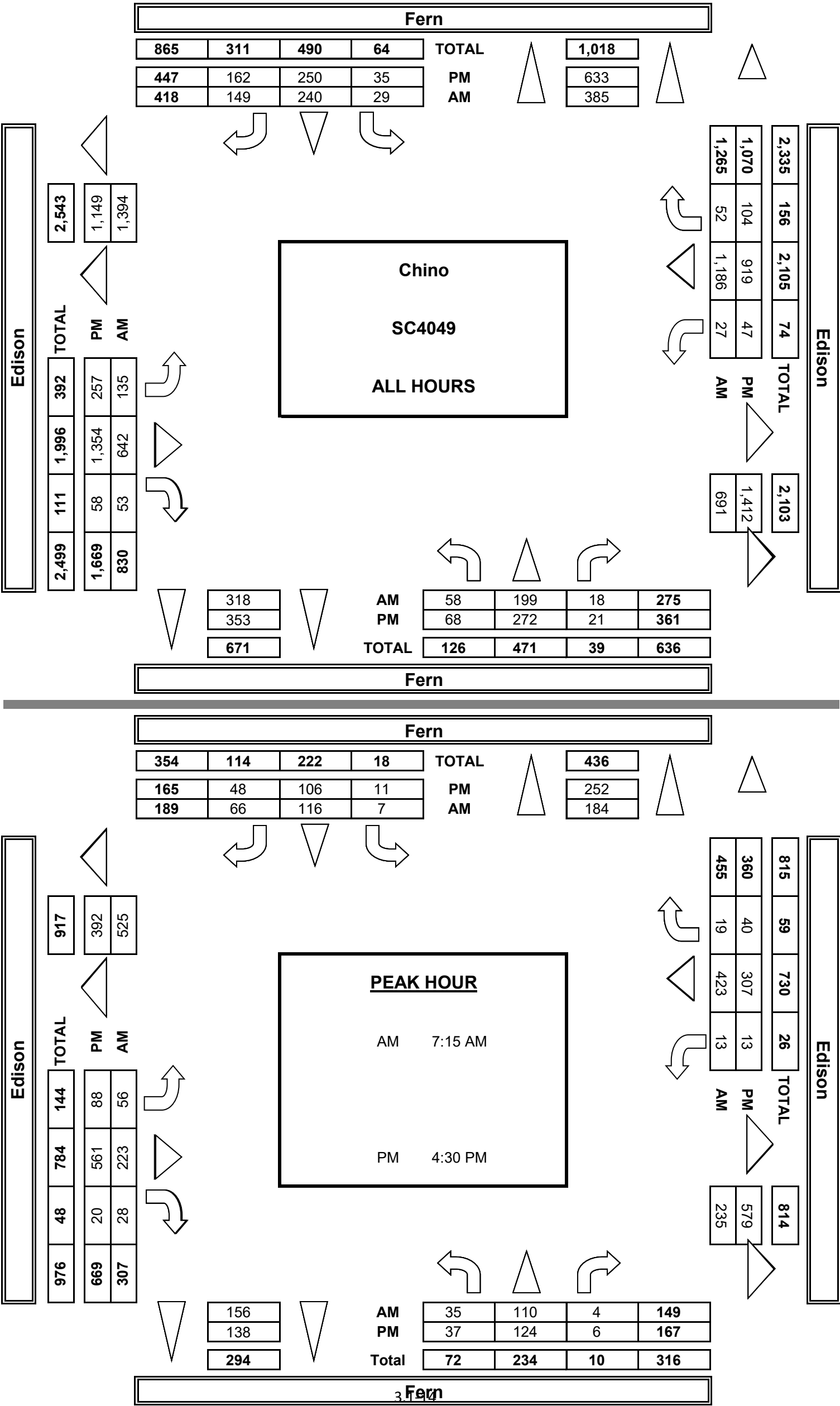
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
TOTAL	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	0	0	0	0	0
0	0	0	0	0	0
0	1	0	1	2	
0	0	1	0	1	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
1	3	0	0	4	
0	0	2	0	2	
1	0	1	0	2	
1	2	0	0	3	
0	3	1	0	4	
3	10	5	1	19	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	2	1	0	3	
0	0	0	0	0	
0	1	0	0	1	
0	3	0	0	3	
1	1	2	1	5	
0	1	0	0	1	
1	1	0	0	2	
1	2	1	0	4	
1	0	0	0	1	
4	11	4	1	20	

PEDESTRIAN CROSSINGS					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	0	0	0	0	
0	0	0	0	0	
0	1	0	0	1	
0	0	1	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
1	3	0	0	4	
0	0	0	0	0	
0	0	1	0	1	
0	2	0	0	2	
0	2	1	0	3	
1	8	3	0	12	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	1	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	3	0	0	3	
1	1	2	0	4	
0	1	0	0	1	
0	1	0	0	1	
0	2	0	0	2	
1	0	0	0	1	
2	8	3	0	13	

BICYCLE CROSSINGS					
ES	WS	SS	NS	TOTAL	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	1	1	
0	0	0	0	0	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	2	0	2	
1	0	0	0	1	
1	0	0	0	1	
0	1	0	0	1	
2	2	2	1	7	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	2	0	0	2	
0	0	0	0	0	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
1	0	0	0	1	
1	0	1	0	2	
0	0	0	0	0	
2	3	1	1	7	

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

T816

DATE: Tue, May 23, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Shopping Center Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4049 9 STOP N

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

	NORTHBOUND Shopping Center			SOUTHBOUND Shopping Center			EASTBOUND Schaefer			WESTBOUND Schaefer			
LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL

AM	6:00 AM	9	0	6	0	0	0	16	11	3	37	0	82
	6:15 AM	8	0	7	0	0	0	30	9	2	23	0	79
	6:30 AM	8	0	8	0	0	0	30	11	6	34	0	97
	6:45 AM	9	0	3	0	0	0	35	14	6	45	0	112
	7:00 AM	14	0	8	0	0	0	42	18	2	32	0	116
	7:15 AM	20	0	18	0	0	0	31	15	7	42	0	133
	7:30 AM	23	0	12	0	0	0	49	24	4	52	0	164
	7:45 AM	10	0	19	0	0	0	73	42	8	65	0	217
	8:00 AM	28	0	14	0	0	0	46	26	9	65	0	188
	8:15 AM	22	0	18	0	0	0	44	27	7	47	0	165
	8:30 AM	17	0	17	0	0	0	41	23	7	48	0	153
	8:45 AM	19	0	16	0	0	0	33	23	13	29	0	133
	VOLUMES	187	0	146	0	0	0	470	243	74	519	0	1,639
APPROACH %		56%	0%	44%	0%	0%	0%	66%	34%	12%	88%	0%	
APP/DEPART		333	/	0	0	/	316	713	/	617	593	/	706
BEGIN PEAK HR		7:30 AM											
VOLUMES		83	0	63	0	0	0	212	119	28	229	0	734
APPROACH %		57%	0%	43%	0%	0%	0%	64%	36%	11%	89%	0%	
PEAK HR FACTOR		0.869			0.000			0.720			0.868		
APP/DEPART		146	/	0	0	/	147	331	/	275	257	/	312
PM	04:00 PM	41	0	36	0	0	0	129	48	20	39	0	313
	4:15 PM	17	0	38	0	0	0	88	47	22	45	0	257
	4:30 PM	35	0	30	0	0	0	117	36	8	35	0	261
	4:45 PM	32	0	28	0	0	0	115	33	12	32	0	252
	5:00 PM	30	0	34	0	0	0	126	37	17	44	0	288
	5:15 PM	23	0	39	0	0	0	112	47	13	34	0	268
	5:30 PM	23	0	30	0	0	0	107	37	13	37	0	247
	5:45 PM	39	0	19	0	0	0	74	40	11	39	0	222
	6:00 PM	35	0	28	0	0	0	74	43	16	33	0	229
	6:15 PM	38	0	32	0	0	0	76	35	12	27	0	220
	6:30 PM	30	0	22	0	0	0	71	39	19	28	0	209
	6:45 PM	24	0	17	0	0	0	42	32	6	28	0	149
	VOLUMES	367	0	353	0	0	0	1,131	474	169	421	0	2,915
APPROACH %		51%	0%	49%	0%	0%	0%	70%	30%	29%	71%	0%	
APP/DEPART		720	/	0	0	/	644	1,605	/	1,484	590	/	787
BEGIN PEAK HR		4:00 PM											
VOLUMES		125	0	132	0	0	0	449	164	62	151	0	1,083
APPROACH %		49%	0%	51%	0%	0%	0%	73%	27%	29%	71%	0%	
PEAK HR FACTOR		0.834			0.000			0.866			0.795		
APP/DEPART		257	/	0	0	/	227	613	/	581	213	/	275



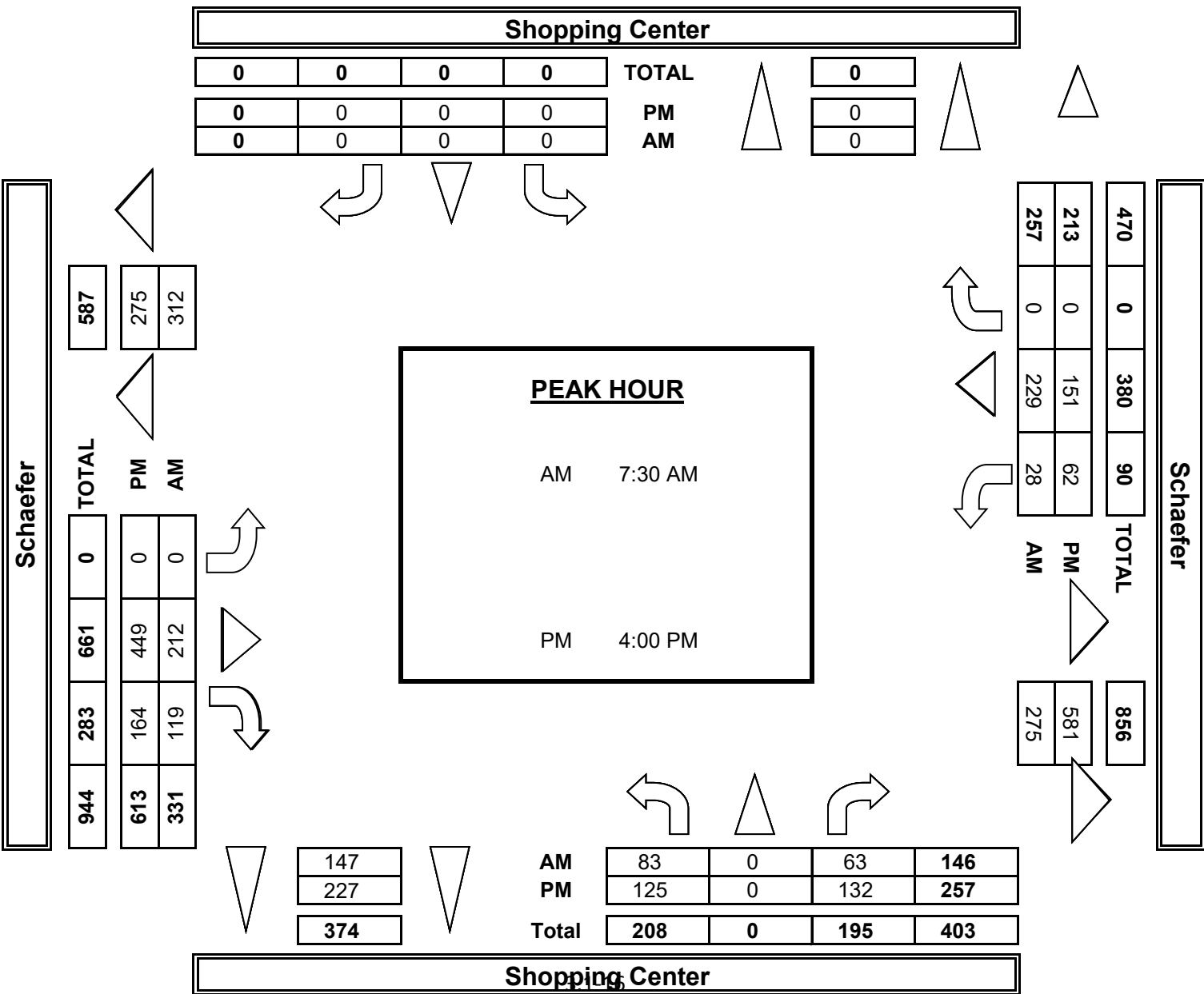
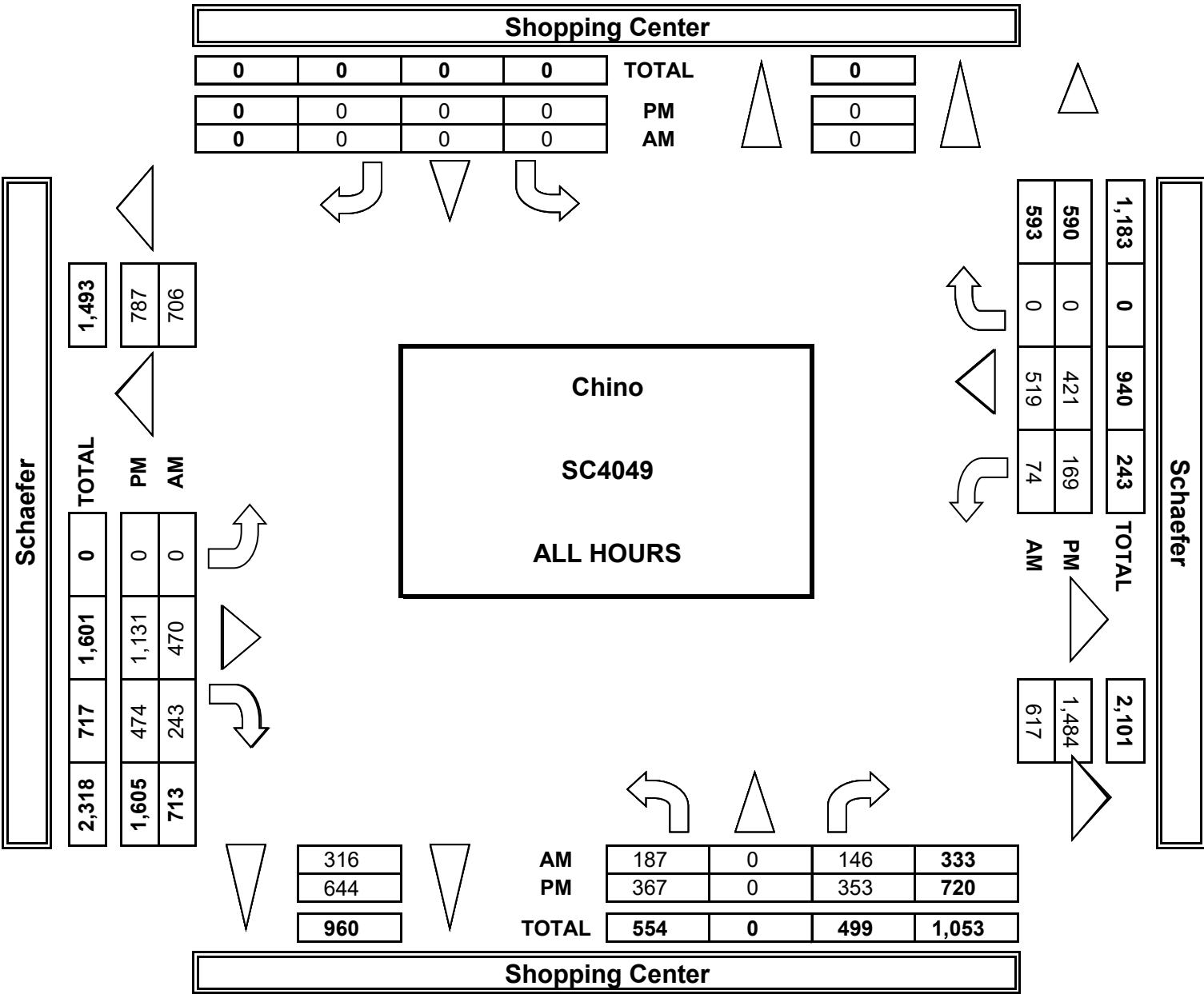
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
	8:30 AM	
	8:45 AM	
	TOTAL	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	2	1	3
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	2	0	2
0	0	1	0	1
0	0	0	0	0
0	0	6	1	7
0	0	1	0	1
0	0	1	0	1
0	0	3	0	3
0	0	4	0	4
0	0	1	0	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	11	0	11

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
0	0	2	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	2	0	2
0	0	0	0	0
0	0	0	0	0
0	0	5	0	5
0	0	1	0	1
0	0	1	0	1
0	0	2	0	2
0	0	3	0	3
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	7	0	7

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	1	2
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	4	0	4

AimTD LLC
TURNING MOVEMENT COUNTS



050223

PROJECT #: SC4199
LOCATION #: 9
CONTROL: STOP N

DATE:
Sat, Sep 9, 23

LOCATION: Chino
NORTH & SOUTH: Shopping Center DWY
EAST & WEST: Schaefer

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

	NORTHBOUND Shopping Center DWY			SOUTHBOUND Shopping Center DWY			EASTBOUND Schaefer			WESTBOUND Schaefer			
LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL

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

RTOR			
NRR X	SRR X	ERR X	WRR X

MD	11:00 AM	32	0	23	0	0	0	0	31	34	19	33	0	172
	11:15 AM	44	0	21	0	0	0	0	32	31	10	33	0	171
	11:30 AM	32	0	15	0	0	0	0	50	37	9	29	0	172
	11:45 AM	28	0	29	0	0	0	0	52	37	13	28	0	187
	12:00 PM	38	0	29	0	0	0	0	37	33	20	23	0	180
	12:15 PM	41	0	31	0	0	0	0	34	42	13	22	0	183
	12:30 PM	27	0	22	0	0	0	0	37	32	13	20	0	151
	12:45 PM	40	0	26	0	0	0	0	37	27	15	22	0	167
	VOLUMES	282	0	196	0	0	0	0	310	273	112	210	0	1,385
	APPROACH %	59%	0%	41%	0%	0%	0%	0%	53%	47%	35%	65%	0%	
	APP/DEPART	479	/	0	0	/	386	584	/	506	322	/	493	0
	BEGIN PEAK HR	11:30 AM												
	VOLUMES	139	0	104	0	0	0	0	173	149	55	102	0	723
	APPROACH %	57%	0%	43%	0%	0%	0%	0%	54%	46%	35%	65%	0%	
PEAK HR FACTOR	0.847		0.000		0.904		0.913		0.961					
APP/DEPART	244	/	0	0	/	205	322	/	277	157	/	241	0	

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
1	0	1	0	2

[illegible]

0	0	0	0



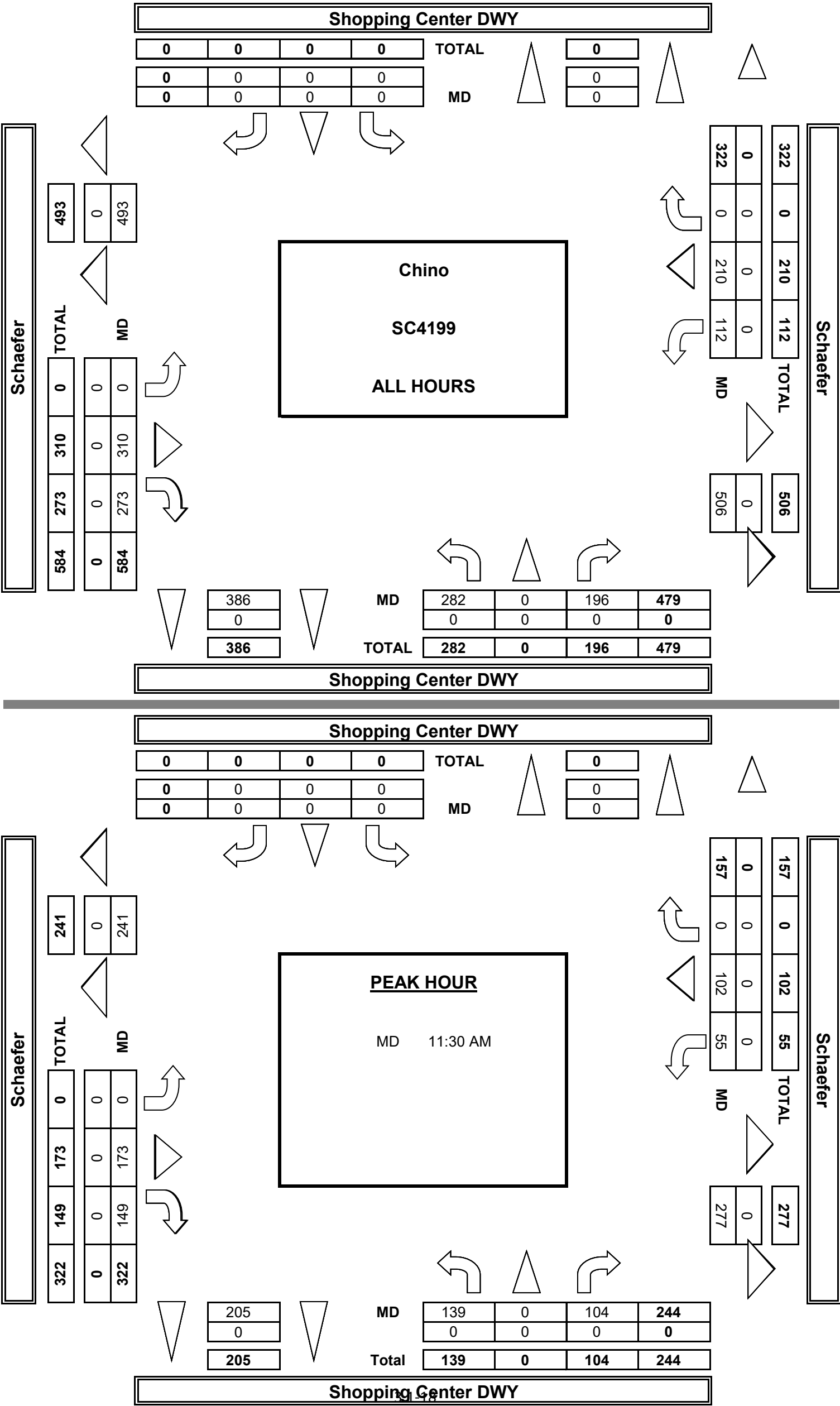
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
	TOTAL

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	5	0	5
0	0	7	0	7

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	5	0	5
0	0	7	0	7

[illegible]

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
Tue, May 23, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
10
SIGNAL

NOTES:

Queue AM/PM SB

AM
PM
MD
OTHER
OTHER

◀ W

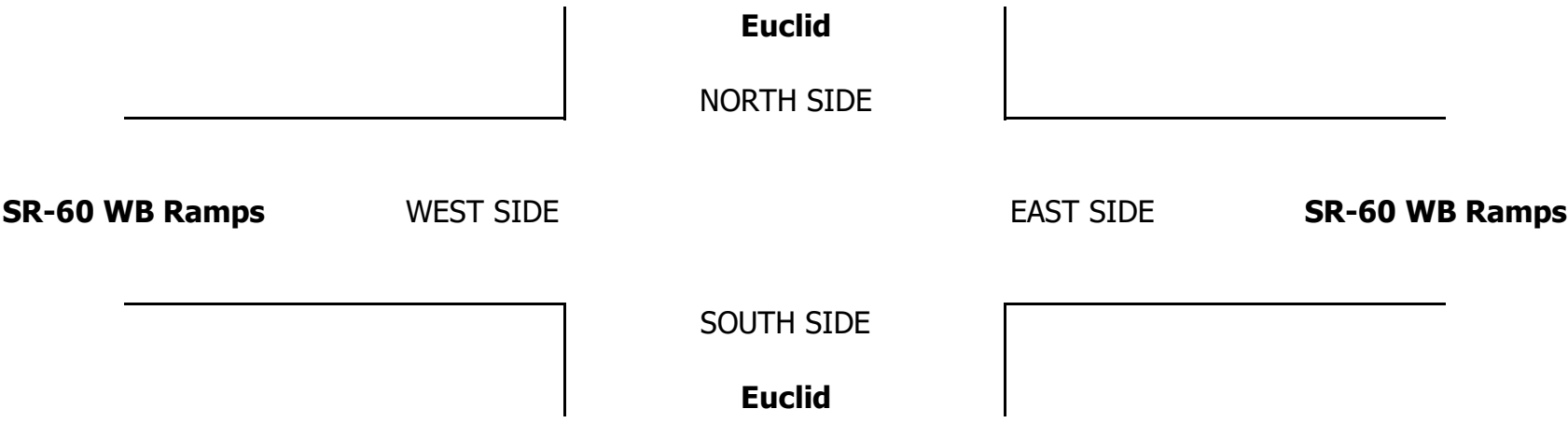
▲ N

S

▼

E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 1	EL X	ET X	ER X	WL 1.3	WT 0.3	WR 1.3	TOTAL
6:00 AM	52	68	0	0	107	83	0	0	0	80	0	44	434
6:15 AM	54	77	0	0	149	92	0	0	0	88	0	49	509
6:30 AM	61	108	0	0	205	83	0	0	0	83	0	46	586
6:45 AM	57	110	0	0	166	116	0	0	0	87	0	57	593
7:00 AM	57	138	0	0	152	122	0	0	0	73	0	71	613
7:15 AM	76	142	0	0	178	114	0	0	0	82	0	74	666
7:30 AM	84	162	0	0	182	122	0	0	0	68	2	70	690
7:45 AM	79	179	0	0	189	108	0	0	0	85	1	88	729
8:00 AM	55	177	0	0	204	103	0	0	0	86	0	95	720
8:15 AM	66	156	0	0	188	102	0	0	0	97	0	78	687
8:30 AM	66	166	0	0	195	96	0	0	0	84	0	74	681
8:45 AM	56	180	0	0	144	77	0	0	0	87	0	68	612
VOLUMES	763	1,663	0	0	2,059	1,218	0	0	0	1,000	3	814	7,520
APPROACH %	31%	69%	0%	0%	63%	37%	0%	0%	0%	55%	0%	45%	
APP/DEPART	2,426	/	2,477	3,277	/	3,078	0	/	0	1,817	/	1,965	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	284	674	0	0	763	435	0	0	0	336	3	331	2,826
APPROACH %	30%	70%	0%	0%	64%	36%	0%	0%	0%	50%	0%	49%	
PEAK HR FACTOR	0.928			0.976			0.000			0.925			0.969
APP/DEPART	958	/	1,005	1,198	/	1,107	0	/	0	670	/	714	0
04:00 PM	60	231	0	0	179	141	0	0	0	97	0	89	797
4:15 PM	59	191	0	0	208	115	0	0	0	60	1	104	738
4:30 PM	49	213	0	0	164	125	0	0	0	94	0	102	747
4:45 PM	57	221	0	0	169	107	0	0	0	96	0	93	743
5:00 PM	59	192	0	0	197	139	0	0	0	83	0	87	757
5:15 PM	66	163	0	0	193	129	0	0	0	76	1	78	706
5:30 PM	52	185	0	0	165	150	0	0	0	85	2	89	728
5:45 PM	69	186	0	0	187	112	0	0	0	101	0	82	737
6:00 PM	52	188	0	0	183	94	0	0	0	122	0	108	747
6:15 PM	60	164	0	0	169	79	0	0	0	104	0	94	670
6:30 PM	50	164	0	0	141	102	0	0	0	66	0	101	624
6:45 PM	42	133	0	0	163	91	0	0	0	79	1	90	599
VOLUMES	675	2,231	0	0	2,118	1,384	0	0	0	1,063	5	1,117	8,593
APPROACH %	23%	77%	0%	0%	60%	40%	0%	0%	0%	49%	0%	51%	
APP/DEPART	2,906	/	3,348	3,502	/	3,202	0	/	0	2,185	/	2,043	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	225	856	0	0	720	488	0	0	0	347	1	388	3,025
APPROACH %	21%	79%	0%	0%	60%	40%	0%	0%	0%	47%	0%	53%	
PEAK HR FACTOR	0.929			0.935			0.000			0.939			0.949
APP/DEPART	1,081	/	1,244	1,208	/	1,072	0	/	0	736	/	709	0



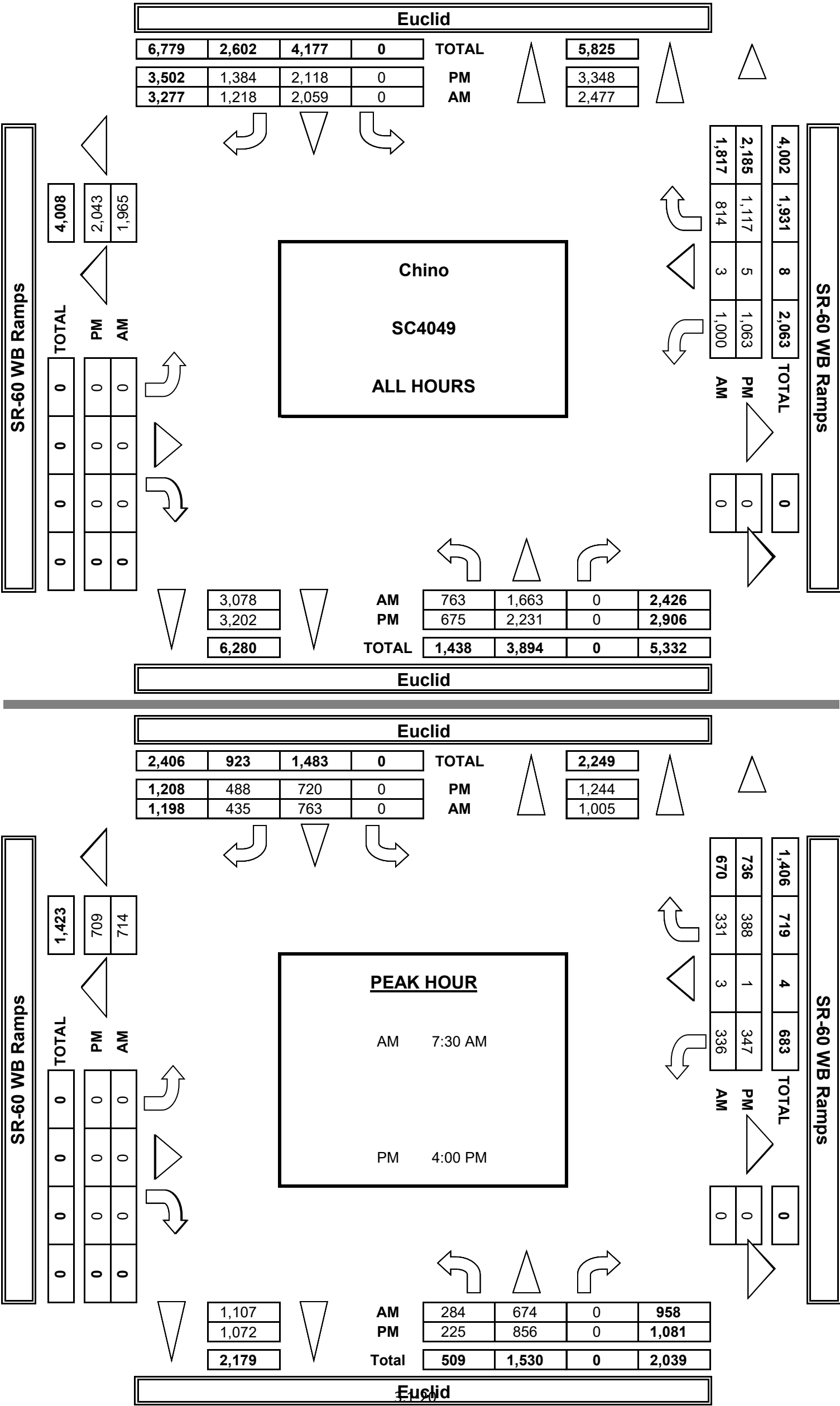
AM	6:00 AM				
	6:15 AM				
	6:30 AM				
	6:45 AM				
	7:00 AM				
	7:15 AM				
	7:30 AM				
	7:45 AM				
	8:00 AM				
PM	8:15 AM				
	8:30 AM				
	8:45 AM				
	TOTAL				
	4:00 PM				
	4:15 PM				
	4:30 PM				
	4:45 PM				
	5:00 PM				
	5:15 PM				
	5:30 PM				
	5:45 PM				
	6:00 PM				
	6:15 PM				
	6:30 PM				
	6:45 PM				
	TOTAL				

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	7	0	0	7	
0	1	0	0	1	
0	1	0	0	1	
2	1	0	1	4	
0	0	0	0	0	
1	2	0	0	3	
0	0	0	0	0	
0	0	0	0	0	
0	2	0	0	2	
3	3	0	0	6	
0	0	0	0	0	
3	2	0	0	5	
9	19	0	1	29	
3	2	0	0	5	
4	3	0	0	7	
4	0	0	0	4	
5	1	0	0	6	
2	0	0	0	2	
0	0	0	0	0	
1	2	0	0	3	
2	3	0	0	5	
3	5	0	1	9	
1	1	0	0	2	
2	4	0	0	6	
1	4	0	0	5	
28	25	0	1	54	

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	3	0	0	3
0	0	0	0	0
0	0	0	0	0
1	1	0	1	3
0	0	0	0	0
1	2	0	0	3
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2
1	3	0	0	4
0	0	0	0	0
1	1	0	0	2
4	12	0	1	17
2	2	0	0	4
1	2	0	0	3
3	0	0	0	3
2	1	0	0	3
1	0	0	0	1
0	0	0	0	0
1	2	0	0	3
0	2	0	0	2
2	3	0	1	6
0	1	0	0	1
2	0	0	0	2
0	4	0	0	4
14	17	0	1	32

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	4	0	0	4
0	1	0	0	1
0	1	0	0	1
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2
0	0	0	0	0
2	1	0	0	3
1	0	0	0	1
3	0	0	0	3
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
2	1	0	0	3
1	2	0	0	3
1	0	0	0	1
0	4	0	0	4
1	0	0	0	1
14	8	0	0	22

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURN

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR X	SL X	ST 2

AM	6:00 AM	73	72	0	0	114
	6:15 AM	81	86	0	0	159
	6:30 AM	87	136	0	0	238
	6:45 AM	83	138	0	0	180
	7:00 AM	86	165	0	0	171
	7:15 AM	125	154	0	0	194
	7:30 AM	128	181	0	0	214
	7:45 AM	121	200	0	0	206
	8:00 AM	92	207	0	0	216
	8:15 AM	110	173	0	0	202
	8:30 AM	92	199	0	0	220
	8:45 AM	79	208	0	0	162
	VOLUMES	1,155	1,916	0	0	2,273
	APPROACH %	38%	62%	0%	0%	63%
	APP/DEPART	3,071	/	2,800	3,619	/
	BEGIN PEAK HR	7:30 AM				
	VOLUMES	451	760	0	0	836
	APPROACH %	37%	63%	0%	0%	64%
	PEAK HR FACTOR	0.944			0.948	
	APP/DEPART	1,210	/	1,107	1,307	/
	04:00 PM	82	251	0	0	192
	4:15 PM	72	208	0	0	225
	4:30 PM	58	236	0	0	171
	4:45 PM	69	229	0	0	181
	5:00 PM	72	210	0	0	208
	5:15 PM	77	180	0	0	205

PM	5:30 PM	56	199	0	0	172
	5:45 PM	77	200	0	0	193
	6:00 PM	56	193	0	0	186
	6:15 PM	71	174	0	0	173
	6:30 PM	54	179	0	0	147
	6:45 PM	50	141	0	0	169
	VOLUMES	790	2,398	0	0	2,221
	APPROACH %	25%	75%	0%	0%	61%
	APP/DEPART	3,188	/	3,559	3,651	/
	BEGIN PEAK HR	4:00 PM				
	VOLUMES	280	923	0	0	769
	APPROACH %	23%	77%	0%	0%	60%
	PEAK HR FACTOR	0.905				0.917
	APP/DEPART	1,203	/	1,326	1,277	/

SR-60 WB Ramps

WEST SIDE

152	0	0	0	114	2	93	788
116	0	0	0	117	0	84	786
98	0	0	0	156	0	115	802
80	0	0	0	145	0	98	740
105	0	0	0	89	0	103	676
96	0	0	0	105	2	97	658
1,430	0	0	0	1,462	6	1,162	9,468
39%	0%	0%	0%	56%	0%	44%	
3,683	0	/	0	2,630	/	2,226	0
508	0	0	0	529	1	403	3,412
40%	0%	0%	0%	57%	0%	43%	
		0.000			0.914		0.923
1,298	0	/	0	933	/	789	0

Euclid

NORTH SIDE

EAST SIDE

SR-60 WB Ramps

SOUTH SIDE

Euclid

U-TURNS				
NB	SB	EB	WB	TTL

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

				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 WB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4049 10 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	▶ E

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 1	EL X	ET X	ER X	WL 1.3	WT 0.3	WR 1.3	TOTAL

AM	6:00 AM	35	64	0	0	94	73	0	0	0	51	0	38	355
	6:15 AM	37	67	0	0	136	78	0	0	0	64	0	44	426
	6:30 AM	41	87	0	0	177	73	0	0	0	60	0	33	471
	6:45 AM	40	86	0	0	150	103	0	0	0	51	0	53	483
	7:00 AM	39	116	0	0	138	104	0	0	0	36	0	63	496
	7:15 AM	44	130	0	0	160	106	0	0	0	47	0	70	557
	7:30 AM	53	145	0	0	158	112	0	0	0	38	1	69	576
	7:45 AM	49	164	0	0	172	100	0	0	0	51	0	84	620
	8:00 AM	33	150	0	0	187	97	0	0	0	47	0	92	606
	8:15 AM	37	140	0	0	174	92	0	0	0	51	0	68	562
	8:30 AM	47	138	0	0	168	88	0	0	0	54	0	65	560
	8:45 AM	40	153	0	0	117	63	0	0	0	53	0	60	486
	VOLUMES	495	1,440	0	0	1,831	1,089	0	0	0	603	1	739	6,198
	APPROACH %	26%	74%	0%	0%	63%	37%	0%	0%	0%	45%	0%	55%	
	APP/DEPART	1,935	/	2,179	2,920	/	2,450	0	/	0	1,343	/	1,569	0
PM	BEGIN PEAK HR	7:30 AM												
	VOLUMES	165	599	0	0	691	401	0	0	0	187	1	313	2,364
	APPROACH %	21%	78%	0%	0%	63%	37%	0%	0%	0%	37%	0%	62%	
	PEAK HR FACTOR	0.905			0.961			0.000			0.901			0.953
	APP/DEPART	771	/	912	1,092	/	885	0	/	0	501	/	567	0
	04:00 PM	44	208	0	0	166	135	0	0	0	53	0	86	692
	4:15 PM	46	171	0	0	189	107	0	0	0	32	1	98	644
	4:30 PM	41	189	0	0	160	123	0	0	0	68	0	96	677
	4:45 PM	48	208	0	0	157	101	0	0	0	74	0	92	680
	5:00 PM	50	176	0	0	185	138	0	0	0	65	0	86	700
	5:15 PM	58	147	0	0	182	122	0	0	0	60	0	75	644
	5:30 PM	47	172	0	0	158	146	0	0	0	67	2	84	676
	5:45 PM	62	173	0	0	180	107	0	0	0	88	0	78	688
	6:00 PM	47	184	0	0	179	92	0	0	0	97	0	104	703
	6:15 PM	53	154	0	0	161	78	0	0	0	81	0	88	615
	6:30 PM	47	153	0	0	136	99	0	0	0	51	0	97	583
	6:45 PM	37	124	0	0	155	88	0	0	0	60	0	83	547
	VOLUMES	580	2,059	0	0	2,008	1,336	0	0	0	796	3	1,067	7,849
	APPROACH %	22%	78%	0%	0%	60%	40%	0%	0%	0%	43%	0%	57%	
	APP/DEPART	2,639	/	3,126	3,344	/	2,824	0	/	0	1,866	/	1,899	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	175	776	0	0	672	466	0	0	0	227	1	372	2,693
	APPROACH %	18%	81%	0%	0%	59%	41%	0%	0%	0%	38%	0%	62%	
	PEAK HR FACTOR	0.933			0.945			0.000			0.904			0.973
	APP/DEPART	955	/	1,148	1,138	/	903	0	/	0	600	/	642	0

U-TURNS				
NB	SB	EB	WB	TTL
1	0	0	0	1
2	0	0	0	2
0	0	0	0	0
1	0	0	0	1
1	0	0	0	1
0	0	0	0	0
3	0	0	0	3
3	0	0	0	3
0	0	0	0	0
1	0	0	0	1
3	0	0	0	3
1	0	0	0	1
16	0	0	0	16

RTOR			
NRR	SRR	ERR	WRR
X	0	X	0

0	32	0	18
0	41	0	28
0	35	0	16
0	47	0	36
0	37	0	37
0	56	0	35
0	42	0	34
0	30	0	40
0	36	0	56
0	32	0	29
0	29	0	26
0	37	0	26
0	454	0	381

0	140	0	159

0	0	0	0	0
1	0	0	0	1
1	0	0	0	1
2	0	0	0	2
3	0	0	0	3
1	0	0	0	1
4	0	0	0	4
2	0	0	0	2
0	0	0	0	0
0	0	0	0	0
3	0	0	0	3
3	0	0	0	3
20	0	0	0	20

0	61	0	27
0	47	0	37
0	53	0	37
0	40	0	27
0	54	0	31
0	40	0	31
0	47	0	30
0	43	0	24
0	38	0	41
0	21	0	30
0	46	0	39
0	43	0	34
0	533	0	388

0	201	0	128

		Euclid	
		NORTH SIDE	
SR-60 WB Ramps	WEST SIDE		EAST SIDE
		SOUTH SIDE	
		Euclid	

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
10
SIGNAL

CLASS 2:
2-AXLE
WORK
VEHICLES/
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	X	X	2	1	X	X	X	1.3	0.3	1.3	

AM	6:00 AM	7	0	0	0	12	9	0	0	0	4	0	4	36
	6:15 AM	3	4	0	0	10	8	0	0	0	8	0	5	38
	6:30 AM	6	6	0	0	12	9	0	0	0	8	0	8	49
	6:45 AM	3	10	0	0	11	7	0	0	0	10	0	2	43
	7:00 AM	2	9	0	0	5	8	0	0	0	6	0	6	36
	7:15 AM	6	7	0	0	12	1	0	0	0	3	0	2	31
	7:30 AM	8	6	0	0	7	6	0	0	0	9	1	0	37
	7:45 AM	8	3	0	0	11	4	0	0	0	17	0	2	45
	8:00 AM	2	13	0	0	15	5	0	0	0	7	0	2	44
	8:15 AM	5	9	0	0	9	5	0	0	0	12	0	7	47
	8:30 AM	6	12	0	0	17	8	0	0	0	12	0	5	60
	8:45 AM	3	15	0	0	22	10	0	0	0	4	0	4	58
	VOLUMES	59	94	0	0	143	80	0	0	0	100	1	47	524
	APPROACH %	39%	61%	0%	0%	64%	36%	0%	0%	0%	68%	1%	32%	
PM	APP/DEPART	153	/	141	223	/	246	0	/	0	148	/	137	0
	BEGIN PEAK HR	7:30 AM												
	VOLUMES	22	31	0	0	42	20	0	0	0	45	1	11	173
	APPROACH %	41%	57%	0%	0%	68%	32%	0%	0%	0%	79%	2%	19%	
	PEAK HR FACTOR	0.900			0.775			0.000			0.750			0.920
	APP/DEPART	54	/	42	62	/	88	0	/	0	57	/	43	0
	04:00 PM	4	13	0	0	5	5	0	0	0	9	0	3	39
PM	4:15 PM	8	13	0	0	12	4	0	0	0	5	0	4	46
	4:30 PM	3	14	0	0	0	1	0	0	0	6	0	4	28
	4:45 PM	3	10	0	0	6	4	0	0	0	4	0	0	27
	5:00 PM	3	9	0	0	8	1	0	0	0	3	0	0	24
	5:15 PM	2	10	0	0	6	4	0	0	0	5	1	1	29
	5:30 PM	4	6	0	0	4	4	0	0	0	3	0	4	25
	5:45 PM	3	5	0	0	4	4	0	0	0	4	0	4	24
	6:00 PM	3	2	0	0	3	0	0	0	0	9	0	1	18
	6:15 PM	1	6	0	0	8	0	0	0	0	1	0	5	21
	6:30 PM	1	3	0	0	2	2	0	0	0	3	0	4	15
	6:45 PM	1	6	0	0	4	1	0	0	0	4	1	5	22
	VOLUMES	36	97	0	0	62	30	0	0	0	56	2	35	318
	APPROACH %	27%	73%	0%	0%	67%	33%	0%	0%	0%	60%	2%	38%	
	APP/DEPART	133	/	132	92	/	119	0	/	0	93	/	67	0
	BEGIN PEAK HR	4:00 PM												
PM	VOLUMES	17	50	0	0	23	14	0	0	0	24	0	11	140
	APPROACH %	25%	74%	0%	0%	62%	38%	0%	0%	0%	69%	0%	31%	
	PEAK HR FACTOR	0.810			0.578			0.000			0.729			0.761
	APP/DEPART	68	/	61	37	/	48	0	/	0	35	/	31	0

U-TURNS				
NB	SB	EB	WB	TTL
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
3	0	0	0	3

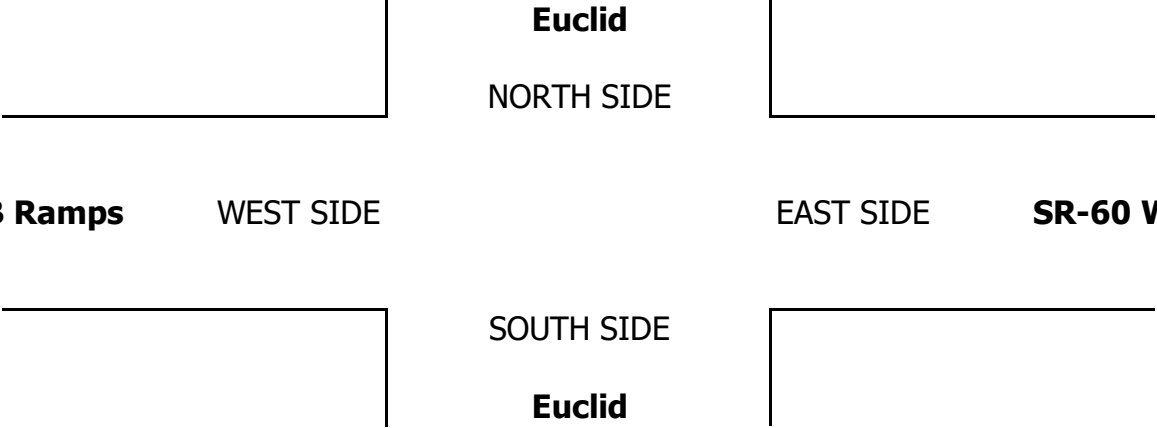
RTOR			
NRR	SRR	ERR	WRR
X	0	X	0
0	7	0	3
0	6	0	1
0	1	0	7
0	4	0	1
0	3	0	3
0	1	0	1
0	3	0	0
0	1	0	0
0	1	0	1
0	1	0	2
0	1	0	2
0	5	0	3
0	34	0	24

0	6	0	3

0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1

0	1	0	1
0	3	0	1
0	1	0	1
0	2	0	0
0	1	0	0
0	2	0	1
0	2	0	1
0	1	0	0
0	0	0	1
0	0	0	3
0	1	0	2
0	1	0	2
0	15	0	13

0	7	0	3



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
10
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	X	X	2	1	X	X	X	1.3	0.3	1.3	

AM	6:00 AM	3	4	0	0	1	0	0	0	0	7	0	1	16
	6:15 AM	3	4	0	0	0	2	0	0	0	4	0	0	13
	6:30 AM	5	5	0	0	5	0	0	0	0	3	0	2	20
	6:45 AM	3	3	0	0	1	4	0	0	0	7	0	1	19
	7:00 AM	4	3	0	0	0	2	0	0	0	14	0	0	23
	7:15 AM	6	0	0	0	2	0	0	0	0	6	0	0	14
	7:30 AM	6	6	0	0	4	2	0	0	0	6	0	0	24
	7:45 AM	6	4	0	0	1	0	0	0	0	3	0	0	14
	8:00 AM	4	4	0	0	0	0	0	0	0	7	0	1	16
	8:15 AM	7	2	0	0	0	0	0	0	0	7	0	0	16
	8:30 AM	3	5	0	0	2	0	0	0	0	4	0	0	14
	8:45 AM	5	2	0	0	3	0	0	0	0	7	0	1	18
VOLUMES		55	42	0	0	19	10	0	0	0	75	0	6	207
APPROACH %		57%	43%	0%	0%	66%	34%	0%	0%	0%	93%	0%	7%	
APP/DEPART		97	/	48	29	/	94	0	/	0	81	/	65	0
BEGIN PEAK HR		7:30 AM												
VOLUMES		23	16	0	0	5	2	0	0	0	23	0	1	70
APPROACH %		59%	41%	0%	0%	71%	29%	0%	0%	0%	96%	0%	4%	
PEAK HR FACTOR		0.813			0.292			0.000			0.750			0.729
APP/DEPART		39	/	17	7	/	28	0	/	0	24	/	25	0
PM	04:00 PM	4	6	0	0	4	0	0	0	0	7	0	0	21
	4:15 PM	1	3	0	0	2	2	0	0	0	5	0	0	13
	4:30 PM	3	3	0	0	0	0	0	0	0	5	0	1	12
	4:45 PM	2	2	0	0	3	1	0	0	0	4	0	0	12
	5:00 PM	1	1	0	0	1	0	0	0	0	1	0	1	5
	5:15 PM	1	0	0	0	0	1	0	0	0	5	0	0	7
	5:30 PM	0	2	0	0	1	0	0	0	0	3	0	0	6
	5:45 PM	2	5	0	0	2	0	0	0	0	4	0	0	13
	6:00 PM	2	0	0	0	1	0	0	0	0	3	0	0	6
	6:15 PM	2	1	0	0	0	1	0	0	0	4	0	1	9
	6:30 PM	1	2	0	0	0	0	0	0	0	3	0	0	6
	6:45 PM	1	1	0	0	4	0	0	0	0	6	0	0	12
VOLUMES		20	26	0	0	18	5	0	0	0	50	0	3	122
APPROACH %		43%	57%	0%	0%	78%	22%	0%	0%	0%	94%	0%	6%	
APP/DEPART		46	/	29	23	/	68	0	/	0	53	/	25	0
BEGIN PEAK HR		4:00 PM												
VOLUMES		10	14	0	0	9	3	0	0	0	21	0	1	58
APPROACH %		42%	58%	0%	0%	75%	25%	0%	0%	0%	95%	0%	5%	
PEAK HR FACTOR		0.600			0.750			0.000			0.786			0.690
APP/DEPART		24	/	15	12	/	30	0	/	0	22	/	13	0

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

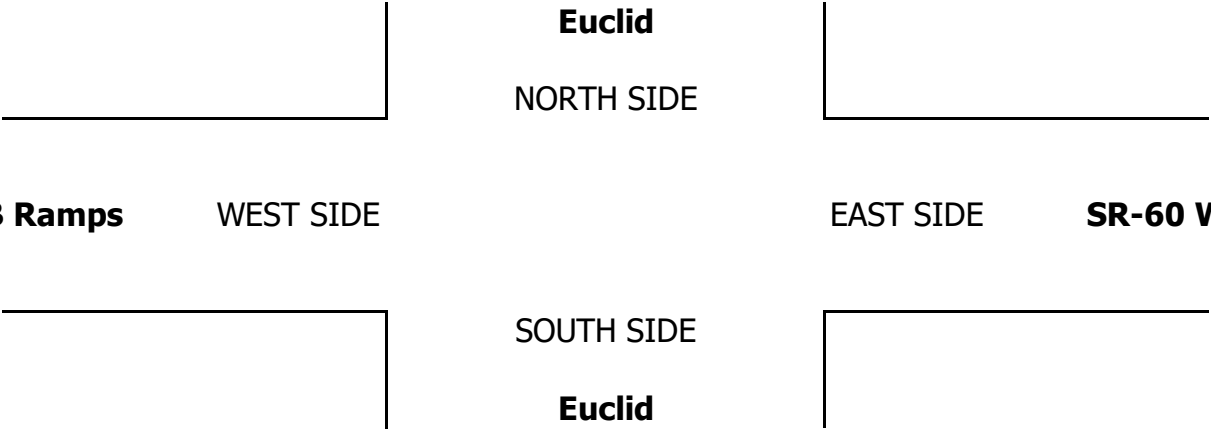
RTOR			
NRR	SRR	ERR	WRR
X	0	X	0
0	0	0	1
0	2	0	0
0	0	0	2
0	0	0	1
0	1	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	4	0	4

0	1	0	0

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

0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	1	0	2

0	1	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 WB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4049 10 SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 1	EL X	ET X	ER X	WL 1.3	WT 0.3	WR 1.3	TOTAL

AM	6:00 AM	7	0	0	0	0	1	0	0	0	18	0	1	27
	6:15 AM	11	1	0	0	2	4	0	0	0	12	0	0	30
	6:30 AM	9	10	0	0	11	1	0	0	0	12	0	3	46
	6:45 AM	10	9	0	0	3	2	0	0	0	19	0	1	44
	7:00 AM	12	9	0	0	7	8	0	0	0	17	0	1	54
	7:15 AM	20	3	0	0	4	7	0	0	0	26	0	2	62
	7:30 AM	17	5	0	0	11	2	0	0	0	15	0	1	51
	7:45 AM	16	7	0	0	5	4	0	0	0	14	1	2	49
	8:00 AM	16	9	0	0	2	1	0	0	0	25	0	0	53
	8:15 AM	17	5	0	0	4	5	0	0	0	27	0	1	59
	8:30 AM	10	11	0	0	6	0	0	0	0	14	0	4	45
	8:45 AM	8	8	0	0	2	4	0	0	0	23	0	2	47
	VOLUMES	153	77	0	0	57	39	0	0	0	222	1	18	567
	APPROACH %	67%	33%	0%	0%	59%	41%	0%	0%	0%	92%	0%	7%	
PM	APP/DEPART	230	/	95	96	/	279	0	/	0	241	/	193	0
	BEGIN PEAK HR	7:30 AM												
	VOLUMES	66	26	0	0	22	12	0	0	0	81	1	4	212
	APPROACH %	72%	28%	0%	0%	65%	35%	0%	0%	0%	94%	1%	5%	
	PEAK HR FACTOR	0.920			0.654			0.000			0.768			0.898
	APP/DEPART	92	/	30	34	/	103	0	/	0	86	/	79	0
	04:00 PM	8	3	0	0	2	1	0	0	0	28	0	0	42
	4:15 PM	4	3	0	0	4	2	0	0	0	17	0	2	32
	4:30 PM	2	6	0	0	3	1	0	0	0	15	0	1	28
	4:45 PM	4	0	0	0	3	1	0	0	0	14	0	1	23
	5:00 PM	5	6	0	0	3	0	0	0	0	14	0	0	28
	5:15 PM	4	6	0	0	4	2	0	0	0	6	0	2	24
	5:30 PM	1	4	0	0	2	0	0	0	0	12	0	1	20
	5:45 PM	2	3	0	0	1	1	0	0	0	5	0	0	12
	6:00 PM	0	2	0	0	0	2	0	0	0	13	0	3	20
	6:15 PM	4	3	0	0	0	0	0	0	0	18	0	0	25
	6:30 PM	1	5	0	0	2	1	0	0	0	9	0	0	18
	6:45 PM	3	2	0	0	0	2	0	0	0	9	0	2	18
	VOLUMES	38	43	0	0	24	13	0	0	0	160	0	12	290
	APPROACH %	47%	53%	0%	0%	65%	35%	0%	0%	0%	93%	0%	7%	
	APP/DEPART	81	/	55	37	/	184	0	/	0	172	/	51	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	18	12	0	0	12	5	0	0	0	74	0	4	125
	APPROACH %	60%	40%	0%	0%	71%	29%	0%	0%	0%	95%	0%	5%	
	PEAK HR FACTOR	0.682			0.708			0.000			0.696			0.744
	APP/DEPART	30	/	16	17	/	86	0	/	0	78	/	23	0

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

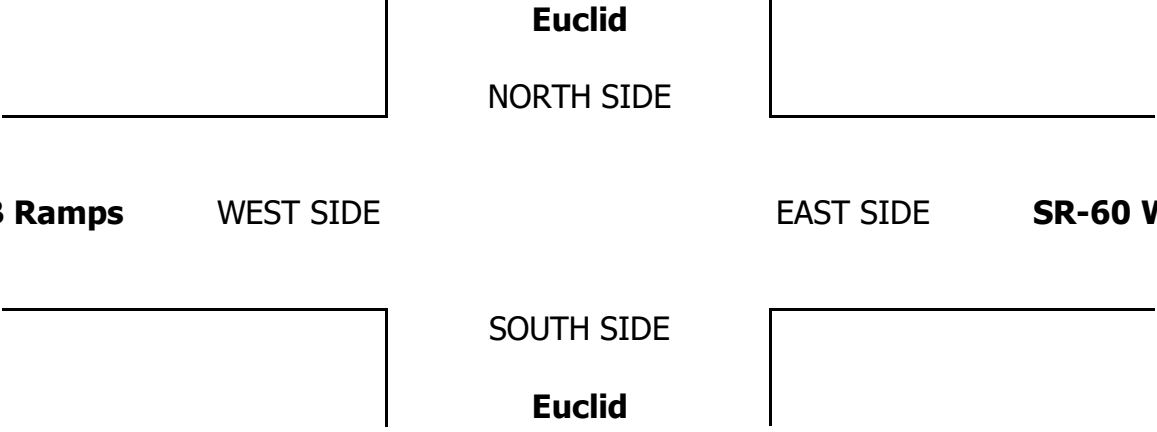
RTOR			
NRR X	SRR 0	ERR X	WRR 0
0	1	0	0
0	2	0	0
0	1	0	0
0	0	0	0
0	2	0	0
0	0	0	1
0	1	0	0
0	1	0	2
0	0	0	0
0	2	0	1
0	0	0	2
0	2	0	1
0	12	0	7

0	4	0	3

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

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	1	0	1
0	3	0	2

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
10
SIGNAL

CLASS 5:
RV

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	1	1	0	0	0	0	0	0	0	0	0	2
	7:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	1	0	0	0	0	0	0	0	0	1	2
	VOLUMES	1	2	0	0	1	0	0	0	0	0	1	5
	APPROACH %	33%	67%	0%	0%	100%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	3	/	3	1	/	1	0	/	0	1	/	1
PM	BEGIN PEAK HR	7:30 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.000		
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	1	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	1	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	1	0	0	0	0	0	0	0	1	0	0	2
	APPROACH %	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	1	/	0	0	/	1	0	/	0	1	/	1
	BEGIN PEAK HR	4:00 PM											
	VOLUMES	0	0	0	0	0	0	0	0	1	0	0	1
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.250		
	APP/DEPART	0	/	0	0	/	1	0	/	0	1	/	0

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

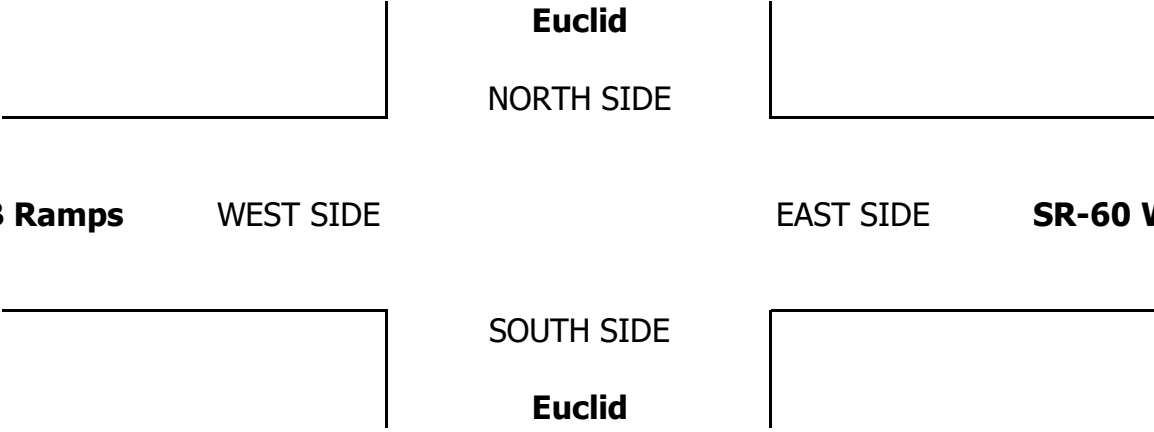
RTOR			
NRR	SRR	ERR	WRR
X	0	X	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0

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

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

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 WB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4049 10 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◄ W		E ►
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	X	X	2	1	X	X	X	1.3	0.3	1.3	

AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	1	0	0	1	0	0	0	0	0	0	2
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	1	0	0	1	0	0	0	0	0	0	2
	7:00 AM	0	1	0	0	1	0	0	0	0	0	1	3
	7:15 AM	0	2	0	0	0	0	0	0	0	0	0	2
	7:30 AM	0	0	0	0	2	0	0	0	0	0	0	2
	7:45 AM	0	1	0	0	0	0	0	0	0	0	0	1
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	1
	8:15 AM	0	0	0	0	1	0	0	0	0	0	2	3
	8:30 AM	0	0	0	0	2	0	0	0	0	0	0	2
	8:45 AM	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	8	0	0	8	0	0	0	0	0	3	19
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	8	/	11	8	/	8	0	/	0	3	/	0
PM	BEGIN PEAK HR	7:30 AM											
	VOLUMES	0	2	0	0	3	0	0	0	0	0	2	7
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	100%	
	PEAK HR FACTOR	0.500			0.375			0.000			0.250		
	APP/DEPART	2	/	4	3	/	3	0	/	0	2	/	0
	APP/DEPART	2	/	4	3	/	3	0	/	0	2	/	0
PM	04:00 PM	0	1	0	0	2	0	0	0	0	0	0	3
	4:15 PM	0	1	0	0	1	0	0	0	0	0	0	2
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	2
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	5:30 PM	0	1	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	1	0	0	1	0	0	0	0	0	0	2
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	6	0	0	6	0	0	0	0	0	0	12
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	6	/	6	6	/	6	0	/	0	0	/	0
PM	BEGIN PEAK HR	4:00 PM											
	VOLUMES	0	4	0	0	4	0	0	0	0	0	0	8
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	1.000			0.500			0.000			0.000		
	APP/DEPART	4	/	4	4	/	4	0	/	0	0	/	0

	Euclid	
	NORTH SIDE	

SR-60 WB Ramps WEST SIDE EAST SIDE SR-60 WB Ramps

	SOUTH SIDE	
	Euclid	

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

RTOR			
NRR	SRR	ERR	WRR
X	0	X	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	3

0	0	0	2

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

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

0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Tue, May 23, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
11
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W

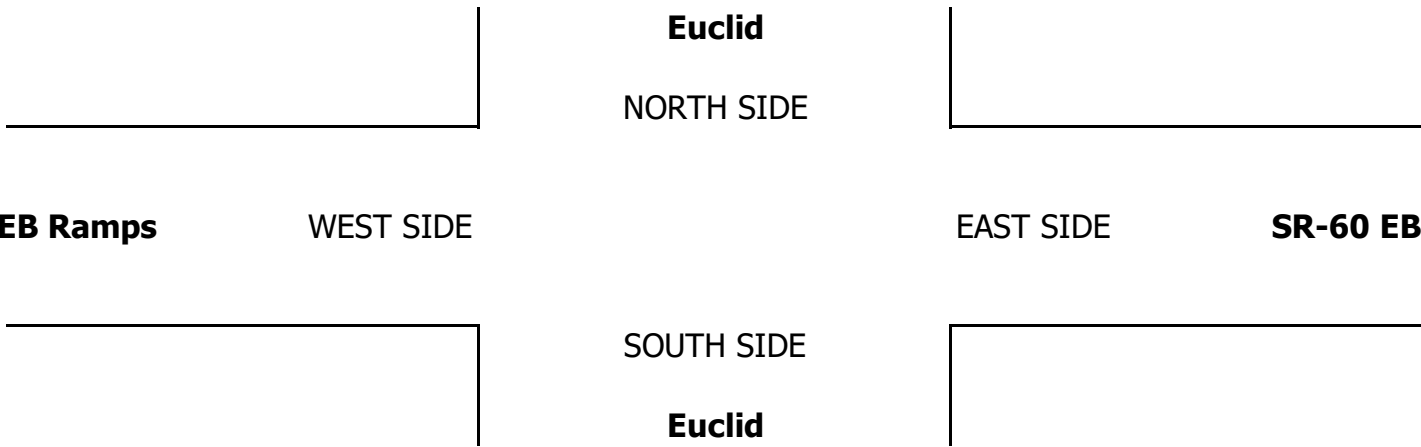
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL X	NT 2	NR 1	SL 1	ST 2	SR X	EL 1.5	ET 0	ER 0.5	WL X	WT X	WR X	TOTAL
6:00 AM	0	77	99	63	126	0	43	0	81	0	0	0	489
6:15 AM	0	88	118	79	160	0	42	0	68	0	0	0	555
6:30 AM	0	109	101	78	210	0	59	0	72	0	0	0	629
6:45 AM	0	107	126	75	179	0	59	0	69	0	0	0	615
7:00 AM	0	124	130	64	156	0	71	0	56	0	0	0	601
7:15 AM	0	136	136	103	157	0	82	2	68	0	0	0	684
7:30 AM	0	169	145	99	155	0	77	4	63	0	0	0	712
7:45 AM	0	169	133	84	193	0	92	0	77	0	0	0	748
8:00 AM	0	146	131	89	201	0	86	0	89	0	0	0	742
8:15 AM	0	144	104	89	197	0	78	0	71	0	0	0	683
8:30 AM	0	162	122	86	196	0	70	0	86	0	0	0	722
8:45 AM	0	154	104	55	178	0	82	0	84	0	0	0	657
VOLUMES	0	1,585	1,449	964	2,108	0	841	6	884	0	0	0	7,837
APPROACH %	0%	52%	48%	31%	69%	0%	49%	0%	51%	0%	0%	0%	
APP/DEPART	3,034	/	2,429	3,072	/	2,992	1,731	/	2,416	0	/	0	0
BEGIN PEAK HR	7:45 AM												
VOLUMES	0	621	490	348	787	0	326	0	323	0	0	0	2,895
APPROACH %	0%	56%	44%	31%	69%	0%	50%	0%	50%	0%	0%	0%	
PEAK HR FACTOR	0.920			0.978			0.927			0.000			0.968
APP/DEPART	1,111	/	947	1,135	/	1,110	649	/	838	0	/	0	0
04:00 PM	0	214	107	64	212	0	77	0	46	0	0	0	720
4:15 PM	0	192	80	85	185	0	57	1	51	0	0	0	651
4:30 PM	0	186	85	69	190	0	73	0	53	0	0	0	656
4:45 PM	0	214	100	74	193	0	64	0	45	0	0	0	690
5:00 PM	0	200	77	69	214	0	56	1	48	0	0	0	665
5:15 PM	0	171	98	75	195	0	58	1	62	0	0	0	660
5:30 PM	0	170	84	65	189	0	67	0	68	0	0	0	643
5:45 PM	0	182	106	85	205	0	72	0	60	0	0	0	710
6:00 PM	0	148	71	67	238	0	92	0	74	0	0	0	690
6:15 PM	0	163	83	72	201	0	61	0	72	0	0	0	652
6:30 PM	0	137	77	56	145	0	77	1	78	0	0	0	571
6:45 PM	0	108	56	72	173	0	64	1	60	0	0	0	534
VOLUMES	0	2,085	1,024	853	2,340	0	818	5	717	0	0	0	7,842
APPROACH %	0%	67%	33%	27%	73%	0%	53%	0%	47%	0%	0%	0%	
APP/DEPART	3,109	/	2,911	3,193	/	3,057	1,540	/	1,874	0	/	0	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	0	806	372	292	780	0	271	1	195	0	0	0	2,717
APPROACH %	0%	68%	32%	27%	73%	0%	58%	0%	42%	0%	0%	0%	
PEAK HR FACTOR	0.917			0.971			0.927			0.000			0.943
APP/DEPART	1,178	/	1,081	1,072	/	975	467	/	661	0	/	0	0



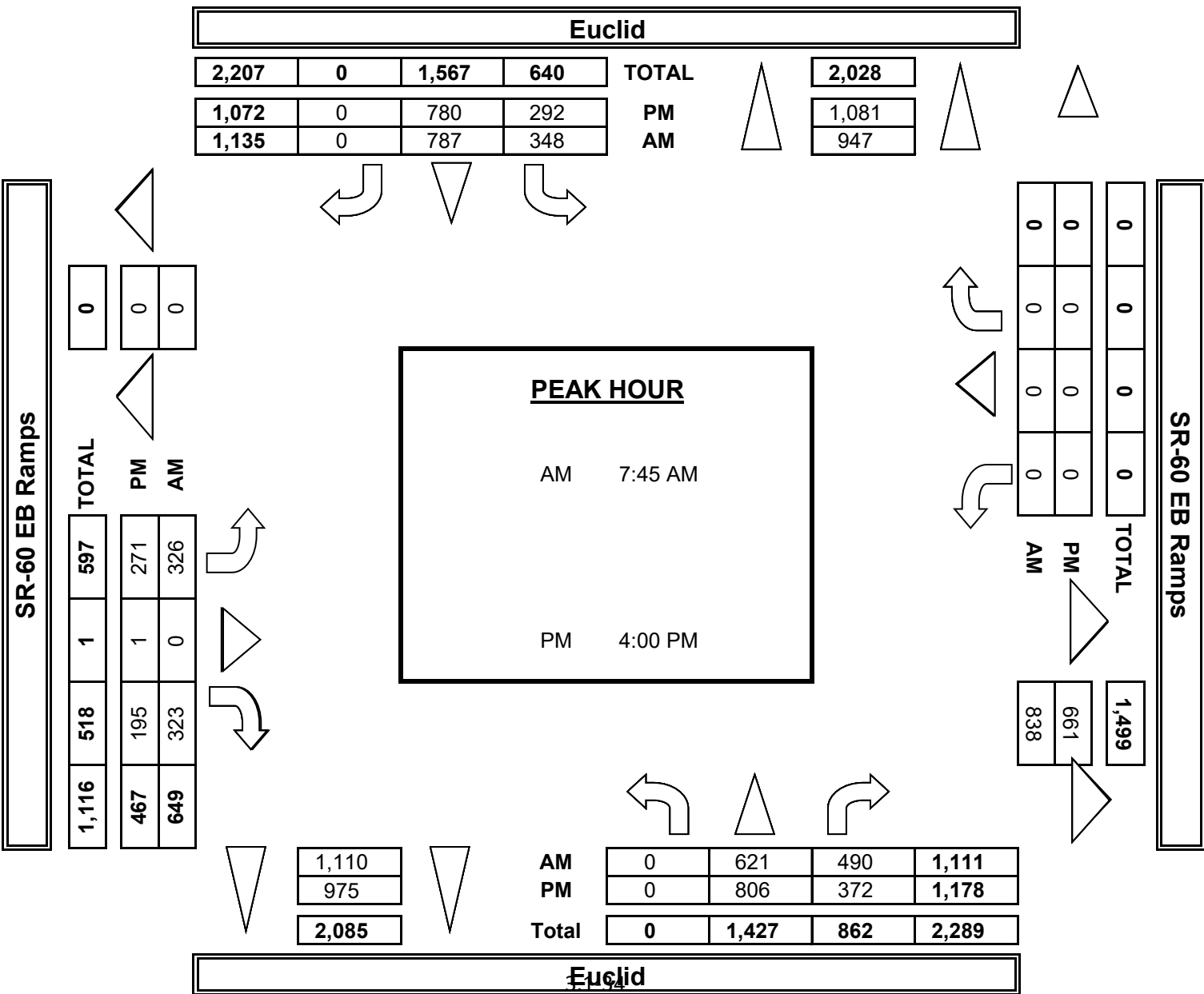
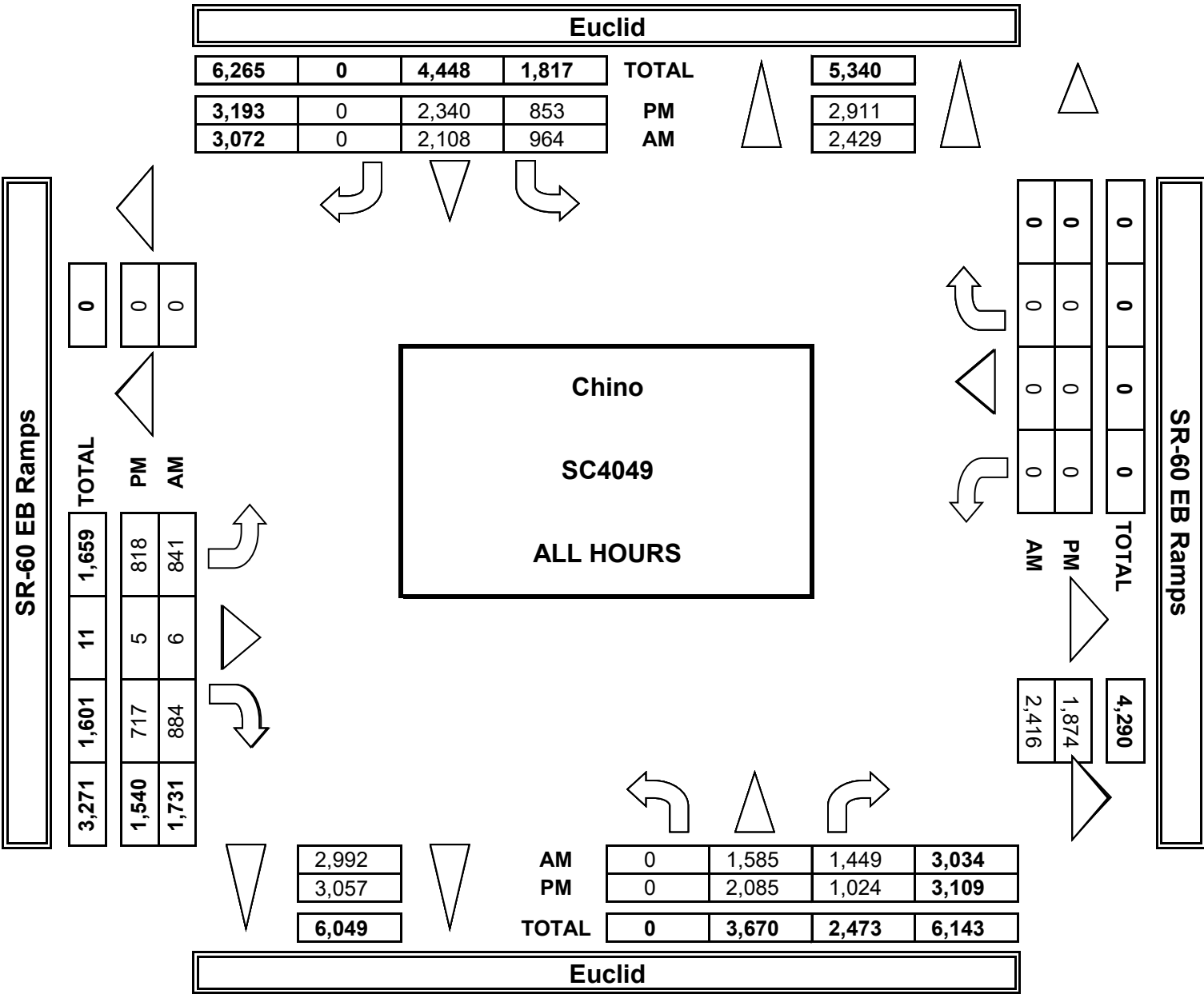
AM	6:00 AM
	6:15 AM
	6:30 AM
	6:45 AM
	7:00 AM
	7:15 AM
	7:30 AM
	7:45 AM
	8:00 AM
	8:15 AM
PM	8:30 AM
	8:45 AM
	TOTAL
	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
	5:00 PM
	5:15 PM
	5:30 PM
	5:45 PM
	6:00 PM
	6:15 PM
	6:30 PM
	6:45 PM
	TOTAL

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	5	0	0	5	
0	1	0	0	1	
0	1	1	0	2	
2	1	0	0	3	
0	0	0	0	0	
1	2	0	0	3	
0	0	0	0	0	
0	1	0	0	1	
0	1	0	0	1	
2	3	0	0	5	
2	0	0	0	2	
1	1	0	0	2	
8	16	1	0	25	
4	4	0	0	8	
1	2	0	0	3	
3	1	0	0	4	
4	0	0	0	4	
2	1	0	0	3	
1	0	0	0	1	
0	2	0	0	2	
2	3	0	0	5	
3	2	0	0	5	
2	0	0	0	2	
1	4	0	0	5	
1	3	0	0	4	
24	22	0	0	46	

PEDESTRIAN CROSSINGS					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	2	0	0	2	
0	0	0	0	0	
0	0	1	0	1	
1	1	0	0	2	
0	0	0	0	0	
1	2	0	0	3	
0	0	0	0	0	
0	1	0	0	1	
0	1	0	0	1	
0	1	0	0	1	
0	3	0	0	3	
2	0	0	0	2	
0	1	0	0	1	
4	11	1	0	16	
1	4	0	0	5	
0	2	0	0	2	
2	0	0	0	2	
2	0	0	0	2	
1	1	0	0	2	
1	0	0	0	1	
0	2	0	0	2	
0	1	0	0	1	
3	0	0	0	3	
0	0	0	0	0	
1	1	0	0	2	
0	2	0	0	2	
11	13	0	0	24	

BICYCLE CROSSINGS					
ES	WS	SS	NS	TOTAL	
0	3	0	0	3	
0	1	0	0	1	
0	1	0	0	1	
1	0	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
2	0	0	0	2	
0	0	0	0	0	
1	0	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
2	2	0	0	4	
0	2	0	0	2	
2	0	0	0	2	
0	3	0	0	3	
1	1	0	0	2	
13	9	0	0	22	

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL X	NT 2	NR 1	SL 1	ST 2

AM	6:00 AM	0	101	154	70	170
	6:15 AM	0	117	163	83	200
	6:30 AM	0	149	135	83	270
	6:45 AM	0	149	175	81	237
	7:00 AM	0	170	163	65	225
	7:15 AM	0	192	181	105	231
	7:30 AM	0	226	212	107	220
	7:45 AM	0	230	190	90	244
	8:00 AM	0	203	201	96	265
	8:15 AM	0	196	136	94	275
	8:30 AM	0	207	186	96	249
	8:45 AM	0	188	168	59	248
	VOLUMES	0	2,125	2,062	1,025	2,831
	APPROACH %	0%	51%	49%	27%	73%
	APP/DEPART	4,186	/	3,071	3,856	/
	BEGIN PEAK HR	7:45 AM				
	VOLUMES	0	835	713	375	1,032
	APPROACH %	0%	54%	46%	27%	73%
	PEAK HR FACTOR	0.921			0.954	
	APP/DEPART	1,548	/	1,195	1,406	/
	04:00 PM	0	245	157	67	290
	4:15 PM	0	216	119	91	239
	4:30 PM	0	210	123	77	227
	4:45 PM	0	228	137	78	235
	5:00 PM	0	219	111	73	254
	5:15 PM	0	187	128	76	224

PM	5:30 PM	0	182	115	71	219
	5:45 PM	0	199	128	89	223
	6:00 PM	0	155	103	68	271
	6:15 PM	0	177	105	76	238
	6:30 PM	0	147	105	61	169
	6:45 PM	0	120	67	75	208
	VOLUMES	0	2,285	1,396	899	2,797
	APPROACH %	0%	62%	38%	24%	76%
	APP/DEPART	3,680	/	3,185	3,696	/
	BEGIN PEAK HR		4:00 PM			
	VOLUMES	0	899	535	313	991
	APPROACH %	0%	63%	37%	24%	76%
	PEAK HR FACTOR		0.893			0.915
	APP/DEPART	1,434	/	1,199	1,303	/

SR-60 EB Ramps

WEST SIDE

0	73	0	85	0	0	0	744
0	77	0	88	0	0	0	803
0	93	0	95	0	0	0	784
0	68	0	95	0	0	0	758
0	85	2	94	0	0	0	661
0	68	1	79	0	0	0	618
0	900	8	956	0	0	0	9,239
0%	48%	0%	51%	0%	0%	0%	
3,753	1,864	/	2,302	0	/	0	0
0	301	3	279	0	0	0	3,319
0%	52%	1%	48%	0%	0%	0%	
		0.879			0.000		0.917
1,269	582	/	851	0	/	0	0

Euclid

NORTH SIDE

EAST SIDE

SR-60 EB Ramps

SOUTH SIDE

Euclid

U-TURNS				
NB	SB	EB	WB	TTL

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

				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 EB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4049 11 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N S ▼	◀ W E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL X	NT 2	NR 1	SL 1	ST 2	SR X	EL 1.5	ET 0	ER 0.5	WL X	WT X	WR X	TOTAL

AM	6:00 AM	0	57	61	53	94	0	42	0	53	0	0	0	360
	6:15 AM	0	66	83	71	130	0	37	0	50	0	0	0	437
	6:30 AM	0	78	72	72	165	0	49	0	49	0	0	0	485
	6:45 AM	0	76	91	68	134	0	49	0	40	0	0	0	458
	7:00 AM	0	92	100	63	106	0	63	0	38	0	0	0	462
	7:15 AM	0	98	101	99	108	0	76	2	38	0	0	0	522
	7:30 AM	0	127	102	90	109	0	71	4	44	0	0	0	547
	7:45 AM	0	127	94	76	150	0	89	0	63	0	0	0	599
	8:00 AM	0	105	81	84	152	0	78	0	67	0	0	0	567
	8:15 AM	0	107	82	85	139	0	70	0	63	0	0	0	546
	8:30 AM	0	127	77	76	149	0	58	0	68	0	0	0	555
	8:45 AM	0	127	60	49	122	0	66	0	67	0	0	0	491
	VOLUMES	0	1,187	1,004	886	1,558	0	748	6	640	0	0	0	6,029
	APPROACH %	0%	54%	46%	36%	64%	0%	54%	0%	46%	0%	0%	0%	
	APP/DEPART	2,191	/	1,938	2,444	/	2,198	1,394	/	1,893	0	/	0	0
PM	BEGIN PEAK HR	7:45 AM												
	VOLUMES	0	466	334	321	590	0	295	0	261	0	0	0	2,267
	APPROACH %	0%	58%	42%	35%	65%	0%	53%	0%	47%	0%	0%	0%	
	PEAK HR FACTOR		0.905			0.965			0.914			0.000		0.946
	APP/DEPART	800	/	761	911	/	851	556	/	655	0	/	0	0
	04:00 PM	0	188	72	61	158	0	64	0	37	0	0	0	580
	4:15 PM	0	165	56	76	146	0	51	0	38	0	0	0	532
	4:30 PM	0	162	64	64	165	0	64	0	33	0	0	0	552
	4:45 PM	0	199	76	69	164	0	58	0	32	0	0	0	598
	5:00 PM	0	186	56	65	186	0	45	1	36	0	0	0	575
	5:15 PM	0	156	79	74	171	0	49	1	49	0	0	0	579
	5:30 PM	0	157	65	60	169	0	62	0	55	0	0	0	568
	5:45 PM	0	165	91	80	190	0	68	0	43	0	0	0	637
	6:00 PM	0	141	51	65	212	0	91	0	56	0	0	0	616
	6:15 PM	0	150	68	68	176	0	57	0	57	0	0	0	576
	6:30 PM	0	129	60	53	128	0	71	0	66	0	0	0	507
	6:45 PM	0	97	49	67	148	0	61	1	50	0	0	0	473
	VOLUMES	0	1,895	787	802	2,013	0	741	3	552	0	0	0	6,793
	APPROACH %	0%	71%	29%	28%	72%	0%	57%	0%	43%	0%	0%	0%	
	APP/DEPART	2,682	/	2,644	2,815	/	2,565	1,296	/	1,584	0	/	0	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	714	268	266	633	0	237	0	140	0	0	0	2,262
	APPROACH %	0%	73%	27%	29%	70%	0%	63%	0%	37%	0%	0%	0%	
	PEAK HR FACTOR		0.893			0.969			0.933			0.000		0.946
	APP/DEPART	982	/	955	903	/	773	377	/	534	0	/	0	0

	Euclid	
	NORTH SIDE	
SR-60 EB Ramps	WEST SIDE	EAST SIDE
	SOUTH SIDE	
	Euclid	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	3	0	0	3

RTOR			
NRR	SRR	ERR	WRR
0	X	0	X

21	0	22	0
26	0	15	0
28	0	14	0
36	0	17	0
37	0	9	0
36	0	6	0
46	0	8	0
35	0	19	0
20	0	14	0
26	0	23	0
27	0	24	0
18	0	15	0
356	0	186	0

108	0	80	0

0	0	0	0	0
0	1	0	0	1
0	3	0	0	3
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	3	0	0	3
0	8	0	0	8

25	0	7	0
32	0	4	0
20	0	8	0
30	0	10	0
22	0	8	0
17	0	19	0
26	0	15	0
28	0	12	0
8	0	8	0
22	0	23	0
22	0	20	0
19	0	6	0
271	0	140	0

107	0	29	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 EB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4049 11 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

AM	6:00 AM	0	7	10	8	9	0	0	0	21	0	0	0	55
	6:15 AM	0	5	13	8	10	0	2	0	6	0	0	0	44
	6:30 AM	0	9	12	5	15	0	3	0	10	0	0	0	54
	6:45 AM	0	8	7	5	16	0	5	0	15	0	0	0	56
	7:00 AM	0	7	16	1	10	0	4	0	3	0	0	0	41
	7:15 AM	0	9	12	4	11	0	4	0	9	0	0	0	49
	7:30 AM	0	10	9	5	12	0	4	0	9	0	0	0	49
	7:45 AM	0	8	10	7	21	0	3	0	9	0	0	0	58
	8:00 AM	0	11	16	1	21	0	4	0	11	0	0	0	64
	8:15 AM	0	9	8	2	19	0	5	0	1	0	0	0	44
	8:30 AM	0	12	11	5	24	0	6	0	7	0	0	0	65
	8:45 AM	0	8	13	5	22	0	10	0	5	0	0	0	63
	VOLUMES	0	103	137	56	190	0	50	0	106	0	0	0	642
	APPROACH %	0%	43%	57%	23%	77%	0%	32%	0%	68%	0%	0%	0%	
	APP/DEPART	240	/	153	246	/	296	156	/	193	0	/	0	0
PM	BEGIN PEAK HR	7:45 AM												
	VOLUMES	0	40	45	15	85	0	18	0	28	0	0	0	231
	APPROACH %	0%	47%	53%	15%	85%	0%	39%	0%	61%	0%	0%	0%	
	PEAK HR FACTOR	0.787			0.862			0.767			0.000			0.888
	APP/DEPART	85	/	58	100	/	113	46	/	60	0	/	0	0
	04:00 PM	0	9	10	1	13	0	8	0	1	0	0	0	42
	4:15 PM	0	18	3	8	10	0	3	0	3	0	0	0	45
	4:30 PM	0	12	1	0	6	0	5	0	4	0	0	0	28
	4:45 PM	0	8	4	4	6	0	5	0	3	0	0	0	30
	5:00 PM	0	6	2	3	8	0	6	0	3	0	0	0	28
	5:15 PM	0	8	4	1	10	0	4	0	6	0	0	0	33
	5:30 PM	0	8	3	3	4	0	2	0	4	0	0	0	24
	5:45 PM	0	8	3	4	4	0	0	0	3	0	0	0	22
	6:00 PM	0	4	2	2	10	0	1	0	5	0	0	0	24
	6:15 PM	0	6	4	3	6	0	1	0	5	0	0	0	25
	6:30 PM	0	2	1	1	4	0	2	1	3	0	0	0	14
	6:45 PM	0	6	2	4	4	0	1	0	0	0	0	0	17
	VOLUMES	0	95	39	34	85	0	38	1	40	0	0	0	332
	APPROACH %	0%	71%	29%	29%	71%	0%	48%	1%	51%	0%	0%	0%	
	APP/DEPART	134	/	133	119	/	125	79	/	74	0	/	0	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	47	18	13	35	0	21	0	11	0	0	0	145
	APPROACH %	0%	72%	28%	27%	73%	0%	66%	0%	34%	0%	0%	0%	
	PEAK HR FACTOR	0.774			0.667			0.889			0.000			0.806
	APP/DEPART	65	/	68	48	/	46	32	/	31	0	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL

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

RTOR			
NRR	SRR	ERR	WRR

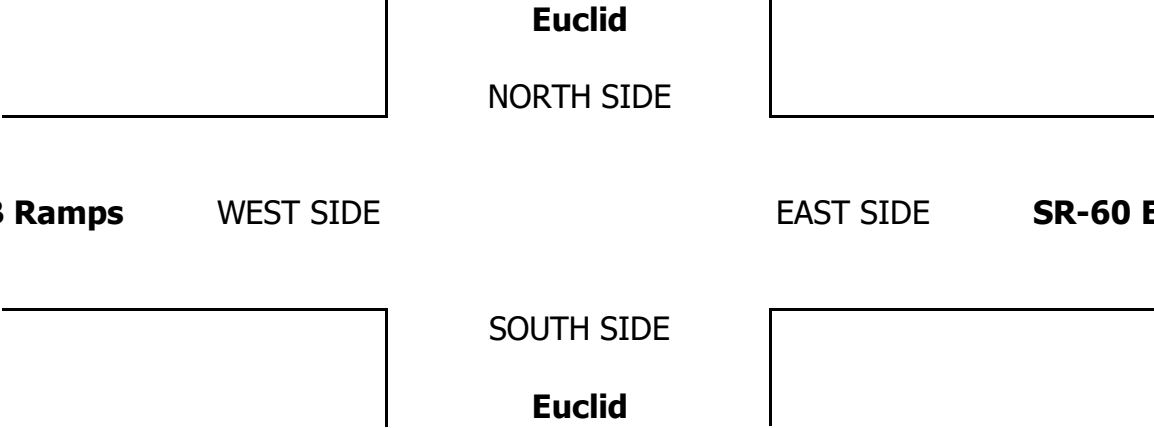
2	0	10	0
3	0	1	0
6	0	4	0
3	0	4	0
6	0	1	0
5	0	2	0
3	0	1	0
4	0	3	0
5	0	2	0
2	0	0	0
5	0	5	0
4	0	1	0
48	0	34	0

16	0	10	0

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

3	0	0	0
1	0	2	0
1	0	2	0
1	0	1	0
0	0	0	0
3	0	3	0
1	0	0	0
1	0	1	0
1	0	3	0
2	0	2	0
0	0	0	0
1	0	0	0
15	0	14	0

6	0	5	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
11
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

▲
N
◀ W
S
▼

E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	1	1	2	X	1.5	0	0.5	X	X	X	

AM	6:00 AM	0	6	6	1	7	0	1	0	2	0	0	0	23
	6:15 AM	0	7	6	0	4	0	0	0	2	0	0	0	19
	6:30 AM	0	9	6	0	8	0	1	0	2	0	0	0	26
	6:45 AM	0	5	10	0	8	0	1	0	4	0	0	0	28
	7:00 AM	0	7	3	0	14	0	0	0	7	0	0	0	31
	7:15 AM	0	6	7	0	8	0	0	0	12	0	0	0	33
	7:30 AM	0	12	6	2	8	0	0	0	5	0	0	0	33
	7:45 AM	0	10	6	0	4	0	0	0	3	0	0	0	23
	8:00 AM	0	8	6	2	3	0	0	0	2	0	0	0	21
	8:15 AM	0	9	0	0	9	0	0	0	1	0	0	0	19
	8:30 AM	0	7	10	2	4	0	1	0	1	0	0	0	25
	8:45 AM	0	7	5	1	9	0	0	0	1	0	0	0	23
	VOLUMES	0	93	71	8	86	0	4	0	42	0	0	0	304
	APPROACH %	0%	57%	43%	9%	91%	0%	9%	0%	91%	0%	0%	0%	
	APP/DEPART	164	/	97	94	/	128	46	/	79	0	/	0	0
PM	BEGIN PEAK HR	7:45 AM												
	VOLUMES	0	34	22	4	20	0	1	0	7	0	0	0	88
	APPROACH %	0%	61%	39%	17%	83%	0%	13%	0%	88%	0%	0%	0%	
	PEAK HR FACTOR	0.824			0.667			0.667			0.000			0.880
	APP/DEPART	56	/	35	24	/	27	8	/	26	0	/	0	0
	04:00 PM	0	7	5	1	10	0	3	0	3	0	0	0	29
	4:15 PM	0	3	5	0	7	0	1	0	3	0	0	0	19
	4:30 PM	0	5	3	2	3	0	1	0	4	0	0	0	18
	4:45 PM	0	3	5	0	7	0	1	0	0	0	0	0	16
	5:00 PM	0	0	5	0	4	0	2	0	3	0	0	0	14
	5:15 PM	0	1	2	0	3	0	0	0	0	0	0	0	6
	5:30 PM	0	1	3	0	4	0	1	0	3	0	0	0	12
	5:45 PM	0	5	3	0	6	0	3	0	2	0	0	0	19
	6:00 PM	0	1	5	0	4	0	0	0	6	0	0	0	16
	6:15 PM	0	3	2	0	4	0	0	0	0	0	0	0	9
	6:30 PM	0	2	5	0	3	0	1	0	4	0	0	0	15
	6:45 PM	0	1	0	1	9	0	1	0	1	0	0	0	13
	VOLUMES	0	32	43	4	64	0	14	0	29	0	0	0	186
	APPROACH %	0%	43%	57%	6%	94%	0%	33%	0%	67%	0%	0%	0%	
	APP/DEPART	75	/	46	68	/	93	43	/	47	0	/	0	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	18	18	3	27	0	6	0	10	0	0	0	82
	APPROACH %	0%	50%	50%	10%	90%	0%	38%	0%	63%	0%	0%	0%	
	PEAK HR FACTOR	0.750			0.682			0.667			0.000			0.707
	APP/DEPART	36	/	24	30	/	37	16	/	21	0	/	0	0

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

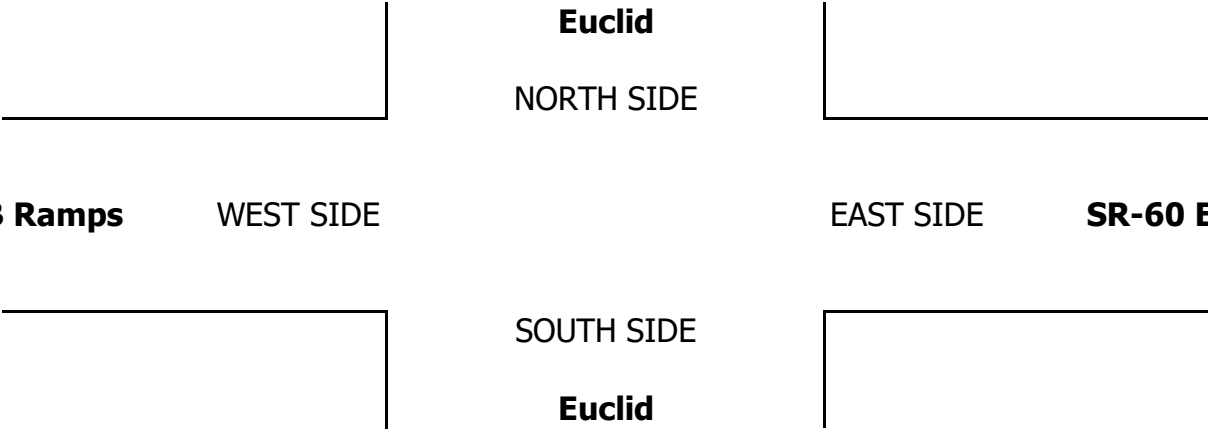
RTOR			
NRR	SRR	ERR	WRR
0	X	0	X
1	0	1	0
2	0	0	0
4	0	2	0
4	0	2	0
0	0	3	0
2	0	0	0
3	0	1	0
3	0	2	0
2	0	0	0
0	0	0	0
3	0	1	0
0	0	0	0
24	0	12	0

8	0	3	0

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

2	0	0	0
1	0	0	0
2	0	0	0
1	0	0	0
0	0	1	0
1	0	0	0
1	0	1	0
0	0	1	0
0	0	1	0
1	0	0	0
3	0	2	0
0	0	0	0
12	0	6	0

6	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
11
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	1	1	2	X	1.5	0	0.5	X	X	X	

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

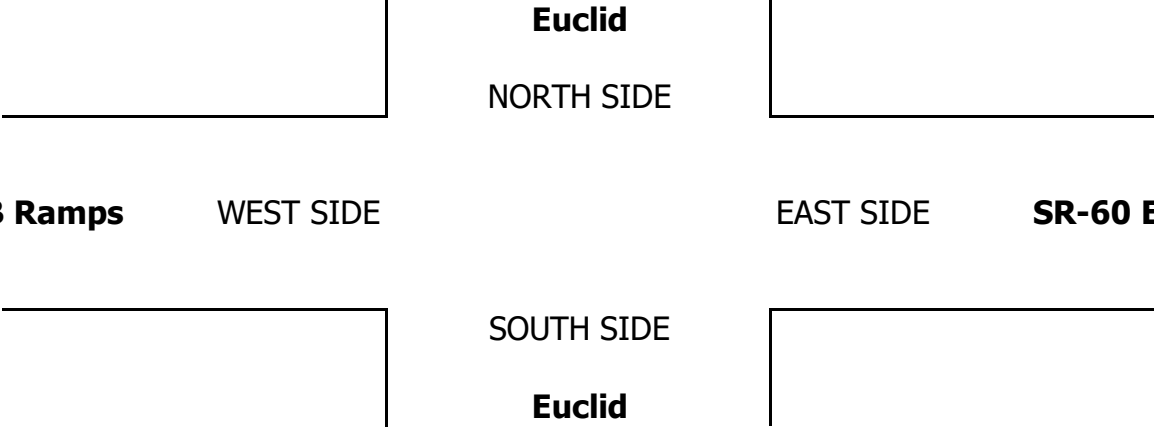
RTOR			
NRR	SRR	ERR	WRR
0	X	0	X

AM	6:00 AM	0	7	22	1	16	0	0	0	4	0	0	0	50
	6:15 AM	0	9	16	0	15	0	3	0	10	0	0	0	53
	6:30 AM	0	13	11	1	22	0	6	0	11	0	0	0	64
	6:45 AM	0	15	17	1	21	0	4	0	9	0	0	0	67
	7:00 AM	0	17	11	0	24	0	4	0	8	0	0	0	64
	7:15 AM	0	22	16	0	30	0	1	0	8	0	0	0	77
	7:30 AM	0	20	28	1	25	0	2	0	5	0	0	0	81
	7:45 AM	0	23	23	1	18	0	0	0	2	0	0	0	67
	8:00 AM	0	21	28	2	25	0	4	0	9	0	0	0	89
	8:15 AM	0	19	14	2	29	0	3	0	6	0	0	0	73
	8:30 AM	0	16	24	2	18	0	5	0	10	0	0	0	75
	8:45 AM	0	11	26	0	25	0	5	0	11	0	0	0	78
	VOLUMES	0	193	236	11	268	0	37	0	93	0	0	0	838
	APPROACH %	0%	45%	55%	4%	96%	0%	28%	0%	72%	0%	0%	0%	
	APP/DEPART	429	/	230	279	/	361	130	/	247	0	/	0	0
PM	BEGIN PEAK HR	7:45 AM												
	VOLUMES	0	79	89	7	90	0	12	0	27	0	0	0	304
	APPROACH %	0%	47%	53%	7%	93%	0%	31%	0%	69%	0%	0%	0%	
	PEAK HR FACTOR	0.857			0.782			0.650			0.000			0.854
	APP/DEPART	168	/	91	97	/	117	39	/	96	0	/	0	0
	04:00 PM	0	9	20	0	30	0	2	0	5	0	0	0	66
	4:15 PM	0	6	16	1	20	0	1	1	7	0	0	0	52
	4:30 PM	0	6	17	3	15	0	3	0	12	0	0	0	56
	4:45 PM	0	3	15	1	16	0	0	0	10	0	0	0	45
	5:00 PM	0	8	14	1	16	0	3	0	6	0	0	0	48
	5:15 PM	0	5	13	0	10	0	5	0	7	0	0	0	40
	5:30 PM	0	3	13	2	12	0	2	0	6	0	0	0	38
	5:45 PM	0	4	8	1	5	0	1	0	12	0	0	0	31
	6:00 PM	0	2	13	0	12	0	0	0	5	0	0	0	32
	6:15 PM	0	4	9	1	15	0	3	0	10	0	0	0	42
	6:30 PM	0	3	11	2	9	0	3	0	5	0	0	0	33
	6:45 PM	0	4	5	0	12	0	1	0	9	0	0	0	31
	VOLUMES	0	57	154	12	172	0	24	1	94	0	0	0	514
	APPROACH %	0%	27%	73%	7%	93%	0%	20%	1%	79%	0%	0%	0%	
	APP/DEPART	211	/	81	184	/	266	119	/	167	0	/	0	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	24	68	5	81	0	6	1	34	0	0	0	219
	APPROACH %	0%	26%	74%	6%	94%	0%	15%	2%	83%	0%	0%	0%	
	PEAK HR FACTOR	0.793			0.717			0.683			0.000			0.830
	APP/DEPART	92	/	30	86	/	115	41	/	74	0	/	0	0

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

8	0	0	0
6	0	1	0
7	0	5	0
8	0	3	0
3	0	1	0
4	0	1	0
3	0	2	0
3	0	4	0
3	0	0	0
2	0	4	0
1	0	0	0
1	0	3	0
49	0	24	0

29	0	9	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4049
11
SIGNAL

CLASS 5:
RV

NOTES:

AM
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OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	1	1	2	X	1.5	0	0.5	X	X	X	

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

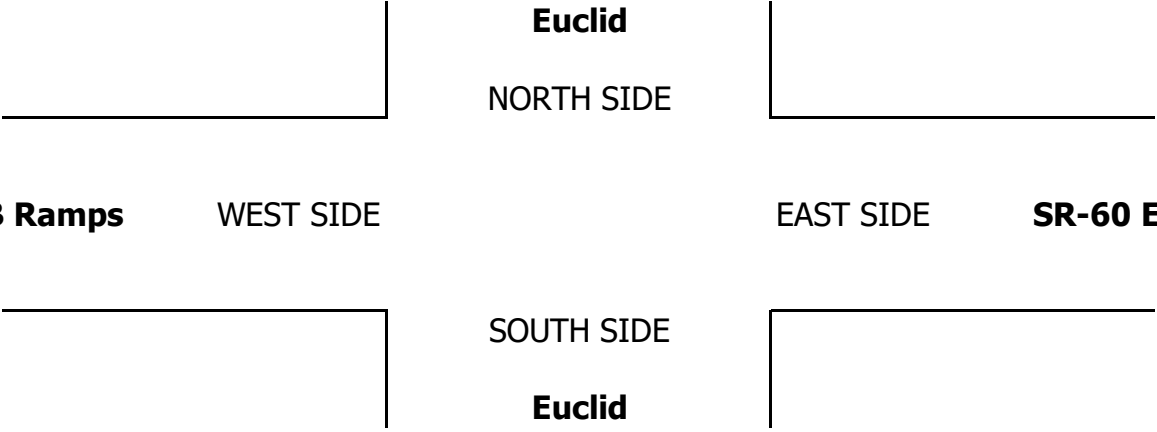
RTOR			
NRR	SRR	ERR	WRR
0	X	0	X
0	0	1	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	1	0

AM	6:00 AM	0	0	0	0	0	0	0	1	0	0	0	1
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	2	1	0	0	0	0	0	0	0	0	3
	7:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	1	0	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	1	0	0	0	0	1
	VOLUMES	0	2	1	0	1	0	2		0	0	0	7
	APPROACH %	0%	67%	33%	0%	100%	0%	67%		0%	0%	0%	
PM	APP/DEPART	3	/	3	1	/	3	3	/	1	0	/	0
	BEGIN PEAK HR	7:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.000		
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	1
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1	1	0	1	0	0	0	0	0	0	3
	APPROACH %	0%	50%	50%	0%	100%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	2	/	1	1	/	1	0	/	1	0	/	0
	BEGIN PEAK HR	4:00 PM											
	VOLUMES	0	0	0	0	1	0	0	0	0	0	0	1
	APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.250			0.000			0.000		
	APP/DEPART	0	/	0	1	/	1	0	/	0	0	/	0

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

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 EB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4049 11 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◄ W		E ►
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	1	1	2	X	1.5	0	0.5	X	X	X	

AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	1	0	1	0	0	0	0	1	0	0	3	
	7:00 AM	0	1	0	0	1	0	0	0	0	0	0	2	
	7:15 AM	0	1	0	0	0	0	1	0	0	0	0	2	
	7:30 AM	0	0	0	1	1	0	0	0	0	0	0	2	
	7:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	
	8:00 AM	0	1	0	0	0	0	0	0	0	0	0	1	
	8:15 AM	0	0	0	0	1	0	0	0	0	0	0	1	
	8:30 AM	0	0	0	1	1	0	0	0	0	0	0	2	
	8:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	
	VOLUMES	0	7	0	3	5	0	1	0	1	0	0	0	17
	APPROACH %	0%	100%	0%	38%	63%	0%	50%	0%	50%	0%	0%	0%	
	APP/DEPART	7	/	8	8	/	6	2	/	3	0	/	0	0
BEGIN PEAK HR	7:45 AM													
VOLUMES	0	2	0	1	2	0	0	0	0	0	0	0	5	
APPROACH %	0%	100%	0%	33%	67%	0%	0%	0%	0%	0%	0%	0%		
PEAK HR FACTOR	0.500			0.375			0.000			0.000			0.625	
APP/DEPART	2	/	2	3	/	2	0	/	1	0	/	0	0	
PM	04:00 PM	0	1	0	1	1	0	0	0	0	0	0	3	
	4:15 PM	0	0	0	0	1	0	1	0	0	0	0	2	
	4:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	1	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	1	0	0	0	0	0	0	1	
	5:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	2	0	0	2	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	VOLUMES	0	5	0	1	5	0	1	0	2	0	0	0	14
	APPROACH %	0%	100%	0%	17%	83%	0%	33%	0%	67%	0%	0%	0%	
	APP/DEPART	5	/	6	6	/	7	3	/	1	0	/	0	0
BEGIN PEAK HR	4:00 PM													
VOLUMES	0	3	0	1	3	0	1	0	0	0	0	0	8	
APPROACH %	0%	100%	0%	25%	75%	0%	100%	0%	0%	0%	0%	0%		
PEAK HR FACTOR	0.750			0.500			0.250			0.000			0.667	
APP/DEPART	3	/	4	4	/	3	1	/	1	0	/	0	0	

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

RTOR			
NRR	SRR	ERR	WRR
0	X	0	X
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0

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

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

0	0	0	0

	Euclid		
	NORTH SIDE		
SR-60 EB Ramps	WEST SIDE	EAST SIDE	SR-60 EB Ramps
	SOUTH SIDE		
	Euclid		

INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Tue, May 23, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

PROJECT #:
LOCATION #:
CONTROL:

SC4049
12
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W

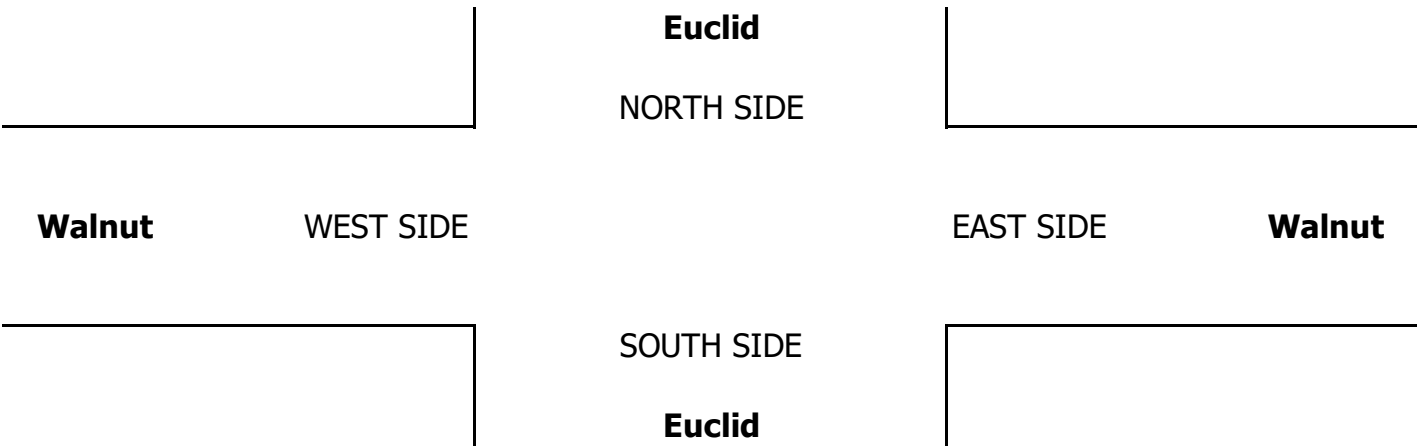
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E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL 1	NT 3	NR 0	SL 2	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM	4	114	4	17	191	5	14	11	12	10	12	32	426
6:15 AM	4	152	2	24	201	6	21	13	14	12	19	27	495
6:30 AM	4	148	6	21	242	6	17	18	24	19	28	41	574
6:45 AM	9	171	3	29	213	7	18	27	20	21	29	41	588
7:00 AM	11	165	5	30	163	9	26	19	23	11	32	39	533
7:15 AM	20	203	6	26	182	13	33	43	24	23	61	46	680
7:30 AM	30	198	9	26	180	5	34	55	22	11	73	49	692
7:45 AM	26	235	10	35	202	16	27	49	30	15	92	40	777
8:00 AM	29	198	5	64	223	20	31	44	21	14	91	30	770
8:15 AM	25	195	6	45	206	17	25	57	28	11	92	40	747
8:30 AM	18	184	20	47	209	12	25	76	27	11	51	38	718
8:45 AM	23	183	11	38	217	16	19	37	29	9	46	31	659
VOLUMES	203	2,146	87	402	2,429	132	290	449	274	167	626	454	7,659
APPROACH %	8%	88%	4%	14%	82%	4%	29%	44%	27%	13%	50%	36%	
APP/DEPART	2,436	/	3,068	2,963	/	2,876	1,013	/	760	1,247	/	955	0
BEGIN PEAK HR	7:45 AM												
VOLUMES	98	812	41	191	840	65	108	226	106	51	326	148	3,012
APPROACH %	10%	85%	4%	17%	77%	6%	25%	51%	24%	10%	62%	28%	
PEAK HR FACTOR	0.877			0.893			0.859			0.893			0.969
APP/DEPART	951	/	1,153	1,096	/	1,000	440	/	373	525	/	486	0
04:00 PM	21	227	12	49	177	30	32	100	29	16	62	32	787
4:15 PM	26	207	13	62	161	29	19	90	28	12	66	35	748
4:30 PM	34	196	10	44	179	22	19	96	29	11	83	35	758
4:45 PM	33	234	17	48	172	33	28	112	29	15	52	35	808
5:00 PM	22	182	15	63	178	24	26	95	26	19	84	35	769
5:15 PM	37	197	15	72	151	26	23	112	35	9	77	35	789
5:30 PM	30	175	23	74	177	21	29	108	29	13	60	35	774
5:45 PM	37	199	12	43	188	31	28	104	28	12	62	49	793
6:00 PM	26	157	14	79	203	31	17	74	18	15	53	34	721
6:15 PM	24	187	19	61	190	31	22	63	27	8	43	34	709
6:30 PM	17	146	15	74	145	24	17	40	15	14	30	27	564
6:45 PM	16	113	12	52	172	18	22	40	19	8	38	36	546
VOLUMES	323	2,220	177	721	2,093	320	282	1,034	312	152	710	422	8,766
APPROACH %	12%	82%	7%	23%	67%	10%	17%	64%	19%	12%	55%	33%	
APP/DEPART	2,720	/	3,114	3,134	/	2,575	1,628	/	1,742	1,284	/	1,335	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	122	788	70	257	678	104	106	427	119	56	273	140	3,140
APPROACH %	12%	80%	7%	25%	65%	10%	16%	65%	18%	12%	58%	30%	
PEAK HR FACTOR	0.863			0.955			0.959			0.850			0.972
APP/DEPART	980	/	1,106	1,039	/	859	652	/	682	469	/	493	0



AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
	6:30 PM	
	6:45 PM	
TOTAL		

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
2	3	2	1	8	
0	0	0	0	0	
0	2	0	0	2	
1	0	0	0	1	
0	0	1	1	2	
1	0	0	0	1	
0	0	1	1	2	
0	0	2	2	4	
1	0	1	0	2	
0	0	0	1	1	
1	0	0	0	1	
0	0	0	1	1	
0	0	0	1	1	
6	5	7	6	24	
2	1	2	0	5	
0	2	1	1	4	
0	0	0	2	2	
2	0	1	1	4	
0	1	0	0	1	
0	2	0	0	2	
0	1	1	1	3	
1	0	0	0	1	
2	2	0	2	6	
0	0	0	0	0	
1	0	0	2	3	
1	0	11	2	14	
9	9	16	11	45	

PEDESTRIAN CROSSINGS					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
1	1	1	1	4	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	1	1	2	
1	0	0	0	1	
0	0	1	2	3	
1	0	0	0	1	
0	0	0	1	1	
0	0	0	0	0	
0	0	0	1	1	
0	0	0	0	0	
3	1	3	6	13	
2	1	2	0	5	
0	1	1	0	2	
0	0	0	1	1	
2	0	1	1	4	
0	0	0	0	0	
0	2	0	0	2	
0	1	0	1	2	
1	0	0	0	1	
2	1	0	2	5	
0	0	0	0	0	
1	0	0	1	2	
0	0	0	1	1	
8	6	4	7	25	

BICYCLE CROSSINGS					
ES	WS	SS	NS	TOTAL	
1	2	1	0	4	
0	0	0	0	0	
0	2	0	0	2	
1	0	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	1	0	1	
0	0	1	0	1	
0	0	0	0	0	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	1	0	1	
0	0	0	0	0	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	1	1	
1	0	11	1	13	
1	3	12	4	20	

U-TURNS					
NB	SB	EB	WB	TTL	
0	0	0	0	7	
0	8	0	0	8	
0	9	0	0	9	
1	13	0	0	14	
0	10	0	0	10	
0	14	0	0	14	
1	14	0	0	15	
2	20	0	0	22	
0	25	0	0	25	
1	19	0	0	20	
0	21	0	0	21	
0	19	0	0	19	
6	178	0	0	184	

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
1	1	5	14
2	1	7	15
3	1	5	16
0	1	8	15
1	1	9	9
2	3	5	6
4	1	11	6
4	5	5	5
1	7	8	2
2	7	6	4
1	4	7	6
3	2	12	11
24	34	88	109

8	23	26	17

6	14	5	5
3	13	5	8
4	11	12	5
1	14	4	6
2	5	6	4
2	7	8	4
6	8	7	3
6	15	6	14
5	12	3	4
6	9	7	8
3	4	6	10
2	4	7	10
46	116	76	81

TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 3	NR 0	SL 2	ST 3

AM	6:00 AM	4	182	5	18	249
	6:15 AM	4	216	2	27	262
	6:30 AM	4	215	6	22	324
	6:45 AM	9	262	3	34	288
	7:00 AM	13	234	6	38	246
	7:15 AM	20	307	7	27	282
	7:30 AM	31	317	12	26	256
	7:45 AM	28	344	13	37	268
	8:00 AM	30	311	5	65	304
	8:15 AM	28	286	7	45	298
	8:30 AM	21	275	25	49	286
	8:45 AM	24	266	12	39	312
	VOLUMES	214	3,212	100	424	3,372
	APPROACH %	6%	91%	3%	11%	86%
	APP/DEPART	3,525	/	3,982	3,935	/
	BEGIN PEAK HR	7:45 AM				
	VOLUMES	106	1,216	49	195	1,155
	APPROACH %	8%	89%	4%	14%	82%
	PEAK HR FACTOR	0.893			0.910	
	APP/DEPART	1,370	/	1,480	1,416	/
	04:00 PM	23	296	13	50	266
	4:15 PM	27	265	14	64	229
	4:30 PM	35	253	10	44	244
	4:45 PM	33	284	17	49	234
	5:00 PM	25	231	16	64	236
	5:15 PM	39	245	15	75	197

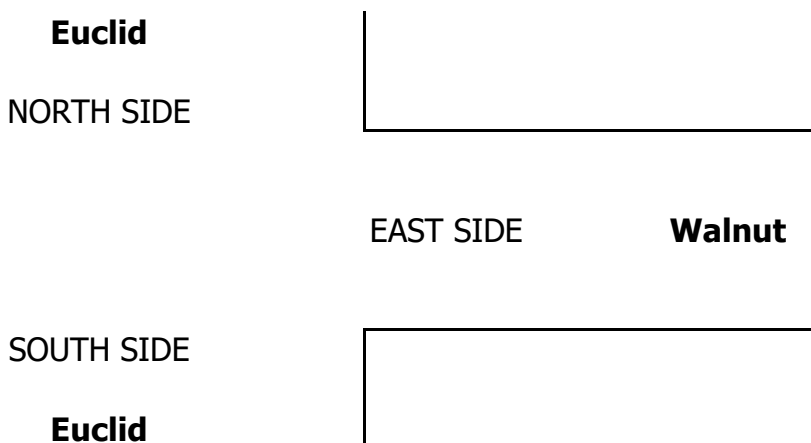
PM	5:30 PM	31	213	23	75	223
	5:45 PM	37	233	12	46	226
	6:00 PM	26	193	14	82	250
	6:15 PM	25	222	20	63	247
	6:30 PM	17	180	15	77	186
	6:45 PM	17	134	12	53	226
	VOLUMES	334	2,747	180	738	2,761
	APPROACH %	10%	84%	6%	19%	72%
	APP/DEPART	3,260	/	3,466	3,823	/
	BEGIN PEAK HR		4:45 PM			
	VOLUMES	128	973	71	262	889
	APPROACH %	11%	83%	6%	21%	71%
	PEAK HR FACTOR		0.876			0.971
	APP/DEPART	1,171	/	1,226	1,255	/

Walnut

WEST SIDE

######

21	30	112	29	13	61	35	865
32	29	107	29	13	63	51	875
32	17	74	18	16	54	35	808
31	23	64	30	8	43	35	808
25	17	40	15	14	30	27	643
19	22	40	20	8	38	36	624
324	288	1,048	320	154	719	431	10,043
8%	17%	63%	19%	12%	55%	33%	
3,235	1,656	/	1,966	1,304	/	1,377	0
105	110	433	120	57	277	144	3,566
8%	17%	65%	18%	12%	58%	30%	
		0.957			0.831		0.967
1,066	663	/	766	477	/	509	0



U-TURNS				
NB	SB	EB	WB	TTL

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

				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

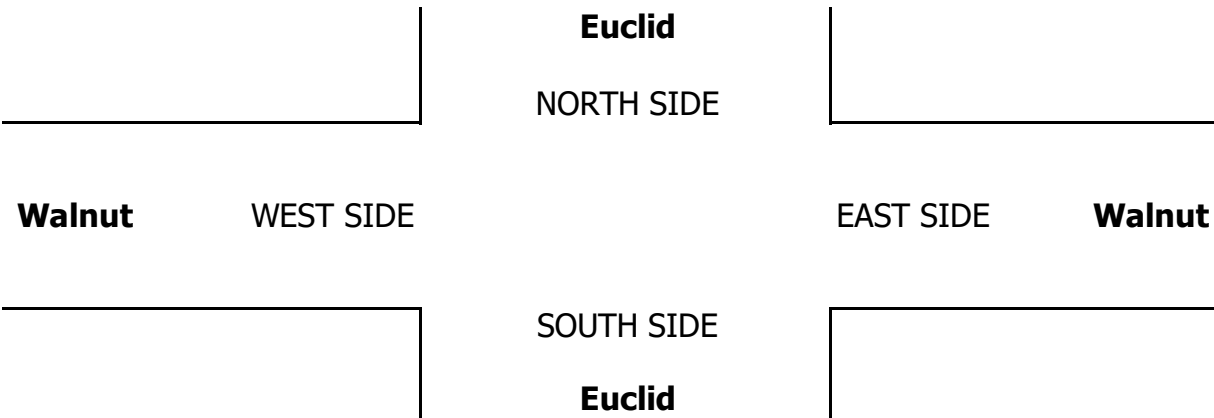
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Walnut	PROJECT #: LOCATION #: CONTROL:	SC4049 12 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL 1	NT 3	NR 0	SL 2	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

AM	6:00 AM	4	68	3	15	139	5	13	10	12	8	12	30	319
	6:15 AM	4	100	2	22	156	5	21	12	13	11	18	25	389
	6:30 AM	4	96	6	20	180	5	16	17	21	18	27	37	447
	6:45 AM	9	108	3	23	157	7	16	27	18	19	26	38	451
	7:00 AM	9	115	4	24	104	8	24	16	20	9	30	36	399
	7:15 AM	20	128	5	25	108	11	31	42	22	20	59	45	516
	7:30 AM	29	121	7	26	123	4	34	53	19	11	72	48	547
	7:45 AM	24	158	8	32	144	16	23	45	25	13	90	39	617
	8:00 AM	28	125	5	63	160	19	29	42	20	11	87	30	619
	8:15 AM	23	132	5	45	144	16	25	56	26	10	89	38	609
	8:30 AM	15	118	16	44	144	12	25	74	22	10	49	35	564
	8:45 AM	21	126	10	37	151	16	19	34	28	9	44	28	523
	VOLUMES	190	1,395	74	376	1,710	124	276	428	246	149	603	429	6,000
	APPROACH %	11%	84%	4%	17%	77%	6%	29%	45%	26%	13%	51%	36%	
APP/DEPART		1,659	/	2,269	2,210	/	2,110	950	/	709	1,181	/	912	0
BEGIN PEAK HR		7:45 AM												
VOLUMES		87	533	34	102	592	63	102	217	93	44	315	142	2,409
APPROACH %		13%	81%	5%	12%	71%	8%	25%	53%	23%	9%	63%	28%	
PEAK HR FACTOR		0.864			0.867			0.851			0.882			0.973
APP/DEPART		657	/	859	839	/	732	412	/	353	501	/	465	0
PM	04:00 PM	18	181	11	48	117	29	30	99	29	15	61	31	669
	4:15 PM	25	165	12	59	118	28	18	88	27	12	64	33	649
	4:30 PM	33	157	10	44	135	22	19	91	27	11	81	33	663
	4:45 PM	33	200	17	47	133	32	27	112	29	14	52	35	731
	5:00 PM	20	153	14	62	140	24	24	92	26	19	80	32	686
	5:15 PM	36	167	15	70	119	26	22	110	33	9	74	35	716
	5:30 PM	28	146	23	72	146	21	27	104	29	13	59	35	703
	5:45 PM	37	173	12	40	163	30	27	98	27	11	61	47	726
	6:00 PM	26	133	14	76	166	30	17	74	18	14	52	33	653
	6:15 PM	22	162	17	58	152	31	21	62	24	8	43	33	633
	6:30 PM	17	124	15	72	117	23	17	40	15	14	30	27	511
	6:45 PM	14	99	12	51	139	17	22	40	18	8	38	36	494
	VOLUMES	309	1,860	172	699	1,645	313	271	1,010	302	148	695	410	7,834
	APPROACH %	13%	79%	7%	26%	62%	12%	17%	64%	19%	12%	55%	33%	
APP/DEPART		2,341	/	2,722	2,657	/	2,112	1,583	/	1,700	1,253	/	1,300	0
BEGIN PEAK HR		4:45 PM												
VOLUMES		112	666	69	181	538	103	100	418	117	55	265	137	2,836
APPROACH %		13%	78%	8%	20%	60%	12%	16%	66%	18%	12%	58%	30%	
PEAK HR FACTOR		0.852			0.933			0.945			0.872			0.970
APP/DEPART		852	/	973	892	/	715	635	/	668	457	/	480	0



U-TURNS				
NB	SB	EB	WB	TTL
1	5	0	0	6
###	7	0	0	7
0	9	0	0	9
1	11	0	0	12
0	9	0	0	9
0	13	0	0	13
0	14	0	0	14
2	19	0	0	21
0	24	0	0	24
1	19	0	0	20
0	20	0	0	20
0	19	0	0	19
5	169	0	0	174

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

1	1	5	13
2	1	6	13
3	0	5	14
0	1	7	13
0	1	7	9
1	3	5	6
3	1	8	6
4	5	5	5
1	6	8	2
1	7	6	4
1	4	6	6
2	2	12	9
19	32	80	100

7	22	25	17

3	13	0	0	16
1	12	0	0	13
2	16	0	0	18
1	12	0	0	13
1	17	0	0	18
3	23	0	0	26
0	18	0	0	18
1	12	0	0	13
2	14	0	0	16
2	15	0	0	17
1	14	0	0	15
0	15	0	0	15
17	181	0	0	198

5	13	5	5
3	12	5	8
4	11	11	5
1	13	4	6
2	5	6	4
2	7	7	4
6	8	7	3
6	15	6	13
5	12	3	4
6	9	7	8
3	4	6	10
2	3	7	10
45	112	74	80

11	33	24	17

INTERSECTION TURNING MOVEMENT COUNTS

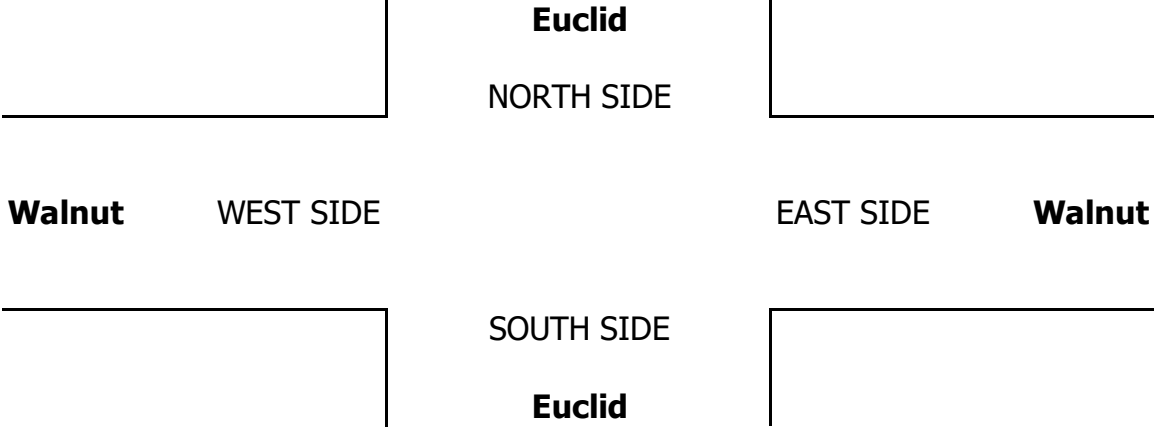
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Walnut	PROJECT #: LOCATION #: CONTROL:	SC4049 12 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	▶ E

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL 1	NT 3	NR 0	SL 2	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

AM	6:00 AM	0	11	1	2	25	0	1	1	0	2	0	1	44
	6:15 AM	0	16	0	1	14	1	0	1	1	1	1	2	38
	6:30 AM	0	15	0	1	24	0	0	1	2	0	0	3	46
	6:45 AM	0	15	0	4	19	0	2	0	1	2	1	3	47
	7:00 AM	1	15	1	2	13	0	1	0	2	2	0	2	39
	7:15 AM	0	19	1	1	17	1	1	1	2	2	2	1	48
	7:30 AM	1	15	1	0	20	0	0	2	2	0	0	1	42
	7:45 AM	1	19	1	2	27	0	4	1	5	2	1	1	64
	8:00 AM	1	14	0	1	26	1	1	1	0	3	1	0	49
	8:15 AM	1	14	1	0	16	1	0	0	2	1	1	2	39
	8:30 AM	2	18	2	3	31	0	0	1	4	0	0	2	63
	8:45 AM	2	12	1	1	19	0	0	1	1	0	2	3	42
	VOLUMES	9	183	9	18	251	4	10	10	22	15	9	21	561
	APPROACH %	4%	91%	4%	7%	92%	1%	24%	24%	52%	33%	20%	47%	
PM	APP/DEPART	201	/	221	273	/	289	42	/	30	45	/	21	0
	BEGIN PEAK HR	7:45 AM												
	VOLUMES	5	65	4	3	100	2	5	3	11	6	3	5	215
	APPROACH %	7%	88%	5%	3%	93%	2%	26%	16%	58%	43%	21%	36%	
	PEAK HR FACTOR	0.841			0.794			0.475			0.875			0.840
	APP/DEPART	74	/	78	108	/	117	19	/	10	14	/	10	0
	4:00 PM	2	9	1	1	10	1	2	1	0	1	1	1	30
PM	4:15 PM	1	13	1	3	4	1	1	2	0	0	2	2	30
	4:30 PM	1	10	0	0	11	0	0	4	2	0	1	1	30
	4:45 PM	0	8	0	1	7	1	1	0	0	1	0	0	19
	5:00 PM	1	5	0	1	7	0	2	3	0	0	4	1	24
	5:15 PM	0	6	0	1	10	0	0	2	2	0	3	0	24
	5:30 PM	2	10	0	2	6	0	2	3	0	0	1	0	26
	5:45 PM	0	7	0	2	2	1	1	6	1	1	1	1	23
	6:00 PM	0	4	0	1	13	1	0	0	0	1	1	1	22
	6:15 PM	2	7	2	3	11	0	1	1	2	0	0	1	30
	6:30 PM	0	2	0	1	4	0	0	0	0	0	0	0	7
	6:45 PM	2	4	0	0	3	1	0	0	1	0	0	0	11
	VOLUMES	11	85	4	16	88	6	10	22	8	4	14	8	276
	APPROACH %	11%	85%	4%	15%	80%	5%	25%	55%	20%	15%	54%	31%	
	APP/DEPART	100	/	110	110	/	101	40	/	35	26	/	30	0
PM	BEGIN PEAK HR	4:45 PM												
	VOLUMES	2	29	0	3	30	1	5	8	2	1	8	1	93
	APPROACH %	6%	91%	0%	8%	83%	3%	33%	53%	13%	10%	80%	10%	
	PEAK HR FACTOR	0.667			0.818			0.750			0.500			0.894
PM	APP/DEPART	32	/	37	36	/	34	15	/	11	10	/	11	0



U-TURNS				
NB	SB	EB	WB	TTL
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
1	0	0	0	1
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
1	7	0	0	8

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	1	2
0	0	0	2
0	0	0	2
1	0	1	0
1	0	0	0
1	0	2	0
0	0	0	0
0	1	0	0
1	0	0	0
0	0	0	0
1	0	0	0
5	1	4	9

1	1	0	0

0	0	0	0	0
0	2	0	0	2
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
1	7	0	0	8

1	1	0	0
0	1	0	0
0	0	1	0
0	1	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
1	4	2	1

0	1	1	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

PROJECT #:
LOCATION #:
CONTROL:

SC4049
12
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	0	2	3	1	1	2	0	1	2	0	

AM	6:00 AM	0	8	0	0	8	0	0	0	0	0	0	16	
	6:15 AM	0	15	0	0	7	0	0	0	0	0	0	22	
	6:30 AM	0	15	0	0	6	1	1	0	1	0	1	26	
	6:45 AM	0	9	0	1	9	0	0	0	1	0	0	20	
	7:00 AM	1	9	0	1	14	0	0	2	0	0	0	27	
	7:15 AM	0	17	0	0	22	1	1	0	0	1	0	42	
	7:30 AM	0	13	0	0	7	1	0	0	0	0	1	22	
	7:45 AM	0	16	0	1	9	0	0	0	0	0	0	26	
	8:00 AM	0	11	0	0	6	0	1	0	0	0	2	20	
	8:15 AM	0	14	0	0	7	0	0	0	0	0	0	21	
	8:30 AM	0	14	0	0	7	0	0	0	1	0	1	23	
	8:45 AM	0	12	0	0	8	0	0	0	0	0	0	20	
	VOLUMES	1	153	0	3	110	3	3	2	3	1	5	1	285
	APPROACH %	1%	99%	0%	3%	95%	3%	38%	25%	38%	14%	71%	14%	
	APP/DEPART	154	/	157	116	/	114	8	/	5	7	/	9	0
BEGIN PEAK HR	7:45 AM													
VOLUMES	0	55	0	1	29	0	1	0	1	0	3	0	90	
APPROACH %	0%	100%	0%	3%	97%	0%	50%	0%	50%	0%	100%	0%		
PEAK HR FACTOR	0.859			0.750			0.500			0.375			0.865	
APP/DEPART	55	/	56	30	/	30	2	/	1	3	/	3	0	
PM	04:00 PM	1	10	0	0	15	0	0	0	0	0	0	26	
	4:15 PM	0	7	0	0	10	0	0	0	0	0	0	17	
	4:30 PM	0	5	0	0	7	0	0	0	0	0	1	13	
	4:45 PM	0	5	0	0	6	0	0	0	0	0	0	11	
	5:00 PM	0	2	1	0	8	0	0	0	0	0	1	12	
	5:15 PM	0	2	0	0	2	0	0	0	0	0	0	4	
	5:30 PM	0	4	0	0	7	0	0	0	0	0	0	11	
	5:45 PM	0	7	0	0	9	0	0	0	0	0	1	17	
	6:00 PM	0	6	0	0	8	0	0	0	0	0	0	14	
	6:15 PM	0	5	0	0	3	0	0	0	0	0	0	8	
	6:30 PM	0	6	0	0	7	1	0	0	0	0	0	14	
	6:45 PM	0	1	0	1	8	0	0	0	0	0	0	10	
	VOLUMES	1	60	1	1	90	1	0	0	0	0	0	3	157
	APPROACH %	2%	97%	2%	1%	98%	1%	0%	0%	0%	0%	0%	100%	
	APP/DEPART	62	/	64	92	/	90	0	/	1	3	/	2	0
BEGIN PEAK HR	4:45 PM													
VOLUMES	0	13	1	0	23	0	0	0	0	0	0	1	38	
APPROACH %	0%	93%	7%	0%	100%	0%	0%	0%	0%	0%	0%	100%		
PEAK HR FACTOR	0.700			0.719			0.000			0.250			0.792	
APP/DEPART	14	/	14	23	/	23	0	/	1	1	/	0	0	

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

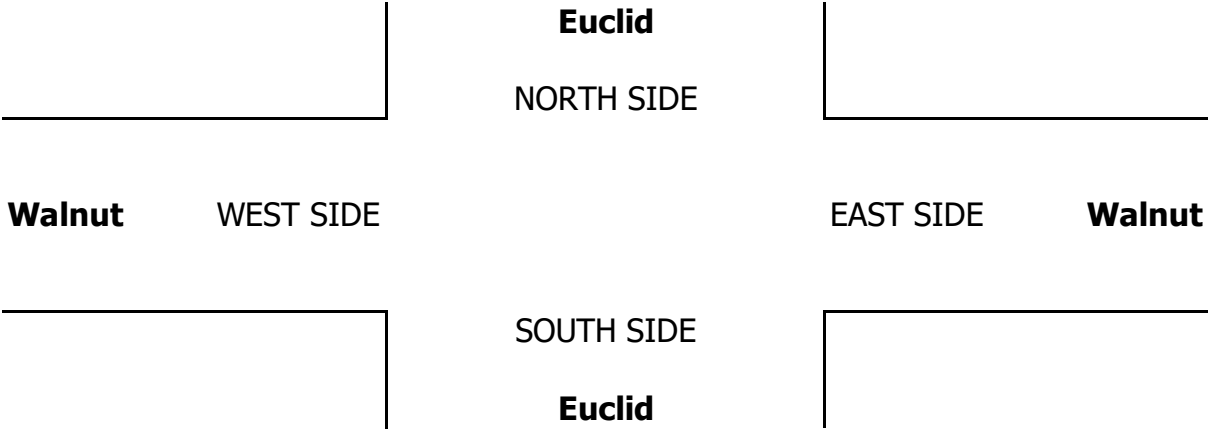
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	1	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	1	2	0

0	0	1	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1

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

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

<u>DATE:</u>	LOCATION:	Chino	PROJECT #:	SC4049
5/23/23	NORTH & SOUTH:	Euclid	LOCATION #:	12
TUESDAY	EAST & WEST:	Walnut	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM		▲	
		PM		N	
		MD	◀ W		E ▶
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL 1	NT 3	NR 0	SL 2	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

AM	6:00 AM	0	27	0	0	18	0	0	0	0	0	0	1	46
	6:15 AM	0	20	0	1	23	0	0	0	0	0	0	0	44
	6:30 AM	0	22	0	0	32	0	0	0	0	1	0	0	55
	6:45 AM	0	35	0	1	28	0	0	0	0	0	0	0	64
	7:00 AM	0	26	0	3	30	1	1	1	1	0	0	0	63
	7:15 AM	0	38	0	0	34	0	0	0	0	0	0	0	72
	7:30 AM	0	49	1	0	29	0	0	0	0	0	0	0	79
	7:45 AM	0	41	1	0	21	0	0	0	0	0	1	0	64
	8:00 AM	0	47	0	0	31	0	0	0	0	0	0	0	78
	8:15 AM	1	35	0	0	38	0	0	0	0	0	0	0	74
	8:30 AM	1	34	2	0	27	0	0	1	0	0	0	1	66
	8:45 AM	0	32	0	0	38	0	0	1	0	0	0	0	71
	VOLUMES	2	406	4	5	349	1	1	3	1	1	1	2	776
APPROACH %	0%	99%	1%	1%	98%	0%	20%	60%	20%	25%	25%	50%		
APP/DEPART	412	/	411	355	/	351	5	/	10	4	/	4	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	2	157	3	0	117	0	0	1	0	0	1	1	282	
APPROACH %	1%	97%	2%	0%	100%	0%	0%	100%	0%	0%	50%	50%		
PEAK HR FACTOR	0.862													
APP/DEPART	162	/	158	117	/	117	1	/	4	2	/	3	0	
PM	04:00 PM	0	27	0	0	34	0	0	0	0	0	0	0	61
	4:15 PM	0	22	0	0	27	0	0	0	1	0	0	0	50
	4:30 PM	0	23	0	0	26	0	0	0	0	0	1	0	50
	4:45 PM	0	20	0	0	26	0	0	0	0	0	0	0	46
	5:00 PM	1	22	0	0	23	0	0	0	0	0	0	1	47
	5:15 PM	1	21	0	1	19	0	0	0	0	0	0	0	42
	5:30 PM	0	14	0	0	18	0	0	1	0	0	0	0	33
	5:45 PM	0	11	0	1	14	0	0	0	0	0	0	0	26
	6:00 PM	0	14	0	0	16	0	0	0	0	0	0	0	30
	6:15 PM	0	13	0	0	24	0	0	0	1	0	0	0	38
	6:30 PM	0	13	0	1	15	0	0	0	0	0	0	0	29
	6:45 PM	0	9	0	0	22	0	0	0	0	0	0	0	31
	VOLUMES	2	209	0	3	264	0	0	1	2	0	1	1	483
APPROACH %	1%	99%	0%	1%	99%	0%	0%	33%	67%	0%	50%	50%		
APP/DEPART	211	/	211	267	/	266	3	/	3	2	/	3	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	2	77	0	1	86	0	0	1	0	0	0	1	168	
APPROACH %	3%	97%	0%	1%	99%	0%	0%	100%	0%	0%	0%	100%		
PEAK HR FACTOR	0.859													
APP/DEPART	79	/	78	87	/	86	1	/	2	1	/	2	0	

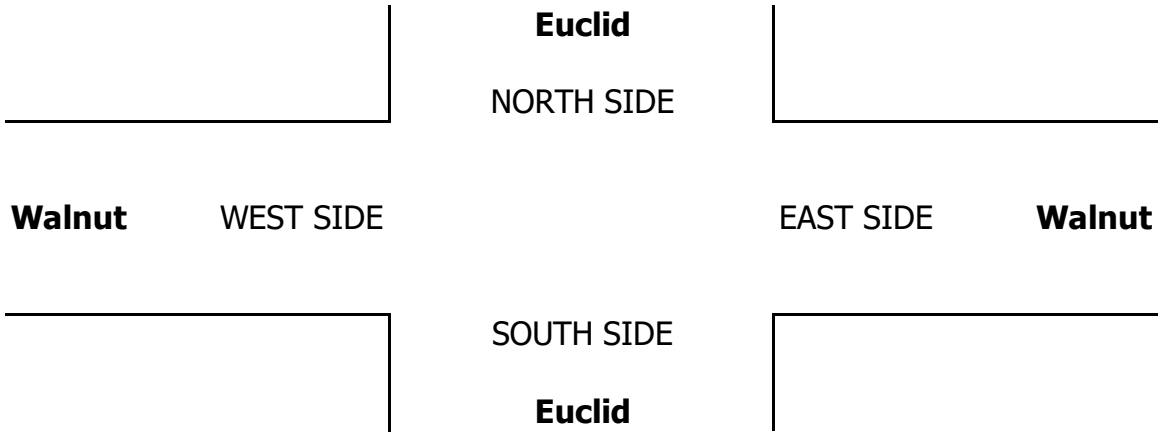
[illegible][illegible]

0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

[illegible]

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

PROJECT #:
LOCATION #:
CONTROL:

SC4049
12
SIGNAL

CLASS 5:
RV

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	0	2	3	1	1	2	0	1	2	0	

AM	6:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	3	0	0	0	0	0	0	0	0	0	3
	7:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	3	0	0	3	0	0	0	0	0	0	6
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	3	/	3	3	/	3	0	/	0	/	0	0
PM	BEGIN PEAK HR	7:45 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.000		
	APP/DEPART	0	/	0	0	/	0	0	/	0	/	0	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	1	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1	0	0	1	0	1	0	0	0	0	3
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	
	APP/DEPART	1	/	2	1	/	1	1	/	0	0	/	0
	BEGIN PEAK HR	4:45 PM											
	VOLUMES	0	0	0	0	0	0	1	0	0	0	0	1
	APPROACH %	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.250			0.000		
	APP/DEPART	0	/	1	0	/	0	1	/	0	0	/	0

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

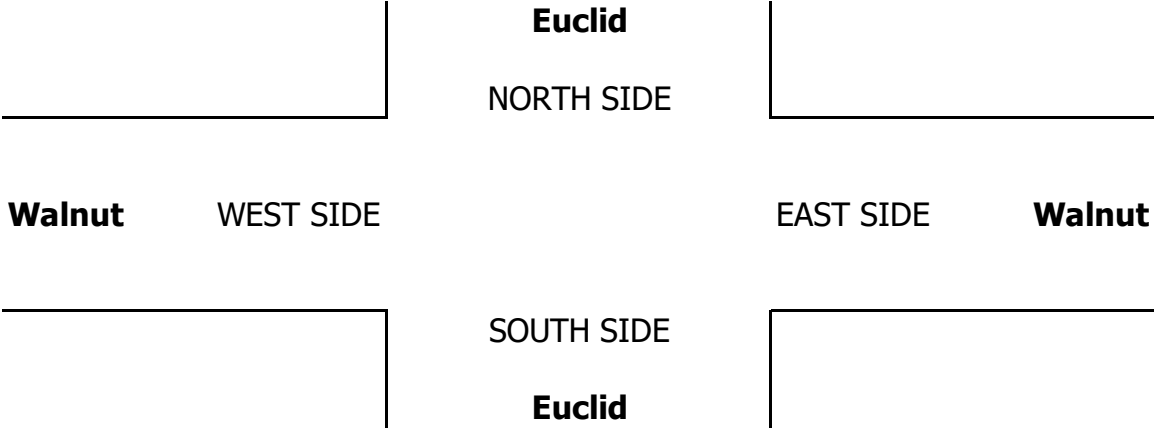
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0

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

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

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Walnut	PROJECT #: LOCATION #: CONTROL:	SC4049 12 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◄ W		E ►
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	0	2	3	1	1	2	0	1	2	0	

AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	1	0	0	0	0	0	0	0	0	0	2
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	1	0	0	0	0	0	0	0	2	0	3
	7:00 AM	0	0	0	0	1	0	0	0	0	2	1	4
	7:15 AM	0	1	0	0	0	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	1	0	0	0	1	0	0	2
	7:45 AM	1	1	0	0	1	0	0	3	0	0	0	6
	8:00 AM	0	1	0	0	0	0	1	1	0	1	0	4
	8:15 AM	0	0	0	0	1	0	0	1	0	2	0	4
	8:30 AM	0	0	0	0	0	0	0	0	1	1	0	2
	8:45 AM	0	1	0	0	1	0	0	1	0	0	0	3
	VOLUMES	1	6	0	0	6	0	0	6	2	1	8	1
	APPROACH %	14%	86%	0%	0%	100%	0%	0%	75%	25%	10%	80%	10%
	APP/DEPART	7	/	7	6	/	9	8	/	6	10	/	9
PM	BEGIN PEAK HR	7:45 AM											
	VOLUMES	1	2	0	0	2	0	0	5	1	1	4	0
	APPROACH %	33%	67%	0%	0%	100%	0%	0%	83%	17%	20%	80%	0%
	PEAK HR FACTOR	0.375			0.500			0.500			0.625		
	APP/DEPART	3	/	2	2	/	4	6	/	5	5	/	5
	04:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	0	1	0	0	0	0	0	1	0	0	0	2
	4:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	1	0	0	0	0	0	0	2
	5:30 PM	0	1	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	2	0	0	0	0	0	0	0	2
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	1	0	0	2	0	0	0	0	0	0	3
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	5	0	2	5	0	0	1	0	0	0	0
	APPROACH %	0%	100%	0%	29%	71%	0%	0%	100%	0%	0%	0%	0%
	APP/DEPART	5	/	5	7	/	5	1	/	3	0	/	0
	BEGIN PEAK HR	4:45 PM											
	VOLUMES	0	3	0	0	1	0	0	0	0	0	0	0
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%
	PEAK HR FACTOR	0.750			0.250			0.000			0.000		
	APP/DEPART	3	/	3	1	/	1	0	/	0	0	/	0

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

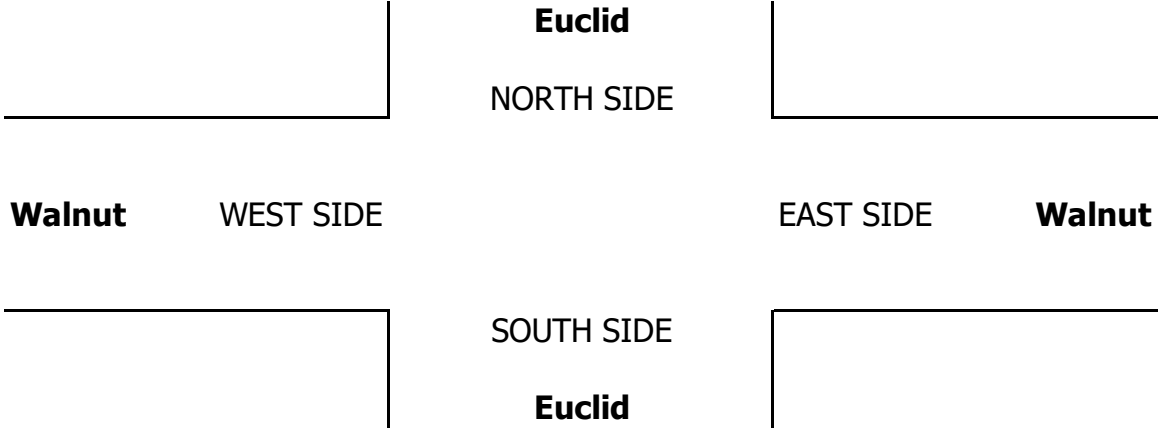
RTOR			
NRR	SRR	ERR	WRR
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0

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

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

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Tue, May 23, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

PROJECT #:
LOCATION #:
CONTROL:

SC4049
13
SIGNAL

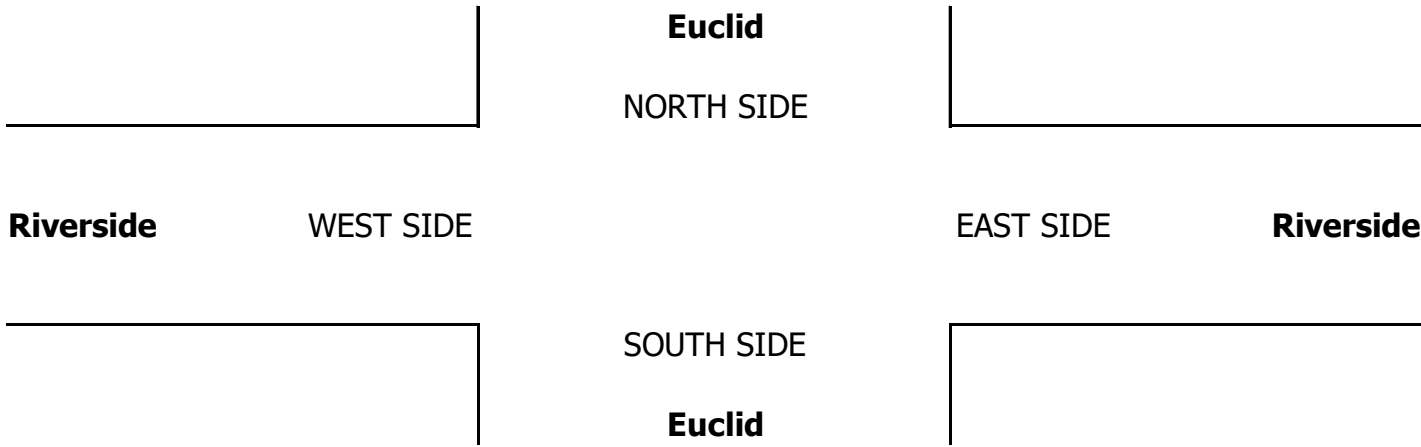
NOTES:

AM
PM
MD
OTHER
OTHER

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N
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S
▼

E ►

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM	2	107	8	50	155	15	6	19	7	33	32	8	442
6:15 AM	4	112	9	34	169	9	25	30	10	44	46	8	500
6:30 AM	4	106	17	23	195	21	28	45	12	58	73	7	589
6:45 AM	8	106	15	24	214	15	23	38	14	48	75	13	593
7:00 AM	10	124	24	28	121	27	32	39	10	33	74	13	535
7:15 AM	6	168	18	20	174	20	26	51	6	28	85	13	615
7:30 AM	11	148	31	32	136	25	40	79	9	46	125	29	711
7:45 AM	20	160	30	46	147	34	34	90	8	42	156	25	792
8:00 AM	13	187	28	47	165	28	34	82	16	40	100	23	763
8:15 AM	12	101	20	46	121	37	14	67	8	31	111	19	587
8:30 AM	7	159	22	63	144	28	30	65	11	41	76	13	659
8:45 AM	11	136	36	59	130	26	26	73	11	42	92	23	665
VOLUMES	108	1,614	258	472	1,871	285	318	678	122	486	1,045	194	7,451
APPROACH %	5%	82%	13%	18%	71%	11%	28%	61%	11%	28%	61%	11%	
APP/DEPART	1,980	/	2,194	2,628	/	2,481	1,118	/	1,340	1,725	/	1,436	0
BEGIN PEAK HR	7:15 AM												
VOLUMES	50	663	107	145	622	107	134	302	39	156	466	90	2,881
APPROACH %	6%	81%	13%	17%	71%	12%	28%	64%	8%	22%	65%	13%	
PEAK HR FACTOR	0.899			0.910			0.900			0.798			0.909
APP/DEPART	820	/	914	874	/	817	475	/	527	712	/	623	0
04:00 PM	20	180	43	42	130	40	31	108	13	37	128	20	792
4:15 PM	16	190	49	35	148	26	30	90	12	34	107	13	750
4:30 PM	12	150	40	26	125	40	37	117	9	40	114	14	724
4:45 PM	9	225	41	13	163	32	29	100	15	35	115	17	794
5:00 PM	29	183	51	26	156	46	28	97	10	36	115	16	793
5:15 PM	11	139	47	20	110	33	28	119	15	49	129	20	720
5:30 PM	12	173	51	41	137	36	24	109	10	34	98	13	738
5:45 PM	15	152	54	19	129	32	24	88	11	32	103	22	681
6:00 PM	10	132	39	24	145	44	23	75	10	23	72	11	608
6:15 PM	13	149	35	28	145	37	30	76	6	33	78	14	644
6:30 PM	10	117	34	24	96	31	22	58	12	27	48	17	496
6:45 PM	9	90	31	15	118	31	15	63	6	23	52	8	461
VOLUMES	166	1,880	515	313	1,602	428	321	1,100	129	403	1,159	185	8,201
APPROACH %	6%	73%	20%	13%	68%	18%	21%	71%	8%	23%	66%	11%	
APP/DEPART	2,561	/	2,468	2,343	/	2,143	1,550	/	1,845	1,747	/	1,745	0
BEGIN PEAK HR	4:15 PM												
VOLUMES	66	748	181	100	592	144	124	404	46	145	451	60	3,061
APPROACH %	7%	75%	18%	12%	71%	17%	22%	70%	8%	22%	69%	9%	
PEAK HR FACTOR	0.905			0.917			0.880			0.976			0.964
APP/DEPART	995	/	952	836	/	789	574	/	664	656	/	656	0



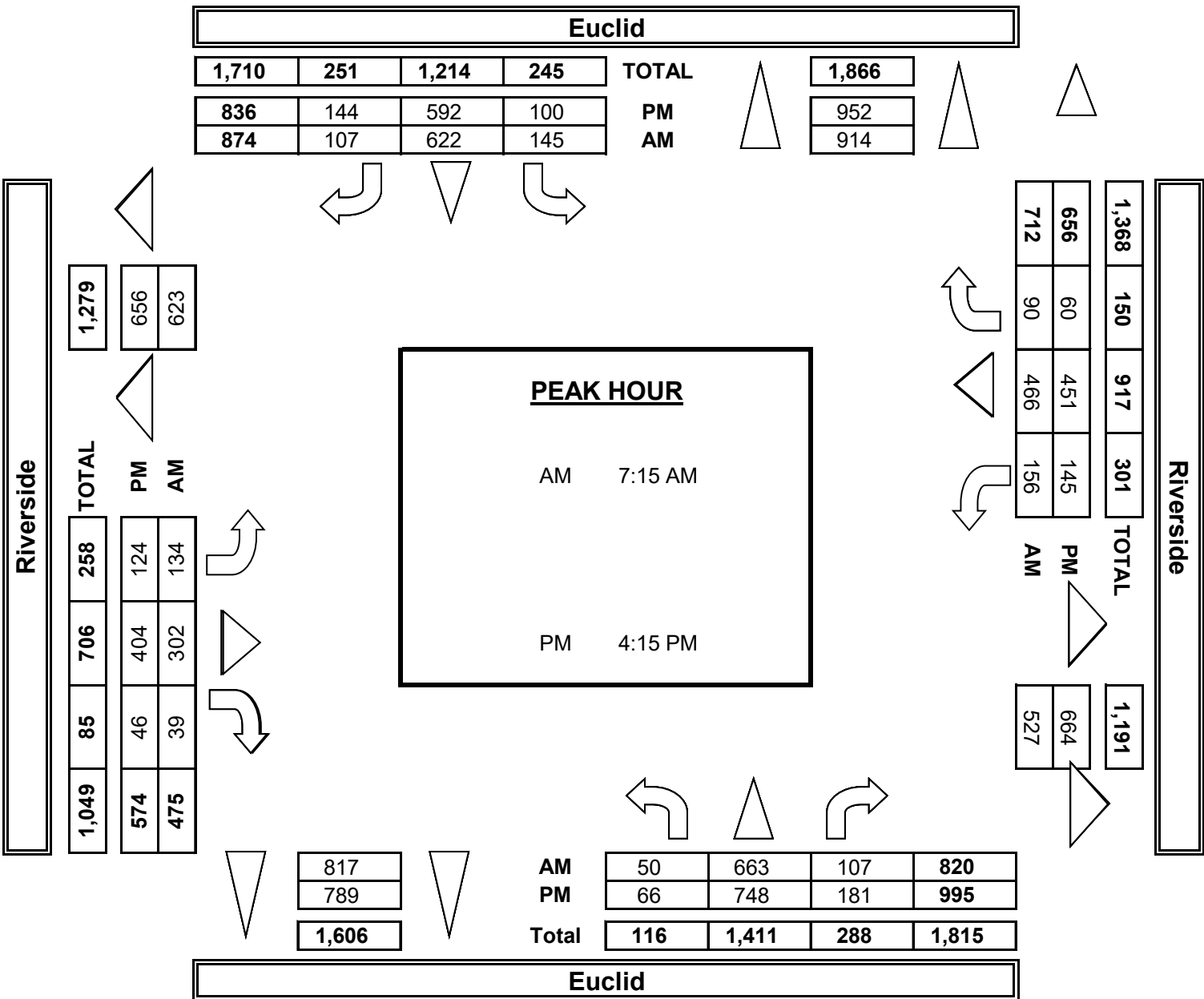
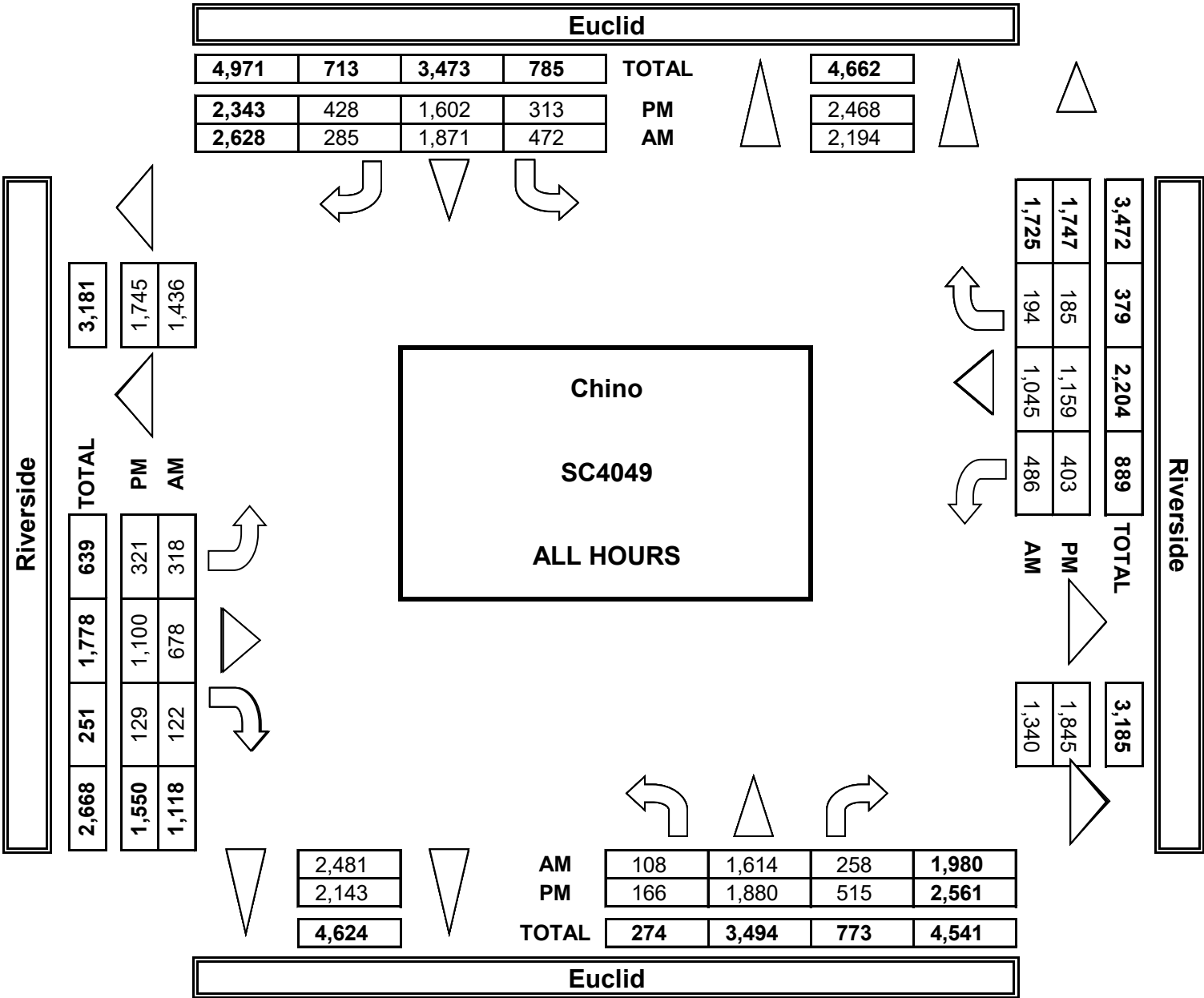
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
TOTAL	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	2	0	0	2	
3	2	4	0	9	
0	2	0	1	3	
0	0	0	2	2	
0	1	0	1	2	
0	0	0	0	0	
0	1	1	0	2	
0	0	0	0	0	
0	0	0	1	1	
0	0	1	0	1	
0	0	1	1	2	
0	0	0	3	3	
3	8	7	9	27	
0	0	0	2	2	
0	0	2	2	4	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	3	3	
1	0	0	1	2	
0	1	1	1	3	
0	0	0	0	0	
0	0	0	0	0	
1	0	0	0	1	
1	0	0	1	2	
0	0	0	0	0	
3	1	3	10	17	

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	0	0	0	0
2	1	3	0	6
0	0	0	1	1
0	0	0	2	2
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	1	1
0	0	1	0	1
0	0	0	1	1
2	3	4	6	15
0	0	0	2	2
0	0	2	2	4
0	0	0	0	0
0	0	0	0	0
0	0	0	3	3
0	0	0	1	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	2	9	11

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	2	0	0	2
1	1	1	0	3
0	2	0	0	2
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	1	1	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
1	0	0	1	2
0	0	0	0	0
3	1	1	1	6

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

AM	6:00 AM	2	177	8	55	210
	6:15 AM	4	174	9	40	228
	6:30 AM	5	167	18	25	255
	6:45 AM	9	176	18	31	283
	7:00 AM	15	201	30	31	198
	7:15 AM	7	270	21	28	262
	7:30 AM	12	245	32	41	203
	7:45 AM	22	252	31	49	199
	8:00 AM	16	296	28	50	242
	8:15 AM	14	165	21	50	185
	8:30 AM	10	256	23	68	216
	8:45 AM	12	215	37	65	199
	VOLUMES	126	2,592	273	531	2,677
	APPROACH %	4%	87%	9%	15%	76%
	APP/DEPART	2,990	/	3,175	3,524	/
	BEGIN PEAK HR	7:15 AM				
	VOLUMES	57	1,063	111	167	905
	APPROACH %	5%	86%	9%	14%	76%
	PEAK HR FACTOR	0.905			0.926	
	APP/DEPART	1,230	/	1,312	1,184	/
	04:00 PM	21	231	44	44	201
	4:15 PM	17	255	52	39	232
	4:30 PM	13	198	42	29	182
	4:45 PM	11	269	42	15	220
	5:00 PM	31	227	51	27	209
	5:15 PM	11	182	49	21	154

PM	5:30 PM	14	207	51	45	176
	5:45 PM	16	180	61	23	174
	6:00 PM	10	171	40	25	182
	6:15 PM	16	184	35	29	202
	6:30 PM	11	150	37	25	140
	6:45 PM	9	110	32	16	162
	VOLUMES	179	2,361	534	335	2,231
	APPROACH %	6%	77%	17%	11%	74%
	APP/DEPART	3,073	/	2,904	3,015	/
	BEGIN PEAK HR		4:15 PM			
	VOLUMES	72	948	186	110	843
	APPROACH %	6%	79%	15%	10%	76%
	PEAK HR FACTOR		0.934			0.930
	APP/DEPART	1,206	/	1,151	1,103	/

Riverside

WEST SIDE

40	26	111	11	34	101	13	828
33	24	90	12	32	104	22	768
45	23	77	10	24	74	11	690
41	30	78	6	33	81	17	750
32	22	62	12	28	51	17	584
32	17	63	6	27	53	8	533
449	347	1,124	134	411	1,187	196	9,486
15%	22%	70%	8%	23%	66%	11%	
2,776	1,605	/	1,993	1,794	/	1,814	0
151	140	411	50	148	464	64	3,583
14%	23%	69%	8%	22%	69%	9%	
		0.843			0.972		0.978
1,040	600	/	707	675	/	686	0

Euclid

NORTH SIDE

EAST SIDE **Riverside**

SOUTH SIDE

Euclid

U-TURNS				
NB	SB	EB	WB	TTL

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

				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

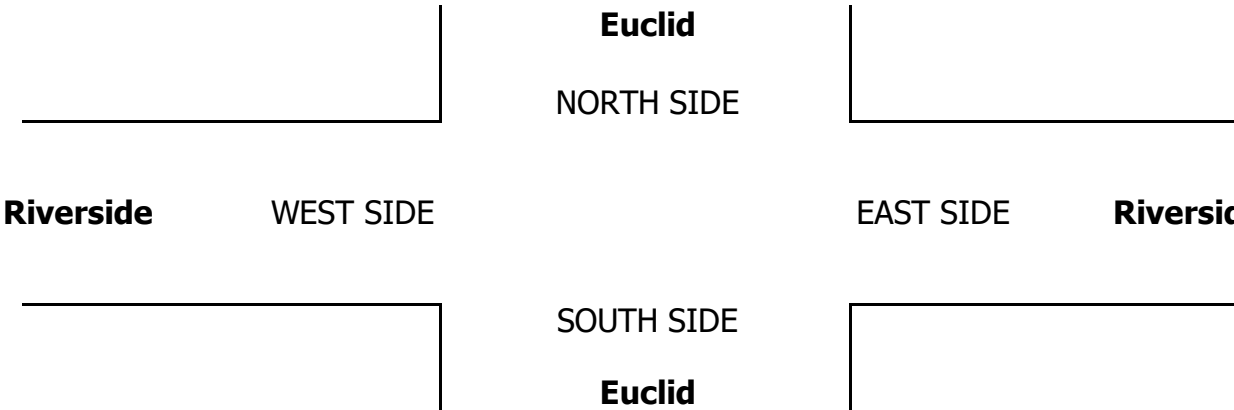
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Riverside	PROJECT #: LOCATION #: CONTROL:	SC4049 13 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N S ▼	◀ W E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 2	WR 0	TOTAL

AM	6:00 AM	2	58	8	43	114	15	6	17	4	28	28	5	328
	6:15 AM	4	65	9	25	129	9	16	29	10	40	43	7	386
	6:30 AM	2	62	16	20	156	17	26	37	8	55	67	5	471
	6:45 AM	7	58	13	17	161	15	18	31	9	45	69	10	453
	7:00 AM	7	73	19	26	69	23	29	32	8	26	66	11	389
	7:15 AM	5	99	16	14	113	20	23	49	6	23	78	12	458
	7:30 AM	10	85	30	25	89	24	33	75	6	43	121	26	567
	7:45 AM	16	99	29	42	104	30	32	87	7	38	150	23	657
	8:00 AM	10	117	28	44	108	28	31	80	12	37	96	21	612
	8:15 AM	11	59	19	44	80	30	13	66	5	27	106	17	477
	8:30 AM	3	93	21	60	94	24	29	59	10	37	71	12	513
	8:45 AM	9	84	35	54	84	22	23	70	8	38	90	19	536
	VOLUMES	86	952	243	414	1,301	257	279	632	93	437	985	168	5,847
	APPROACH %	7%	74%	19%	21%	66%	13%	28%	63%	9%	27%	62%	11%	
	APP/DEPART	1,281	/	1,459	1,972	/	1,833	1,004	/	1,229	1,590	/	1,326	0
PM	BEGIN PEAK HR	7:15 AM												
	VOLUMES	41	400	103	102	414	102	119	291	31	141	445	82	2,294
	APPROACH %	8%	74%	19%	16%	65%	16%	27%	66%	7%	21%	67%	12%	
	PEAK HR FACTOR		0.877			0.890			0.875			0.791		0.873
	APP/DEPART	544	/	624	641	/	586	441	/	496	668	/	588	0
	04:00 PM	19	142	42	41	80	37	26	104	13	36	125	17	682
PM	4:15 PM	15	145	44	31	96	26	28	85	11	32	101	12	626
	4:30 PM	11	116	37	24	85	38	32	112	8	38	111	14	626
	4:45 PM	8	195	40	12	127	30	27	100	14	35	110	15	713
	5:00 PM	26	156	51	24	123	43	25	97	10	36	114	15	720
	5:15 PM	11	114	46	19	82	31	27	114	15	48	127	19	653
	5:30 PM	11	147	51	38	108	34	23	105	9	34	95	13	668
	5:45 PM	14	132	47	17	100	31	24	85	10	32	102	22	616
	6:00 PM	10	106	38	22	119	43	23	72	10	22	70	11	546
	6:15 PM	11	126	35	27	110	33	30	75	6	33	76	12	574
	6:30 PM	9	94	32	23	70	29	22	54	12	26	46	17	434
	6:45 PM	9	77	29	14	89	30	14	63	6	19	51	8	409
	VOLUMES	154	1,550	492	292	1,189	405	301	1,066	124	391	1,128	175	7,267
	APPROACH %	7%	71%	22%	15%	63%	21%	20%	71%	8%	23%	67%	10%	
	APP/DEPART	2,196	/	2,105	1,886	/	1,710	1,491	/	1,770	1,694	/	1,682	0
	BEGIN PEAK HR	4:15 PM												
PM	VOLUMES	57	612	172	70	431	137	111	394	43	141	436	56	2,685
	APPROACH %	7%	73%	20%	11%	65%	21%	20%	72%	8%	22%	69%	9%	
	PEAK HR FACTOR		0.868			0.867			0.903			0.959		0.932
	APP/DEPART	844	/	800	659	/	618	549	/	636	633	/	631	0



U-TURNS				
NB	SB	EB	WB	TTL
0	8	0	0	8
1	4	0	0	5
0	5	0	0	5
0	3	0	0	3
0	1	0	0	1
0	4	0	0	4
0	2	0	0	2
0	11	0	0	11
0	6	0	0	6
0	6	0	0	6
0	4	0	0	4
1	6	0	0	7
2	60	0	0	62

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

5	4	1	3
5	2	7	1
8	5	4	2
6	8	5	3
14	15	3	6
8	11	4	9
17	13	2	15
20	16	6	9
16	16	7	15
11	18	3	4
11	15	6	5
22	17	1	7
143	140	49	79

61	56	19	48

3	8	0	0	11
0	7	0	0	7
2	5	0	0	7
0	3	0	0	3
1	6	1	0	8
0	4	0	0	4
0	11	0	0	11
0	4	0	0	4
0	7	0	0	7
0	10	0	0	10
0	9	0	0	9
0	6	0	0	6
6	80	1	0	87

25	18	7	8
17	12	8	5
18	24	3	8
14	14	5	8
27	27	5	9
25	21	7	10
22	17	1	5
21	14	4	13
15	26	6	8
19	18	2	7
19	18	8	10
19	17	4	4
241	226	60	95

76	77	21	30

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Riverside	PROJECT #: LOCATION #: CONTROL:	SC4049 13 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 2	WR 0	TOTAL

AM	6:00 AM	0	11	0	6	14	0	0	1	2	5	4	2	45
	6:15 AM	0	14	0	7	9	0	4	1	0	2	1	1	39
	6:30 AM	2	12	1	3	8	3	2	5	1	0	4	1	42
	6:45 AM	1	5	0	4	19	0	5	5	4	2	3	0	48
	7:00 AM	1	11	1	0	10	1	2	4	1	3	5	0	39
	7:15 AM	0	14	1	3	7	0	2	1	0	3	5	1	37
	7:30 AM	1	12	1	2	11	0	4	2	2	2	2	0	39
	7:45 AM	4	8	1	2	16	3	1	2	1	4	4	1	47
	8:00 AM	2	11	0	1	20	0	1	0	3	2	3	1	44
	8:15 AM	0	4	1	0	7	3	1	1	1	3	2	1	24
	8:30 AM	3	13	0	1	16	4	1	3	0	2	3	0	46
	8:45 AM	2	10	1	2	11	1	1	2	2	3	1	1	37
	VOLUMES	16	125	7	31	148	15	24	27	17	31	37	9	487
	APPROACH %	11%	84%	5%	16%	76%	8%	35%	40%	25%	40%	48%	12%	
	APP/DEPART	148	/	163	194	/	196	68	/	60	77	/	68	0
PM	BEGIN PEAK HR	7:15 AM												
	VOLUMES	7	45	3	6	54	3	8	5	6	11	14	3	167
	APPROACH %	13%	82%	5%	9%	83%	5%	42%	26%	32%	39%	50%	11%	
	PEAK HR FACTOR	0.917			0.774			0.594			0.778			0.888
	APP/DEPART	55	/	58	65	/	71	19	/	14	28	/	24	0
	04:00 PM	1	9	1	0	14	2	2	3	0	1	1	1	35
	4:15 PM	1	11	5	2	5	0	2	4	1	2	4	1	38
	4:30 PM	0	10	2	1	10	2	0	4	0	1	2	0	32
	4:45 PM	0	5	1	0	6	1	2	0	0	0	3	2	20
	5:00 PM	2	4	0	2	4	2	1	0	0	0	0	0	15
	5:15 PM	0	3	0	1	6	2	1	4	0	1	1	0	19
	5:30 PM	0	10	0	1	8	0	0	4	1	0	2	0	26
	5:45 PM	0	5	4	0	5	1	0	3	1	0	1	0	20
	6:00 PM	0	4	1	2	5	1	0	3	0	1	0	0	17
	6:15 PM	0	5	0	1	7	2	0	0	0	0	1	0	16
	6:30 PM	1	4	1	1	1	2	0	3	0	1	1	0	15
	6:45 PM	0	2	2	1	3	1	0	0	0	3	1	0	13
	VOLUMES	5	72	17	12	74	16	8	28	3	10	17	4	266
	APPROACH %	5%	77%	18%	12%	73%	16%	21%	72%	8%	32%	55%	13%	
	APP/DEPART	94	/	86	102	/	89	39	/	55	31	/	36	0
	BEGIN PEAK HR	4:15 PM												
	VOLUMES	1	30	8	5	25	5	5	8	1	3	9	3	105
	APPROACH %	2%	73%	20%	14%	71%	14%	36%	57%	7%	20%	60%	20%	
	PEAK HR FACTOR	0.603			0.673			0.500			0.536			0.691
	APP/DEPART	41	/	38	35	/	31	14	/	21	15	/	15	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	2	0	0	2
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	5	0	0	5

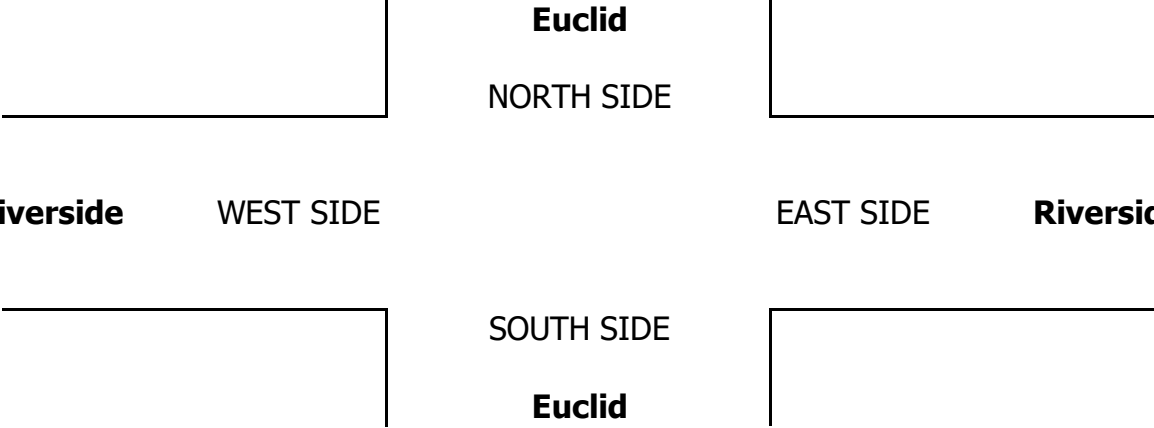
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	1
0	0	0	0
1	1	1	0
0	0	1	0
1	0	0	1
1	0	1	0
1	1	0	0
0	0	1	1
0	3	1	0
0	2	0	0
0	0	2	0
5	7	7	3

3	1	2	2

0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
2	2	0	0	4

0	2	0	1
1	0	0	0
0	1	0	0
0	0	0	1
0	1	0	0
0	1	0	0
0	0	0	0
0	0	0	0
2	0	0	0
1	0	0	0
0	2	0	0
0	1	0	0
2	1	0	0
6	9	0	2

1	2	0	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

PROJECT #:
LOCATION #:
CONTROL:

SC4049
13
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	0	1	2	0	

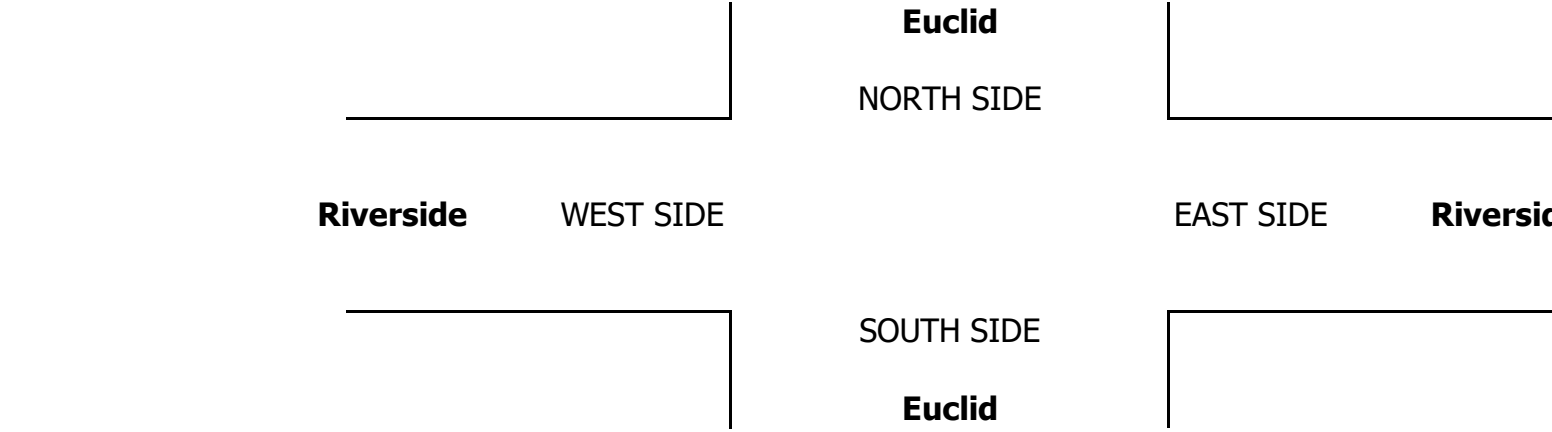
U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	1	1
0	0	0	0
0	0	0	1
0	1	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
1	1	2	2

AM	6:00 AM	0	12	0	0	5	0	0	1	0	0	0	0	18
	6:15 AM	0	10	0	2	7	0	3	0	0	1	1	0	24
	6:30 AM	0	9	0	0	6	1	0	0	2	2	1	0	21
	6:45 AM	0	15	1	1	9	0	0	1	0	1	2	0	30
	7:00 AM	0	9	2	1	11	0	1	1	1	3	2	1	32
	7:15 AM	1	14	0	0	23	0	1	1	0	0	0	0	40
	7:30 AM	0	11	0	1	10	0	1	0	0	0	0	1	24
	7:45 AM	0	17	0	2	9	1	0	0	0	0	1	0	30
	8:00 AM	0	14	0	0	6	0	0	0	0	0	1	0	21
	8:15 AM	0	13	0	0	7	0	0	0	2	0	0	0	22
	8:30 AM	0	16	1	0	4	0	0	1	0	1	2	0	25
	8:45 AM	0	9	0	1	6	0	0	0	0	0	0	0	16
	VOLUMES	1	149	4	8	103	2	6	5	5	8	10	2	303
	APPROACH %	1%	97%	3%	7%	91%	2%	38%	31%	31%	40%	50%	10%	
	APP/DEPART	154	/	158	113	/	116	16	/	16	20	/	13	0
PM	BEGIN PEAK HR	7:15 AM												
	VOLUMES	1	56	0	3	48	1	2	1	0	0	2	1	115
	APPROACH %	2%	98%	0%	6%	92%	2%	67%	33%	0%	0%	67%	33%	
	PEAK HR FACTOR	0.838			0.565			0.375			0.750			0.719
	APP/DEPART	57	/	59	52	/	48	3	/	4	3	/	4	0
	04:00 PM	0	12	0	0	8	0	1	0	0	0	2	1	24
	4:15 PM	0	9	0	1	10	0	0	0	0	0	2	0	22
	4:30 PM	1	4	1	0	8	0	0	1	0	1	1	0	17
	4:45 PM	0	8	0	0	5	0	0	0	0	0	0	0	13
	5:00 PM	1	4	0	0	7	0	1	0	0	0	1	0	14
	5:15 PM	0	2	0	0	2	0	0	1	0	0	1	0	6
	5:30 PM	0	3	0	1	7	0	0	0	0	0	0	0	11
	5:45 PM	1	4	0	0	6	0	0	0	0	0	0	0	11
	6:00 PM	0	7	0	0	8	0	0	0	0	0	0	0	15
	6:15 PM	1	4	0	0	3	1	0	0	0	0	0	1	10
	6:30 PM	0	6	0	0	4	0	0	0	0	0	0	0	10
	6:45 PM	0	3	0	0	10	0	0	0	0	0	0	0	13
	VOLUMES	4	66	1	2	78	1	2	2	0	1	7	2	166
	APPROACH %	6%	93%	1%	2%	96%	1%	50%	50%	0%	10%	70%	20%	
	APP/DEPART	71	/	70	81	/	80	4	/	5	10	/	11	0
	BEGIN PEAK HR	4:15 PM												
	VOLUMES	1	25	1	1	30	0	1	1	0	1	4	0	66
	APPROACH %	4%	89%	4%	3%	97%	0%	50%	50%	0%	20%	80%	0%	
	PEAK HR FACTOR	0.778			0.705			0.500			0.625			0.750
	APP/DEPART	28	/	26	31	/	32	2	/	3	5	/	5	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	1



0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

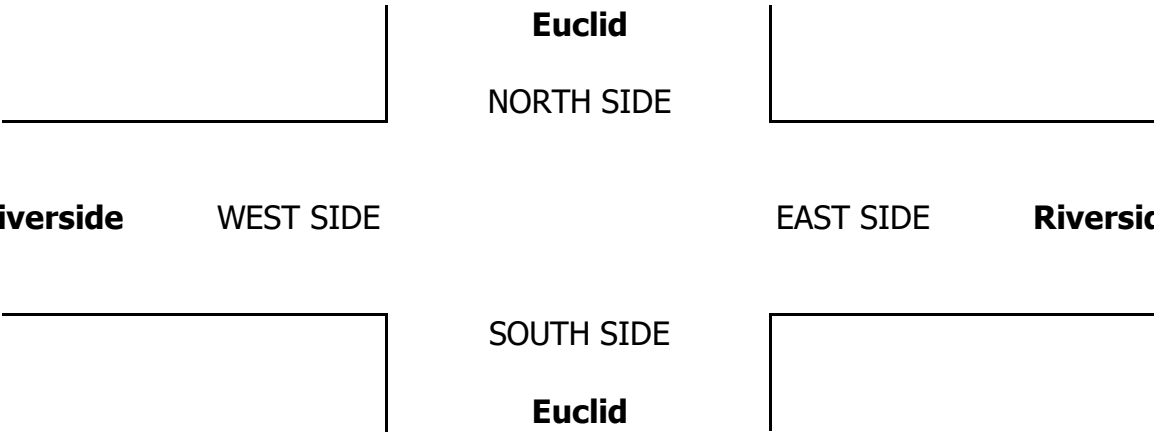
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Riverside	PROJECT #: LOCATION #: CONTROL:	SC4049 13 SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 2	WR 0	TOTAL

AM	6:00 AM	0	26	0	1	21	0	0	0	1	0	0	1	50
	6:15 AM	0	22	0	0	23	0	2	0	0	0	1	0	48
	6:30 AM	0	23	0	0	25	0	0	2	0	1	1	1	53
	6:45 AM	0	24	1	2	25	0	0	0	1	0	0	3	56
	7:00 AM	2	31	1	1	30	3	0	1	0	1	0	1	71
	7:15 AM	0	40	1	3	30	0	0	0	0	1	1	0	76
	7:30 AM	0	40	0	3	25	1	2	0	0	1	2	2	76
	7:45 AM	0	35	0	0	17	0	1	0	0	0	0	0	53
	8:00 AM	1	44	0	0	30	0	2	0	1	0	0	1	79
	8:15 AM	1	24	0	2	26	4	0	0	0	0	0	1	58
	8:30 AM	0	37	0	2	30	0	0	0	1	1	0	1	72
	8:45 AM	0	32	0	2	28	3	2	1	1	1	1	3	74
	VOLUMES	4	378	3	16	310	11	9	4	5	6	6	14	766
	APPROACH %	1%	98%	1%	5%	92%	3%	50%	22%	28%	23%	23%	54%	
PM	APP/DEPART	385	/	403	337	/	321	18	/	21	26	/	21	0
	BEGIN PEAK HR	7:15 AM												
	VOLUMES	1	159	1	4	102	1	5	0	1	2	3	3	284
	APPROACH %	1%	99%	1%	4%	94%	1%	83%	0%	17%	25%	38%	38%	
	PEAK HR FACTOR	0.894			0.826			0.500			0.400			0.899
	APP/DEPART	161	/	169	109	/	105	6	/	5	8	/	5	0
	04:00 PM	0	17	0	1	28	1	2	1	0	0	0	0	50
PM	4:15 PM	0	25	0	1	34	0	0	1	0	0	0	0	61
	4:30 PM	0	19	0	1	22	0	5	0	1	0	0	0	48
	4:45 PM	1	16	0	1	24	1	0	0	0	0	2	0	45
	5:00 PM	0	19	0	0	22	1	1	0	0	0	0	1	44
	5:15 PM	0	19	1	0	19	0	0	0	0	0	0	1	40
	5:30 PM	1	13	0	1	14	2	1	0	0	0	1	0	33
	5:45 PM	0	10	2	2	18	0	0	0	0	0	0	0	32
	6:00 PM	0	15	0	0	13	0	0	0	0	0	0	0	28
	6:15 PM	1	14	0	0	25	1	0	1	0	0	1	1	44
	6:30 PM	0	12	1	0	18	0	0	1	0	0	1	0	33
	6:45 PM	0	8	0	0	16	0	1	0	0	1	0	0	26
	VOLUMES	3	187	4	7	253	6	10	4	1	1	5	3	484
	APPROACH %	2%	96%	2%	3%	95%	2%	67%	27%	7%	11%	56%	33%	
	APP/DEPART	194	/	201	266	/	255	15	/	14	9	/	14	0
	BEGIN PEAK HR	4:15 PM												
PM	VOLUMES	1	79	0	3	102	2	6	1	1	0	2	1	198
	APPROACH %	1%	99%	0%	3%	95%	2%	75%	13%	13%	0%	67%	33%	
	PEAK HR FACTOR	0.800			0.764			0.333			0.375			0.811
	APP/DEPART	80	/	86	107	/	103	8	/	4	3	/	5	0



U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2

RTOR			
NRR	SRR	ERR	WRR

0	0	1	0
0	0	0	0
0	0	0	1
0	0	1	1
1	1	0	1
1	0	0	0
0	0	0	1
0	0	0	0
0	0	1	1
0	3	0	0
0	0	1	0
0	2	0	0
2	6	4	5

1	0	1	2

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

0	1	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	1	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
1	4	1	0

0	1	1	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

PROJECT #:
LOCATION #:
CONTROL:

SC4049
13
SIGNAL

CLASS 5:
RV

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	0	1	2	0	

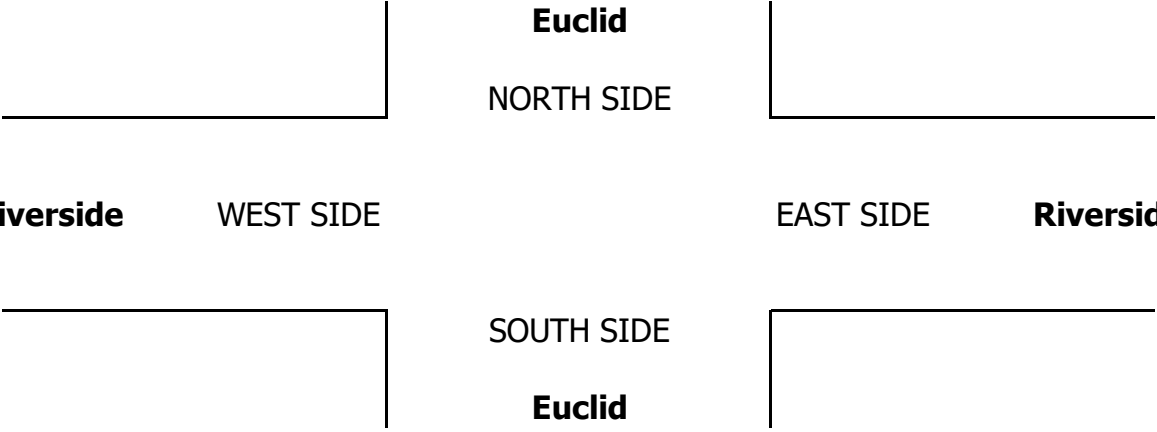
U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

AM	6:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	3	0	0	0	0	0	0	0	0	0	3
	7:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	1	0	0	1	0	0	0	0	0	0	2
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	4	0	0	3	0	0	0	0	0	0	7
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
PM	APP/DEPART	4	/	4	3	/	3	0	/	0	0	/	0
	BEGIN PEAK HR	7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.000		
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	1	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	2	0	0	0	0	0	0	2
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	1	0	0	3	0	0	0	1	0	0	5
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%	0%	
	APP/DEPART	1	/	1	3	/	4	1	/	0	0	/	0
	BEGIN PEAK HR	4:15 PM											
	VOLUMES	0	0	0	0	1	0	0	0	1	0	0	2
	APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR	0.000			0.250			0.250			0.000		
	APP/DEPART	0	/	0	1	/	2	1	/	0	0	/	0

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

0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0



0	0	1	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Riverside	PROJECT #: LOCATION #: CONTROL:	SC4049 13 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◄ W		E ►
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	0	1	2	0	

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

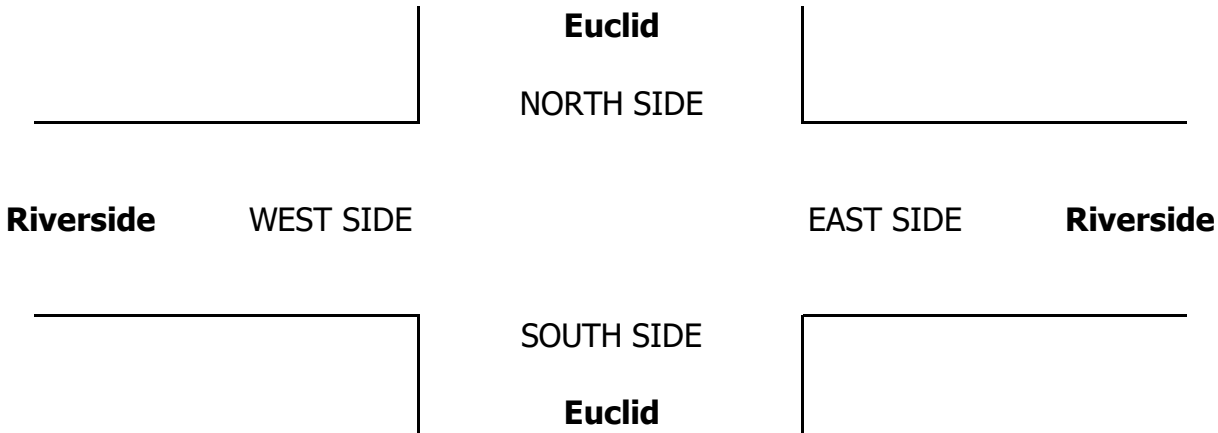
RTOR			
NRR	SRR	ERR	WRR
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0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0

AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	1	0	0	1	0	0	0	1	0	0	3	
	6:30 AM	0	0	0	0	0	0	0	1	1	0	0	2	
	6:45 AM	0	1	0	0	0	0	0	1	0	0	1	3	
	7:00 AM	0	0	1	0	0	0	0	1	0	0	1	3	
	7:15 AM	0	1	0	0	1	0	0	0	0	1	1	4	
	7:30 AM	0	0	0	1	1	0	0	2	1	0	0	5	
	7:45 AM	0	1	0	0	1	0	0	1	0	0	1	5	
	8:00 AM	0	1	0	2	1	0	0	2	0	1	0	7	
	8:15 AM	0	0	0	0	0	0	0	0	0	1	3	4	
	8:30 AM	1	0	0	0	0	0	0	2	0	0	0	3	
	8:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	
	VOLUMES	1	6	1	3	6	0	0	10	2	4	7	1	41
	APPROACH %	13%	75%	13%	33%	67%	0%	0%	83%	17%	33%	58%	8%	
	APP/DEPART	8	/	7	9	/	12	12	/	14	12	/	8	0
BEGIN PEAK HR	7:15 AM													
VOLUMES	0	3	0	3	4	0	0	5	1	2	2	1	21	
APPROACH %	0%	100%	0%	43%	57%	0%	0%	83%	17%	40%	40%	20%		
PEAK HR FACTOR	0.750			0.583			0.500			0.625			0.750	
APP/DEPART	3	/	4	7	/	7	6	/	8	5	/	2	0	
PM	04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	
	4:15 PM	0	0	0	0	2	0	0	0	0	0	0	2	
	4:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	
	4:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	1	
	6:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	VOLUMES	0	4	1	0	5	0	0	0	0	0	2	1	13
	APPROACH %	0%	80%	20%	0%	100%	0%	0%	0%	0%	0%	67%	33%	
	APP/DEPART	5	/	5	5	/	5	0	/	1	3	/	2	0
BEGIN PEAK HR	4:15 PM													
VOLUMES	0	2	0	0	3	0	0	0	0	0	0	0	5	
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%		
PEAK HR FACTOR	0.500			0.375			0.000			0.000			0.625	
APP/DEPART	2	/	2	3	/	3	0	/	0	0	/	0	0	

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

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Tue, May 23, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4049
14
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W

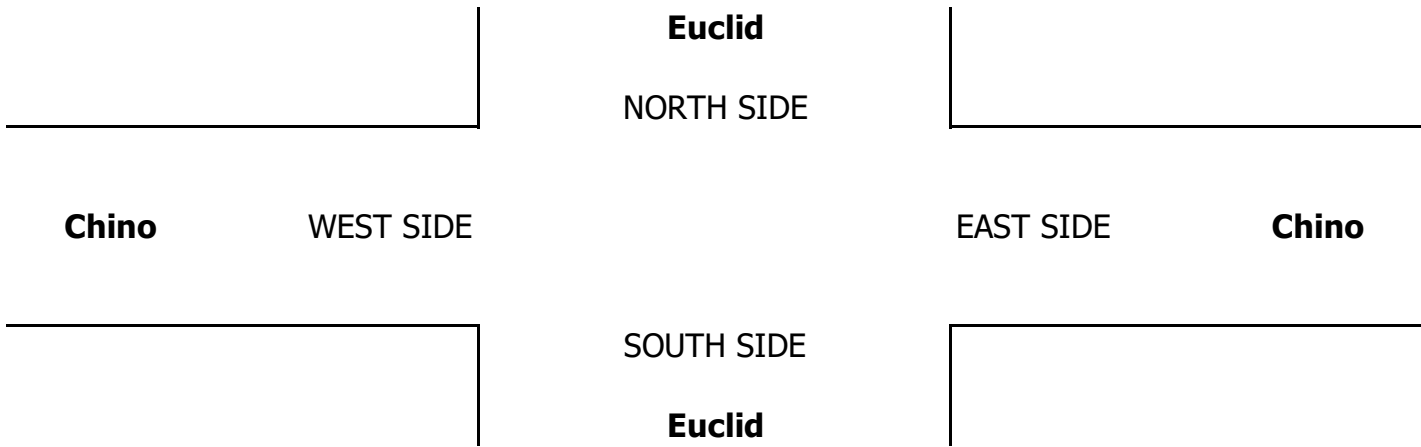
▲ N

S

▼

E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL
6:00 AM	0	99	8	4	180	7	8	14	5	10	12	5	352
6:15 AM	0	112	6	4	198	13	14	14	9	23	17	5	415
6:30 AM	3	103	11	10	245	9	15	16	3	18	24	3	460
6:45 AM	1	118	19	10	256	18	15	19	11	22	42	7	538
7:00 AM	2	154	18	7	152	7	15	14	5	18	30	8	430
7:15 AM	8	156	23	9	188	14	25	29	1	25	50	9	537
7:30 AM	4	182	37	15	175	22	13	39	2	24	47	13	573
7:45 AM	8	190	29	10	184	12	20	38	8	19	52	11	581
8:00 AM	6	165	32	12	172	18	10	25	13	28	48	15	544
8:15 AM	6	170	37	15	177	19	13	26	5	19	43	12	542
8:30 AM	3	153	25	17	172	12	13	40	4	7	36	9	491
8:45 AM	6	167	31	9	159	12	12	27	4	15	30	9	481
VOLUMES	47	1,769	276	122	2,258	163	173	301	70	228	431	106	5,944
APPROACH %	2%	85%	13%	5%	89%	6%	32%	55%	13%	30%	56%	14%	
APP/DEPART	2,092	/	2,053	2,543	/	2,562	544	/	694	765	/	635	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	24	707	135	52	708	71	56	128	28	90	190	51	2,240
APPROACH %	3%	82%	16%	6%	85%	9%	26%	60%	13%	27%	57%	15%	
PEAK HR FACTOR	0.954			0.980			0.803			0.909			0.964
APP/DEPART	866	/	817	831	/	828	212	/	312	331	/	283	0
04:00 PM	10	216	59	14	162	11	20	81	1	21	40	11	646
4:15 PM	11	192	73	11	179	7	13	76	3	26	24	9	624
4:30 PM	4	230	44	8	154	20	18	78	5	15	45	6	627
4:45 PM	9	249	64	16	174	10	18	79	11	20	40	7	697
5:00 PM	9	214	45	5	172	20	18	90	1	15	32	2	623
5:15 PM	5	197	46	10	149	12	12	68	12	14	38	1	564
5:30 PM	9	226	42	7	160	13	14	55	7	12	33	4	582
5:45 PM	11	190	36	9	155	14	10	55	10	14	29	4	537
6:00 PM	5	189	37	6	149	16	13	31	9	12	11	7	485
6:15 PM	7	142	22	10	162	17	13	27	4	14	17	7	442
6:30 PM	11	139	30	4	121	8	15	35	7	14	21	1	406
6:45 PM	9	133	18	7	127	8	11	19	3	10	14	2	361
VOLUMES	100	2,317	516	107	1,864	156	175	694	73	187	344	61	6,594
APPROACH %	3%	79%	18%	5%	88%	7%	19%	74%	8%	32%	58%	10%	
APP/DEPART	2,933	/	2,556	2,127	/	2,133	942	/	1,314	592	/	591	0
BEGIN PEAK HR	4:00 PM												
VOLUMES	34	887	240	49	669	48	69	314	20	82	149	33	2,594
APPROACH %	3%	76%	21%	6%	87%	6%	17%	78%	5%	31%	56%	13%	
PEAK HR FACTOR	0.901			0.958			0.933			0.917			0.930
APP/DEPART	1,161	/	990	766	/	774	403	/	602	264	/	228	0



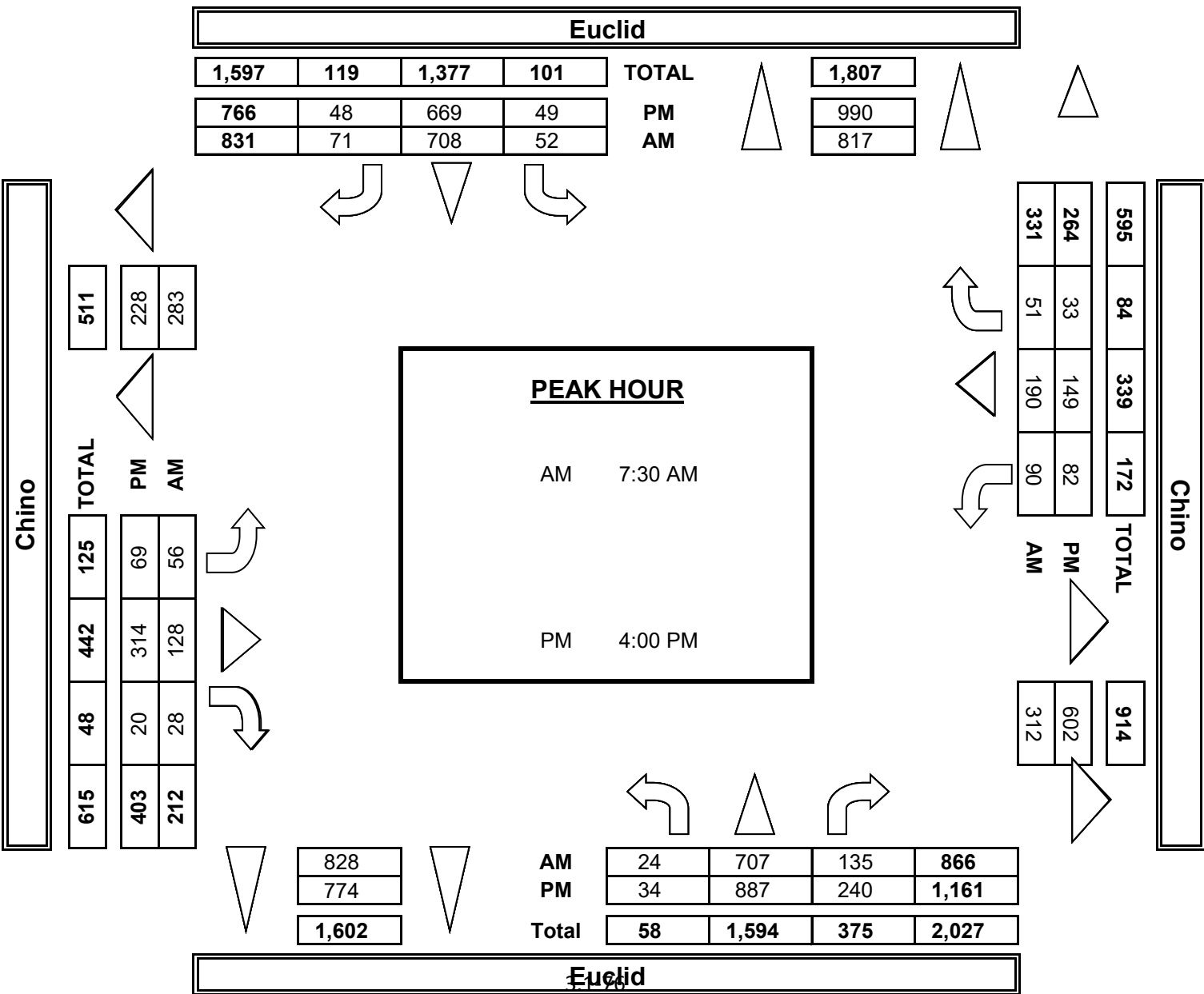
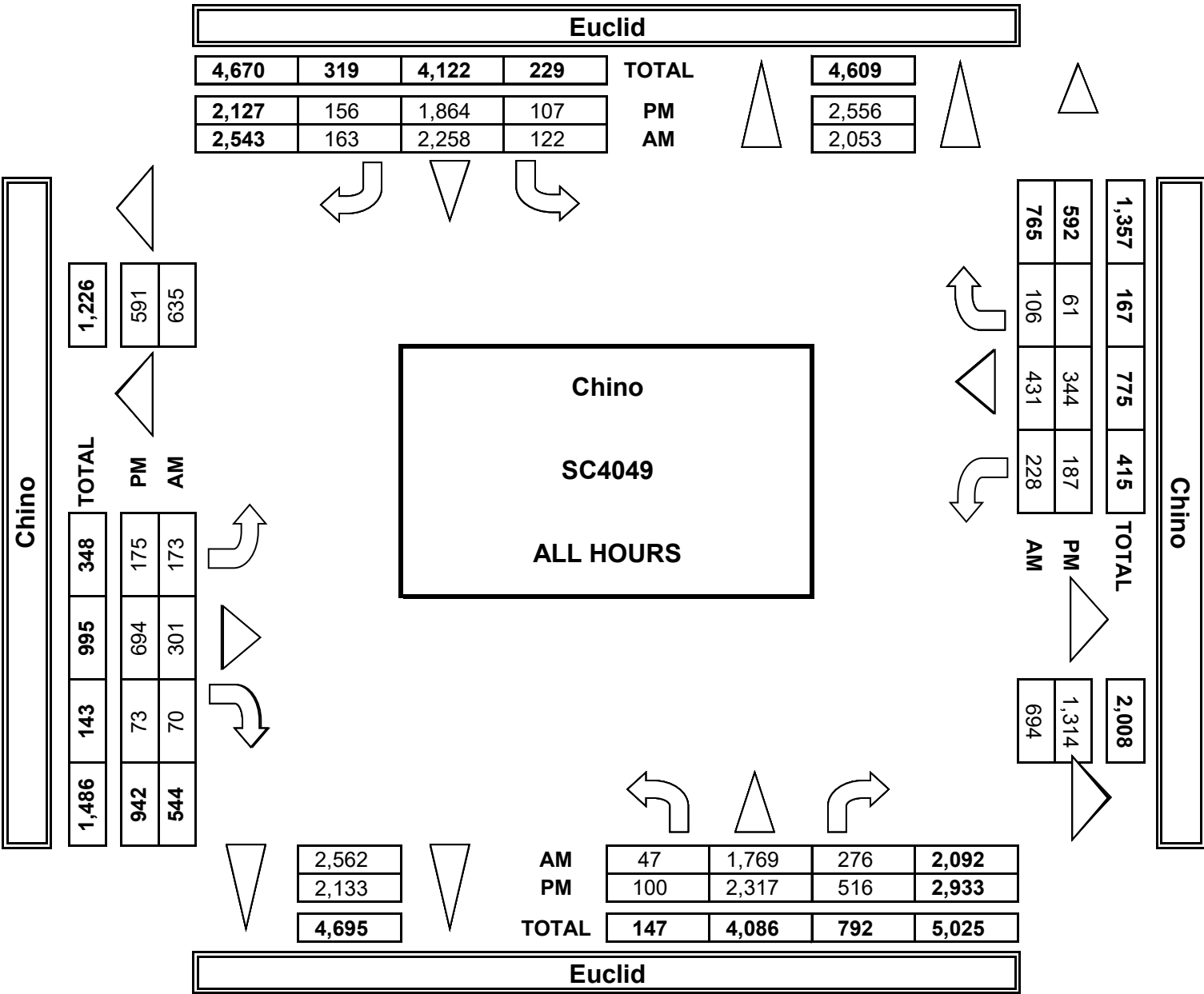
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
PM	8:15 AM	
	8:30 AM	
	8:45 AM	
	TOTAL	
	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	2	0	0	2	
0	2	0	0	2	
0	2	0	0	2	
0	0	0	0	0	
0	0	0	2	2	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	1	1	
0	0	0	1	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	1	1	
0	0	0	0	0	
0	0	0	0	0	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
1	2	0	0	3	

PEDESTRIAN CROSSINGS				
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	2	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	2	0	4	6
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

BICYCLE CROSSINGS				
ES	WS	SS	NS	TOTAL
0	1	0	0	1
0	2	0	0	2
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	2	0	0	3

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

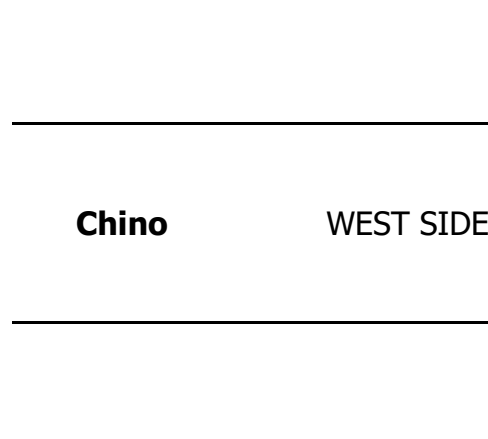
LOCATION: Chino
NORTH & SOUTH: Euclid
EAST & WEST: Chino

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

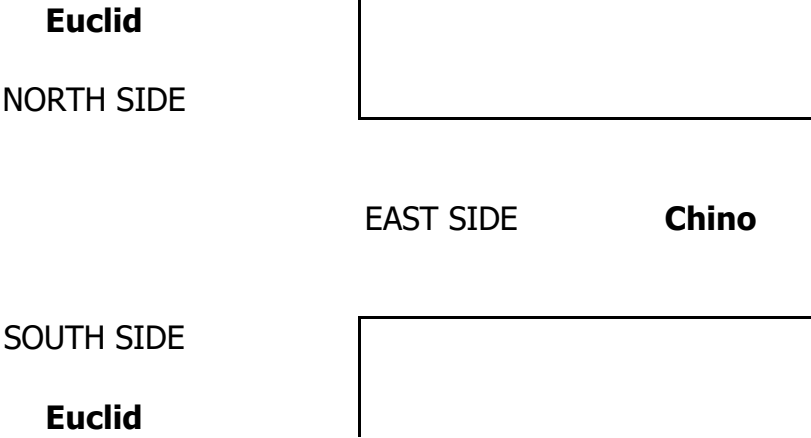
	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

AM	6:00 AM	0	158	8	4	237
	6:15 AM	0	170	6	6	252
	6:30 AM	4	157	12	16	308
	6:45 AM	1	188	21	17	328
	7:00 AM	2	234	20	11	233
	7:15 AM	11	251	26	13	271
	7:30 AM	4	286	42	21	254
	7:45 AM	10	286	32	16	241
	8:00 AM	9	236	37	19	237
	8:15 AM	9	252	38	23	260
	8:30 AM	3	241	26	25	246
	8:45 AM	6	249	31	15	221
	VOLUMES	59	2,706	298	184	3,084
	APPROACH %	2%	88%	10%	5%	90%
	APP/DEPART	3,062	/	3,083	3,445	/
	BEGIN PEAK HR	7:30 AM				
	VOLUMES	32	1,059	149	79	990
	APPROACH %	3%	85%	12%	7%	87%
	PEAK HR FACTOR	0.933			0.948	
	APP/DEPART	1,240	/	1,212	1,144	/
	04:00 PM	10	281	63	21	227
	4:15 PM	11	242	76	19	258
	4:30 PM	5	279	45	15	205
	4:45 PM	9	296	69	25	219
	5:00 PM	9	248	47	11	210
	5:15 PM	5	242	50	17	192

PM	5:30 PM	11	260	43	10	198
	5:45 PM	11	227	38	14	193
	6:00 PM	7	222	38	6	183
	6:15 PM	8	174	26	17	212
	6:30 PM	11	167	31	10	158
	6:45 PM	9	165	19	16	162
	VOLUMES	106	2,799	542	179	2,415
	APPROACH %	3%	81%	16%	6%	88%
	APP/DEPART	3,447	/	3,067	2,759	/
	BEGIN PEAK HR		4:00 PM			
	VOLUMES	35	1,097	252	78	909
	APPROACH %	3%	79%	18%	8%	88%
	PEAK HR FACTOR		0.926			0.912
	APP/DEPART	1,384	/	1,215	1,038	/



13	16	58	7	14	33	6	668
14	11	57	10	15	30	4	622
19	14	33	9	12	11	10	563
17	13	30	4	14	17	10	542
8	15	36	7	15	22	1	480
8	11	19	3	12	14	3	440
166	186	722	78	199	352	82	7,824
6%	19%	73%	8%	31%	56%	13%	
2,691	986	/	1,443	633	/	623	0
52	74	323	21	88	155	44	3,125
5%	18%	77%	5%	31%	54%	15%	
		0.916			0.915		0.954
1,017	418	/	653	286	/	241	0



U-TURNS				
NB	SB	EB	WB	TTL

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

				0
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				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

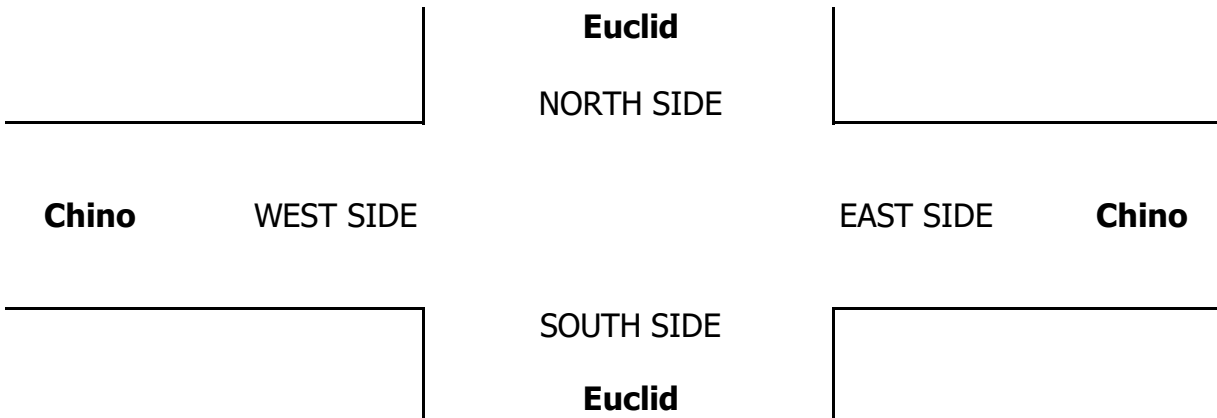
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Chino	PROJECT #: LOCATION #: CONTROL:	SC4049 14 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL

AM	6:00 AM	0	58	8	4	135	6	8	12	3	8	12	3	257
	6:15 AM	0	69	6	3	160	13	13	11	9	18	16	0	318
	6:30 AM	2	62	10	6	201	9	14	15	3	18	22	0	362
	6:45 AM	1	71	15	3	198	18	13	19	10	18	37	3	406
	7:00 AM	2	101	15	5	93	7	14	13	3	15	28	2	298
	7:15 AM	6	96	18	5	127	11	24	27	1	19	47	3	384
	7:30 AM	4	114	31	8	124	20	12	31	2	19	46	8	419
	7:45 AM	7	128	27	5	135	11	17	36	8	16	51	2	443
	8:00 AM	4	120	28	8	122	15	10	23	12	24	41	5	412
	8:15 AM	3	117	36	9	123	19	12	24	4	14	43	4	408
	8:30 AM	3	91	24	11	121	9	11	39	3	5	33	4	354
	8:45 AM	6	112	31	5	111	10	12	25	4	11	29	5	361
	VOLUMES	38	1,139	249	72	1,650	148	160	275	62	185	405	39	4,422
	APPROACH %	3%	80%	17%	4%	88%	8%	32%	55%	12%	29%	64%	6%	
APP/DEPART		1,426	/	1,342	1,870	/	1,899	497	/	592	629	/	589	0
BEGIN PEAK HR		7:30 AM												
VOLUMES		18	479	122	27	504	65	51	114	26	73	181	19	1,682
APPROACH %		3%	77%	20%	5%	84%	11%	27%	60%	14%	27%	66%	7%	
PEAK HR FACTOR		0.955												
PEAK HR FACTOR		0.985												
APP/DEPART		619	/	552	599	/	603	191	/	263	273	/	264	0
PM	04:00 PM	10	169	51	8	118	11	16	78	1	20	38	8	528
	4:15 PM	11	157	71	5	131	6	11	76	3	25	24	7	527
	4:30 PM	3	195	43	3	119	19	17	74	5	14	44	5	541
	4:45 PM	9	215	61	11	143	9	18	74	10	17	36	6	609
	5:00 PM	9	191	42	2	149	18	18	88	1	12	32	1	563
	5:15 PM	5	170	42	6	120	12	10	62	9	14	37	1	488
	5:30 PM	7	201	40	4	134	13	12	52	7	11	33	3	517
	5:45 PM	11	166	33	6	129	14	9	53	10	13	28	4	476
	6:00 PM	4	165	35	6	124	14	11	30	9	12	11	5	426
	6:15 PM	6	120	18	5	131	17	13	24	4	14	17	5	374
	6:30 PM	11	119	28	1	97	8	15	34	7	13	19	1	353
	6:45 PM	9	113	17	2	103	8	11	19	3	9	14	1	309
	VOLUMES	95	1,981	481	59	1,498	149	161	664	69	174	333	47	5,711
	APPROACH %	4%	77%	19%	3%	88%	9%	18%	74%	8%	31%	60%	8%	
APP/DEPART		2,557	/	2,192	1,706	/	1,748	894	/	1,201	554	/	570	0
BEGIN PEAK HR		4:00 PM												
VOLUMES		31	736	226	26	511	45	62	302	19	76	142	26	2,205
APPROACH %		3%	74%	23%	4%	88%	8%	16%	79%	5%	31%	58%	11%	
PEAK HR FACTOR		0.873												
PEAK HR FACTOR		0.894												
APP/DEPART		995	/	825	583	/	608	383	/	554	244	/	218	0



U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2
0	0	0	0	0
1	1	0	0	2
2	4	0	0	6

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	2	1	2
1	4	3	0
1	4	1	0
0	7	8	1
4	1	3	1
0	0	0	0
5	3	0	0
3	7	2	5
7	4	6	0
10	7	3	1
8	4	3	0
4	2	2	2
6	1	2	2
49	46	34	14

28	22	14	6

1	0	0	0	1
1	0	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
1	0	0	0	1
0	1	0	0	1
1	1	0	0	2
1	0	0	0	1
1	0	0	0	1
7	3	0	0	10

17	6	1	0
15	2	2	3
12	5	4	1
18	3	9	2
6	7	0	1
10	7	7	0
6	1	6	0
4	5	6	3
8	3	2	1
3	3	3	1
5	0	5	0
4	3	3	1
108	45	48	13

62	16	16	6

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Chino	PROJECT #: LOCATION #: CONTROL:	SC4049 14 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL

AM	6:00 AM	0	8	0	0	18	0	0	2	1	2	0	0	31
	6:15 AM	0	12	0	0	9	0	0	2	0	1	1	1	26
	6:30 AM	1	14	1	0	9	0	1	1	0	0	1	0	28
	6:45 AM	0	6	4	5	25	0	0	0	1	1	2	0	44
	7:00 AM	0	11	2	0	15	0	1	1	1	1	0	2	34
	7:15 AM	0	7	4	1	10	2	0	0	0	5	2	3	34
	7:30 AM	0	12	2	5	9	1	0	5	0	5	1	1	41
	7:45 AM	0	7	0	2	21	1	2	2	0	3	0	5	43
	8:00 AM	0	6	2	0	21	2	0	2	1	2	3	5	44
	8:15 AM	2	9	1	2	9	0	0	2	0	4	0	1	30
	8:30 AM	0	16	0	3	15	3	2	1	1	1	3	2	47
	8:45 AM	0	9	0	1	18	0	0	0	0	2	1	2	33
	VOLUMES	3	117	16	19	179	9	6	18	5	27	14	22	435
	APPROACH %	2%	86%	12%	9%	86%	4%	21%	62%	17%	43%	22%	35%	
	APP/DEPART	136	/	146	207	/	212	29	/	52	63	/	25	0
PM	BEGIN PEAK HR	7:30 AM												
	VOLUMES	1	34	5	9	60	4	2	11	1	14	4	12	158
	APPROACH %	2%	83%	12%	12%	82%	5%	14%	79%	7%	47%	13%	40%	
	PEAK HR FACTOR	0.732			0.760			0.700			0.750			0.898
	APP/DEPART	41	/	48	73	/	76	14	/	25	30	/	9	0
	04:00 PM	0	13	8	3	11	0	2	3	0	1	2	1	44
	4:15 PM	0	9	1	1	2	0	1	0	0	1	0	0	15
	4:30 PM	0	10	1	1	8	1	1	4	0	1	1	0	28
	4:45 PM	0	8	1	1	6	0	0	3	1	0	2	0	22
	5:00 PM	0	5	3	0	3	0	0	1	0	3	0	0	15
	5:15 PM	0	5	2	0	8	0	1	4	0	0	1	0	21
	5:30 PM	0	7	2	2	5	0	0	2	0	0	0	0	18
	5:45 PM	0	5	2	0	6	0	1	1	0	1	1	0	17
	6:00 PM	0	5	2	0	7	0	2	0	0	0	0	0	16
	6:15 PM	0	6	3	2	6	0	0	2	0	0	0	0	19
	6:30 PM	0	5	2	0	3	0	0	0	0	1	2	0	13
	6:45 PM	0	4	1	0	4	0	0	0	0	0	0	1	10
	VOLUMES	0	82	28	10	69	1	8	20	1	8	9	2	238
	APPROACH %	0%	75%	25%	13%	86%	1%	28%	69%	3%	42%	47%	11%	
	APP/DEPART	110	/	92	80	/	78	29	/	58	19	/	10	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	40	11	6	27	1	4	10	1	3	5	1	109
	APPROACH %	0%	78%	22%	18%	79%	3%	27%	67%	7%	33%	56%	11%	
	PEAK HR FACTOR	0.607			0.607			0.750			0.563			0.619
	APP/DEPART	51	/	45	34	/	31	15	/	27	9	/	6	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	0	0	0	0
1	1	0	0	2

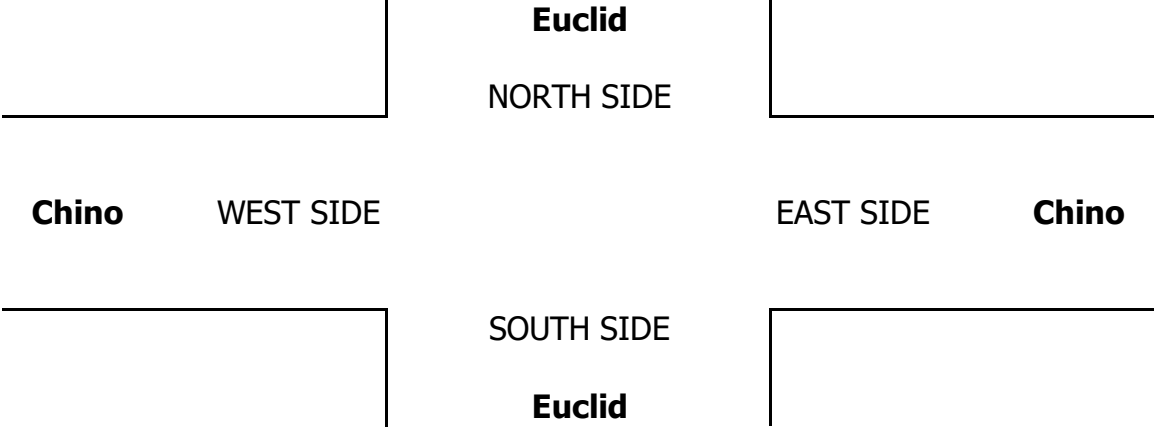
RTOR			
NRR	SRR	ERR	WRR
0	0	1	0
0	0	0	1
0	0	0	0
1	0	1	0
0	0	1	0
0	1	0	0
1	0	0	0
0	0	0	0
0	1	1	1
0	0	0	0
0	1	1	0
0	0	0	1
2	3	5	3

1	1	1	1

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

2	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
3	0	0	0

2	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4049
14
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W

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E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	0	1	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	1

0	0	0	1

AM	6:00 AM	0	10	0	0	5	0	0	0	0	0	1	16	
	6:15 AM	0	10	0	0	7	0	1	0	0	3	0	21	
	6:30 AM	0	7	0	2	11	0	0	0	0	1	1	22	
	6:45 AM	0	11	0	0	7	0	1	0	0	1	2	23	
	7:00 AM	0	10	0	0	14	0	0	0	1	0	2	28	
	7:15 AM	1	15	1	3	21	0	1	2	0	1	0	48	
	7:30 AM	0	14	4	1	8	1	0	1	0	0	0	30	
	7:45 AM	0	17	0	1	9	0	0	0	0	1	2	30	
	8:00 AM	1	9	0	1	4	0	0	0	0	1	0	18	
	8:15 AM	0	10	0	1	10	0	0	0	0	1	0	24	
	8:30 AM	0	11	1	0	6	0	0	0	0	0	2	20	
	8:45 AM	0	14	0	1	6	0	0	0	0	1	0	22	
	VOLUMES	2	138	6	10	108	1	3	3	1	8	5	17	302
	APPROACH %	1%	95%	4%	8%	91%	1%	43%	43%	14%	27%	17%	57%	
	APP/DEPART	146	/	158	119	/	119	7	/	19	30	/	6	0
PM	BEGIN PEAK HR	7:30 AM												
	VOLUMES	0	50	4	4	31	1	0	1	0	2	1	7	102
	APPROACH %	0%	91%	7%	11%	86%	3%	0%	100%	0%	20%	10%	70%	
	PEAK HR FACTOR	0.764			0.818			0.250			0.833			0.850
	APP/DEPART	55	/	57	36	/	34	1	/	9	10	/	2	0
	04:00 PM	0	10	0	1	7	0	2	0	0	0	0	0	20
	4:15 PM	0	6	0	3	11	1	1	0	0	0	0	0	22
	4:30 PM	0	6	0	2	7	0	0	0	0	0	0	1	16
	4:45 PM	0	8	0	0	6	0	0	0	0	1	1	1	17
	5:00 PM	0	5	0	0	4	1	0	0	0	0	0	0	10
	5:15 PM	0	1	1	1	3	0	0	0	2	0	0	0	8
	5:30 PM	0	6	0	0	7	0	1	0	0	0	0	0	14
	5:45 PM	0	4	0	1	5	0	0	1	0	0	0	0	11
	6:00 PM	0	8	0	0	6	1	0	0	0	0	0	1	16
	6:15 PM	1	3	0	0	3	0	0	0	0	0	0	1	8
	6:30 PM	0	4	0	0	5	0	0	1	0	0	0	0	10
	6:45 PM	0	1	0	1	7	0	0	0	0	0	0	0	9
	VOLUMES	1	62	1	9	71	3	4	2	2	1	1	4	161
	APPROACH %	2%	97%	2%	11%	86%	4%	50%	25%	25%	17%	17%	67%	
	APP/DEPART	64	/	70	83	/	74	8	/	12	6	/	5	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	30	0	6	31	1	3	0	0	1	1	2	75
	APPROACH %	0%	100%	0%	16%	82%	3%	100%	0%	0%	25%	25%	50%	
	PEAK HR FACTOR	0.750			0.633			0.375			0.333			0.852
	APP/DEPART	30	/	35	38	/	32	3	/	6	4	/	2	0

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

0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	1
0	0	0	0
0	0	0	0
0	1	1	2

0	1	0	0

Euclid

NORTH SIDE

Chino

WEST SIDE

EAST SIDE

Chino

Euclid

SOUTH SIDE

3.1-85

INTERSECTION TURNING MOVEMENT COUNTS

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

<u>DATE:</u> 5/23/23 TUESDAY	LOCATION:	Chino	PROJECT #:	SC4049
	NORTH & SOUTH:	Euclid	LOCATION #:	14
	EAST & WEST:	Chino	CONTROL:	SIGNAL

CLASS 4:	NOTES:	AM		▲	
4 OR MORE AXLE TRUCKS		PM		N	
		MD	◀ W		E ▶
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

AM	6:00 AM	0	22	0	0	21	1	0	0	1	0	0	1	46
	6:15 AM	0	21	0	1	20	0	0	1	0	1	0	4	48
	6:30 AM	0	20	0	2	23	0	0	0	0	0	0	2	47
	6:45 AM	0	26	0	2	26	0	1	0	0	2	1	3	61
	7:00 AM	0	32	0	2	29	0	0	0	0	2	0	2	67
	7:15 AM	1	38	0	0	27	1	0	0	0	0	1	0	68
	7:30 AM	0	42	0	1	32	0	1	1	0	0	0	3	80
	7:45 AM	1	37	1	2	18	0	1	0	0	0	0	2	62
	8:00 AM	1	29	2	3	25	0	0	0	0	1	4	3	68
	8:15 AM	1	33	0	3	33	0	1	0	1	0	0	5	77
	8:30 AM	0	34	0	3	30	0	0	0	0	0	0	1	68
	8:45 AM	0	31	0	2	23	2	0	0	0	1	0	2	61
	VOLUMES	4	365	3	21	307	4	4	2	2	7	6	28	753
APPROACH %	1%	98%	1%	6%	92%	1%	50%	25%	25%	17%	15%	68%		
APP/DEPART	372	/	397	332	/	317	8	/	26	41	/	13	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	3	141	3	9	108	0	3	1	1	1	4	13	287	
APPROACH %	2%	96%	2%	8%	92%	0%	60%	20%	20%	6%	22%	72%		
PEAK HR FACTOR	0.875													
APP/DEPART	147	/	157	117	/	110	5	/	13	18	/	7	0	
PM	4:00 PM	0	24	0	2	26	0	0	0	0	0	0	2	54
	4:15 PM	0	19	1	2	32	0	0	0	0	0	0	2	56
	4:30 PM	0	19	0	2	20	0	0	0	0	0	0	0	41
	4:45 PM	0	17	2	4	17	1	0	2	0	1	1	0	45
	5:00 PM	0	13	0	3	16	1	0	1	0	0	0	1	35
	5:15 PM	0	20	1	3	18	0	1	2	1	0	0	0	46
	5:30 PM	0	12	0	1	14	0	0	1	0	1	0	1	30
	5:45 PM	0	15	0	2	15	0	0	0	0	0	0	0	32
	6:00 PM	1	11	0	0	12	1	0	1	0	0	0	1	27
	6:15 PM	0	13	1	3	22	0	0	1	0	0	0	1	41
	6:30 PM	0	10	0	3	14	0	0	0	0	0	0	0	27
	6:45 PM	0	14	0	4	13	0	0	0	0	1	0	0	32
	VOLUMES	1	187	5	29	219	3	1	8	1	3	1	8	466
APPROACH %	1%	97%	3%	12%	87%	1%	10%	80%	10%	25%	8%	67%		
APP/DEPART	193	/	196	251	/	223	10	/	42	12	/	5	0	
BEGIN PEAK HR	4:00 PM													
VOLUMES	0	79	3	10	95	1	0	2	0	1	1	4	196	
APPROACH %	0%	96%	4%	9%	90%	1%	0%	100%	0%	17%	17%	67%		
PEAK HR FACTOR	0.854													
APP/DEPART	82	/	83	106	/	96	2	/	15	6	/	2	0	

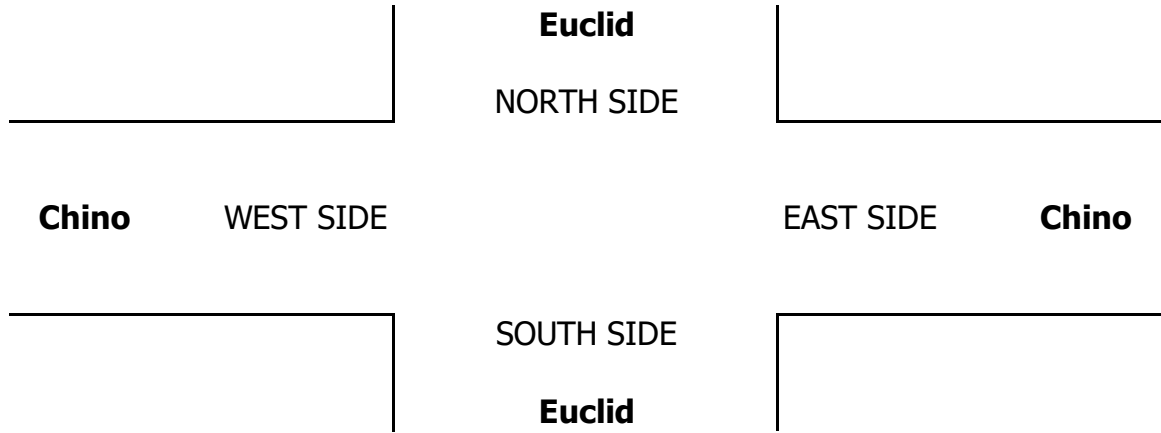
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1

0	0	1	1
0	0	0	0
0	0	0	0
0	0	0	2
0	0	0	1
0	1	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	1	1
0	0	0	0
0	0	0	0
0	1	2	6

0	0	1	2

[illegible][illegible]

0	0	0	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4049
14
SIGNAL

CLASS 5:
RV

NOTES:

AM
PM
MD
OTHER
OTHER

▲
N
◀ W
S
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E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	0	1	0	

AM	6:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	2	0	0	0	0	0	0	0	0	0	2
	7:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	2	0	0	2	0	0	0	0	0	0	4
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	2	/	2	2	/	2	0	/	0	/	0	0
PM	BEGIN PEAK HR	7:30 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.000		
	APP/DEPART	0	/	0	0	/	0	0	/	0	/	0	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	1	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	1	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	1
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
	6:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	1	1	0	2	0	0	0	1	0	0	5
	APPROACH %	0%	50%	50%	0%	100%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	2	/	1	2	/	3	0	/	1	1	/	0
	BEGIN PEAK HR	4:00 PM											
	VOLUMES	0	0	0	0	1	0	0	0	1	0	0	2
	APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	
	PEAK HR FACTOR	0.000			0.250			0.000			0.250		
	APP/DEPART	0	/	0	1	/	2	0	/	0	1	/	0

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

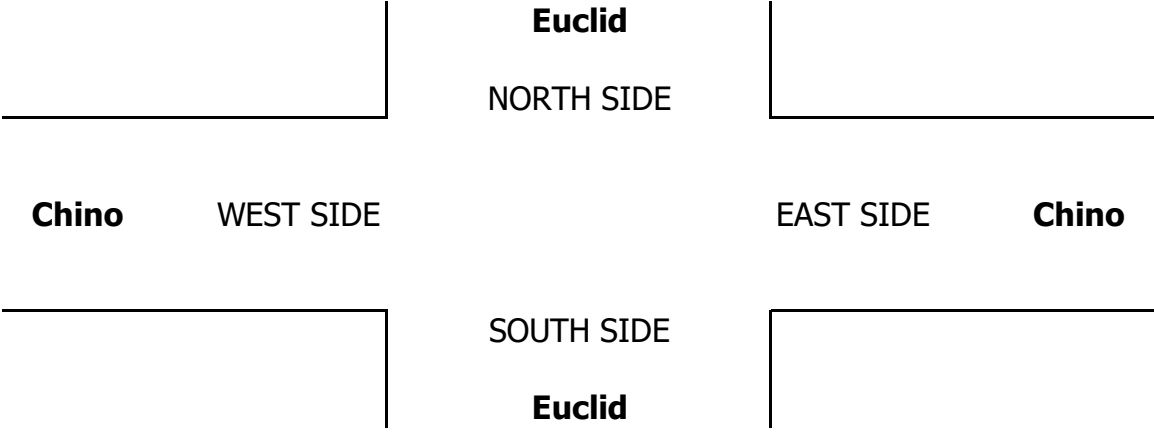
RTOR			
NRR	SRR	ERR	WRR
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0

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

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

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Chino	PROJECT #: LOCATION #: CONTROL:	SC4049 14 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◄ W		E ►
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL

AM	6:00 AM	0	1	0	0	0	0	0	0	0	0	0	1
	6:15 AM	0	0	0	0	2	0	0	0	0	0	0	2
	6:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
	6:45 AM	0	2	0	0	0	0	0	0	0	0	0	2
	7:00 AM	0	0	1	0	0	0	0	0	0	1	0	2
	7:15 AM	0	0	0	0	3	0	0	0	0	0	0	3
	7:30 AM	0	0	0	0	2	0	0	1	0	0	0	3
	7:45 AM	0	1	1	0	1	0	0	0	0	0	0	3
	8:00 AM	0	1	0	0	0	1	0	0	0	0	0	2
	8:15 AM	0	1	0	0	2	0	0	0	0	0	0	3
	8:30 AM	0	1	0	0	0	0	0	0	1	0	0	2
	8:45 AM	0	1	0	0	1	0	2	0	0	0	0	4
	VOLUMES	0	8	2	0	12	1	0	3	0	1	1	28
	APPROACH %	0%	80%	20%	0%	92%	8%	0%	100%	0%	50%	50%	0%
	APP/DEPART	10	/	8	13	/	13	3	/	5	2	/	2
PM	BEGIN PEAK HR	7:30 AM											
	VOLUMES	0	3	1	0	5	1	0	1	0	0	0	11
	APPROACH %	0%	75%	25%	0%	83%	17%	0%	100%	0%	0%	0%	0%
	PEAK HR FACTOR	0.500			0.750			0.250			0.000		
	APP/DEPART	4	/	3	6	/	5	1	/	2	0	/	1
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	2	0	0	0	0	0	0	3
	4:30 PM	1	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	1	0	0	2	0	0	0	0	0	0	3
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	1
	5:30 PM	2	0	0	0	0	0	1	0	0	0	0	3
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	1	0	0	1	0	0	0	0	0	0	2
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	3	4	0	0	5	0	1	0	0	0	0	13
	APPROACH %	43%	57%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%
	APP/DEPART	7	/	5	5	/	7	1	/	0	0	/	1
	BEGIN PEAK HR	4:00 PM											
	VOLUMES	0	2	0	0	4	0	0	0	0	0	0	7
	APPROACH %	0%	67%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%
	PEAK HR FACTOR	0.750			0.500			0.000			0.000		
	APP/DEPART	3	/	2	4	/	5	0	/	0	0	/	0

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

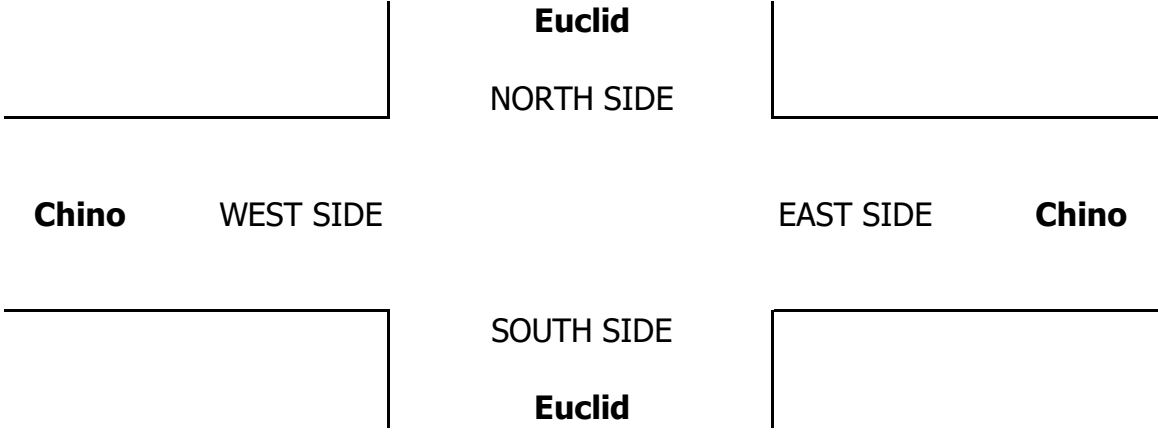
RTOR			
NRR	SRR	ERR	WRR
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	1	0	0

0	1	0	0

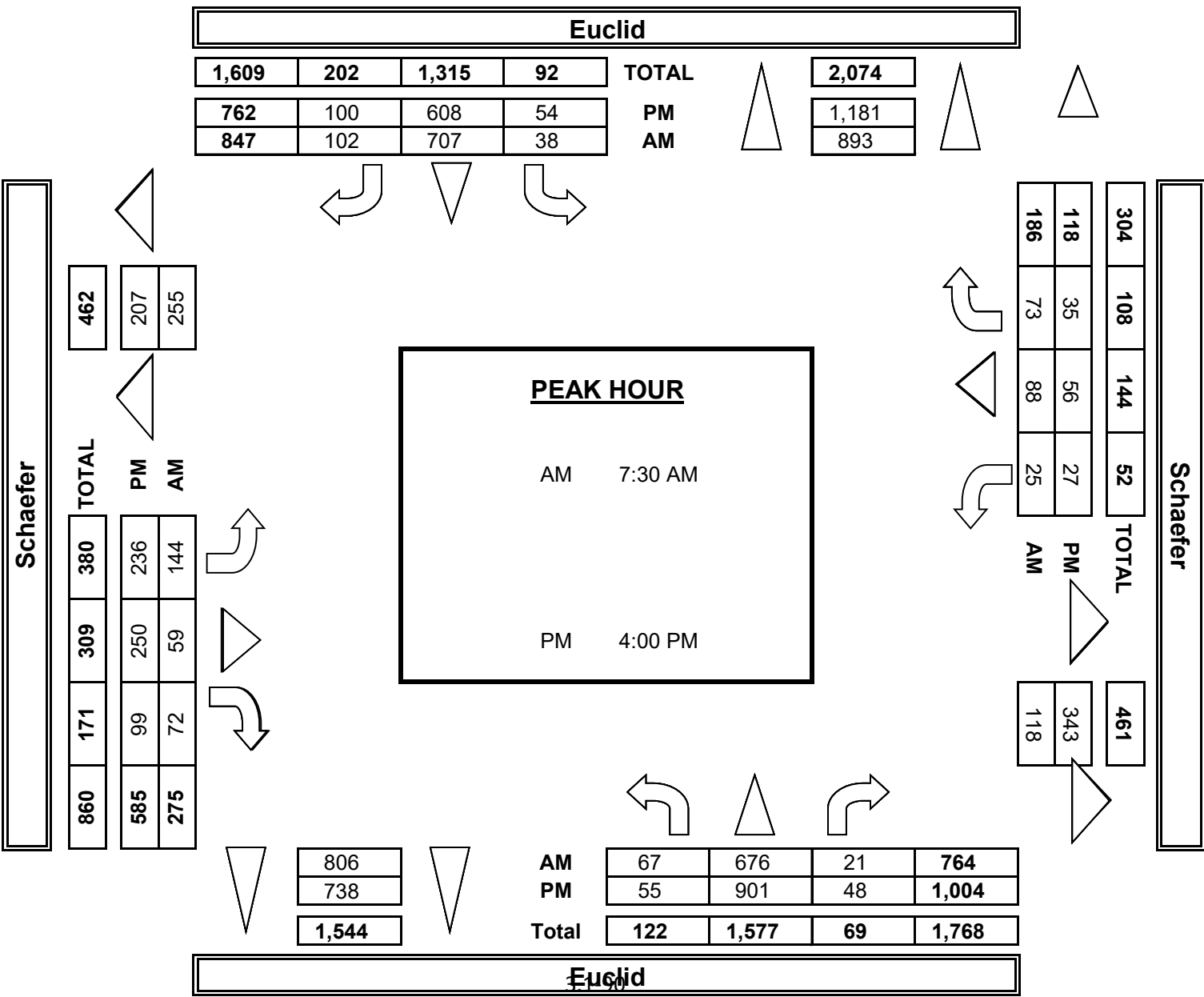
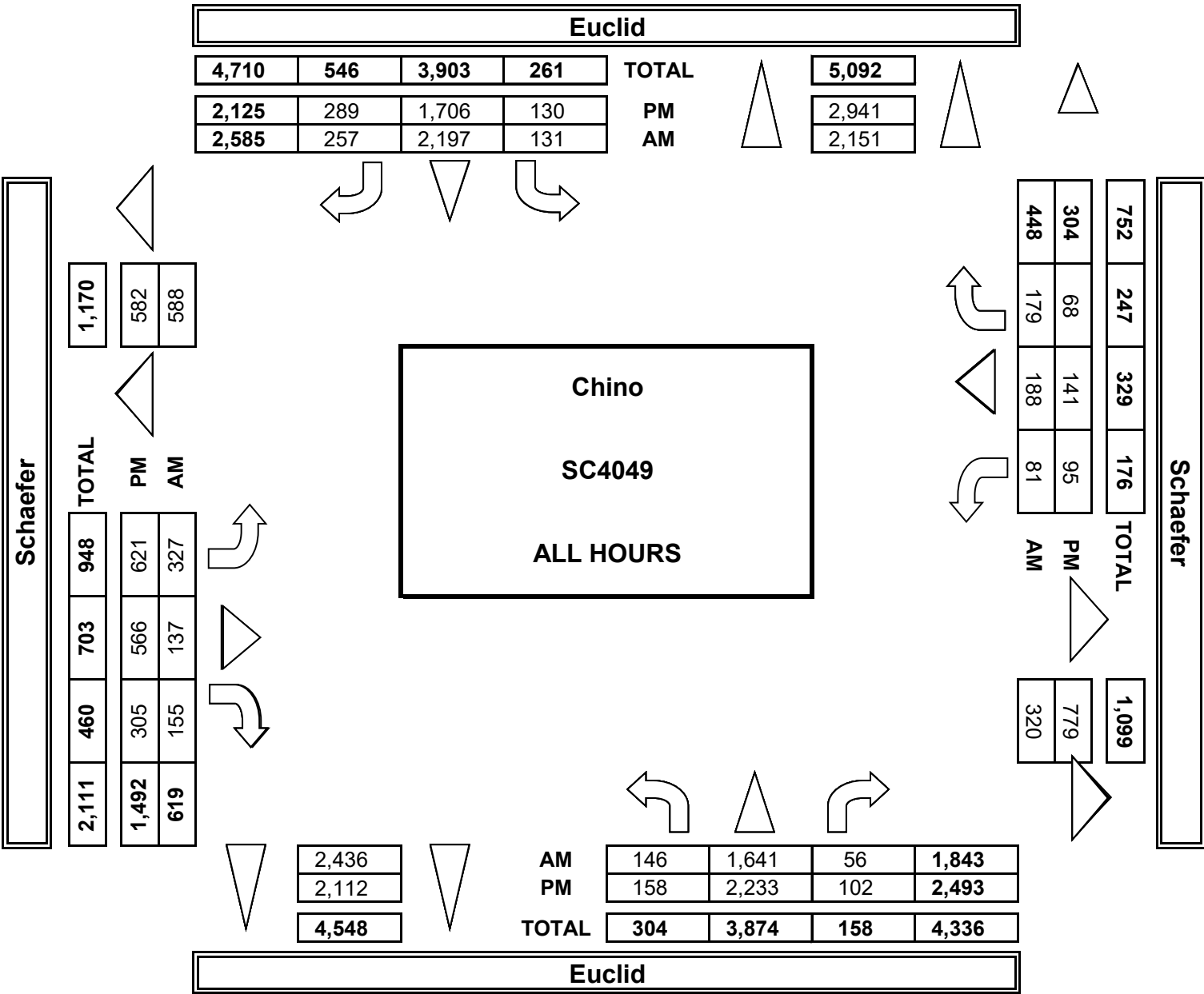
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0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2

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

0	0	0	0



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Schaefer

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

AM	6:00 AM	7	137	3	14	202
	6:15 AM	2	133	10	20	258
	6:30 AM	5	136	7	9	289
	6:45 AM	14	178	6	13	337
	7:00 AM	11	182	11	34	249
	7:15 AM	10	220	11	28	230
	7:30 AM	13	232	8	22	217
	7:45 AM	23	233	6	17	231
	8:00 AM	19	226	12	15	256
	8:15 AM	14	249	11	13	267
	8:30 AM	16	213	6	13	207
	8:45 AM	19	227	8	30	214
	VOLUMES	152	2,362	97	226	2,954
	APPROACH %	6%	90%	4%	7%	85%
	APP/DEPART	2,610	/	3,144	3,462	/
	BEGIN PEAK HR	7:30 AM				
	VOLUMES	68	939	36	66	970
	APPROACH %	7%	90%	3%	6%	85%
	PEAK HR FACTOR	0.955			0.936	
	APP/DEPART	1,043	/	1,276	1,146	/
	04:00 PM	11	301	28	18	210
	4:15 PM	21	289	29	22	232
	4:30 PM	10	212	7	46	182
	4:45 PM	13	303	15	22	185
	5:00 PM	17	228	12	27	179
	5:15 PM	18	233	11	15	181

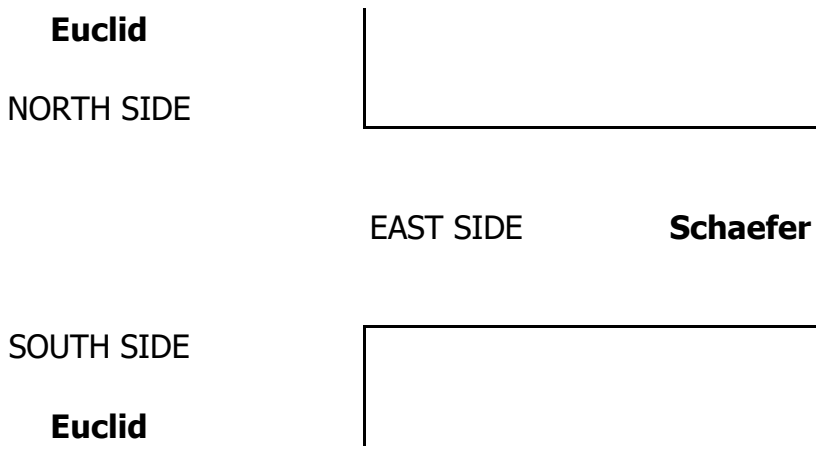
PM	5:30 PM	11	244	8	13	170
	5:45 PM	14	244	15	20	200
	6:00 PM	8	208	20	17	162
	6:15 PM	13	144	7	25	162
	6:30 PM	12	151	20	12	145
	6:45 PM	13	148	12	16	141
	VOLUMES	160	2,703	183	251	2,147
	APPROACH %	5%	89%	6%	9%	80%
	APP/DEPART	3,045	/	3,444	2,692	/
	BEGIN PEAK HR	4:00 PM				
	VOLUMES	55	1,105	79	107	808
	APPROACH %	4%	89%	6%	10%	79%
	PEAK HR FACTOR	0.912				0.897
	APP/DEPART	1,238	/	1,403	1,018	/

Schaefer

WEST SIDE

######

34	48	63	30	29	8	13	670
23	37	31	24	19	10	5	641
32	47	34	22	21	11	7	588
24	61	35	27	27	3	8	535
20	43	23	30	21	15	1	492
15	32	11	13	6	10	7	423
295	639	583	317	179	150	103	7,707
11%	42%	38%	21%	41%	35%	24%	
2,643	1,538	/	1,016	432	/	605	0
104	246	261	106	38	60	52	3,017
10%	40%	43%	17%	25%	40%	35%	
		0.890			0.753		0.940
951	612	/	446	149	/	218	0



U-TURNS				
NB	SB	EB	WB	TTL

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

				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

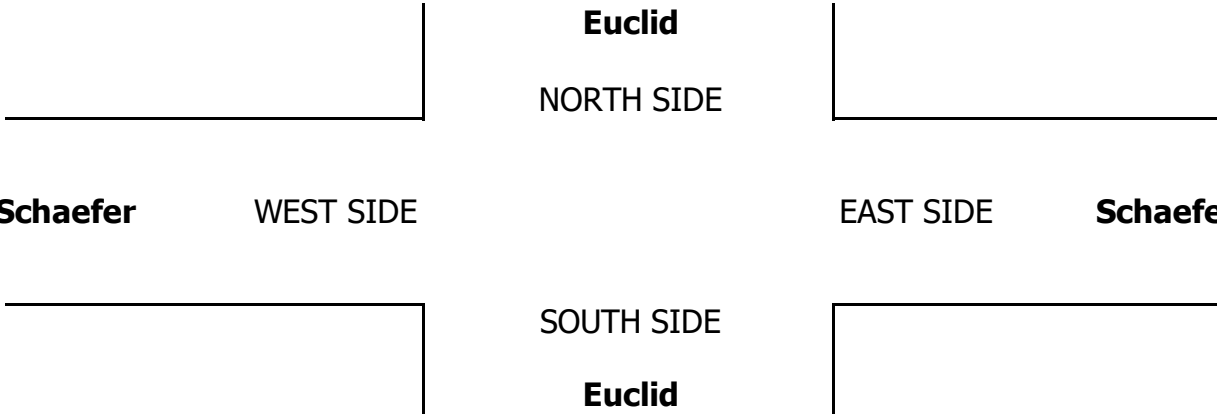
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4049 15 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

AM	6:00 AM	5	52	1	7	114	18	12	4	5	3	8	2	231
	6:15 AM	2	54	0	9	160	15	17	3	11	2	8	2	283
	6:30 AM	5	62	2	2	198	19	13	6	10	4	14	3	338
	6:45 AM	11	72	4	3	215	17	17	9	8	0	21	1	378
	7:00 AM	5	98	2	2	114	12	22	6	12	5	7	3	288
	7:15 AM	10	92	2	4	115	20	28	13	9	7	16	1	317
	7:30 AM	13	127	4	0	112	21	28	17	12	2	20	3	359
	7:45 AM	21	113	1	5	141	24	48	15	25	2	25	1	421
	8:00 AM	17	123	3	4	133	26	25	13	13	4	24	3	388
	8:15 AM	14	131	1	4	125	23	32	9	15	4	16	1	375
	8:30 AM	16	87	1	5	96	16	34	11	5	3	13	3	290
	8:45 AM	19	119	3	6	116	17	24	11	9	4	5	3	336
	VOLUMES	138	1,130	24	51	1,639	228	300	117	134	40	177	26	4,004
	APPROACH %	11%	87%	2%	3%	85%	12%	54%	21%	24%	16%	73%	11%	
	APP/DEPART	1,292	/	1,459	1,918	/	1,814	551	/	189	243	/	542	0
PM	BEGIN PEAK HR	7:30 AM												
	VOLUMES	64	494	9	13	511	94	133	54	65	12	85	8	1,543
	APPROACH %	11%	87%	2%	2%	83%	15%	53%	21%	26%	11%	81%	8%	
	PEAK HR FACTOR		0.973			0.909			0.716			0.847		0.916
	APP/DEPART	568	/	635	618	/	589	252	/	76	105	/	243	0
	04:00 PM	11	193	9	4	117	26	56	63	25	5	14	4	527
	4:15 PM	21	182	8	6	116	30	47	52	21	5	14	5	507
	4:30 PM	10	151	4	4	116	17	58	59	20	5	16	7	467
	4:45 PM	13	220	6	4	124	23	63	60	24	4	7	4	552
	5:00 PM	17	167	6	4	131	28	61	58	33	3	15	3	526
	5:15 PM	16	159	5	5	125	15	58	65	27	5	15	3	498
	5:30 PM	9	191	2	2	116	32	48	61	27	2	8	3	501
	5:45 PM	14	175	4	8	138	23	35	31	24	7	10	2	471
	6:00 PM	8	159	2	2	119	30	44	32	20	3	11	1	431
	6:15 PM	13	84	1	1	117	24	56	30	27	3	3	4	363
	6:30 PM	12	111	2	4	90	20	40	21	30	3	13	1	347
	6:45 PM	11	99	1	5	102	15	32	11	13	3	5	4	301
	VOLUMES	155	1,891	50	49	1,411	283	598	543	291	48	131	41	5,491
	APPROACH %	7%	90%	2%	3%	81%	16%	42%	38%	20%	22%	60%	19%	
	APP/DEPART	2,096	/	2,547	1,743	/	1,756	1,432	/	625	220	/	563	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	51	746	27	11	473	96	224	234	90	19	51	20	2,053
	APPROACH %	6%	90%	3%	2%	81%	16%	41%	43%	16%	21%	57%	22%	
	PEAK HR FACTOR		0.866			0.965			0.932			0.804		0.930
	APP/DEPART	828	/	997	587	/	586	548	/	272	90	/	198	0



U-TURNS				
NB	SB	EB	WB	TTL
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	1	0	0	0
0	1	0	0	1
1	3	0	0	4

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	4	4	0
0	7	4	0
0	5	2	0
1	3	3	0
0	5	4	1
0	5	5	1
1	8	4	0
0	4	8	0
1	6	2	2
0	3	8	0
0	4	3	1
0	5	4	0
3	59	51	5

2	21	22	2

2	1	0	0	3
0	1	0	0	1
1	3	0	0	4
1	2	0	0	3
0	1	0	0	1
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	0	0	0	0
1	0	0	0	1
0	4	0	0	4
0	4	0	0	4
6	17	0	0	23

2	11	17	1
0	15	10	1
0	6	5	3
1	9	10	4
2	8	15	1
1	6	8	2
2	17	10	1
1	9	9	2
1	6	7	1
0	9	16	1
0	3	12	0
0	6	12	3
10	105	131	20

3	41	42	9

INTERSECTION TURNING MOVEMENT COUNTS

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

<u>DATE:</u>	LOCATION:	Chino	PROJECT #:	SC4049
5/23/23	NORTH & SOUTH:	Euclid	LOCATION #:	15
TUESDAY	EAST & WEST:	Schaefer	CONTROL:	SIGNAL

CLASS 2:	NOTES:	AM		▲	
2-AXLE		PM		N	
WORK		MD	◀ W		E ▶
VEHICLES/ TRUCKS		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

AM	6:00 AM	1	8	0	0	16	3	0	3	0	1	2	0	34
	6:15 AM	0	7	0	0	17	0	3	2	0	2	0	1	32
	6:30 AM	0	13	0	0	7	0	1	4	0	1	1	1	28
	6:45 AM	0	11	1	1	22	1	0	1	3	0	0	1	41
	7:00 AM	4	10	0	3	13	3	2	0	0	0	0	1	36
	7:15 AM	0	9	0	1	13	2	2	0	2	1	2	0	32
	7:30 AM	0	11	0	2	5	0	1	0	2	1	0	0	22
	7:45 AM	1	8	0	2	20	1	2	0	2	0	0	1	37
	8:00 AM	1	11	1	1	21	3	1	3	1	0	1	3	47
	8:15 AM	0	7	1	1	20	1	2	1	1	0	1	2	37
	8:30 AM	0	9	1	0	17	3	2	2	3	0	1	6	44
	8:45 AM	0	9	0	0	14	1	1	0	1	0	0	3	29
	VOLUMES	7	113	4	11	185	18	17	16	15	6	8	19	419
APPROACH %	6%	91%	3%	5%	86%	8%	35%	33%	31%	18%	24%	58%		
APP/DEPART	124	/	149	214	/	208	48	/	31	33	/	31	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	1	37	2	6	66	5	6	4	6	1	2	6	143	
APPROACH %	2%	90%	5%	8%	86%	6%	38%	25%	38%	11%	22%	67%		
PEAK HR FACTOR	0.788			0.770			0.800			0.563			0.761	
APP/DEPART	41	/	49	77	/	74	16	/	12	9	/	8	0	
PM	04:00 PM	0	22	3	0	7	3	1	1	3	0	2	2	44
	4:15 PM	0	16	2	1	6	0	2	5	3	0	0	1	36
	4:30 PM	0	9	0	5	9	0	3	2	0	1	0	0	29
	4:45 PM	0	10	0	1	7	0	2	5	1	0	1	1	28
	5:00 PM	0	6	0	0	6	0	2	0	0	0	0	0	14
	5:15 PM	1	7	2	1	6	0	0	2	1	0	1	1	22
	5:30 PM	1	9	2	2	2	0	0	0	0	1	0	0	17
	5:45 PM	0	8	1	2	4	0	1	0	0	0	0	0	16
	6:00 PM	0	5	0	1	5	0	2	0	0	0	0	0	13
	6:15 PM	0	6	2	4	0	0	2	1	0	0	0	1	16
	6:30 PM	0	3	0	0	2	0	2	1	0	0	1	0	9
	6:45 PM	0	4	1	0	2	0	0	0	0	0	1	0	8
	VOLUMES	2	105	13	17	56	3	17	17	8	2	6	6	252
APPROACH %	2%	88%	11%	22%	74%	4%	40%	40%	19%	14%	43%	43%		
APP/DEPART	120	/	128	76	/	66	42	/	47	14	/	11	0	
BEGIN PEAK HR	4:00 PM													
VOLUMES	0	57	5	7	29	3	8	13	7	1	3	4	137	
APPROACH %	0%	92%	8%	18%	74%	8%	29%	46%	25%	13%	38%	50%		
PEAK HR FACTOR	0.620			0.696			0.700			0.500			0.778	
APP/DEPART	62	/	69	39	/	37	28	/	25	8	/	6	0	

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	0	0	0	2

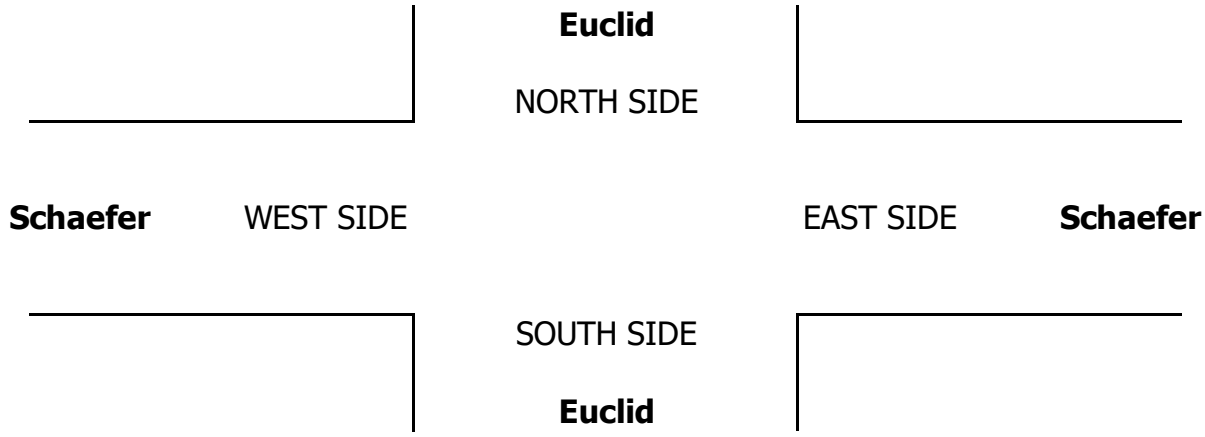
0	1	0	0
0	0	0	0
0	0	0	0
0	0	2	1
0	1	0	1
0	0	0	0
0	0	1	0
0	0	1	0
1	1	0	1
0	0	0	0
0	1	0	0
0	0	1	1
1	4	5	4

1	1	2	1

[illegible]

0	0	2	0
0	0	1	0
0	0	0	0
0	0	1	1
0	0	0	0
1	0	0	1
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
2	0	4	3

0	0	4	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Schaefer

PROJECT #:
LOCATION #:
CONTROL:

SC4049
15
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1

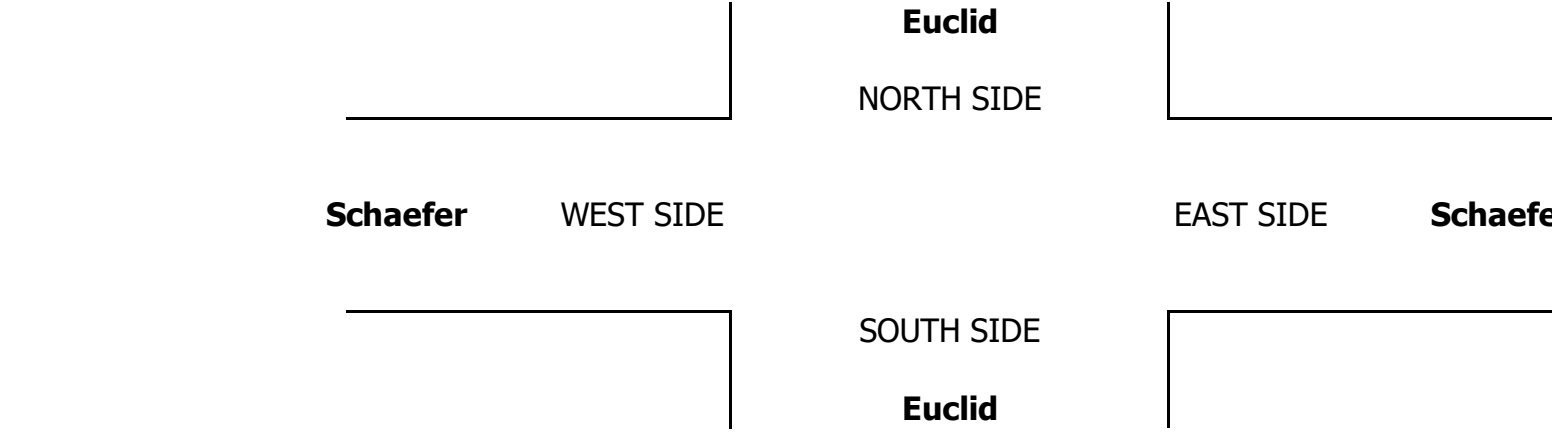
RTOR			
NRR 0	SRR 0	ERR 0	WRR 0
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	2
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	5

AM	6:00 AM	0	10	1	1	5	0	0	0	0	1	0	3	21
	6:15 AM	0	10	2	4	4	0	1	1	0	0	0	2	24
	6:30 AM	0	6	1	2	6	0	0	0	0	1	0	1	17
	6:45 AM	0	10	0	4	4	1	0	0	0	1	0	1	21
	7:00 AM	0	8	2	9	8	0	0	1	0	0	1	2	31
	7:15 AM	0	15	3	11	10	0	0	0	0	0	0	1	40
	7:30 AM	0	14	2	5	6	0	1	0	0	1	0	5	34
	7:45 AM	0	13	0	3	5	0	0	1	0	0	0	3	25
	8:00 AM	0	6	2	3	4	0	0	0	0	1	0	3	19
	8:15 AM	0	9	1	2	10	1	1	0	0	1	0	1	26
	8:30 AM	0	13	0	1	5	0	0	0	0	1	1	1	22
	8:45 AM	0	8	1	3	3	0	0	0	0	1	0	2	18
VOLUMES		0	122	15	48	70	2	3	3	0	8	2	25	298
APPROACH %		0%	89%	11%	40%	58%	2%	50%	50%	0%	23%	6%	71%	
APP/DEPART		137	/	151	120	/	78	6	/	65	35	/	4	0
BEGIN PEAK HR		7:30 AM												
VOLUMES		0	42	5	13	25	1	2	1	0	3	0	12	104
APPROACH %		0%	89%	11%	33%	64%	3%	67%	33%	0%	20%	0%	80%	
PEAK HR FACTOR		0.734			0.750			0.750			0.625			0.765
APP/DEPART		47	/	56	39	/	28	3	/	19	15	/	1	0
PM	04:00 PM	0	3	4	1	5	0	2	1	0	0	0	3	19
	4:15 PM	0	8	0	1	8	0	0	0	0	1	0	0	18
	4:30 PM	0	1	0	4	4	0	0	0	0	3	2	2	16
	4:45 PM	0	6	0	1	5	0	0	1	1	0	0	2	16
	5:00 PM	0	5	0	1	3	0	0	0	1	1	0	0	11
	5:15 PM	0	2	0	1	4	0	0	0	0	0	0	0	7
	5:30 PM	0	4	0	1	7	1	0	0	0	2	0	2	17
	5:45 PM	0	5	0	0	4	0	0	0	0	0	0	0	9
	6:00 PM	0	7	0	2	4	1	0	1	1	0	0	0	16
	6:15 PM	0	2	0	0	3	0	1	0	0	0	0	1	7
	6:30 PM	0	4	0	1	3	0	0	0	0	0	0	0	8
	6:45 PM	1	1	0	1	6	0	0	0	0	0	0	0	9
VOLUMES		1	48	4	14	56	2	3	3	3	7	2	10	153
APPROACH %		2%	91%	8%	19%	78%	3%	33%	33%	33%	37%	11%	53%	
APP/DEPART		53	/	61	72	/	66	9	/	21	19	/	5	0
BEGIN PEAK HR		4:00 PM												
VOLUMES		0	18	4	7	22	0	2	2	1	4	2	7	69
APPROACH %		0%	82%	18%	24%	76%	0%	40%	40%	20%	31%	15%	54%	
PEAK HR FACTOR		0.688			0.806			0.417			0.464			0.908
APP/DEPART		22	/	27	29	/	27	5	/	13	13	/	2	0

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

0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	2	0

0	0	1	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4049 15 SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

AM	6:00 AM	0	17	0	1	18	0	0	0	0	4	0	4	44
	6:15 AM	0	16	2	1	20	0	0	0	0	1	0	6	46
	6:30 AM	0	14	1	1	22	1	0	0	0	6	0	5	50
	6:45 AM	1	21	0	0	27	0	0	0	0	2	0	7	58
	7:00 AM	0	17	1	3	33	0	1	0	1	3	0	14	73
	7:15 AM	0	28	1	0	23	0	1	0	0	1	0	14	68
	7:30 AM	0	20	0	3	27	0	0	0	0	5	0	21	76
	7:45 AM	0	26	1	1	16	1	3	0	0	1	0	9	58
	8:00 AM	0	24	1	1	27	1	0	0	0	1	1	9	65
	8:15 AM	0	29	2	1	30	0	0	0	1	2	0	8	73
	8:30 AM	0	28	1	2	25	2	0	0	0	1	0	4	63
	8:45 AM	0	26	1	6	23	1	1	1	0	0	0	7	66
	VOLUMES	1	266	11	20	291	6	6	1	2	27	1	108	740
	APPROACH %	0%	96%	4%	6%	92%	2%	67%	11%	22%	20%	1%	79%	
	APP/DEPART	278	/	380	317	/	320	9	/	32	136	/	8	0
PM	BEGIN PEAK HR	7:30 AM												
	VOLUMES	0	99	4	6	100	2	3	0	1	9	1	47	272
	APPROACH %	0%	96%	4%	6%	93%	2%	75%	0%	25%	16%	2%	82%	
	PEAK HR FACTOR	0.831			0.871			0.333			0.548			0.895
	APP/DEPART	103	/	149	108	/	110	4	/	10	57	/	3	0
	04:00 PM	0	23	2	4	24	1	0	0	0	1	0	2	57
	4:15 PM	0	21	6	4	29	0	0	0	0	0	0	0	60
	4:30 PM	0	15	1	8	14	0	0	0	1	1	0	1	41
	4:45 PM	0	18	3	4	12	0	2	1	0	1	0	1	42
	5:00 PM	0	14	2	7	11	0	1	0	0	0	0	0	35
	5:15 PM	0	19	1	2	13	0	0	0	0	3	1	1	40
	5:30 PM	0	9	1	2	11	0	0	0	1	7	0	2	33
	5:45 PM	0	15	3	3	16	0	0	0	0	4	0	1	42
	6:00 PM	0	9	6	3	9	0	0	0	0	6	0	2	35
	6:15 PM	0	15	1	6	13	0	0	1	0	8	0	0	44
	6:30 PM	0	9	6	2	14	0	0	0	0	6	0	0	37
	6:45 PM	0	13	3	3	8	0	0	0	0	1	1	1	30
	VOLUMES	0	180	35	48	174	1	3	2	2	38	2	11	496
	APPROACH %	0%	84%	16%	22%	78%	0%	43%	29%	29%	75%	4%	22%	
	APP/DEPART	215	/	194	223	/	214	7	/	85	51	/	3	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	77	12	20	79	1	2	1	1	3	0	4	200
	APPROACH %	0%	87%	13%	20%	79%	1%	50%	25%	25%	43%	0%	57%	
	PEAK HR FACTOR	0.824			0.758			0.333			0.583			0.833
	APP/DEPART	89	/	83	100	/	83	4	/	33	7	/	1	0

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

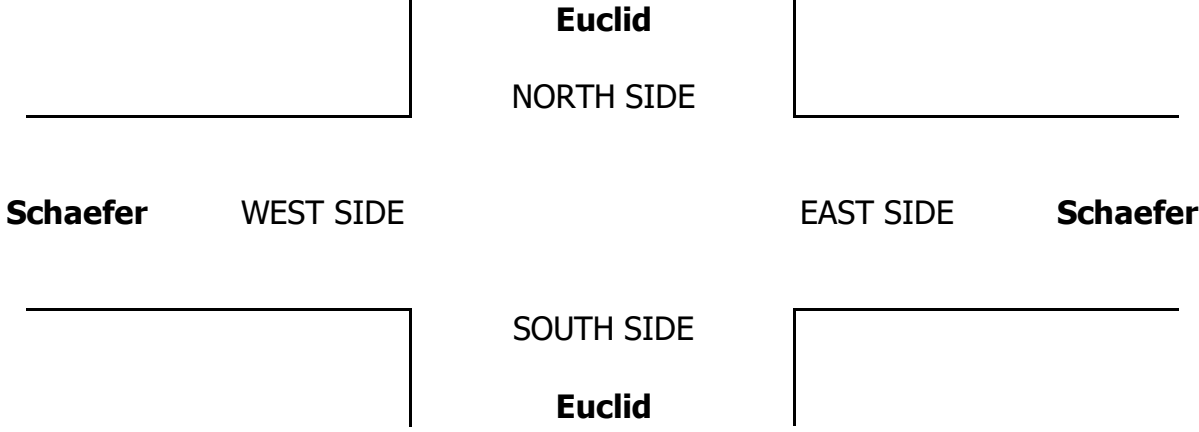
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	3
0	0	0	3
0	0	0	2
0	0	0	3
1	0	0	2
0	0	0	1
0	0	0	1
0	0	0	0
0	1	0	0
1	1	0	17

1	0	0	7

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

0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	1

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Schaefer

PROJECT #:
LOCATION #:
CONTROL:

SC4049
15
SIGNAL

CLASS 5:
RV

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

AM	6:00 AM	0	0	0	1	0	0	0	0	0	0	0	1
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	2	0	0	0	0	0	0	0	0	0	2
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	1	0	0	0	0	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	2	0	1	1	0	0	0	0	0	0	4
	APPROACH %	0%	100%	0%	50%	50%	0%	0%	0%	0%	0%	0%	
PM	APP/DEPART	2	/	2	2	/	1	0	/	1	0	/	0
	BEGIN PEAK HR	7:30 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.000		
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	1	1	0	0	0	0	0	0	2
	4:45 PM	0	0	0	1	1	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	1	0	0	0	1
	5:30 PM	0	1	0	0	1	0	0	1	0	0	0	3
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
	6:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	4	0	2	4	0	0	1	1	0	0	12
	APPROACH %	0%	100%	0%	33%	67%	0%	0%	50%	50%	0%	0%	0%
	APP/DEPART	4	/	6	6	/	5	2	/	1	0	/	0
	BEGIN PEAK HR	4:00 PM											
	VOLUMES	0	1	0	0	2	0	0	0	0	0	0	5
	APPROACH %	0%	100%	0%	0%	50%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.250			0.500			0.000			0.000		
	APP/DEPART	1	/	3	4	/	2	0	/	0	0	/	0

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

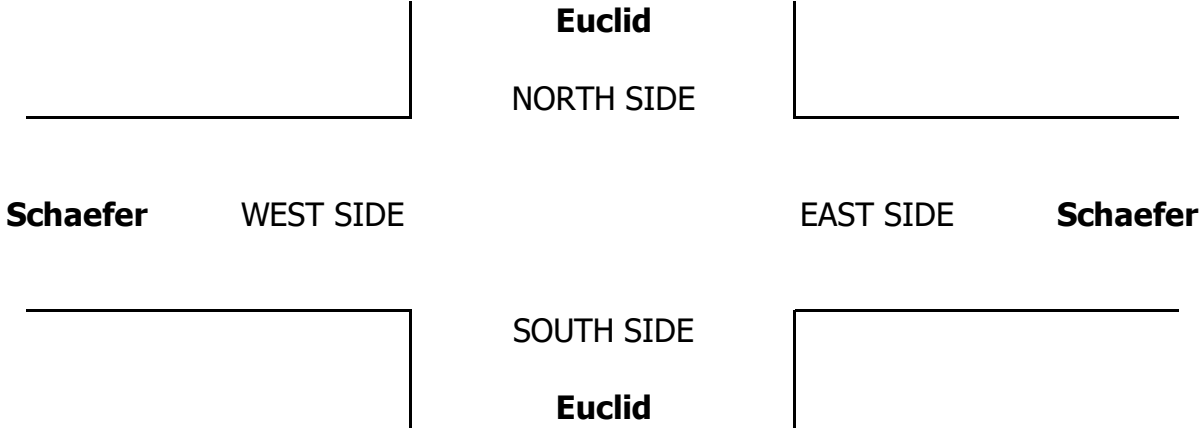
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2

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

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4049 15 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◄ W		E ►
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

AM	6:00 AM	0	1	0	0	0	1	0	0	0	0	0	2	
	6:15 AM	0	0	0	0	2	0	0	0	1	0	0	3	
	6:30 AM	0	0	0	0	1	0	0	0	3	0	0	4	
	6:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	
	7:00 AM	0	1	1	0	0	0	1	0	0	0	0	1	4
	7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
	7:45 AM	0	2	1	0	1	0	0	0	0	0	0	0	4
	8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
	8:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	3
	8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
	VOLUMES	0	8	2	0	11	3	1	0	4	0	0	1	30
	APPROACH %	0%	80%	20%	0%	79%	21%	20%	0%	80%	0%	0%	100%	
APP/DEPART	10	/	10	14	/	15	5	/	2	1	/	3	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	0	4	1	0	5	0	0	0	0	0	0	0	10	
APPROACH %	0%	80%	20%	0%	100%	0%	0%	0%	0%	0%	0%	0%		
PEAK HR FACTOR	0.417			0.625			0.000			0.000			0.625	
APP/DEPART	5	/	4	5	/	5	0	/	1	0	/	0	0	
PM	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	1	0	0	2	0	0	0	0	0	0	3	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	1	
	5:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	1	0	0	0	0	0	0	0	0	0	1	
	6:30 PM	0	0	0	0	1	0	0	0	0	0	0	1	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	
	VOLUMES	0	5	0	0	5	0	0	0	0	0	0	10	
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%		
	APP/DEPART	5	/	5	5	/	5	0	/	0	0	/	0	0
	BEGIN PEAK HR	4:00 PM												
	VOLUMES	0	2	0	0	3	0	0	0	0	0	0	5	
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%			
PEAK HR FACTOR	0.500			0.375			0.000			0.000			0.417	
APP/DEPART	2	/	2	3	/	3	0	/	0	0	/	0	0	

	Euclid	
	NORTH SIDE	

Schaefer WEST SIDE EAST SIDE Schaefer

	SOUTH SIDE	
	Euclid	

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	1	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
1	1	2	0

1	0	0	0

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

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

0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Tue, May 23, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Edison

PROJECT #:
LOCATION #:
CONTROL:

SC4049
16
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W

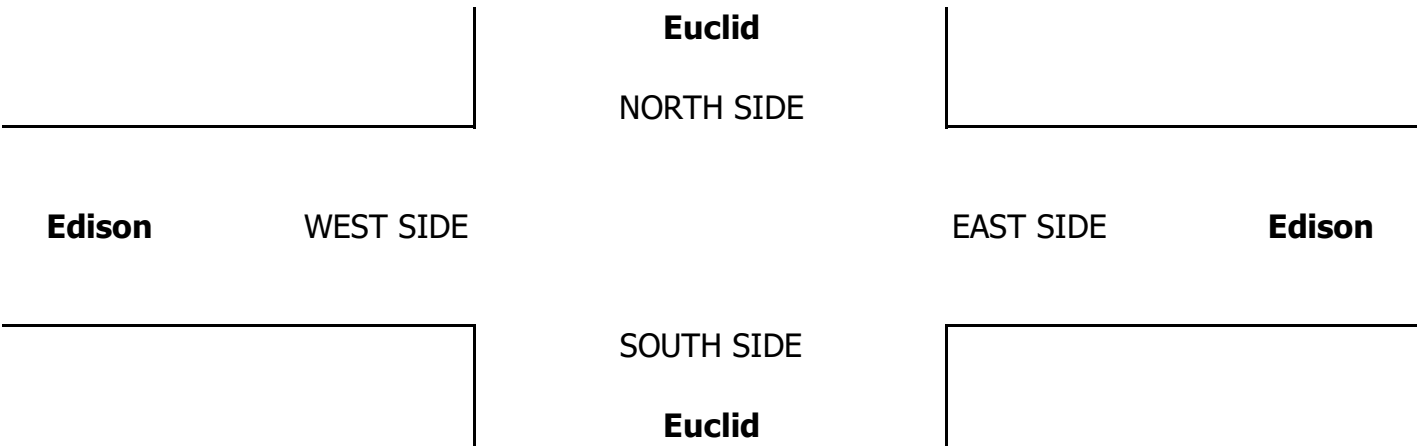
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E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
6:00 AM	14	71	6	10	137	20	23	12	17	17	55	1	383
6:15 AM	10	70	6	9	177	22	22	19	14	22	83	5	459
6:30 AM	14	84	6	14	203	22	20	18	16	23	67	4	491
6:45 AM	16	108	9	15	271	19	19	18	14	36	79	4	608
7:00 AM	23	116	4	12	144	22	15	29	19	26	69	13	492
7:15 AM	29	152	4	15	133	25	18	28	13	11	66	14	508
7:30 AM	44	162	13	12	153	23	21	31	17	23	64	15	578
7:45 AM	25	156	11	11	153	25	16	32	17	28	63	15	552
8:00 AM	29	183	15	20	142	21	15	37	10	17	61	12	562
8:15 AM	23	160	14	11	167	29	20	26	10	18	73	5	556
8:30 AM	37	145	8	14	146	31	29	30	9	14	51	9	523
8:45 AM	29	140	3	11	147	25	16	23	11	28	73	16	522
VOLUMES	293	1,547	99	154	1,973	284	234	303	167	263	804	113	6,234
APPROACH %	15%	80%	5%	6%	82%	12%	33%	43%	24%	22%	68%	10%	
APP/DEPART	1,939	/	1,898	2,411	/	2,410	704	/	553	1,180	/	1,373	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	121	661	53	54	615	98	72	126	54	86	261	47	2,248
APPROACH %	14%	79%	6%	7%	80%	13%	29%	50%	21%	22%	66%	12%	
PEAK HR FACTOR	0.920			0.926			0.913			0.929			0.972
APP/DEPART	835	/	781	767	/	757	252	/	233	394	/	477	0
04:00 PM	27	203	10	22	136	31	22	60	28	10	46	11	606
4:15 PM	18	218	16	20	134	30	27	61	25	16	38	10	613
4:30 PM	20	168	19	21	137	25	25	75	36	9	45	14	594
4:45 PM	17	270	14	14	159	29	25	77	19	5	57	6	692
5:00 PM	21	183	15	17	166	31	39	102	34	7	52	7	674
5:15 PM	21	174	9	19	164	18	30	92	31	10	35	10	613
5:30 PM	28	222	9	12	139	35	27	56	29	15	53	9	634
5:45 PM	22	180	6	20	137	33	29	69	23	14	42	10	585
6:00 PM	17	176	11	17	122	39	16	60	21	6	32	7	524
6:15 PM	20	113	10	13	123	24	19	53	22	5	29	7	438
6:30 PM	8	125	5	13	129	27	18	60	11	4	30	4	434
6:45 PM	16	116	8	11	96	21	23	45	16	0	31	5	388
VOLUMES	235	2,148	132	199	1,642	343	300	810	295	101	490	100	6,795
APPROACH %	9%	85%	5%	9%	75%	16%	21%	58%	21%	15%	71%	14%	
APP/DEPART	2,515	/	2,568	2,184	/	2,043	1,405	/	1,121	691	/	1,063	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	87	849	47	62	628	113	121	327	113	37	197	32	2,613
APPROACH %	9%	86%	5%	8%	78%	14%	22%	58%	20%	14%	74%	12%	
PEAK HR FACTOR	0.816			0.938			0.801			0.864			0.944
APP/DEPART	983	/	1,011	803	/	781	561	/	427	266	/	394	0



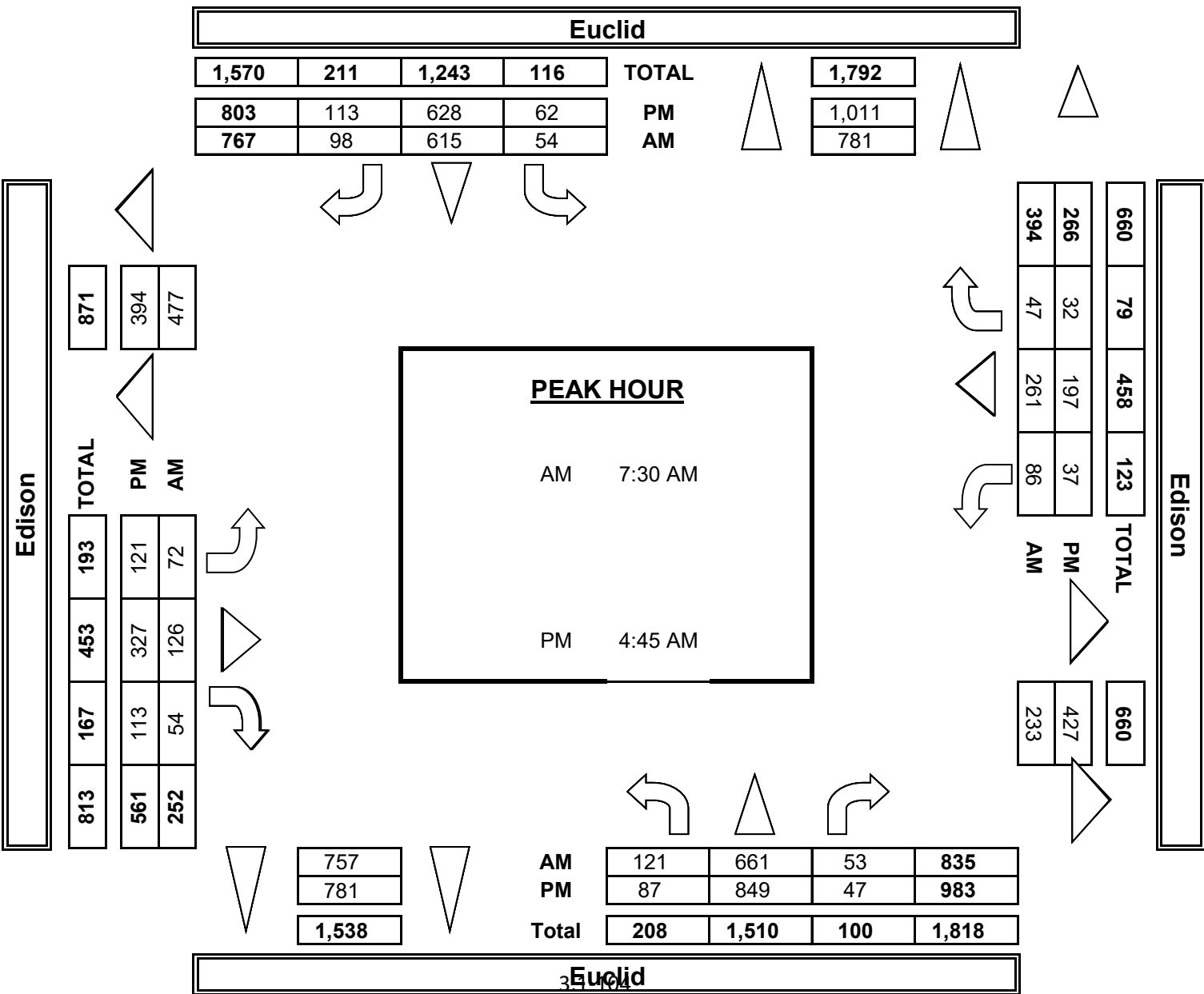
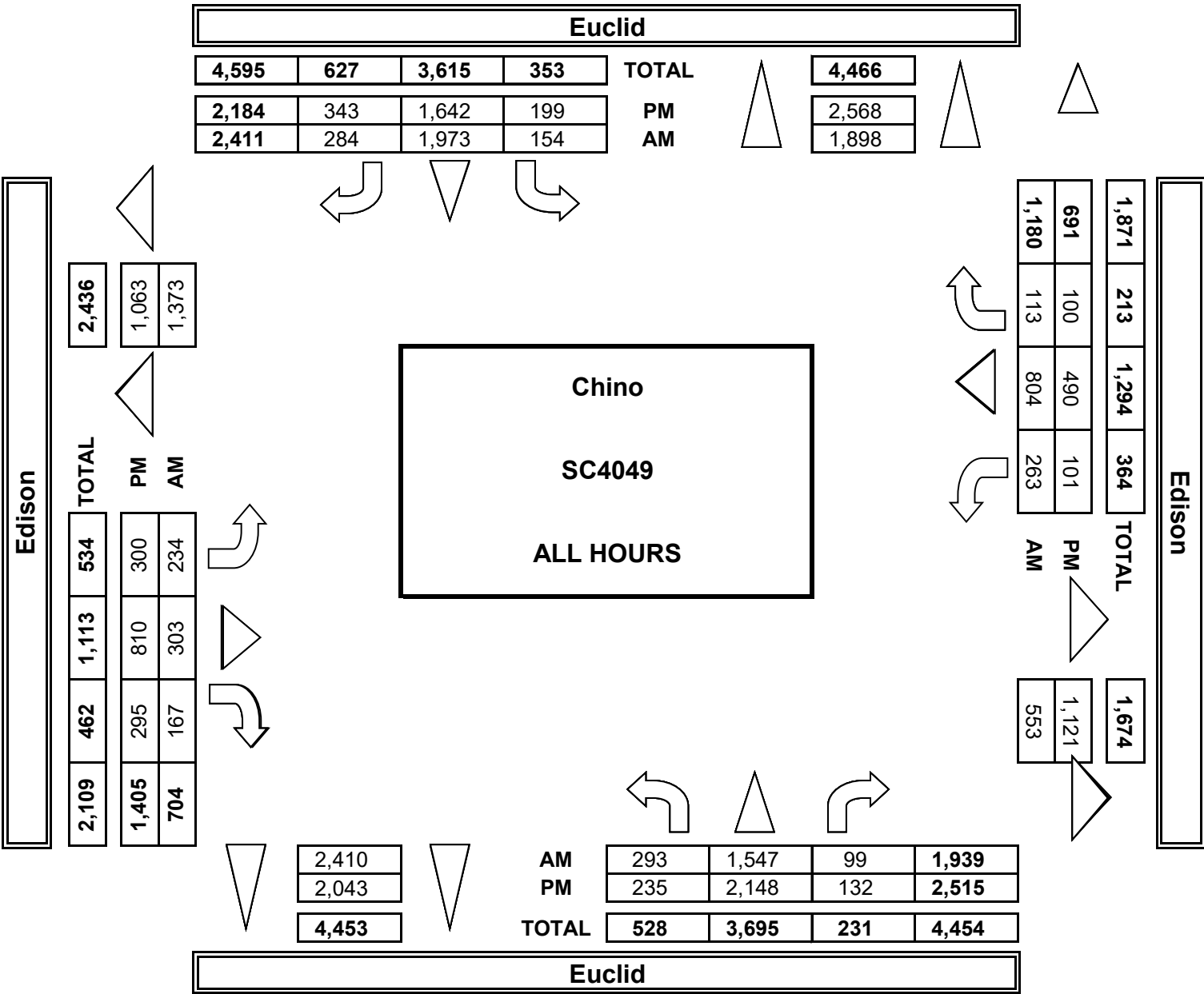
AM	6:00 AM	
	6:15 AM	
	6:30 AM	
	6:45 AM	
	7:00 AM	
	7:15 AM	
	7:30 AM	
	7:45 AM	
	8:00 AM	
	8:15 AM	
PM	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	6:00 PM	
	6:15 PM	
TOTAL	6:30 PM	
	6:45 PM	
	TOTAL	

ALL PED AND BIKE					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	0	0	0	0	0
0	0	0	0	0	0
0	1	0	0	0	1
0	1	0	0	0	1
0	0	0	0	0	0
0	0	0	1	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	2	0	2	2
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	2	2	2
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	3	0	4	7	7

PEDESTRIAN CROSSINGS					
E SIDE	W SIDE	S SIDE	N SIDE	TOTAL	
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	1	0	0	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	1	0	4	5	5

BICYCLE CROSSINGS					
ES	WS	SS	NS	TOTAL	
0	0	0	0	0	0
0	0	0	0	0	0
0	1	0	0	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	1	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	2	0	2	2
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	2	0	0	2	2

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURN

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Edison

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

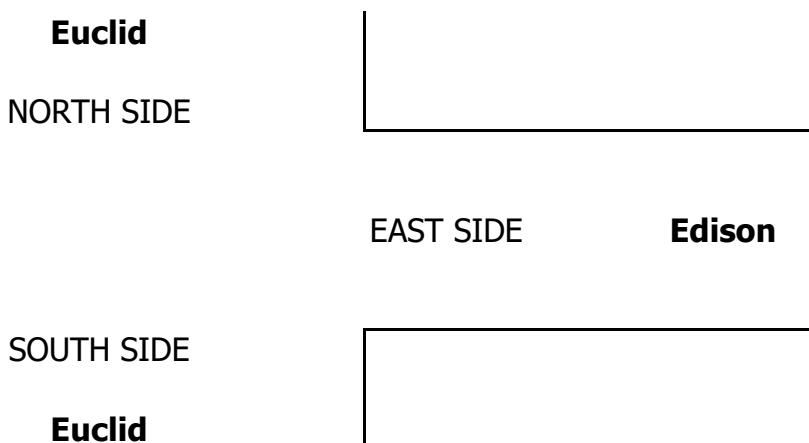
AM	6:00 AM	18	94	12	15	174
	6:15 AM	16	95	6	9	228
	6:30 AM	24	111	13	20	238
	6:45 AM	20	135	12	22	332
	7:00 AM	34	147	5	18	190
	7:15 AM	38	201	5	24	174
	7:30 AM	52	190	25	14	208
	7:45 AM	29	192	18	14	188
	8:00 AM	37	227	22	31	177
	8:15 AM	28	200	22	17	223
	8:30 AM	42	195	10	21	189
	8:45 AM	32	177	8	15	182
	VOLUMES	366	1,963	155	218	2,499
	APPROACH %	15%	79%	6%	7%	78%
	APP/DEPART	2,484	/	2,644	3,213	/
	BEGIN PEAK HR	7:30 AM				
	VOLUMES	145	809	87	75	795
	APPROACH %	14%	78%	8%	7%	76%
	PEAK HR FACTOR	0.911			0.886	
	APP/DEPART	1,040	/	1,043	1,040	/
	04:00 PM	38	244	14	26	167
	4:15 PM	22	252	20	27	166
	4:30 PM	21	184	30	32	161
	4:45 PM	21	308	15	16	181
	5:00 PM	23	212	17	26	178
	5:15 PM	26	200	12	20	195

PM	5:30 PM	33	237	9	19	162
	5:45 PM	33	208	10	26	161
	6:00 PM	19	208	11	18	139
	6:15 PM	22	133	12	13	160
	6:30 PM	13	146	5	19	158
	6:45 PM	22	140	10	17	109
	VOLUMES	291	2,469	162	257	1,934
	APPROACH %	10%	85%	6%	9%	71%
	APP/DEPART	2,921	/	3,080	2,718	/
	BEGIN PEAK HR	4:45 PM				
	VOLUMES	103	956	52	80	714
	APPROACH %	9%	86%	5%	8%	74%
	PEAK HR FACTOR	0.809				0.982
	APP/DEPART	1,110	/	1,173	968	/

Edison

WEST SIDE

57	40	70	35	20	59	9	748
50	50	74	29	20	45	10	715
52	22	69	29	6	35	10	615
35	30	59	31	5	33	11	542
39	27	68	14	6	33	6	532
27	39	49	20	0	33	7	472
527	495	940	370	122	543	116	8,223
19%	27%	52%	20%	16%	70%	15%	
2,425	1,804	/	1,358	780	/	1,360	0
174	186	387	137	44	216	32	3,079
18%	26%	55%	19%	15%	74%	11%	
		0.821			0.833		0.945
895	710	/	519	292	/	492	0



U-TURNS				
NB	SB	EB	WB	TTL

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

				0
				0
				0
				0
				0
				0

				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

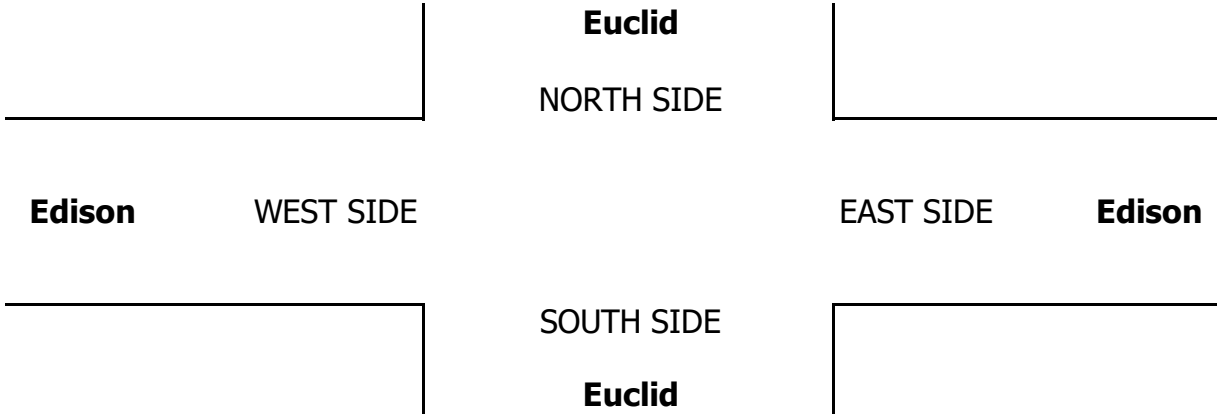
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Edison	PROJECT #: LOCATION #: CONTROL:	SC4049 16 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

AM	6:00 AM	10	53	3	7	107	11	6	6	11	9	41	0	264
	6:15 AM	6	53	6	9	142	14	5	10	6	16	61	1	329
	6:30 AM	7	63	2	11	178	12	6	13	10	18	59	1	380
	6:45 AM	13	88	6	11	225	10	3	12	10	30	68	1	477
	7:00 AM	15	89	3	9	109	8	6	22	13	22	57	4	357
	7:15 AM	21	117	3	8	99	12	2	20	8	7	59	3	359
	7:30 AM	34	140	3	9	115	11	6	25	13	18	57	9	440
	7:45 AM	22	133	6	9	128	13	3	26	11	19	59	4	433
	8:00 AM	22	153	8	12	113	12	9	35	9	10	56	4	443
	8:15 AM	20	132	8	7	127	12	6	19	7	10	65	1	414
	8:30 AM	31	110	6	10	107	11	8	24	9	6	43	4	369
	8:45 AM	25	114	0	8	121	13	5	17	8	13	62	12	398
	VOLUMES	226	1,245	54	110	1,571	139	65	229	115	178	687	44	4,663
	APPROACH %	15%	82%	4%	6%	86%	8%	16%	56%	28%	20%	76%	5%	
	APP/DEPART	1,525	/	1,358	1,820	/	1,870	409	/	389	909	/	1,046	0
PM	BEGIN PEAK HR	7:30 AM												
	VOLUMES	96	558	25	36	483	48	24	105	40	57	237	18	1,730
	APPROACH %	14%	82%	4%	6%	85%	8%	14%	62%	24%	18%	76%	6%	
	PEAK HR FACTOR		0.930			0.947			0.797			0.929		0.976
	APP/DEPART	681	/	601	568	/	582	169	/	166	312	/	381	0
	04:00 PM	18	168	7	20	115	19	12	50	25	7	42	10	493
PM	4:15 PM	14	189	13	15	111	7	9	52	20	15	33	9	487
	4:30 PM	19	155	11	15	120	16	11	63	28	9	39	12	498
	4:45 PM	13	244	13	13	142	18	16	68	16	5	52	6	606
	5:00 PM	19	161	13	11	158	22	29	93	28	7	49	7	597
	5:15 PM	16	152	7	18	144	9	17	84	26	9	29	10	521
	5:30 PM	23	207	9	8	122	21	16	45	25	12	48	9	545
	5:45 PM	14	160	4	16	122	23	16	64	19	10	40	10	498
	6:00 PM	15	153	11	16	112	30	12	55	13	6	30	5	458
	6:15 PM	18	97	8	13	101	18	13	48	16	5	25	5	367
	6:30 PM	3	112	5	8	112	21	12	55	9	3	26	3	369
	6:45 PM	12	97	5	7	88	16	15	41	12	0	30	4	327
	VOLUMES	184	1,895	106	160	1,447	220	178	718	237	88	443	90	5,766
	APPROACH %	8%	87%	5%	9%	79%	12%	16%	63%	21%	14%	71%	14%	
	APP/DEPART	2,185	/	2,182	1,827	/	1,776	1,133	/	965	621	/	843	0
	BEGIN PEAK HR	4:45 PM												
PM	VOLUMES	69	764	42	41	566	70	78	290	95	33	178	32	2,269
	APPROACH %	8%	87%	5%	6%	83%	10%	17%	63%	21%	14%	73%	13%	
	PEAK HR FACTOR		0.812			0.898			0.772			0.880		0.936
	APP/DEPART	877	/	883	686	/	696	463	/	373	243	/	317	0



U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
1	1	0	0	2
0	0	0	0	0
1	0	0	0	1
1	1	0	0	2
0	0	0	0	0
1	0	0	0	1
1	1	0	0	2
6	4	0	0	10

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
1	3	8	0
0	6	1	0
1	5	2	0
3	7	8	0
2	2	6	0
2	3	2	1
1	1	9	0
5	9	6	0
3	3	5	0
3	5	2	0
1	6	5	1
0	8	2	0
22	58	56	2

12	18	22	0

0	2	0	0	2
0	1	0	0	1
0	0	0	0	0
0	2	0	0	2
1	2	0	0	3
0	5	0	0	5
1	0	0	0	1
1	0	0	0	1
0	4	0	0	4
1	3	0	0	4
0	0	0	0	0
0	0	0	0	0
4	19	0	0	23

2	5	11	3
3	3	9	5
1	8	15	1
2	9	12	0
4	8	11	2
2	2	15	5
2	5	14	1
2	5	6	2
3	14	6	0
5	5	7	1
0	4	4	3
3	7	6	2
29	75	116	25

10	24	52	8

INTERSECTION TURNING MOVEMENT COUNTS

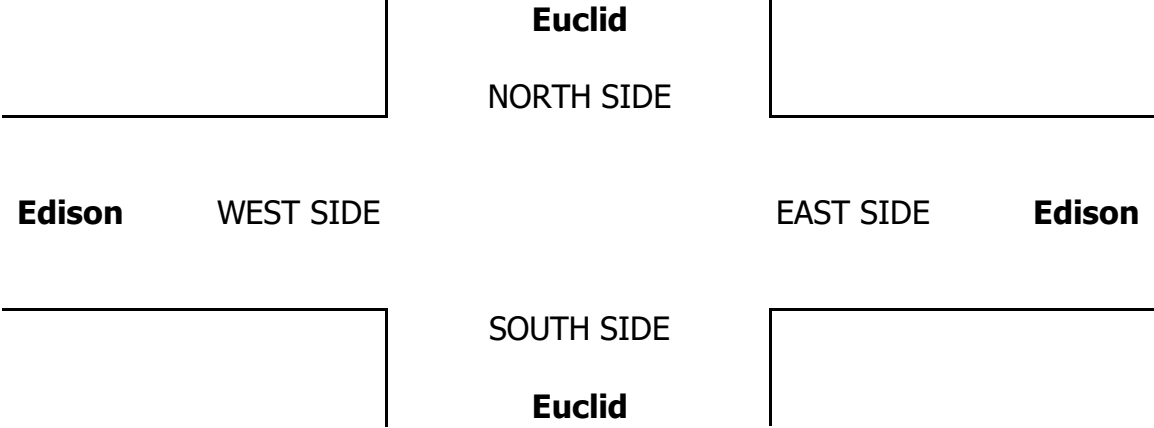
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Edison	PROJECT #: LOCATION #: CONTROL:	SC4049 16 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

AM	6:00 AM	2	4	0	1	12	3	2	3	2	4	9	1	43
	6:15 AM	1	2	0	0	9	3	5	6	4	1	5	1	37
	6:30 AM	1	6	1	0	5	1	6	2	3	1	2	1	29
	6:45 AM	0	4	0	0	15	3	4	1	1	1	7	0	36
	7:00 AM	1	11	1	0	11	4	2	2	0	1	5	0	38
	7:15 AM	3	7	1	0	13	0	3	3	2	0	4	4	40
	7:30 AM	4	4	0	2	9	0	4	1	2	2	4	1	33
	7:45 AM	0	3	1	1	9	6	2	2	2	4	0	0	30
	8:00 AM	1	6	2	2	13	3	0	1	1	1	2	2	34
	8:15 AM	1	4	0	1	10	6	1	3	3	1	3	1	34
	8:30 AM	5	8	1	1	18	5	6	3	0	2	4	2	55
	8:45 AM	3	4	1	1	8	3	1	4	1	1	2	1	30
	VOLUMES	22	63	8	9	132	37	36	31	21	19	47	14	439
	APPROACH %	24%	68%	9%	5%	74%	21%	41%	35%	24%	24%	59%	18%	
PM	APP/DEPART	93	/	113	178	/	172	88	/	49	80	/	105	0
	BEGIN PEAK HR	7:30 AM												
	VOLUMES	6	17	3	6	41	15	7	7	8	7	9	4	131
	APPROACH %	23%	65%	12%	10%	66%	24%	32%	32%	36%	33%	43%	19%	
	PEAK HR FACTOR	0.722			0.861			0.786			0.750			0.963
	APP/DEPART	26	/	28	62	/	56	22	/	17	21	/	30	0
	04:00 PM	5	14	1	0	6	2	4	3	0	1	0	0	36
PM	4:15 PM	2	10	1	1	6	3	1	1	3	0	2	0	30
	4:30 PM	1	6	1	0	4	3	2	5	1	0	2	2	27
	4:45 PM	2	7	1	0	5	4	1	0	0	0	3	0	23
	5:00 PM	0	9	1	1	1	1	1	1	2	0	1	0	18
	5:15 PM	3	8	1	1	5	2	3	1	2	0	4	0	30
	5:30 PM	2	9	0	0	3	1	4	4	0	0	3	0	26
	5:45 PM	3	6	0	0	2	1	2	2	1	0	0	0	17
	6:00 PM	0	5	0	0	1	3	1	1	3	0	1	0	15
	6:15 PM	0	7	1	0	3	0	1	3	0	0	2	0	17
	6:30 PM	2	3	0	2	1	0	0	1	1	0	3	0	13
	6:45 PM	1	8	2	1	0	2	0	3	2	0	0	0	19
	VOLUMES	21	92	9	6	37	22	20	25	15	1	21	2	271
	APPROACH %	17%	75%	7%	9%	57%	34%	33%	42%	25%	4%	88%	8%	
	APP/DEPART	122	/	114	65	/	54	60	/	40	24	/	63	0
	BEGIN PEAK HR	4:45 PM												
PM	VOLUMES	6	33	3	2	14	8	9	6	4	0	11	0	97
	APPROACH %	14%	77%	7%	8%	58%	33%	47%	32%	21%	0%	100%	0%	
	PEAK HR FACTOR	0.896			0.667			0.594			0.688			0.808
	APP/DEPART	43	/	42	24	/	19	19	/	11	11	/	25	0



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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
1	0	0	1	2

0	2	0	1
0	2	3	0
1	0	3	0
0	0	1	0
0	0	0	0
1	0	0	1
0	0	0	1
0	4	2	0
2	2	1	1
0	2	3	1
0	4	0	0
1	1	0	0
5	17	13	5

2	8	6	3

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1

0	1	0	0
0	1	1	0
0	1	0	2
0	0	0	0
0	0	1	0
1	0	2	0
0	0	0	0
0	0	0	0
0	1	1	0
0	0	0	0
0	0	0	0
2	1	0	0
3	5	5	2

1	0	3	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Edison

PROJECT #:
LOCATION #:
CONTROL:

SC4049
16
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

AM	6:00 AM	1	6	0	0	5	2	4	3	2	1	3	0	27
	6:15 AM	1	6	0	0	4	2	3	2	1	1	10	2	32
	6:30 AM	3	6	0	0	5	1	2	3	0	0	3	2	25
	6:45 AM	2	5	3	1	8	2	7	1	2	2	1	1	35
	7:00 AM	3	6	0	0	8	1	3	4	4	0	3	3	35
	7:15 AM	3	11	0	3	6	4	6	2	0	0	0	1	36
	7:30 AM	6	9	8	1	6	2	3	0	0	0	0	4	39
	7:45 AM	2	4	2	0	1	2	5	1	1	3	3	4	28
	8:00 AM	5	6	4	2	3	1	1	1	0	5	1	2	31
	8:15 AM	0	9	4	1	9	0	3	0	0	2	2	0	30
	8:30 AM	0	6	0	0	7	3	5	1	0	5	2	1	30
	8:45 AM	1	9	0	1	4	1	2	1	0	6	2	1	28
VOLUMES		27	83	21	9	66	21	44	19	10	25	30	21	376
APPROACH %		21%	63%	16%	9%	69%	22%	60%	26%	14%	33%	39%	28%	
APP/DEPART		131	/	148	96	/	101	73	/	49	76	/	78	0
BEGIN PEAK HR		7:30 AM												
VOLUMES		13	28	18	4	19	5	12	2	1	10	6	10	128
APPROACH %		22%	47%	31%	14%	68%	18%	80%	13%	7%	38%	23%	38%	
PEAK HR FACTOR		0.641			0.700			0.536			0.650			0.821
APP/DEPART		59	/	50	28	/	30	15	/	24	26	/	24	0
PM	04:00 PM	0	8	1	0	2	1	1	2	1	1	1	0	18
	4:15 PM	1	8	0	2	3	7	1	3	0	0	1	0	26
	4:30 PM	0	1	4	0	4	3	2	1	3	0	2	0	20
	4:45 PM	1	3	0	0	4	1	2	0	1	0	1	0	13
	5:00 PM	2	2	1	2	3	4	2	0	1	0	2	0	19
	5:15 PM	1	4	0	0	1	2	1	3	2	0	0	0	14
	5:30 PM	2	2	0	0	6	5	2	2	2	1	0	0	22
	5:45 PM	1	3	0	1	3	2	2	2	1	2	1	0	18
	6:00 PM	2	7	0	1	2	1	1	0	4	0	0	1	19
	6:15 PM	2	1	1	0	3	1	0	0	3	0	1	0	12
	6:30 PM	2	1	0	0	3	0	3	1	0	0	1	0	11
	6:45 PM	1	1	1	1	3	1	0	0	1	0	0	0	9
VOLUMES		15	41	8	7	37	28	17	14	19	4	10	1	201
APPROACH %		23%	64%	13%	10%	51%	39%	34%	28%	38%	27%	67%	7%	
APP/DEPART		64	/	59	72	/	60	50	/	29	15	/	53	0
BEGIN PEAK HR		4:45 PM												
VOLUMES		6	11	1	2	14	12	7	5	6	1	3	0	68
APPROACH %		33%	61%	6%	7%	50%	43%	39%	28%	33%	25%	75%	0%	
PEAK HR FACTOR		0.900			0.636			0.750			0.500			0.773
APP/DEPART		18	/	18	28	/	21	18	/	8	4	/	21	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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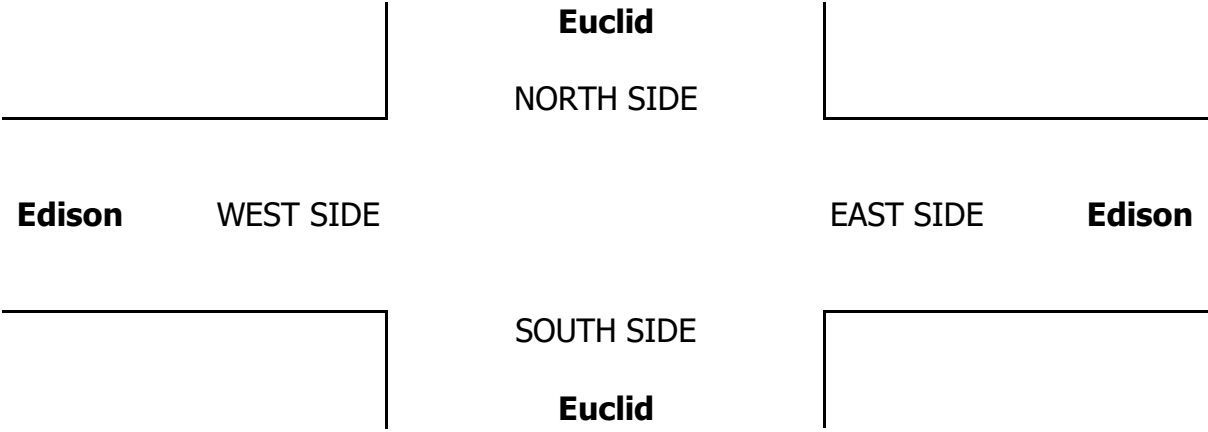
RTOR			
NRR	SRR	ERR	WRR
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1	1	0	1
0	1	0	1
0	0	0	1
0	0	0	0
0	2	0	0
0	1	0	0
1	5	0	4

1	2	0	3

0	0	0	0	0
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0	0	0	0
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0	0	1	0
1	0	1	0
0	1	0	0
0	3	1	0
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0	0	0	0
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0	0	0	0
0	0	0	0
0	0	0	0
1	7	3	0

1	4	3	0



INTERSECTION TURNING MOVEMENT COUNTS

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

<u>DATE:</u> 5/23/23 TUESDAY	LOCATION:	Chino	PROJECT #:	SC4049
	NORTH & SOUTH:	Euclid	LOCATION #:	16
	EAST & WEST:	Edison	CONTROL:	SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM		▲	
		PM		N	
		MD	◀ W		E ▶
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

AM	6:00 AM	1	7	3	2	13	4	11	0	2	3	2	0	48
	6:15 AM	2	9	0	0	20	2	9	1	3	4	7	1	58
	6:30 AM	3	9	3	3	12	8	6	0	0	4	2	0	50
	6:45 AM	1	9	0	3	22	4	5	3	1	3	3	1	55
	7:00 AM	3	9	0	3	16	9	4	1	2	3	4	5	59
	7:15 AM	2	17	0	2	13	9	7	3	3	3	3	6	68
	7:30 AM	0	8	2	0	21	10	8	4	1	3	3	1	61
	7:45 AM	1	14	2	1	14	4	6	3	1	2	1	7	56
	8:00 AM	1	17	1	4	12	5	5	0	0	1	2	4	52
	8:15 AM	2	14	2	2	21	11	10	4	0	5	3	3	77
	8:30 AM	1	19	0	3	13	12	10	2	0	1	2	2	65
	8:45 AM	0	13	2	1	13	8	8	1	2	8	7	2	65
	VOLUMES	17	145	15	24	190	86	89	22	15	40	39	32	714
APPROACH %	10%	82%	8%	8%	63%	29%	71%	17%	12%	36%	35%	29%		
APP/DEPART	177	/	266	300	/	246	126	/	61	111	/	141	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	3	53	7	7	68	30	29	11	2	11	9	15	246	
APPROACH %	5%	83%	11%	7%	65%	29%	69%	26%	5%	31%	26%	43%		
PEAK HR FACTOR	0.842													
APP/DEPART	64	/	97	105	/	82	42	/	25	35	/	42	0	
PM	4:00 PM	4	13	1	2	13	9	5	4	2	1	3	1	58
	4:15 PM	1	10	1	2	12	13	15	5	2	1	2	1	65
	4:30 PM	0	6	3	5	9	3	10	4	4	0	2	0	46
	4:45 PM	1	15	0	1	7	6	6	9	2	0	1	0	48
	5:00 PM	0	11	0	3	4	4	7	8	3	0	0	0	40
	5:15 PM	1	8	1	0	13	4	9	4	1	1	2	0	44
	5:30 PM	1	4	0	3	7	8	4	5	2	2	2	0	38
	5:45 PM	4	11	2	2	10	7	9	1	2	2	1	0	51
	6:00 PM	0	11	0	0	7	5	2	4	1	0	1	1	32
	6:15 PM	0	7	0	0	16	5	5	2	3	0	1	2	41
	6:30 PM	1	9	0	2	12	6	3	3	1	1	0	1	39
	6:45 PM	2	9	0	2	5	2	8	1	1	0	1	1	32
	VOLUMES	15	114	8	22	115	72	83	50	24	8	16	7	534
APPROACH %	11%	83%	6%	11%	55%	34%	53%	32%	15%	26%	52%	23%		
APP/DEPART	137	/	204	209	/	147	157	/	80	31	/	103	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	3	38	1	7	31	22	26	26	8	3	5	0	170	
APPROACH %	7%	90%	2%	12%	52%	37%	43%	43%	13%	38%	63%	0%		
PEAK HR FACTOR	0.656													
APP/DEPART	42	/	64	60	/	42	60	/	34	8	/	30	0	

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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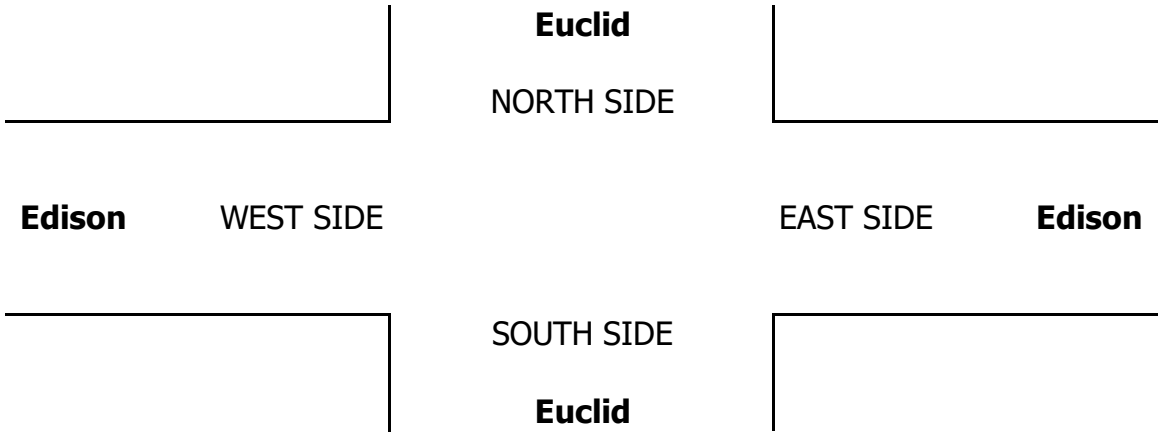
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0	2	0	1
0	2	0	1
0	2	0	0
0	1	0	0
1	13	2	5

0	6	0	3

[illegible]

0	1	1	0
0	6	0	0
1	2	1	0
0	0	1	0
0	0	2	0
0	1	1	0
0	3	1	0
0	3	0	0
0	0	0	0
0	0	2	1
0	4	0	0
0	0	1	0
1	20	10	1

0	4	5	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:	LOCATION:	Chino	PROJECT #:	SC4049
5/23/23	NORTH & SOUTH:	Euclid	LOCATION #:	16
TUESDAY	EAST & WEST:	Edison	CONTROL:	SIGNAL

CLASS 5:	NOTES:	AM		▲	
RV		PM		N	
		MD	◀ W		E ▶
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

U-TURNS				
NB	SB	EB	WB	TTL

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	2	0	0	0	0	0	0	0	0	1	3
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	2	0	0	0	0	0	0	0	2
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	1	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	2	1	2	0	0	0	0	0	0	1	6
	APPROACH %	0%	67%	33%	100%	0%	0%	0%	0%	0%	0%	100%	
APP/DEPART	3	/	3	2	/	0	0	/	3	1	/	0	
BEGIN PEAK HR	7:30 AM												
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PEAK HR FACTOR	0.000			0.000			0.000			0.000			0.000
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	
PM	04:00 PM	0	0	0	0	0	0	0	1	0	0	0	1
	4:15 PM	0	0	1	0	0	0	1	0	0	0	0	2
	4:30 PM	0	0	0	1	0	0	0	1	0	0	0	2
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	1	1	0	0	0	0	0	3
	5:30 PM	0	0	0	1	0	0	0	0	0	0	0	1
	5:45 PM	0	0	0	1	0	0	0	0	0	0	0	1
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	1	0	0	0	0	0	0	0	1
	6:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	2	1	4	1	1	1	2	0	0	0	12
	APPROACH %	0%	67%	33%	67%	17%	17%	33%	67%	0%	0%	0%	
APP/DEPART	3	/	4	6	/	1	3	/	6	0	/	1	
BEGIN PEAK HR	4:45 PM												
VOLUMES	0	1	0	1	1	1	0	0	0	0	0	4	
APPROACH %	0%	100%	0%	33%	33%	33%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.250			0.375			0.000			0.000			0.333
APP/DEPART	1	/	1	3	/	1	0	/	1	0	/	1	

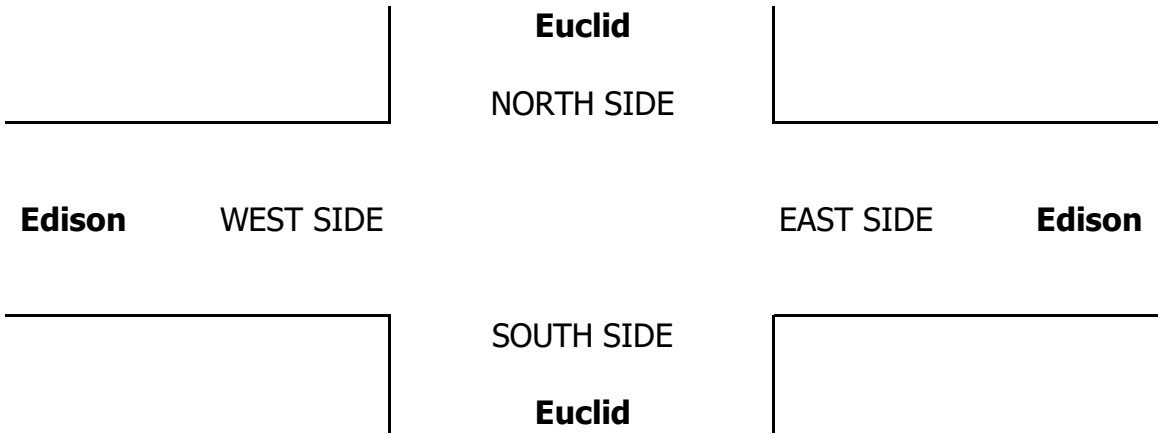
[illegible][illegible]

0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

[illegible]

0	1	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Edison	PROJECT #: LOCATION #: CONTROL:	SC4049 16 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◄ W		E ►
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

AM	6:00 AM	0	1	0	0	0	0	0	0	0	0	0	1
	6:15 AM	0	0	0	0	2	1	0	0	0	0	0	3
	6:30 AM	0	0	0	0	3	0	0	0	3	0	1	7
	6:45 AM	0	0	0	0	1	0	0	1	0	0	0	2
	7:00 AM	1	1	0	0	0	0	0	0	0	0	1	3
	7:15 AM	0	0	0	0	2	0	0	0	0	1	0	3
	7:30 AM	0	1	0	0	2	0	0	1	1	0	0	5
	7:45 AM	0	2	0	0	1	0	0	0	2	0	0	5
	8:00 AM	0	1	0	0	1	0	0	0	0	0	0	2
	8:15 AM	0	1	0	0	0	0	0	0	0	0	0	1
	8:30 AM	0	2	0	0	1	0	0	0	0	0	0	3
	8:45 AM	0	0	0	0	1	0	0	0	0	0	0	1
	VOLUMES	1	9	0	0	14	1	0	2	6	1	1	36
	APPROACH %	10%	90%	0%	0%	93%	7%	0%	25%	75%	33%	33%	33%
	APP/DEPART	10	/	10	15	/	21	8	/	2	3	/	3
PM	BEGIN PEAK HR	7:30 AM											
	VOLUMES	0	5	0	0	4	0	0	1	3	0	0	13
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	25%	75%	0%	0%	0%
	PEAK HR FACTOR	0.625			0.500			0.500			0.000		
	APP/DEPART	5	/	5	4	/	7	4	/	1	0	/	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	2	0	0	0	0	0	0	3
	4:30 PM	0	0	0	0	0	0	0	1	0	0	0	1
	4:45 PM	0	1	0	0	1	0	0	0	0	0	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	1	0	1	0	0	0	0	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	1	0	0	0	0	0	0	0	0	0	1
	6:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	0	4	0	0	5	0	1	1	0	0	0	11
	APPROACH %	0%	100%	0%	0%	100%	0%	50%	50%	0%	0%	0%	0%
	APP/DEPART	4	/	5	5	/	5	2	/	1	0	/	0
	BEGIN PEAK HR	4:45 PM											
	VOLUMES	0	2	0	0	2	0	1	0	0	0	0	5
	APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%
	PEAK HR FACTOR	0.500			0.500			0.250			0.000		
	APP/DEPART	2	/	3	2	/	2	1	/	0	0	/	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
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0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1

0	0	0	0

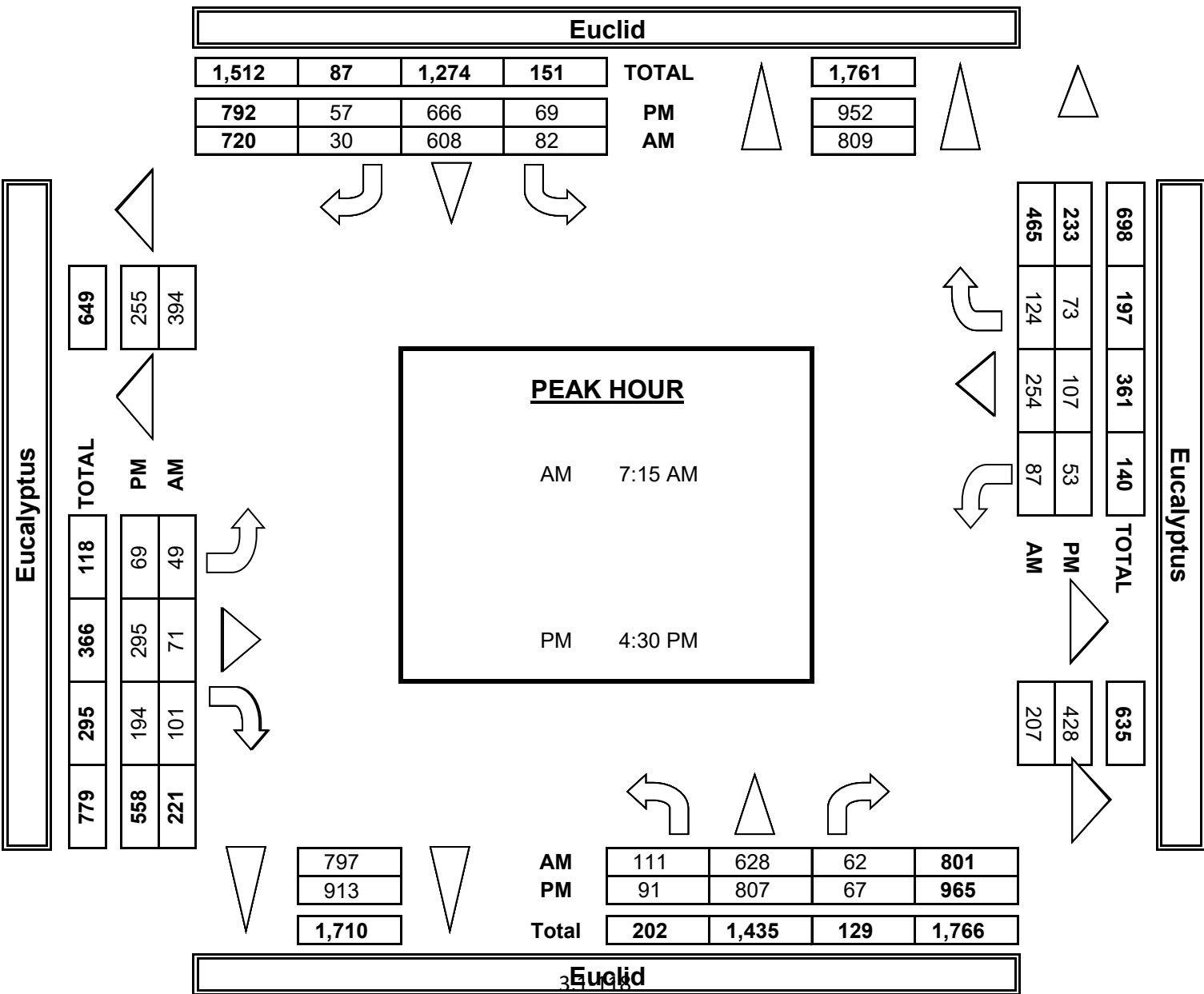
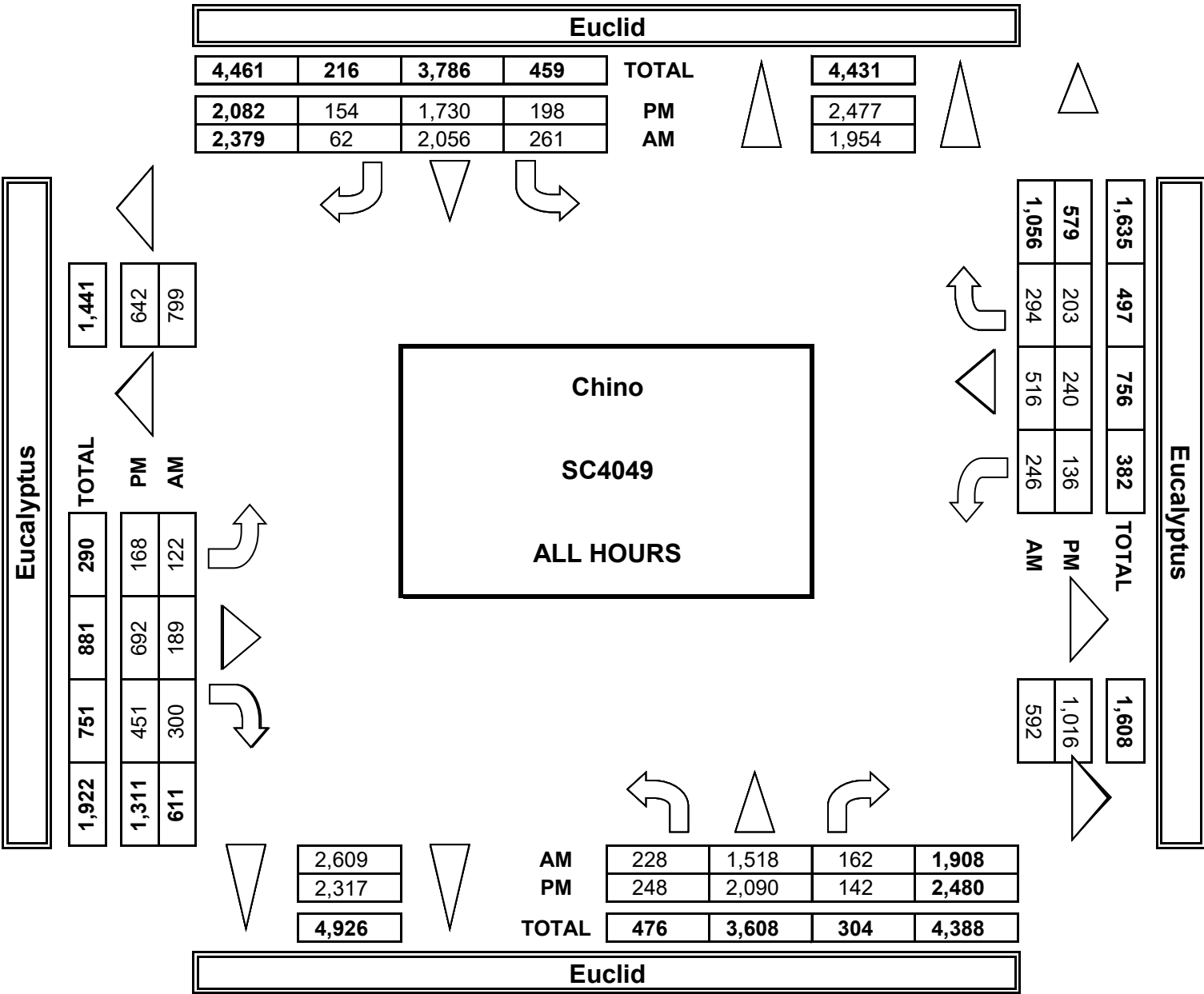
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0	0	0	0	0
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0	0	0	0	0

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

0	0	0	0

	Euclid	
	NORTH SIDE	
Edison	WEST SIDE	EAST SIDE Edison
	SOUTH SIDE	
	Euclid	

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURN

PREPARED BY: AimTD LI

DATE: 5/23/23 TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

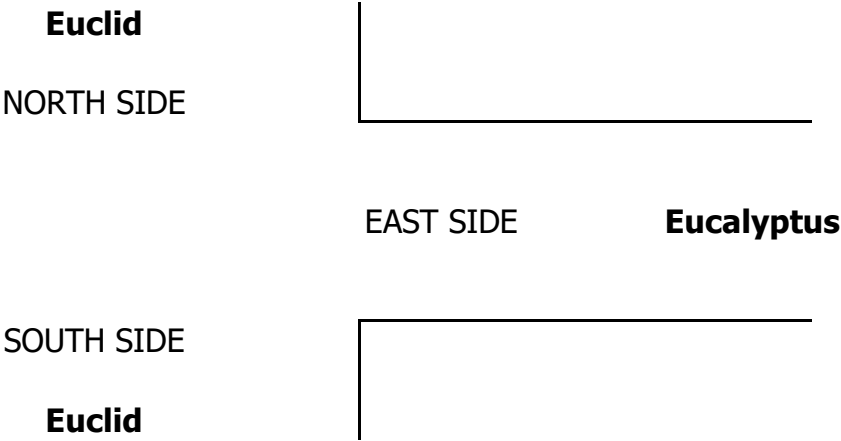
AM	6:00 AM	11	87	14	50	183
	6:15 AM	10	90	6	55	228
	6:30 AM	8	110	21	36	238
	6:45 AM	16	148	26	52	317
	7:00 AM	11	136	11	38	235
	7:15 AM	21	167	24	38	171
	7:30 AM	27	189	14	39	200
	7:45 AM	40	198	19	29	203
	8:00 AM	31	194	28	21	201
	8:15 AM	17	206	11	7	224
	8:30 AM	32	165	21	33	161
	8:45 AM	17	184	18	17	232
	VOLUMES	239	1,873	211	412	2,591
	APPROACH %	10%	81%	9%	13%	84%
	APP/DEPART	2,322	/	2,473	3,076	/
	BEGIN PEAK HR	7:15 AM				
	VOLUMES	119	748	84	126	774
	APPROACH %	12%	79%	9%	13%	83%
	PEAK HR FACTOR	0.924			0.937	
	APP/DEPART	950	/	1,000	935	/
	04:00 PM	22	235	20	18	166
	4:15 PM	17	227	11	23	195
	4:30 PM	27	230	19	29	166
	4:45 PM	22	251	18	19	173
	5:00 PM	30	230	23	26	195
	5:15 PM	22	179	14	33	189

PM	5:30 PM	19	244	20	22	188
	5:45 PM	35	192	11	33	171
	6:00 PM	12	196	4	24	131
	6:15 PM	20	163	9	32	170
	6:30 PM	15	121	5	22	141
	6:45 PM	14	135	6	22	119
	VOLUMES	253	2,400	158	300	2,002
	APPROACH %	9%	85%	6%	12%	81%
	APP/DEPART	2,810	/	2,855	2,460	/
	BEGIN PEAK HR	4:30 PM				
	VOLUMES	100	889	74	106	722
	APPROACH %	9%	84%	7%	12%	82%
	PEAK HR FACTOR	0.916				0.930
	APP/DEPART	1,062	/	1,065	884	/

Eucalyptus

WEST SIDE

17	15	64	27	17	29	29	690
8	12	64	31	18	17	28	618
16	11	46	31	11	12	23	516
11	11	29	39	9	18	5	515
18	6	28	24	8	7	17	410
4	7	13	24	3	11	26	384
159	176	708	455	162	242	279	7,292
6%	13%	53%	34%	24%	35%	41%	
2,619	1,339	/	1,166	683	/	653	0
57	76	339	208	62	101	100	2,831
6%	12%	54%	33%	24%	38%	38%	
		0.967			0.875		0.958
992	623	/	518	263	/	257	0



U-TURNS				
NB	SB	EB	WB	TTL

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

				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4049
17
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

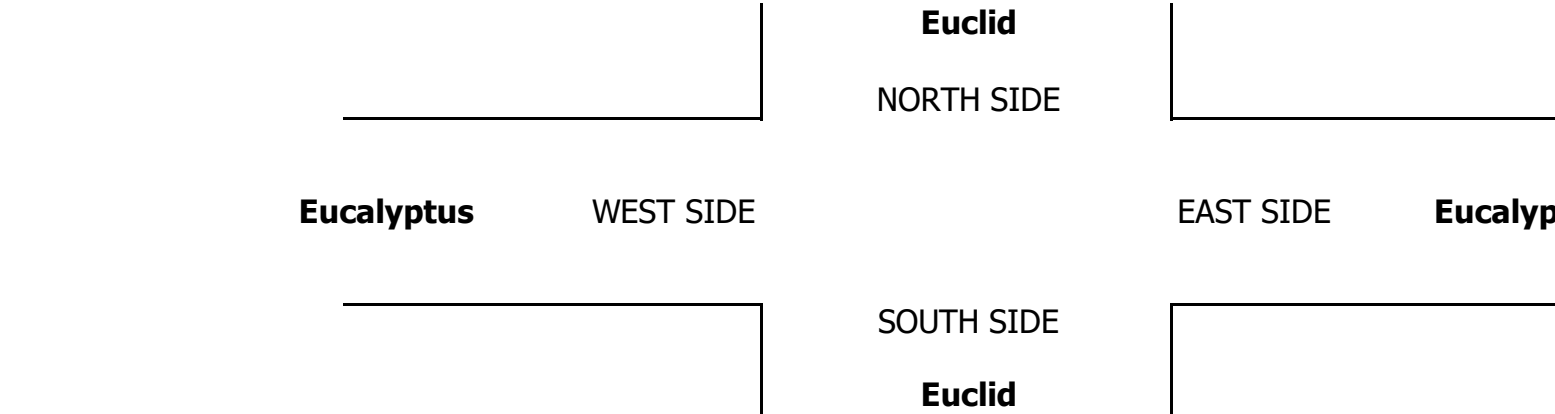
AM
PM
MD
OTHER
OTHER

▲
N
◀ W
S
▼

E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

AM	6:00 AM	11	48	9	18	116	2	8	12	18	12	14	11	279
	6:15 AM	10	51	4	17	147	0	4	11	28	19	15	3	309
	6:30 AM	8	60	15	18	173	3	8	11	28	28	31	6	389
	6:45 AM	14	96	11	17	230	2	3	16	31	30	36	10	496
	7:00 AM	9	96	7	14	134	1	7	15	26	20	42	11	382
	7:15 AM	18	117	10	9	101	6	13	15	19	19	57	15	399
	7:30 AM	23	135	8	16	119	7	13	15	28	17	63	13	457
	7:45 AM	33	140	8	11	134	7	7	21	26	25	63	17	492
	8:00 AM	27	143	13	15	114	5	12	17	24	10	65	19	464
	8:15 AM	15	132	9	5	127	5	14	15	19	9	37	19	406
	8:30 AM	30	108	9	15	92	5	10	23	26	10	34	28	390
	8:45 AM	15	124	10	8	132	8	11	11	17	5	37	8	386
	VOLUMES	213	1,250	113	163	1,619	51	110	182	290	204	494	160	4,849
	APPROACH %	14%	79%	7%	9%	88%	3%	19%	31%	50%	24%	58%	19%	
	APP/DEPART	1,576	/	1,536	1,833	/	2,119	582	/	442	858	/	752	0
PM	BEGIN PEAK HR	7:15 AM												
	VOLUMES	101	535	39	45	468	25	45	68	97	71	248	64	1,812
	APPROACH %	15%	79%	6%	8%	86%	5%	21%	32%	46%	19%	65%	17%	
	PEAK HR FACTOR	0.922			0.895			0.938			0.912			0.921
	APP/DEPART	675	/	650	544	/	636	210	/	152	383	/	374	0
	04:00 PM	18	162	18	7	114	12	13	68	27	16	17	14	486
PM	4:15 PM	17	170	7	11	142	14	20	52	43	9	29	10	524
	4:30 PM	23	182	19	11	126	13	15	87	37	10	21	21	565
	4:45 PM	20	195	16	6	138	15	14	74	45	13	28	15	579
	5:00 PM	30	175	18	12	172	17	21	71	58	14	19	12	619
	5:15 PM	20	141	10	15	153	8	16	78	59	8	31	12	551
	5:30 PM	19	217	17	14	143	15	12	62	27	8	27	14	575
	5:45 PM	35	143	6	9	135	8	12	62	31	14	17	9	481
	6:00 PM	12	145	4	8	101	16	11	46	31	6	12	16	408
	6:15 PM	18	122	6	8	126	11	9	29	39	5	18	3	394
	6:30 PM	15	96	5	10	101	16	6	28	22	6	7	10	322
	6:45 PM	14	91	3	10	92	4	7	13	24	3	11	13	285
	VOLUMES	241	1,839	129	121	1,543	149	156	670	443	112	237	149	5,789
	APPROACH %	11%	83%	6%	7%	85%	8%	12%	53%	35%	22%	48%	30%	
	APP/DEPART	2,209	/	2,151	1,813	/	2,098	1,269	/	913	498	/	627	0
	BEGIN PEAK HR	4:30 PM												
PM	VOLUMES	93	693	63	41	589	53	66	310	199	45	99	60	2,314
	APPROACH %	11%	82%	7%	6%	86%	8%	11%	54%	35%	22%	49%	29%	
	PEAK HR FACTOR	0.919			0.853			0.940			0.911			0.935
	APP/DEPART	849	/	822	686	/	833	575	/	414	204	/	245	0



U-TURNS				
NB	SB	EB	WB	TTL
1	0	0	0	1
2	2	0	0	4
1	1	0	0	2
1	3	0	0	4
1	1	0	0	2
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	4	0	0	4
0	0	0	0	0
0	2	0	0	2
0	1	0	0	1
6	16	0	0	22

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
5	0	11	3
1	0	18	0
7	2	12	1
2	2	13	3
2	0	12	1
4	0	11	2
3	2	10	0
4	4	7	1
5	3	9	4
3	1	12	5
2	1	14	4
5	3	11	2
43	18	140	26

16	9	37	7

0	0	0	0	0
0	0	0	0	0
0	2	0	0	2
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	7	0	0	7

6	5	15	3
2	4	27	2
8	8	16	8
8	9	24	2
7	10	27	2
1	8	25	4
7	3	18	3
3	2	16	2
0	7	19	5
2	6	24	1
1	6	14	6
1	0	14	5
46	68	239	43

24	35	92	16

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4049
17
SIGNAL

CLASS 2:
2-AXLE
WORK
VEHICLES/
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

▲
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

AM	6:00 AM	0	6	2	4	14	0	0	1	0	2	2	0	31
	6:15 AM	0	4	1	1	13	0	0	1	0	1	1	0	22
	6:30 AM	0	8	4	1	10	0	0	0	0	1	0	0	24
	6:45 AM	1	6	3	5	15	0	0	0	0	1	2	1	34
	7:00 AM	0	8	0	0	16	0	0	0	0	1	3	1	29
	7:15 AM	2	6	1	1	17	0	1	1	0	2	0	2	33
	7:30 AM	0	5	1	1	12	0	1	0	1	1	0	2	24
	7:45 AM	2	8	2	4	10	0	0	0	0	0	1	1	28
	8:00 AM	1	4	5	2	21	0	1	0	1	1	2	3	41
	8:15 AM	1	5	0	0	8	0	0	1	1	4	3	1	24
	8:30 AM	1	8	2	3	11	0	1	1	1	3	1	2	34
	8:45 AM	1	6	0	0	16	1	2	0	1	2	4	3	36
	VOLUMES	9	74	21	22	163	1	6	5	5	19	19	16	360
	APPROACH %	9%	71%	20%	12%	88%	1%	38%	31%	31%	35%	35%	30%	
PM	APP/DEPART	104	/	97	186	/	187	16	/	47	54	/	29	0
	BEGIN PEAK HR	7:15 AM												
	VOLUMES	5	23	9	8	60	0	3	1	2	4	3	8	126
	APPROACH %	14%	62%	24%	12%	88%	0%	50%	17%	33%	27%	20%	53%	
	PEAK HR FACTOR	0.771			0.739			0.750			0.625			0.768
	APP/DEPART	37	/	34	68	/	66	6	/	18	15	/	8	0
	04:00 PM	1	13	1	2	6	0	2	2	0	1	0	1	29
PM	4:15 PM	0	9	1	3	7	0	0	2	1	2	1	3	29
	4:30 PM	1	10	0	1	5	1	1	1	1	2	0	0	23
	4:45 PM	1	7	0	1	5	0	2	3	2	2	0	0	23
	5:00 PM	0	11	0	2	3	0	0	3	2	0	0	0	21
	5:15 PM	1	6	1	1	4	0	1	2	1	0	0	1	18
	5:30 PM	0	7	0	2	4	0	2	1	0	2	1	4	23
	5:45 PM	0	8	1	1	2	0	0	0	0	1	0	1	14
	6:00 PM	0	7	0	2	2	0	0	0	0	1	0	1	13
	6:15 PM	1	6	0	0	2	0	0	0	0	1	0	0	10
	6:30 PM	0	3	0	1	1	0	0	0	1	0	0	1	7
	6:45 PM	0	8	0	1	2	0	0	0	0	0	0	0	11
	VOLUMES	5	95	4	17	43	1	8	14	8	12	2	12	221
	APPROACH %	5%	91%	4%	28%	70%	2%	27%	47%	27%	46%	8%	46%	
	APP/DEPART	104	/	115	61	/	63	30	/	35	26	/	8	0
PM	BEGIN PEAK HR	4:30 PM												
	VOLUMES	3	34	1	5	17	1	4	9	6	4	0	1	85
	APPROACH %	8%	89%	3%	22%	74%	4%	21%	47%	32%	80%	0%	20%	
	PEAK HR FACTOR	0.864			0.821			0.679			0.625			0.924
	APP/DEPART	38	/	39	23	/	27	19	/	15	5	/	4	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

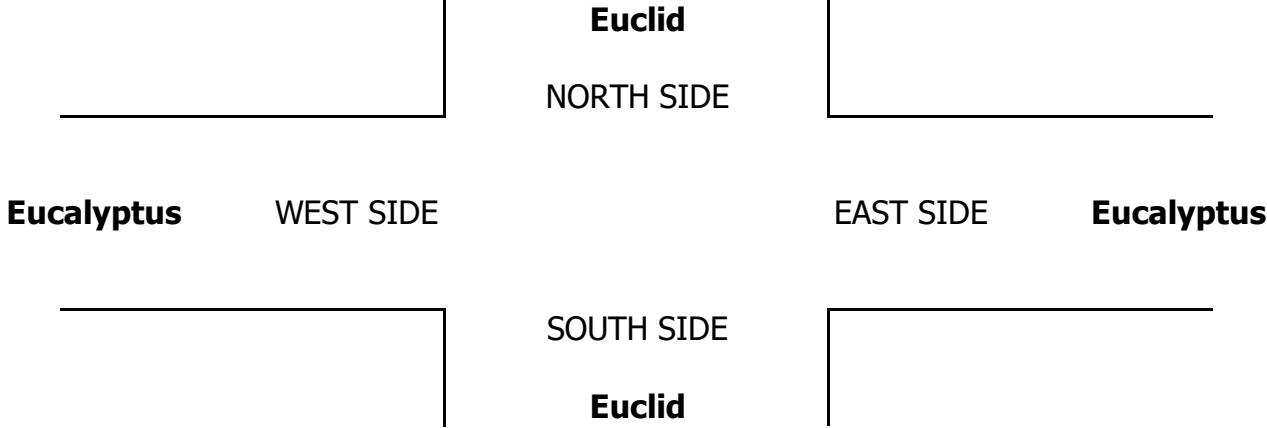
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
2	0	1	1
0	0	0	0
1	0	0	1
0	0	1	0
6	0	2	2

3	0	1	1

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

0	0	0	0
1	0	1	0
0	0	0	0
0	0	1	0
0	0	1	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
1	0	4	1

0	0	3	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4049
17
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

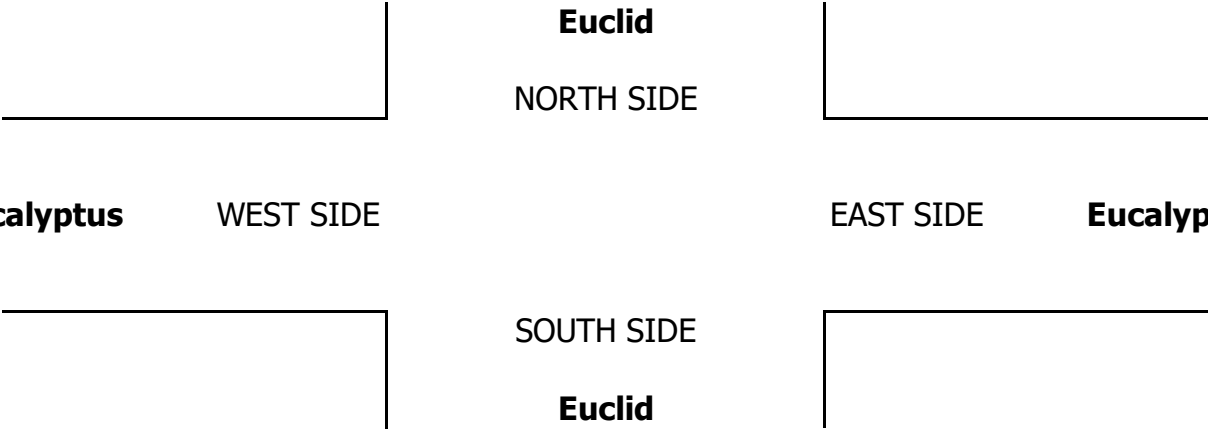
AM
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OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

AM	6:00 AM	0	3	1	1	5	0	0	0	0	0	4	14	
	6:15 AM	0	3	0	0	7	0	0	0	0	0	4	14	
	6:30 AM	0	4	0	2	2	0	0	0	0	0	6	14	
	6:45 AM	0	6	2	0	9	0	1	0	0	0	4	22	
	7:00 AM	0	4	2	0	12	0	0	0	0	1	0	6	25
	7:15 AM	0	7	3	3	3	0	0	0	0	1	1	7	25
	7:30 AM	1	11	2	3	4	2	0	0	0	0	1	9	33
	7:45 AM	2	4	4	0	4	0	0	1	0	3	0	6	24
	8:00 AM	1	8	2	0	7	0	0	1	0	4	0	8	31
	8:15 AM	0	6	1	1	8	1	0	0	0	0	0	4	21
	8:30 AM	0	1	0	2	8	0	0	0	1	1	0	5	18
	8:45 AM	0	4	1	0	11	0	0	0	0	0	0	5	21
	VOLUMES	4	61	18	12	80	3	1	2	1	10	2	68	262
	APPROACH %	5%	73%	22%	13%	84%	3%	25%	50%	25%	13%	3%	85%	
APP/DEPART	83	/	130	95	/	92	4	/	32	80	/	8	0	
PM	BEGIN PEAK HR	7:15 AM												
	VOLUMES	3	30	11	6	18	2	0	2	0	8	2	30	113
	APPROACH %	7%	67%	24%	23%	69%	8%	0%	100%	0%	20%	5%	75%	
	PEAK HR FACTOR	0.804			0.722			0.500			0.833			0.856
	APP/DEPART	45	/	60	26	/	27	2	/	19	40	/	7	0
	04:00 PM	0	7	0	1	2	0	0	0	0	0	0	1	11
4:15 PM	0	7	1	2	2	0	0	0	0	0	0	0	12	
4:30 PM	0	3	0	2	4	0	0	6	0	0	0	1	16	
4:45 PM	0	6	1	1	6	0	0	0	0	1	1	0	16	
5:00 PM	0	4	1	1	3	0	0	0	0	0	0	2	11	
5:15 PM	0	3	1	2	2	0	0	0	0	0	0	1	9	
5:30 PM	0	2	0	1	6	0	0	0	0	0	0	3	12	
5:45 PM	0	2	0	2	6	0	0	1	0	1	0	1	13	
6:00 PM	0	5	0	5	0	0	0	0	0	0	0	1	11	
6:15 PM	0	4	0	6	1	0	0	0	0	1	0	1	13	
6:30 PM	0	1	0	2	1	0	0	0	0	1	0	1	6	
6:45 PM	0	3	0	2	3	0	0	0	0	0	0	2	10	
VOLUMES	0	47	4	27	36	0	0	7	0	4	1	14	140	
APPROACH %	0%	92%	8%	43%	57%	0%	0%	100%	0%	21%	5%	74%		
APP/DEPART	51	/	65	63	/	40	7	/	34	19	/	1	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	0	16	3	5	15	0	0	6	0	1	1	4	52	
APPROACH %	0%	84%	16%	24%	71%	0%	0%	100%	0%	17%	17%	67%		
PEAK HR FACTOR	0.679			0.750			0.250			0.750			0.813	
APP/DEPART	19	/	21	21	/	16	6	/	14	6	/	1	0	



U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	1
0	0	0	3
0	0	0	1
1	0	0	1
0	0	0	1
0	0	0	4
0	0	0	1
2	0	0	1
1	0	0	1
0	0	0	0
0	0	0	3
0	0	0	0
0	0	0	0
4	0	0	18

3	0	0	7

0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	4	0	0	4

0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	3

0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4049
17
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

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PM
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OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

AM	6:00 AM	0	8	0	8	12	0	0	0	0	2	0	3	33
	6:15 AM	0	9	0	12	15	0	0	0	0	0	0	4	40
	6:30 AM	0	10	0	4	12	0	0	0	0	2	0	3	31
	6:45 AM	0	9	2	9	14	0	0	0	0	0	0	1	35
	7:00 AM	0	6	0	8	17	0	0	0	0	1	0	9	41
	7:15 AM	0	9	2	7	12	0	0	0	0	3	0	7	40
	7:30 AM	0	8	0	5	17	0	0	0	0	0	0	3	33
	7:45 AM	0	12	0	4	14	0	0	0	0	0	0	6	36
	8:00 AM	0	9	1	1	13	0	0	0	1	1	0	5	31
	8:15 AM	0	18	0	0	23	0	0	0	0	2	0	1	44
	8:30 AM	0	13	3	3	12	1	0	0	0	0	0	5	37
	8:45 AM	0	13	2	3	18	0	0	0	0	1	0	2	39
	VOLUMES	0	124	10	64	179	1	0	0	1	12	0	49	440
	APPROACH %	0%	93%	7%	26%	73%	0%	0%	100%	20%	0%	80%		
PM	APP/DEPART	134	/	176	244	/	192	1	/	71	61	/	1	0
	BEGIN PEAK HR	7:15 AM												
	VOLUMES	0	38	3	15	56	0	0	0	1	4	0	21	140
	APPROACH %	0%	93%	7%	21%	77%	0%	0%	0%	100%	16%	0%	84%	
	PEAK HR FACTOR	0.854			0.830			0.250			0.625			0.875
	APP/DEPART	41	/	61	73	/	61	1	/	18	25	/	0	0
	04:00 PM	0	13	0	2	13	0	0	0	0	0	0	6	34
PM	4:15 PM	0	9	0	1	12	0	0	0	0	2	0	1	25
	4:30 PM	0	9	0	4	8	0	0	0	0	0	0	2	23
	4:45 PM	0	11	0	3	5	0	0	0	0	1	0	3	23
	5:00 PM	0	10	1	3	4	0	0	1	0	0	0	3	22
	5:15 PM	0	7	0	4	8	0	0	0	0	2	0	2	23
	5:30 PM	0	4	1	1	9	0	0	0	0	2	0	1	18
	5:45 PM	0	11	1	6	7	0	0	0	0	0	0	5	30
	6:00 PM	0	10	0	1	9	0	0	0	0	1	0	1	22
	6:15 PM	0	8	1	4	13	0	0	0	0	0	0	0	26
	6:30 PM	0	6	0	2	12	0	0	0	0	0	0	1	21
	6:45 PM	0	8	1	2	6	0	0	0	0	0	0	3	20
	VOLUMES	0	106	5	33	106	0	0	1	0	8	0	28	287
	APPROACH %	0%	95%	5%	24%	76%	0%	0%	100%	0%	22%	0%	78%	
	APP/DEPART	111	/	139	139	/	114	1	/	34	36	/	0	0
	BEGIN PEAK HR	4:30 PM												
PM	VOLUMES	0	37	1	13	25	0	0	1	0	3	0	10	91
	APPROACH %	0%	97%	3%	33%	64%	0%	0%	100%	0%	23%	0%	77%	
	PEAK HR FACTOR	0.864			0.813			0.250			0.813			0.989
	APP/DEPART	38	/	48	39	/	28	1	/	15	13	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	3	0	0	3

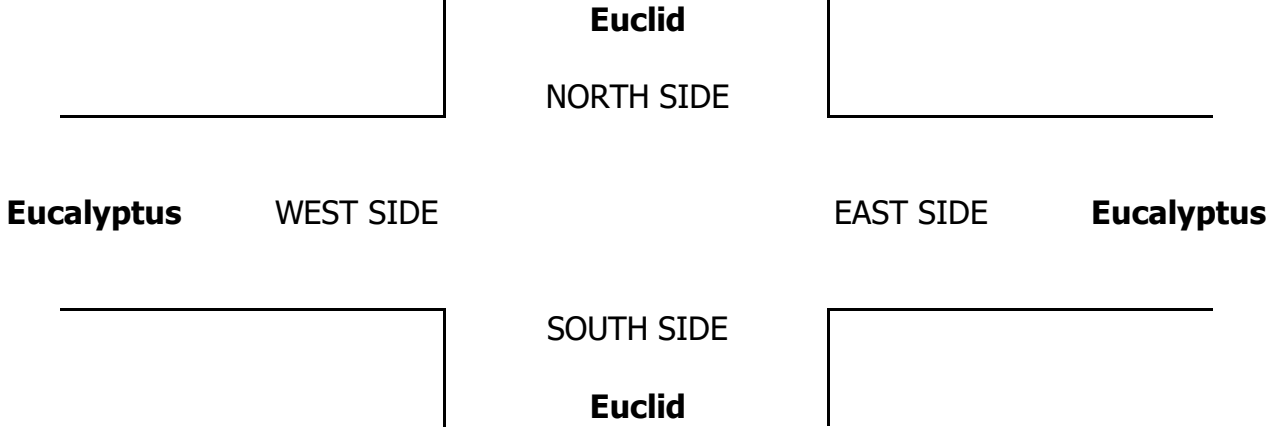
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	1
0	0	1	1
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	1
0	0	1	9

0	0	1	4

0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	5	0	0	5

0	0	0	1
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	1
0	0	0	6

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
5/23/23
TUESDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4049
17
SIGNAL

CLASS 5:
RV

NOTES:

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

AM	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	1	0	0	1
	6:45 AM	0	2	0	0	0	0	0	0	0	0	0	2
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	1	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	2	0	0	0	0	0	0	0	0	0	2
	VOLUMES	0	5	0	0	0	0	0	0	1	0	0	6
	APPROACH %	0%	100%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
	APP/DEPART	5	/	5	0	/	1	0	/	0	1	/	0
PM	BEGIN PEAK HR	7:15 AM											
	VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0
	APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.000			0.000			0.000			0.000		
	APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	1	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	1	0	0	0	0	0	0	2
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
	VOLUMES	0	3	0	0	1	0	0	0	0	0	0	4
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	APP/DEPART	3	/	3	1	/	1	0	/	0	0	/	0
	BEGIN PEAK HR	4:30 PM											
	VOLUMES	0	1	0	0	1	0	0	0	0	0	0	2
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
	PEAK HR FACTOR	0.250			0.250			0.000			0.000		
	APP/DEPART	1	/	1	1	/	1	0	/	0	0	/	0

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

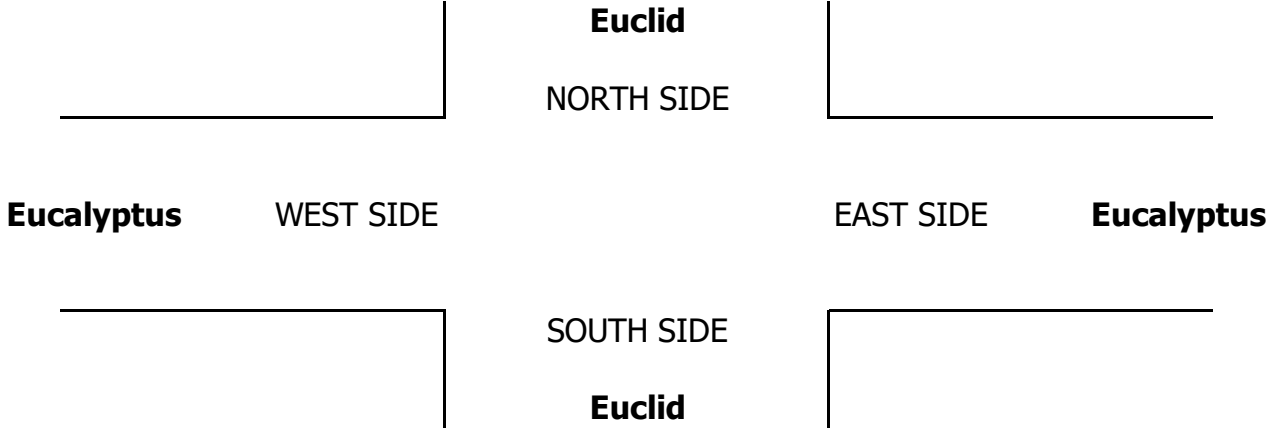
RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

0	0	0	0

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

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

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 5/23/23 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Eucalyptus	PROJECT #: LOCATION #: CONTROL:	SC4049 17 SIGNAL

CLASS 6:	NOTES:	AM		▲	
BUSES		PM		N	
		MD	◀ W		E ▶
		OTHER		S	
		OTHER		▼	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

AM	6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
	6:15 AM	0	0	0	0	1	1	0	0	0	0	0	0	2
	6:30 AM	0	0	0	0	5	0	0	0	1	0	0	0	6
	6:45 AM	0	0	0	0	2	0	0	0	1	0	0	0	3
	7:00 AM	1	1	0	0	1	0	1	0	0	0	0	0	4
	7:15 AM	0	0	0	0	1	2	0	0	1	0	0	0	4
	7:30 AM	1	0	0	0	2	0	1	0	0	0	0	0	4
	7:45 AM	0	1	0	0	2	1	0	0	0	0	0	1	5
	8:00 AM	0	1	0	0	1	0	0	0	0	0	1	0	3
	8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
	8:30 AM	0	1	0	0	0	1	1	0	0	0	0	0	3
	8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
	VOLUMES	2	4	0	0	15	6	5	0	3	0	1	1	37
	APPROACH %	33%	67%	0%	0%	71%	29%	63%	0%	38%	0%	50%	50%	
	APP/DEPART	6	/	10	21	/	18	8	/	0	2	/	9	0
BEGIN PEAK HR	7:15 AM													
VOLUMES	1	2	0	0	6	3	1	0	1	0	1	1	16	
APPROACH %	33%	67%	0%	0%	67%	33%	50%	0%	50%	0%	50%	50%		
PEAK HR FACTOR	0.750			0.750			0.500			0.500			0.800	
APP/DEPART	3	/	4	9	/	7	2	/	0	2	/	5	0	
PM	04:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	1	1	1	0	0	0	0	0	3
	4:30 PM	1	0	0	0	0	0	1	0	0	0	0	0	2
	4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
	6:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	2	0	0	0	1	4	4	0	0	0	0	0	11
	APPROACH %	100%	0%	0%	0%	20%	80%	100%	0%	0%	0%	0%	0%	
	APP/DEPART	2	/	4	5	/	1	4	/	0	0	/	6	0
BEGIN PEAK HR	4:30 PM													
VOLUMES	1	0	0	0	0	1	2	0	0	0	0	0	4	
APPROACH %	100%	0%	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%		
PEAK HR FACTOR	0.250			0.250			0.500			0.000			0.500	
APP/DEPART	1	/	2	1	/	0	2	/	0	0	/	2	0	

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	1	0	0
0	3	0	0

0	1	0	0

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

0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0

0	1	0	0

	Euclid		
	NORTH SIDE		
Eucalyptus	WEST SIDE	EAST SIDE	Eucalyptus
	SOUTH SIDE		
	Euclid		

ADT1 Schaefer west of Euclid.

Prepared by AimTD LLC tel. 714 253 7888

AM Period	EB		WB		PM Period		EB		WB		
0:00	9		12		12:00		65		50		
0:15	7		3		12:15		49		42		
0:30	4		6		12:30		79		58		
0:45	8	28	3	24	52	12:45	77	270	44	194	464
1:00	13		3		13:00		64		46		
1:15	4		4		13:15		52		30		
1:30	8		1		13:30		96		40		
1:45	2	27	5	13	40	13:45	68	280	54	170	450
2:00	2		5		14:00		88		40		
2:15	1		2		14:15		82		54		
2:30	3		4		14:30		116		44		
2:45	2	8	4	15	23	14:45	120	406	56	194	600
3:00	3		3		15:00		118		61		
3:15	4		3		15:15		132		37		
3:30	9		15		15:30		145		37		
3:45	9	25	13	34	59	15:45	127	522	74	209	731
4:00	6		7		16:00		152		55		
4:15	8		12		16:15		130		65		
4:30	18		23		16:30		143		44		
4:45	16	48	28	70	118	16:45	160	585	43	207	792
5:00	16		22		17:00		156		60		
5:15	15		19		17:15		154		49		
5:30	15		28		17:30		138		50		
5:45	19	65	30	99	164	17:45	91	539	47	206	745
6:00	24		38		18:00		100		50		
6:15	39		25		18:15		118		39		
6:30	37		40		18:30		94		46		
6:45	38	138	52	155	293	18:45	56	368	34	169	537
7:00	46		31		19:00		65		29		
7:15	55		50		19:15		72		39		
7:30	61		54		19:30		47		23		
7:45	96	258	73	208	466	19:45	48	232	24	115	347
8:00	56		73		20:00		70		27		
8:15	62		55		20:15		63		29		
8:30	57		54		20:30		43		22		
8:45	48	223	43	225	448	20:45	45	221	21	99	320
9:00	46		38		21:00		38		7		
9:15	52		33		21:15		30		16		
9:30	41		36		21:30		37		21		
9:45	55	194	36	143	337	21:45	25	130	12	56	186
10:00	53		35		22:00		19		20		
10:15	50		39		22:15		27		11		
10:30	55		34		22:30		34		16		
10:45	66	224	37	145	369	22:45	29	109	9	56	165
11:00	62		46		23:00		20		15		
11:15	68		35		23:15		13		6		
11:30	76		41		23:30		9		7		
11:45	69	275	52	174	449	23:45	11	53	7	35	88
Total Vol.	1513		1305		2818		3715		1710		5425
							Daily Totals				
							EB		WB		Combined
							5228		3015		8243
	AM						PM				
Split %	53.7%		46.3%		34.2%		68.5%		31.5%		65.8%
Peak Hour	11:15		7:30		7:30		16:30		15:45		16:45
Volume	278		255		530		613		238		810
P.H.F.	0.91		0.87		0.78		0.96		0.80		0.94

ADT3 Edison west of Euclid.

Prepared by AimTD LLC tel. 714 253 7888

AM Period	EB		WB		PM Period		EB		WB		
0:00	10		10		12:00		76		64		
0:15	7		6		12:15		60		88		
0:30	10		10		12:30		76		75		
0:45	2	29	9	35	64	12:45	76	288	64	291	579
1:00	9		8		13:00		62		79		
1:15	9		7		13:15		90		88		
1:30	9		6		13:30		84		83		
1:45	5	32	4	25	57	13:45	88	324	57	307	631
2:00	5		11		14:00		100		90		
2:15	6		5		14:15		74		81		
2:30	3		4		14:30		99		75		
2:45	10	24	4	24	48	14:45	111	384	96	342	726
3:00	8		6		15:00		102		102		
3:15	13		18		15:15		115		100		
3:30	6		13		15:30		128		119		
3:45	14	41	16	53	94	15:45	150	495	134	455	950
4:00	11		13		16:00		110		104		
4:15	16		18		16:15		113		86		
4:30	11		45		16:30		136		90		
4:45	21	59	47	123	182	16:45	121	480	103	383	863
5:00	29		33		17:00		175		103		
5:15	33		51		17:15		153		73		
5:30	35		81		17:30		112		115		
5:45	47	144	86	251	395	17:45	121	561	96	387	948
6:00	52		89		18:00		97		88		
6:15	55		114		18:15		94		72		
6:30	54		103		18:30		89		65		
6:45	51	212	114	420	632	18:45	84	364	68	293	657
7:00	63		114		19:00		81		59		
7:15	59		119		19:15		77		47		
7:30	69		131		19:30		65		60		
7:45	65	256	112	476	732	19:45	68	291	48	214	505
8:00	62		110		20:00		66		37		
8:15	56		124		20:15		72		38		
8:30	68		117		20:30		55		36		
8:45	50	236	126	477	713	20:45	52	245	32	143	388
9:00	69		101		21:00		53		38		
9:15	52		97		21:15		34		21		
9:30	55		87		21:30		40		29		
9:45	49	225	98	383	608	21:45	19	146	21	109	255
10:00	57		72		22:00		42		32		
10:15	63		92		22:15		33		16		
10:30	59		60		22:30		49		26		
10:45	53	232	84	308	540	22:45	29	153	15	89	242
11:00	56		83		23:00		17		10		
11:15	60		84		23:15		18		13		
11:30	67		87		23:30		23		10		
11:45	69	252	85	339	591	23:45	10	68	12	45	113
Total Vol.	1742		2914		4656		3799		3058		6857
							Daily Totals				
							EB		WB	Combined	
							5541		5972	11513	
AM							PM				
Split %	37.4%		62.6%		40.4%		55.4%		44.6%	59.6%	
Peak Hour	11:45		6:45		7:00		16:30		15:15	15:15	
Volume	281		478		732		585		457	960	
P.H.F.	0.92		0.91		0.92		0.84		0.85	0.85	

ADT4 Riverside east of Euclid.

Prepared by AimTD LLC tel. 714 253 7888

AM Period	EB		WB		PM Period		EB		WB		
0:00	21		9		12:00		139		151		
0:15	9		7		12:15		135		145		
0:30	8		14		12:30		139		130		
0:45	6	44	7	37	81	12:45	115	528	152	578	1106
1:00	12		7		13:00		130		158		
1:15	5		4		13:15		131		155		
1:30	9		7		13:30		160		175		
1:45	5	31	3	21	52	13:45	161	582	144	632	1214
2:00	6		6		14:00		140		164		
2:15	9		8		14:15		120		156		
2:30	7		7		14:30		135		175		
2:45	11	33	7	28	61	14:45	147	542	160	655	1197
3:00	10		5		15:00		166		151		
3:15	4		10		15:15		148		148		
3:30	7		20		15:30		170		188		
3:45	11	32	28	63	95	15:45	149	633	189	676	1309
4:00	15		19		16:00		185		185		
4:15	15		15		16:15		167		154		
4:30	16		43		16:30		178		168		
4:45	18	64	51	128	192	16:45	151	681	167	674	1355
5:00	18		30		17:00		168		167		
5:15	38		50		17:15		182		198		
5:30	51		80		17:30		189		145		
5:45	69	176	82	242	418	17:45	157	696	157	667	1363
6:00	69		73		18:00		130		106		
6:15	66		98		18:15		129		125		
6:30	79		138		18:30		107		92		
6:45	74	288	136	445	733	18:45	102	468	83	406	874
7:00	90		120		19:00		84		84		
7:15	85		126		19:15		93		65		
7:30	138		200		19:30		82		70		
7:45	154	467	223	669	1136	19:45	78	337	47	266	603
8:00	150		163		20:00		90		70		
8:15	127		161		20:15		115		69		
8:30	146		130		20:30		83		56		
8:45	162	585	157	611	1196	20:45	61	349	46	241	590
9:00	155		136		21:00		53		38		
9:15	162		134		21:15		60		44		
9:30	125		121		21:30		57		48		
9:45	130	572	121	512	1084	21:45	40	210	38	168	378
10:00	139		120		22:00		43		40		
10:15	130		132		22:15		28		35		
10:30	137		142		22:30		47		31		
10:45	146	552	153	547	1099	22:45	31	149	19	125	274
11:00	139		151		23:00		25		25		
11:15	135		194		23:15		16		23		
11:30	103		176		23:30		16		10		
11:45	144	521	156	677	1198	23:45	9	66	13	71	137
Total Vol.	3365		3980		7345		5241		5159		10400
							Daily Totals				
							EB		WB		Combined
							8606		9139		17745
	AM						PM				
Split %	45.8%		54.2%		41.4%		50.4%		49.6%		58.6%
Peak Hour	8:30		7:30		7:30		17:00		15:30		15:30
Volume	625		747		1316		696		716		1387
P.H.F.	0.96		0.84		0.87		0.92		0.95		0.94

Tuesday, May 23, 2023					CITY: Chino					PROJECT: SC4049				
ADT5 Fern north of Schaefer.										Prepared by AimTD LLC tel. 714 253 7888				
AM Period	NB		SB			PM Period	NB		SB					
0:00	3		4			12:00	40		36					
0:15	2		2			12:15	41		35					
0:30	2		1			12:30	42		32					
0:45	2	9	2	9	18	12:45	46	169	30	133	302			
1:00	4		2			13:00	40		36					
1:15	0		3			13:15	44		33					
1:30	2		1			13:30	52		36					
1:45	2	8	0	6	14	13:45	41	177	29	134	311			
2:00	3		1			14:00	44		40					
2:15	1		1			14:15	27		44					
2:30	1		1			14:30	63		37					
2:45	1	6	0	3	9	14:45	66	200	50	171	371			
3:00	3		0			15:00	56		47					
3:15	0		1			15:15	48		49					
3:30	1		2			15:30	68		41					
3:45	2	6	0	3	9	15:45	67	239	40	177	416			
4:00	1		5			16:00	84		41					
4:15	1		3			16:15	59		59					
4:30	2		8			16:30	70		50					
4:45	1	5	12	28	33	16:45	80	293	43	193	486			
5:00	8		4			17:00	63		45					
5:15	4		14			17:15	64		46					
5:30	4		26			17:30	53		44					
5:45	6	22	24	68	90	17:45	64	244	50	185	429			
6:00	2		23			18:00	62		32					
6:15	6		25			18:15	66		40					
6:30	14		28			18:30	53		28					
6:45	22	44	45	121	165	18:45	39	220	23	123	343			
7:00	18		33			19:00	48		35					
7:15	27		39			19:15	58		25					
7:30	41		64			19:30	37		31					
7:45	50	136	65	201	337	19:45	35	178	20	111	289			
8:00	43		71			20:00	24		24					
8:15	43		53			20:15	34		20					
8:30	43		51			20:30	23		24					
8:45	36	165	52	227	392	20:45	38	119	11	79	198			
9:00	42		32			21:00	22		14					
9:15	27		36			21:15	21		17					
9:30	31		29			21:30	28		15					
9:45	30	130	21	118	248	21:45	8	79	7	53	132			
10:00	27		24			22:00	19		7					
10:15	38		30			22:15	11		7					
10:30	38		40			22:30	6		8					
10:45	34	137	34	128	265	22:45	19	55	9	31	86			
11:00	30		30			23:00	9		4					
11:15	38		29			23:15	4		4					
11:30	46		35			23:30	5		1					
11:45	40	154	43	137	291	23:45	10	28	3	12	40			
Total Vol.	822		1049		1871		2001		1402		3403			
							Daily Totals							
							NB		SB		Combined			
							2823		2451		5274			
AM					PM									
Split %	43.9%		56.1%		35.5%		58.8%		41.2%		64.5%			
Peak Hour	7:45		7:30		7:30		16:00		16:15		16:00			
Volume	179		253		430		293		197		486			
P.H.F.	0.90		0.89		0.93		0.84		0.83		0.97			

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 23, 2023
JOB #: SC4049

CITY: Chino
LOCATION: CLASS2 Euclid north of Schaefer

AM TIME	NORTHBOUND													TOTAL	PM Time	NORTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	47	12	0	1	1	0	1	4	0	0	0	0	66	12:00	0	109	34	0	14	15	0	2	33	0	0	0	0	207
0:15	1	41	7	0	0	3	0	1	6	0	0	0	0	59	12:15	1	110	18	1	21	11	0	5	39	0	0	0	0	206
0:30	0	27	9	0	0	0	0	0	5	0	0	0	0	41	12:30	0	95	31	0	19	16	0	4	28	0	0	0	0	193
0:45	0	24	3	0	2	2	0	2	3	0	0	0	0	36	12:45	0	130	30	1	11	9	0	2	32	0	0	0	0	215
1:00	0	26	3	0	0	2	0	0	5	0	0	0	0	36	13:00	0	117	38	1	16	10	0	3	27	0	0	1	0	213
1:15	0	23	2	0	3	2	0	0	8	0	0	0	0	38	13:15	0	97	31	1	13	9	0	4	30	0	0	0	0	185
1:30	0	42	4	0	2	1	0	0	3	0	0	0	0	52	13:30	0	140	33	0	12	10	0	1	23	1	0	1	0	221
1:45	0	12	2	0	0	3	0	2	7	0	0	0	0	26	13:45	0	135	44	1	14	3	0	1	13	0	0	0	0	211
2:00	0	32	14	0	2	0	0	0	5	0	1	0	0	54	14:00	1	161	53	1	25	13	0	2	35	0	0	0	0	291
2:15	0	21	6	0	0	1	0	1	9	0	1	2	0	41	14:15	0	143	43	1	18	12	0	1	24	0	0	0	0	242
2:30	1	16	7	0	1	2	0	0	7	0	0	1	0	35	14:30	1	151	48	1	16	6	0	1	27	0	0	0	0	251
2:45	0	11	4	0	4	0	0	0	5	0	0	0	0	24	14:45	0	211	56	1	14	6	0	0	15	0	0	0	0	303
3:00	0	17	5	0	1	0	0	0	9	0	0	0	0	32	15:00	0	162	36	1	10	8	0	0	23	0	0	0	0	240
3:15	0	16	5	0	5	2	0	1	10	0	0	0	0	39	15:15	2	161	48	1	14	10	0	3	16	0	1	1	0	257
3:30	0	16	3	0	0	0	0	0	9	0	0	1	0	29	15:30	1	209	49	2	19	8	0	0	16	0	1	0	0	305
3:45	0	16	6	0	1	1	0	0	10	0	0	0	0	34	15:45	1	209	54	1	11	10	0	1	19	0	0	0	0	306
4:00	0	32	10	0	1	1	0	0	7	0	1	0	0	52	16:00	0	209	50	0	11	8	0	3	22	0	0	0	0	303
4:15	0	21	4	0	2	4	0	1	10	0	0	0	0	42	16:15	2	191	52	1	15	6	0	5	17	0	0	0	0	289
4:30	1	52	19	0	4	6	0	0	11	0	1	0	0	94	16:30	1	167	49	0	7	4	0	3	11	0	1	0	0	243
4:45	0	39	11	0	2	3	0	1	13	0	1	2	0	72	16:45	1	242	46	1	9	5	0	5	17	0	0	0	0	326
5:00	0	40	9	0	1	10	0	0	11	0	0	0	0	71	17:00	0	193	45	0	8	3	0	4	11	0	0	0	0	264
5:15	1	27	9	0	7	15	0	0	17	0	1	0	0	77	17:15	0	195	34	1	9	2	0	1	18	0	0	0	0	260
5:30	0	49	19	0	9	11	0	0	13	0	0	0	0	101	17:30	1	214	34	1	10	6	0	0	11	0	0	0	0	277
5:45	0	46	14	0	8	14	0	1	15	0	3	0	0	101	17:45	0	174	32	0	8	5	0	4	12	0	0	0	0	235
6:00	0	52	14	1	7	11	0	1	12	0	9	0	0	107	18:00	1	166	47	0	3	7	0	0	12	0	0	0	0	236
6:15	0	68	9	0	11	12	0	0	18	0	2	0	0	120	18:15	3	117	26	1	6	4	0	0	13	0	0	0	0	170
6:30	0	63	17	0	16	8	0	0	17	0	1	0	0	122	18:30	0	127	34	1	1	4	0	0	11	0	0	0	0	178
6:45	0	84	17	1	13	10	0	1	20	0	1	0	0	147	18:45	0	124	17	0	4	1	0	0	13	0	1	0	0	160
7:00	1	112	16	3	14	9	0	4	25	0	0	1	0	185	19:00	0	108	20	0	5	6	0	1	12	0	0	0	0	152
7:15	0	105	18	0	16	14	0	5	35	0	0	0	0	193	19:15	0	129	22	1	1	3	0	0	16	0	0	0	0	172
7:30	1	139	14	0	16	14	0	2	38	0	0	0	0	224	19:30	0	114	12	0	1	4	0	0	7	0	0	0	0	138
7:45	0	137	27	2	9	20	0	2	30	1	0	0	0	228	19:45	0	105	21	0	1	3	0	3	5	0	1	0	0	139
8:00	0	139	22	1	9	11	0	4	24	0	1	0	0	211	20:00	0	86	13	0	2	6	0	0	16	0	0	0	0	123
8:15	0	142	28	1	11	14	0	1	29	0	0	0	0	226	20:15	0	93	20	1	1	7	0	0	10	0	0	1	0	133
8:30	0	108	18	1	14	17	0	1	24	1	0	0	0	184	20:30	0	65	11	0	1	4	0	0	13	0	0	0	0	94
8:45	0	114	34	1	12	12	0	1	30	0	0	0	0	204	20:45	0	79	19	0	1	4	0	0	12	0	0	0	0	115
9:00	0	95	34	1	16	15	0	0	30	0	0	0	0	191	21:00	1	91	6	0	0	8	0	1	11	0	0	0	0	118
9:15	0	98	22	0	19	8	0	0	42	0	1	0	0	190	21:15	1	73	12	0	1	4	0	1	15	0	0	0	0	107
9:30	1	82	28	1	14	9	0	0	27	0	0	0	0	162	21:30	0	86	7	0	0	5	0	0	8	0	0	0	0	106
9:45	0	85	20	0	11	15	0	5	31	0	0	0	0	167	21:45	0	74	15	0	0	1	0	0	9	0	0	0	0	99
10:00	0	89	17	1	13	8	0	2	26	0	0	0	0	156	22:00	0	63	17	0	0	1	0	0	11	0	0	0	0	92
10:15	2	103	22	0	18	13	0	2	28	0	0	0	0	188	22:15	1	67	12	0	0	3	0	0	9	0	0	0	0	92
10:30	0	87	23	1	10	10	0	0	28	0	0	0	0	159	22:30	0	74	9	0	1	2	0	0	6	0	0	0	0	92
10:45	0	104	26	0	12	12	0	1	26	0	0	0	0	181	22:45	0	49	13	0	5	1	1	3	9	0	0	0	0	81
11:00	1	97	37	0	10	8	0	1	29	0	2	0	0	185	23:00	0	37	10	0	1	1	0	0	4	0	0	0	0	53
11:15	0	105	36	1	12	8	0	3	31	0	0	0	0	196	23:15	0	32	9	0	0	3	0	0	5	0	0	1	0	50
11:30	0	105	29	0	16	14	0	3	29	0	1	0	0	197	23:30	0	25	11	0	0	2	0	0	6	0	0	0	0	44
11:45	1	105	24	0	11	10	0	3	22	0	0	0	0	176	23:45	0	17	4	0	0	2	0	1	9	0	0	0	0	33
TOTAL	11	3,111	739	16	366	366	0	53	853	2	27	7	0	5,551	TOTAL	19	5,926	1,375	22	359	281	1	65	761	1	5	5	0	8,820

AM PEAK HOUR 7:30 AM
AM PEAK VOLUME 889

PM PEAK HOUR 3:30 PM
PM PEAK VOLUME 1,203

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	30	9,037	2,114	38	725	647	1	118	###	3	32	12	0	14,371
% OF TOTAL	0.2%	62.9%	14.7%	0.3%	5.0%	4.5%	0.0%	0.8%	11.2%	0.0%	0.2%	0.1%	0.0%	100.0%

Class	1	2	3	4	5	6	7	8	9	10	11	12	13	
TOTAL: ALL	60	17,630	3,921	78	1,422	1,275	2	259	###	4	64	31	0	27,945
% OF TOTAL	0.4%	122.7%	27.3%	0.5%	9.9%	8.9%	0.0%	1.8%	22.3%	0.0%	0.4%	0.2%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 23, 2023
JOB #: SC4049

CITY: Chino
LOCATION: CLASS2 Euclid north of Schaefer

AM TIME	SOUTHBOUND													TOTAL	PM Time	SOUTHBOUND													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	21	1	0	0	4	0	0	6	0	0	0	0	32	12:00	0	80	24	2	9	7	0	3	34	0	0	0	0	159
0:15	0	23	2	0	2	2	0	0	3	0	0	3	0	35	12:15	1	115	19	1	18	9	0	4	31	0	0	0	0	198
0:30	0	18	2	0	0	1	0	0	2	0	0	1	0	24	12:30	0	109	19	0	17	8	0	3	35	0	0	1	0	192
0:45	0	18	2	0	2	2	0	1	8	0	0	0	0	33	12:45	0	92	21	1	15	4	0	2	24	0	2	0	0	161
1:00	0	22	1	0	0	2	0	1	3	0	0	0	0	29	13:00	1	110	30	0	15	10	0	3	23	0	2	1	0	195
1:15	0	18	4	0	1	3	0	1	8	0	0	0	0	35	13:15	1	100	24	1	14	9	0	3	25	0	1	0	0	178
1:30	0	14	5	0	0	4	0	0	4	0	0	0	0	27	13:30	0	106	26	1	17	7	0	3	24	0	2	0	0	186
1:45	0	15	4	0	1	4	0	0	5	0	0	2	0	31	13:45	1	126	27	1	15	6	0	5	25	0	0	0	0	206
2:00	0	14	6	0	2	2	0	0	5	0	0	0	0	29	14:00	0	92	19	1	10	9	0	4	27	0	3	0	0	165
2:15	0	12	4	0	1	2	0	0	10	0	0	0	0	29	14:15	0	120	22	1	11	13	0	8	24	0	0	0	0	199
2:30	1	17	4	0	2	4	1	2	5	0	1	0	0	37	14:30	0	113	25	0	10	8	0	4	27	0	3	0	0	190
2:45	0	20	2	0	2	5	0	0	6	0	0	0	0	35	14:45	0	116	28	1	13	7	0	6	26	0	4	0	0	201
3:00	0	14	10	0	0	1	0	1	9	0	0	1	0	36	15:00	1	109	28	0	11	7	0	3	26	0	4	0	0	189
3:15	0	33	11	0	2	2	0	0	8	0	0	0	0	56	15:15	0	132	27	1	8	6	0	2	23	0	1	0	0	200
3:30	0	44	13	0	1	9	0	1	12	0	0	0	0	80	15:30	0	88	22	0	12	7	0	3	17	0	0	0	0	149
3:45	0	71	15	0	0	6	0	0	8	0	0	3	0	103	15:45	1	146	26	1	17	9	0	4	15	0	0	0	0	219
4:00	1	43	8	0	0	9	0	0	9	0	0	0	0	70	16:00	0	127	19	0	10	5	0	6	23	0	1	0	0	191
4:15	0	56	18	0	2	5	0	1	8	0	0	1	0	91	16:15	0	142	15	2	8	10	0	7	25	0	0	0	0	209
4:30	1	117	24	0	2	12	0	0	6	0	0	0	0	162	16:30	0	114	21	0	13	9	0	4	17	0	0	0	0	178
4:45	0	135	26	0	2	7	0	0	14	0	0	0	0	184	16:45	1	138	22	1	9	5	0	3	13	0	0	0	0	192
5:00	0	85	33	0	2	11	0	0	14	0	0	1	0	146	17:00	0	139	23	0	2	7	0	1	16	0	0	0	0	188
5:15	0	113	37	0	6	5	0	0	12	0	0	0	0	173	17:15	0	129	16	0	8	5	0	2	13	0	0	0	0	173
5:30	2	178	61	0	1	9	0	0	11	1	0	0	0	263	17:30	2	135	9	1	5	10	0	3	8	0	0	0	0	173
5:45	2	148	53	0	11	7	0	0	18	0	0	0	0	239	17:45	0	137	25	0	7	4	0	2	16	0	1	0	0	192
6:00	0	97	51	0	13	9	0	0	13	0	0	0	0	183	18:00	0	135	16	0	4	7	0	0	12	0	0	0	0	174
6:15	0	142	51	2	10	11	0	2	17	0	0	0	0	235	18:15	1	130	17	0	4	2	0	0	18	0	0	0	0	172
6:30	1	175	41	1	7	10	0	0	20	0	0	0	0	255	18:30	0	103	14	1	2	5	0	0	14	0	0	0	0	139
6:45	0	201	39	0	16	12	0	1	19	0	1	0	0	289	18:45	0	109	15	0	2	7	0	0	11	0	0	0	0	144
7:00	0	105	36	0	14	16	0	1	30	0	0	0	0	202	19:00	0	108	14	0	4	3	0	0	15	0	0	0	0	144
7:15	0	117	23	2	16	21	0	0	20	0	0	0	0	199	19:15	0	113	18	0	4	3	0	0	13	0	0	0	0	151
7:30	0	108	30	2	7	14	0	0	24	0	0	0	0	185	19:30	0	99	15	1	2	4	0	1	19	0	0	0	0	141
7:45	0	151	31	1	16	11	0	0	15	0	0	0	0	225	19:45	1	85	10	0	2	1	0	0	9	0	0	0	0	108
8:00	1	138	33	1	19	7	0	1	23	0	0	0	0	223	20:00	1	79	6	0	2	5	0	0	16	0	0	0	0	109
8:15	4	135	27	1	20	10	0	0	28	0	0	0	0	225	20:15	0	81	10	1	1	2	0	0	7	0	0	1	0	103
8:30	0	106	20	2	14	8	0	0	26	0	0	0	0	176	20:30	0	97	13	0	2	3	0	0	13	0	0	0	0	128
8:45	1	114	33	1	7	9	0	2	21	0	0	0	0	188	20:45	0	82	13	0	2	3	0	0	12	0	0	0	0	112
9:00	0	99	24	1	14	13	0	2	31	0	0	0	0	184	21:00	0	69	1	0	6	3	0	1	7	0	0	0	0	87
9:15	0	99	23	1	15	9	0	1	24	0	1	0	0	173	21:15	0	66	6	0	0	4	0	0	6	0	0	0	0	82
9:30	0	93	25	0	14	6	0	1	24	0	0	0	0	163	21:30	0	78	3	0	0	4	0	0	9	0	0	0	0	94
9:45	0	85	27	2	19	9	0	1	26	0	1	0	0	170	21:45	0	58	4	0	3	3	0	0	9	0	0	0	0	77
10:00	1	86	16	1	17	11	0	3	25	0	1	0	0	161	22:00	0	62	4	0	3	1	0	1	12	0	0	0	0	83
10:15	0	85	19	1	11	13	0	2	32	0	1	1	0	165	22:15	0	55	8	0	1	3	0	2	7	0	0	1	0	77
10:30	0	98	27	0	11	6	0	2	32	0	1	0	0	177	22:30	0	47	2	0	0	3	0	2	12	0	0	0	0	66
10:45	0	99	22	1	11	5	0	3	30	0	0	0	0	171	22:45	2	35	6	0	0	8	0	0	8	0	0	1	0	60
11:00	0	80	23	0	10	9	0	3	28	0	0	0	0	153	23:00	0	40	5	0	0	2	0	0	4	0	0	1	0	52
11:15	0	82	28	1	14	8	0	3	27	0	0	0	0	163	23:15	0	39	6	0	2	1	0	1	7	0	0	0	0	56
11:30	1	93	27	0	18	7	0	3	34	0	1	0	0	184	23:30	0	32	6	0	0	5	0	0	4	0	0	0	0	47
11:45	0	102	34	0	22	12	0	6	31	0	0	0	0	207	23:45	0	37	2	0	0	1	0	0	10	0	0	0	0	50
TOTAL	16	3,939	1,056	21	377	364	1	45	794	1	8	13	0	6,635	TOTAL	14	4,654	751	19	320	264	0	96	791	0	24	6	0	6,939

AM PEAK HOUR 6:15 AM
AM PEAK VOLUME 981

PM PEAK HOUR 3:45 PM
PM PEAK VOLUME 797

CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	30	8,593	1,807	40	697	628	1	141	###	1	32	19	0	13,574
% OF TOTAL	0.2%	63.3%	13.3%	0.3%	5.1%	4.6%	0.0%	1.0%	11.7%	0.0%	0.2%	0.1%	0.0%	100.0%

Class 1 2 3 4 5 6 7 8 9 10 11 12 13

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

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

DATE: Tuesday, May 23, 2023

CITY# Chino

JOB #: SC4049

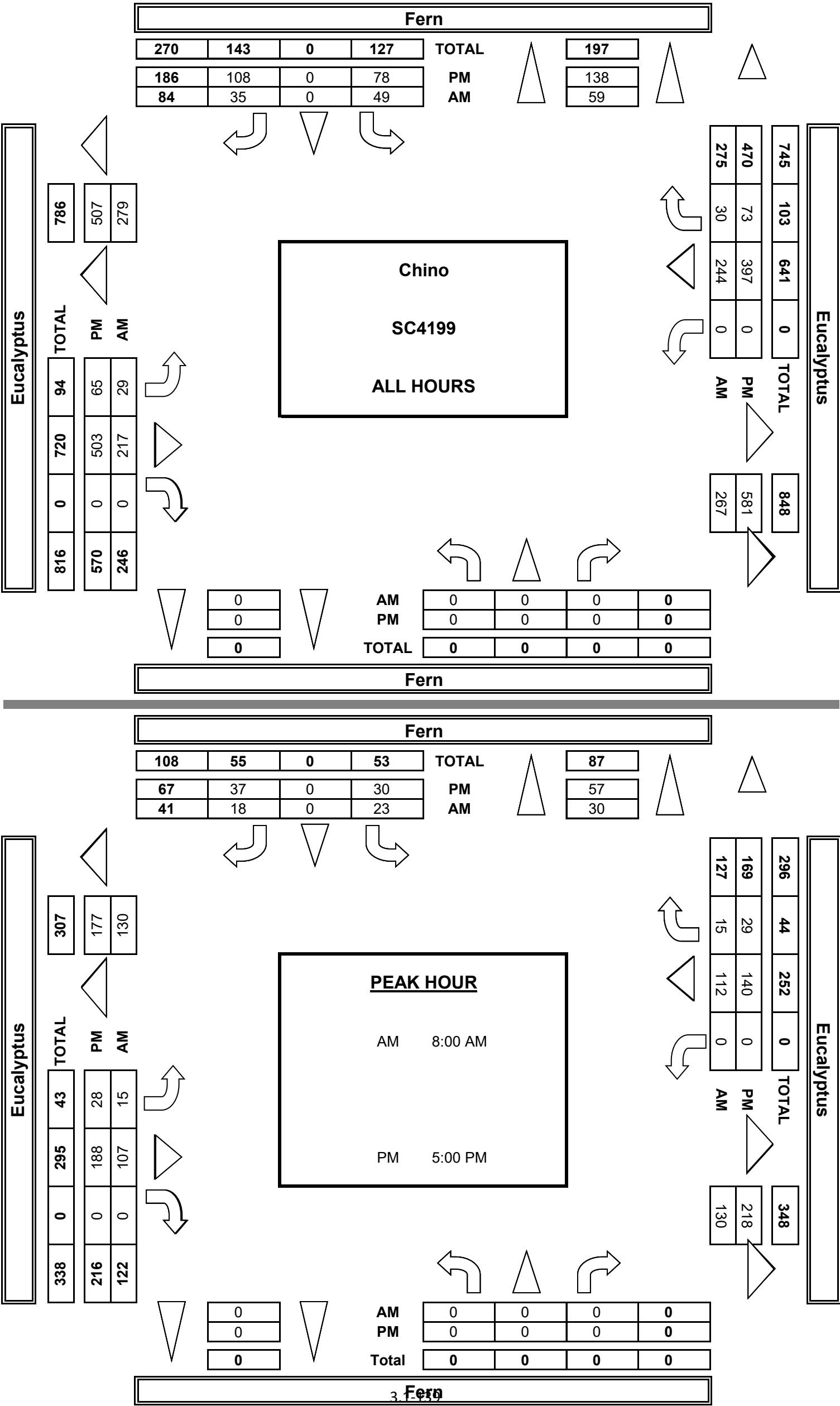
CLASS2 Euclid north of Schaefer

AM TIME	COMBINED													TOTAL	PM Time	COMBINED													TOTAL
	1	2	3	4	5	6	7	8	9	10	11	12	13			1	2	3	4	5	6	7	8	9	10	11	12	13	
0:00	0	68	13	0	1	5	0	1	10	0	0	0	0	98	12:00	0	189	58	2	23	22	0	5	67	0	0	0	0	366
0:15	1	64	9	0	2	5	0	1	9	0	0	3	0	94	12:15	2	225	37	2	39	20	0	9	70	0	0	0	0	404
0:30	0	45	11	0	0	1	0	0	7	0	0	1	0	65	12:30	0	204	50	0	36	24	0	7	63	0	0	1	0	385
0:45	0	42	5	0	4	4	0	3	11	0	0	0	0	69	12:45	0	222	51	2	26	13	0	4	56	0	2	0	0	376
1:00	0	48	4	0	0	4	0	1	8	0	0	0	0	65	13:00	1	227	68	1	31	20	0	6	50	0	2	2	0	408
1:15	0	41	6	0	4	5	0	1	16	0	0	0	0	73	13:15	1	197	55	2	27	18	0	7	55	0	1	0	0	363
1:30	0	56	9	0	2	5	0	0	7	0	0	0	0	79	13:30	0	246	59	1	29	17	0	4	47	1	2	1	0	407
1:45	0	27	6	0	1	7	0	2	12	0	0	2	0	57	13:45	1	261	71	2	29	9	0	6	38	0	0	0	0	417
2:00	0	46	20	0	4	2	0	0	10	0	1	0	0	83	14:00	1	253	72	2	35	22	0	6	62	0	3	0	0	456
2:15	0	33	10	0	1	3	0	1	19	0	1	2	0	70	14:15	0	263	65	2	29	25	0	9	48	0	0	0	0	441
2:30	2	33	11	0	3	6	1	2	12	0	1	1	0	72	14:30	1	264	73	1	26	14	0	5	54	0	3	0	0	441
2:45	0	31	6	0	6	5	0	0	11	0	0	0	0	59	14:45	0	327	84	2	27	13	0	6	41	0	4	0	0	504
3:00	0	31	15	0	1	1	0	1	18	0	0	1	0	68	15:00	1	271	64	1	21	15	0	3	49	0	4	0	0	429
3:15	0	49	16	0	7	4	0	1	18	0	0	0	0	95	15:15	2	293	75	2	22	16	0	5	39	0	2	1	0	457
3:30	0	60	16	0	1	9	0	1	21	0	0	1	0	109	15:30	1	297	71	2	31	15	0	3	33	0	1	0	0	454
3:45	0	87	21	0	1	7	0	0	18	0	0	3	0	137	15:45	2	355	80	2	28	19	0	5	34	0	0	0	0	525
4:00	1	75	18	0	1	10	0	0	16	0	1	0	0	122	16:00	0	336	69	0	21	13	0	9	45	0	1	0	0	494
4:15	0	77	22	0	4	9	0	2	18	0	0	1	0	133	16:15	2	333	67	3	23	16	0	12	42	0	0	0	0	498
4:30	2	169	43	0	6	18	0	0	17	0	1	0	0	256	16:30	1	281	70	0	20	13	0	7	28	0	1	0	0	421
4:45	0	174	37	0	4	10	0	1	27	0	1	2	0	256	16:45	2	380	68	2	18	10	0	8	30	0	0	0	0	518
5:00	0	125	42	0	3	21	0	0	25	0	0	1	0	217	17:00	0	332	68	0	10	10	0	5	27	0	0	0	0	452
5:15	1	140	46	0	13	20	0	0	29	0	1	0	0	250	17:15	0	324	50	1	17	7	0	3	31	0	0	0	0	433
5:30	2	227	80	0	10	20	0	0	24	1	0	0	0	364	17:30	3	349	43	2	15	16	0	3	19	0	0	0	0	450
5:45	2	194	67	0	19	21	0	1	33	0	3	0	0	340	17:45	0	311	57	0	15	9	0	6	28	0	1	0	0	427
6:00	0	149	65	1	20	20	0	1	25	0	9	0	0	290	18:00	1	301	63	0	7	14	0	0	24	0	0	0	0	410
6:15	0	210	60	2	21	23	0	2	35	0	2	0	0	355	18:15	4	247	43	1	10	6	0	0	31	0	0	0	0	342
6:30	1	238	58	1	23	18	0	0	37	0	1	0	0	377	18:30	0	230	48	2	3	9	0	0	25	0	0	0	0	317
6:45	0	285	56	1	29	22	0	2	39	0	2	0	0	436	18:45	0	233	32	0	6	8	0	0	24	0	1	0	0	304
7:00	1	217	52	3	28	25	0	5	55	0	0	1	0	387	19:00	0	216	34	0	9	9	0	1	27	0	0	0	0	296
7:15	0	222	41	2	32	35	0	5	55	0	0	0	0	392	19:15	0	242	40	1	5	6	0	0	29	0	0	0	0	323
7:30	1	247	44	2	23	28	0	2	62	0	0	0	0	409	19:30	0	213	27	1	3	8	0	1	26	0	0	0	0	279
7:45	0	288	58	3	25	31	0	2	45	1	0	0	0	453	19:45	1	190	31	0	3	4	0	3	14	0	1	0	0	247
8:00	1	277	55	2	28	18	0	5	47	0	1	0	0	434	20:00	1	165	19	0	4	11	0	0	32	0	0	0	0	232
8:15	4	277	55	2	31	24	0	1	57	0	0	0	0	451	20:15	0	174	30	2	2	9	0	0	17	0	0	2	0	236
8:30	0	214	38	3	28	25	0	1	50	1	0	0	0	360	20:30	0	162	24	0	3	7	0	0	26	0	0	0	0	222
8:45	1	228	67	2	19	21	0	3	51	0	0	0	0	392	20:45	0	161	32	0	3	7	0	0	24	0	0	0	0	227
9:00	0	194	58	2	30	28	0	2	61	0	0	0	0	375	21:00	1	160	7	0	6	11	0	2	18	0	0	0	0	205
9:15	0	197	45	1	34	17	0	1	66	0	2	0	0	363	21:15	1	139	18	0	1	8	0	1	21	0	0	0	0	189
9:30	1	175	53	1	28	15	0	1	51	0	0	0	0	325	21:30	0	164	10	0	0	9	0	0	17	0	0	0	0	200
9:45	0	170	47	2	30	24	0	6	57	0	1	0	0	337	21:45	0	132	19	0	3	4	0	0	18	0	0	0	0	176
10:00	1	175	33	2	30	19	0	5	51	0	1	0	0	317	22:00	0	125	21	0	3	2	0	1	23	0	0	0	0	175
10:15	2	188	41	1	29	26	0	4	60	0	1	1	0	353	22:15	1	122	20	0	1	6	0	2	16	0	0	1	0	169
10:30	0	185	50	1	21	16	0	2	60	0	1	0	0	336	22:30	0	121	11	0	1	5	0	2	18	0	0	0	0	158
10:45	0	203	48	1	23	17	0	4	56	0	0	0	0	352	22:45	2	84	19	0	5	9	1	3	17	0	0	1	0	141
11:00	1	177	60	0	20	17	0	4	57	0	2	0	0	338	23:00	0	77	15	0	1	3	0	0	8	0	0	1	0	105
11:15	0	187	64	2	26	16	0	6	58	0	0	0	0	359	23:15	0	71	15	0	2	4	0	1	12	0	0	1	0	106
11:30	1	198	56	0	34	21	0	6	63	0	2	0	0	381	23:30	0	57	17	0	0	7	0	0	10	0	0	0	0	91
11:45	1	207	58	0	33	22	0	9	53	0	0	0	0	383	23:45	0	54	6	0	0	3	0	1	19	0	0	0	0	83
TOTAL	27	7,050	1,795	37	743	730	1	98	###	3	35	20	0	12,186	TOTAL	33	10,580	2,126	41	679	545	1	161	###	1	29	11	0	15,759
AM PEAK HOUR														7:30 AM	PM PEAK HOUR														3:30 PM
AM PEAK VOLUME														1,747	PM PEAK VOLUME														1,971

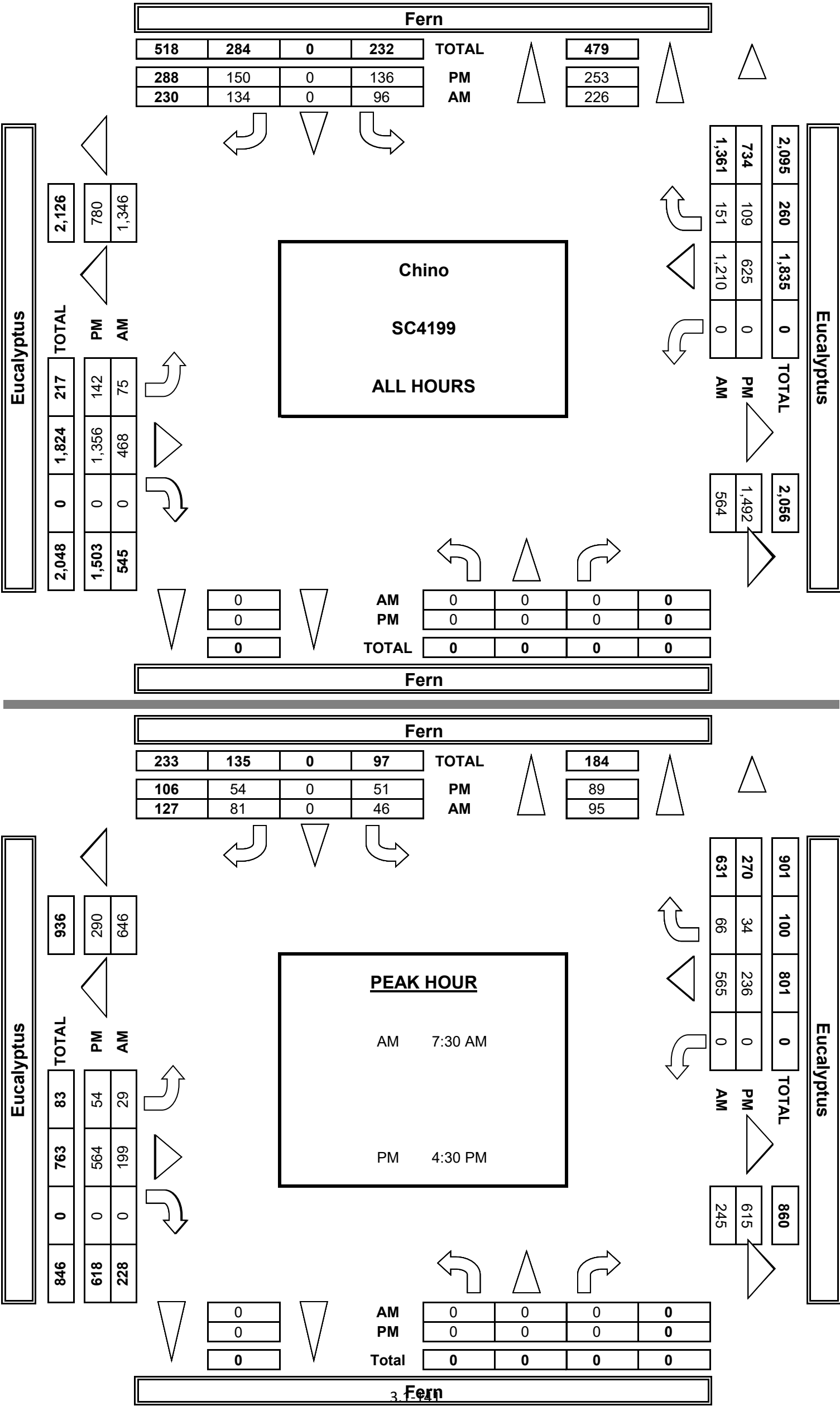
CLASS 1	Class 1 — Motorcycles	CLASS 8	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	CLASS 9	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	CLASS 10	6 or More Axles, Single Trailer
CLASS 4	Buses	CLASS 11	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	CLASS 12	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	CLASS 13	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	60	17,630	3,921	78	1,422	1,275	2	259	###	4	64	31	0	27,945
% OF TOTAL	0.2%	63.1%	14.0%	0.3%	5.1%	4.6%	0.0%	0.9%	11.4%	0.0%	0.2%	0.1%	0.0%	100.0%

AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Sat, Sep 9, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
San Antonio
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4199
3
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W

▲ N

S ▼

E ▶

NORTHBOUND
San Antonio

SOUTHBOUND
San Antonio

EASTBOUND
Chino

WESTBOUND
Chino

TOTAL

LANES:

NL
0

NT
1

NR
0

SL
0

ST
1

SR
0

EL
1

ET
2

ER
0

WL
1

WT
2

WR
0

U-TURNS

NB
0

SB
0

EB
0

WB
0

TTL

RTOR

NRR
0

SRR
0

ERR
0

WRR
0

MD

11:00 AM
11:15 AM
11:30 AM
11:45 AM
12:00 PM
12:15 PM
12:30 PM
12:45 PM
VOLUMES
APPROACH %
APP/DEPART
BEGIN PEAK HR
VOLUMES
APPROACH %
PEAK HR FACTOR
APP/DEPART

2
5
9
6
5
6
4
4
41
17%
246
22
18%
0.902
119

23
17
20
23
19
24
26
19
171
70%
/
11:00 AM
83
70%
0.902
/
108

4
3
3
4
8
3
4
3
34
14%
218
14
12%
/
124

6
0
1
2
2
2
1
16
128
72%
177
80
77%
0.765
/
104

6
2
3
4
8
3
4
3
33
19%
209
15
14%
/
124

1
4
2
4
2
2
3
2
20
6%
319
11
6%
170

36
33
29
33
30
24
28
30
243
76%
/
131
77%
0.944
/
154

5
5
10
8
8
5
7
8
56
18%
293
28
16%
/
154

6
4
4
2
4
1
4
0
25
7%
361
16
8%
198

33
52
44
39
32
38
38
33
309
86%
/
168
85%
0.825
/
205

4
4
1
5
2
3
5
3
27
7%
383
14
7%
205

148
146
151
146
131
124
135
122
1,103
0
591
0.978
0

U-TURNS

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

RTOR

2
1
2
3
2
5
2
0
17

2
0
1
0
4
1
2
0
10

3
1
3
3
3
0
1
13

0
1
0
0
2
0
1
5

8

3

8

1

San Antonio

NORTH SIDE

Chino

WEST SIDE

EAST SIDE

Chino

SOUTH SIDE

San Antonio

MD

11:00 AM
11:15 AM
11:30 AM
11:45 AM
12:00 PM
12:15 PM
12:30 PM
12:45 PM
TOTAL

ALL PED AND BIKE

E LEG
0
1
1
0
0
0
0
0
2

W LEG
0
0
0
0
0
0
0
0
0

S LEG
0
0
0
0
1
4
2
0
7

N LEG
1
1
0
1
2
0
0
3
8

TOTAL
1
2
1
1
3
4
2
3
17

PEDESTRIAN CROSSINGS

0
1
1
0
0
0
0
0
2

0
0
0
0
0
0
0
0
0

0
0
0
0
0
1
0
0
1

1
1
0
1
0
0
0
0
3

TOTAL
1
2
1
1
0
1
0
0
6

BICYCLE CROSSINGS

0
0
0
0
0
0
0
0
0

0
0
0
0
0
0
0
0
0

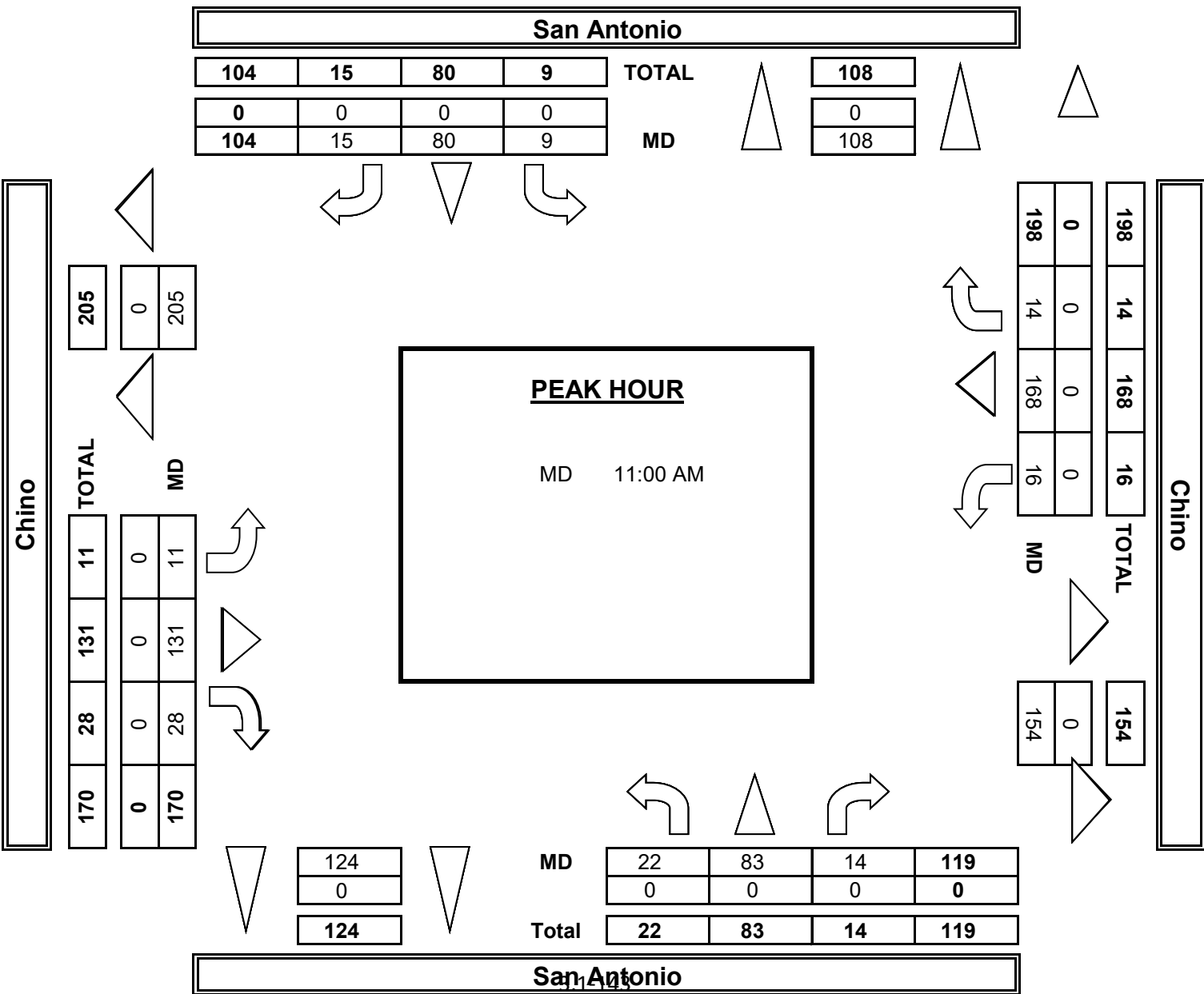
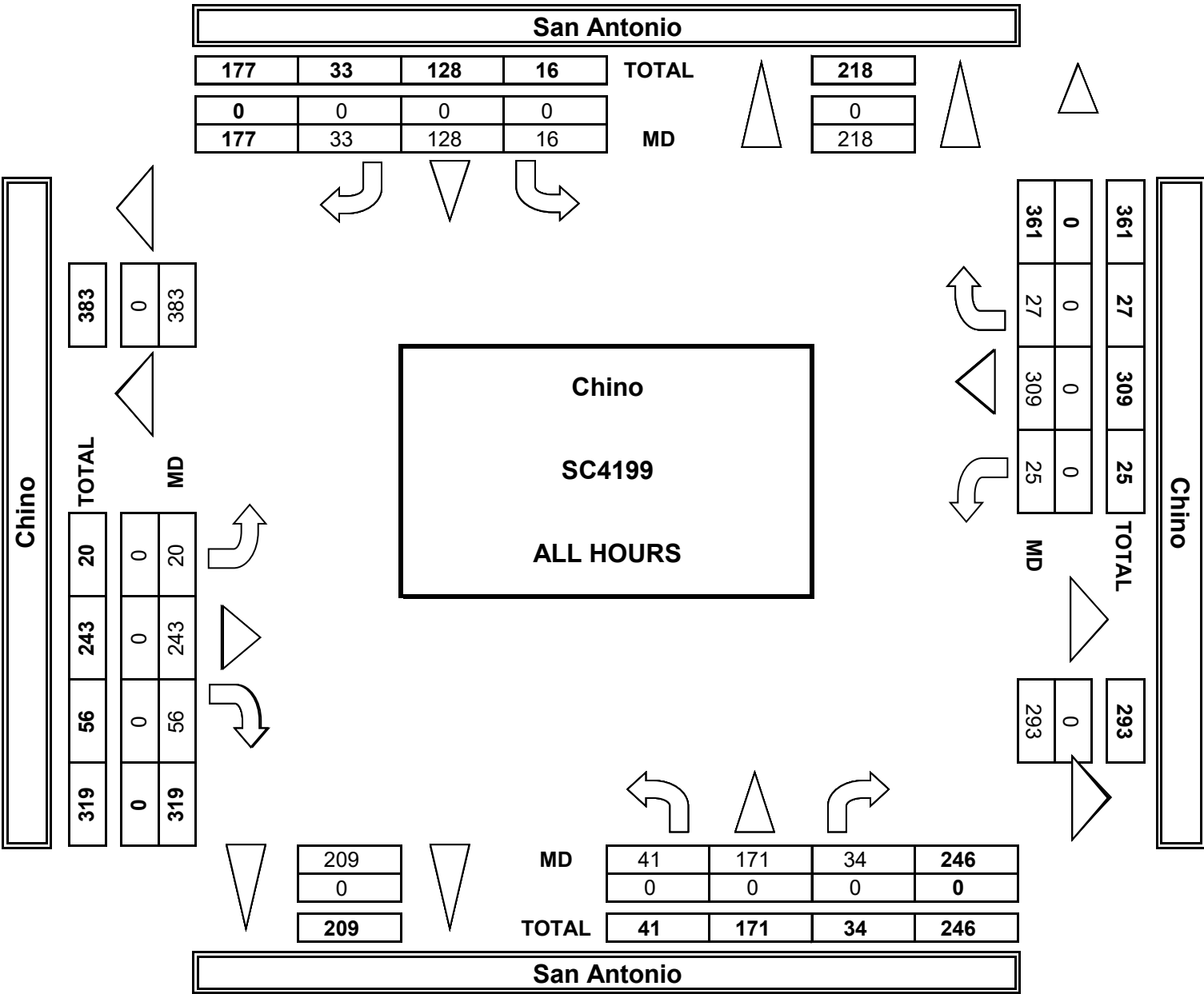
0
0
0
1
2
3
0
0
6

0
0
0
0
2
0
3
5

TOTAL
0
0
3
2
3
3
2
11

3.1-142

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Sat, Sep 9, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino San Antonio Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4199 4 SIGNAL

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	San Antonio			San Antonio			Schaefer			Schaefer			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

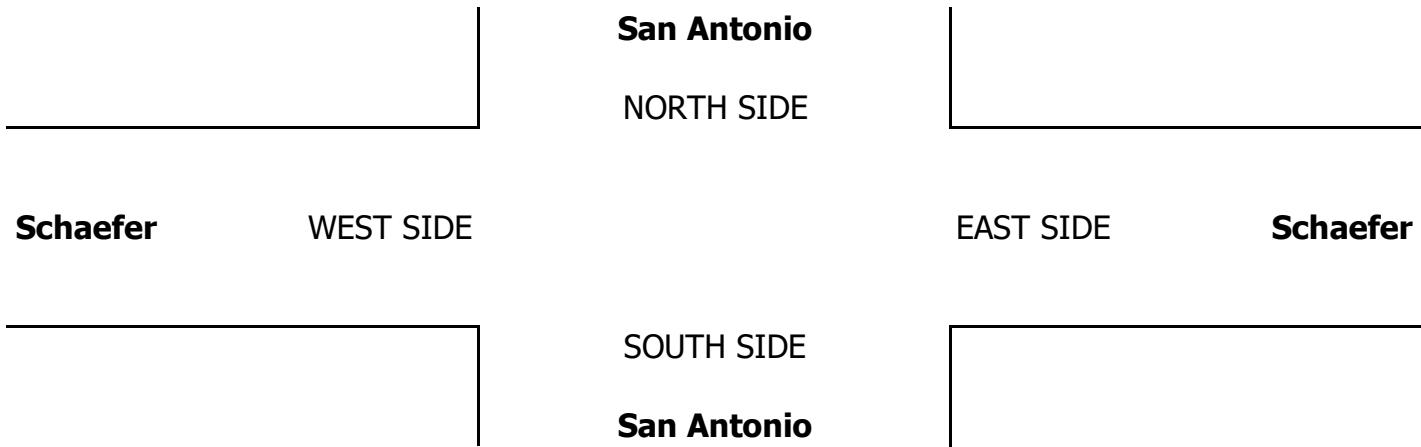
MD	11:00 AM	5	10	4	3	8	7	4	58	6	5	73	2	185
	11:15 AM	8	8	4	4	9	6	4	58	6	3	75	4	189
	11:30 AM	8	7	3	11	10	10	7	73	8	2	53	6	198
	11:45 AM	5	9	4	5	10	3	3	83	5	6	59	5	197
	12:00 PM	6	6	4	7	10	7	4	67	10	3	53	9	186
	12:15 PM	9	12	2	5	4	4	5	67	4	2	63	5	182
	12:30 PM	7	12	2	4	4	5	6	64	2	3	45	5	159
	12:45 PM	9	10	2	2	4	8	7	66	5	1	46	4	164
	VOLUMES	57	74	25	41	59	50	40	536	46	25	467	40	1,460
	APPROACH %	37%	47%	16%	27%	39%	33%	6%	86%	7%	5%	88%	8%	
	APP/DEPART	156	/	154	150	/	130	622	/	602	532	/	574	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	27	30	15	27	39	26	18	281	29	14	240	24	770
	APPROACH %	38%	42%	21%	29%	42%	28%	5%	86%	9%	5%	86%	9%	
	PEAK HR FACTOR	0.900			0.742			0.901			0.848			0.972
	APP/DEPART	72	/	72	92	/	82	328	/	323	278	/	293	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	3	3	0
3	4	1	0
3	6	1	2
2	0	0	1
1	6	3	1
1	1	1	0
1	2	0	1
1	5	1	1
12	27	10	6

9	16	5	4



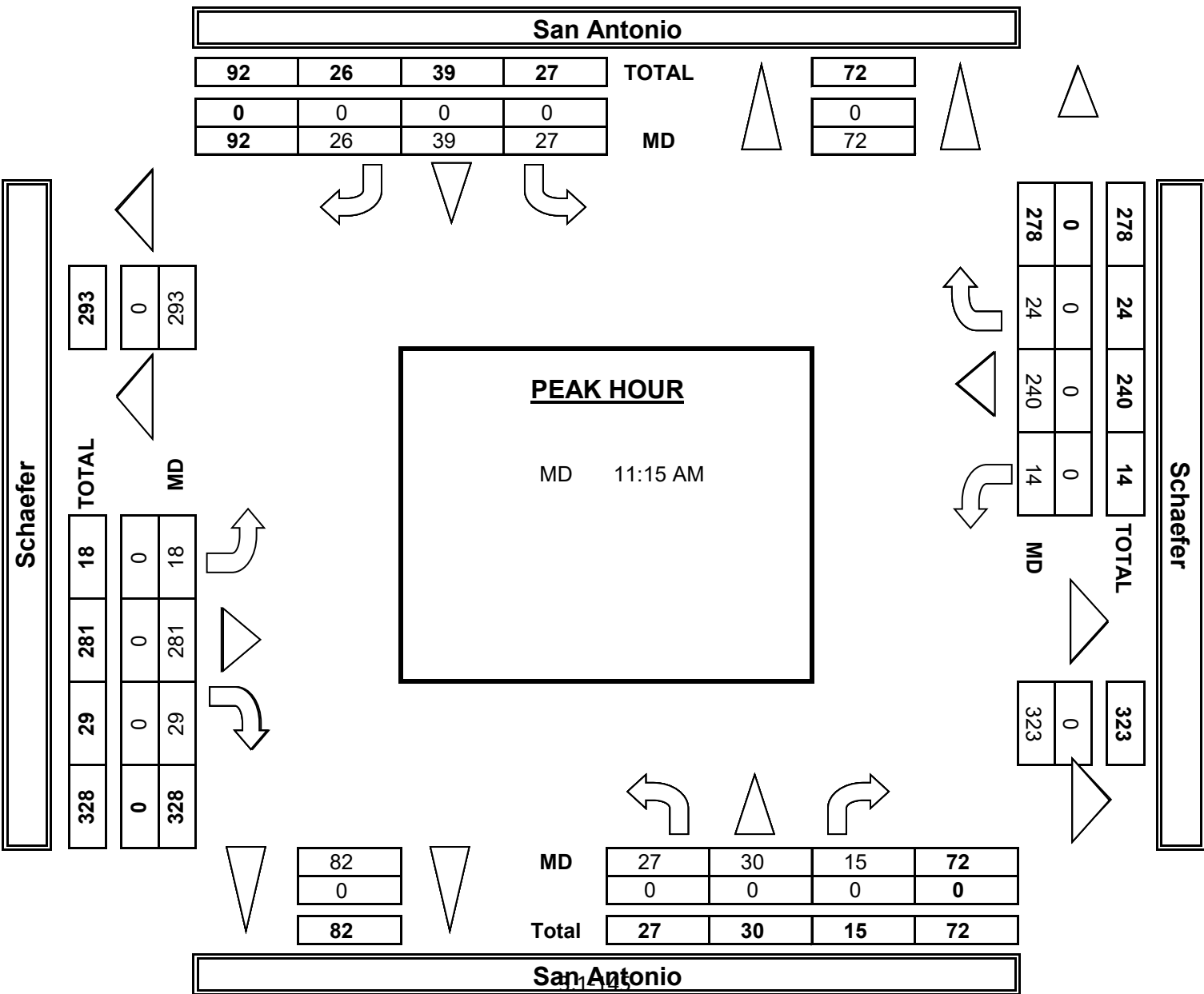
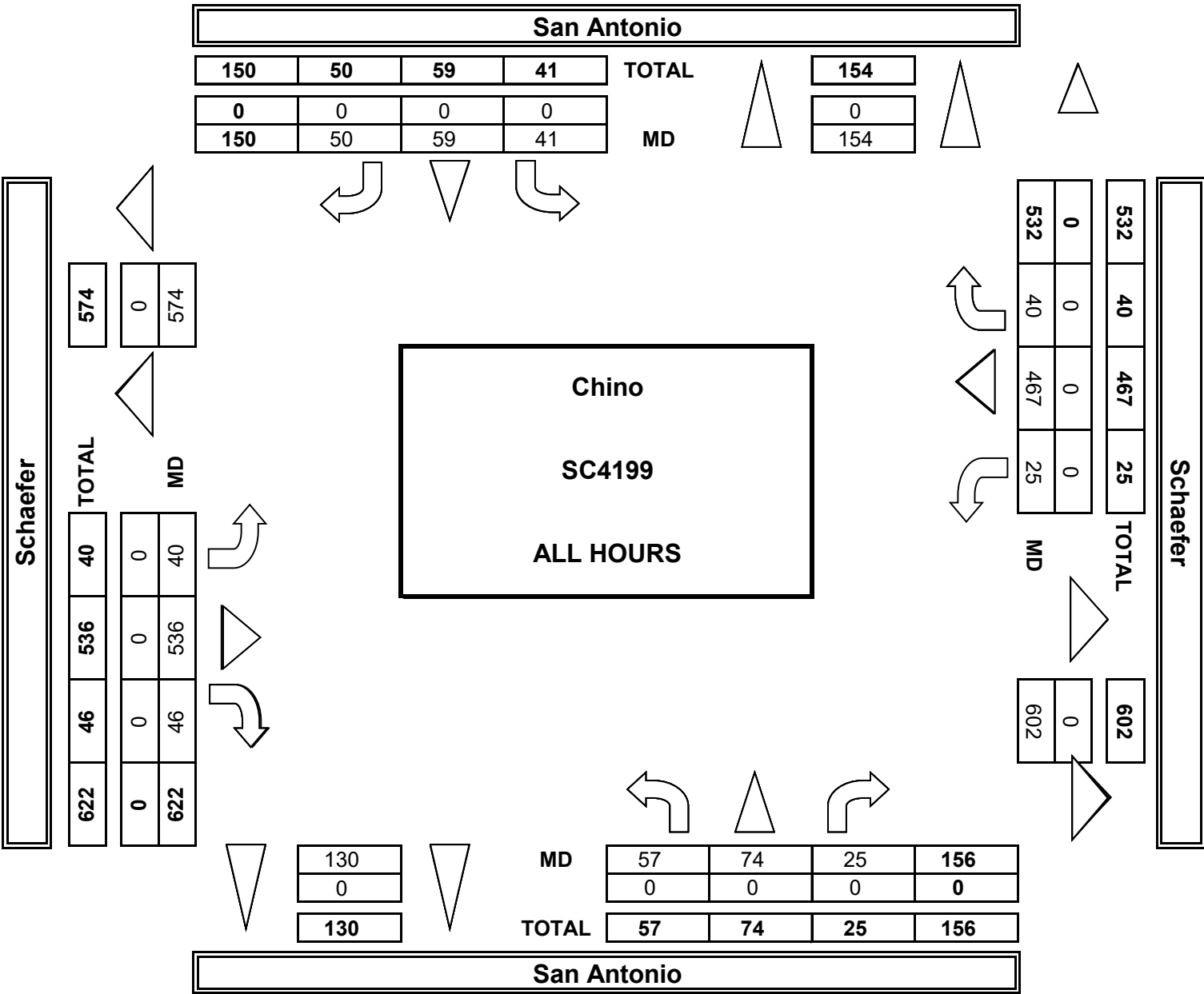
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
TOTAL	

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
1	0	1	0	2
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	0	1	1	2
0	0	0	2	2
0	0	0	1	1
1	0	3	5	9

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
1	0	1	0	2
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	0	1	1	2
0	0	0	2	2
0	0	0	1	1
1	0	3	5	9

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Sat, Sep 9, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
San Antonio
Edison

PROJECT #:
LOCATION #:
CONTROL:

SC4199
5
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

◀ W

▲ N

S ▼

E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	San Antonio			San Antonio			Edison			Edison			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	2	1	1	2	1	

MD	11:00 AM	8	3	4	2	7	4	2	58	6	3	66	5	168
	11:15 AM	5	3	3	2	5	7	9	83	9	5	77	6	214
	11:30 AM	3	9	1	3	6	4	6	85	5	3	90	0	215
	11:45 AM	5	4	0	2	6	12	9	80	6	3	83	7	217
	12:00 PM	3	5	2	2	2	5	6	93	8	4	63	2	195
	12:15 PM	1	5	1	2	2	9	11	77	1	3	59	2	173
	12:30 PM	6	4	2	3	2	5	6	95	7	3	74	1	208
	12:45 PM	2	5	3	5	3	3	5	108	6	0	65	1	206
	VOLUMES	33	38	16	21	33	49	54	679	48	24	577	24	1,597
	APPROACH %	38%	44%	18%	20%	32%	48%	7%	87%	6%	4%	92%	4%	
	APP/DEPART	87	/	116	103	/	105	781	/	717	626	/	659	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	16	21	6	9	19	28	30	341	28	15	313	15	841
	APPROACH %	37%	49%	14%	16%	34%	50%	8%	85%	7%	4%	91%	4%	
	PEAK HR FACTOR	0.827			0.700			0.932			0.922			0.969
	APP/DEPART	43	/	66	56	/	62	399	/	356	343	/	357	0

U-TURNS					
NB	SB	EB	WB	TTL	
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	1	1	1
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	1	1	1

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
4	2	1	0
2	7	0	2
1	4	0	0
0	9	1	1
2	3	1	0
0	8	0	0
2	5	1	0
2	3	2	0
13	41	6	3

5	23	2	3

San Antonio

NORTH SIDE

Edison

WEST SIDE

EAST SIDE

Edison

San Antonio

SOUTH SIDE

MD	11:00 AM	
	11:15 AM	
	11:30 AM	
	11:45 AM	
	12:00 PM	
	12:15 PM	
	12:30 PM	
	12:45 PM	
TOTAL		

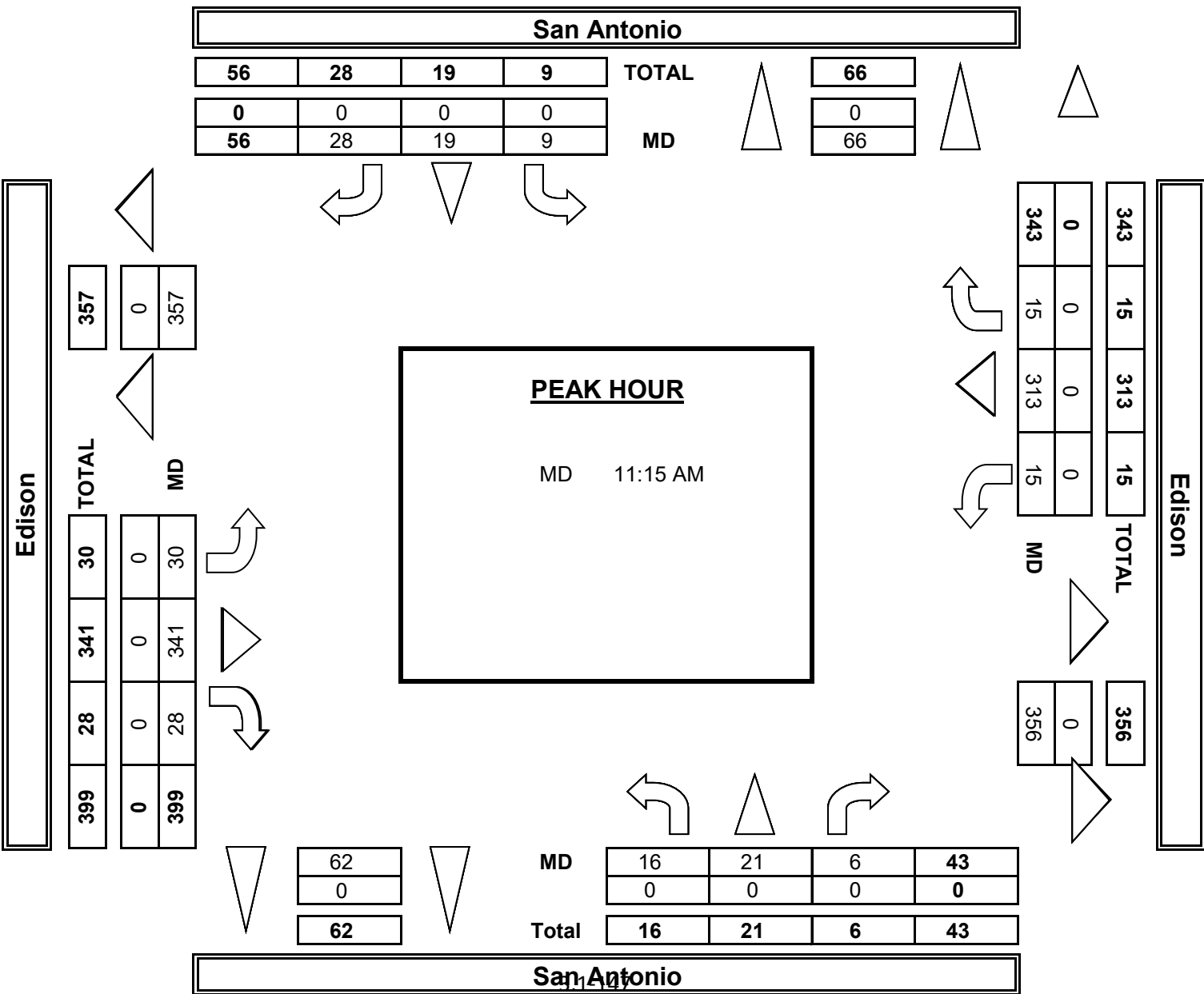
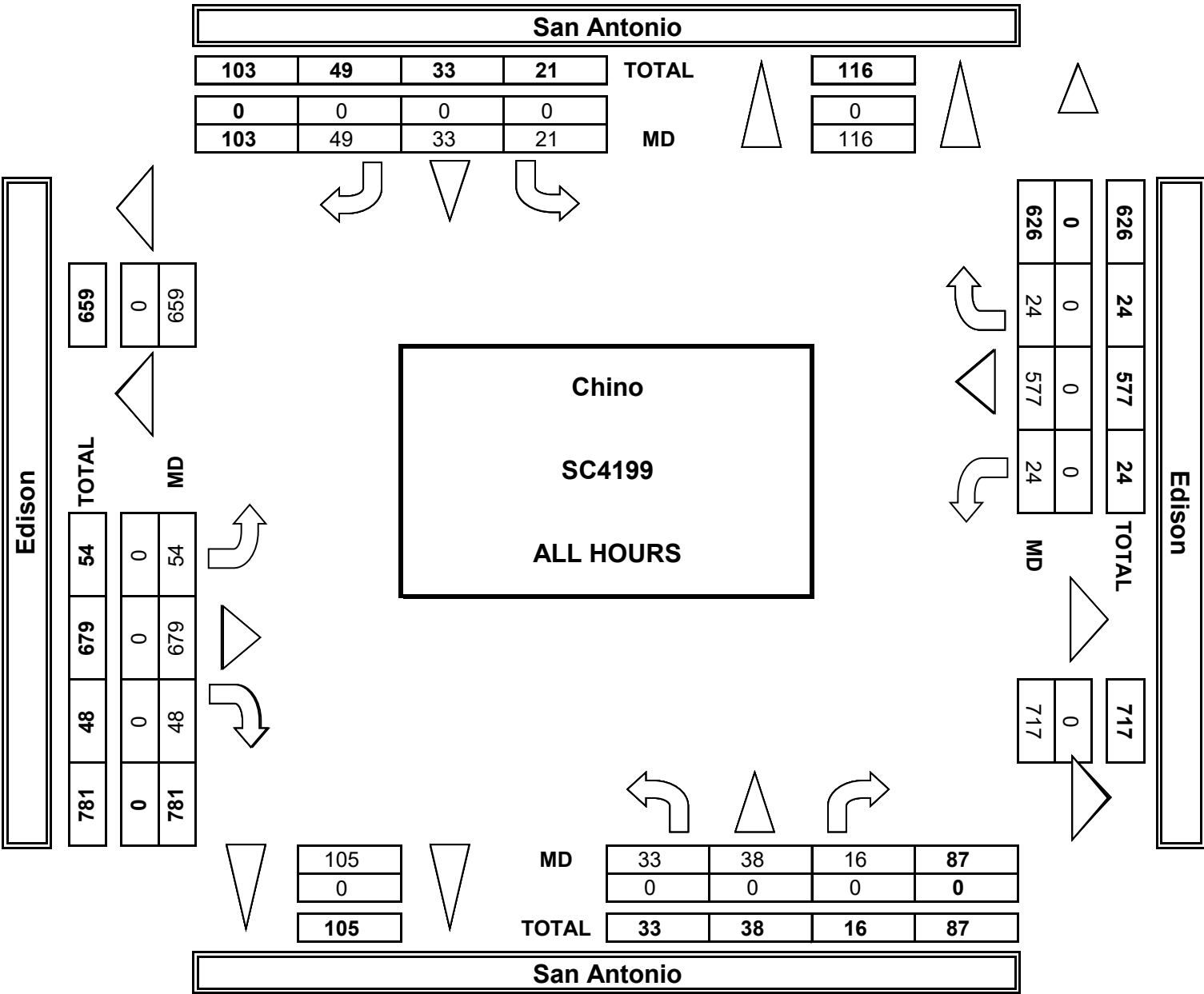
ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
1	0	0	0	1
0	0	1	0	1
1	0	0	0	1
0	1	0	1	2
0	0	0	0	0
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
2	1	3	1	7

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	3	0	3

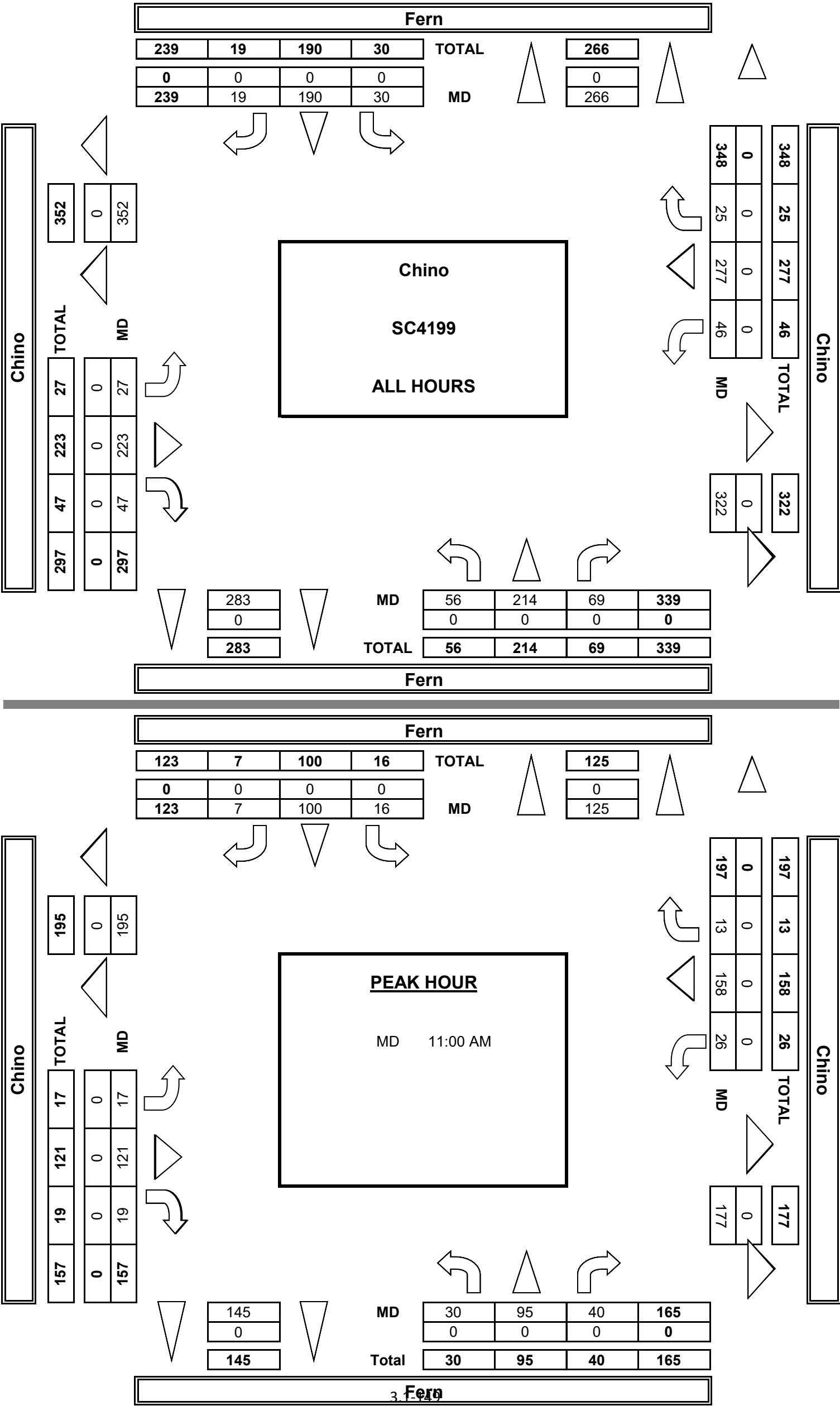
BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
1	0	0	0	1
0	0	0	0	0
1	0	0	0	1
0	1	0	1	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	1	0	1	4

3.1-146

AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Sat, Sep 9, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Fern
Schaefer

PROJECT #:
LOCATION #:
CONTROL:

SC4199
7
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

▲
N
◀ W
S
▼

E ▶

NORTHBOUND
Fern
NL
1
NT
2
NR
0

SOUTHBOUND
Fern
SL
1
ST
2
SR
0

EASTBOUND
Schaefer
EL
1
ET
2
ER
0

WESTBOUND
Schaefer
WL
1
WT
2
WR
0

TOTAL

LANES:

U-TURNS

NB
0

SB
0

EB
0

WB
0

TTL

RTOR

NRR
0

SRR
0

ERR
0

WRR
0

MD

11:00 AM
11:15 AM
11:30 AM
11:45 AM
12:00 PM
12:15 PM
12:30 PM
12:45 PM
VOLUMES
APPROACH %
APP/DEPART
BEGIN PEAK HR
VOLUMES
APPROACH %
PEAK HR FACTOR
APP/DEPART

15
10
10
16
7
13
11
7
89
29%
308
46
30%
0.842
155

19
20
23
27
24
24
33
26
196
64%
/
98
63%
0.842
/
169

3
2
5
3
0
3
3
4
23
7%
339
11
7%
/
169

13
10
12
8
9
10
11
22
73
26%
285
39
24%
160
0
7
2
7

17
20
25
19
31
15
3
6
160
56%
/
90
56%
0.833
/
123

5
7
6
7
8
10
3
6
52
18%
226
31
19%
123

7
4
8
8
4
5
4
6
46
8%
590
25
8%
323
25
8%
/
323

10
8
5
9
7
4
6
5
54
9%
586
25
8%
323

1
0
2
2
3
1
0
3
12
2%
491
8
3%
241
187
78%
/
264

8
14
13
8
9
16
12
17
97
20%
523
46
19%
0
0
0
0
0
0
0
0
1,674
0
879
0.951
0

U-TURNS

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

RTOR

3
2
1
0
0
1
2
0
11

0
4
5
5
4
8
1
5
32

2
2
1
0
0
1
0
0
7

5
5
1
8
1
5
0
8
31

2

22

3

12

Fern

NORTH SIDE

Schaefer

WEST SIDE

EAST SIDE

Schaefer

SOUTH SIDE

Fern

MD

11:00 AM
11:15 AM
11:30 AM
11:45 AM
12:00 PM
12:15 PM
12:30 PM
12:45 PM
TOTAL

ALL PED AND BIKE

E LEG
2
0
2
1
0
1
1
1

W LEG
1
0
0
3
0
0
0
4
8

S LEG
1
0
1
1
0
0
0
4
7

N LEG
1
0
0
0
1
0
0
0
2

TOTAL
5
0
3
5
0
2
1
9
25

PEDESTRIAN CROSSINGS

1
0
1
1
0
0
1
1
1

0
0
0
2
0
0
0
4
6

0
0
1
0
0
0
0
0
5

1
0
0
0
0
0
0
0
1

TOTAL
2
0
1
4
0
0
1
9
17

BICYCLE CROSSINGS

1
0
1
0
0
1
0
0
3

1
0
0
1
0
0
0
2
2

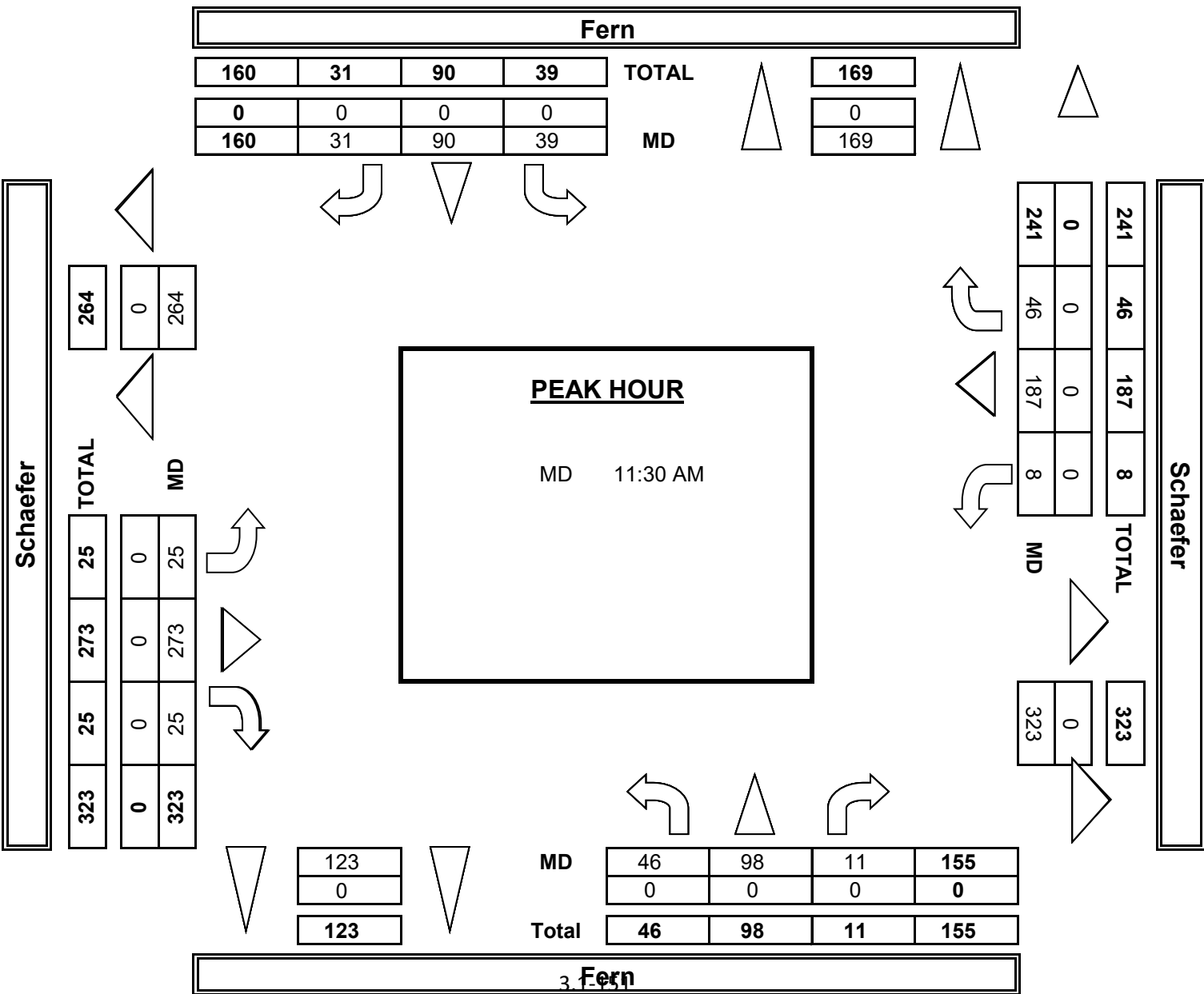
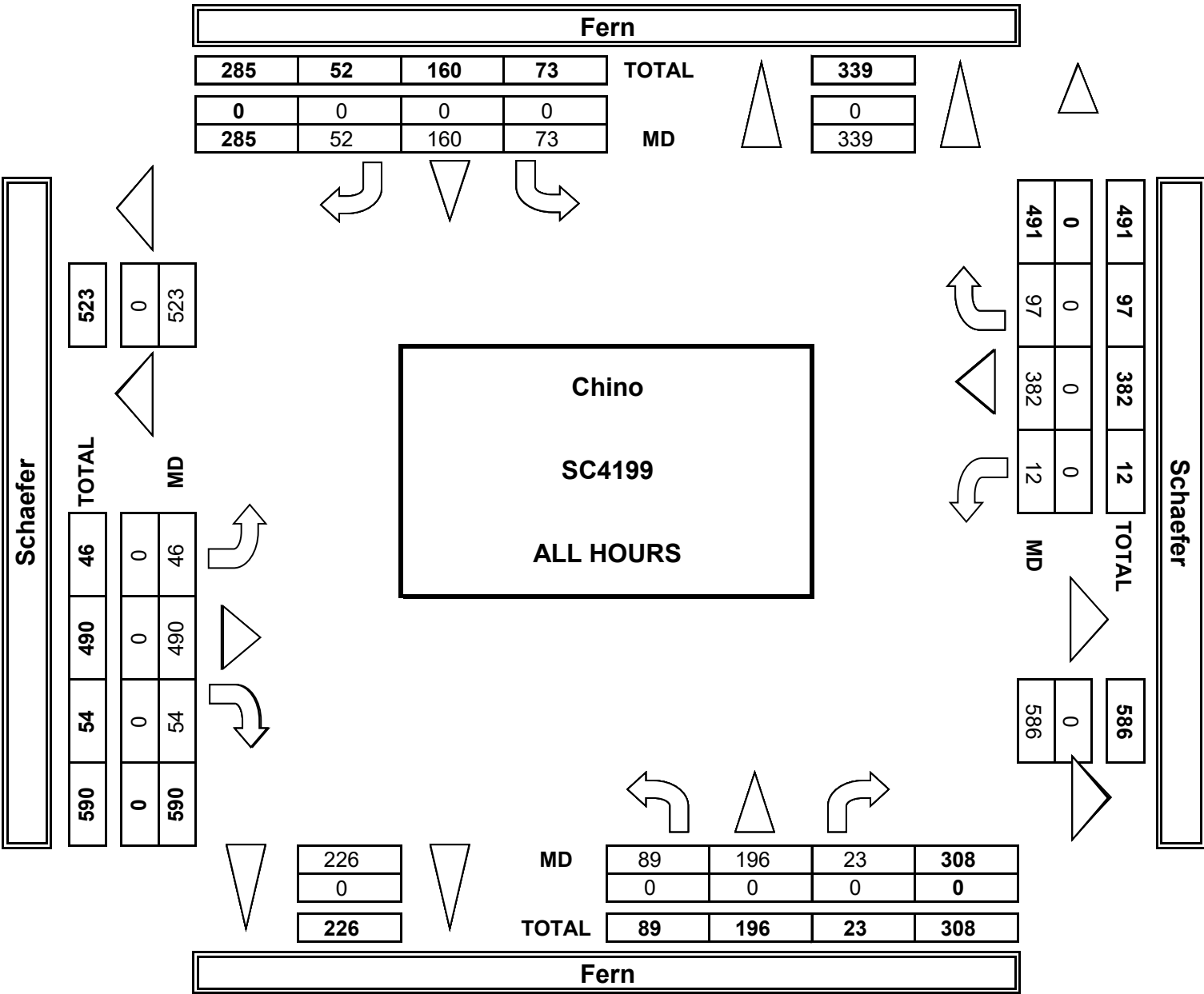
1
0
1
0
0
0
0
1
2

0
0
0
0
1
0
0
1
8

TOTAL
3
0
2
1
0
1
0
8
8

3.1-150

AimTD LLC
TURNING MOVEMENT COUNTS



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

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

PROJECT #: SC4199
LOCATION #: 8
CONTROL: SIGNAL

DATE:
Sat, Sep 9, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Fern
Edison

NOTES:

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Fern			Fern			Edison			Edison			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

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

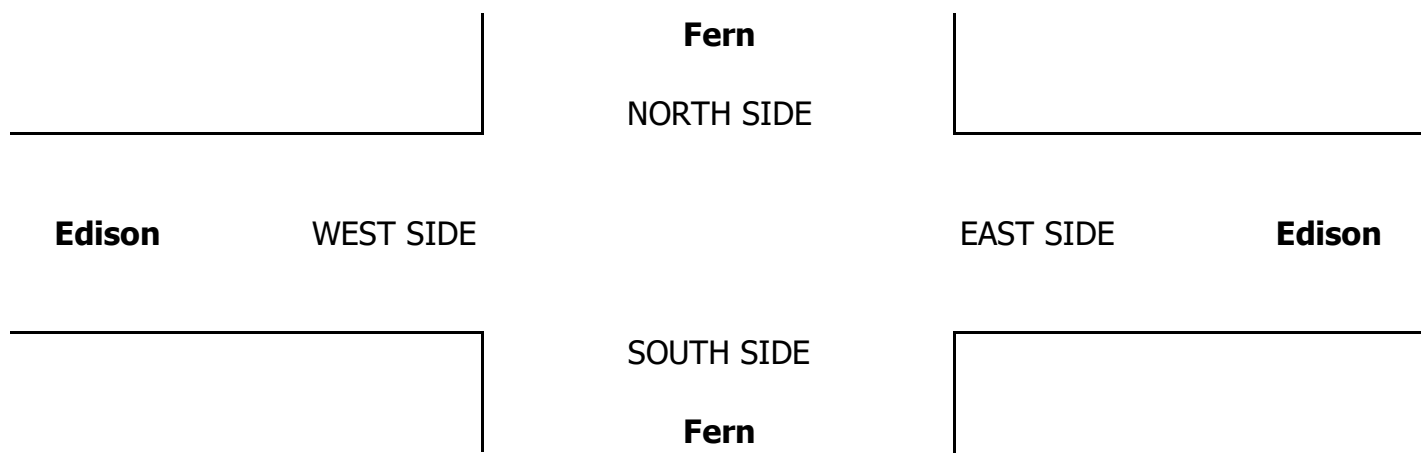
RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

MD	11:00 AM	1	16	2	0	13	19	8	55	3	1	69	8	195
	11:15 AM	4	13	3	5	11	10	15	71	2	4	68	8	214
	11:30 AM	4	12	2	2	21	15	22	73	2	8	78	2	241
	11:45 AM	3	17	2	3	16	17	8	57	5	5	79	6	218
	12:00 PM	5	16	1	3	20	11	16	79	5	2	51	3	212
	12:15 PM	3	15	2	2	13	6	17	61	4	2	58	8	191
	12:30 PM	1	7	1	2	11	9	15	78	3	2	63	6	198
	12:45 PM	3	13	4	3	14	6	20	89	8	1	56	3	220
	VOLUMES	24	109	17	20	119	93	121	563	32	25	522	44	1,689
	APPROACH %	16%	73%	11%	9%	51%	40%	17%	79%	4%	4%	88%	7%	
	APP/DEPART	150	/	274	232	/	176	716	/	600	591	/	639	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	16	58	8	13	68	53	61	280	14	19	276	19	885
	APPROACH %	20%	71%	10%	10%	51%	40%	17%	79%	4%	6%	88%	6%	
PEAK HR FACTOR	0.932		0.882		0.888		0.888		0.872		0.918			
APP/DEPART	82	/	138	134	/	101	355	/	301	314	/	345	0	

[illegible]

1	9	1	1
2	6	1	1
1	10	0	0
1	11	1	3
0	7	2	3
2	4	1	6
0	6	0	1
2	3	1	0
9	56	7	15

4	34	4	7



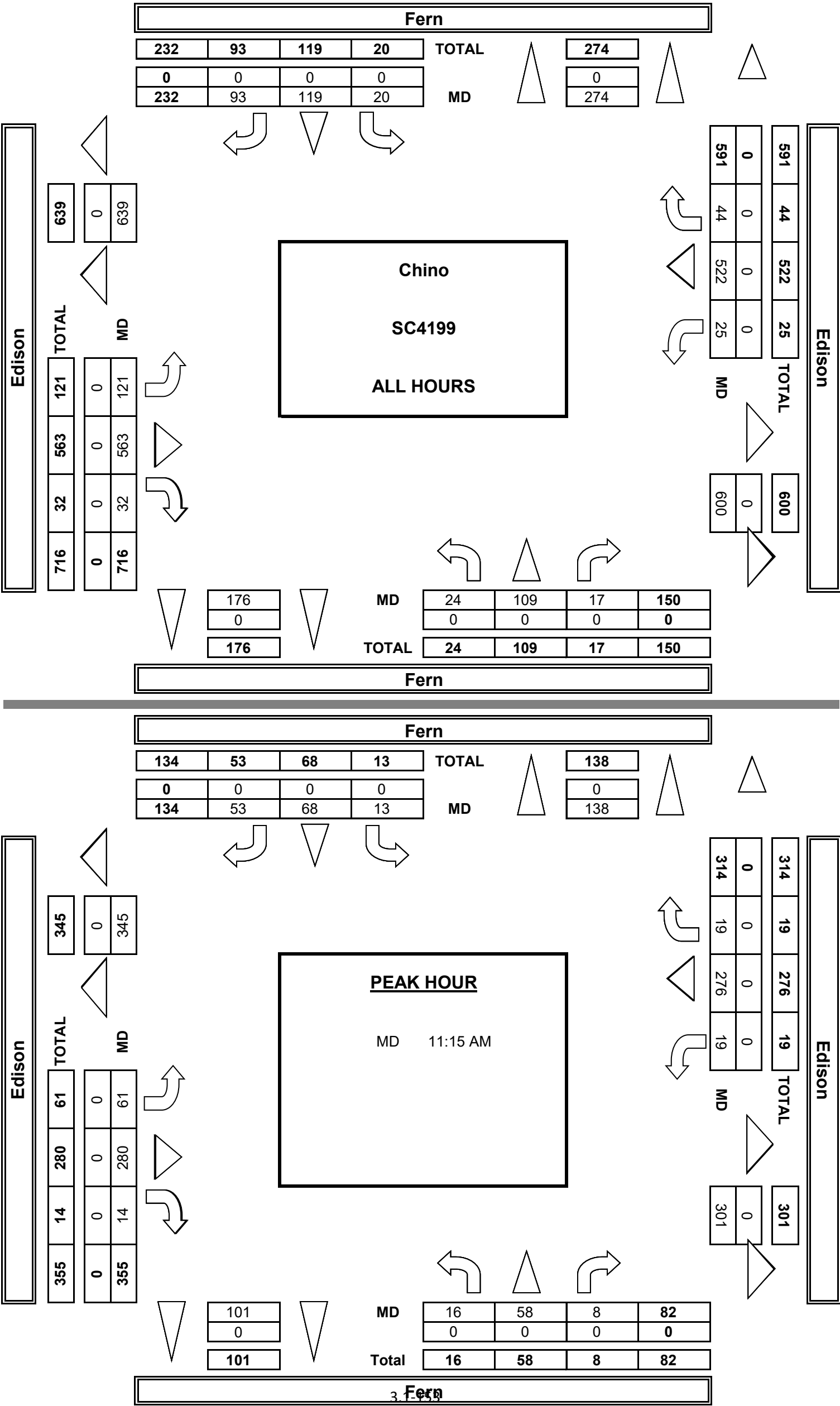
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
	TOTAL

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	2	0	0	2
0	0	1	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
2	1	1	0	4
0	2	1	0	3
0	0	0	0	0
2	6	3	0	11

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	1	0	2
0	1	1	0	2
0	0	0	0	0
1	1	3	0	5

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
0	2	0	0	2
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
1	1	0	0	2
0	1	0	0	1
0	0	0	0	0
1	5	0	0	6

AimTD LLC
TURNING MOVEMENT COUNTS



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

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

PROJECT #: SC4199
LOCATION #: 9
CONTROL: STOP N

DATE:
Sat, Sep 9, 23

LOCATION: Chino
NORTH & SOUTH: Shopping Center DWY
EAST & WEST: Schaefer

NOTES:

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Shopping Center DWY			Shopping Center DWY			Schaefer			Schaefer			
LANES:	NL 1	NT X	NR 1	SL X	ST X	SR X	EL X	ET 2	ER 0	WL 1	WT 2	WR X	TOTAL

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

RTOR			
NRR X	SRR X	ERR X	WRR X

MD	11:00 AM	32	0	23	0	0	0	0	31	34	19	33	0	172
	11:15 AM	44	0	21	0	0	0	0	32	31	10	33	0	171
	11:30 AM	32	0	15	0	0	0	0	50	37	9	29	0	172
	11:45 AM	28	0	29	0	0	0	0	52	37	13	28	0	187
	12:00 PM	38	0	29	0	0	0	0	37	33	20	23	0	180
	12:15 PM	41	0	31	0	0	0	0	34	42	13	22	0	183
	12:30 PM	27	0	22	0	0	0	0	37	32	13	20	0	151
	12:45 PM	40	0	26	0	0	0	0	37	27	15	22	0	167
	VOLUMES	282	0	196	0	0	0	0	310	273	112	210	0	1,385
	APPROACH %	59%	0%	41%	0%	0%	0%	0%	53%	47%	35%	65%	0%	
	APP/DEPART	479	/	0	0	/	386	584	/	506	322	/	493	0
	BEGIN PEAK HR	11:30 AM												
	VOLUMES	139	0	104	0	0	0	0	173	149	55	102	0	723
	APPROACH %	57%	0%	43%	0%	0%	0%	0%	54%	46%	35%	65%	0%	
PEAK HR FACTOR	0.847		0.000		0.904		0.904		0.913		0.961			
APP/DEPART	244	/	0	0	/	205	322	/	277	157	/	241	0	

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
1	0	1	0	2

[illegible]

0	0	0	0



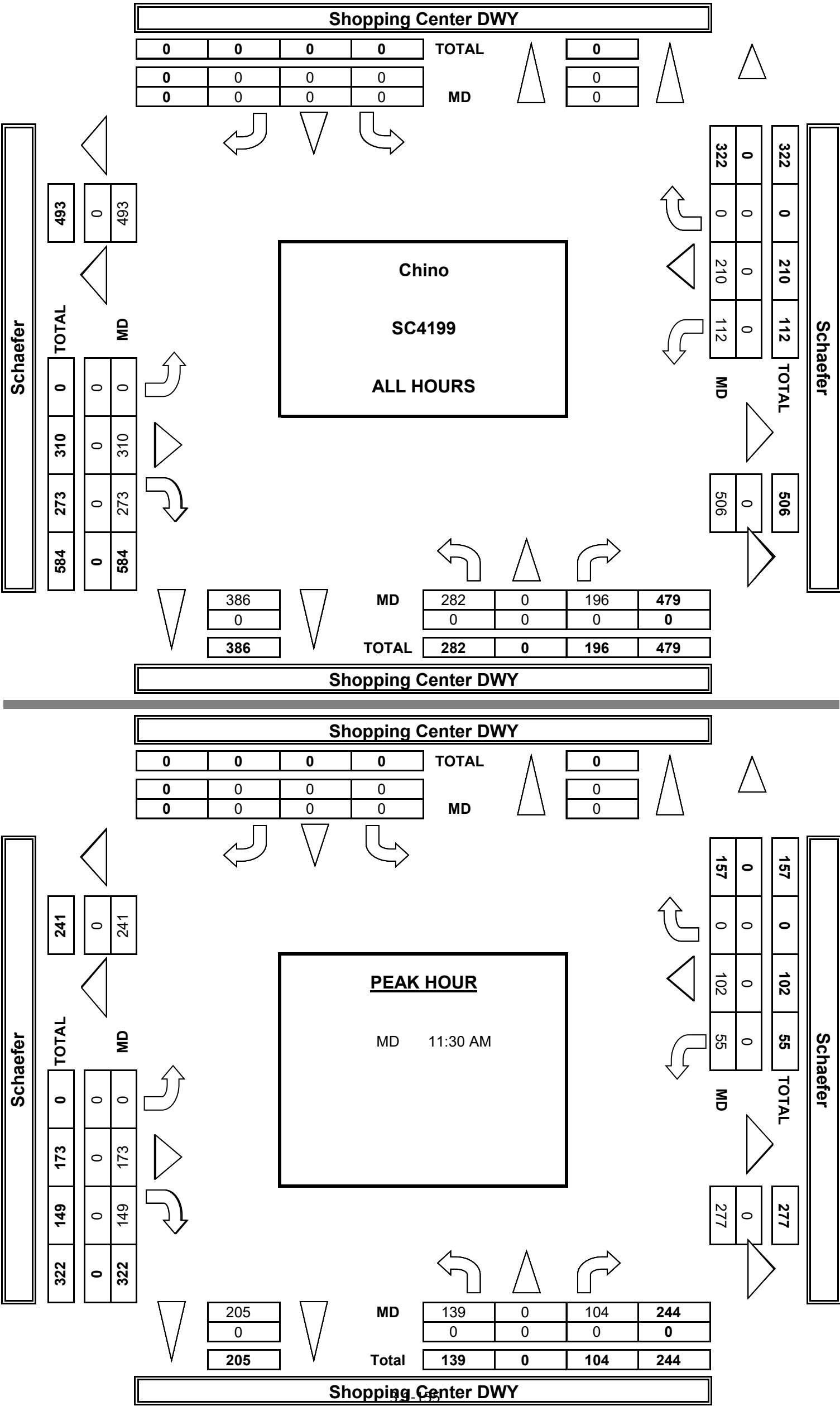
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
	TOTAL

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	5	0	5
0	0	7	0	7

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	5	0	5
0	0	7	0	7

[illegible]

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Sat, Sep 9, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 WB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4199 10 SIGNAL

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

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	X	X	2	1	X	X	X	1.3	0.3	1.3	

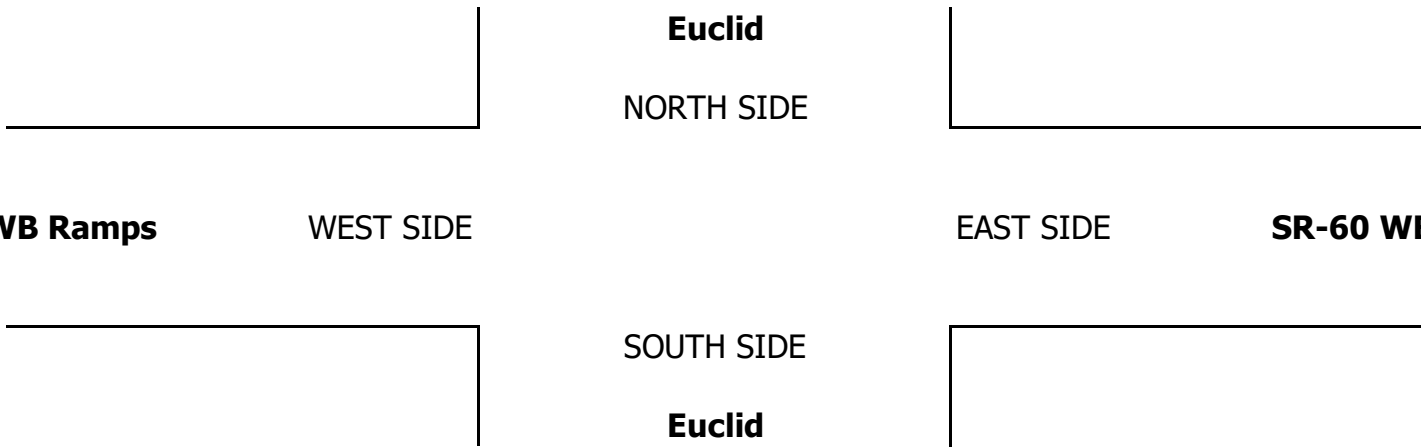
MD	11:00 AM	86	201	0	0	166	91	0	0	0	69	0	61	674
	11:15 AM	96	157	0	0	181	101	0	0	0	66	2	99	702
	11:30 AM	77	201	0	0	221	110	0	0	0	71	0	79	759
	11:45 AM	84	198	0	0	197	109	0	0	0	59	1	106	754
	12:00 PM	76	189	0	0	199	100	0	0	0	56	1	81	702
	12:15 PM	74	197	0	0	193	95	0	0	0	59	2	77	697
	12:30 PM	77	214	0	0	212	95	0	0	0	54	1	91	744
	12:45 PM	68	196	0	0	213	114	0	0	0	70	0	82	743
	VOLUMES	638	1,553	0	0	1,582	815	0	0	0	504	7	676	5,794
	APPROACH %	29%	70%	0%	0%	66%	34%	0%	0%	0%	42%	1%	57%	
	APP/DEPART	2,210	/	2,229	2,397	/	2,105	0	/	0	1,187	/	1,460	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	333	745	0	0	798	420	0	0	0	252	4	365	2,930
	APPROACH %	31%	68%	0%	0%	66%	34%	0%	0%	0%	41%	1%	59%	
	PEAK HR FACTOR	0.954			0.920			0.000			0.930			0.959
	APP/DEPART	1,091	/	1,110	1,218	/	1,063	0	/	0	621	/	757	0

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

RTOR			
NRR	SRR	ERR	WRR
X	0	X	0

0	32	0	32
0	22	0	47
0	27	0	43
0	15	0	50
0	21	0	48
0	24	0	45
0	23	0	43
0	30	0	40
0	194	0	348

0	85	0	188



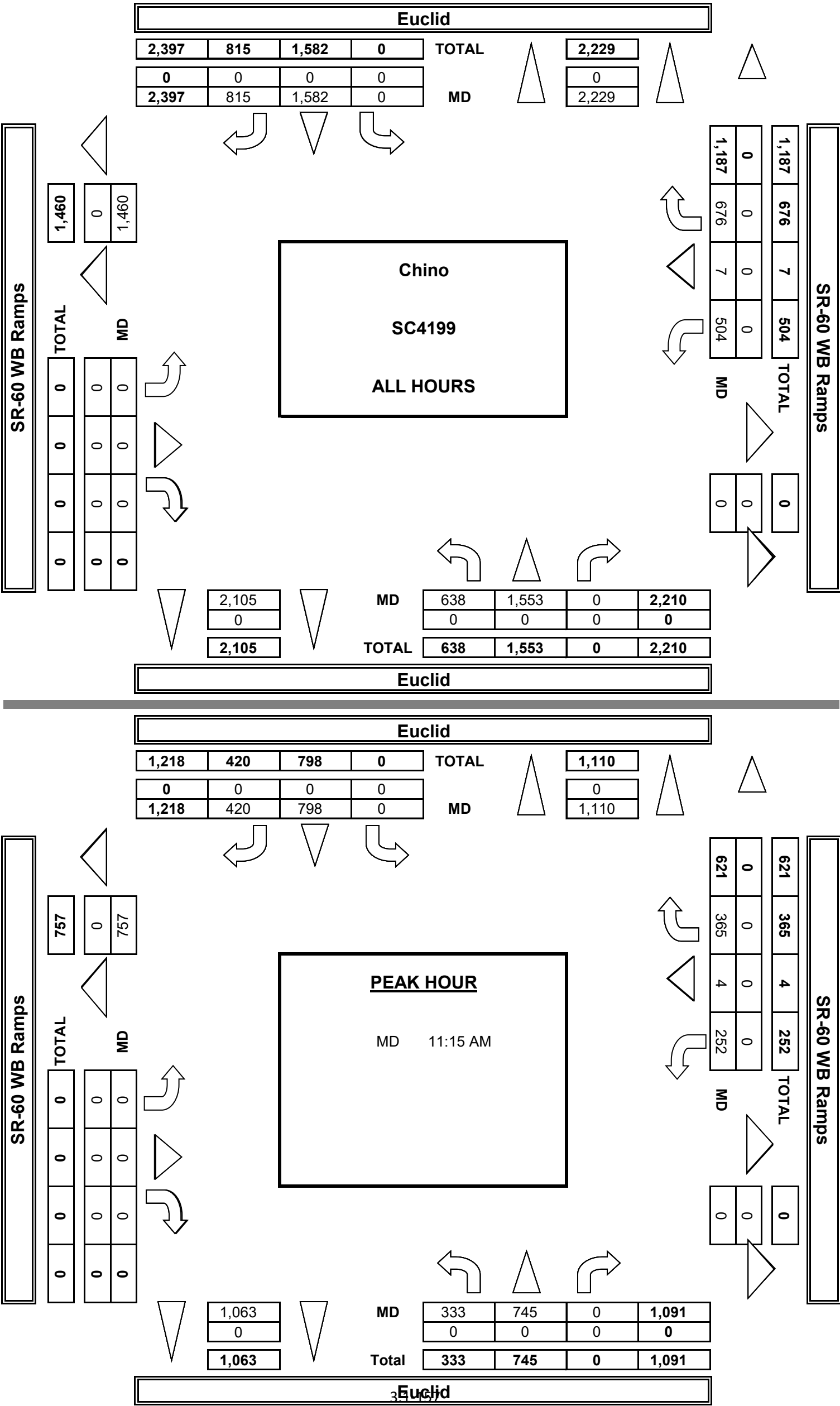
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
TOTAL	

ALL PED AND BIKE					
E LEG	W LEG	S LEG	N LEG	TOTAL	
0	1	0	0	1	
3	0	0	0	3	
1	2	0	0	3	
3	1	0	0	4	
1	0	0	0	1	
0	2	0	1	3	
0	1	0	0	1	
1	1	0	0	2	
9	8	0	1	18	

PEDESTRIAN CROSSINGS					
E LEG	W LEG	S LEG	N LEG	TOTAL	
0	0	0	0	0	
3	0	0	0	3	
0	2	0	0	2	
1	1	0	0	2	
1	0	0	0	1	
0	2	0	1	3	
0	0	0	0	0	
1	1	0	0	2	
6	6	0	1	13	

BICYCLE CROSSINGS					
EL	WL	SL	NL	TOTAL	
0	1	0	0	1	
0	0	0	0	0	
1	0	0	0	1	
2	0	0	0	2	
0	0	0	0	0	
0	0	0	0	0	
0	1	0	0	1	
0	0	0	0	0	
3	2	0	0	5	

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR X	SL X	ST 2

MD	11:00 AM	95	212	0	0	175
	11:15 AM	115	173	0	0	192
	11:30 AM	91	214	0	0	230
	11:45 AM	93	207	0	0	202
	12:00 PM	86	197	0	0	205
	12:15 PM	84	211	0	0	202
	12:30 PM	89	224	0	0	221
	12:45 PM	72	204	0	0	220
	VOLUMES	725	1,640	0	0	1,645
	APPROACH %	31%	69%	0%	0%	66%
	APP/DEPART	2,364	/	2,343	2,491	/
	BEGIN PEAK HR	11:15 AM				
	VOLUMES	385	790	0	0	828
	APPROACH %	33%	67%	0%	0%	65%
	PEAK HR FACTOR	0.963			0.922	
	APP/DEPART	1,175	/	1,170	1,267	/

SR-60 WB Ramps

WEST SIDE

|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4199
10
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

AM
PM
MD
OTHER
OTHER

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S

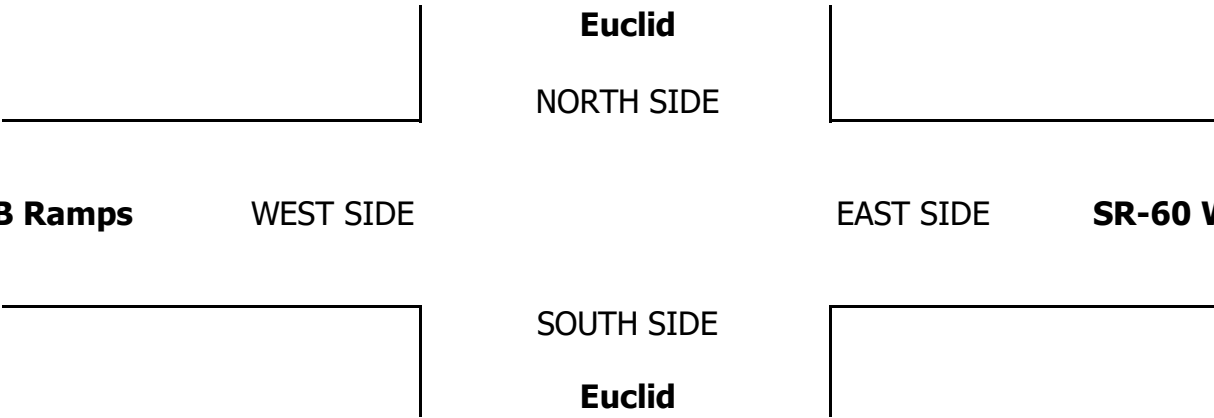
◀ W
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	X	X	2	1	X	X	X	1.3	0.3	1.3	

U-TURNS				
NB	SB	EB	WB	TTL
1	0	0	0	1
2	0	0	0	2
5	0	0	0	5
4	0	0	0	4
2	0	0	0	2
2	0	0	0	2
0	0	0	0	0
3	0	0	0	3
19	0	0	0	19

RTOR			
NRR	SRR	ERR	WRR
X	0	X	0
0	30	0	32
0	21	0	44
0	26	0	43
0	13	0	50
0	19	0	48
0	24	0	43
0	22	0	40
0	30	0	39
0	185	0	339

ND	11:00 AM	79	187	0	0	154	88	0	0	0	55	0	58	621
	11:15 AM	80	143	0	0	169	96	0	0	0	54	2	91	635
	11:30 AM	65	188	0	0	212	105	0	0	0	64	0	74	708
	11:45 AM	75	188	0	0	192	104	0	0	0	46	1	101	707
	12:00 PM	66	176	0	0	192	96	0	0	0	46	1	79	656
	12:15 PM	66	184	0	0	185	91	0	0	0	51	2	73	652
	12:30 PM	69	199	0	0	201	90	0	0	0	46	1	85	691
	12:45 PM	63	190	0	0	207	111	0	0	0	59	0	79	709
	VOLUMES	563	1,455	0	0	1,512	781	0	0	0	421	7	640	5,398
	APPROACH %	28%	71%	0%	0%	66%	34%	0%	0%	0%	39%	1%	60%	
	APP/DEPART	2,037	/	2,095	2,293	/	1,952	0	/	0	1,068	/	1,351	0
	BEGIN PEAK HR	11:15 AM												
ND	VOLUMES	286	695	0	0	765	401	0	0	0	210	4	345	2,719
	APPROACH %	29%	70%	0%	0%	66%	34%	0%	0%	0%	38%	1%	62%	
	PEAK HR FACTOR	0.931			0.920			0.000			0.944			0.953
	APP/DEPART	994	/	1,040	1,166	/	988	0	/	0	559	/	691	0



0	79	0	185

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4199
10
SIGNAL

CLASS 2:
2-AXLE
WORK
VEHICLES/
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 1	EL X	ET X	ER X	WL 1.3	WT 0.3	WR 1.3	TOTAL

MD	11:00 AM	1	11	0	0	9	2	0	0	0	1	0	3	27
	11:15 AM	6	7	0	0	9	1	0	0	0	4	0	6	33
	11:30 AM	6	6	0	0	5	4	0	0	0	1	0	3	25
	11:45 AM	4	7	0	0	3	4	0	0	0	4	0	2	24
	12:00 PM	4	12	0	0	4	2	0	0	0	2	0	2	26
	12:15 PM	2	7	0	0	4	4	0	0	0	5	0	2	24
	12:30 PM	2	13	0	0	8	3	0	0	0	3	0	5	34
	12:45 PM	4	2	0	0	2	2	0	0	0	2	0	3	15
	VOLUMES	29	65	0	0	44	22	0	0	0	22	0	26	208
	APPROACH %	31%	69%	0%	0%	67%	33%	0%	0%	0%	46%	0%	54%	
	APP/DEPART	94	/	91	66	/	66	0	/	0	48	/	51	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	20	32	0	0	21	11	0	0	0	11	0	13	108
	APPROACH %	38%	62%	0%	0%	66%	34%	0%	0%	0%	46%	0%	54%	
	PEAK HR FACTOR	0.813			0.800			0.000			0.600			0.818
	APP/DEPART	52	/	45	32	/	32	0	/	0	24	/	31	0

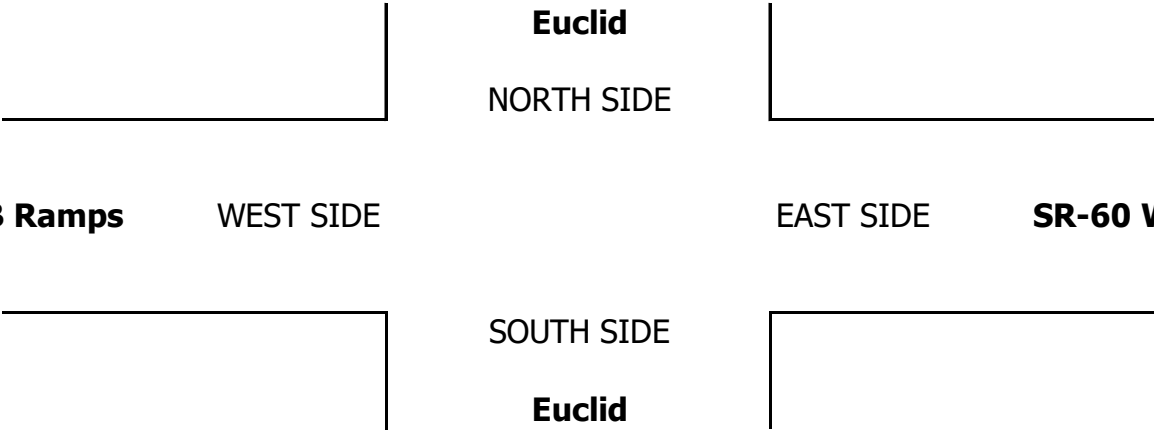
U-TURNS				
NB	SB	EB	WB	TTL

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

RTOR			
NRR X	SRR 0	ERR X	WRR 0

0	1	0	0
0	0	0	3
0	1	0	0
0	1	0	0
0	1	0	0
0	0	0	2
0	0	0	3
0	0	0	1
0	4	0	9

0	3	0	3



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4199
10
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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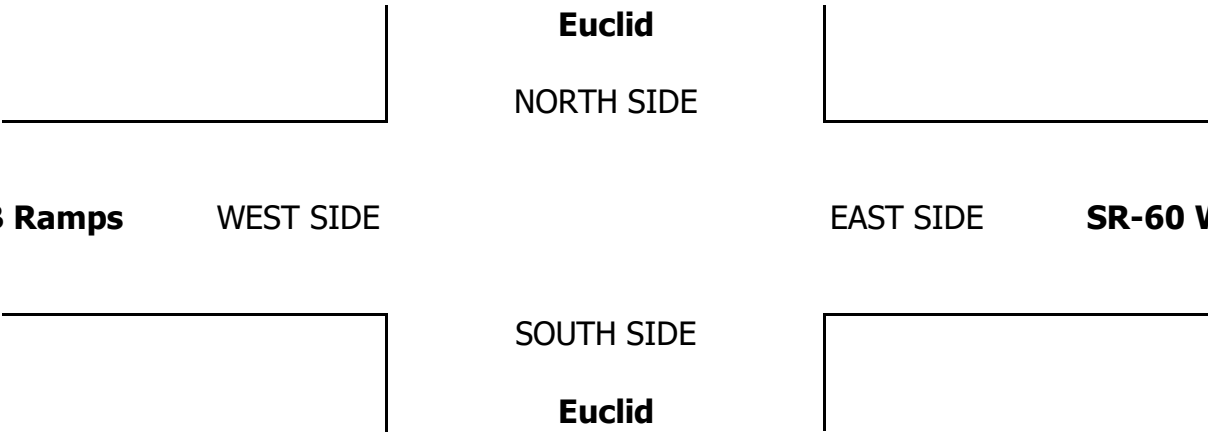
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	X	X	2	1	X	X	X	1.3	0.3	1.3	

ND	11:00 AM	4	1	0	0	1	1	0	0	0	2	0	0	9
	11:15 AM	4	1	0	0	0	0	0	0	0	3	0	0	8
	11:30 AM	1	3	0	0	2	0	0	0	0	1	0	1	8
	11:45 AM	3	1	0	0	1	0	0	0	0	2	0	1	8
	12:00 PM	4	0	0	0	1	1	0	0	0	2	0	0	8
	12:15 PM	3	1	0	0	1	0	0	0	0	2	0	0	7
	12:30 PM	1	1	0	0	1	1	0	0	0	1	0	0	5
	12:45 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
	VOLUMES	20	9	0	0	9	3	0	0	0	13	0	2	56
	APPROACH %	69%	31%	0%	0%	75%	25%	0%	0%	0%	87%	0%	13%	
	APP/DEPART	29	/	11	12	/	22	0	/	0	15	/	23	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	12	5	0	0	4	1	0	0	0	8	0	2	32
	APPROACH %	71%	29%	0%	0%	80%	20%	0%	0%	0%	80%	0%	20%	
	PEAK HR FACTOR	0.850				0.625		0.000			0.833			1.000
	APP/DEPART	17	/	7	5	/	12	0	/	0	10	/	13	0

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

RTOR			
NRR	SRR	ERR	WRR
X	0	X	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	0	0	0
0	2	0	0

0	0	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 WB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4199
10
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 WB Ramps			SR-60 WB Ramps			
LANES:	NL 1	NT 2	NR X	SL X	ST 2	SR 1	EL X	ET X	ER X	WL 1.3	WT 0.3	WR 1.3	TOTAL

MD	11:00 AM	2	2	0	0	1	0	0	0	0	11	0	0	16
	11:15 AM	6	5	0	0	3	3	0	0	0	5	0	0	22
	11:30 AM	5	3	0	0	2	1	0	0	0	5	0	1	17
	11:45 AM	2	2	0	0	1	1	0	0	0	7	0	0	13
	12:00 PM	2	1	0	0	1	1	0	0	0	6	0	0	11
	12:15 PM	3	4	0	0	3	0	0	0	0	1	0	2	13
	12:30 PM	5	1	0	0	2	1	0	0	0	4	0	1	14
	12:45 PM	1	3	0	0	2	1	0	0	0	9	0	0	16
	VOLUMES	26	21	0	0	15	8	0	0	0	48	0	4	122
	APPROACH %	55%	45%	0%	0%	65%	35%	0%	0%	0%	92%	0%	8%	
	APP/DEPART	47	/	25	23	/	63	0	/	0	52	/	34	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	15	11	0	0	7	6	0	0	0	23	0	1	63
	APPROACH %	58%	42%	0%	0%	54%	46%	0%	0%	0%	96%	0%	4%	
	PEAK HR FACTOR	0.591			0.542			0.000			0.857			0.716
	APP/DEPART	26	/	12	13	/	30	0	/	0	24	/	21	0

U-TURNS				
NB	SB	EB	WB	TTL

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

RTOR			
NRR X	SRR 0	ERR X	WRR 0

0	0	0	0
0	1	0	0
0	0	0	0
0	1	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	3	0	0

0	3	0	0

Euclid

NORTH SIDE

SR-60 WB Ramps

WEST SIDE

EAST SIDE

SR-60 WB Ramps

Euclid

SOUTH SIDE

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

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

PROJECT #: SC4199
LOCATION #: 11
CONTROL: SIGNAL

DATE:
Sat, Sep 9, 23

LOCATION: Chino
NORTH & SOUTH: Euclid
EAST & WEST: SR-60 EB Ramps

NOTES:

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL X	NT 2	NR 1	SL 1	ST 2	SR X	EL 1.5	ET X	ER 0.5	WL X	WT X	WR X	TOTAL

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

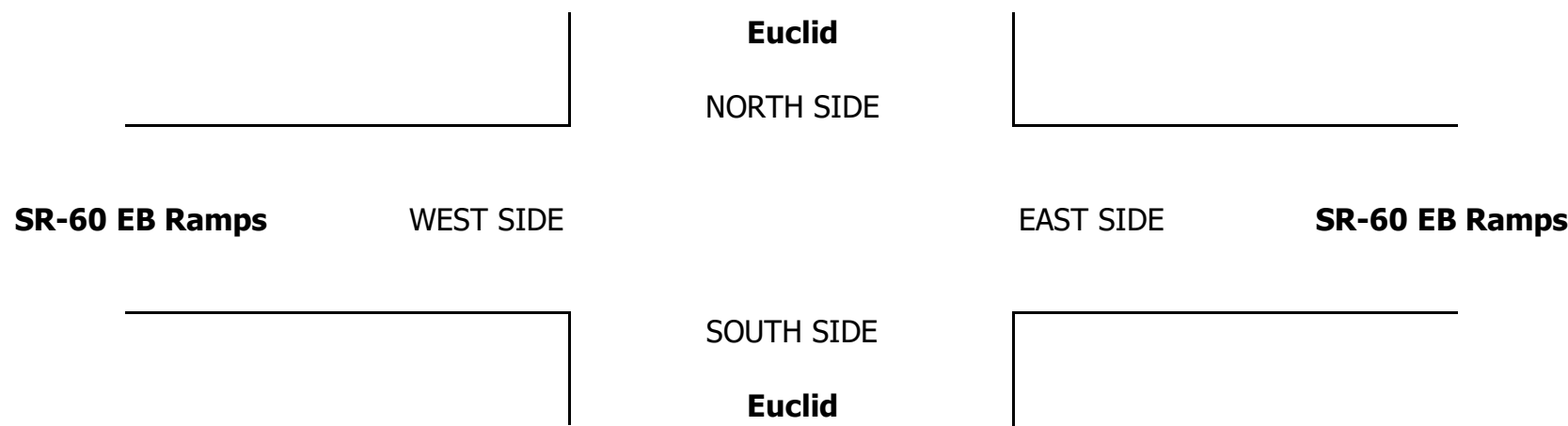
RTOR			
NRR 0	SRR X	ERR 0	WRR X

MD	11:00 AM	0	191	88	70	162	0	97	0	75	0	0	0	683
	11:15 AM	0	191	98	76	172	0	63	0	94	0	0	0	694
	11:30 AM	0	202	109	85	212	0	81	0	69	0	0	0	758
	11:45 AM	0	215	83	76	181	0	71	0	70	0	0	0	696
	12:00 PM	0	177	106	88	160	0	85	0	80	0	0	0	696
	12:15 PM	0	197	87	80	173	0	75	0	77	0	0	0	689
	12:30 PM	0	210	73	94	170	0	79	0	74	0	0	0	700
	12:45 PM	0	199	84	96	188	0	66	0	79	0	0	0	712
	VOLUMES	0	1,582	728	665	1,418	0	617	0	618	0	0	0	5,645
	APPROACH %	0%	68%	32%	32%	68%	0%	50%	0%	50%	0%	0%	0%	
	APP/DEPART	2,310	/	2,216	2,100	/	2,036	1,235	/	1,393	0	/	0	0
	BEGIN PEAK HR		11:15 AM											
	VOLUMES	0	785	396	325	725	0	300	0	313	0	0	0	2,853
	APPROACH %	0%	66%	34%	31%	68%	0%	49%	0%	51%	0%	0%	0%	
PEAK HR FACTOR		0.949			0.891			0.929			0.000		0.941	
APP/DEPART	1,181	/	1,094	1,059	/	1,038	613	/	721	0	/	0	0	

0	3	0	0	3
0	1	0	0	1
0	0	0	0	0
0	3	0	0	3
0	5	0	0	5
0	1	0	0	1
0	2	0	0	2
0	2	0	0	2
0	17	0	0	17

27	0	16	0
28	0	30	0
27	0	9	0
25	0	25	0
29	0	38	0
17	0	25	0
8	0	37	0
18	0	17	0
179	0	197	0

109	0	102	0



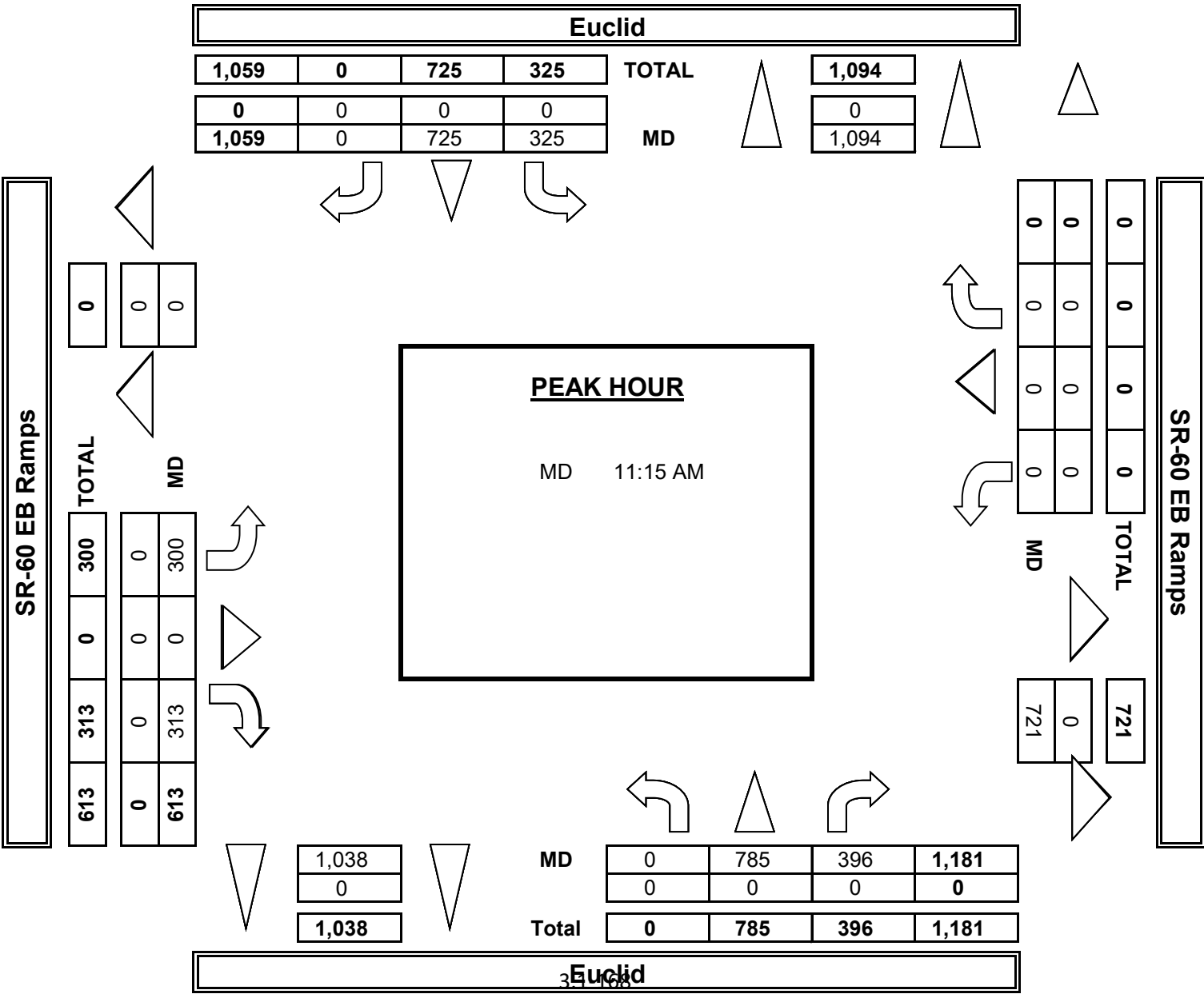
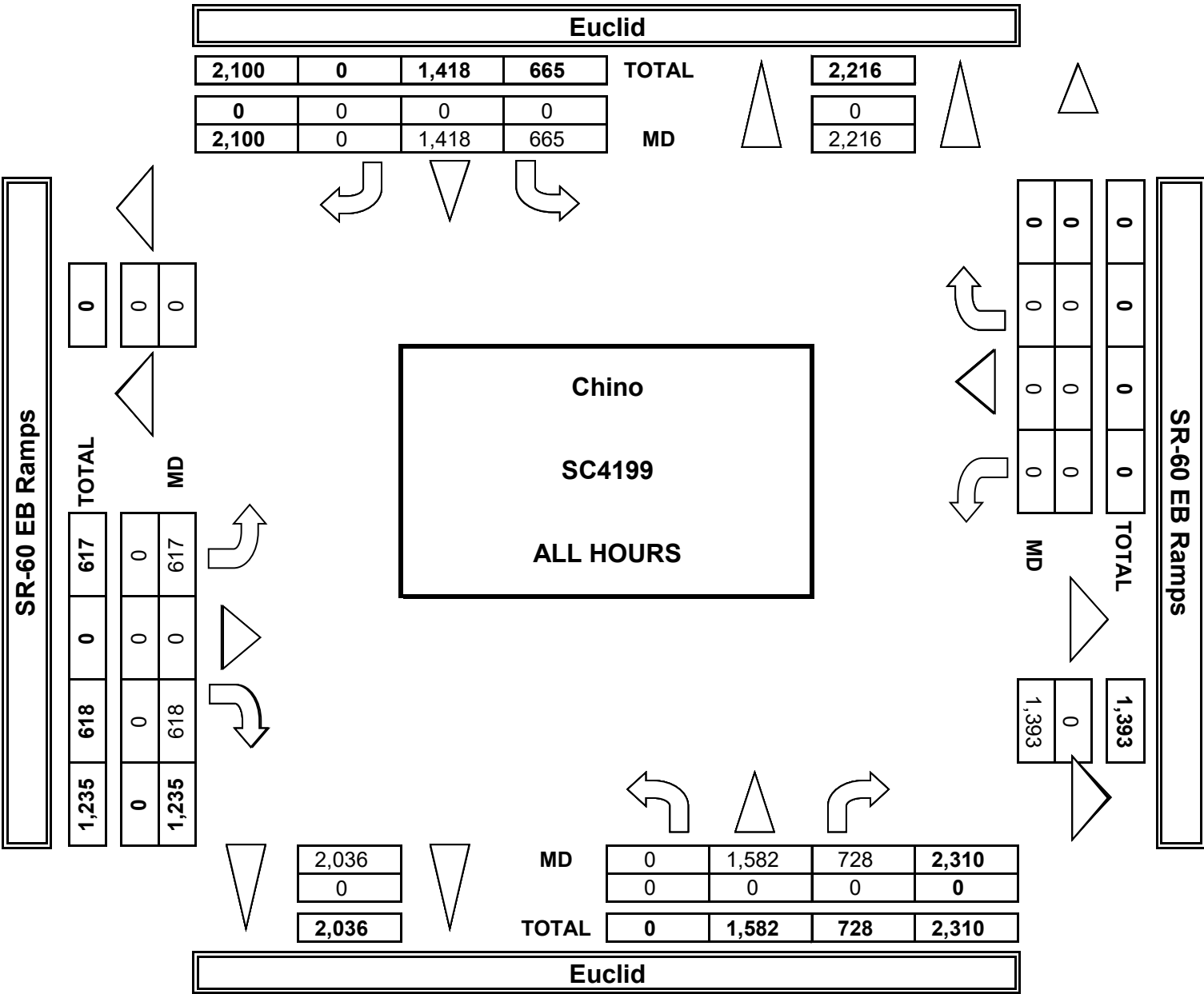
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
	TOTAL

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	1	0	0	1
2	0	0	0	2
2	3	0	0	5
3	0	0	0	3
1	0	0	0	1
0	1	1	0	2
1	1	0	0	2
1	1	0	0	2
10	7	1	0	18

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
2	0	0	0	2
2	2	0	0	4
1	0	0	0	1
1	0	0	0	1
0	1	1	0	2
1	1	0	0	2
1	1	0	0	2
8	5	1	0	14

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
2	0	0	0	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
2	2	0	0	4

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL X	NT 2	NR 1	SL 1	ST 2

MD	11:00 AM	0	205	100	73	192
	11:15 AM	0	218	121	78	196
	11:30 AM	0	227	139	87	230
	11:45 AM	0	230	105	78	202
	12:00 PM	0	192	144	91	178
	12:15 PM	0	217	105	86	183
	12:30 PM	0	227	93	97	187
	12:45 PM	0	206	94	102	208
	VOLUMES	0	1,719	900	692	1,574
	APPROACH %	0%	66%	34%	31%	69%
	APP/DEPART	2,619	/	2,372	2,266	/
	BEGIN PEAK HR	11:15 AM				
	VOLUMES	0	865	508	334	805
	APPROACH %	0%	63%	37%	29%	71%
	PEAK HR FACTOR	0.939				0.898
	APP/DEPART	1,373	/	1,182	1,139	/

SR-60 EB Ramps

WEST SIDE

|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4199
11
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

AM
PM
MD
OTHER
OTHER

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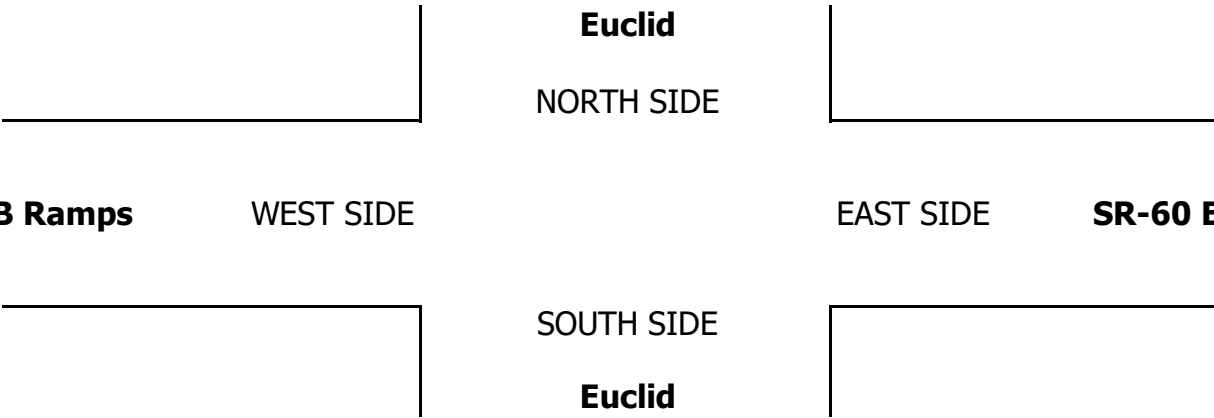
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	1	1	2	X	1.5	X	0.5	X	X	X	

U-TURNS				
NB	SB	EB	WB	TTL
0	3	0	0	3
0	1	0	0	1
0	0	0	0	0
0	2	0	0	2
0	5	0	0	5
0	1	0	0	1
0	2	0	0	2
0	2	0	0	2
0	16	0	0	16

RTOR			
NRR	SRR	ERR	WRR
0	X	0	X
24	0	15	0
24	0	27	0
24	0	6	0
19	0	20	0
27	0	33	0
13	0	22	0
7	0	28	0
16	0	13	0
154	0	164	0

ND	11:00 AM	0	175	74	64	142	0	92	0	61	0	0	0	608
	11:15 AM	0	168	81	72	152	0	56	0	82	0	0	0	611
	11:30 AM	0	180	91	82	199	0	78	0	59	0	0	0	689
	11:45 AM	0	199	70	74	166	0	69	0	58	0	0	0	636
	12:00 PM	0	161	85	85	146	0	78	0	70	0	0	0	625
	12:15 PM	0	180	72	74	163	0	71	0	69	0	0	0	629
	12:30 PM	0	195	59	88	157	0	71	0	62	0	0	0	632
	12:45 PM	0	192	75	91	176	0	62	0	68	0	0	0	664
	VOLUMES	0	1,450	607	630	1,301	0	577	0	529	0	0	0	5,110
	APPROACH %	0%	70%	30%	32%	67%	0%	52%	0%	48%	0%	0%	0%	
APP/DEPART		2,057	/	2,043	1,947	/	1,830	1,106	/	1,237	0	/	0	0
BEGIN PEAK HR		11:15 AM												
VOLUMES		0	708	327	313	663	0	281	0	269	0	0	0	2,569
APPROACH %		0%	68%	32%	32%	67%	0%	51%	0%	49%	0%	0%	0%	
PEAK HR FACTOR		0.955			0.875			0.929			0.000			0.932
APP/DEPART		1,035	/	997	984	/	932	550	/	640	0	/	0	0

94	0	86	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid SR-60 EB Ramps	PROJECT #: LOCATION #: CONTROL:	SC4199 11 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	1	1	2	X	1.5	X	0.5	X	X	X	

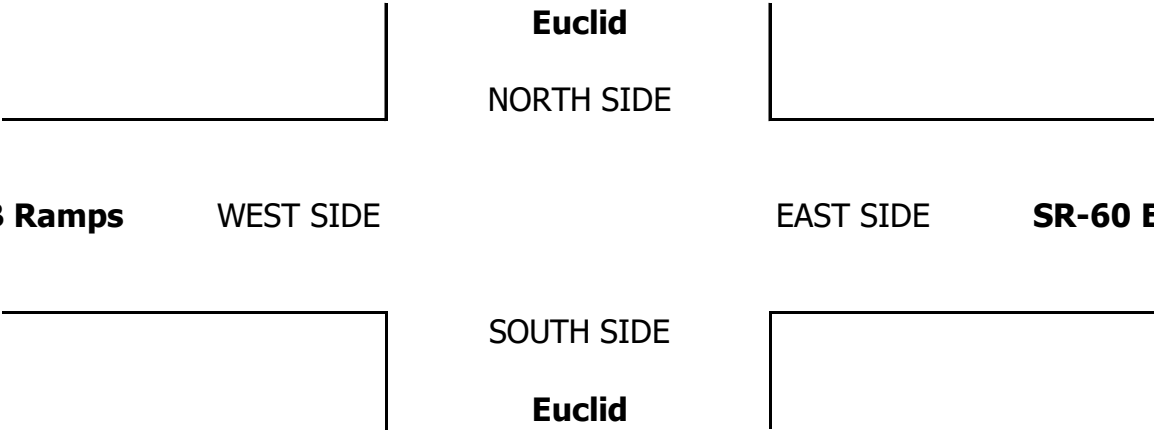
MD	11:00 AM	0	9	8	6	4	0	3	0	6	0	0	0	36
	11:15 AM	0	9	7	4	9	0	4	0	4	0	0	0	37
	11:30 AM	0	11	2	2	4	0	1	0	1	0	0	0	21
	11:45 AM	0	9	1	1	5	0	1	0	3	0	0	0	20
	12:00 PM	0	9	1	2	4	0	7	0	3	0	0	0	26
	12:15 PM	0	7	4	4	5	0	2	0	3	0	0	0	25
	12:30 PM	0	8	4	6	5	0	7	0	3	0	0	0	33
	12:45 PM	0	4	4	2	2	0	2	0	7	0	0	0	21
	VOLUMES	0	66	31	27	38	0	27	0	30	0	0	0	220
	APPROACH %	0%	68%	32%	41%	58%	0%	47%	0%	53%	0%	0%	0%	
	APP/DEPART	97	/	94	66	/	68	57	/	58	0	/	0	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	0	38	11	9	22	0	13	0	11	0	0	0	105
	APPROACH %	0%	78%	22%	28%	69%	0%	54%	0%	46%	0%	0%	0%	
	PEAK HR FACTOR	0.766			0.615			0.600			0.000			0.709
	APP/DEPART	49	/	52	32	/	33	24	/	20	0	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

RTOR			
NRR	SRR	ERR	WRR
0	X	0	X

2	0	0	0
0	0	0	0
0	0	0	0
1	0	2	0
0	0	3	0
0	0	1	0
0	0	2	0
1	0	3	0
4	0	11	0

1	0	5	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4199
11
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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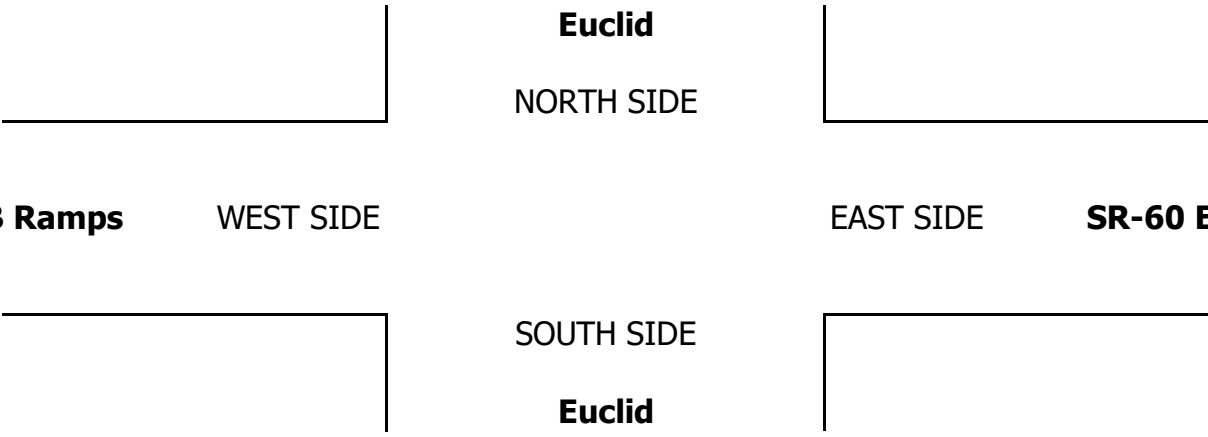
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	2	1	1	2	X	1.5	X	0.5	X	X	X	

ND	11:00 AM	0	5	4	0	3	0	0	0	2	0	0	0	14
	11:15 AM	0	5	1	0	3	0	0	0	3	0	0	0	12
	11:30 AM	0	3	3	1	2	0	1	0	2	0	0	0	12
	11:45 AM	0	4	3	1	2	0	0	0	1	0	0	0	11
	12:00 PM	0	4	3	0	3	0	0	0	2	0	0	0	12
	12:15 PM	0	3	5	0	3	0	1	0	2	0	0	0	14
	12:30 PM	0	1	2	0	2	0	1	0	1	0	0	0	7
	12:45 PM	0	1	2	1	1	0	0	0	0	0	0	0	5
	VOLUMES	0	26	23	3	19	0	3	0	13	0	0	0	87
	APPROACH %	0%	53%	47%	14%	86%	0%	19%	0%	81%	0%	0%	0%	
	APP/DEPART	49	/	29	22	/	32	16	/	26	0	/	0	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	0	16	10	2	10	0	1	0	8	0	0	0	47
	APPROACH %	0%	62%	38%	17%	83%	0%	11%	0%	89%	0%	0%	0%	
	PEAK HR FACTOR	0.929			1.000			0.750			0.000			0.979
	APP/DEPART	26	/	17	12	/	18	9	/	12	0	/	0	0

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

RTOR			
NRR	SRR	ERR	WRR
0	X	0	X
1	0	0	0
0	0	1	0
2	0	0	0
1	0	0	0
0	0	1	0
4	0	1	0
0	0	1	0
0	0	0	0
8	0	4	0

3	0	2	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
SR-60 EB Ramps

PROJECT #:
LOCATION #:
CONTROL:

SC4199
11
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
	Euclid			Euclid			SR-60 EB Ramps			SR-60 EB Ramps				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	
	X	2	1	1	2	X	1.5	X	0.5	X	X	X		
MD	11:00 AM	0	2	2	0	12	0	2	0	6	0	0	0	24
	11:15 AM	0	8	9	0	8	0	3	0	5	0	0	0	33
	11:30 AM	0	8	13	0	7	0	0	0	7	0	0	0	35
	11:45 AM	0	3	9	0	8	0	1	0	8	0	0	0	29
	12:00 PM	0	3	17	1	6	0	0	0	5	0	0	0	32
	12:15 PM	0	6	5	2	2	0	1	0	3	0	0	0	19
	12:30 PM	0	6	8	0	6	0	0	0	8	0	0	0	28
	12:45 PM	0	2	3	2	9	0	2	0	4	0	0	0	22
	VOLUMES	0	38	66	5	58	0	9	0	46	0	0	0	222
	APPROACH %	0%	37%	63%	8%	92%	0%	16%	0%	84%	0%	0%	0%	
	APP/DEPART	104	/	47	63	/	104	55	/	71	0	/	0	0
	BEGIN PEAK HR	11:15 AM												
MD	VOLUMES	0	22	48	1	29	0	4	0	25	0	0	0	129
	APPROACH %	0%	31%	69%	3%	97%	0%	14%	0%	86%	0%	0%	0%	
	PEAK HR FACTOR	0.833			0.938			0.806			0.000			0.921
	APP/DEPART	70	/	26	30	/	54	29	/	49	0	/	0	0

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

RTOR			
NRR	SRR	ERR	WRR
0	X	0	X
0	0	1	0
4	0	2	0
1	0	3	0
4	0	3	0
2	0	1	0
0	0	1	0
1	0	6	0
1	0	1	0
13	0	18	0

11	0	9	0

Euclid

NORTH SIDE

SR-60 EB Ramps

WEST SIDE

EAST SIDE

SR-60 EB Ramps

Euclid

SOUTH SIDE

3.1-177

INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE: Sat, Sep 9, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Walnut	PROJECT #: LOCATION #: CONTROL:	SC4199 12 SIGNAL

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL 1	NT 3	NR 1	SL 2	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

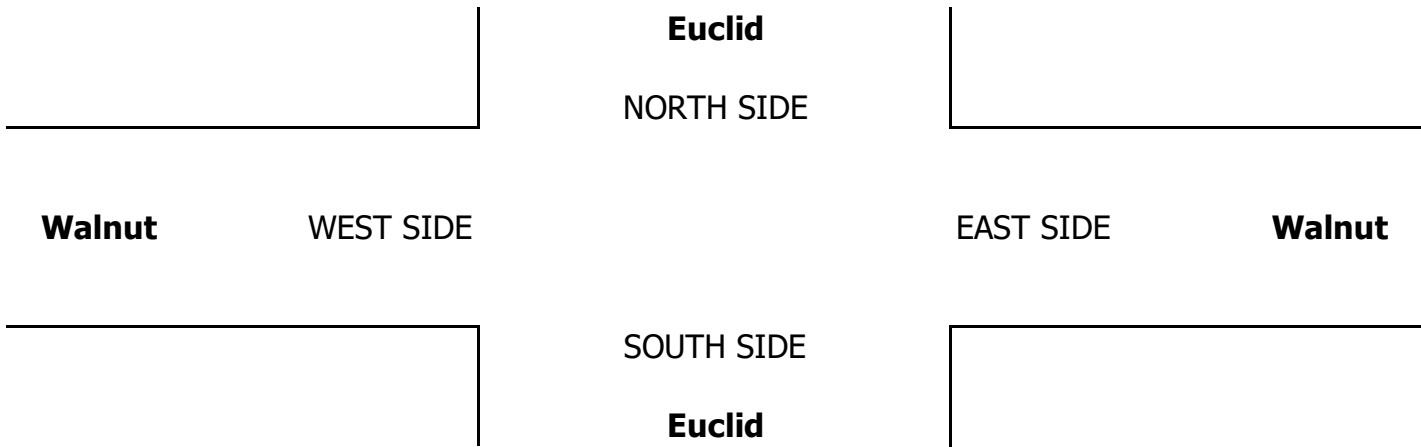
MD	11:00 AM	18	167	13	44	169	19	19	33	25	14	44	49	614
	11:15 AM	16	200	15	41	187	19	21	29	28	15	30	52	653
	11:30 AM	20	237	8	41	192	25	14	34	22	8	43	38	682
	11:45 AM	25	212	9	34	175	26	26	34	29	14	48	41	673
	12:00 PM	16	196	12	29	172	21	22	38	38	22	43	32	641
	12:15 PM	17	202	18	40	164	17	28	41	25	14	28	50	644
	12:30 PM	21	197	10	44	166	23	18	37	29	8	29	38	620
	12:45 PM	18	184	15	33	184	24	30	37	29	10	36	48	648
	VOLUMES	151	1,595	100	306	1,409	174	178	283	225	105	301	348	5,347
	APPROACH %	8%	86%	5%	15%	69%	8%	26%	41%	33%	14%	40%	46%	
	APP/DEPART	1,852	/	2,287	2,055	/	1,745	686	/	689	754	/	626	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	77	845	44	145	726	91	83	135	117	59	164	163	2,741
	APPROACH %	8%	87%	5%	14%	69%	9%	25%	40%	35%	15%	42%	42%	
	PEAK HR FACTOR		0.908			0.915			0.855			0.937		0.961
	APP/DEPART	970	/	1,179	1,050	/	906	335	/	324	386	/	332	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

5	3	4	14
4	8	7	9
4	7	9	6
2	16	13	14
5	6	7	4
4	10	3	14
2	5	6	14
9	8	3	5
35	63	52	80

15	37	36	33



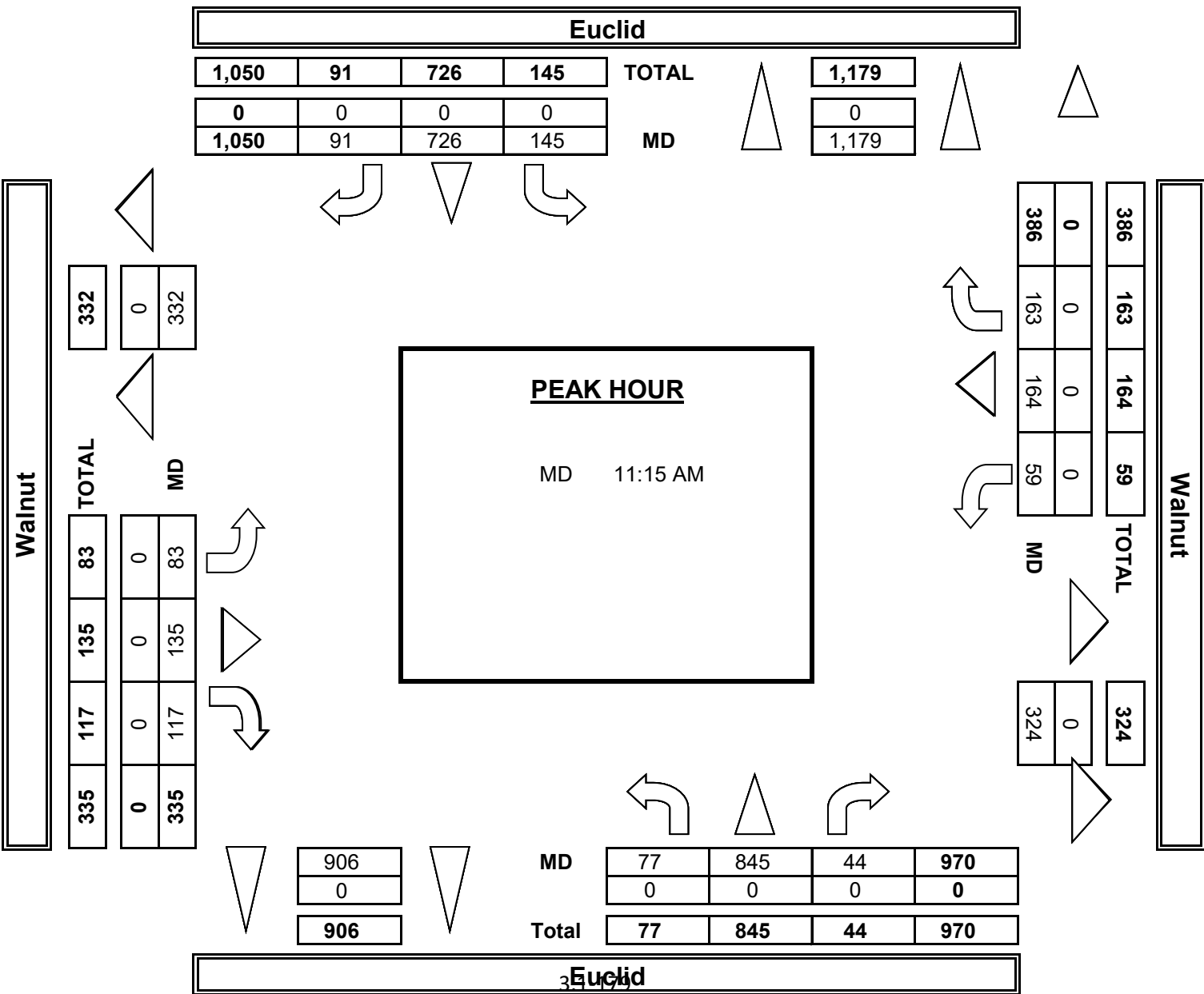
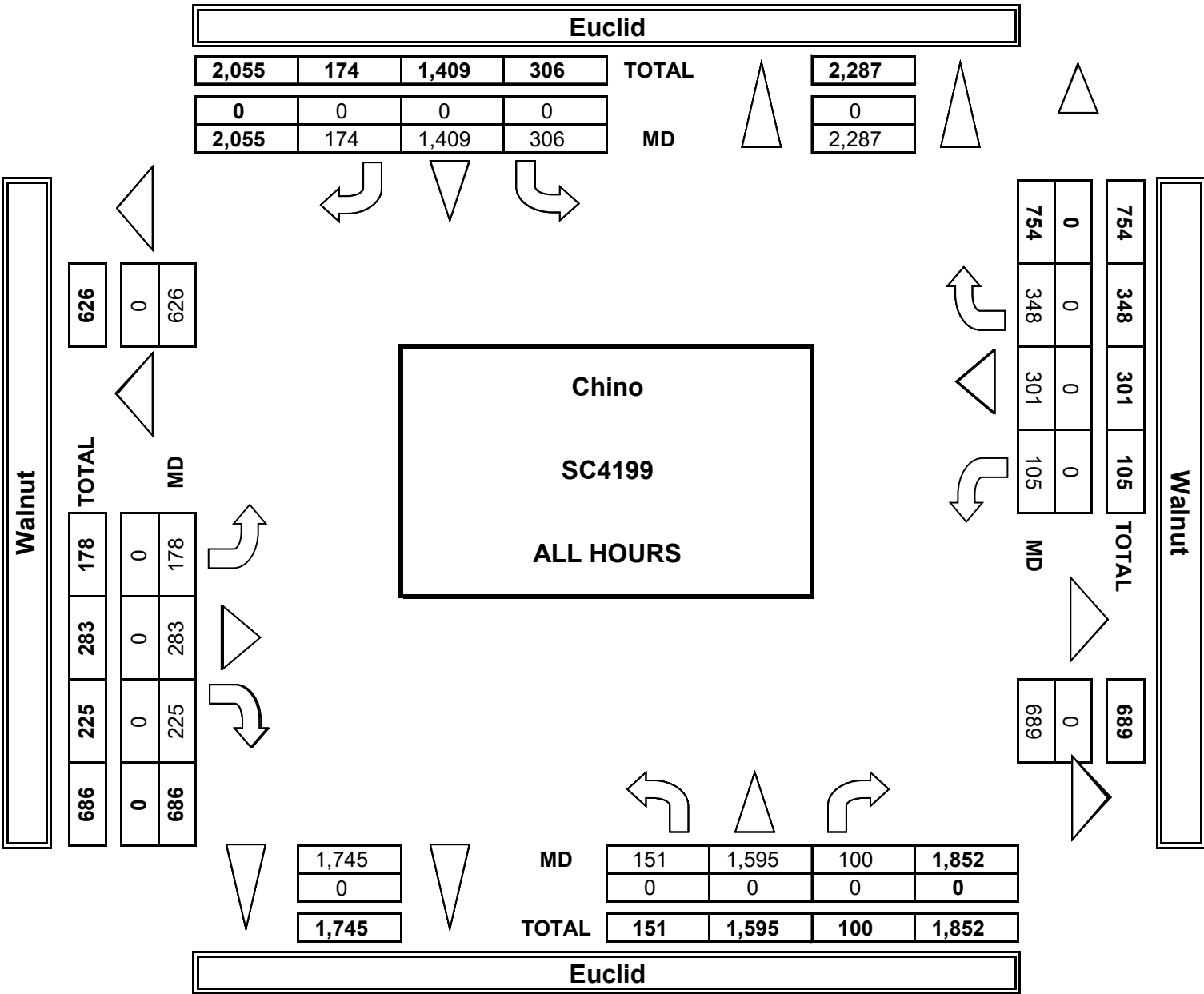
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
TOTAL	

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	1	1	2
1	1	0	0	2
0	0	0	0	0
1	0	2	0	3
1	0	1	1	3
1	2	1	0	4
1	0	0	1	2
1	0	1	1	3
6	3	6	4	19

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	1	1
1	0	0	0	1
0	0	0	0	0
0	0	2	0	2
1	0	1	0	2
1	2	1	0	4
1	0	0	1	2
1	0	1	1	3
5	2	5	3	15

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
0	0	1	0	1
0	1	0	0	1
0	0	0	0	0
1	0	0	0	1
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	1	1	1	4

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 3	NR 1	SL 2	ST 3

MD	11:00 AM	19	192	14	45	209
	11:15 AM	16	243	16	44	220
	11:30 AM	20	286	8	41	226
	11:45 AM	29	251	9	36	211
	12:00 PM	16	248	12	30	205
	12:15 PM	18	237	18	41	180
	12:30 PM	21	229	10	47	199
	12:45 PM	18	203	15	34	215
	VOLUMES	157	1,887	102	316	1,663
	APPROACH %	7%	88%	5%	15%	77%
	APP/DEPART	2,145	/	2,425	2,160	/
	BEGIN PEAK HR	11:15 AM				
	VOLUMES	81	1,028	45	151	861
	APPROACH %	7%	89%	4%	14%	78%
	PEAK HR FACTOR	0.918				
	APP/DEPART	1,154	/	1,279	1,103	/

Walnut

WEST SIDE

|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

PROJECT #:
LOCATION #:
CONTROL:

SC4199
12
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	1	2	3	1	1	2	0	1	2	0	

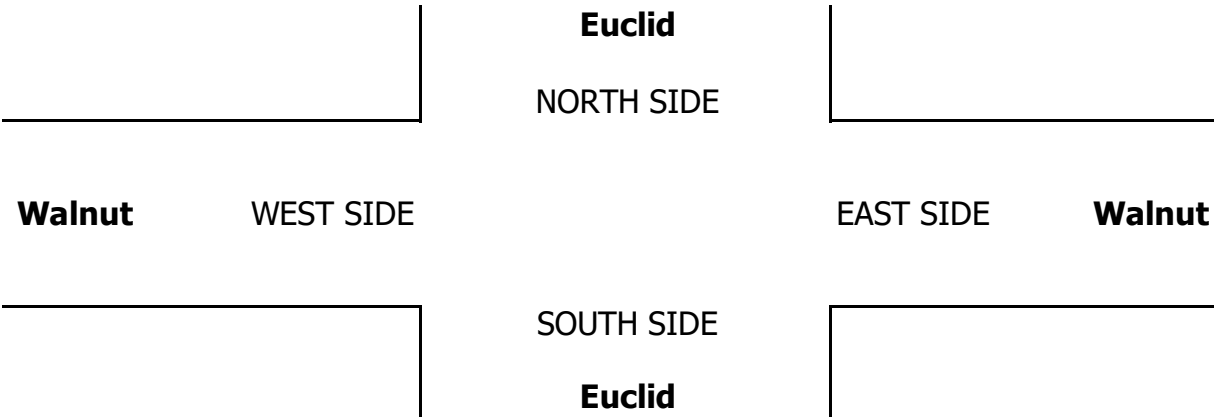
U-TURNS				
NB	SB	EB	WB	TTL
0	17	0	0	17
2	20	0	0	22
2	28	0	0	30
0	16	0	0	16
0	22	0	0	22
1	17	0	0	18
1	18	0	0	19
0	25	0	0	25
6	163	0	0	169

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

4	3	4	14
4	8	7	7
4	7	8	6
2	15	13	13
5	6	6	4
4	8	3	13
2	5	6	14
9	8	3	5
34	60	50	76

15	36	34	30

ΣD	11:00 AM	17	142	12	42	144	15	18	32	24	12	43	47	548
	11:15 AM	16	166	14	38	161	19	20	29	28	15	30	50	586
	11:30 AM	20	203	8	41	169	25	13	33	20	8	40	37	617
	11:45 AM	21	182	9	33	150	25	26	34	27	14	47	39	607
	12:00 PM	16	160	12	28	148	21	22	37	37	20	42	30	573
	12:15 PM	16	172	18	39	150	15	27	40	23	14	27	49	590
	12:30 PM	21	172	10	42	141	23	18	35	26	8	29	37	562
	12:45 PM	18	168	15	32	162	24	29	35	29	10	35	47	604
	VOLUMES	145	1,365	98	295	1,225	167	173	275	214	101	293	336	4,856
	APPROACH %	9%	85%	6%	16%	66%	9%	26%	42%	32%	14%	40%	46%	
	APP/DEPART	1,614	/	2,037	1,850	/	1,546	662	/	668	730	/	605	0
	BEGIN PEAK HR	11:15 AM												
ΣD	VOLUMES	73	711	43	140	628	90	81	133	112	57	159	156	2,473
	APPROACH %	9%	86%	5%	15%	67%	10%	25%	41%	34%	15%	43%	42%	
	PEAK HR FACTOR	0.892			0.897			0.849			0.930			0.956
	APP/DEPART	831	/	1,034	944	/	801	326	/	316	372	/	322	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Walnut	PROJECT #: LOCATION #: CONTROL:	SC4199 12 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL 1	NT 3	NR 1	SL 2	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL

MD	11:00 AM	1	11	1	2	5	0	1	1	1	2	1	2	28
	11:15 AM	0	14	0	2	9	0	1	0	0	0	0	0	26
	11:30 AM	0	8	0	0	6	0	1	1	0	0	3	1	20
	11:45 AM	2	10	0	0	8	1	0	0	2	0	1	2	26
	12:00 PM	0	9	0	1	5	0	0	1	1	1	1	2	21
	12:15 PM	0	11	0	1	5	2	0	1	2	0	1	0	23
	12:30 PM	0	10	0	1	10	0	0	2	2	0	0	1	26
	12:45 PM	0	7	0	1	8	0	1	2	0	0	1	1	21
	VOLUMES	3	80	1	8	56	3	4	8	8	3	8	9	193
	APPROACH %	4%	95%	1%	12%	81%	4%	20%	40%	40%	15%	40%	45%	
	APP/DEPART	84	/	95	69	/	67	20	/	17	20	/	14	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	2	41	0	3	28	1	2	2	3	1	5	5	94
	APPROACH %	5%	95%	0%	9%	85%	3%	29%	29%	43%	9%	45%	45%	
	PEAK HR FACTOR	0.768			0.750			0.875			0.688			0.904
	APP/DEPART	43	/	49	33	/	32	7	/	5	11	/	8	0

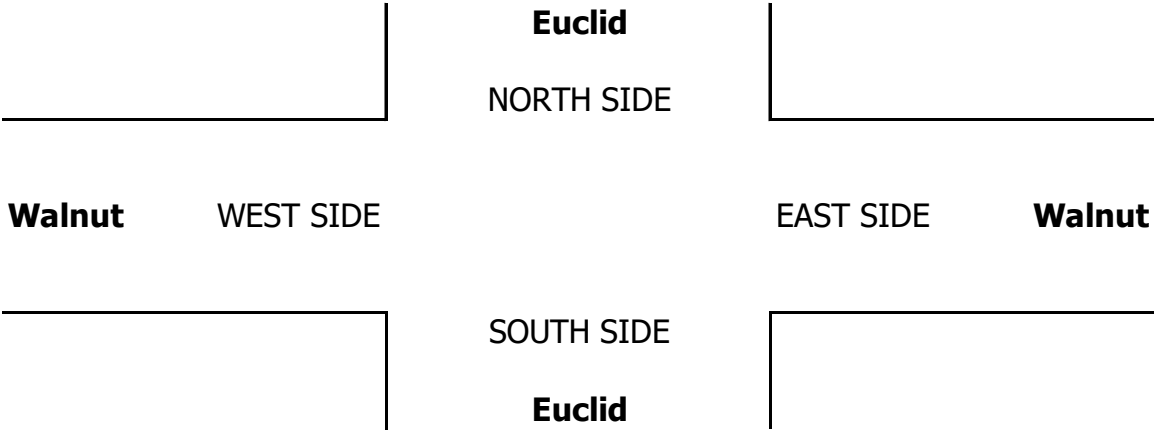
U-TURNS				
NB	SB	EB	WB	TTL

0	1	0	0	1
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	2	0	0	2

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

1	0	0	0
0	0	0	0
0	0	0	0
0	1	0	1
0	0	1	0
0	2	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	3	1	1

0	1	1	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

PROJECT #:
LOCATION #:
CONTROL:

SC4199
12
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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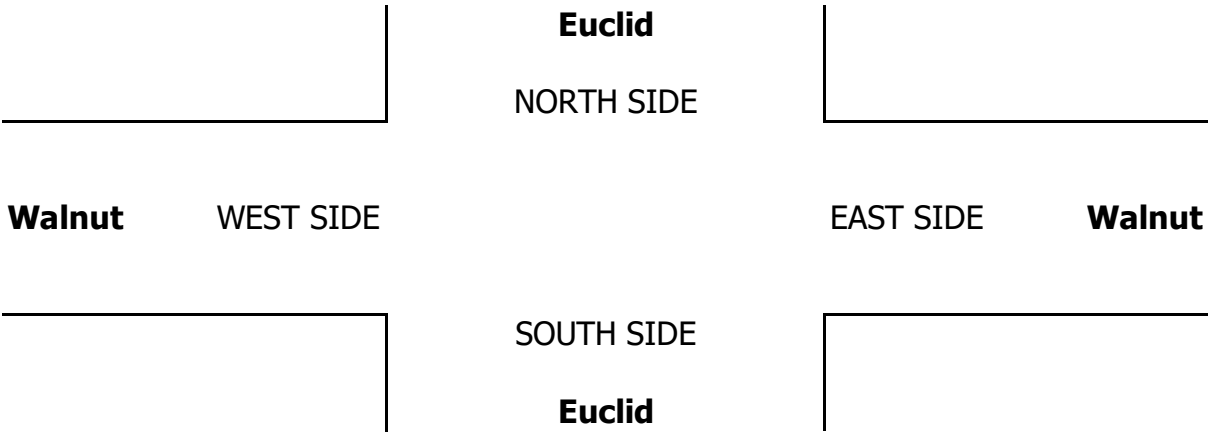
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	1	2	3	1	1	2	0	1	2	0	

MD	11:00 AM	0	9	0	0	3	3	0	0	0	0	0	0	15
	11:15 AM	0	3	1	0	5	0	0	0	0	0	0	2	11
	11:30 AM	0	7	0	0	3	0	0	0	1	0	0	0	11
	11:45 AM	1	6	0	0	2	0	0	0	0	0	0	0	9
	12:00 PM	0	7	0	0	7	0	0	0	0	1	0	0	15
	12:15 PM	1	7	0	0	5	0	1	0	0	0	0	0	14
	12:30 PM	0	3	0	0	2	0	0	0	0	0	0	0	5
	12:45 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
	VOLUMES	2	45	1	0	28	3	1	0	1	1	0	2	84
	APPROACH %	4%	94%	2%	0%	90%	10%	50%	0%	50%	33%	0%	67%	
	APP/DEPART	48	/	48	31	/	30	2	/	1	3	/	5	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	1	23	1	0	17	0	0	0	1	1	0	2	46
	APPROACH %	4%	92%	4%	0%	100%	0%	0%	0%	100%	33%	0%	67%	
	PEAK HR FACTOR	0.893			0.607			0.250			0.375			0.767
	APP/DEPART	25	/	25	17	/	19	1	/	1	3	/	1	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	2

0	0	0	2



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Walnut

PROJECT #:
LOCATION #:
CONTROL:

SC4199
12
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Walnut			Walnut			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	1	2	3	1	1	2	0	1	2	0	

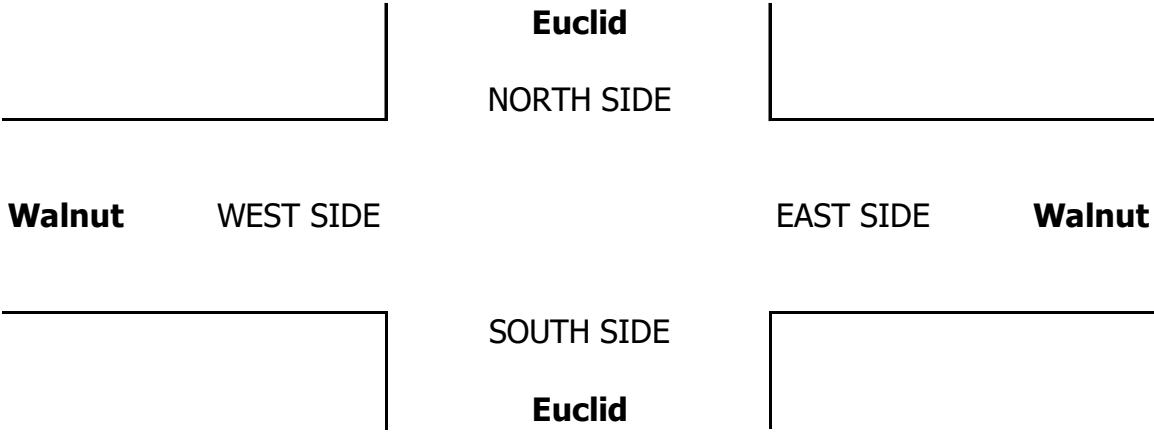
MD	11:00 AM	0	5	0	0	17	1	0	0	0	0	0	0	23
	11:15 AM	0	16	0	1	11	0	0	0	0	0	0	28	
	11:30 AM	0	19	0	0	14	0	0	0	1	0	0	34	
	11:45 AM	1	14	0	1	15	0	0	0	0	0	0	31	
	12:00 PM	0	20	0	0	11	0	0	0	0	0	0	31	
	12:15 PM	0	10	0	0	4	0	0	0	0	0	1	15	
	12:30 PM	0	12	0	1	13	0	0	0	1	0	0	27	
	12:45 PM	0	6	0	0	13	0	0	0	0	0	0	19	
	VOLUMES	1	102	0	3	98	1	0	0	2	0	0	1	209
	APPROACH %	1%	99%	0%	3%	95%	1%	0%	0%	100%	0%	0%	100%	
	APP/DEPART	103	/	104	103	/	100	2	/	3	1	/	2	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	1	69	0	2	51	0	0	0	1	0	0	0	125
	APPROACH %	1%	99%	0%	4%	94%	0%	0%	0%	100%	0%	0%	0%	
	PEAK HR FACTOR	0.875			0.794			0.250			0.000			0.919
	APP/DEPART	70	/	70	54	/	52	1	/	2	0	/	1	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	1

0	0	1	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: Sat, Sep 9, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Riverside	PROJECT #: LOCATION #: CONTROL:	SC4199 13 SIGNAL

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	0	1	2	0	

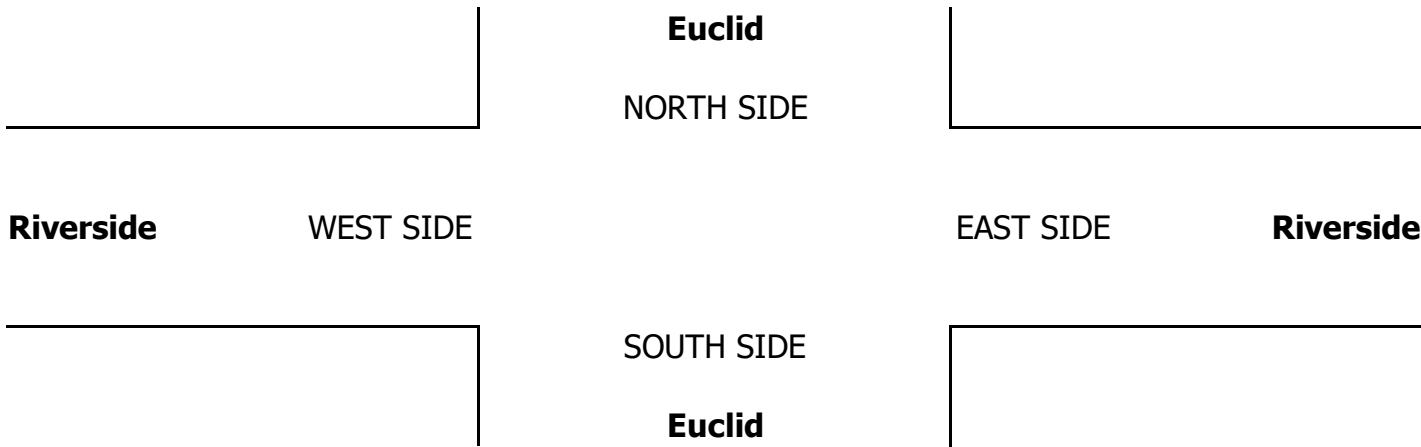
MD	11:00 AM	19	113	37	41	89	19	27	63	16	34	70	43	571
	11:15 AM	17	128	41	27	114	39	36	50	13	34	70	31	600
	11:30 AM	21	143	33	49	122	29	23	48	16	33	82	49	648
	11:45 AM	15	128	34	34	124	34	31	67	18	33	93	38	649
	12:00 PM	15	132	29	36	132	32	35	54	7	28	81	33	614
	12:15 PM	7	133	40	45	108	26	33	70	7	25	64	32	590
	12:30 PM	16	102	26	33	110	33	27	61	14	29	72	50	573
	12:45 PM	8	113	43	38	130	34	24	69	16	24	75	30	604
	VOLUMES	118	992	283	303	929	246	236	482	107	240	607	306	4,936
	APPROACH %	8%	71%	20%	19%	60%	16%	29%	58%	13%	21%	53%	27%	
	APP/DEPART	1,399	/	1,615	1,559	/	1,282	825	/	1,068	1,153	/	971	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	68	531	137	146	492	134	125	219	54	128	326	151	2,546
	APPROACH %	9%	72%	19%	18%	61%	17%	31%	55%	14%	21%	54%	25%	
	PEAK HR FACTOR		0.937			0.945			0.858			0.922		0.969
	APP/DEPART	738	/	840	805	/	676	398	/	502	605	/	528	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

10	9	7	23
14	16	6	13
15	7	10	16
13	10	12	17
7	15	1	13
12	8	4	13
10	16	6	19
9	15	11	13
90	96	57	127

49	48	29	59



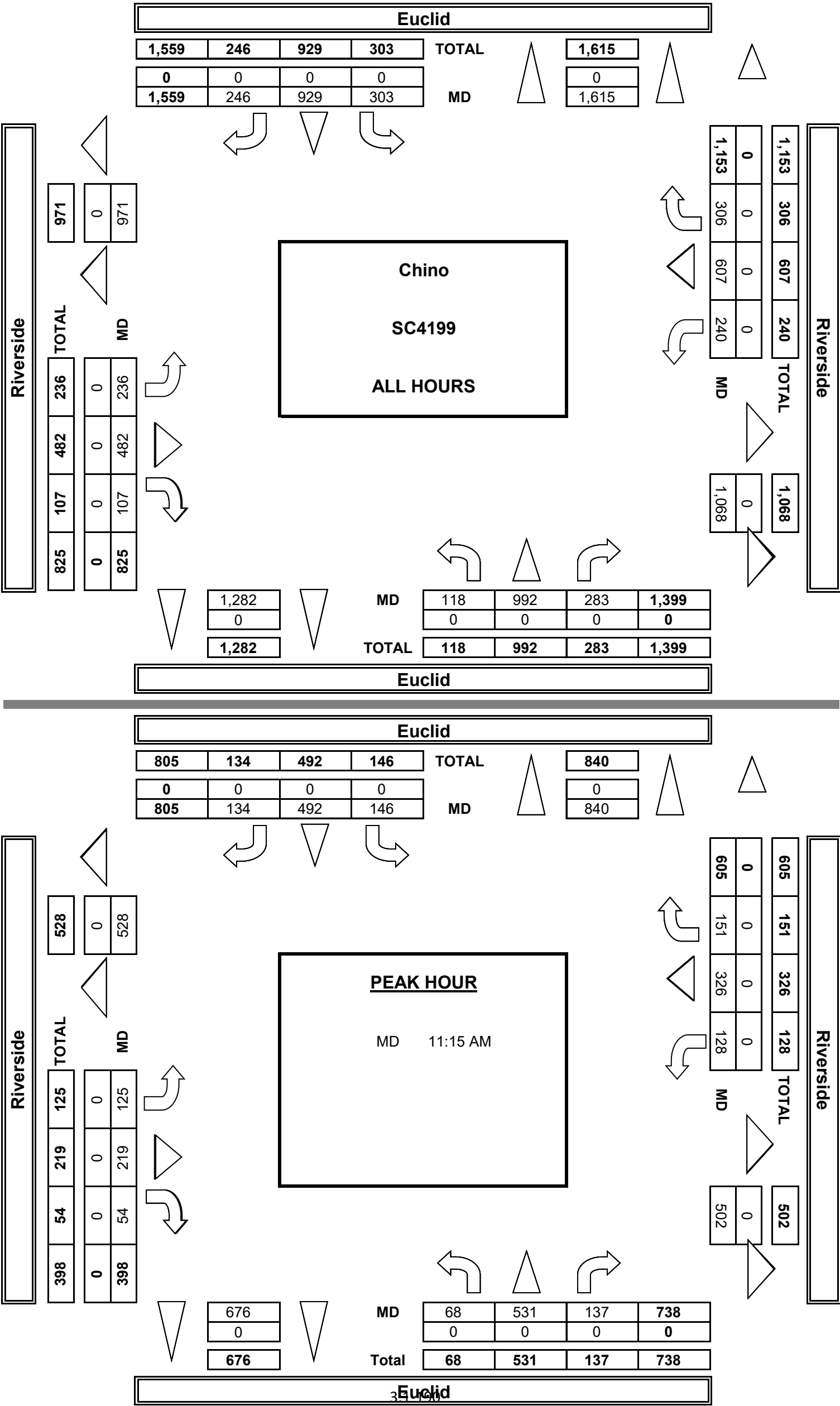
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
TOTAL	

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	1	1	2
0	2	2	1	5
0	0	1	0	1
0	0	1	0	1
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	0	1
0	2	6	3	11

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	1	1
0	0	2	0	2
0	0	0	0	0
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	3	1	4

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
0	0	1	0	1
0	2	0	1	3
0	0	1	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	1	0	1
0	2	3	2	7

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

MD	11:00 AM	21	141	37	42	122
	11:15 AM	18	154	41	30	138
	11:30 AM	22	192	34	50	154
	11:45 AM	16	159	35	35	154
	12:00 PM	15	183	29	40	163
	12:15 PM	8	157	41	47	119
	12:30 PM	17	137	26	36	140
	12:45 PM	8	122	44	39	158
	VOLUMES	123	1,243	287	317	1,146
	APPROACH %	7%	75%	17%	18%	67%
	APP/DEPART	1,652	/	1,805	1,720	/
	BEGIN PEAK HR	11:15 AM				
	VOLUMES	70	687	139	154	608
	APPROACH %	8%	77%	15%	17%	67%
	PEAK HR FACTOR	0.904				
	APP/DEPART	895	/	975	905	/

Riverside

WEST SIDE

|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

PROJECT #:
LOCATION #:
CONTROL:

SC4199
13
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

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OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	0	1	2	0	

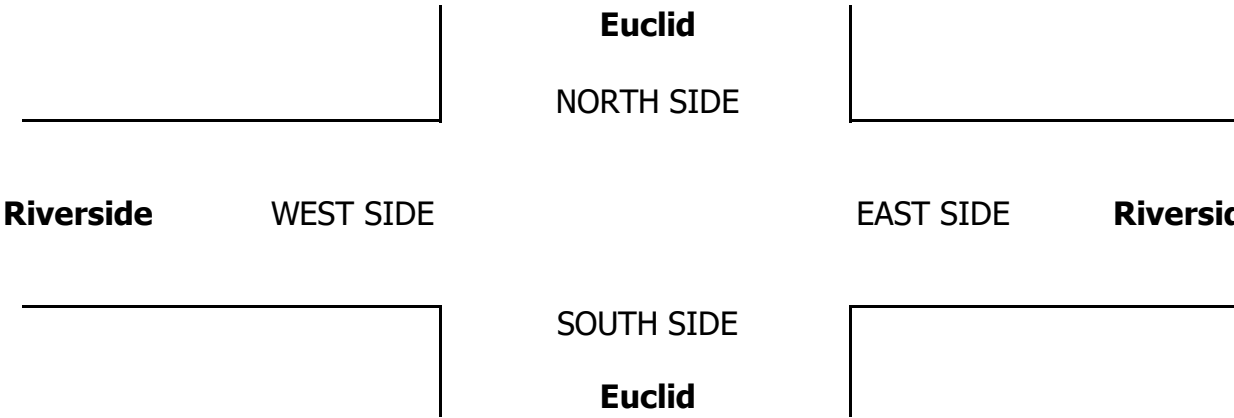
U-TURNS				
NB	SB	EB	WB	TTL
2	15	0	0	17
1	5	0	0	6
0	7	0	0	7
0	8	0	0	8
1	13	0	0	14
1	11	0	0	12
1	11	0	0	12
0	10	0	0	10
6	80	0	0	86

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

ΣD	11:00 AM	18	88	37	40	70	18	26	63	16	32	67	41	516
	11:15 AM	16	111	41	25	96	35	34	49	12	34	69	29	551
	11:30 AM	20	112	31	47	102	28	23	47	15	31	81	48	585
	11:45 AM	14	107	33	33	104	33	30	63	18	32	89	36	592
	12:00 PM	15	101	29	34	112	31	31	51	7	28	81	32	552
	12:15 PM	5	116	39	43	99	25	32	68	7	24	62	31	551
	12:30 PM	15	78	26	31	90	32	26	60	12	29	67	50	516
	12:45 PM	8	105	42	36	114	34	22	66	14	23	73	29	566
	VOLUMES	111	818	278	289	787	236	224	467	101	233	589	296	4,515
	APPROACH %	9%	67%	23%	21%	57%	17%	28%	59%	13%	21%	53%	26%	
	APP/DEPART	1,213	/	1,418	1,392	/	1,127	792	/	1,034	1,118	/	936	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	65	431	134	139	414	127	118	210	52	125	320	145	2,315
	APPROACH %	10%	68%	21%	19%	58%	18%	31%	55%	14%	21%	54%	25%	
	PEAK HR FACTOR		0.935			0.938			0.856			0.922		0.965
	APP/DEPART	632	/	727	713	/	593	380	/	483	590	/	512	0

10	9	7	22
14	15	5	12
14	7	9	15
13	10	12	16
7	14	1	13
12	7	4	12
10	16	5	19
9	15	10	13
89	93	53	122

48	46	27	56



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Riverside	PROJECT #: LOCATION #: CONTROL:	SC4199 13 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 0	WL 1	WT 2	WR 0	TOTAL

MD	11:00 AM	0	9	0	0	3	1	1	0	0	2	2	0	18
	11:15 AM	1	4	0	1	5	1	1	1	1	0	1	1	17
	11:30 AM	1	4	2	2	4	0	0	0	0	2	1	1	17
	11:45 AM	1	3	1	1	6	1	0	3	0	0	4	2	22
	12:00 PM	0	3	0	0	1	0	2	2	0	0	0	1	9
	12:15 PM	2	2	0	1	3	0	1	1	0	1	2	1	14
	12:30 PM	1	7	0	1	4	1	1	0	2	0	4	0	21
	12:45 PM	0	3	0	2	2	0	1	3	2	0	2	1	16
	VOLUMES	6	35	3	8	28	4	7	10	5	5	16	7	135
	APPROACH %	14%	80%	7%	20%	68%	10%	32%	45%	23%	18%	57%	25%	
	APP/DEPART	44	/	50	41	/	38	22	/	21	28	/	26	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	3	14	3	4	16	2	3	6	1	2	6	5	65
	APPROACH %	15%	70%	15%	18%	73%	9%	30%	60%	10%	15%	46%	38%	
	PEAK HR FACTOR	0.714			0.688			0.625			0.542			0.739
	APP/DEPART	20	/	22	22	/	19	10	/	13	13	/	11	0

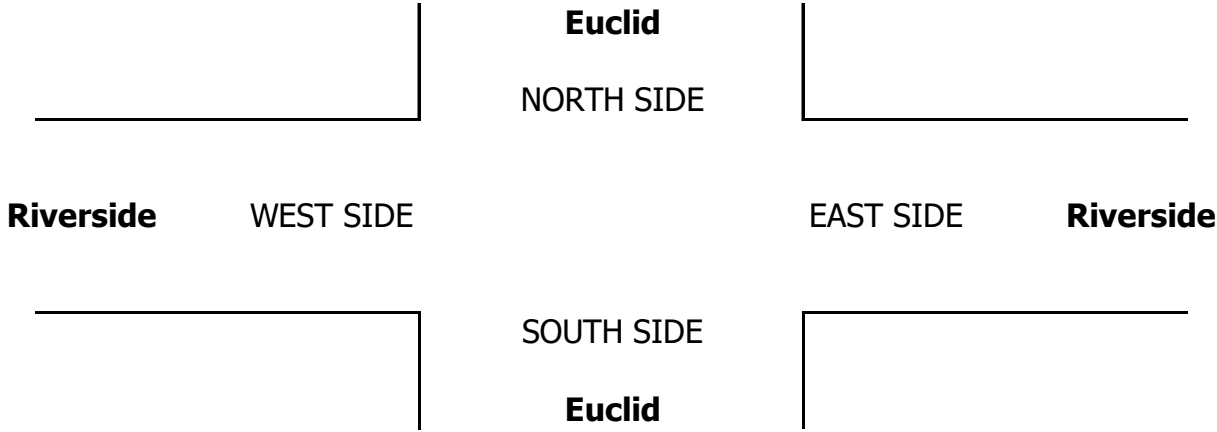
U-TURNS				
NB	SB	EB	WB	TTL

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

0	0	0	0
0	1	1	0
1	0	0	1
0	0	0	1
0	0	0	0
0	0	0	1
0	0	1	0
0	0	1	0
1	1	3	3

1	1	1	2



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

PROJECT #:
LOCATION #:
CONTROL:

SC4199
13
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
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MD
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OTHER

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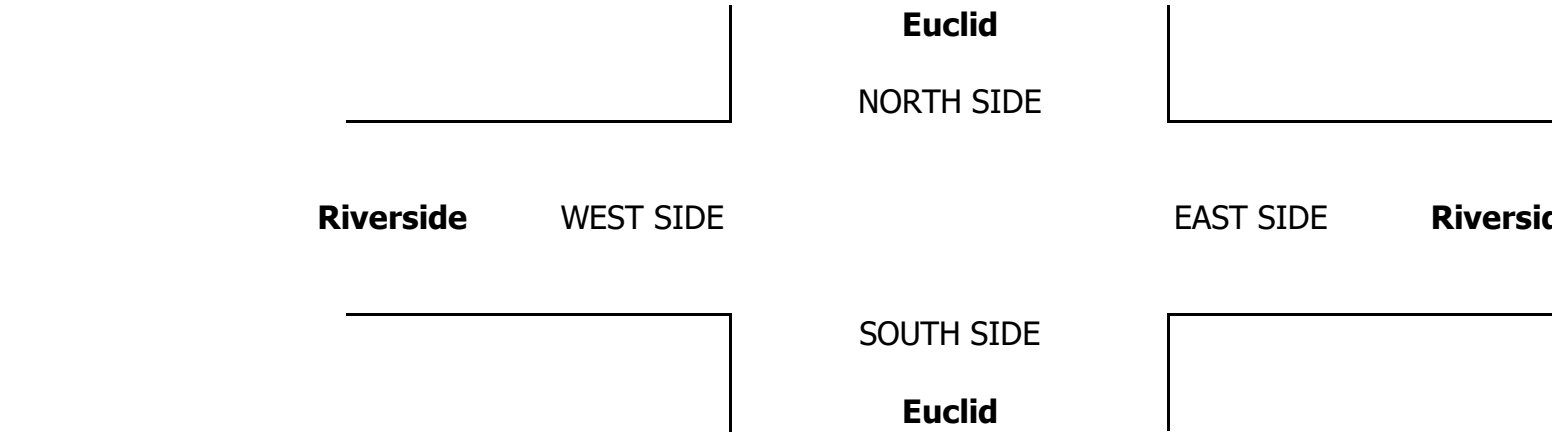
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	0	1	2	0	

MD	11:00 AM	0	9	0	1	1	0	0	0	0	1	0	12	
	11:15 AM	0	1	0	0	4	1	1	0	0	0	0	7	
	11:30 AM	0	7	0	0	2	0	0	0	0	0	0	9	
	11:45 AM	0	7	0	0	1	0	1	1	0	1	0	11	
	12:00 PM	0	7	0	0	8	1	0	1	0	0	0	17	
	12:15 PM	0	5	0	1	2	1	0	1	0	0	0	10	
	12:30 PM	0	3	0	0	4	0	0	1	0	0	0	8	
	12:45 PM	0	3	1	0	1	0	1	0	0	0	0	6	
	VOLUMES	0	42	1	2	23	3	3	4	0	1	1	0	80
	APPROACH %	0%	98%	2%	7%	82%	11%	43%	57%	0%	50%	50%	0%	
	APP/DEPART	43	/	45	28	/	24	7	/	7	2	/	4	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	0	22	0	0	15	2	2	2	0	1	0	0	44
	APPROACH %	0%	100%	0%	0%	88%	12%	50%	50%	0%	100%	0%	0%	
	PEAK HR FACTOR	0.786			0.472			0.500			0.250			0.647
	APP/DEPART	22	/	24	17	/	16	4	/	2	1	/	2	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	2	0	0

0	1	0	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Riverside

PROJECT #:
LOCATION #:
CONTROL:

SC4199
13
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Riverside			Riverside			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	0	1	2	0	

MD	11:00 AM	1	7	0	0	15	0	0	0	0	0	2	25
	11:15 AM	0	11	0	1	8	2	0	0	0	0	1	23
	11:30 AM	0	20	0	0	14	1	0	1	0	0	0	37
	11:45 AM	0	11	0	0	13	0	0	0	0	0	0	24
	12:00 PM	0	21	0	2	11	0	2	0	0	0	0	36
	12:15 PM	0	8	0	0	3	0	0	0	0	0	0	11
	12:30 PM	0	14	0	1	12	0	0	0	0	1	0	28
	12:45 PM	0	2	0	0	13	0	0	0	0	1	0	16
	VOLUMES	1	94	0	4	89	3	2	1	1	1	3	200
	APPROACH %	1%	99%	0%	4%	93%	3%	50%	25%	25%	20%	20%	60%
	APP/DEPART	95	/	99	96	/	91	4	/	5	5	/	5
	BEGIN PEAK HR	11:15 AM											
	VOLUMES	0	63	0	3	46	3	2	1	1	0	0	1
	APPROACH %	0%	100%	0%	6%	88%	6%	50%	25%	25%	0%	0%	100%

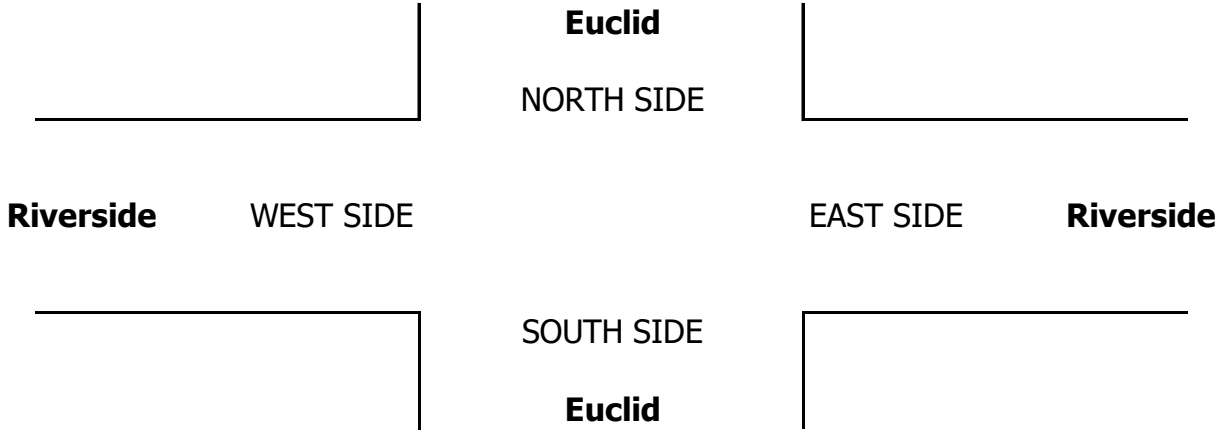
PEAK HR FACTOR	0.750			0.867			0.500			0.250			0.811
APP/DEPART	63	/	66	52	/	47	4	/	4	1	/	3	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	0	0	1
0	0	0	1
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	2

0	0	1	1



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE:
Sat, Sep 9, 23

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4199
14
SIGNAL

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	0	1	0	

MD	11:00 AM	6	144	33	8	103	6	12	24	8	26	29	22	421
	11:15 AM	4	156	20	15	136	10	13	15	8	19	30	12	438
	11:30 AM	1	153	18	11	133	14	17	12	7	27	15	18	426
	11:45 AM	5	164	26	10	151	14	9	22	8	18	27	9	463
	12:00 PM	6	152	24	15	141	7	10	15	8	23	19	15	435
	12:15 PM	4	148	25	4	126	5	15	16	12	16	21	11	403
	12:30 PM	1	109	28	12	113	8	9	19	4	24	19	18	364
	12:45 PM	3	142	30	7	139	4	9	19	6	17	16	6	398
	VOLUMES	30	1,168	204	82	1,042	68	94	142	61	170	176	111	3,361
	APPROACH %	2%	83%	15%	7%	87%	6%	32%	48%	20%	37%	39%	24%	
APP/DEPART	1,404	/	1,383	1,202	/	1,275	298	/	428	457	/	275	0	
BEGIN PEAK HR	11:15 AM													
VOLUMES	16	625	88	51	561	45	49	64	31	87	91	54	1,770	
APPROACH %	2%	86%	12%	8%	85%	7%	34%	44%	21%	38%	39%	23%		
PEAK HR FACTOR		0.936			0.947			0.929			0.951		0.956	
APP/DEPART	730	/	734	663	/	680	145	/	203	232	/	153	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	3	1	0	4
0	1	0	0	1
0	0	0	0	0
1	2	0	0	3
1	2	0	0	3
0	1	0	0	1
0	1	0	0	1
2	10	1	0	13

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
4	2	7	3
6	2	7	3
6	3	6	5
6	4	2	1
7	2	3	1
5	2	6	4
7	2	3	3
4	0	6	0
45	17	40	20

25	11	18	10

Euclid

NORTH SIDE

Chino

WEST SIDE

EAST SIDE

Chino

Euclid

SOUTH SIDE

MD

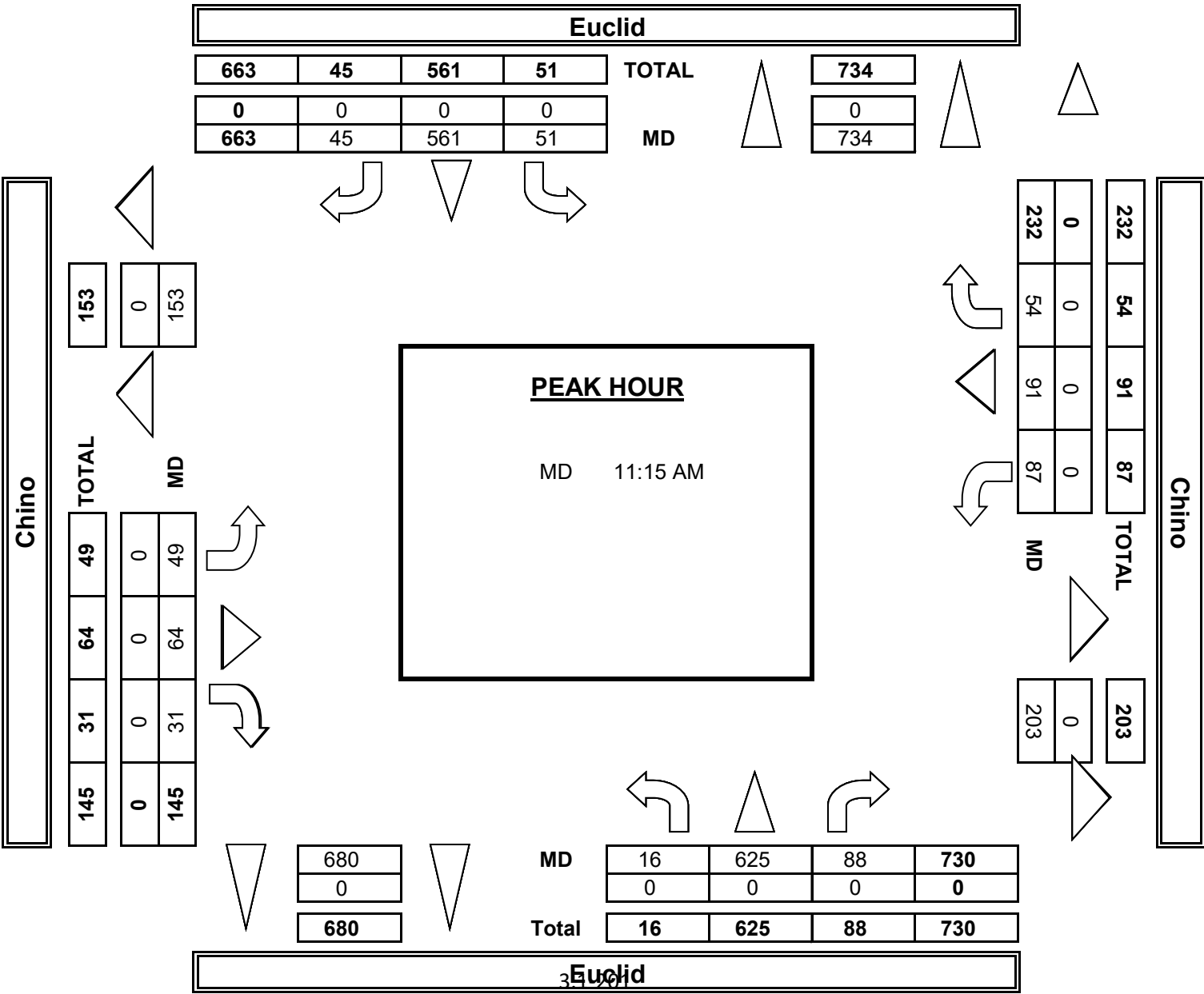
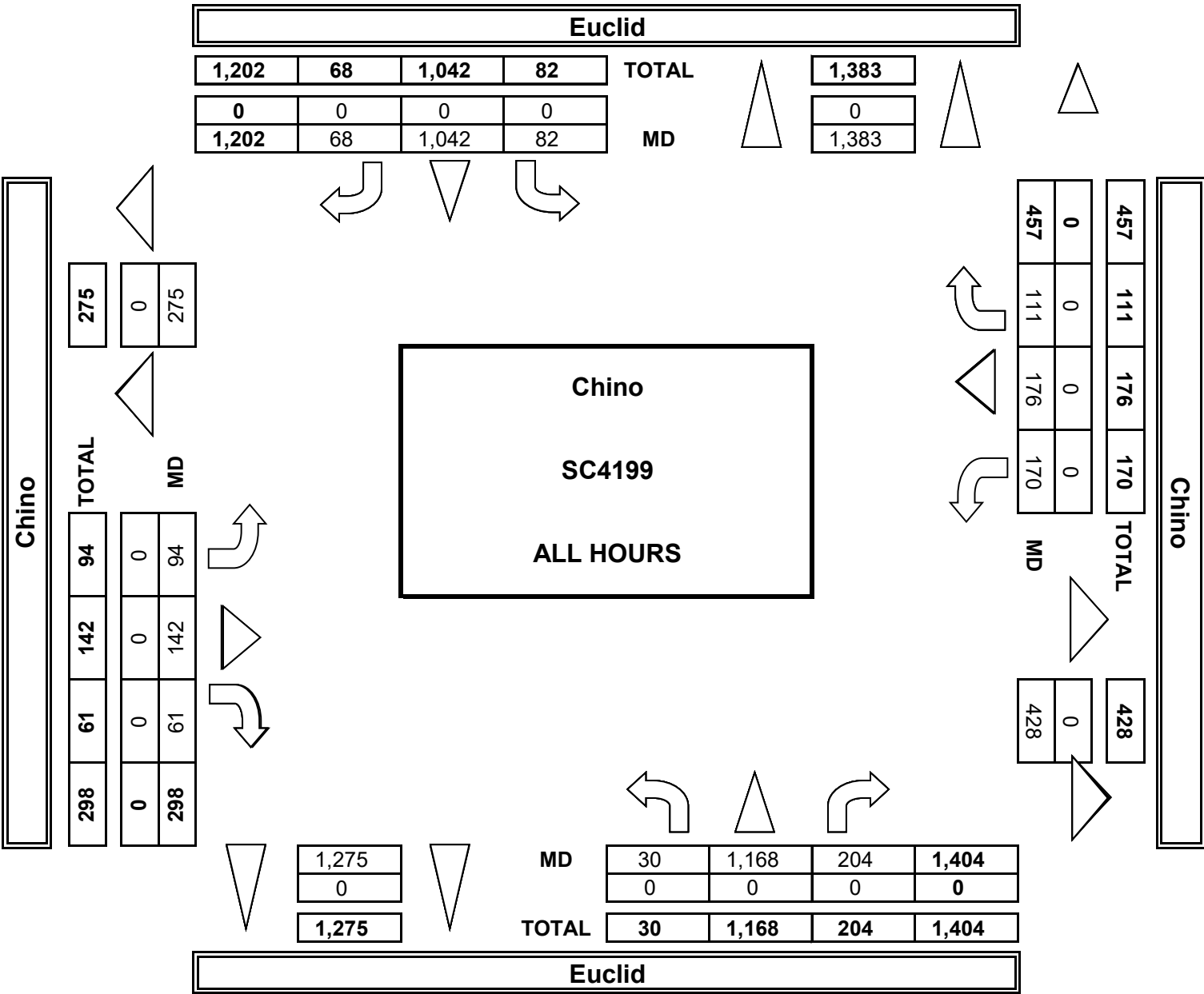
11:00 AM	
11:15 AM	
11:30 AM	
11:45 AM	
12:00 PM	
12:15 PM	
12:30 PM	
12:45 PM	
TOTAL	

ALL PED AND BIKE				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	1	0	0	1
0	2	0	0	2
0	0	0	0	0
0	1	0	1	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	5	0	1	6

PEDESTRIAN CROSSINGS				
E LEG	W LEG	S LEG	N LEG	TOTAL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	2	0	0	2

BICYCLE CROSSINGS				
EL	WL	SL	NL	TOTAL
0	1	0	0	1
0	2	0	0	2
0	0	0	0	0
0	0	0	1	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	3	0	1	4

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Chino

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

MD	11:00 AM	6	162	38	15	126
	11:15 AM	5	184	23	21	159
	11:30 AM	1	190	22	14	152
	11:45 AM	7	194	29	14	180
	12:00 PM	6	198	26	30	164
	12:15 PM	4	172	31	6	147
	12:30 PM	1	132	34	22	128
	12:45 PM	4	155	34	15	160
	VOLUMES	33	1,385	236	136	1,214
	APPROACH %	2%	84%	14%	10%	85%
	APP/DEPART	1,654	/	1,630	1,423	/
	BEGIN PEAK HR	11:15 AM				
	VOLUMES	18	765	99	78	654
	APPROACH %	2%	87%	11%	10%	84%
	PEAK HR FACTOR	0.959				0.930
	APP/DEPART	882	/	887	782	/



|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4199
14
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	0	1	0	

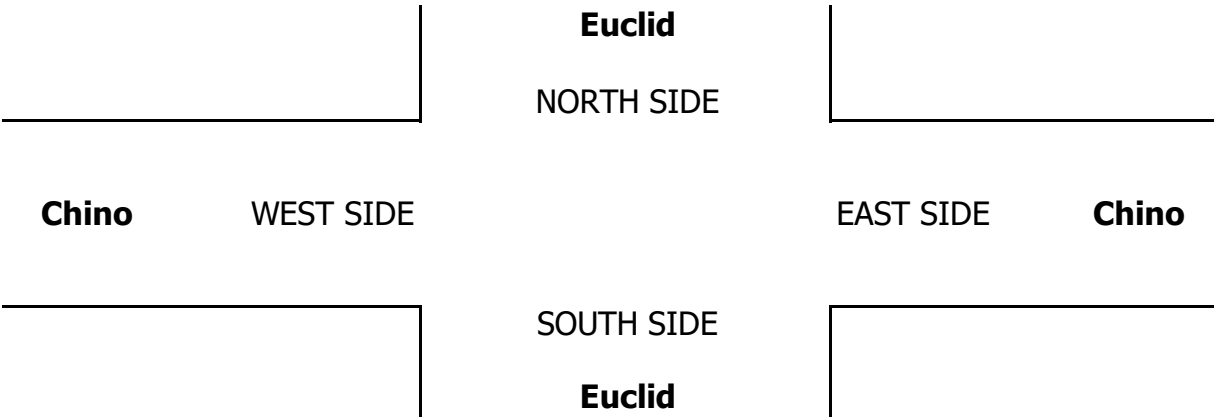
U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	3	1	0	4
0	1	0	0	1
0	0	0	0	0
1	2	0	0	3
0	2	0	0	2
0	0	0	0	0
0	0	0	0	0
1	8	1	0	10

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

4	2	7	3
6	2	6	2
5	3	6	3
6	2	2	1
7	2	3	1
5	2	5	4
7	2	3	3
3	0	6	0
43	15	38	17

24	9	17	7

ΣD	11:00 AM	6	129	30	4	88	6	12	22	8	23	26	14	368
	11:15 AM	3	137	18	10	122	10	13	14	7	16	30	8	388
	11:30 AM	1	130	15	9	118	12	16	12	6	24	15	12	370
	11:45 AM	3	143	23	8	132	12	9	21	7	16	27	8	409
	12:00 PM	6	124	23	6	126	7	10	15	7	20	17	11	372
	12:15 PM	4	129	22	3	112	5	15	16	10	16	21	9	362
	12:30 PM	1	91	25	5	100	8	9	18	4	21	17	15	314
	12:45 PM	2	131	25	3	125	4	9	16	6	17	15	6	359
	VOLUMES	26	1,014	181	48	923	64	93	134	55	153	168	83	2,952
	APPROACH %	2%	83%	15%	5%	88%	6%	33%	47%	19%	38%	42%	21%	
	APP/DEPART	1,222	/	1,198	1,043	/	1,132	283	/	363	404	/	259	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	13	534	79	33	498	41	48	62	27	76	89	39	1,547
	APPROACH %	2%	85%	13%	6%	86%	7%	35%	45%	20%	37%	44%	19%	
	PEAK HR FACTOR	0.928			0.951			0.932			0.944			0.946
	APP/DEPART	627	/	627	578	/	602	138	/	174	204	/	144	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Chino	PROJECT #: LOCATION #: CONTROL:	SC4199 14 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶

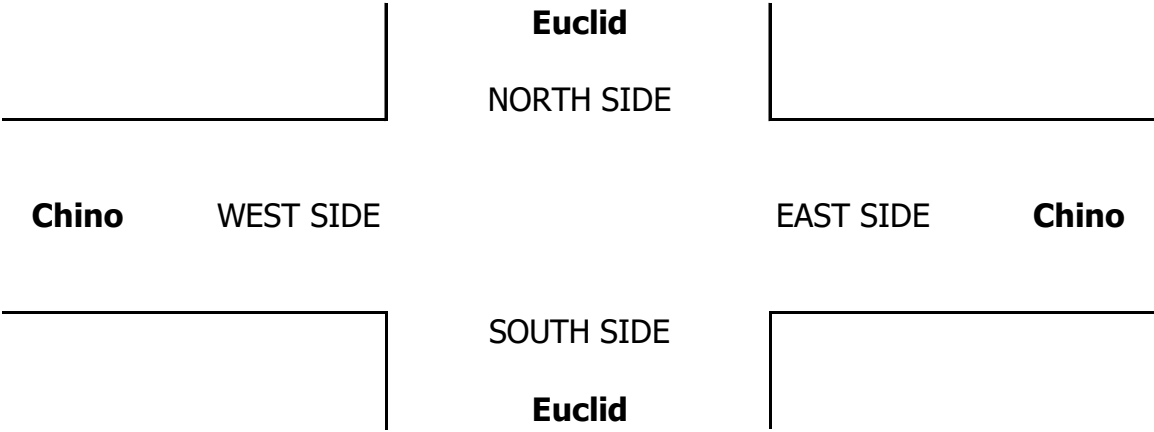
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL

MD	11:00 AM	0	3	1	0	5	0	0	2	0	3	2	1	17
	11:15 AM	1	5	1	3	2	0	0	1	1	1	0	1	16
	11:30 AM	0	5	1	0	5	1	1	0	0	1	0	1	15
	11:45 AM	1	4	2	0	5	1	0	1	0	1	0	1	16
	12:00 PM	0	2	0	1	1	0	0	0	1	1	2	1	9
	12:15 PM	0	4	0	0	2	0	0	0	2	0	0	1	9
	12:30 PM	0	7	0	2	6	0	0	0	0	2	0	0	17
	12:45 PM	0	4	4	0	4	0	0	2	0	0	0	0	14
	VOLUMES	2	34	9	6	30	2	1	6	4	7	6	6	116
	APPROACH %	4%	74%	20%	15%	75%	5%	9%	55%	36%	37%	32%	32%	
	APP/DEPART	46	/	43	40	/	42	11	/	21	19	/	10	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	2	16	4	4	13	2	1	2	2	4	2	4	56
	APPROACH %	9%	73%	18%	21%	68%	11%	20%	40%	40%	40%	20%	40%	
	PEAK HR FACTOR	0.786			0.792			0.625			0.625			0.875
	APP/DEPART	22	/	21	19	/	19	5	/	10	10	/	6	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	1	0	0	1
0	1	0	0	1
1	2	0	0	3

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0
0	0	0	0
0	0	1	1
0	0	0	0
0	1	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	1	2	1

0	1	1	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Chino

PROJECT #:
LOCATION #:
CONTROL:

SC4199
14
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

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MD
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OTHER

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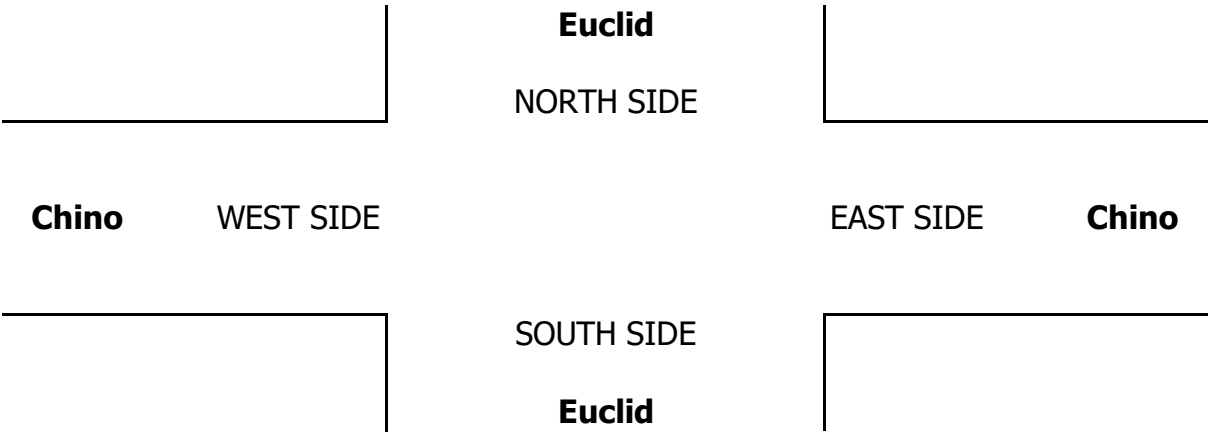
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	0	1	0	

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1

ND	11:00 AM	0	8	0	1	0	0	0	0	0	0	2	11
	11:15 AM	0	2	0	0	1	0	0	0	1	0	1	5
	11:30 AM	0	2	1	1	4	0	0	0	1	0	4	13
	11:45 AM	1	6	0	0	2	0	0	0	0	0	0	9
	12:00 PM	0	7	0	2	6	0	0	0	0	0	1	16
	12:15 PM	0	5	0	0	3	0	0	0	0	0	0	8
	12:30 PM	0	3	0	1	2	0	0	1	0	0	0	7
	12:45 PM	1	3	0	0	1	0	0	1	0	0	0	6
	VOLUMES	2	36	1	5	19	0	0	2	0	8		75
	APPROACH %	5%	92%	3%	21%	79%	0%	0%	100%	0%	20%	0%	80%
	APP/DEPART	39	/	44	24	/	21	2	/	8	10	/	2
	BEGIN PEAK HR	11:15 AM											
ND	VOLUMES	1	17	1	3	13	0	0	0	0	0	6	43
	APPROACH %	5%	89%	5%	19%	81%	0%	0%	0%	25%	0%	75%	
	PEAK HR FACTOR	0.679			0.500			0.000			0.400		
	APP/DEPART	19	/	23	16	/	15	0	/	4	8	/	1

0	0	0	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Chino	PROJECT #: LOCATION #: CONTROL:	SC4199 14 SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Chino			Chino			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL

MD	11:00 AM	0	4	2	3	10	0	0	0	0	1	5	25	
	11:15 AM	0	11	1	2	10	0	0	0	1	0	2	27	
	11:30 AM	0	16	1	1	6	1	0	0	1	1	0	1	28
	11:45 AM	0	11	1	2	12	1	0	0	1	1	0	0	29
	12:00 PM	0	19	1	6	8	0	0	0	0	2	0	2	38
	12:15 PM	0	7	3	1	8	0	0	0	0	0	0	1	20
	12:30 PM	0	8	3	4	5	0	0	0	0	3	0	3	26
	12:45 PM	0	4	1	4	9	0	0	0	0	0	1	0	19
	VOLUMES	0	80	13	23	68	2	0	0	2	8	2	14	212
	APPROACH %	0%	86%	14%	25%	73%	2%	0%	0%	100%	33%	8%	58%	
	APP/DEPART	93	/	94	93	/	78	2	/	36	24	/	4	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	0	57	4	11	36	2	0	0	2	5	0	5	122
	APPROACH %	0%	93%	7%	22%	73%	4%	0%	0%	100%	50%	0%	50%	
	PEAK HR FACTOR	0.763			0.817			0.500			0.625			0.803
	APP/DEPART	61	/	62	49	/	43	2	/	15	10	/	2	0

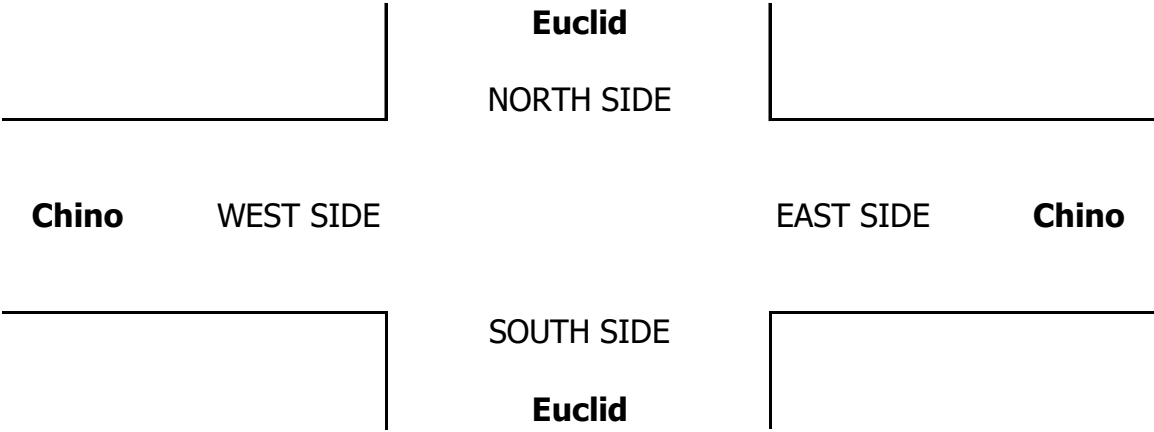
U-TURNS				
NB	SB	EB	WB	TTL

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

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

0	0	0	0
0	0	0	0
1	0	0	1
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
2	1	0	1

1	1	0	1



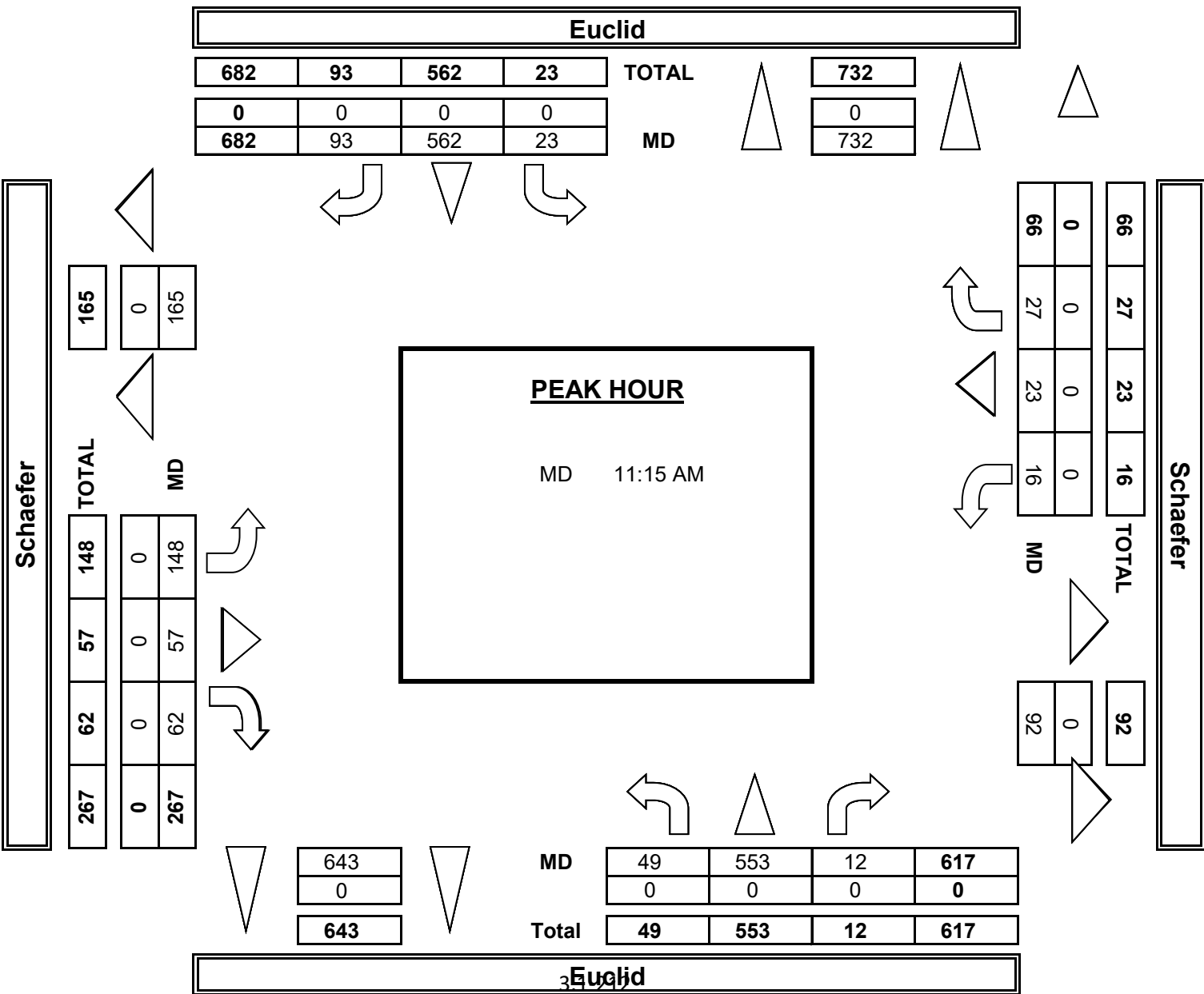
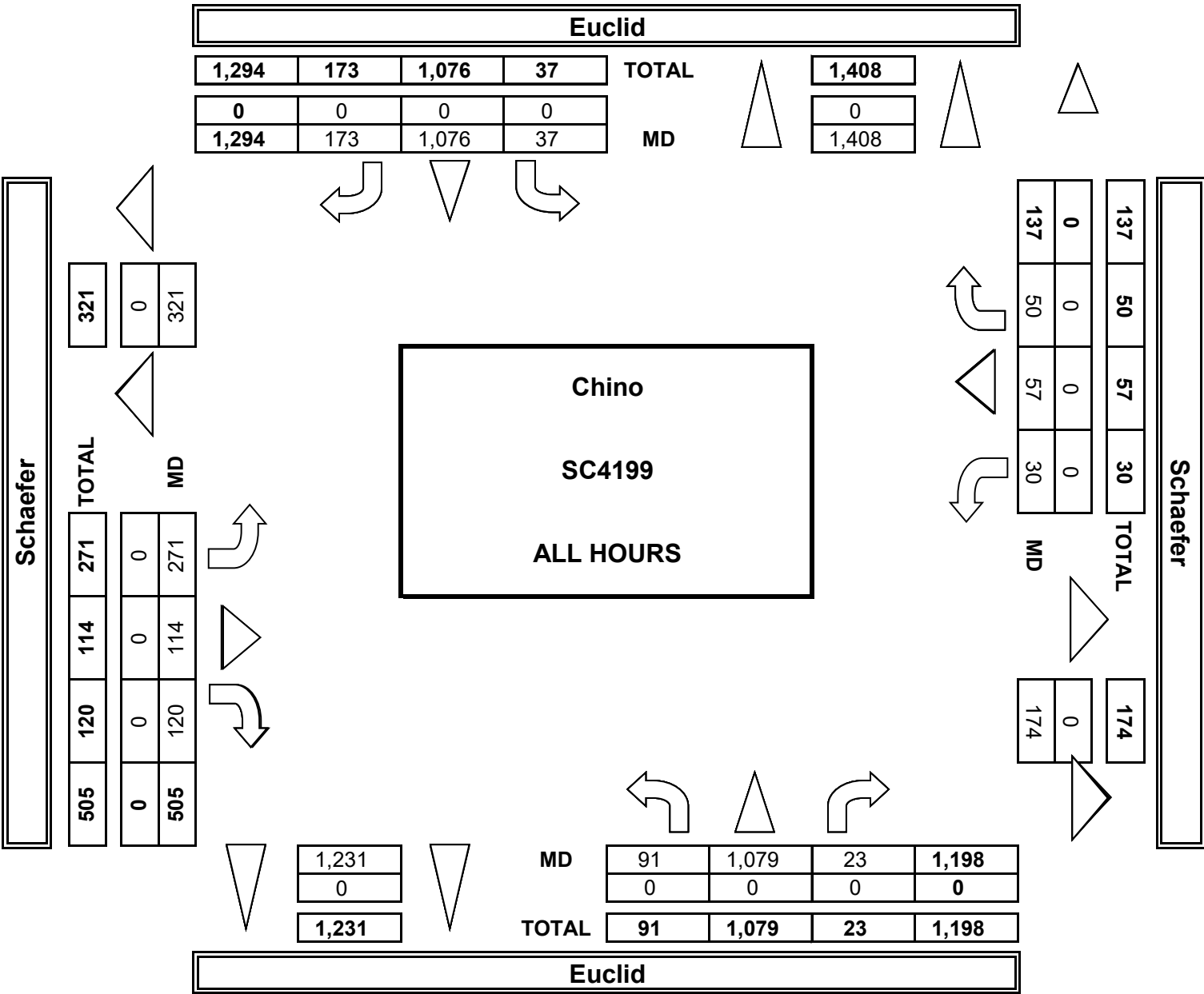
INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE: Sat, Sep 9, 23		LOCATION: NORTH & SOUTH: EAST & WEST:		Chino Euclid Schaefer		PROJECT #: LOCATION #: CONTROL:		SC4199 15 SIGNAL								
NOTES:						AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼								
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND					
		Euclid			Euclid			Schaefer			Schaefer					
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL		
MD	11:00 AM	18	142	4	6	126	25	26	16	15	5	8	6	397		
	11:15 AM	15	139	2	4	131	24	29	7	16	6	5	7	385		
	11:30 AM	14	139	4	5	155	16	37	15	18	2	4	7	416		
	11:45 AM	13	142	4	11	130	24	42	21	19	4	9	7	426		
	12:00 PM	7	133	2	3	146	29	40	14	9	4	5	6	398		
	12:15 PM	11	125	3	4	122	15	32	14	13	2	8	6	355		
	12:30 PM	5	122	2	2	132	20	29	13	13	4	9	8	359		
	12:45 PM	8	137	2	2	134	20	36	14	17	3	9	3	385		
	VOLUMES	91	1,079	23	37	1,076	173	271	114	120	30	57	50	3,134		
	APPROACH %	8%	90%	2%	3%	83%	13%	54%	23%	24%	22%	42%	36%			
	APP/DEPART	1,198	/	1,408	1,294	/	1,231	505	/	174	137	/	321	0		
	BEGIN PEAK HR	11:15 AM														
VOLUMES	49	553	12	23	562	93	148	57	62	16	23	27	1,632			
APPROACH %	8%	90%	2%	3%	82%	14%	55%	21%	23%	24%	35%	41%				
PEAK HR FACTOR	0.964			0.953			0.814			0.825			0.956			
APP/DEPART	617	/	732	682	/	643	267	/	92	66	/	165	0			
		Euclid			Euclid			Schaefer			Schaefer					
		NORTH SIDE			WEST SIDE			EAST SIDE			SOUTH SIDE					
					Euclid											
MD	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	2	0	0	0	2	0	0	0	0	2	0	2		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	1	0	0	1	0	0	1	0	0	0	0		
	12:00 PM	0	0	1	0	0	1	0	0	1	0	0	0	0		
	12:15 PM	1	0	1	0	0	2	1	0	1	0	0	0	0		
	12:30 PM	0	1	0	0	0	1	0	1	0	0	0	0	0		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0		
		1	3	3	0	0	7	1	1	3	0	0	2	5		
		ALL PED AND BIKE			PEDESTRIAN CROSSINGS			BICYCLE CROSSINGS								
		E LEG	W LEG	S LEG	N LEG	TOTAL	E LEG	W LEG	S LEG	N LEG	TOTAL	EL	WL	SL	NL	TOTAL
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	2	0	0	2	0	0	0	0	0	0	2	0	0	2
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
		0	0	1	0	1	0	0	1	0	1	0	0	0	0	0
		1	0	1	0	2	1	0	1	0	2	0	0	0	0	0
		0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1	3	3	0	7	1	1	3	0	5	0	2	0	0	2
					</											

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE: 9/9/23 SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Schaefer

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

MD	11:00 AM	19	170	5	12	149
	11:15 AM	18	171	4	6	154
	11:30 AM	14	173	4	10	181
	11:45 AM	16	172	4	19	149
	12:00 PM	8	174	2	3	175
	12:15 PM	11	153	4	8	129
	12:30 PM	5	141	4	2	155
	12:45 PM	8	152	5	4	155
	VOLUMES	97	1,304	30	64	1,245
	APPROACH %	7%	91%	2%	4%	84%
	APP/DEPART	1,431	/	1,656	1,485	/
	BEGIN PEAK HR	11:15 AM				
	VOLUMES	55	689	14	38	658
	APPROACH %	7%	91%	2%	5%	83%
	PEAK HR FACTOR	0.986				
	APP/DEPART	758	/	884	791	/

Schaefer

WEST SIDE

|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Schaefer	PROJECT #: LOCATION #: CONTROL:	SC4199 15 SIGNAL

CLASS 1: PASSENGER VEHICLES	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

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

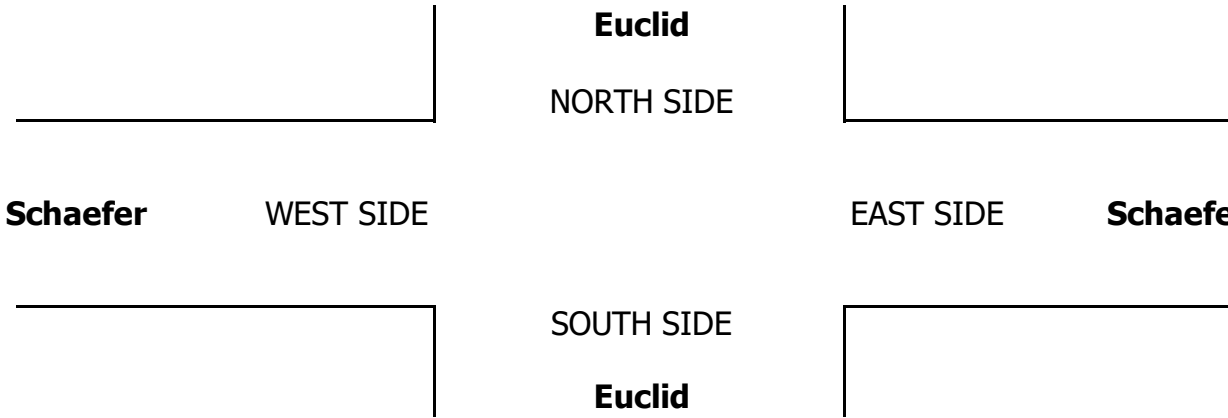
RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

ΣD	11:00 AM	17	120	3	2	109	24	26	16	15	3	8	5	348
	11:15 AM	13	118	1	2	114	24	29	7	16	5	5	6	340
	11:30 AM	14	115	4	2	136	16	35	15	16	2	4	3	362
	11:45 AM	11	122	4	7	117	23	42	19	18	3	8	3	377
	12:00 PM	6	106	2	3	128	27	39	14	8	4	5	4	346
	12:15 PM	11	104	2	2	116	14	31	14	13	1	8	4	320
	12:30 PM	5	107	0	2	116	19	27	11	11	4	9	7	318
	12:45 PM	8	125	0	1	120	20	35	13	17	3	9	2	353
	VOLUMES	85	917	16	21	956	167	264	109	114	25	56	34	2,775
	APPROACH %	8%	90%	2%	2%	83%	15%	54%	22%	23%	22%	49%	30%	
	APP/DEPART	1,022	/	1,222	1,151	/	1,099	487	/	146	115	/	308	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	44	461	11	14	495	90	145	55	58	14	22	16	1,431
	APPROACH %	8%	89%	2%	2%	82%	15%	56%	21%	22%	27%	42%	31%	
	PEAK HR FACTOR	0.938			0.954			0.816			0.813			0.946
	APP/DEPART	518	/	626	603	/	569	258	/	80	52	/	156	0

0	0	0	0	0
0	1	0	0	1
1	3	0	0	4
1	0	0	0	1
0	0	0	0	0
1	2	0	0	3
1	1	0	0	2
0	0	0	0	0
4	7	0	0	11

1	14	14	4
0	7	14	5
1	10	15	3
0	8	13	2
0	12	6	4
2	4	11	4
0	6	7	5
0	9	12	2
4	70	92	29

1	37	48	14



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Schaefer

PROJECT #:
LOCATION #:
CONTROL:

SC4199
15
SIGNAL

CLASS 2:
2-AXLE
WORK
VEHICLES/
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

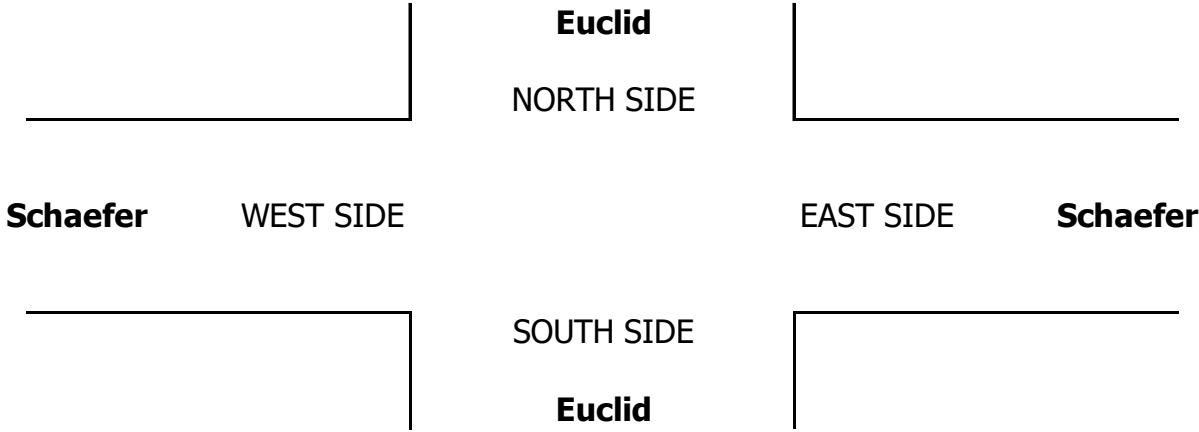
MD	11:00 AM	1	7	1	1	6	1	0	0	0	0	0	0	17
	11:15 AM	1	5	0	0	6	0	0	0	0	0	0	0	12
	11:30 AM	0	6	0	0	6	0	1	0	2	0	0	0	15
	11:45 AM	1	4	0	0	3	1	0	2	1	1	1	0	14
	12:00 PM	1	5	0	0	1	2	1	0	1	0	0	0	11
	12:15 PM	0	4	1	0	2	1	0	0	0	1	0	1	10
	12:30 PM	0	6	1	0	5	1	1	2	1	0	0	0	17
	12:45 PM	0	3	1	0	5	0	1	1	0	0	0	1	12
	VOLUMES	4	40	4	1	34	6	4	5	5	2	1	2	110
	APPROACH %	8%	82%	8%	2%	81%	14%	29%	36%	36%	40%	20%	40%	
	APP/DEPART	49	/	47	42	/	42	14	/	10	5	/	11	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	3	20	0	0	16	3	2	2	4	1	1	0	53
	APPROACH %	13%	83%	0%	0%	84%	16%	25%	25%	50%	50%	50%	0%	
	PEAK HR FACTOR	0.857			0.792			0.667			0.250			0.883
	APP/DEPART	24	/	22	19	/	22	8	/	2	2	/	7	0

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
1	0	0	0	1
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
1	1	0	0	2

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	0	0	0
0	0	0	0
0	0	1	0
0	0	1	0
0	0	0	0
0	0	0	1
1	0	0	0
0	0	0	1
1	0	2	2

0	0	2	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Schaefer

PROJECT #:
LOCATION #:
CONTROL:

SC4199
15
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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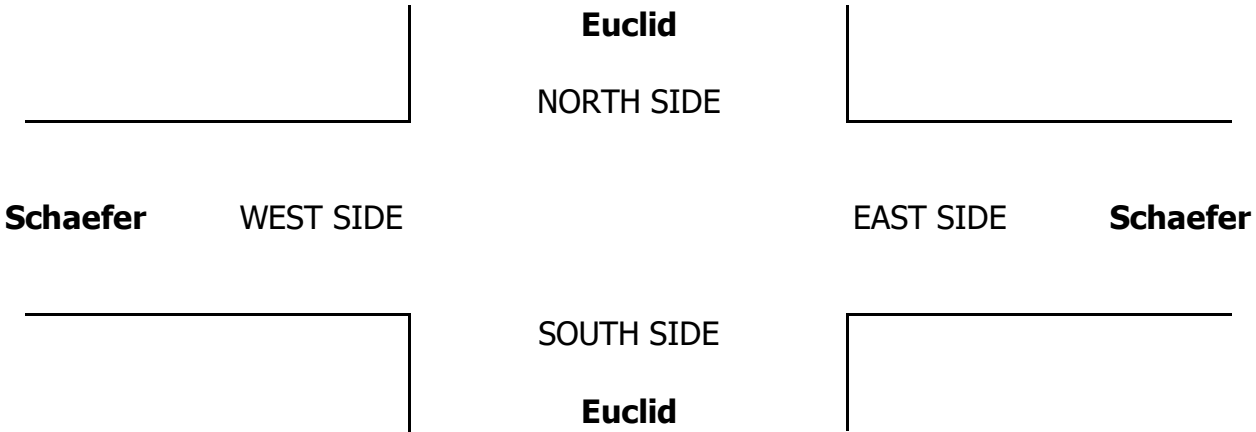
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

ND	11:00 AM	0	5	0	1	2	0	0	0	0	1	0	0	9
	11:15 AM	0	3	0	2	1	0	0	0	0	1	0	0	7
	11:30 AM	0	5	0	1	3	0	0	0	0	0	0	1	10
	11:45 AM	0	4	0	0	3	0	0	0	0	0	0	2	9
	12:00 PM	0	5	0	0	6	0	0	0	0	0	0	1	12
	12:15 PM	0	7	0	0	1	0	0	0	0	0	0	0	8
	12:30 PM	0	2	1	0	2	0	0	1	0	0	0	0	7
	12:45 PM	0	5	0	0	0	0	0	0	0	0	0	0	5
	VOLUMES	0	36	1	4	18	0	1	0	1	2	0	4	67
	APPROACH %	0%	97%	3%	18%	82%	0%	50%	0%	50%	33%	0%	67%	
	APP/DEPART	37	/	41	22	/	21	2	/	5	6	/	0	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	0	17	0	3	13	0	0	0	0	1	0	4	38
	APPROACH %	0%	100%	0%	19%	81%	0%	0%	0%	0%	20%	0%	80%	
	PEAK HR FACTOR	0.850			0.667			0.000			0.625			0.792
	APP/DEPART	17	/	21	16	/	14	0	/	3	5	/	0	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	1	3

0	0	0	3



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Schaefer

PROJECT #:
LOCATION #:
CONTROL:

SC4199
15
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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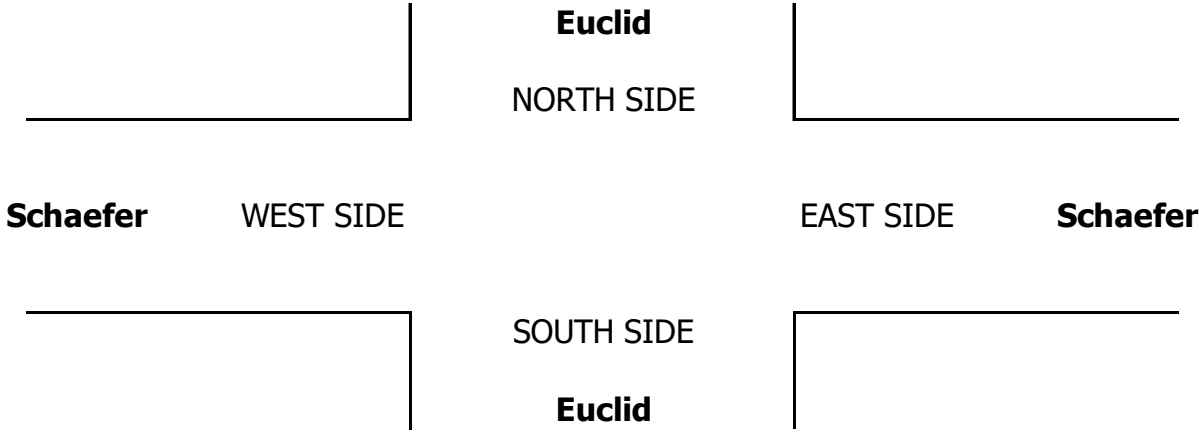
◀ W
E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Schaefer			Schaefer			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
11:00 AM	0	9	0	2	9	0	0	0	0	1	0	1	22
11:15 AM	1	13	1	0	9	0	0	0	0	0	0	1	25
11:30 AM	0	13	0	2	10	0	1	0	0	0	0	3	29
11:45 AM	1	12	0	4	7	0	0	0	0	0	0	2	26
12:00 PM	0	16	0	0	11	0	0	0	0	0	0	0	27
12:15 PM	0	9	0	2	2	0	1	0	0	0	0	1	15
12:30 PM	0	7	0	0	9	0	0	0	0	0	0	1	17
12:45 PM	0	4	1	1	9	0	0	0	0	0	0	0	15
VOLUMES	2	83	2	11	66	0	2	0	0	1	0	9	176
APPROACH %	2%	95%	2%	14%	86%	0%	100%	0%	0%	10%	0%	90%	
APP/DEPART	87	/	94	77	/	67	2	/	13	10	/	2	0
BEGIN PEAK HR	11:15 AM												
VOLUMES	2	54	1	6	37	0	1	0	0	0	0	6	107
APPROACH %	4%	95%	2%	14%	86%	0%	100%	0%	0%	0%	0%	100%	
PEAK HR FACTOR	0.891			0.896			0.250			0.500			0.922
APP/DEPART	57	/	61	43	/	37	1	/	7	6	/	2	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	2
0	0	0	2
0	0	0	0
0	0	0	1
0	0	0	1
1	0	0	0
1	0	0	7

0	0	0	4



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE: Sat, Sep 9, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Edison	PROJECT #: LOCATION #: CONTROL:	SC4199 16 SIGNAL

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

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Euclid			Euclid			Edison			Edison			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	1	1	2	1	1	1	1	1	1	0	

MD	11:00 AM	16	143	11	12	127	13	26	31	7	4	37	15	442
	11:15 AM	22	131	9	16	108	23	28	31	19	15	40	14	456
	11:30 AM	21	120	11	7	126	21	30	26	16	11	47	9	445
	11:45 AM	18	126	10	17	136	19	28	30	14	12	43	12	465
	12:00 PM	12	120	5	16	131	17	24	45	19	13	29	10	441
	12:15 PM	11	109	5	10	115	19	14	31	18	6	33	4	375
	12:30 PM	14	108	8	10	116	18	22	46	11	7	42	11	413
	12:45 PM	7	129	9	11	120	17	21	42	23	4	31	5	419
	VOLUMES	121	986	68	99	979	147	193	282	127	72	302	80	3,469
	APPROACH %	10%	84%	6%	8%	79%	12%	32%	47%	21%	16%	67%	18%	
	APP/DEPART	1,180	/	1,267	1,233	/	1,183	602	/	449	454	/	570	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	73	497	35	56	501	80	110	132	68	51	159	45	1,814
	APPROACH %	12%	82%	6%	9%	78%	12%	35%	43%	22%	20%	62%	18%	
	PEAK HR FACTOR	0.933			0.926			0.881			0.924			0.973
	APP/DEPART	608	/	656	641	/	623	310	/	223	255	/	312	0

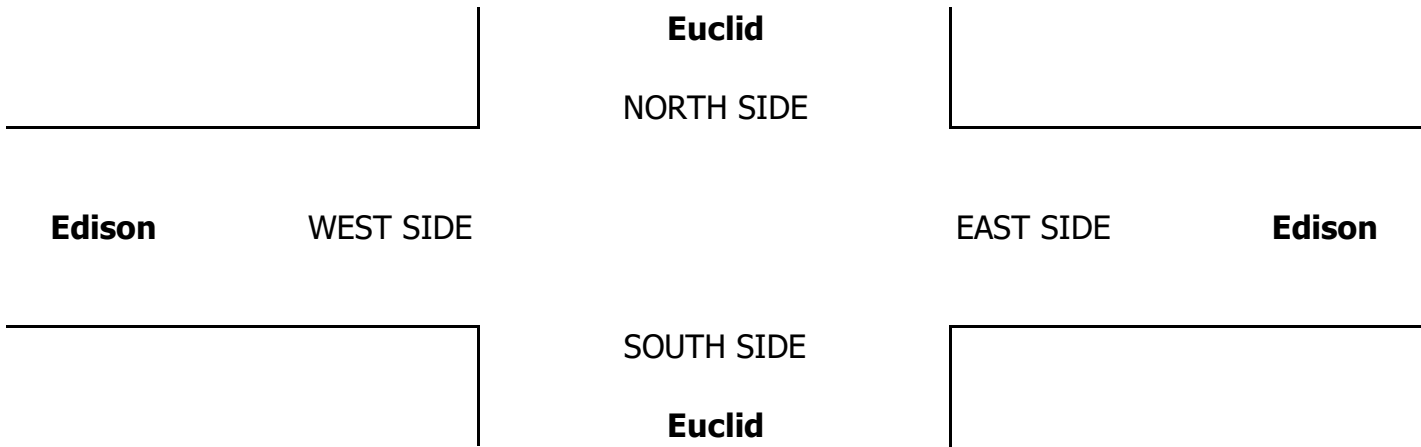
U-TURNS					
NB	SB	EB	WB	TTL	
0	0	0	0		

0	1	0	0	1
1	0	0	0	1
0	2	0	0	2
0	1	0	0	1
2	1	0	0	3
0	1	0	0	1
0	1	0	0	1
2	1	0	0	3
5	8	0	0	13

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

2	6	3	0
3	11	9	1
5	10	8	2
6	8	7	3
0	8	9	2
1	8	11	2
3	7	5	4
1	4	9	2
21	62	61	16

14	37	33	8



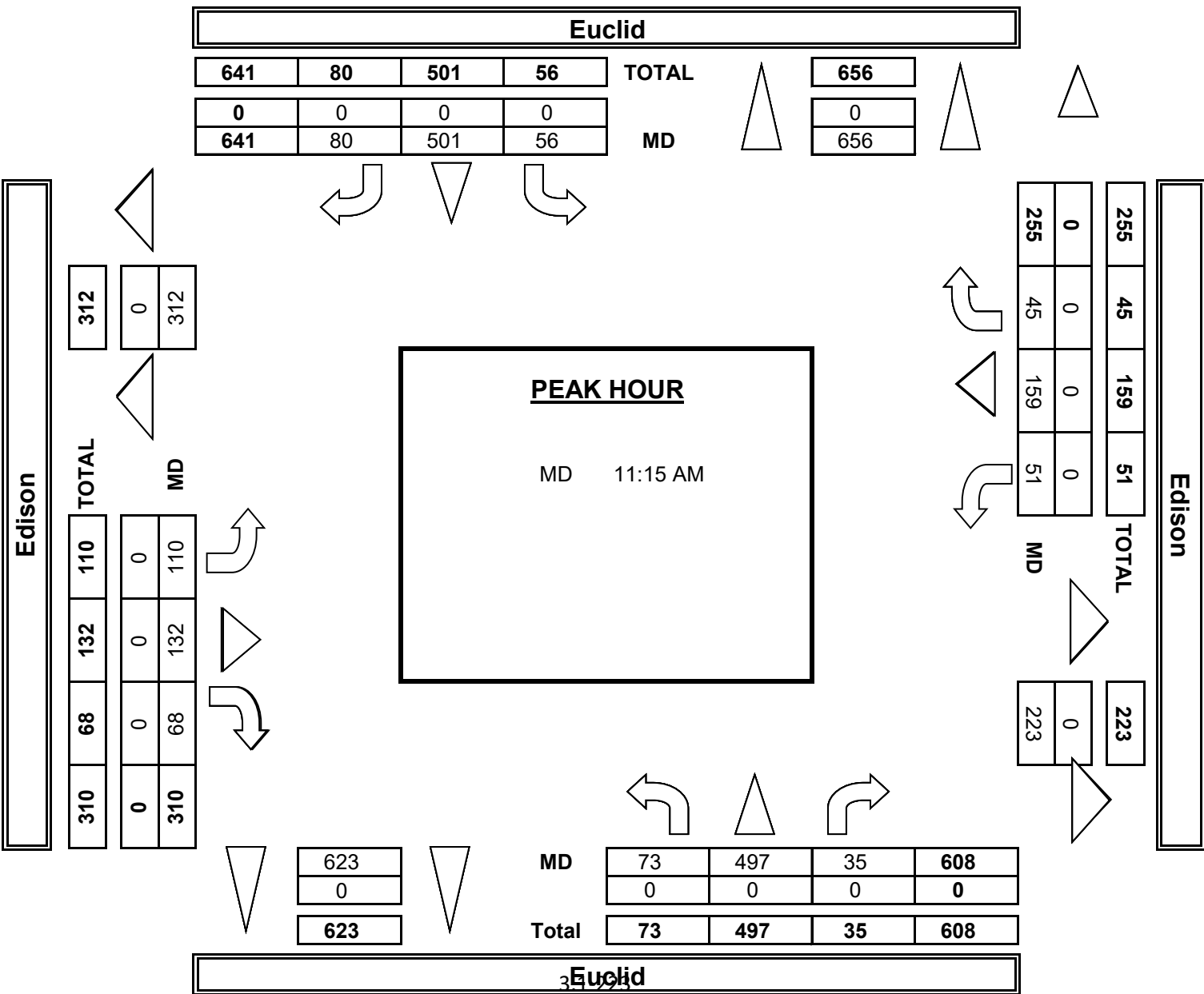
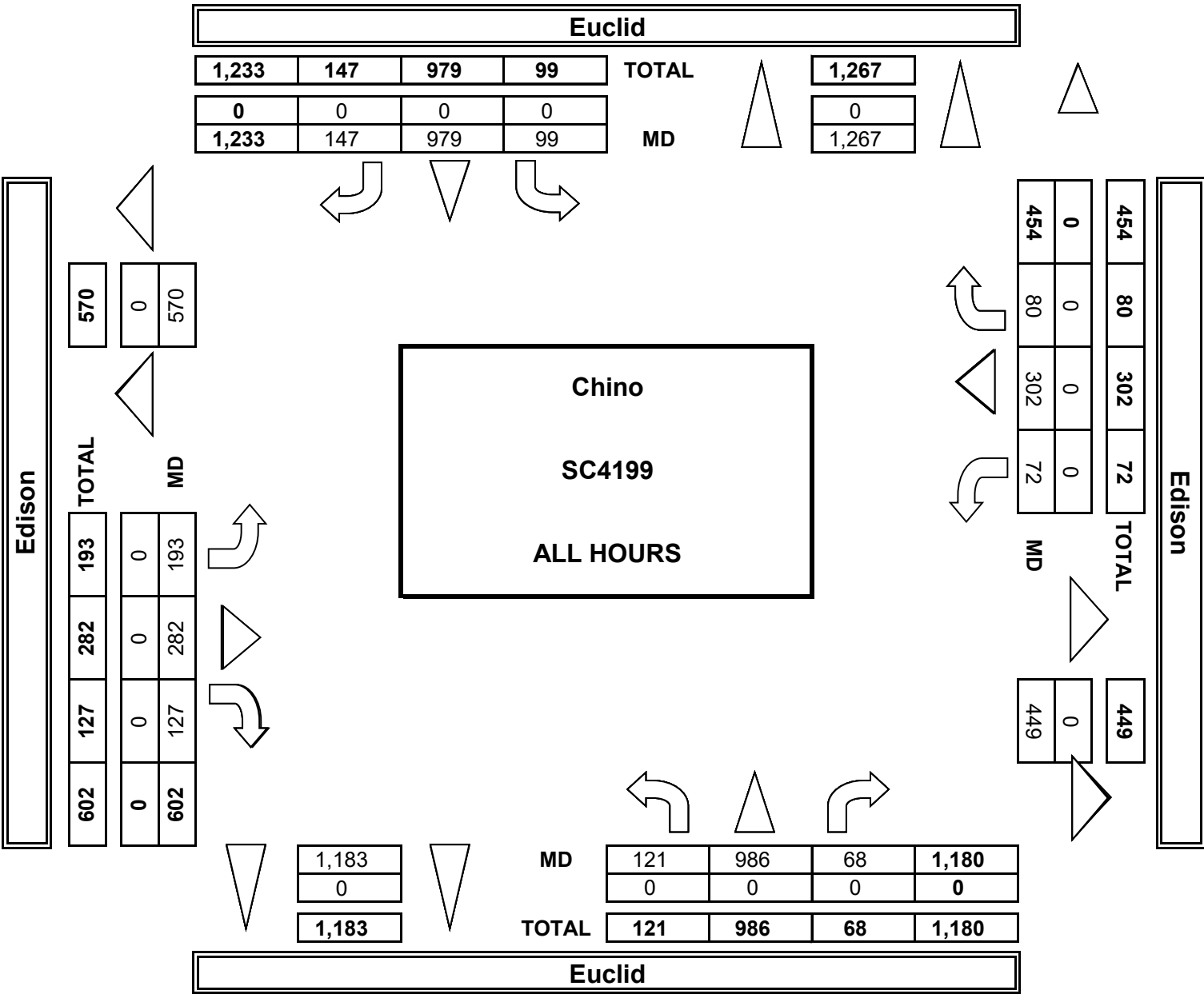
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
TOTAL	

ALL PED AND BIKE					
E LEG	W LEG	S LEG	N LEG	TOTAL	
0	0	0	0	0	
0	2	1	1	4	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	1	0	0	1	
0	0	1	0	1	
0	0	0	0	0	
0	3	2	1	6	

PEDESTRIAN CROSSINGS					
E LEG	W LEG	S LEG	N LEG	TOTAL	
0	0	0	0	0	
0	0	1	1	2	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	1	0	0	1	
0	0	1	0	1	
0	0	0	0	0	
0	1	2	1	4	

BICYCLE CROSSINGS					
EL	WL	SL	NL	TOTAL	
0	0	0	0	0	
0	2	0	0	2	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	2	0	0	2	

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE: 9/9/23 SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Edison

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2

MD	11:00 AM	18	157	20	24	143
	11:15 AM	23	158	12	21	122
	11:30 AM	25	142	23	7	138
	11:45 AM	22	141	15	29	142
	12:00 PM	15	143	5	24	146
	12:15 PM	12	130	5	11	124
	12:30 PM	14	117	11	11	131
	12:45 PM	13	140	11	16	130
	VOLUMES	142	1,126	102	142	1,075
	APPROACH %	10%	82%	7%	10%	76%
	APP/DEPART	1,369	/	1,504	1,410	/
	BEGIN PEAK HR	11:15 AM				
	VOLUMES	85	584	55	81	547
	APPROACH %	12%	81%	8%	11%	74%
	PEAK HR FACTOR	0.939			0.941	
	APP/DEPART	723	/	798	738	/

Edison

WEST SIDE

|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Edison

PROJECT #:
LOCATION #:
CONTROL:

SC4199
16
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

AM
PM
MD
OTHER
OTHER

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N
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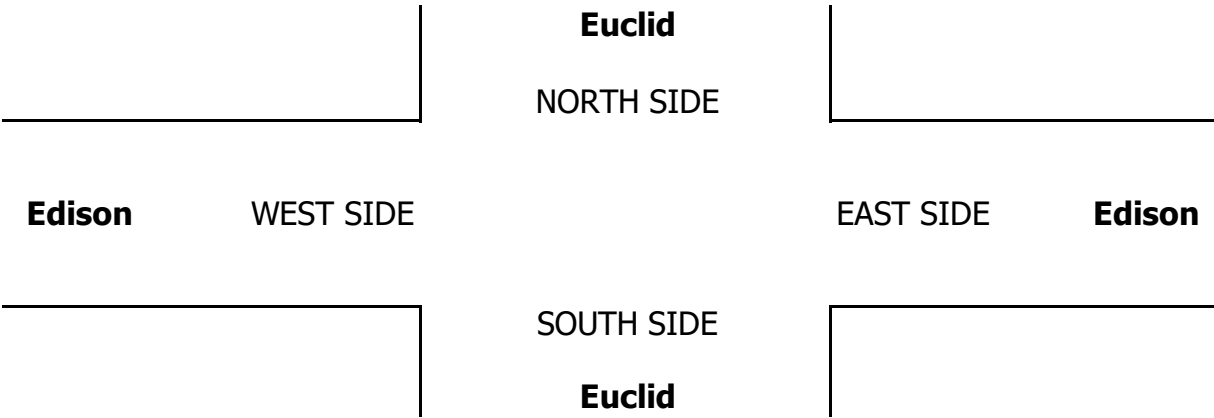
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	1	1	2	1	1	1	1	1	1	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	1	0	0	1
1	0	0	0	1
0	2	0	0	2
0	1	0	0	1
2	1	0	0	3
0	1	0	0	1
0	1	0	0	1
2	1	0	0	3
5	8	0	0	13

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	6	3	0
3	9	9	1
2	7	8	2
5	6	5	2
0	6	8	2
1	7	11	1
3	7	4	4
1	4	8	2
15	52	56	14

ΣD	11:00 AM	15	130	6	5	114	11	18	28	7	2	34	10	380
	11:15 AM	21	113	7	13	96	18	21	28	19	7	39	12	394
	11:30 AM	17	103	5	7	115	16	22	25	12	9	43	8	382
	11:45 AM	15	115	6	10	130	15	23	28	10	11	40	7	410
	12:00 PM	9	104	5	12	120	12	16	42	17	12	28	7	384
	12:15 PM	10	93	5	9	109	15	7	27	17	5	31	3	331
	12:30 PM	14	99	6	9	105	15	19	44	9	6	40	8	374
	12:45 PM	4	120	7	7	112	13	17	42	21	4	30	3	380
	VOLUMES	105	877	47	72	901	115	143	264	112	56	285	58	3,048
	APPROACH %	10%	85%	5%	7%	82%	10%	28%	51%	22%	14%	71%	15%	
	APP/DEPART	1,034	/	1,086	1,096	/	1,074	519	/	383	399	/	505	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	62	435	23	42	461	61	82	123	58	39	150	34	1,577
	APPROACH %	12%	83%	4%	7%	81%	11%	31%	47%	22%	17%	67%	15%	
	PEAK HR FACTOR	0.921			0.910			0.877			0.929			0.959
	APP/DEPART	523	/	555	568	/	561	263	/	188	223	/	273	0

10	28	30	7



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Edison	PROJECT #: LOCATION #: CONTROL:	SC4199 16 SIGNAL

CLASS 2: 2-AXLE WORK VEHICLES/ TRUCKS	NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

MD	11:00 AM	0	7	0	1	6	0	3	1	0	1	2	1	22
	11:15 AM	0	5	0	1	4	2	1	3	0	0	1	1	18
	11:30 AM	2	6	0	0	7	0	2	0	3	0	1	0	21
	11:45 AM	1	4	2	0	3	2	0	0	0	0	1	1	14
	12:00 PM	2	4	0	0	2	0	0	1	1	0	1	0	11
	12:15 PM	0	4	0	1	1	1	1	1	1	0	1	0	11
	12:30 PM	0	5	0	0	4	2	0	1	2	0	1	1	16
	12:45 PM	0	3	1	2	4	0	0	0	1	0	1	1	13
	VOLUMES	5	38	3	5	31	7	7	7	8	1	9	5	126
	APPROACH %	11%	83%	7%	12%	72%	16%	32%	32%	36%	7%	60%	33%	
	APP/DEPART	46	/	50	43	/	40	22	/	15	15	/	21	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	5	19	2	1	16	4	3	4	4	0	4	2	64
	APPROACH %	19%	73%	8%	5%	76%	19%	27%	36%	36%	0%	67%	33%	
	PEAK HR FACTOR	0.813			0.750			0.550			0.750			0.762
	APP/DEPART	26	/	24	21	/	20	11	/	7	6	/	13	0

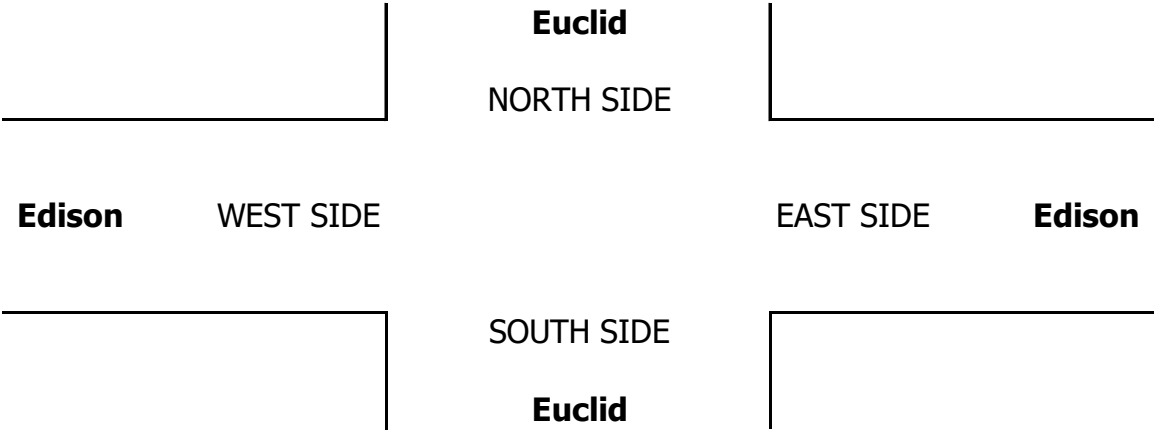
U-TURNS				
NB	SB	EB	WB	TTL

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

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

0	0	0	0
0	1	0	0
0	0	0	0
1	1	0	0
0	0	1	0
0	0	0	0
0	0	1	0
0	0	1	0
0	0	1	0
1	2	3	0

1	2	1	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Edison

PROJECT #:
LOCATION #:
CONTROL:

SC4199
16
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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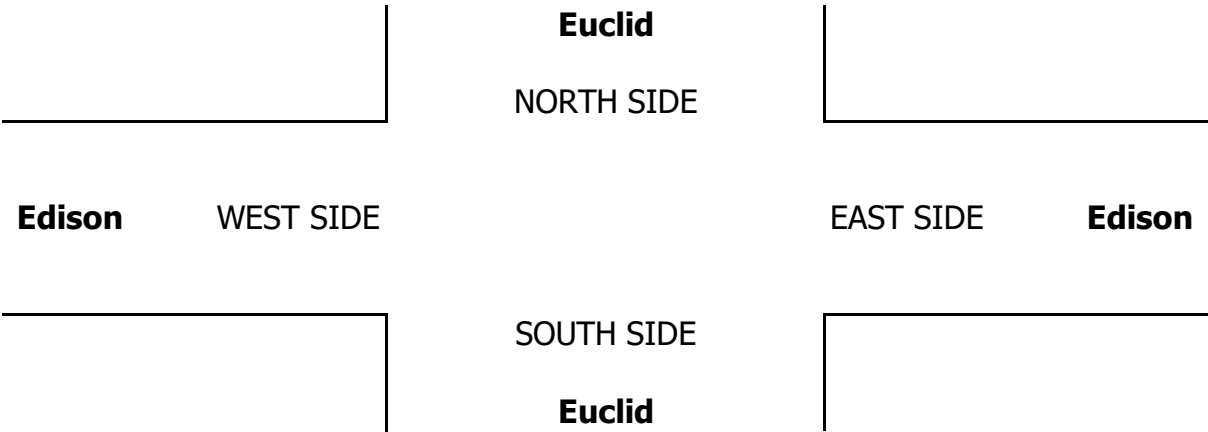
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	1	1	2	1	1	1	1	1	1	0	

ND	11:00 AM	0	1	1	1	1	2	2	0	0	1	0	2	11
	11:15 AM	1	2	1	0	3	0	1	0	0	6	0	0	14
	11:30 AM	1	3	0	0	0	1	3	0	1	1	2	1	13
	11:45 AM	1	1	0	2	2	0	1	0	3	1	2	2	15
	12:00 PM	0	2	0	0	4	1	1	1	0	1	0	2	12
	12:15 PM	1	4	0	0	1	2	3	0	0	0	0	0	11
	12:30 PM	0	2	1	1	1	1	1	1	0	1	1	0	10
	12:45 PM	0	3	1	0	0	0	2	0	0	0	0	0	6
	VOLUMES	4	18	4	4	12	7	14	2	4	11	5	7	92
	APPROACH %	15%	69%	15%	17%	52%	30%	70%	10%	20%	48%	22%	30%	
	APP/DEPART	26	/	39	23	/	27	20	/	10	23	/	16	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	3	8	1	2	9	2	6	1	4	9	4	5	54
	APPROACH %	25%	67%	8%	15%	69%	15%	55%	9%	36%	50%	22%	28%	
	PEAK HR FACTOR	0.750			0.650			0.688			0.750			0.900
	APP/DEPART	12	/	19	13	/	22	11	/	4	18	/	9	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	1	0	0
0	0	1	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	1	1

0	1	1	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Edison

PROJECT #:
LOCATION #:
CONTROL:

SC4199
16
SIGNAL

CLASS 4:
4 OR MORE
AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Edison			Edison			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	1	1	2	1	1	1	1	1	1	0	

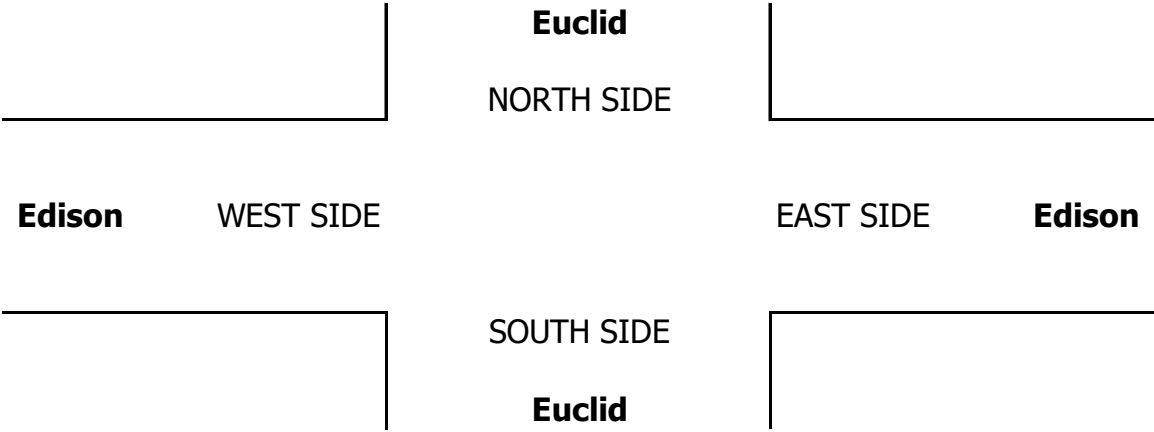
MD	11:00 AM	1	4	4	5	6	0	3	2	0	0	1	2	28
	11:15 AM	0	11	1	2	4	3	5	0	0	2	0	1	29
	11:30 AM	1	8	6	0	4	4	3	1	0	1	1	0	29
	11:45 AM	1	6	2	5	1	2	4	2	1	0	0	2	26
	12:00 PM	1	9	0	4	5	4	7	1	1	0	0	1	33
	12:15 PM	0	7	0	0	3	1	3	3	0	1	1	1	20
	12:30 PM	0	2	1	0	6	0	2	0	0	0	0	2	13
	12:45 PM	3	3	0	2	4	4	2	0	1	0	0	1	20
	VOLUMES	7	50	14	18	33	18	29	9	3	4	3	10	198
	APPROACH %	10%	70%	20%	26%	48%	26%	71%	22%	7%	24%	18%	59%	
	APP/DEPART	71	/	89	69	/	40	41	/	41	17	/	28	0
	BEGIN PEAK HR	11:15 AM												
	VOLUMES	3	34	9	11	14	13	19	4	2	3	1	4	117
	APPROACH %	7%	74%	20%	29%	37%	34%	76%	16%	8%	38%	13%	50%	
	PEAK HR FACTOR	0.767			0.731			0.694			0.667			0.886
	APP/DEPART	46	/	57	38	/	19	25	/	24	8	/	17	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

2	0	0	0
0	1	0	0
3	2	0	0
0	1	1	0
0	2	0	0
0	1	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
5	7	1	1

3	6	1	0



INTERSECTION TURNING MOVEMENT COUNTS

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

T050223

DATE: Sat, Sep 9, 23	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Eucalyptus	PROJECT #: LOCATION #: CONTROL:	SC4199 17 SIGNAL

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

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

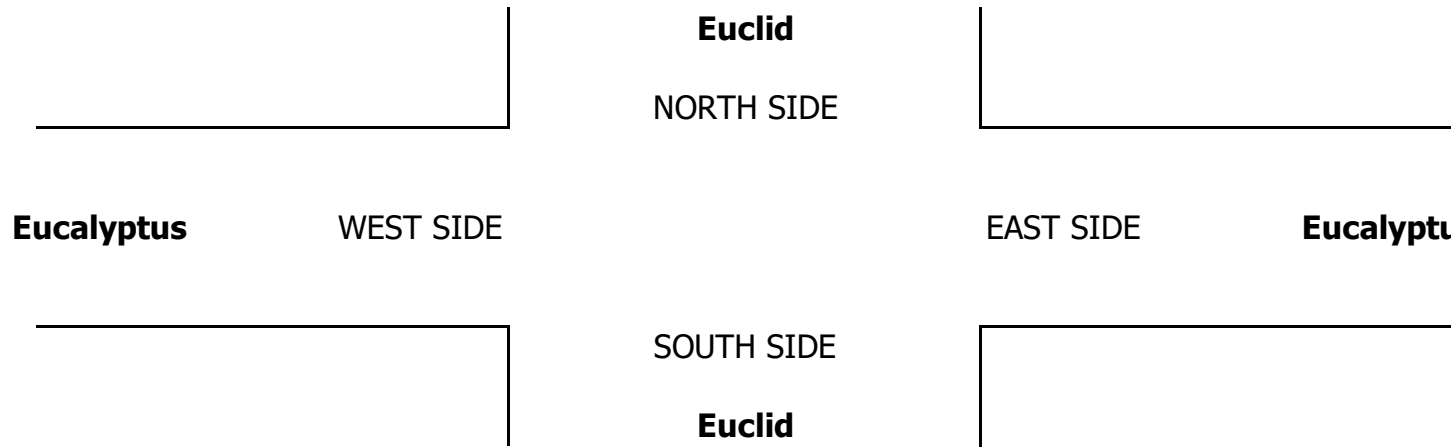
MD	11:00 AM	18	152	2	2	135	3	11	11	27	2	10	5	378
	11:15 AM	36	144	2	4	136	8	8	10	24	2	8	5	387
	11:30 AM	22	136	2	4	136	8	9	12	22	7	12	4	374
	11:45 AM	17	144	1	7	147	11	9	11	31	3	18	8	407
	12:00 PM	16	116	4	5	139	17	10	12	31	2	11	2	365
	12:15 PM	22	94	0	4	125	9	9	16	35	2	10	7	333
	12:30 PM	18	117	1	6	110	6	9	12	26	0	9	3	317
	12:45 PM	23	126	1	8	135	10	11	8	27	4	16	4	373
	VOLUMES	172	1,029	13	40	1,063	72	76	92	223	22	94	38	2,942
	APPROACH %	14%	85%	1%	3%	90%	6%	19%	24%	57%	14%	61%	25%	
	APP/DEPART	1,215	/	1,150	1,182	/	1,309	391	/	145	154	/	338	0
	BEGIN PEAK HR	11:00 AM												
	VOLUMES	93	576	7	17	554	30	37	44	104	14	48	22	1,549
	APPROACH %	14%	85%	1%	3%	92%	5%	20%	24%	56%	17%	57%	26%	
	PEAK HR FACTOR		0.930			0.914			0.907			0.724		0.951
	APP/DEPART	677	/	637	603	/	673	185	/	68	84	/	171	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	2	17	4
0	4	19	1
0	3	17	3
0	5	24	3
1	4	21	1
0	3	24	4
0	2	20	0
0	3	20	2
1	26	162	18

0	14	77	11



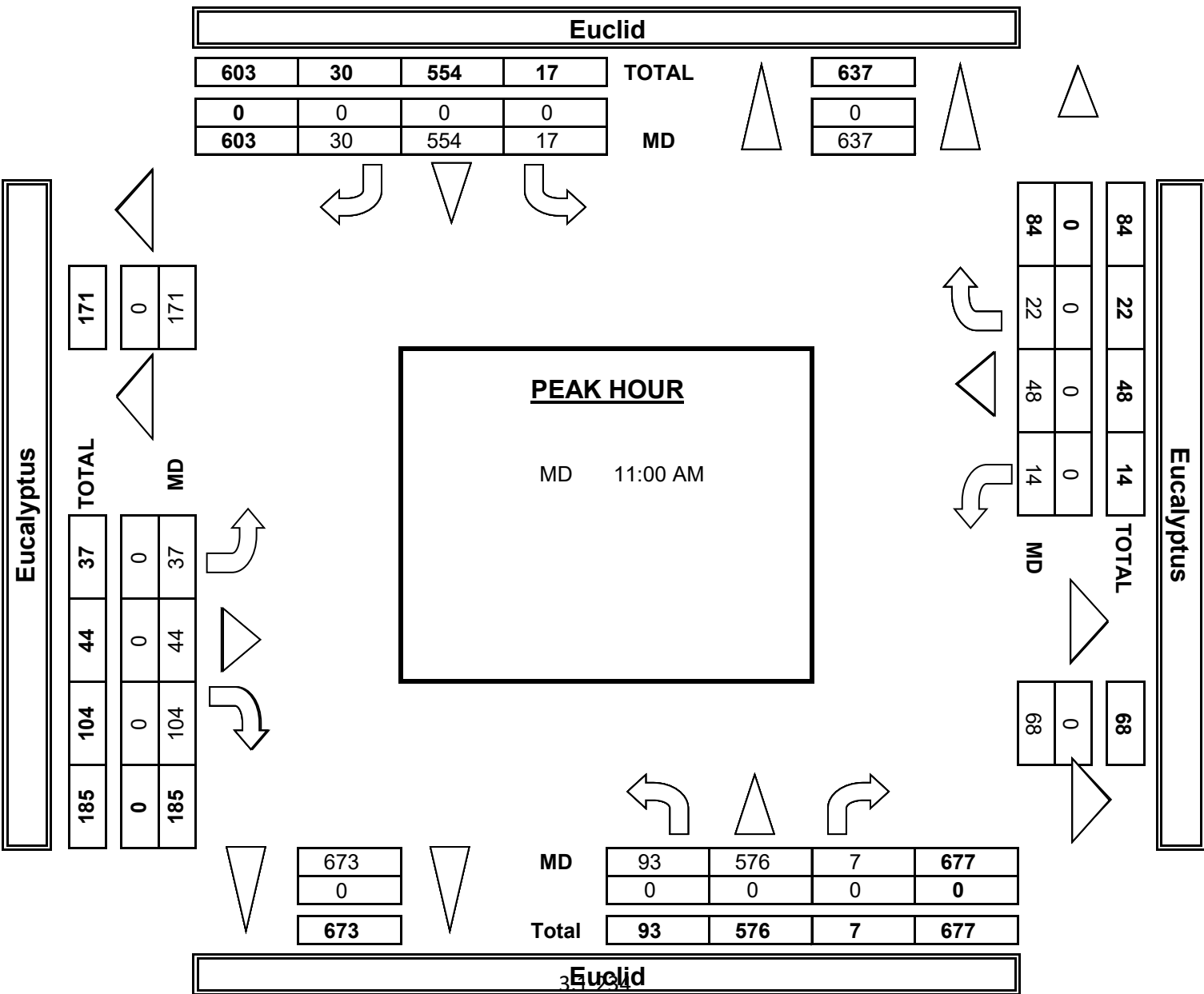
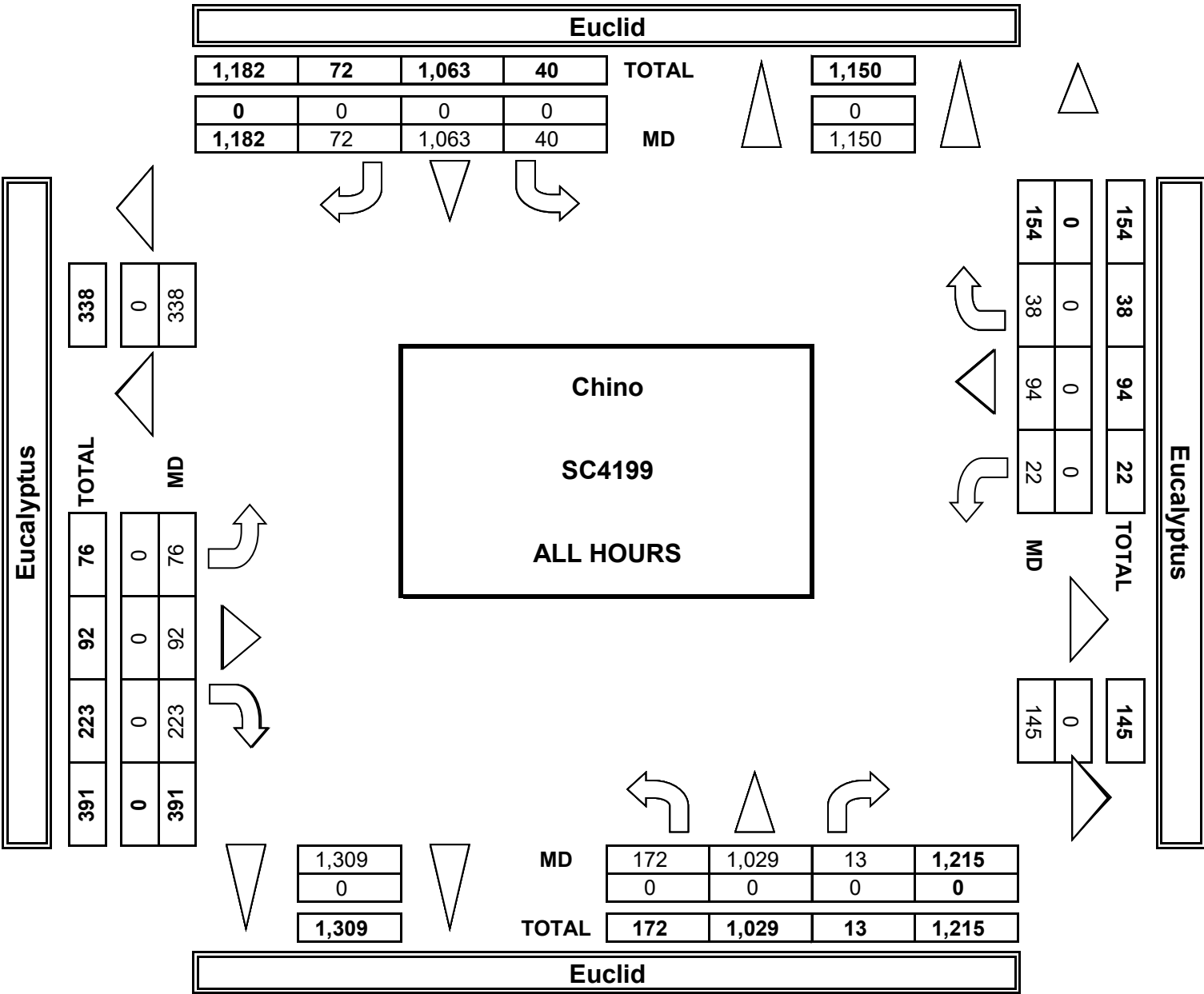
MD	11:00 AM
	11:15 AM
	11:30 AM
	11:45 AM
	12:00 PM
	12:15 PM
	12:30 PM
	12:45 PM
TOTAL	

ALL PED AND BIKE					
E LEG	W LEG	S LEG	N LEG	TOTAL	
0	1	0	0	1	
0	1	0	0	1	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	3	0	0	3	

PEDESTRIAN CROSSINGS					
E LEG	W LEG	S LEG	N LEG	TOTAL	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	

BICYCLE CROSSINGS					
EL	WL	SL	NL	TOTAL	
0	1	0	0	1	
0	1	0	0	1	
0	1	0	0	1	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	3	0	0	3	

AimTD LLC
TURNING MOVEMENT COUNTS



INTERSECTION TUR

PREPARED BY: AimTD LI

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

	NOTES:				
PCE Adjusted	Class	1	2	3	4
	Factor	1	1.5	2	3

	NORTHBOUND			SOUTHBOUND	
	Euclid			Euclid	
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2

MD	11:00 AM	19	180	4	2	147
	11:15 AM	37	165	2	5	158
	11:30 AM	23	168	2	4	153
	11:45 AM	17	168	3	7	159
	12:00 PM	17	137	6	7	156
	12:15 PM	23	115	0	5	135
	12:30 PM	18	128	1	7	127
	12:45 PM	24	149	1	11	143
	VOLUMES	176	1,208	19	46	1,176
	APPROACH %	13%	86%	1%	4%	91%
	APP/DEPART	1,403	/	1,331	1,298	/
	BEGIN PEAK HR	11:00 AM				
	VOLUMES	96	680	11	18	616
	APPROACH %	12%	86%	1%	3%	93%
	PEAK HR FACTOR	0.963			0.939	
	APP/DEPART	786	/	744	665	/

Eucalyptus

WEST SIDE

|

U-TURNS				
NB	SB	EB	WB	TTL

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

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4199
17
SIGNAL

CLASS 1:
PASSENGER
VEHICLES

NOTES:

AM
PM
MD
OTHER
OTHER

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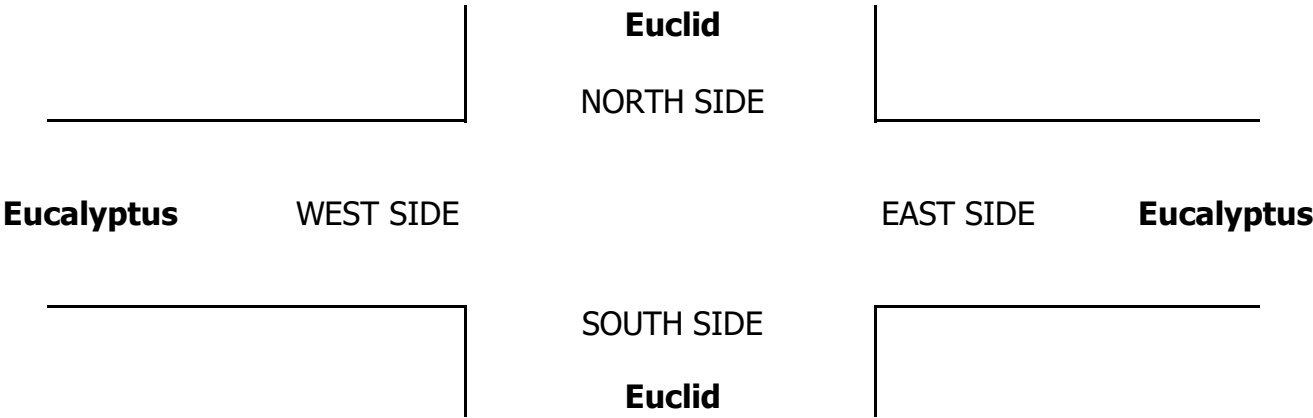
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E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

U-TURNS				
NB	SB	EB	WB	TTL
0	0	0	0	0
0	0	0	0	0
1	1	0	0	2
0	0	0	0	0
0	1	0	0	1
0	1	0	0	1
0	2	0	0	2
0	0	0	0	0
1	5	0	0	6

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	2	15	3
0	4	18	1
0	3	17	3
0	5	23	3
0	4	21	1
0	2	23	3
0	2	17	0
0	3	19	1
0	25	153	15

ND	11:00 AM	16	133	1	2	123	3	10	11	25	2	10	4	340
	11:15 AM	34	129	2	3	119	7	8	10	23	2	7	3	347
	11:30 AM	21	113	2	4	122	8	9	12	22	7	11	4	335
	11:45 AM	17	126	0	7	135	10	9	10	30	2	16	8	370
	12:00 PM	15	100	2	4	126	16	8	12	30	2	11	2	328
	12:15 PM	21	78	0	3	118	7	8	14	32	2	10	6	299
	12:30 PM	18	107	1	5	97	6	9	11	23	0	9	3	289
	12:45 PM	22	109	1	6	128	10	11	8	26	4	16	3	344
	VOLUMES	164	895	9	34	968	67	72	88	211	21	90	33	2,658
	APPROACH %	15%	84%	1%	3%	90%	6%	19%	24%	57%	15%	63%	23%	
	APP/DEPART	1,069	/	1,005	1,074	/	1,201	371	/	131	144	/	321	0
	BEGIN PEAK HR	11:00 AM												
ND	VOLUMES	88	501	5	16	499	28	36	43	100	13	44	19	1,394
	APPROACH %	15%	84%	1%	3%	92%	5%	20%	24%	56%	17%	58%	25%	
	PEAK HR FACTOR	0.902			0.895			0.913			0.731			0.942
	APP/DEPART	595	/	557	544	/	613	179	/	64	76	/	160	0



0	14	73	10

INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4199
17
SIGNAL

CLASS 2:
2-AXLE
WORK
VEHICLES/
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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N
▼
S

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E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

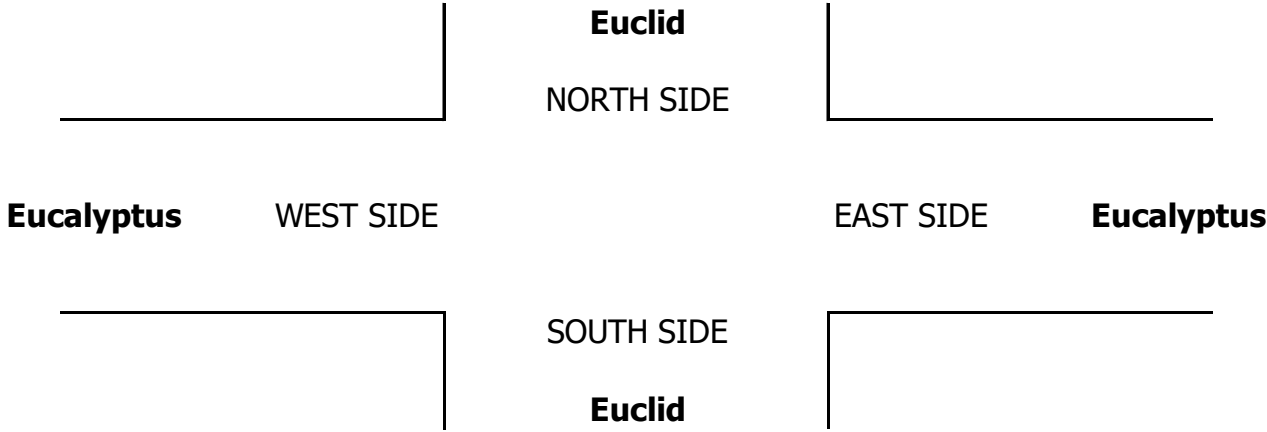
MD	11:00 AM	2	5	0	0	7	0	0	0	1	0	0	1	16
	11:15 AM	2	4	0	1	2	0	0	0	1	0	1	0	11
	11:30 AM	1	7	0	0	6	0	0	0	0	1	1	0	15
	11:45 AM	0	7	0	0	5	1	0	1	0	1	1	0	16
	12:00 PM	1	6	1	0	3	1	1	0	1	0	0	0	14
	12:15 PM	1	4	0	1	2	1	1	2	3	0	0	1	16
	12:30 PM	0	4	0	1	5	0	0	1	3	0	0	0	14
	12:45 PM	1	5	0	1	4	0	0	0	1	0	0	1	13
	VOLUMES	8	42	1	4	34	3	2	4	10	1	3	3	115
	APPROACH %	16%	82%	2%	10%	83%	7%	13%	25%	63%	14%	43%	43%	
	APP/DEPART	51	/	47	41	/	45	16	/	9	7	/	14	0
	BEGIN PEAK HR	11:00 AM												
	VOLUMES	5	23	0	1	20	1	0	1	2	1	3	1	58
	APPROACH %	18%	82%	0%	5%	91%	5%	0%	33%	67%	20%	60%	20%	
	PEAK HR FACTOR	0.875			0.786			0.750			0.625			0.906
	APP/DEPART	28	/	24	22	/	23	3	/	2	5	/	9	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0

0	0	1	1
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	1	1	1
0	0	3	0
0	0	1	1
0	1	7	3

0	0	2	1



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE:
9/9/23
SATURDAY

LOCATION:
NORTH & SOUTH:
EAST & WEST:

Chino
Euclid
Eucalyptus

PROJECT #:
LOCATION #:
CONTROL:

SC4199
17
SIGNAL

CLASS 3:
3-AXLE
TRUCKS

NOTES:

AM
PM
MD
OTHER
OTHER

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N
S
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◀ W
E ▶

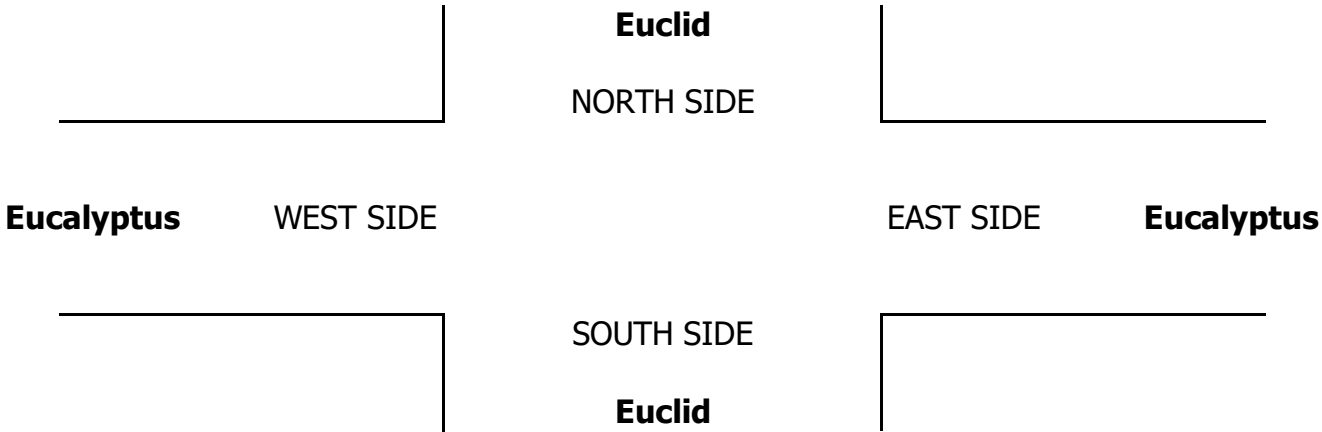
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	1	1	2	1	1	1	1	1	1	0	

MD	11:00 AM	0	3	0	0	2	0	0	0	0	0	0	5	
	11:15 AM	0	3	0	0	9	0	0	0	0	0	0	12	
	11:30 AM	0	4	0	0	2	0	0	0	0	0	0	6	
	11:45 AM	0	2	0	0	5	0	0	0	1	0	1	0	9
	12:00 PM	0	2	1	0	5	0	0	0	0	0	0	0	8
	12:15 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
	12:30 PM	0	3	0	0	2	0	0	0	0	0	0	0	5
	12:45 PM	0	4	0	0	0	0	0	0	0	0	0	0	4
	VOLUMES	0	25	1	0	26	0	0	0	1	0	1	0	54
	APPROACH %	0%	96%	4%	0%	100%	0%	0%	0%	100%	0%	100%	0%	
	APP/DEPART	26	/	25	26	/	27	1	/	1	1	/	1	0
	BEGIN PEAK HR	11:00 AM												
	VOLUMES	0	12	0	0	18	0	0	0	1	0	1	0	32
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	100%	0%	100%	0%	
	PEAK HR FACTOR	0.750			0.500			0.250			0.250			0.667
	APP/DEPART	12	/	12	18	/	19	1	/	0	1	/	1	0

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

RTOR			
NRR	SRR	ERR	WRR
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	1	0

0	0	1	0



INTERSECTION TURNING MOVEMENT COUNTS

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

DATE: 9/9/23 SATURDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Chino Euclid Eucalyptus	PROJECT #: LOCATION #: CONTROL:	SC4199 17 SIGNAL

CLASS 4: 4 OR MORE AXLE TRUCKS	NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N S ▼	E ▶

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Euclid			Euclid			Eucalyptus			Eucalyptus			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL

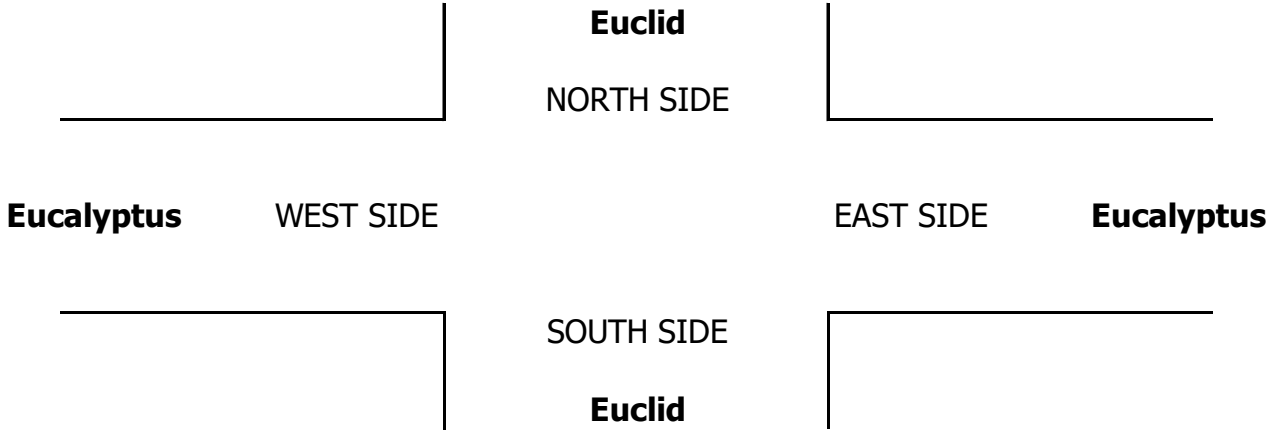
MD	11:00 AM	0	11	1	0	3	0	0	0	1	0	0	0	16
	11:15 AM	0	8	0	0	6	0	0	0	0	0	0	2	16
	11:30 AM	0	12	0	0	6	0	0	0	0	0	0	0	18
	11:45 AM	0	9	1	0	2	0	0	0	0	0	0	0	12
	12:00 PM	0	8	0	1	5	0	0	0	0	0	0	0	14
	12:15 PM	0	7	0	0	4	0	0	0	0	0	0	0	11
	12:30 PM	0	3	0	0	6	0	0	0	0	0	0	0	9
	12:45 PM	0	8	0	1	3	0	0	0	0	0	0	0	12
	VOLUMES	0	66	2	2	35	0	0	0	1	0	0	2	110
	APPROACH %	0%	97%	3%	5%	90%	0%	0%	0%	100%	0%	0%	100%	
	APP/DEPART	68	/	70	39	/	36	1	/	4	2	/	0	0
	BEGIN PEAK HR	11:00 AM												
	VOLUMES	0	40	2	0	17	0	0	0	1	0	0	2	63
	APPROACH %	0%	95%	5%	0%	94%	0%	0%	0%	100%	0%	0%	100%	
	PEAK HR FACTOR	0.875			0.750			0.250			0.250			0.875
	APP/DEPART	42	/	43	18	/	18	1	/	2	2	/	0	0

U-TURNS				
NB	SB	EB	WB	TTL
0	1	0	0	1
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	1	0	0	1
0	2	0	0	2

RTOR			
NRR 0	SRR 0	ERR 0	WRR 0

0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0

0	0	1	0



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APPENDIX 3.2: EXISTING (2023) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	36	321	100	35	433	81	37	9	35
Future Volume (vph)	36	321	100	35	433	81	37	9	35
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	19.0	49.0	49.0	19.0	49.0	52.0	52.0	52.0	52.0
Total Split (%)	15.8%	40.8%	40.8%	15.8%	40.8%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	7.2	18.1	18.1	7.2	18.1		16.7		16.7
Actuated g/C Ratio	0.14	0.34	0.34	0.14	0.34		0.32		0.32
v/c Ratio	0.24	0.40	0.26	0.24	0.56		0.53		0.26
Control Delay	29.4	16.3	5.4	29.4	18.1		21.2		12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	29.4	16.3	5.4	29.4	18.1		21.2		12.4
LOS	C	B	A	C	B		C		B
Approach Delay		14.9			18.9		21.2		12.4
Approach LOS		B			B		C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 52.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 17.2

Intersection LOS: B

Intersection Capacity Utilization 46.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

		
Ø2	Ø3	Ø4
52 s	19 s	49 s
		
Ø6	Ø7	Ø8
52 s	19 s	49 s

HCM 6th Signalized Intersection Summary

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	321	100	35	433	11	81	37	45	9	35	48
Future Volume (veh/h)	36	321	100	35	433	11	81	37	45	9	35	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.98		0.99	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	52	465	120	51	628	10	117	54	40	13	51	37
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	1057	460	85	1061	17	317	137	75	119	261	164
Arrive On Green	0.05	0.31	0.31	0.05	0.31	0.31	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1594	3367	1463	1594	3388	54	664	494	271	81	940	590
Grp Volume(v), veh/h	52	465	120	51	312	326	211	0	0	101	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1463	1594	1683	1759	1429	0	0	1610	0	0
Q Serve(g_s), s	1.3	4.7	2.6	1.3	6.6	6.6	3.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	4.7	2.6	1.3	6.6	6.6	5.0	0.0	0.0	2.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.55		0.19	0.13		0.37
Lane Grp Cap(c), veh/h	86	1057	460	85	527	551	530	0	0	544	0	0
V/C Ratio(X)	0.60	0.44	0.26	0.60	0.59	0.59	0.40	0.00	0.00	0.19	0.00	0.00
Avail Cap(c_a), veh/h	543	3438	1494	543	1719	1796	1685	0	0	1859	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.6	11.5	10.8	19.6	12.2	12.2	12.7	0.0	0.0	11.7	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.3	0.3	2.5	1.1	1.0	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.3	0.6	0.5	1.9	2.0	1.5	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	11.8	11.1	22.1	13.3	13.3	13.2	0.0	0.0	11.9	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		637			689			211			101	
Approach Delay, s/veh		12.5			13.9			13.2			11.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.4	6.9	19.1		16.4	6.9	19.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		47.4	14.4	43.2		47.4	14.4	43.2				
Max Q Clear Time (g_c+I1), s		7.0	3.3	6.7		4.0	3.3	8.6				
Green Ext Time (p_c), s		1.5	0.0	3.4		0.7	0.0	3.7				
Intersection Summary												
HCM 6th Ctrl Delay			13.2									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	36	281	25	8	523	24	42	84	18	109
Future Volume (vph)	36	281	25	8	523	24	42	84	18	109
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	17.0	57.0	57.0	12.0	52.0	52.0	51.0	51.0	51.0	51.0
Total Split (%)	14.2%	47.5%	47.5%	10.0%	43.3%	43.3%	42.5%	42.5%	42.5%	42.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.9	22.3	22.3	5.8	17.8	17.8		16.0		16.0
Actuated g/C Ratio	0.13	0.43	0.43	0.11	0.35	0.35		0.31		0.31
v/c Ratio	0.21	0.24	0.05	0.06	0.55	0.05		0.35		0.54
Control Delay	28.6	10.5	2.2	29.5	17.3	0.2		18.9		19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	28.6	10.5	2.2	29.5	17.3	0.2		18.9		19.3
LOS	C	B	A	C	B	A		B		B
Approach Delay		11.8			16.7			18.9		19.3
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 51.4

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 16.1

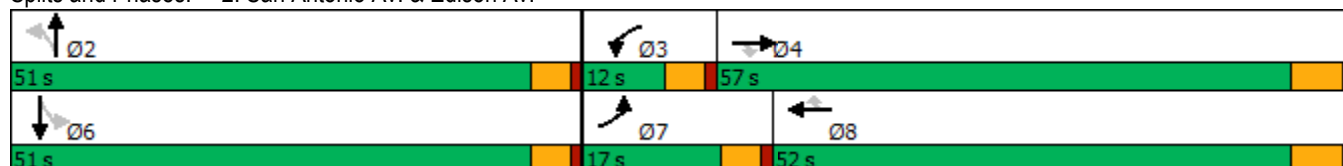
Intersection LOS: B

Intersection Capacity Utilization 51.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	281	25	8	523	24	42	84	6	18	109	102
Future Volume (veh/h)	36	281	25	8	523	24	42	84	6	18	109	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	44	347	22	10	646	26	52	104	2	22	135	52
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1207	526	21	1089	475	203	322	5	120	297	105
Arrive On Green	0.05	0.36	0.36	0.01	0.32	0.32	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	327	1255	20	84	1157	411
Grp Volume(v), veh/h	44	347	22	10	646	26	158	0	0	209	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1603	0	0	1652	0	0
Q Serve(g_s), s	1.1	3.0	0.4	0.3	6.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	3.0	0.4	0.3	6.5	0.5	2.9	0.0	0.0	4.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.33		0.01	0.11		0.25
Lane Grp Cap(c), veh/h	77	1207	526	21	1089	475	530	0	0	522	0	0
V/C Ratio(X)	0.57	0.29	0.04	0.48	0.59	0.05	0.30	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	490	4274	1863	292	3856	1681	1862	0	0	1966	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.8	9.3	8.4	19.8	11.4	9.4	12.2	0.0	0.0	12.7	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.1	0.0	6.1	0.5	0.0	0.3	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.1	0.1	1.7	0.1	1.0	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	9.4	8.5	25.9	11.9	9.4	12.6	0.0	0.0	13.2	0.0	0.0
LnGrp LOS	C	A	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h		413			682			158			209	
Approach Delay, s/veh		10.6			12.1			12.6			13.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.9	5.1	20.3		14.9	6.5	18.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		46.4	7.4	51.2		46.4	12.4	46.2				
Max Q Clear Time (g_c+I1), s		4.9	2.3	5.0		6.2	3.1	8.5				
Green Ext Time (p_c), s		1.1	0.0	2.3		1.4	0.0	4.5				
Intersection Summary												
HCM 6th Ctrl Delay				11.9								
HCM 6th LOS				B								

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	174	47	332	34	116	17	132
Future Volume (vph)	15	174	47	332	34	116	17	132
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	43.0	18.0	47.0	21.0	41.0	18.0	38.0
Total Split (%)	11.7%	35.8%	15.0%	39.2%	17.5%	34.2%	15.0%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	16.8	12.7	19.3	17.0	6.5	14.5	6.0	12.3
Actuated g/C Ratio	0.36	0.27	0.41	0.36	0.14	0.31	0.13	0.26
v/c Ratio	0.04	0.26	0.12	0.34	0.18	0.19	0.10	0.21
Control Delay	10.4	16.3	10.3	13.4	26.6	11.7	27.5	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	16.3	10.3	13.4	26.6	11.7	27.5	16.3
LOS	B	B	B	B	C	B	C	B
Approach Delay		15.9		13.1		14.3		17.4
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 46.8

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 14.7

Intersection LOS: B

Intersection Capacity Utilization 46.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

 Ø1	 Ø2	 Ø3	 Ø4
18 s	41 s	18 s	43 s
 Ø5	 Ø6	 Ø7	 Ø8
21 s	38 s	14 s	47 s

HCM 6th Signalized Intersection Summary
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	174	30	47	332	21	34	116	47	17	132	29
Future Volume (veh/h)	15	174	30	47	332	21	34	116	47	17	132	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	202	28	55	386	19	40	135	21	20	153	22
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	675	92	420	851	42	69	723	110	39	676	96
Arrive On Green	0.02	0.23	0.23	0.05	0.26	0.26	0.04	0.25	0.25	0.02	0.23	0.23
Sat Flow, veh/h	1594	2975	407	1594	3265	160	1594	2922	445	1594	2958	418
Grp Volume(v), veh/h	17	113	117	55	198	207	40	77	79	20	86	89
Grp Sat Flow(s),veh/h/ln	1594	1683	1698	1594	1683	1742	1594	1683	1684	1594	1683	1692
Q Serve(g_s), s	0.4	2.5	2.6	1.2	4.5	4.5	1.1	1.6	1.7	0.6	1.9	2.0
Cycle Q Clear(g_c), s	0.4	2.5	2.6	1.2	4.5	4.5	1.1	1.6	1.7	0.6	1.9	2.0
Prop In Lane	1.00		0.24	1.00		0.09	1.00		0.26	1.00		0.25
Lane Grp Cap(c), veh/h	332	382	385	420	439	454	69	417	417	39	385	387
V/C Ratio(X)	0.05	0.30	0.30	0.13	0.45	0.45	0.58	0.18	0.19	0.51	0.22	0.23
Avail Cap(c_a), veh/h	626	1369	1381	799	1516	1569	571	1310	1311	467	1200	1206
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	14.7	14.7	12.3	14.2	14.2	21.5	13.6	13.6	22.0	14.3	14.4
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	0.7	0.7	2.8	0.2	0.2	3.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.8	0.8	0.3	1.4	1.5	0.4	0.5	0.5	0.2	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	15.1	15.1	12.3	14.9	14.9	24.2	13.8	13.8	25.8	14.6	14.7
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h	247			460				196			195	
Approach Delay, s/veh	15.0			14.6				15.9			15.8	
Approach LOS	B			B				B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	16.7	7.1	16.2	6.6	15.9	5.6	17.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	35.6	13.4	37.2	16.4	32.6	9.4	41.2				
Max Q Clear Time (g_c+I1), s	2.6	3.7	3.2	4.6	3.1	4.0	2.4	6.5				
Green Ext Time (p_c), s	0.0	0.8	0.0	1.2	0.0	0.9	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay	15.1											
HCM 6th LOS	B											

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	36	270	13	265	78	110	31	136
Future Volume (vph)	36	270	13	265	78	110	31	136
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	41.0	15.0	38.0	27.0	47.0	17.0	37.0
Total Split (%)	15.0%	34.2%	12.5%	31.7%	22.5%	39.2%	14.2%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	7.8	75.1	6.0	69.3	11.5	21.0	7.4	12.9
Actuated g/C Ratio	0.06	0.63	0.05	0.58	0.10	0.18	0.06	0.11
v/c Ratio	0.42	0.21	0.21	0.19	0.62	0.29	0.38	0.62
Control Delay	65.3	11.1	60.3	14.1	69.0	36.2	64.5	37.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.3	11.1	60.3	14.1	69.0	36.2	64.5	37.1
LOS	E	B	E	B	E	D	E	D
Approach Delay		16.0		16.1		47.9		40.5
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 27.2

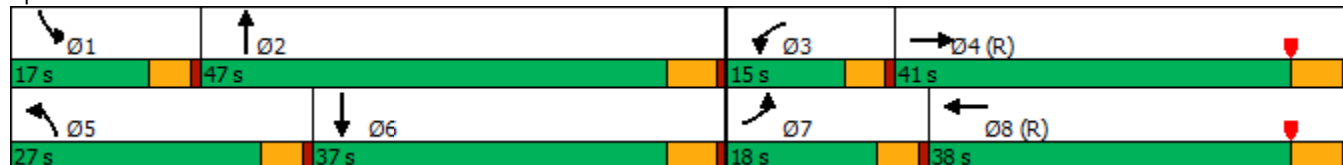
Intersection LOS: C

Intersection Capacity Utilization 54.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	270	88	13	265	31	78	110	30	31	136	86
Future Volume (veh/h)	36	270	88	13	265	31	78	110	30	31	136	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	43	325	89	16	319	29	94	133	29	37	164	69
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	1660	448	27	1928	174	115	411	87	47	249	100
Arrive On Green	0.03	0.63	0.63	0.02	0.62	0.62	0.07	0.15	0.15	0.03	0.11	0.11
Sat Flow, veh/h	1594	2620	706	1594	3122	282	1594	2752	583	1594	2330	937
Grp Volume(v), veh/h	43	207	207	16	171	177	94	80	82	37	116	117
Grp Sat Flow(s),veh/h/ln	1594	1683	1642	1594	1683	1720	1594	1683	1652	1594	1683	1584
Q Serve(g_s), s	3.2	6.2	6.3	1.2	5.2	5.3	7.0	5.1	5.3	2.8	8.0	8.5
Cycle Q Clear(g_c), s	3.2	6.2	6.3	1.2	5.2	5.3	7.0	5.1	5.3	2.8	8.0	8.5
Prop In Lane	1.00		0.43	1.00		0.16	1.00		0.35	1.00		0.59
Lane Grp Cap(c), veh/h	53	1067	1041	27	1040	1063	115	252	247	47	180	169
V/C Ratio(X)	0.81	0.19	0.20	0.58	0.16	0.17	0.82	0.32	0.33	0.79	0.65	0.69
Avail Cap(c_a), veh/h	178	1067	1041	138	1040	1063	298	584	573	165	443	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	9.2	9.2	58.5	9.8	9.8	54.9	45.6	45.7	57.9	51.4	51.7
Incr Delay (d2), s/veh	9.8	0.4	0.4	7.1	0.3	0.3	5.2	0.7	0.8	10.2	3.9	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.2	2.2	0.5	1.8	1.9	2.9	2.1	2.2	1.2	3.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	9.6	9.6	65.6	10.1	10.1	60.1	46.3	46.4	68.1	55.3	56.6
LnGrp LOS	E	A	A	E	B	B	E	D	D	E	E	E
Approach Vol, veh/h	457			364			256			270		
Approach Delay, s/veh	15.0			12.5			51.4			57.6		
Approach LOS	B			B			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	23.3	6.7	81.9	13.3	18.2	8.6	79.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	12.4	41.6	10.4	35.2	22.4	31.6	13.4	32.2				
Max Q Clear Time (g_c+I1), s	4.8	7.3	3.2	8.3	9.0	10.5	5.2	7.3				
Green Ext Time (p_c), s	0.0	0.9	0.0	2.2	0.1	1.2	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay	29.8											
HCM 6th LOS	C											

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	56	223	28	13	423	19	35	110	7	116
Future Volume (vph)	56	223	28	13	423	19	35	110	7	116
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	22.0	52.0	52.0	13.0	43.0	43.0	17.0	42.0	13.0	38.0
Total Split (%)	18.3%	43.3%	43.3%	10.8%	35.8%	35.8%	14.2%	35.0%	10.8%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.7	20.1	20.1	6.1	14.9	14.9	6.8	15.7	6.0	13.4
Actuated g/C Ratio	0.15	0.39	0.39	0.12	0.29	0.29	0.13	0.30	0.12	0.26
v/c Ratio	0.26	0.18	0.05	0.07	0.47	0.04	0.18	0.12	0.04	0.23
Control Delay	29.7	13.3	0.1	31.8	20.2	0.2	30.7	16.1	32.3	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.7	13.3	0.1	31.8	20.2	0.2	30.7	16.1	32.3	14.0
LOS	C	B	A	C	C	A	C	B	C	B
Approach Delay		15.1			19.6			19.5		14.7
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 51.5

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 17.5

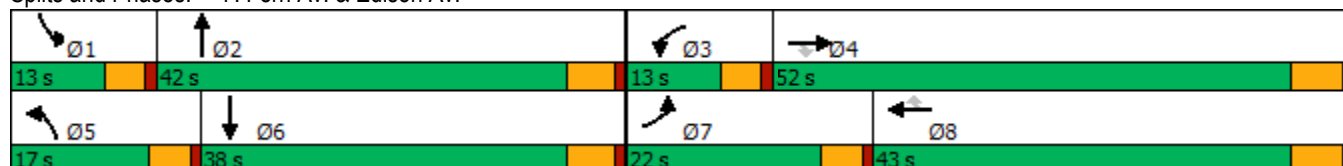
Intersection LOS: B

Intersection Capacity Utilization 47.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	223	28	13	423	19	35	110	4	7	116	66
Future Volume (veh/h)	56	223	28	13	423	19	35	110	4	7	116	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	61	242	20	14	460	16	38	120	2	8	126	38
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	913	402	28	774	345	67	859	14	17	571	166
Arrive On Green	0.06	0.27	0.27	0.02	0.23	0.23	0.04	0.25	0.25	0.01	0.22	0.22
Sat Flow, veh/h	1594	3367	1481	1594	3367	1502	1594	3389	56	1594	2570	748
Grp Volume(v), veh/h	61	242	20	14	460	16	38	59	63	8	81	83
Grp Sat Flow(s),veh/h/ln	1594	1683	1481	1594	1683	1502	1594	1683	1762	1594	1683	1634
Q Serve(g_s), s	1.7	2.6	0.5	0.4	5.6	0.4	1.1	1.2	1.3	0.2	1.8	1.9
Cycle Q Clear(g_c), s	1.7	2.6	0.5	0.4	5.6	0.4	1.1	1.2	1.3	0.2	1.8	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.46
Lane Grp Cap(c), veh/h	94	913	402	28	774	345	67	427	447	17	374	363
V/C Ratio(X)	0.65	0.27	0.05	0.49	0.59	0.05	0.57	0.14	0.14	0.48	0.22	0.23
Avail Cap(c_a), veh/h	607	3407	1499	293	2743	1224	433	1350	1412	293	1202	1167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	13.1	12.3	22.2	15.7	13.7	21.5	13.2	13.2	22.5	14.5	14.5
Incr Delay (d2), s/veh	2.8	0.2	0.1	4.8	0.7	0.1	2.8	0.1	0.1	7.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.1	0.2	1.7	0.1	0.4	0.4	0.4	0.1	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	13.2	12.3	27.1	16.4	13.7	24.3	13.3	13.3	30.0	14.8	14.9
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		323			490			160			172	
Approach Delay, s/veh		15.2			16.6			15.9			15.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	17.0	5.4	18.2	6.5	15.5	7.3	16.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	36.6	8.4	46.2	12.4	32.6	17.4	37.2				
Max Q Clear Time (g_c+I1), s	2.2	3.3	2.4	4.6	3.1	3.9	3.7	7.6				
Green Ext Time (p_c), s	0.0	0.6	0.0	1.5	0.0	0.8	0.0	2.9				
Intersection Summary												
HCM 6th Ctrl Delay			16.0									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	199	565	66	46	81
Future Vol, veh/h	29	199	565	66	46	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	240	681	80	55	98
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	761	0	-	0	911	381
Stage 1	-	-	-	-	721	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	847	-	-	-	274	617
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	823	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	847	-	-	-	263	617
Mov Cap-2 Maneuver	-	-	-	-	355	-
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	823	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.2	0		13.7		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	847	-	-	-	355	617
HCM Lane V/C Ratio	0.041	-	-	-	0.156	0.158
HCM Control Delay (s)	9.4	-	-	-	17	11.9
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	0.6

Intersection						
Int Delay, s/veh	2.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	212	119	28	229	83	63
Future Vol, veh/h	212	119	28	229	83	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	249	140	33	269	98	74
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	389	0	520	195
Stage 1	-	-	-	-	319	-
Stage 2	-	-	-	-	201	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1292	-	601	*1001
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	813	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1292	-	585	*1001
Mov Cap-2 Maneuver	-	-	-	-	639	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	792	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.9		11.1	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	757	-	-	1292	-	
HCM Lane V/C Ratio	0.227	-	-	0.025	-	
HCM Control Delay (s)	11.1	-	-	7.9	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	348	3	331	284	674	787	435
Future Volume (vph)	348	3	331	284	674	787	435
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	38.0	86.0	48.0	48.0
Total Split (%)	28.3%	28.3%	28.3%	31.7%	71.7%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	21.8	21.8	21.8	24.3	87.7	58.9	58.9
Actuated g/C Ratio	0.18	0.18	0.18	0.20	0.73	0.49	0.49
v/c Ratio	0.80	0.76	0.49	0.82	0.27	0.47	0.45
Control Delay	65.5	54.0	8.8	67.2	5.7	23.4	3.8
Queue Delay	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	54.1	8.8	67.2	5.7	23.4	3.8
LOS	E	D	A	E	A	C	A
Approach Delay		43.8			24.0	16.5	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 25.5

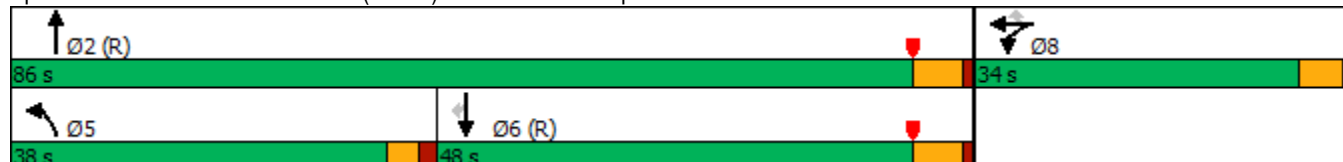
Intersection LOS: C

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	348	3	331	284	674	0	0	787	435
Future Volume (veh/h)	0	0	0	348	3	331	284	674	0	0	787	435
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				413	0	114	293	695	0	0	811	292
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				487	0	217	316	2757	0	0	1993	889
Arrive On Green				0.14	0.00	0.14	0.36	1.00	0.00	0.00	0.56	0.56
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				413	0	114	293	695	0	0	811	292
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				13.6	0.0	8.0	19.0	0.0	0.0	0.0	15.6	11.9
Cycle Q Clear(g_c), s				13.6	0.0	8.0	19.0	0.0	0.0	0.0	15.6	11.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				487	0	217	316	2757	0	0	1993	889
V/C Ratio(X)				0.85	0.00	0.53	0.93	0.25	0.00	0.00	0.41	0.33
Avail Cap(c_a), veh/h				861	0	383	497	2757	0	0	1993	889
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.81	0.81	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.6	0.0	48.2	37.9	0.0	0.0	0.0	15.0	14.2
Incr Delay (d2), s/veh				1.6	0.0	0.7	10.7	0.2	0.0	0.0	0.6	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.0	0.0	3.1	7.4	0.1	0.0	0.0	6.1	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.2	0.0	48.9	48.7	0.2	0.0	0.0	15.6	15.2
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					527			988			1103	
Approach Delay, s/veh					51.5			14.6			15.5	
Approach LOS					D			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		98.6			25.8	72.8		21.4				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		80.5			33.5	42.5		29.0				
Max Q Clear Time (g_c+I1), s		2.0			21.0	17.6		15.6				
Green Ext Time (p_c), s		7.9			0.3	9.8		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				22.4								
HCM 6th LOS				C								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	329	0	629	490	348	787
Future Volume (vph)	329	0	629	490	348	787
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	38.0	38.0	42.0	42.0	40.0	82.0
Total Split (%)	31.7%	31.7%	35.0%	35.0%	33.3%	68.3%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	26.0	26.0	51.0	51.0	28.5	83.5
Actuated g/C Ratio	0.22	0.22	0.42	0.42	0.24	0.70
v/c Ratio	0.84	0.75	0.43	0.54	0.85	0.33
Control Delay	64.6	27.9	27.8	5.0	82.6	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.1
Total Delay	64.6	27.9	27.8	5.0	82.9	8.1
LOS	E	C	C	A	F	A
Approach Delay		44.6	17.8			31.1
Approach LOS		D	B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 29.0

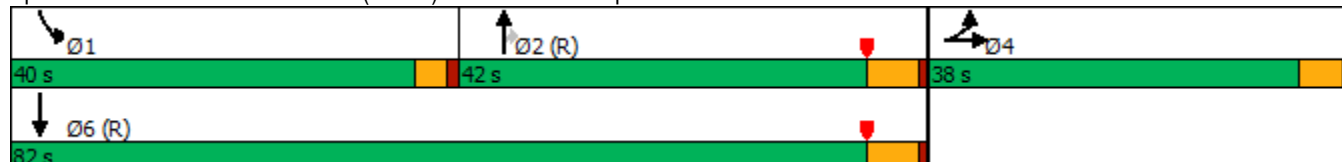
Intersection LOS: C

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	0	323	0	0	0	0	629	490	348	787	0
Future Volume (veh/h)	329	0	323	0	0	0	0	629	490	348	787	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	284	77	229				0	648	339	359	811	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	369	86	255				0	1630	710	380	2507	0
Arrive On Green	0.21	0.21	0.21				0.00	0.46	0.46	0.43	1.00	0.00
Sat Flow, veh/h	1781	415	1234				0	3647	1547	1781	3647	0
Grp Volume(v), veh/h	284	0	306				0	648	339	359	811	0
Grp Sat Flow(s),veh/h/ln	1781	0	1648				0	1777	1547	1781	1777	0
Q Serve(g_s), s	18.1	0.0	21.7				0.0	14.5	18.2	23.2	0.0	0.0
Cycle Q Clear(g_c), s	18.1	0.0	21.7				0.0	14.5	18.2	23.2	0.0	0.0
Prop In Lane	1.00		0.75				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	369	0	341				0	1630	710	380	2507	0
V/C Ratio(X)	0.77	0.00	0.90				0.00	0.40	0.48	0.94	0.32	0.00
Avail Cap(c_a), veh/h	490	0	453				0	1630	710	534	2507	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.90	0.90	0.82	0.82	0.00
Uniform Delay (d), s/veh	44.9	0.0	46.3				0.0	21.5	22.5	33.7	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.0	14.2				0.0	0.7	2.1	15.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	9.9				0.0	6.0	6.8	9.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.5	0.0	60.5				0.0	22.2	24.6	49.6	0.3	0.0
LnGrp LOS	D	A	E				A	C	C	D	A	A
Approach Vol, veh/h	590						987			1170		
Approach Delay, s/veh	54.7						23.0			15.4		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	29.6	60.5	29.8		90.2							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	36.0	36.5	33.0		76.5							
Max Q Clear Time (g_c+I1), s	25.2	20.2	23.7		2.0							
Green Ext Time (p_c), s	0.4	6.8	1.1		9.8							
Intersection Summary												
HCM 6th Ctrl Delay	26.6											
HCM 6th LOS	C											
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	108	226	51	326	98	812	41	191	840	65
Future Volume (vph)	108	226	51	326	98	812	41	191	840	65
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	41.0	17.0	34.0	22.0	41.0	41.0	21.0	40.0	40.0
Total Split (%)	20.0%	34.2%	14.2%	28.3%	18.3%	34.2%	34.2%	17.5%	33.3%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.4	24.0	7.9	18.2	10.7	36.2	36.2	10.9	38.9	38.9
Actuated g/C Ratio	0.12	0.25	0.08	0.19	0.11	0.37	0.37	0.11	0.40	0.40
v/c Ratio	0.60	0.39	0.41	0.72	0.58	0.43	0.07	0.59	0.41	0.10
Control Delay	56.6	25.9	55.4	39.1	56.6	25.5	0.2	50.2	24.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.6	25.9	55.4	39.1	56.6	25.5	0.2	50.2	24.8	0.3
LOS	E	C	E	D	E	C	A	D	C	A
Approach Delay		33.4		40.7		27.6			27.8	
Approach LOS		C		D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 97.4

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 30.8

Intersection LOS: C

Intersection Capacity Utilization 63.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.

			
21 s	41 s	17 s	41 s
			
22 s	40 s	24 s	34 s

HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			  		  	  	
Traffic Volume (veh/h)	108	226	106	51	326	148	98	812	41	191	840	65
Future Volume (veh/h)	108	226	106	51	326	148	98	812	41	191	840	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	111	233	82	53	336	135	101	837	34	197	866	43
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	577	197	66	447	176	125	2164	603	266	2218	627
Arrive On Green	0.09	0.23	0.23	0.04	0.18	0.18	0.08	0.41	0.41	0.09	0.42	0.42
Sat Flow, veh/h	1594	2517	859	1594	2417	952	1594	5316	1482	3000	5316	1502
Grp Volume(v), veh/h	111	162	153	53	245	226	101	837	34	197	866	43
Grp Sat Flow(s),veh/h/ln	1594	1772	1604	1594	1772	1597	1594	1772	1482	1500	1772	1502
Q Serve(g_s), s	6.0	6.8	7.1	2.9	11.4	11.8	5.5	9.7	1.2	5.6	9.9	1.5
Cycle Q Clear(g_c), s	6.0	6.8	7.1	2.9	11.4	11.8	5.5	9.7	1.2	5.6	9.9	1.5
Prop In Lane	1.00		0.54	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	407	368	66	327	295	125	2164	603	266	2218	627
V/C Ratio(X)	0.81	0.40	0.42	0.80	0.75	0.77	0.81	0.39	0.06	0.74	0.39	0.07
Avail Cap(c_a), veh/h	354	713	646	226	572	515	317	2164	603	563	2218	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	28.6	28.7	41.6	33.7	33.9	39.6	18.2	15.7	38.9	17.7	15.3
Incr Delay (d2), s/veh	4.3	0.6	0.8	8.2	3.4	4.2	4.6	0.5	0.2	1.5	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.8	2.6	1.2	4.9	4.6	2.2	3.8	0.4	2.0	3.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	29.2	29.4	49.7	37.1	38.0	44.2	18.8	15.9	40.4	18.3	15.5
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h	426			524			972			1106		
Approach Delay, s/veh	33.0			38.8			21.3			22.1		
Approach LOS	C			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	41.0	8.2	25.9	11.5	41.9	12.1	22.0				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	17.4	34.6	19.4	28.2				
Max Q Clear Time (g_c+I1), s	7.6	11.7	4.9	9.1	7.5	11.9	8.0	13.8				
Green Ext Time (p_c), s	0.2	5.9	0.0	1.7	0.1	6.1	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay	26.3											
HCM 6th LOS	C											

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	134	302	156	466	90	50	663	107	145	622	107
Future Volume (vph)	134	302	156	466	90	50	663	107	145	622	107
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.3	37.0	23.0	35.7	35.7	14.7	39.0	39.0	21.0	45.3	24.3
Total Split (%)	20.3%	30.8%	19.2%	29.8%	29.8%	12.3%	32.5%	32.5%	17.5%	37.8%	20.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	14.1	26.7	15.0	27.6	27.6	8.0	28.2	28.2	14.0	35.9	51.9
Actuated g/C Ratio	0.13	0.25	0.14	0.26	0.26	0.08	0.27	0.27	0.13	0.34	0.49
v/c Ratio	0.70	0.85	0.76	0.58	0.20	0.46	0.81	0.23	0.75	0.60	0.15
Control Delay	63.8	56.8	67.6	38.3	1.7	64.1	45.2	3.5	69.8	33.4	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.8	56.8	67.6	38.3	1.7	64.1	45.2	3.5	69.8	33.4	3.0
LOS	E	E	E	D	A	E	D	A	E	C	A
Approach Delay		58.8		40.1			40.9			35.7	
Approach LOS		E		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 42.1

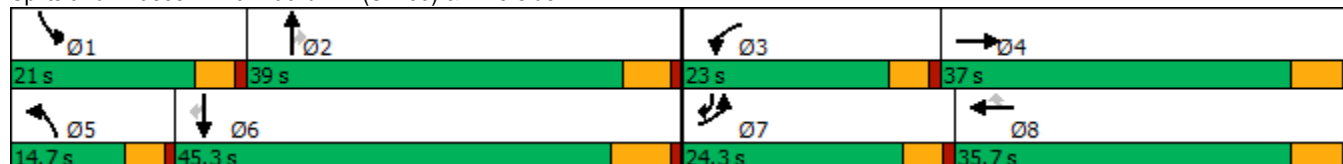
Intersection LOS: D

Intersection Capacity Utilization 74.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.



HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	302	39	156	466	90	50	663	107	145	622	107
Future Volume (veh/h)	134	302	39	156	466	90	50	663	107	145	622	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	147	332	19	171	512	41	55	729	47	159	684	54
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	386	22	203	837	373	68	908	405	190	1167	687
Arrive On Green	0.11	0.23	0.23	0.13	0.25	0.25	0.04	0.27	0.27	0.12	0.35	0.35
Sat Flow, veh/h	1594	1658	95	1594	3367	1500	1594	3367	1502	1594	3367	1500
Grp Volume(v), veh/h	147	0	351	171	512	41	55	729	47	159	684	54
Grp Sat Flow(s),veh/h/ln	1594	0	1753	1594	1683	1500	1594	1683	1502	1594	1683	1500
Q Serve(g_s), s	7.7	0.0	16.5	9.0	11.6	1.8	2.9	17.3	2.0	8.4	14.3	1.7
Cycle Q Clear(g_c), s	7.7	0.0	16.5	9.0	11.6	1.8	2.9	17.3	2.0	8.4	14.3	1.7
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	408	203	837	373	68	908	405	190	1167	687
V/C Ratio(X)	0.83	0.00	0.86	0.84	0.61	0.11	0.81	0.80	0.12	0.84	0.59	0.08
Avail Cap(c_a), veh/h	366	0	638	342	1174	523	188	1319	588	305	1523	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	0.0	31.6	36.6	28.5	24.9	40.7	29.2	23.6	36.9	23.0	13.1
Incr Delay (d2), s/veh	3.7	0.0	7.2	3.6	0.7	0.1	8.3	2.3	0.1	5.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	7.3	3.5	4.4	0.6	1.2	6.5	0.7	3.4	5.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.0	0.0	38.7	40.2	29.3	25.0	49.0	31.5	23.7	42.4	23.4	13.1
LnGrp LOS	D	A	D	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h		498			724			831			897	
Approach Delay, s/veh		39.4			31.6			32.2			26.2	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	29.6	15.5	25.8	8.3	36.2	14.2	27.1				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.4	* 34	18.4	31.2	10.1	38.8	19.7	29.9				
Max Q Clear Time (g_c+I1), s	10.4	19.3	11.0	18.5	4.9	16.3	9.7	13.6				
Green Ext Time (p_c), s	0.1	3.8	0.1	1.5	0.0	4.7	0.1	2.9				

Intersection Summary

HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	56	128	28	90	190	24	707	135	52	708	71
Future Volume (vph)	56	128	28	90	190	24	707	135	52	708	71
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	53.0	53.0	53.0	53.0	53.0	13.0	50.0	50.0	17.0	54.0	54.0
Total Split (%)	44.2%	44.2%	44.2%	44.2%	44.2%	10.8%	41.7%	41.7%	14.2%	45.0%	45.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	26.5	26.5	26.5		26.5	6.3	47.1	47.1	7.8	51.6	51.6
Actuated g/C Ratio	0.28	0.28	0.28		0.28	0.07	0.50	0.50	0.08	0.54	0.54
v/c Ratio	0.29	0.27	0.06		0.82	0.24	0.44	0.18	0.42	0.41	0.09
Control Delay	31.2	28.0	0.2		47.6	52.1	19.2	10.6	54.4	16.2	4.8
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.2	28.0	0.2		47.6	52.1	19.2	10.6	54.4	16.2	4.8
LOS	C	C	A		D	D	B	B	D	B	A
Approach Delay		25.2			47.6		18.7			17.6	
Approach LOS		C			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 94.9

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 23.2

Intersection LOS: C

Intersection Capacity Utilization 71.5%

ICU Level of Service C

Analysis Period (min) 15

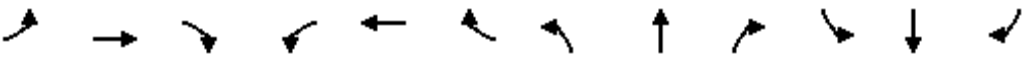
Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	50 s	53 s
		
Ø5	Ø6	Ø8
13 s	54 s	53 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	128	28	90	190	51	24	707	135	52	708	71
Future Volume (veh/h)	56	128	28	90	190	51	24	707	135	52	708	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	58	133	12	94	198	43	25	736	111	54	738	49
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	477	404	140	247	50	41	1698	757	66	1751	781
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.50	0.50	0.04	0.52	0.52
Sat Flow, veh/h	1018	1772	1502	333	920	184	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	58	133	12	335	0	0	25	736	111	54	738	49
Grp Sat Flow(s),veh/h/ln	1018	1772	1502	1437	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	5.4	0.5	15.2	0.0	0.0	1.4	12.7	3.6	3.1	12.3	1.5
Cycle Q Clear(g_c), s	7.8	5.4	0.5	20.6	0.0	0.0	1.4	12.7	3.6	3.1	12.3	1.5
Prop In Lane	1.00		1.00	0.28		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	477	404	437	0	0	41	1698	757	66	1751	781
V/C Ratio(X)	0.23	0.28	0.03	0.77	0.00	0.00	0.61	0.43	0.15	0.82	0.42	0.06
Avail Cap(c_a), veh/h	500	916	776	814	0	0	147	1698	757	216	1751	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	26.4	24.6	32.2	0.0	0.0	44.0	14.4	12.1	43.4	13.5	10.9
Incr Delay (d2), s/veh	0.5	0.3	0.0	2.8	0.0	0.0	5.4	0.8	0.4	8.7	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.2	0.2	6.9	0.0	0.0	0.6	4.2	1.1	1.3	4.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.7	26.7	24.6	35.1	0.0	0.0	49.4	15.2	12.5	52.1	14.2	11.0
LnGrp LOS	C	C	C	D	A	A	D	B	B	D	B	B
Approach Vol, veh/h	203			335			872			841		
Approach Delay, s/veh	26.9			35.1			15.8			16.5		
Approach LOS	C			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	52.6		30.4	6.9	54.0		30.4				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 45		47.2	8.4	47.5		47.2				
Max Q Clear Time (g_c+I1), s	5.1	14.7		9.8	3.4	14.3		22.6				
Green Ext Time (p_c), s	0.0	5.1		1.0	0.0	4.9		1.9				

Intersection Summary

HCM 6th Ctrl Delay 19.9

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	144	59	72	25	88	67	676	21	38	707	102
Future Volume (vph)	144	59	72	25	88	67	676	21	38	707	102
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	22.0	51.5	51.5	13.5	43.0	14.0	44.0	44.0	11.0	41.0	41.0
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	11.7%	36.7%	36.7%	9.2%	34.2%	34.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	12.6	27.0	27.0	11.3	14.6	8.4	27.9	27.9	6.9	24.2	24.2
Actuated g/C Ratio	0.16	0.34	0.34	0.14	0.18	0.11	0.35	0.35	0.09	0.31	0.31
v/c Ratio	0.60	0.10	0.13	0.12	0.51	0.43	0.60	0.04	0.29	0.73	0.19
Control Delay	48.1	23.5	4.7	43.0	31.5	49.6	26.2	0.1	49.6	31.7	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.1	23.5	4.7	43.0	31.5	49.6	26.2	0.1	49.6	31.7	4.2
LOS	D	C	A	D	C	D	C	A	D	C	A
Approach Delay		31.4			33.0		27.6			29.2	
Approach LOS		C			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 79.2

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 29.2

Intersection LOS: C

Intersection Capacity Utilization 60.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.

			
Ø1	Ø2	Ø3	Ø4
11 s	44 s	13.5 s	51.5 s
			
Ø5	Ø6	Ø7	Ø8
14 s	41 s	22 s	43 s

HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	59	72	25	88	73	67	676	21	38	707	102
Future Volume (veh/h)	144	59	72	25	88	73	67	676	21	38	707	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	152	62	51	26	93	63	71	712	16	40	744	84
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	347	294	95	135	91	96	1131	504	66	1067	476
Arrive On Green	0.12	0.20	0.20	0.06	0.14	0.14	0.06	0.34	0.34	0.04	0.32	0.32
Sat Flow, veh/h	1594	1772	1502	1594	985	667	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	152	62	51	26	0	156	71	712	16	40	744	84
Grp Sat Flow(s),veh/h/ln	1594	1772	1502	1594	0	1652	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	5.1	1.6	1.5	0.8	0.0	4.9	2.4	9.7	0.4	1.3	10.6	2.2
Cycle Q Clear(g_c), s	5.1	1.6	1.5	0.8	0.0	4.9	2.4	9.7	0.4	1.3	10.6	2.2
Prop In Lane	1.00		1.00	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	189	347	294	95	0	226	96	1131	504	66	1067	476
V/C Ratio(X)	0.80	0.18	0.17	0.27	0.00	0.69	0.74	0.63	0.03	0.60	0.70	0.18
Avail Cap(c_a), veh/h	541	1447	1226	292	0	1091	307	2347	1047	219	2162	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	18.3	18.2	24.5	0.0	22.4	25.2	15.2	12.2	25.7	16.3	13.5
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.6	0.0	2.8	4.1	0.6	0.0	3.2	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.6	0.5	0.3	0.0	1.8	0.9	2.8	0.1	0.5	3.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	18.4	18.4	25.1	0.0	25.2	29.2	15.8	12.2	28.9	17.2	13.6
LnGrp LOS	C	B	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		265			182			799			868	
Approach Delay, s/veh		23.0			25.2			16.9			17.4	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	24.3	6.8	17.7	6.8	23.3	10.0	14.5				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	7.5	38.0	10.0	44.5	10.5	35.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	3.3	11.7	2.8	3.6	4.4	12.6	7.1	6.9				
Green Ext Time (p_c), s	0.0	4.4	0.0	0.3	0.0	4.7	0.1	0.6				
Intersection Summary												
HCM 6th Ctrl Delay			18.6									
HCM 6th LOS			B									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	72	126	54	86	261	121	661	53	54	615	98
Future Volume (vph)	72	126	54	86	261	121	661	53	54	615	98
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	16.0	50.0	50.0	16.0	50.0	50.0
Total Split (%)	45.0%	45.0%	45.0%	45.0%	45.0%	13.3%	41.7%	41.7%	13.3%	41.7%	41.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	20.2	20.2	20.2	20.2	20.2	8.2	23.2	23.2	7.7	20.5	20.5
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.13	0.36	0.36	0.12	0.32	0.32
v/c Ratio	0.28	0.24	0.11	0.25	0.58	0.34	0.56	0.09	0.30	0.59	0.18
Control Delay	22.1	19.5	5.7	20.6	24.1	34.6	21.3	5.0	37.4	23.0	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	19.5	5.7	20.6	24.1	34.6	21.3	5.0	37.4	23.0	6.0
LOS	C	B	A	C	C	C	C	A	D	C	A
Approach Delay		17.2			23.3		22.2			21.8	
Approach LOS		B			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 64.3

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 21.7

Intersection LOS: C

Intersection Capacity Utilization 65.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
16 s	50 s	54 s
		
Ø5	Ø6	Ø8
16 s	50 s	54 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	126	54	86	261	47	121	661	53	54	615	98
Future Volume (veh/h)	72	126	54	86	261	47	121	661	53	54	615	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	74	130	27	89	269	39	125	681	40	56	634	66
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	513	429	403	438	63	243	1076	480	87	979	436
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.08	0.32	0.32	0.05	0.29	0.29
Sat Flow, veh/h	959	1772	1481	1100	1513	219	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	74	130	27	89	0	308	125	681	40	56	634	66
Grp Sat Flow(s),veh/h/ln	959	1772	1481	1100	0	1732	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	3.5	2.8	0.6	3.3	0.0	7.5	2.0	8.5	0.9	1.7	8.1	1.6
Cycle Q Clear(g_c), s	11.1	2.8	0.6	6.1	0.0	7.5	2.0	8.5	0.9	1.7	8.1	1.6
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	513	429	403	0	501	243	1076	480	87	979	436
V/C Ratio(X)	0.27	0.25	0.06	0.22	0.00	0.61	0.52	0.63	0.08	0.65	0.65	0.15
Avail Cap(c_a), veh/h	919	1699	1420	1140	0	1661	742	3022	1348	406	3022	1348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	13.4	12.6	15.7	0.0	15.1	21.5	14.2	11.7	22.7	15.2	12.9
Incr Delay (d2), s/veh	0.5	0.3	0.1	0.3	0.0	1.2	0.6	0.6	0.1	3.0	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	0.2	0.7	0.0	2.5	0.6	2.3	0.2	0.6	2.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	13.6	12.7	16.0	0.0	16.3	22.1	14.8	11.7	25.7	15.9	13.1
LnGrp LOS	C	B	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		231			397			846			756	
Approach Delay, s/veh		15.7			16.2			15.8			16.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	21.7		21.2	7.6	20.2		21.2				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	12.5	44.0		47.0	12.5	44.0		47.0				
Max Q Clear Time (g_c+I1), s	3.7	10.5		13.1	4.0	10.1		9.5				
Green Ext Time (p_c), s	0.0	4.4		1.1	0.1	4.2		2.1				
Intersection Summary												
HCM 6th Ctrl Delay				16.1								
HCM 6th LOS				B								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	49	71	101	87	254	111	628	62	82	608	30
Future Volume (vph)	49	71	101	87	254	111	628	62	82	608	30
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	52.0	52.0	52.0	52.0	52.0	23.0	49.0	49.0	19.0	45.0	45.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%	19.2%	40.8%	40.8%	15.8%	37.5%	37.5%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	23.5	23.5	23.5	23.5	23.5	11.4	22.5	22.5	9.9	21.3	21.3
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.17	0.33	0.33	0.14	0.31	0.31
v/c Ratio	0.26	0.13	0.18	0.23	0.68	0.45	0.60	0.13	0.38	0.62	0.06
Control Delay	23.4	18.7	5.2	20.5	26.6	37.6	24.0	10.1	38.4	25.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	18.7	5.2	20.5	26.6	37.6	24.0	10.1	38.4	25.6	0.2
LOS	C	B	A	C	C	D	C	B	D	C	A
Approach Delay		13.6			25.4		24.8			26.0	
Approach LOS		B			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 68.3

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 24.2

Intersection LOS: C

Intersection Capacity Utilization 67.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
19 s	49 s	52 s
 Ø5	 Ø6	 Ø8
23 s	45 s	52 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	71	101	87	254	124	111	628	62	82	608	30
Future Volume (veh/h)	49	71	101	87	254	124	111	628	62	82	608	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	52	76	66	93	270	112	118	668	43	87	647	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	555	470	467	372	154	148	1073	478	115	1002	447
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.09	0.32	0.32	0.07	0.30	0.30
Sat Flow, veh/h	896	1772	1502	1115	1190	493	1594	3367	1502	1594	3367	1500
Grp Volume(v), veh/h	52	76	66	93	0	382	118	668	43	87	647	21
Grp Sat Flow(s),veh/h/ln	896	1772	1502	1115	0	1683	1594	1683	1502	1594	1683	1500
Q Serve(g_s), s	2.6	1.5	1.5	3.1	0.0	9.5	3.4	8.0	0.9	2.5	7.9	0.5
Cycle Q Clear(g_c), s	12.1	1.5	1.5	4.5	0.0	9.5	3.4	8.0	0.9	2.5	7.9	0.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	555	470	467	0	527	148	1073	478	115	1002	447
V/C Ratio(X)	0.21	0.14	0.14	0.20	0.00	0.72	0.80	0.62	0.09	0.76	0.65	0.05
Avail Cap(c_a), veh/h	867	1770	1500	1232	0	1681	658	3085	1376	523	2800	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	11.6	11.7	13.3	0.0	14.4	21.0	13.7	11.3	21.5	14.4	11.8
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.2	0.0	1.4	7.1	0.6	0.1	7.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.4	0.6	0.0	2.9	1.3	2.1	0.2	1.0	2.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	11.7	11.8	13.4	0.0	15.8	28.1	14.3	11.4	28.9	15.1	11.9
LnGrp LOS	C	B	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h	194			475			829			755		
Approach Delay, s/veh	14.0			15.4			16.1			16.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	20.8		19.6	7.9	19.8		19.6				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	15.5	43.3		47.2	19.5	39.3		47.2				
Max Q Clear Time (g_c+I1), s	4.5	10.0		14.1	5.4	9.9		11.5				
Green Ext Time (p_c), s	0.1	4.4		0.7	0.1	4.1		2.1				
Intersection Summary												
HCM 6th Ctrl Delay	15.9											
HCM 6th LOS	B											

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	692	60	19	279	26	52	21	31
Future Volume (vph)	29	692	60	19	279	26	52	21	31
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	18.0	66.0	66.0	17.0	65.0	37.0	37.0	37.0	37.0
Total Split (%)	15.0%	55.0%	55.0%	14.2%	54.2%	30.8%	30.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.1	22.6	22.6	5.8	20.3		12.2		12.2
Actuated g/C Ratio	0.14	0.54	0.54	0.14	0.48		0.29		0.29
v/c Ratio	0.14	0.41	0.08	0.09	0.20		0.22		0.17
Control Delay	22.5	10.3	4.6	22.8	10.9		14.4		13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	22.5	10.3	4.6	22.8	10.9		14.4		13.1
LOS	C	B	A	C	B		B		B
Approach Delay		10.3			11.6		14.4		13.1
Approach LOS		B			B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 42.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 11.1

Intersection LOS: B

Intersection Capacity Utilization 44.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

		
Ø2	Ø3	Ø4
37 s	17 s	66 s
		
Ø6	Ø7	Ø8
37 s	18 s	65 s

HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	692	60	19	279	23	26	52	17	21	31	18
Future Volume (veh/h)	29	692	60	19	279	23	26	52	17	21	31	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	31	744	49	20	300	24	28	56	12	23	33	7
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	1258	547	40	1142	91	176	252	44	203	227	38
Arrive On Green	0.04	0.37	0.37	0.02	0.36	0.36	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1594	3367	1463	1594	3153	250	262	1171	205	357	1059	177
Grp Volume(v), veh/h	31	744	49	20	159	165	96	0	0	63	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1463	1594	1683	1720	1638	0	0	1593	0	0
Q Serve(g_s), s	0.7	6.9	0.8	0.5	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	6.9	0.8	0.5	2.6	2.6	1.8	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.15	0.29		0.12	0.37		0.11
Lane Grp Cap(c), veh/h	58	1258	547	40	610	623	472	0	0	469	0	0
V/C Ratio(X)	0.53	0.59	0.09	0.50	0.26	0.26	0.20	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	550	5221	2269	509	2567	2623	1443	0	0	1408	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.4	9.8	7.9	18.7	8.7	8.7	12.7	0.0	0.0	12.4	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.4	0.1	3.6	0.2	0.2	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.6	0.2	0.2	0.6	0.6	0.6	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	10.2	7.9	22.3	8.9	9.0	12.9	0.0	0.0	12.5	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h	824			344			96			63		
Approach Delay, s/veh	10.5			9.7			12.9			12.5		
Approach LOS	B			A			B			B		
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	12.9		5.6	20.3		12.9	6.0	19.9				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	32.4		12.4	60.2		32.4	13.4	59.2				
Max Q Clear Time (g_c+I1), s	3.8		2.5	8.9		3.1	2.7	4.6				
Green Ext Time (p_c), s	0.5		0.0	5.6		0.3	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay	10.6											
HCM 6th LOS	B											

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	32	669	24	5	383	16	25	30	10	33
Future Volume (vph)	32	669	24	5	383	16	25	30	10	33
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	19.0	67.0	67.0	14.0	62.0	62.0	39.0	39.0	39.0	39.0
Total Split (%)	15.8%	55.8%	55.8%	11.7%	51.7%	51.7%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.3	25.5	25.5	5.7	25.3	25.3		13.0		13.0
Actuated g/C Ratio	0.16	0.64	0.64	0.14	0.64	0.64		0.33		0.33
v/c Ratio	0.14	0.35	0.03	0.03	0.20	0.02		0.15		0.16
Control Delay	21.8	9.4	1.7	23.2	9.2	0.1		12.1		9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	21.8	9.4	1.7	23.2	9.2	0.1		12.1		9.6
LOS	C	A	A	C	A	A		B		A
Approach Delay		9.7			9.0			12.1		9.6
Approach LOS		A			A			B		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 39.8

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 9.6

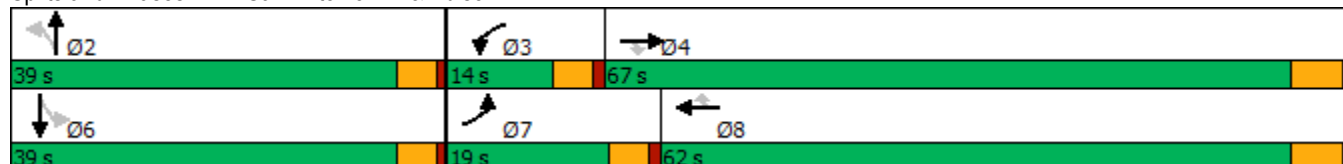
Intersection LOS: A

Intersection Capacity Utilization 44.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	669	24	5	383	16	25	30	10	10	33	33
Future Volume (veh/h)	32	669	24	5	383	16	25	30	10	10	33	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	36	743	25	6	426	15	28	33	4	11	37	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	1281	558	13	1167	520	231	210	20	141	224	83
Arrive On Green	0.04	0.38	0.38	0.01	0.35	0.35	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1594	3367	1468	1594	3367	1499	446	1039	97	128	1110	413
Grp Volume(v), veh/h	36	743	25	6	426	15	65	0	0	64	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1499	1582	0	0	1651	0	0
Q Serve(g_s), s	0.8	6.4	0.4	0.1	3.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	6.4	0.4	0.1	3.5	0.2	1.1	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.43		0.06	0.17		0.25
Lane Grp Cap(c), veh/h	67	1281	558	13	1167	520	460	0	0	449	0	0
V/C Ratio(X)	0.54	0.58	0.04	0.47	0.37	0.03	0.14	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	627	5625	2453	409	5165	2301	1570	0	0	1627	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.2	9.0	7.2	18.1	9.0	7.9	12.1	0.0	0.0	12.1	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.4	0.0	9.4	0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	0.1	0.1	0.8	0.0	0.4	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	9.4	7.2	27.5	9.1	7.9	12.3	0.0	0.0	12.3	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		804			447			65			64	
Approach Delay, s/veh		9.8			9.3			12.3			12.3	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.0	4.9	19.7		12.0	6.1	18.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.4	9.4	61.2		34.4	14.4	56.2				
Max Q Clear Time (g_c+I1), s		3.1	2.1	8.4		3.1	2.8	5.5				
Green Ext Time (p_c), s		0.3	0.0	5.5		0.3	0.0	2.8				
Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			A									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	23	358	44	194	27	150	28	115
Future Volume (vph)	23	358	44	194	27	150	28	115
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	45.0	17.0	48.0	18.0	40.0	18.0	40.0
Total Split (%)	11.7%	37.5%	14.2%	40.0%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	18.1	13.9	20.2	18.0	6.3	12.5	6.3	12.6
Actuated g/C Ratio	0.38	0.29	0.42	0.38	0.13	0.26	0.13	0.26
v/c Ratio	0.06	0.45	0.12	0.18	0.14	0.30	0.14	0.16
Control Delay	10.1	17.7	10.1	12.4	27.9	12.5	27.8	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	17.7	10.1	12.4	27.9	12.5	27.8	17.6
LOS	B	B	B	B	C	B	C	B
Approach Delay		17.2		12.0		13.9		19.5
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 47.9

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 15.5

Intersection LOS: B

Intersection Capacity Utilization 48.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

 Ø1	 Ø2	 Ø3	 Ø4
18 s	40 s	17 s	45 s
 Ø5	 Ø6	 Ø7	 Ø8
18 s	40 s	14 s	48 s

HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	358	45	44	194	16	27	150	98	28	115	10
Future Volume (veh/h)	23	358	45	44	194	16	27	150	98	28	115	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	25	389	36	48	211	14	29	163	58	30	125	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	728	67	343	814	54	54	584	200	55	809	13
Arrive On Green	0.03	0.23	0.23	0.05	0.25	0.25	0.03	0.24	0.24	0.03	0.24	0.24
Sat Flow, veh/h	1594	3112	286	1594	3204	211	1594	2454	841	1594	3390	54
Grp Volume(v), veh/h	25	209	216	48	110	115	29	110	111	30	62	65
Grp Sat Flow(s),veh/h/ln	1594	1683	1715	1594	1683	1732	1594	1683	1612	1594	1683	1761
Q Serve(g_s), s	0.5	5.0	5.1	1.0	2.4	2.4	0.8	2.4	2.6	0.9	1.3	1.3
Cycle Q Clear(g_c), s	0.5	5.0	5.1	1.0	2.4	2.4	0.8	2.4	2.6	0.9	1.3	1.3
Prop In Lane	1.00		0.17	1.00		0.12	1.00		0.52	1.00		0.03
Lane Grp Cap(c), veh/h	411	394	401	343	428	440	54	400	383	55	402	420
V/C Ratio(X)	0.06	0.53	0.54	0.14	0.26	0.26	0.54	0.27	0.29	0.54	0.15	0.15
Avail Cap(c_a), veh/h	689	1435	1462	693	1545	1590	465	1267	1213	465	1267	1325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	15.4	15.4	12.5	13.7	13.7	21.9	14.3	14.3	21.8	13.8	13.8
Incr Delay (d2), s/veh	0.0	1.1	1.1	0.1	0.3	0.3	3.1	0.4	0.4	3.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.6	1.7	0.3	0.7	0.8	0.3	0.8	0.8	0.3	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.7	16.5	16.5	12.5	14.0	14.0	25.0	14.7	14.8	24.9	14.0	14.0
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		450			273			250			157	
Approach Delay, s/veh		16.3			13.7			15.9			16.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.2	16.3	6.9	16.6	6.1	16.4	6.0	17.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	34.6	12.4	39.2	13.4	34.6	9.4	42.2				
Max Q Clear Time (g_c+I1), s	2.9	4.6	3.0	7.1	2.8	3.3	2.5	4.4				
Green Ext Time (p_c), s	0.0	1.2	0.0	2.3	0.0	0.6	0.0	1.2				
Intersection Summary												
HCM 6th Ctrl Delay			15.6									
HCM 6th LOS			B									

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	71	563	12	205	76	161	29	113
Future Volume (vph)	71	563	12	205	76	161	29	113
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	22.0	51.0	12.0	41.0	24.0	41.0	16.0	33.0
Total Split (%)	18.3%	42.5%	10.0%	34.2%	20.0%	34.2%	13.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	9.8	79.5	5.7	71.5	10.3	17.3	6.9	12.0
Actuated g/C Ratio	0.08	0.66	0.05	0.60	0.09	0.14	0.06	0.10
v/c Ratio	0.56	0.29	0.16	0.13	0.58	0.39	0.33	0.44
Control Delay	68.5	11.1	59.2	12.8	68.7	44.6	63.3	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.5	11.1	59.2	12.8	68.7	44.6	63.3	40.4
LOS	E	B	E	B	E	D	E	D
Approach Delay		16.9		14.9		51.6		44.0
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 26.6

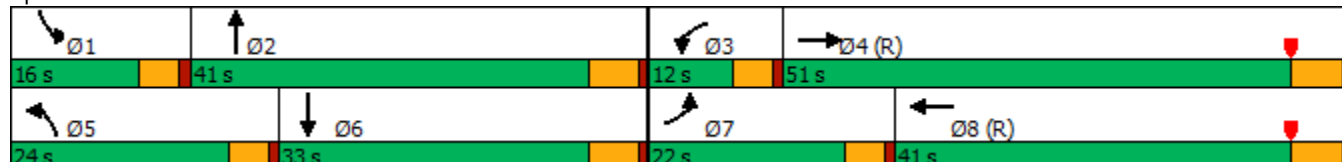
Intersection LOS: C

Intersection Capacity Utilization 55.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	563	62	12	205	45	76	161	25	29	113	42
Future Volume (veh/h)	71	563	62	12	205	45	76	161	25	29	113	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	72	574	59	12	209	39	78	164	23	30	115	25
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	2011	206	22	1736	318	97	404	56	42	281	59
Arrive On Green	0.06	0.65	0.65	0.01	0.61	0.61	0.06	0.14	0.14	0.03	0.10	0.10
Sat Flow, veh/h	1594	3078	316	1594	2840	521	1594	2962	408	1594	2750	579
Grp Volume(v), veh/h	72	313	320	12	122	126	78	92	95	30	69	71
Grp Sat Flow(s),veh/h/ln	1594	1683	1710	1594	1683	1678	1594	1683	1687	1594	1683	1646
Q Serve(g_s), s	5.4	9.5	9.6	0.9	3.7	3.8	5.8	6.0	6.2	2.2	4.6	4.9
Cycle Q Clear(g_c), s	5.4	9.5	9.6	0.9	3.7	3.8	5.8	6.0	6.2	2.2	4.6	4.9
Prop In Lane	1.00		0.18	1.00		0.31	1.00		0.24	1.00		0.35
Lane Grp Cap(c), veh/h	89	1100	1117	22	1029	1025	97	230	230	42	172	168
V/C Ratio(X)	0.81	0.28	0.29	0.55	0.12	0.12	0.81	0.40	0.41	0.71	0.40	0.42
Avail Cap(c_a), veh/h	231	1100	1117	98	1029	1025	258	499	500	151	387	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	8.9	8.9	58.8	9.8	9.8	55.7	47.3	47.4	58.0	50.4	50.6
Incr Delay (d2), s/veh	5.8	0.6	0.6	7.7	0.2	0.2	5.8	1.1	1.2	8.1	1.5	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.3	3.3	0.4	1.3	1.3	2.4	2.5	2.6	1.0	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.8	9.4	9.5	66.5	10.0	10.1	61.4	48.4	48.6	66.1	51.9	52.2
LnGrp LOS	E	A	A	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		705			260			265			170	
Approach Delay, s/veh		14.8			12.6			52.3			54.6	
Approach LOS		B			B			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	21.8	6.2	84.2	11.9	17.7	11.3	79.1				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	11.4	35.6	7.4	45.2	19.4	27.6	17.4	35.2				
Max Q Clear Time (g_c+I1), s	4.2	8.2	2.9	11.6	7.8	6.9	7.4	5.8				
Green Ext Time (p_c), s	0.0	0.9	0.0	3.7	0.1	0.6	0.0	1.3				
Intersection Summary												
HCM 6th Ctrl Delay			26.3									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	88	561	20	13	307	40	37	124	11	106
Future Volume (vph)	88	561	20	13	307	40	37	124	11	106
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	27.0	53.0	53.0	13.0	39.0	39.0	17.0	41.0	13.0	37.0
Total Split (%)	22.5%	44.2%	44.2%	10.8%	32.5%	32.5%	14.2%	34.2%	10.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	8.7	22.6	22.6	6.0	13.4	13.4	6.8	15.6	5.9	13.1
Actuated g/C Ratio	0.16	0.42	0.42	0.11	0.25	0.25	0.13	0.29	0.11	0.24
v/c Ratio	0.38	0.44	0.03	0.08	0.40	0.09	0.20	0.15	0.07	0.21
Control Delay	29.9	14.6	0.1	32.0	21.8	0.4	31.0	16.7	32.2	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.9	14.6	0.1	32.0	21.8	0.4	31.0	16.7	32.2	15.3
LOS	C	B	A	C	C	A	C	B	C	B
Approach Delay		16.2			19.8			19.9		16.5
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 53.6

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 17.6

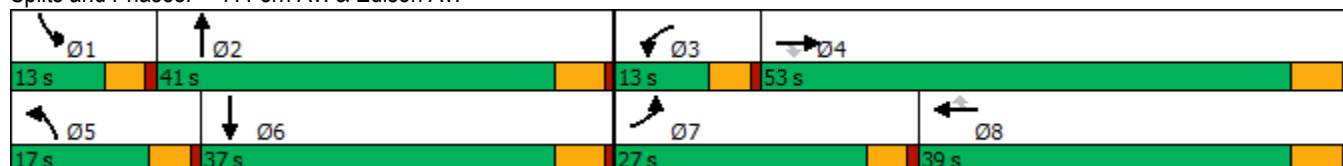
Intersection LOS: B

Intersection Capacity Utilization 50.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	561	20	13	307	40	37	124	6	11	106	48
Future Volume (veh/h)	88	561	20	13	307	40	37	124	6	11	106	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	97	616	14	14	337	33	41	136	6	12	116	32
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	985	439	28	787	351	70	783	34	25	549	146
Arrive On Green	0.08	0.29	0.29	0.02	0.23	0.23	0.04	0.24	0.24	0.02	0.21	0.21
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3285	144	1594	2620	697
Grp Volume(v), veh/h	97	616	14	14	337	33	41	69	73	12	73	75
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1746	1594	1683	1634
Q Serve(g_s), s	2.8	7.4	0.3	0.4	4.0	0.8	1.2	1.5	1.5	0.3	1.7	1.8
Cycle Q Clear(g_c), s	2.8	7.4	0.3	0.4	4.0	0.8	1.2	1.5	1.5	0.3	1.7	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.43
Lane Grp Cap(c), veh/h	122	985	439	28	787	351	70	401	416	25	353	342
V/C Ratio(X)	0.79	0.63	0.03	0.49	0.43	0.09	0.58	0.17	0.17	0.49	0.21	0.22
Avail Cap(c_a), veh/h	763	3397	1513	286	2389	1066	422	1281	1329	286	1137	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	14.3	11.8	22.8	15.3	14.0	21.9	14.2	14.2	22.8	15.3	15.3
Incr Delay (d2), s/veh	4.4	0.7	0.0	4.9	0.4	0.1	2.8	0.2	0.2	5.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.2	0.1	0.2	1.2	0.2	0.4	0.5	0.5	0.2	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	15.0	11.8	27.6	15.6	14.2	24.8	14.4	14.4	28.3	15.6	15.6
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		727			384			183			160	
Approach Delay, s/veh		16.3			15.9			16.7			16.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.3	16.5	5.4	19.5	6.7	15.2	8.2	16.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	35.6	8.4	47.2	12.4	31.6	22.4	33.2				
Max Q Clear Time (g_c+I1), s	2.3	3.5	2.4	9.4	3.2	3.8	4.8	6.0				
Green Ext Time (p_c), s	0.0	0.7	0.0	4.2	0.0	0.7	0.1	2.1				
Intersection Summary												
HCM 6th Ctrl Delay			16.3									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	564	236	34	51	54
Future Vol, veh/h	54	564	236	34	51	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	56	581	243	35	53	56
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	278	0	-	0	664	139
Stage 1	-	-	-	-	261	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1282	-	-	-	394	884
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1282	-	-	-	377	884
Mov Cap-2 Maneuver	-	-	-	-	482	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	644	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		11.3		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1282	-	-	-	482	884
HCM Lane V/C Ratio	0.043	-	-	-	0.109	0.063
HCM Control Delay (s)	7.9	-	-	-	13.4	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.2

Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	449	164	62	151	125	132
Future Vol, veh/h	449	164	62	151	125	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	522	191	72	176	145	153
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	713	0	850	357
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	232	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1094	-	472	*899
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1094	-	441	*899
Mov Cap-2 Maneuver	-	-	-	-	536	-
Stage 1	-	-	-	-	732	-
Stage 2	-	-	-	-	733	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.5		14.5	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	676	-	-	1094	-	
HCM Lane V/C Ratio	0.442	-	-	0.066	-	
HCM Control Delay (s)	14.5	-	-	8.5	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	2.3	-	-	0.2	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	349	1	388	225	856	723	488
Future Volume (vph)	349	1	388	225	856	723	488
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	34.0	82.0	48.0	48.0
Total Split (%)	31.7%	31.7%	31.7%	28.3%	68.3%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	24.1	24.1	24.1	20.4	85.4	60.4	60.4
Actuated g/C Ratio	0.20	0.20	0.20	0.17	0.71	0.50	0.50
v/c Ratio	0.79	0.73	0.57	0.79	0.36	0.43	0.49
Control Delay	61.9	44.4	18.3	74.5	6.2	22.0	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	61.9	44.4	18.3	74.5	6.3	22.0	3.8
LOS	E	D	B	E	A	C	A
Approach Delay		42.1			20.5	14.7	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 23.4

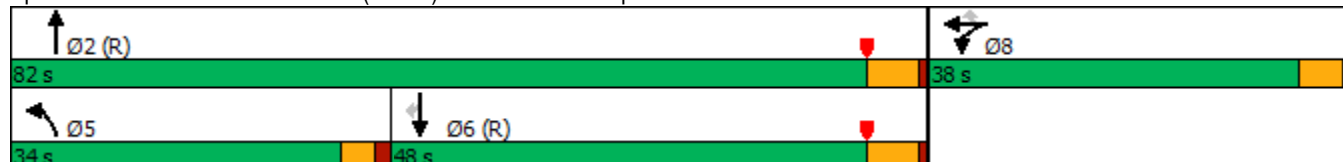
Intersection LOS: C

Intersection Capacity Utilization 68.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	349	1	388	225	856	0	0	723	488
Future Volume (veh/h)	0	0	0	349	1	388	225	856	0	0	723	488
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				451	0	180	237	901	0	0	761	294
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				530	0	236	261	2714	0	0	2059	918
Arrive On Green				0.15	0.00	0.15	0.29	1.00	0.00	0.00	0.58	0.58
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				451	0	180	237	901	0	0	761	294
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				14.8	0.0	13.1	15.4	0.0	0.0	0.0	13.8	11.5
Cycle Q Clear(g_c), s				14.8	0.0	13.1	15.4	0.0	0.0	0.0	13.8	11.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				530	0	236	261	2714	0	0	2059	918
V/C Ratio(X)				0.85	0.00	0.76	0.91	0.33	0.00	0.00	0.37	0.32
Avail Cap(c_a), veh/h				980	0	436	438	2714	0	0	2059	918
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.79	0.79	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.8	0.0	49.0	41.6	0.0	0.0	0.0	13.5	13.0
Incr Delay (d2), s/veh				1.5	0.0	1.9	7.0	0.3	0.0	0.0	0.5	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.5	0.0	5.2	6.0	0.1	0.0	0.0	5.3	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.3	0.0	51.0	48.6	0.3	0.0	0.0	14.0	13.9
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					631			1138			1055	
Approach Delay, s/veh					51.2			10.3			14.0	
Approach LOS					D			B			B	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	97.1			22.1			75.0			22.9		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	76.5			29.5			42.5			33.0		
Max Q Clear Time (g_c+I1), s	2.0			17.4			15.8			16.8		
Green Ext Time (p_c), s	11.4			0.3			9.5			1.0		
Intersection Summary												
HCM 6th Ctrl Delay				20.8								
HCM 6th LOS				C								
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	273	1	808	372	292	780
Future Volume (vph)	273	1	808	372	292	780
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	49.0	49.0	36.0	85.0
Total Split (%)	29.2%	29.2%	40.8%	40.8%	30.0%	70.8%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	22.8	22.8	57.6	57.6	25.1	86.7
Actuated g/C Ratio	0.19	0.19	0.48	0.48	0.21	0.72
v/c Ratio	0.82	0.52	0.51	0.42	0.84	0.32
Control Delay	66.1	12.0	24.9	3.9	78.5	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	66.1	12.0	24.9	3.9	78.5	7.1
LOS	E	B	C	A	E	A
Approach Delay		40.4	18.3			26.5
Approach LOS		D	B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 25.3

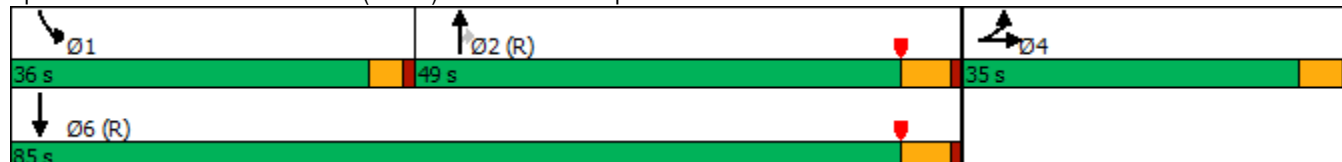
Intersection LOS: C

Intersection Capacity Utilization 68.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	1	195	0	0	0	0	808	372	292	780	0
Future Volume (veh/h)	273	1	195	0	0	0	0	808	372	292	780	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	195	134	100				0	860	225	311	830	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	277	154	115				0	1907	831	333	2691	0
Arrive On Green	0.16	0.16	0.16				0.00	0.54	0.54	0.37	1.00	0.00
Sat Flow, veh/h	1781	995	742				0	3647	1548	1781	3647	0
Grp Volume(v), veh/h	195	0	234				0	860	225	311	830	0
Grp Sat Flow(s),veh/h/ln	1781	0	1737				0	1777	1548	1781	1777	0
Q Serve(g_s), s	12.5	0.0	15.8				0.0	17.8	9.5	20.1	0.0	0.0
Cycle Q Clear(g_c), s	12.5	0.0	15.8				0.0	17.8	9.5	20.1	0.0	0.0
Prop In Lane	1.00		0.43				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	277	0	270				0	1907	831	333	2691	0
V/C Ratio(X)	0.70	0.00	0.87				0.00	0.45	0.27	0.93	0.31	0.00
Avail Cap(c_a), veh/h	445	0	434				0	1907	831	475	2691	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.89	0.89	0.84	0.84	0.00
Uniform Delay (d), s/veh	48.1	0.0	49.5				0.0	17.0	15.1	36.8	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	6.0				0.0	0.7	0.7	15.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	7.1				0.0	7.1	3.4	8.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.3	0.0	55.5				0.0	17.7	15.8	52.0	0.3	0.0
LnGrp LOS	D	A	E				A	B	B	D	A	A
Approach Vol, veh/h	429						1085			1141		
Approach Delay, s/veh	52.7						17.3			14.4		
Approach LOS	D						B			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	26.5	69.9	23.6		96.4							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	32.0	43.5	30.0		79.5							
Max Q Clear Time (g_c+I1), s	22.1	19.8	17.8		2.0							
Green Ext Time (p_c), s	0.3	9.7	0.9		10.1							
Intersection Summary												
HCM 6th Ctrl Delay			21.8									
HCM 6th LOS			C									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	106	427	56	273	122	788	70	257	678	104
Future Volume (vph)	106	427	56	273	122	788	70	257	678	104
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	40.0	17.0	33.0	26.0	38.0	38.0	25.0	37.0	37.0
Total Split (%)	20.0%	33.3%	14.2%	27.5%	21.7%	31.7%	31.7%	20.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.1	22.6	8.1	17.2	12.1	33.1	33.1	13.0	34.0	34.0
Actuated g/C Ratio	0.12	0.24	0.09	0.18	0.13	0.35	0.35	0.14	0.36	0.36
v/c Ratio	0.59	0.68	0.43	0.64	0.63	0.44	0.12	0.65	0.37	0.17
Control Delay	55.3	36.8	54.4	34.1	55.1	26.7	0.4	48.3	25.5	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.3	36.8	54.4	34.1	55.1	26.7	0.4	48.3	25.5	2.4
LOS	E	D	D	C	E	C	A	D	C	A
Approach Delay		39.8		36.5		28.4			28.8	
Approach LOS		D		D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 95.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 32.1

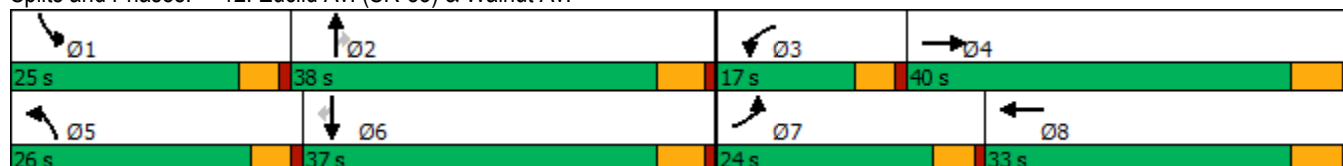
Intersection LOS: C

Intersection Capacity Utilization 65.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	427	119	56	273	140	122	788	70	257	678	104
Future Volume (veh/h)	106	427	119	56	273	140	122	788	70	257	678	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	109	440	97	58	281	126	126	812	61	265	699	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	586	128	71	394	172	155	2069	584	341	2157	600
Arrive On Green	0.08	0.21	0.21	0.04	0.17	0.17	0.10	0.39	0.39	0.11	0.41	0.41
Sat Flow, veh/h	1594	2809	614	1594	2337	1019	1594	5316	1499	3000	5316	1480
Grp Volume(v), veh/h	109	276	261	58	211	196	126	812	61	265	699	72
Grp Sat Flow(s),veh/h/ln	1594	1772	1651	1594	1772	1584	1594	1772	1499	1500	1772	1480
Q Serve(g_s), s	5.6	12.2	12.4	3.0	9.4	9.8	6.5	9.2	2.2	7.2	7.5	2.5
Cycle Q Clear(g_c), s	5.6	12.2	12.4	3.0	9.4	9.8	6.5	9.2	2.2	7.2	7.5	2.5
Prop In Lane	1.00		0.37	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	370	345	71	299	267	155	2069	584	341	2157	600
V/C Ratio(X)	0.81	0.75	0.76	0.82	0.71	0.73	0.81	0.39	0.10	0.78	0.32	0.12
Avail Cap(c_a), veh/h	369	724	674	236	575	514	407	2069	584	731	2157	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	31.1	31.1	39.7	32.9	33.0	37.1	18.4	16.3	36.1	17.0	15.5
Incr Delay (d2), s/veh	4.2	3.0	3.4	8.2	3.1	3.9	3.9	0.6	0.4	1.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	5.2	4.9	1.3	4.0	3.8	2.6	3.6	0.7	2.6	2.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	34.1	34.5	47.8	35.9	36.9	40.9	19.0	16.6	37.5	17.4	16.0
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		646			465			999			1036	
Approach Delay, s/veh		35.6			37.8			21.6			22.5	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.1	38.0	8.3	23.3	12.7	39.4	11.7	19.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	20.4	32.6	12.4	34.2	21.4	31.6	19.4	27.2				
Max Q Clear Time (g_c+I1), s	9.2	11.2	5.0	14.4	8.5	9.5	7.6	11.8				
Green Ext Time (p_c), s	0.4	5.6	0.0	2.8	0.1	4.8	0.1	1.9				
Intersection Summary												
HCM 6th Ctrl Delay			27.2									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	124	404	145	451	60	66	748	181	100	592	144
Future Volume (vph)	124	404	145	451	60	66	748	181	100	592	144
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	20.6	41.1	41.1	15.9	40.2	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.0	32.6	13.7	33.3	33.3	8.8	30.3	30.3	10.1	33.2	52.9
Actuated g/C Ratio	0.12	0.30	0.13	0.31	0.31	0.08	0.28	0.28	0.09	0.31	0.49
v/c Ratio	0.68	0.89	0.76	0.45	0.12	0.53	0.83	0.34	0.70	0.60	0.18
Control Delay	65.8	56.5	71.5	32.8	0.8	67.0	45.7	6.5	76.0	36.9	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.8	56.5	71.5	32.8	0.8	67.0	45.7	6.5	76.0	36.9	3.3
LOS	E	E	E	C	A	E	D	A	E	D	A
Approach Delay		58.5		38.4			39.9			35.8	
Approach LOS		E		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 42.0

Intersection LOS: D

Intersection Capacity Utilization 79.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

 Ø1	 Ø2	 Ø3	 Ø4
16 s	40.2 s	20.6 s	43.2 s
 Ø5	 Ø6	 Ø7	 Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	404	46	145	451	60	66	748	181	100	592	144
Future Volume (veh/h)	124	404	46	145	451	60	66	748	181	100	592	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	129	421	24	151	470	30	69	779	109	104	617	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	476	27	180	1015	451	86	953	425	128	1043	613
Arrive On Green	0.10	0.29	0.29	0.11	0.30	0.30	0.05	0.28	0.28	0.08	0.31	0.31
Sat Flow, veh/h	1594	1660	95	1594	3367	1494	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	129	0	445	151	470	30	69	779	109	104	617	67
Grp Sat Flow(s),veh/h/ln	1594	0	1755	1594	1683	1494	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	7.2	0.0	22.0	8.4	10.3	1.3	3.9	19.6	5.1	5.8	14.1	2.5
Cycle Q Clear(g_c), s	7.2	0.0	22.0	8.4	10.3	1.3	3.9	19.6	5.1	5.8	14.1	2.5
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	0	503	180	1015	451	86	953	425	128	1043	613
V/C Ratio(X)	0.82	0.00	0.88	0.84	0.46	0.07	0.81	0.82	0.26	0.81	0.59	0.11
Avail Cap(c_a), veh/h	317	0	722	281	1307	580	198	1289	575	200	1252	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	31.0	39.5	25.8	22.6	42.5	30.4	25.2	41.1	26.5	16.7
Incr Delay (d2), s/veh	4.0	0.0	9.2	7.1	0.3	0.1	6.5	3.1	0.3	6.6	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	9.9	3.5	3.9	0.4	1.6	7.5	1.7	2.4	5.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	0.0	40.2	46.5	26.1	22.7	49.1	33.5	25.5	47.8	27.1	16.7
LnGrp LOS	D	A	D	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h	574			651			957			788		
Approach Delay, s/veh	41.1			30.7			33.7			28.9		
Approach LOS	D			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.9	32.2	14.9	31.9	9.5	34.7	13.6	33.2				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+I1), s	7.8	21.6	10.4	24.0	5.9	16.1	9.2	12.3				
Green Ext Time (p_c), s	0.0	4.1	0.1	2.1	0.0	3.9	0.1	2.9				
Intersection Summary												
HCM 6th Ctrl Delay	33.2											
HCM 6th LOS	C											
Notes												

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	69	314	20	82	149	34	887	240	49	669	48
Future Volume (vph)	69	314	20	82	149	34	887	240	49	669	48
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	52.3	52.3	52.3	52.3	52.3	12.0	52.9	52.9	14.8	55.7	55.7
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	10.0%	44.1%	44.1%	12.3%	46.4%	46.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	29.9	29.9	29.9		29.9	6.4	50.0	50.0	7.6	52.1	52.1
Actuated g/C Ratio	0.30	0.30	0.30		0.30	0.06	0.50	0.50	0.08	0.52	0.52
v/c Ratio	0.30	0.65	0.04		1.07	0.37	0.57	0.33	0.45	0.42	0.06
Control Delay	30.5	36.8	0.1		109.1	60.9	23.0	14.7	60.7	19.1	3.6
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	36.8	0.1		109.1	60.9	23.0	14.7	60.7	19.1	3.6
LOS	C	D	A		F	E	C	B	E	B	A
Approach Delay		33.9			109.1		22.4			20.8	
Approach LOS		C			F		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 101

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 32.5

Intersection LOS: C

Intersection Capacity Utilization 80.5%

ICU Level of Service D

Analysis Period (min) 15

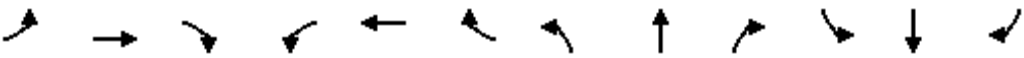
Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14.8 s	52.9 s	52.3 s
		
Ø5	Ø6	Ø8
12 s	55.7 s	52.3 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	314	20	82	149	33	34	887	240	49	669	48
Future Volume (veh/h)	69	314	20	82	149	33	34	887	240	49	669	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	74	338	5	88	160	27	37	954	189	53	719	34
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	269	584	495	122	203	30	50	1569	700	65	1600	714
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.03	0.47	0.47	0.04	0.48	0.48
Sat Flow, veh/h	1071	1772	1502	232	617	92	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	74	338	5	275	0	0	37	954	189	53	719	34
Grp Sat Flow(s),veh/h/ln	1071	1772	1502	941	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	16.4	0.2	14.5	0.0	0.0	2.4	21.9	8.0	3.4	14.7	1.3
Cycle Q Clear(g_c), s	10.7	16.4	0.2	30.9	0.0	0.0	2.4	21.9	8.0	3.4	14.7	1.3
Prop In Lane	1.00		1.00	0.32		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	584	495	356	0	0	50	1569	700	65	1600	714
V/C Ratio(X)	0.27	0.58	0.01	0.77	0.00	0.00	0.73	0.61	0.27	0.81	0.45	0.05
Avail Cap(c_a), veh/h	397	796	675	522	0	0	114	1569	700	157	1600	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	28.7	23.3	35.9	0.0	0.0	49.7	20.6	16.9	49.2	18.1	14.6
Incr Delay (d2), s/veh	0.5	0.9	0.0	4.2	0.0	0.0	7.4	1.8	0.9	8.6	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.7	0.1	6.8	0.0	0.0	1.0	7.9	2.6	1.4	5.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	29.6	23.3	40.2	0.0	0.0	57.1	22.4	17.8	57.8	19.0	14.7
LnGrp LOS	C	C	C	D	A	A	E	C	B	E	B	B
Approach Vol, veh/h	417			275			1180			806		
Approach Delay, s/veh	29.2			40.2			22.7			21.4		
Approach LOS	C			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	54.7		39.9	7.9	55.7		39.9				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	10.2	* 48		46.5	7.4	49.2		46.5				
Max Q Clear Time (g_c+I1), s	5.4	23.9		18.4	4.4	16.7		32.9				
Green Ext Time (p_c), s	0.0	6.8		2.2	0.0	4.7		1.3				

Intersection Summary

HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	236	250	99	27	56	55	901	48	54	608	100
Future Volume (vph)	236	250	99	27	56	55	901	48	54	608	100
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.0	43.0	9.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.8%	35.8%	7.5%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	20.1	27.0	27.0	11.6	12.3	8.1	31.5	31.5	6.4	29.5	29.5
Actuated g/C Ratio	0.24	0.32	0.32	0.14	0.15	0.10	0.37	0.37	0.08	0.35	0.35
v/c Ratio	0.66	0.47	0.19	0.13	0.36	0.38	0.76	0.08	0.48	0.54	0.17
Control Delay	45.3	28.2	4.0	45.0	30.9	51.7	31.0	0.2	61.1	28.2	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.3	28.2	4.0	45.0	30.9	51.7	31.0	0.2	61.1	28.2	1.4
LOS	D	C	A	D	C	D	C	A	E	C	A
Approach Delay		31.0			34.1		30.6			27.0	
Approach LOS		C			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 84.3

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 29.8

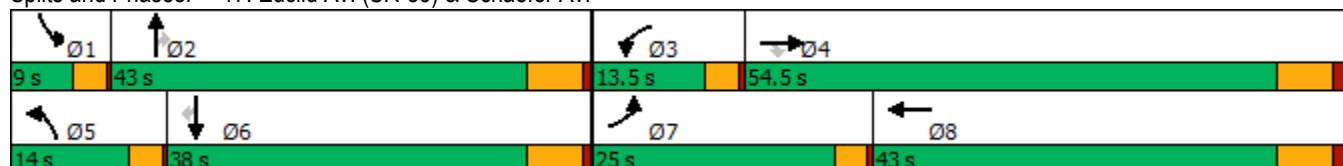
Intersection LOS: C

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	250	99	27	56	35	55	901	48	54	608	100
Future Volume (veh/h)	236	250	99	27	56	35	55	901	48	54	608	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	248	263	55	28	59	26	58	948	48	57	640	62
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	380	317	97	108	47	80	1237	540	79	1236	551
Arrive On Green	0.18	0.21	0.21	0.06	0.09	0.09	0.05	0.37	0.37	0.05	0.37	0.37
Sat Flow, veh/h	1594	1772	1478	1594	1166	514	1594	3367	1470	1594	3367	1502
Grp Volume(v), veh/h	248	263	55	28	0	85	58	948	48	57	640	62
Grp Sat Flow(s),veh/h/ln	1594	1772	1478	1594	0	1679	1594	1683	1470	1594	1683	1502
Q Serve(g_s), s	9.8	8.9	2.0	1.1	0.0	3.1	2.3	16.1	1.4	2.3	9.7	1.8
Cycle Q Clear(g_c), s	9.8	8.9	2.0	1.1	0.0	3.1	2.3	16.1	1.4	2.3	9.7	1.8
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	380	317	97	0	155	80	1237	540	79	1236	551
V/C Ratio(X)	0.85	0.69	0.17	0.29	0.00	0.55	0.73	0.77	0.09	0.72	0.52	0.11
Avail Cap(c_a), veh/h	527	1295	1080	245	0	930	258	1917	837	135	1658	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	23.6	20.8	29.2	0.0	28.2	30.4	18.1	13.4	30.4	16.1	13.6
Incr Delay (d2), s/veh	2.7	1.7	0.2	0.6	0.0	2.2	4.7	1.0	0.1	4.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.5	0.6	0.4	0.0	1.2	0.9	5.1	0.4	0.9	3.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	25.3	21.0	29.8	0.0	30.4	35.1	19.1	13.5	35.1	16.4	13.7
LnGrp LOS	C	C	C	C	A	C	D	B	B	D	B	B
Approach Vol, veh/h		566			113			1054			759	
Approach Delay, s/veh		26.2			30.3			19.7			17.6	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	29.9	7.5	20.9	6.7	29.8	15.4	13.0				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.5	37.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	4.3	18.1	3.1	10.9	4.3	11.7	11.8	5.1				
Green Ext Time (p_c), s	0.0	5.8	0.0	1.2	0.0	3.8	0.2	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			21.0									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	121	327	113	37	197	87	849	47	62	628	113
Future Volume (vph)	121	327	113	37	197	87	849	47	62	628	113
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	12.0	54.0	54.0	15.0	57.0	57.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	10.0%	45.0%	45.0%	12.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	22.5	22.5	22.5	22.5	22.5	7.4	27.5	27.5	8.2	28.3	28.3
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.10	0.37	0.37	0.11	0.38	0.38
v/c Ratio	0.41	0.63	0.22	0.17	0.44	0.31	0.70	0.08	0.36	0.50	0.18
Control Delay	28.1	29.7	5.8	24.1	25.0	41.9	24.7	3.3	44.5	20.1	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.1	29.7	5.8	24.1	25.0	41.9	24.7	3.3	44.5	20.1	4.7
LOS	C	C	A	C	C	D	C	A	D	C	A
Approach Delay		24.6			24.8		25.3			19.9	
Approach LOS		C			C		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 73.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 23.4

Intersection LOS: C

Intersection Capacity Utilization 71.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	54 s	51 s
		
Ø5	Ø6	Ø8
12 s	57 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	327	113	37	197	32	87	849	47	62	628	113
Future Volume (veh/h)	121	327	113	37	197	32	87	849	47	62	628	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	125	337	60	38	203	25	90	875	36	64	647	82
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	322	528	447	241	461	57	192	1220	544	88	1185	528
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.07	0.36	0.36	0.06	0.35	0.35
Sat Flow, veh/h	1031	1772	1502	883	1547	191	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	125	337	60	38	0	228	90	875	36	64	647	82
Grp Sat Flow(s),veh/h/ln	1031	1772	1502	883	0	1738	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	6.5	9.6	1.7	2.3	0.0	6.2	1.7	13.0	0.9	2.3	8.9	2.2
Cycle Q Clear(g_c), s	12.6	9.6	1.7	11.8	0.0	6.2	1.7	13.0	0.9	2.3	8.9	2.2
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	322	528	447	241	0	517	192	1220	544	88	1185	528
V/C Ratio(X)	0.39	0.64	0.13	0.16	0.00	0.44	0.47	0.72	0.07	0.72	0.55	0.16
Avail Cap(c_a), veh/h	797	1344	1139	648	0	1318	426	2785	1242	316	2959	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	17.7	14.9	22.8	0.0	16.5	26.1	15.9	12.1	27.0	15.1	12.9
Incr Delay (d2), s/veh	0.8	1.3	0.1	0.3	0.0	0.6	0.7	0.8	0.1	4.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.4	0.5	0.4	0.0	2.1	0.5	3.8	0.2	0.8	2.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	19.0	15.0	23.1	0.0	17.1	26.8	16.7	12.1	31.1	15.5	13.0
LnGrp LOS	C	B	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		522			266			1001			793	
Approach Delay, s/veh		19.3			17.9			17.5			16.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	27.0		24.3	7.3	26.4		24.3				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	11.5	48.0		44.0	8.5	51.0		44.0				
Max Q Clear Time (g_c+I1), s	4.3	15.0		14.6	3.7	10.9		13.8				
Green Ext Time (p_c), s	0.0	6.0		2.7	0.0	4.4		1.4				
Intersection Summary												
HCM 6th Ctrl Delay				17.6								
HCM 6th LOS				B								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	69	295	194	53	107	91	807	67	69	666	57
Future Volume (vph)	69	295	194	53	107	91	807	67	69	666	57
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	51.0	51.0	51.0	51.0	51.0	20.0	53.0	53.0	16.0	49.0	49.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	16.7%	44.2%	44.2%	13.3%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	20.6	20.6	20.6	20.6	20.6	10.3	25.6	25.6	9.0	24.5	24.5
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.15	0.38	0.38	0.13	0.36	0.36
v/c Ratio	0.23	0.58	0.35	0.26	0.36	0.40	0.67	0.12	0.35	0.58	0.10
Control Delay	22.9	26.9	5.2	24.4	19.6	38.2	22.6	9.3	39.7	22.2	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	26.9	5.2	24.4	19.6	38.2	22.6	9.3	39.7	22.2	3.9
LOS	C	C	A	C	B	D	C	A	D	C	A
Approach Delay		18.9			20.7		23.2			22.4	
Approach LOS		B			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 68

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 21.8

Intersection LOS: C

Intersection Capacity Utilization 64.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
16 s	53 s	51 s
 Ø5	 Ø6	 Ø8
20 s	49 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	295	194	53	107	73	91	807	67	69	666	57
Future Volume (veh/h)	69	295	194	53	107	73	91	807	67	69	666	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	73	311	102	56	113	64	96	849	47	73	701	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	490	410	254	294	166	119	1256	560	103	1221	537
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.07	0.37	0.37	0.06	0.36	0.36
Sat Flow, veh/h	1080	1772	1482	871	1062	602	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	73	311	102	56	0	177	96	849	47	73	701	28
Grp Sat Flow(s),veh/h/ln	1080	1772	1482	871	0	1664	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	2.9	7.5	2.6	2.9	0.0	4.2	2.9	10.3	1.0	2.2	8.2	0.6
Cycle Q Clear(g_c), s	7.1	7.5	2.6	10.5	0.0	4.2	2.9	10.3	1.0	2.2	8.2	0.6
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	353	490	410	254	0	460	119	1256	560	103	1221	537
V/C Ratio(X)	0.21	0.64	0.25	0.22	0.00	0.38	0.81	0.68	0.08	0.71	0.57	0.05
Avail Cap(c_a), veh/h	1075	1675	1401	836	0	1572	538	3258	1453	408	2982	1312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	15.5	13.7	20.1	0.0	14.3	22.3	12.9	9.9	22.4	12.5	10.1
Incr Delay (d2), s/veh	0.2	1.0	0.2	0.3	0.0	0.4	9.3	0.6	0.1	6.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.6	0.7	0.5	0.0	1.3	1.2	2.7	0.2	0.9	2.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.4	16.5	14.0	20.4	0.0	14.7	31.5	13.5	10.0	29.0	13.0	10.2
LnGrp LOS	B	B	B	C	A	B	C	B	A	C	B	B
Approach Vol, veh/h		486			233			992			802	
Approach Delay, s/veh		16.1			16.1			15.1			14.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	23.9		18.3	7.1	23.4		18.3				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	12.5	47.3		46.2	16.5	43.3		46.2				
Max Q Clear Time (g_c+I1), s	4.2	12.3		9.5	4.9	10.2		12.5				
Green Ext Time (p_c), s	0.1	5.9		1.9	0.1	4.6		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				15.1								
HCM 6th LOS				B								

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	281	29	14	240	27	30	27	39
Future Volume (vph)	18	281	29	14	240	27	30	27	39
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	23.0	53.0	53.0	19.0	49.0	48.0	48.0	48.0	48.0
Total Split (%)	19.2%	44.2%	44.2%	15.8%	40.8%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	5.7	20.5	20.5	5.6	20.5		12.3		12.3
Actuated g/C Ratio	0.16	0.59	0.59	0.16	0.59		0.35		0.35
v/c Ratio	0.07	0.15	0.03	0.05	0.14		0.14		0.18
Control Delay	18.3	9.3	2.6	18.4	9.2		9.3		9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	18.3	9.3	2.6	18.4	9.2		9.3		9.1
LOS	B	A	A	B	A		A		A
Approach Delay		9.2			9.6		9.3		9.1
Approach LOS		A			A		A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 34.8

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.18

Intersection Signal Delay: 9.4

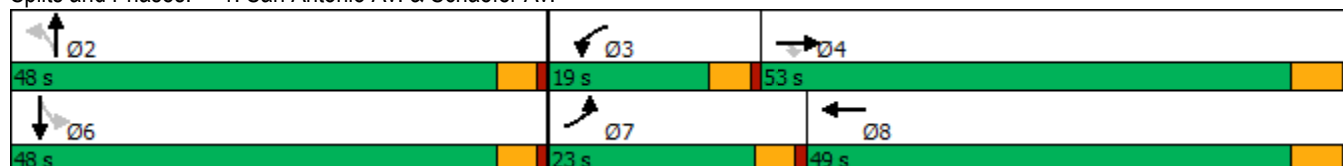
Intersection LOS: A

Intersection Capacity Utilization 33.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	281	29	14	240	24	27	30	15	27	39	26
Future Volume (veh/h)	18	281	29	14	240	24	27	30	15	27	39	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	19	290	25	14	247	21	28	31	6	28	40	11
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1036	452	29	946	80	254	219	32	220	235	50
Arrive On Green	0.02	0.31	0.31	0.02	0.30	0.30	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1594	3367	1470	1594	3137	264	443	988	146	328	1059	224
Grp Volume(v), veh/h	19	290	25	14	132	136	65	0	0	79	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1470	1594	1683	1718	1577	0	0	1612	0	0
Q Serve(g_s), s	0.4	2.2	0.4	0.3	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	2.2	0.4	0.3	2.0	2.0	1.0	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.15	0.43		0.09	0.35		0.14
Lane Grp Cap(c), veh/h	39	1036	452	29	508	518	505	0	0	504	0	0
V/C Ratio(X)	0.49	0.28	0.06	0.48	0.26	0.26	0.13	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	885	4794	2093	692	2194	2238	2137	0	0	2174	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.0	8.7	8.1	16.1	8.8	8.8	10.4	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.1	0.1	4.5	0.3	0.3	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.1	0.1	0.4	0.5	0.3	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	8.8	8.1	20.6	9.0	9.0	10.5	0.0	0.0	10.7	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		334			282			65			79	
Approach Delay, s/veh		9.4			9.6			10.5			10.7	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.9	5.2	16.0		11.9	5.4	15.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		43.4	14.4	47.2		43.4	18.4	43.2				
Max Q Clear Time (g_c+I1), s		3.0	2.3	4.2		3.2	2.4	4.0				
Green Ext Time (p_c), s		0.4	0.0	1.9		0.5	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay			9.7									
HCM 6th LOS			A									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	30	341	28	15	313	15	16	21	9	19
Future Volume (vph)	30	341	28	15	313	15	16	21	9	19
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	25.0	55.0	55.0	22.0	52.0	52.0	43.0	43.0	43.0	43.0
Total Split (%)	20.8%	45.8%	45.8%	18.3%	43.3%	43.3%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.0	22.4	22.4	5.6	22.3	22.3		12.7		12.7
Actuated g/C Ratio	0.16	0.59	0.59	0.15	0.59	0.59		0.34		0.34
v/c Ratio	0.12	0.18	0.03	0.06	0.16	0.02		0.09		0.11
Control Delay	19.3	9.8	2.6	19.8	10.1	0.1		9.3		7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	19.3	9.8	2.6	19.8	10.1	0.1		9.3		7.0
LOS	B	A	A	B	B	A		A		A
Approach Delay		10.0			10.1			9.3		7.0
Approach LOS		B			B			A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 37.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.18

Intersection Signal Delay: 9.8

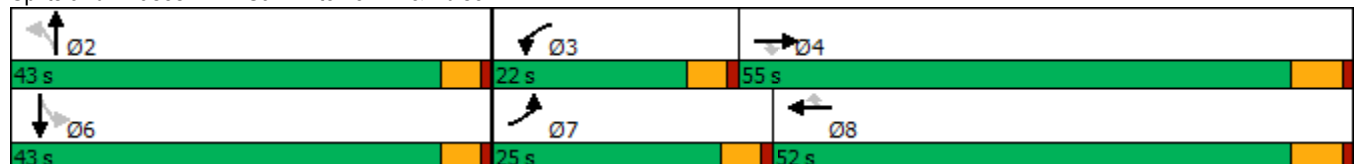
Intersection LOS: A

Intersection Capacity Utilization 36.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	341	28	15	313	15	16	21	6	9	19	28
Future Volume (veh/h)	30	341	28	15	313	15	16	21	6	9	19	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	31	352	22	15	323	12	16	22	2	9	20	-33
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	1219	532	31	1157	505	229	102	8	0	3220	1431
Arrive On Green	0.04	0.36	0.36	0.02	0.34	0.34	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	534	969	79	-1923	-5304	8223
Grp Volume(v), veh/h	31	352	22	15	323	12	40	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1583	0	0	0	0	0
Q Serve(g_s), s	0.6	2.2	0.3	0.3	2.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	2.2	0.3	0.3	2.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.05	-2.25		8.25
Lane Grp Cap(c), veh/h	61	1219	532	31	1157	505	339	0	0	0	0	0
V/C Ratio(X)	0.51	0.29	0.04	0.48	0.28	0.02	0.12	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1111	5661	2468	948	5316	2318	2215	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	13.8	6.6	6.0	14.2	7.0	6.4	12.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.1	0.0	4.2	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	0.1	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	6.8	6.1	18.4	7.1	6.4	12.1	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		405			350			40			0	
Approach Delay, s/veh		7.5			7.6			12.1			0.0	
Approach LOS		A			A			B				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.7	5.2	16.4		7.7	5.7	15.9				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		38.4	17.4	49.2		38.4	20.4	46.2				
Max Q Clear Time (g_c+I1), s		2.6	2.3	4.2		0.0	2.6	4.0				
Green Ext Time (p_c), s		0.2	0.0	2.3		0.0	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay			7.7									
HCM 6th LOS			A									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	17	121	26	158	30	95	16	100
Future Volume (vph)	17	121	26	158	30	95	16	100
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	17.0	41.0	17.0	41.0	24.0	41.0	21.0	38.0
Total Split (%)	14.2%	34.2%	14.2%	34.2%	20.0%	34.2%	17.5%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	12.9	13.1	13.0	13.1	6.5	17.0	6.2	16.9
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.17	0.45	0.16	0.44
v/c Ratio	0.04	0.13	0.06	0.15	0.11	0.10	0.06	0.07
Control Delay	9.4	11.6	9.4	11.9	21.3	10.0	22.1	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	11.6	9.4	11.9	21.3	10.0	22.1	12.7
LOS	A	B	A	B	C	B	C	B
Approach Delay		11.3		11.5		12.1		13.9
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 38.1

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.15

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 42.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

			
Ø1	Ø2	Ø3	Ø4
21 s	41 s	17 s	41 s
			
Ø5	Ø6	Ø7	Ø8
24 s	38 s	17 s	41 s

HCM 6th Signalized Intersection Summary
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	121	19	26	158	13	30	95	40	16	100	7
Future Volume (veh/h)	17	121	19	26	158	13	30	95	40	16	100	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	123	16	27	161	7	31	97	22	16	102	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	423	711	91	441	814	35	57	682	150	32	780	23
Arrive On Green	0.02	0.24	0.24	0.03	0.25	0.25	0.04	0.25	0.25	0.02	0.23	0.23
Sat Flow, veh/h	1594	3001	384	1594	3286	142	1594	2735	600	1594	3338	98
Grp Volume(v), veh/h	17	68	71	27	82	86	31	58	61	16	51	54
Grp Sat Flow(s),veh/h/ln	1594	1683	1701	1594	1683	1745	1594	1683	1651	1594	1683	1752
Q Serve(g_s), s	0.4	1.4	1.5	0.6	1.7	1.7	0.8	1.2	1.3	0.4	1.1	1.1
Cycle Q Clear(g_c), s	0.4	1.4	1.5	0.6	1.7	1.7	0.8	1.2	1.3	0.4	1.1	1.1
Prop In Lane	1.00		0.23	1.00		0.08	1.00		0.36	1.00		0.06
Lane Grp Cap(c), veh/h	423	399	403	441	417	432	57	420	412	32	393	410
V/C Ratio(X)	0.04	0.17	0.18	0.06	0.20	0.20	0.54	0.14	0.15	0.50	0.13	0.13
Avail Cap(c_a), veh/h	836	1340	1355	837	1340	1390	699	1356	1330	591	1241	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	13.4	13.4	12.0	13.2	13.2	21.0	12.9	12.9	21.4	13.4	13.4
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.2	0.2	3.0	0.1	0.2	4.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.5	0.2	0.5	0.5	0.3	0.4	0.4	0.2	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	13.6	13.6	12.1	13.4	13.4	23.9	13.1	13.1	25.8	13.5	13.5
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		156			195			150			121	
Approach Delay, s/veh		13.5			13.2			15.3			15.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	16.4	6.0	16.3	6.2	15.7	5.5	16.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	19.4	32.6	12.4	35.2				
Max Q Clear Time (g_c+I1), s	2.4	3.3	2.6	3.5	2.8	3.1	2.4	3.7				
Green Ext Time (p_c), s	0.0	0.6	0.0	0.7	0.0	0.5	0.0	0.8				
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	273	8	187	46	98	39	90
Future Volume (vph)	25	273	8	187	46	98	39	90
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	19.0	44.0	15.0	40.0	25.0	40.0	21.0	36.0
Total Split (%)	15.8%	36.7%	12.5%	33.3%	20.8%	33.3%	17.5%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	6.7	83.7	5.4	78.5	8.1	12.5	7.7	12.1
Actuated g/C Ratio	0.06	0.70	0.04	0.65	0.07	0.10	0.06	0.10
v/c Ratio	0.30	0.14	0.11	0.11	0.45	0.33	0.41	0.36
Control Delay	62.5	8.0	58.1	9.5	66.1	46.9	65.0	39.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.5	8.0	58.1	9.5	66.1	46.9	65.0	39.2
LOS	E	A	E	A	E	D	E	D
Approach Delay		12.2		11.0		52.6		45.5
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 25.1

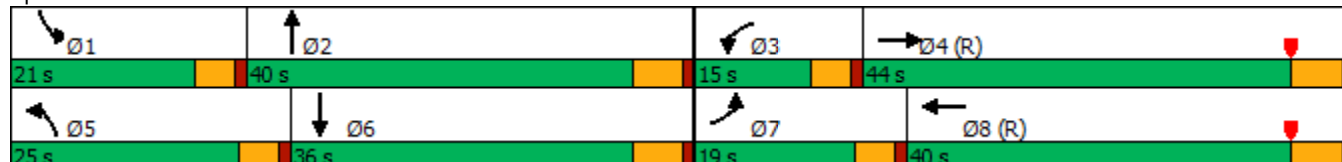
Intersection LOS: C

Intersection Capacity Utilization 49.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	273	25	8	187	46	46	98	11	39	90	31
Future Volume (veh/h)	25	273	25	8	187	46	46	98	11	39	90	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	26	287	23	8	197	35	48	103	10	41	95	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	2192	174	16	1945	339	60	291	28	50	271	28
Arrive On Green	0.02	0.69	0.69	0.01	0.68	0.68	0.04	0.09	0.09	0.03	0.09	0.09
Sat Flow, veh/h	1594	3155	251	1594	2860	499	1594	3097	296	1594	3072	318
Grp Volume(v), veh/h	26	152	158	8	114	118	48	55	58	41	51	54
Grp Sat Flow(s),veh/h/ln	1594	1683	1723	1594	1683	1675	1594	1683	1710	1594	1683	1707
Q Serve(g_s), s	1.9	3.6	3.7	0.6	2.8	2.9	3.6	3.7	3.8	3.1	3.4	3.6
Cycle Q Clear(g_c), s	1.9	3.6	3.7	0.6	2.8	2.9	3.6	3.7	3.8	3.1	3.4	3.6
Prop In Lane	1.00		0.15	1.00		0.30	1.00		0.17	1.00		0.19
Lane Grp Cap(c), veh/h	38	1169	1197	16	1145	1139	60	158	161	50	149	151
V/C Ratio(X)	0.68	0.13	0.13	0.51	0.10	0.10	0.81	0.35	0.36	0.81	0.35	0.36
Avail Cap(c_a), veh/h	191	1169	1197	138	1145	1139	271	485	493	218	429	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	6.2	6.2	59.1	6.6	6.6	57.3	50.9	51.0	57.8	51.4	51.5
Incr Delay (d2), s/veh	7.4	0.2	0.2	9.4	0.2	0.2	9.0	1.3	1.3	11.1	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.2	1.2	0.3	0.9	1.0	1.6	1.6	1.7	1.4	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.4	6.4	6.4	68.6	6.8	6.8	66.4	52.2	52.3	68.9	52.8	52.9
LnGrp LOS	E	A	A	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h		336			240			161			146	
Approach Delay, s/veh		11.0			8.8			56.5			57.4	
Approach LOS		B			A			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	16.7	5.8	89.2	9.1	16.0	7.5	87.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	34.6	10.4	38.2	20.4	30.6	14.4	34.2				
Max Q Clear Time (g_c+I1), s	5.1	5.8	2.6	5.7	5.6	5.6	3.9	4.9				
Green Ext Time (p_c), s	0.0	0.5	0.0	1.6	0.0	0.5	0.0	1.2				
Intersection Summary												
HCM 6th Ctrl Delay			26.3									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	61	280	14	19	276	19	16	58	13	68
Future Volume (vph)	61	280	14	19	276	19	16	58	13	68
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	25.0	48.0	48.0	17.0	40.0	40.0	17.0	41.0	14.0	38.0
Total Split (%)	20.8%	40.0%	40.0%	14.2%	33.3%	33.3%	14.2%	34.2%	11.7%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.4	24.7	24.7	6.1	19.3	19.3	6.1	13.2	6.0	13.2
Actuated g/C Ratio	0.16	0.53	0.53	0.13	0.41	0.41	0.13	0.28	0.13	0.28
v/c Ratio	0.26	0.17	0.02	0.10	0.22	0.03	0.08	0.08	0.07	0.14
Control Delay	26.0	11.8	0.1	27.6	16.7	0.1	27.8	14.8	27.8	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	11.8	0.1	27.6	16.7	0.1	27.8	14.8	27.8	10.9
LOS	C	B	A	C	B	A	C	B	C	B
Approach Delay		13.7			16.4			17.3		12.5
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 46.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.26

Intersection Signal Delay: 14.8

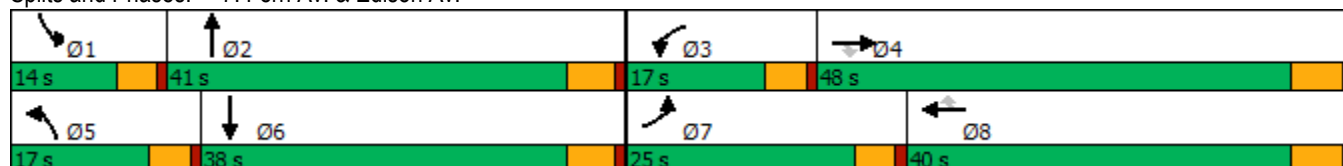
Intersection LOS: B

Intersection Capacity Utilization 40.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	280	14	19	276	19	16	58	8	13	68	53
Future Volume (veh/h)	61	280	14	19	276	19	16	58	8	13	68	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	66	304	11	21	300	13	17	63	5	14	74	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	917	409	41	790	352	34	659	52	29	534	145
Arrive On Green	0.06	0.27	0.27	0.03	0.23	0.23	0.02	0.21	0.21	0.02	0.20	0.20
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3163	248	1594	2607	709
Grp Volume(v), veh/h	66	304	11	21	300	13	17	33	35	14	47	48
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1727	1594	1683	1633
Q Serve(g_s), s	1.7	3.1	0.2	0.6	3.2	0.3	0.5	0.7	0.7	0.4	1.0	1.0
Cycle Q Clear(g_c), s	1.7	3.1	0.2	0.6	3.2	0.3	0.5	0.7	0.7	0.4	1.0	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.43
Lane Grp Cap(c), veh/h	101	917	409	41	790	352	34	351	360	29	345	335
V/C Ratio(X)	0.65	0.33	0.03	0.51	0.38	0.04	0.50	0.09	0.10	0.49	0.14	0.14
Avail Cap(c_a), veh/h	758	3312	1476	461	2684	1197	461	1397	1434	349	1279	1241
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	12.5	11.4	20.6	13.8	12.7	20.8	13.7	13.7	20.9	13.9	14.0
Incr Delay (d2), s/veh	2.6	0.2	0.0	3.6	0.3	0.0	4.1	0.1	0.1	4.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	0.1	0.2	0.9	0.1	0.2	0.2	0.2	0.2	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	12.7	11.5	24.2	14.1	12.7	24.9	13.8	13.8	25.6	14.1	14.2
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		381			334			85			109	
Approach Delay, s/veh		14.3			14.7			16.0			15.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.4	14.3	5.7	17.5	5.5	14.2	7.3	15.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	9.4	35.6	12.4	42.2	12.4	32.6	20.4	34.2				
Max Q Clear Time (g_c+I1), s	2.4	2.7	2.6	5.1	2.5	3.0	3.7	5.2				
Green Ext Time (p_c), s	0.0	0.3	0.0	1.9	0.0	0.4	0.1	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			14.8									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	188	140	29	30	37
Future Vol, veh/h	28	188	140	29	30	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	202	151	31	32	40
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	182	0	-	0	328	91
Stage 1	-	-	-	-	167	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1391	-	-	-	641	949
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	851	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1391	-	-	-	627	949
Mov Cap-2 Maneuver	-	-	-	-	669	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	851	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		9.8		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1391	-	-	-	669	949
HCM Lane V/C Ratio	0.022	-	-	-	0.048	0.042
HCM Control Delay (s)	7.6	-	-	-	10.7	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.1

Intersection						
Int Delay, s/veh	5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	173	149	55	102	139	104
Future Vol, veh/h	173	149	55	102	139	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	204	175	65	120	164	122
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	379	0	482	190
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1259	-	594	975
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	823	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1259	-	563	975
Mov Cap-2 Maneuver	-	-	-	-	622	-
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	780	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.8		13	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	736	-	-	1259	-	
HCM Lane V/C Ratio	0.388	-	-	0.051	-	
HCM Control Delay (s)	13	-	-	8	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	1.8	-	-	0.2	-	

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	252	4	365	335	750	798	420
Future Volume (vph)	252	4	365	335	750	798	420
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	31.0	31.0	31.0	42.0	89.0	47.0	47.0
Total Split (%)	25.8%	25.8%	25.8%	35.0%	74.2%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	20.1	20.1	20.1	28.2	89.4	56.7	56.7
Actuated g/C Ratio	0.17	0.17	0.17	0.24	0.74	0.47	0.47
v/c Ratio	0.80	0.57	0.49	0.84	0.30	0.50	0.45
Control Delay	67.7	20.1	9.5	69.1	5.2	25.3	4.0
Queue Delay	0.0	0.0	0.0	0.2	0.2	0.0	0.0
Total Delay	67.7	20.1	9.5	69.3	5.4	25.3	4.0
LOS	E	C	A	E	A	C	A
Approach Delay		33.2			25.1	18.0	
Approach LOS		C			C	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 23.8

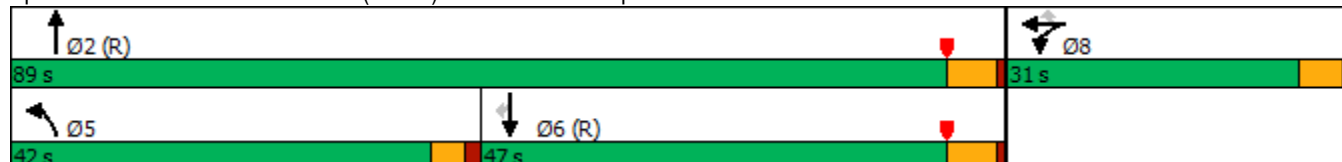
Intersection LOS: C

Intersection Capacity Utilization 73.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	252	4	365	335	750	0	0	798	420
Future Volume (veh/h)	0	0	0	252	4	365	335	750	0	0	798	420
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				321	0	124	349	781	0	0	831	349
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				393	0	175	371	2850	0	0	1977	882
Arrive On Green				0.11	0.00	0.11	0.42	1.00	0.00	0.00	0.56	0.56
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				321	0	124	349	781	0	0	831	349
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				10.6	0.0	9.1	22.6	0.0	0.0	0.0	16.2	15.0
Cycle Q Clear(g_c), s				10.6	0.0	9.1	22.6	0.0	0.0	0.0	16.2	15.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				393	0	175	371	2850	0	0	1977	882
V/C Ratio(X)				0.82	0.00	0.71	0.94	0.27	0.00	0.00	0.42	0.40
Avail Cap(c_a), veh/h				772	0	343	557	2850	0	0	1977	882
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.76	0.76	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				52.2	0.0	51.5	34.3	0.0	0.0	0.0	15.4	15.1
Incr Delay (d2), s/veh				1.6	0.0	2.0	12.6	0.2	0.0	0.0	0.7	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.7	0.0	3.6	8.6	0.1	0.0	0.0	6.4	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.8	0.0	53.5	46.9	0.2	0.0	0.0	16.1	16.5
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					445			1130			1180	
Approach Delay, s/veh					53.7			14.6			16.2	
Approach LOS					D			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		101.8			29.5	72.3		18.2				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		83.5			37.5	41.5		26.0				
Max Q Clear Time (g_c+I1), s		2.0			24.6	18.2		12.6				
Green Ext Time (p_c), s		9.3			0.4	10.1		0.7				
Intersection Summary												
HCM 6th Ctrl Delay				21.6								
HCM 6th LOS				C								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	300	0	785	396	325	725
Future Volume (vph)	300	0	785	396	325	725
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	37.0	37.0	44.0	44.0	39.0	83.0
Total Split (%)	30.8%	30.8%	36.7%	36.7%	32.5%	69.2%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	24.8	24.8	53.2	53.2	27.6	84.7
Actuated g/C Ratio	0.21	0.21	0.44	0.44	0.23	0.71
v/c Ratio	0.83	0.74	0.53	0.47	0.85	0.31
Control Delay	64.8	25.0	28.3	4.6	83.3	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.1
Total Delay	64.8	25.0	28.3	4.6	83.5	6.3
LOS	E	C	C	A	F	A
Approach Delay		42.5	20.4			30.2
Approach LOS		D	C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 28.8

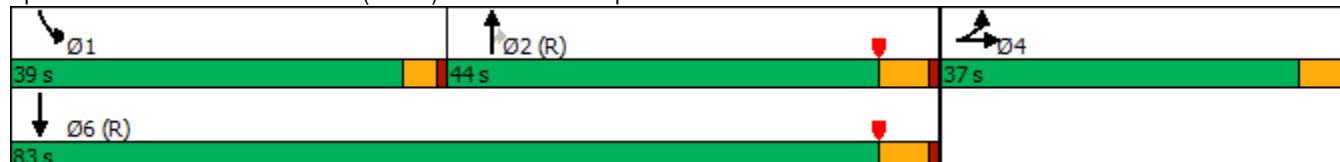
Intersection LOS: C

Intersection Capacity Utilization 73.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	0	313	0	0	0	0	785	396	325	725	0
Future Volume (veh/h)	300	0	313	0	0	0	0	785	396	325	725	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	272	66	224				0	835	305	346	771	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	352	74	251				0	1679	728	372	2540	0
Arrive On Green	0.20	0.20	0.20				0.00	0.47	0.47	0.28	0.95	0.00
Sat Flow, veh/h	1781	374	1268				0	3647	1541	1781	3647	0
Grp Volume(v), veh/h	272	0	290				0	835	305	346	771	0
Grp Sat Flow(s),veh/h/ln	1781	0	1642				0	1777	1541	1781	1777	0
Q Serve(g_s), s	17.4	0.0	20.7				0.0	19.4	15.6	22.7	1.8	0.0
Cycle Q Clear(g_c), s	17.4	0.0	20.7				0.0	19.4	15.6	22.7	1.8	0.0
Prop In Lane	1.00		0.77				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	352	0	325				0	1679	728	372	2540	0
V/C Ratio(X)	0.77	0.00	0.89				0.00	0.50	0.42	0.93	0.30	0.00
Avail Cap(c_a), veh/h	475	0	438				0	1679	728	520	2540	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.92	0.92	0.81	0.81	0.00
Uniform Delay (d), s/veh	45.6	0.0	46.9				0.0	21.8	20.8	42.5	0.9	0.0
Incr Delay (d2), s/veh	3.6	0.0	13.7				0.0	1.0	1.6	13.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	9.4				0.0	8.0	5.7	10.6	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	0.0	60.6				0.0	22.8	22.4	56.3	1.1	0.0
LnGrp LOS	D	A	E				A	C	C	E	A	A
Approach Vol, veh/h	562						1140			1117		
Approach Delay, s/veh	55.1						22.7			18.2		
Approach LOS	E						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	29.1	62.2	28.7		91.3							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	35.0	38.5	32.0		77.5							
Max Q Clear Time (g_c+I1), s	24.7	21.4	22.7		3.8							
Green Ext Time (p_c), s	0.4	8.4	1.1		9.1							
Intersection Summary												
HCM 6th Ctrl Delay			27.4									
HCM 6th LOS			C									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	83	135	59	164	77	845	44	145	726	91
Future Volume (vph)	83	135	59	164	77	845	44	145	726	91
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	23.0	38.0	19.0	34.0	22.0	43.0	43.0	20.0	41.0	41.0
Total Split (%)	19.2%	31.7%	15.8%	28.3%	18.3%	35.8%	35.8%	16.7%	34.2%	34.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	9.4	14.2	8.1	13.0	9.1	38.5	38.5	9.1	41.0	41.0
Actuated g/C Ratio	0.11	0.16	0.09	0.15	0.10	0.44	0.44	0.10	0.46	0.46
v/c Ratio	0.52	0.43	0.43	0.56	0.51	0.39	0.07	0.50	0.31	0.13
Control Delay	51.3	20.4	50.5	21.4	51.4	19.8	0.2	45.7	18.8	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	20.4	50.5	21.4	51.4	19.8	0.2	45.7	18.8	4.4
LOS	D	C	D	C	D	B	A	D	B	A
Approach Delay		28.0		25.9		21.4			21.5	
Approach LOS		C		C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 88.3

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 22.9

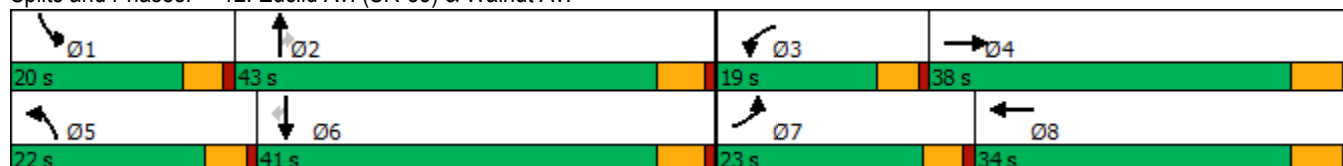
Intersection LOS: C

Intersection Capacity Utilization 55.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	135	117	59	164	163	77	845	44	145	726	91
Future Volume (veh/h)	83	135	117	59	164	163	77	845	44	145	726	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	88	144	86	63	174	138	82	899	31	154	772	58
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	348	195	78	269	199	102	2459	685	223	2514	701
Arrive On Green	0.07	0.16	0.16	0.05	0.14	0.14	0.06	0.46	0.46	0.07	0.47	0.47
Sat Flow, veh/h	1594	2128	1193	1594	1880	1391	1594	5316	1481	3000	5316	1483
Grp Volume(v), veh/h	88	118	112	63	163	149	82	899	31	154	772	58
Grp Sat Flow(s),veh/h/ln	1594	1772	1549	1594	1772	1499	1594	1772	1481	1500	1772	1483
Q Serve(g_s), s	4.4	4.9	5.3	3.2	7.1	7.7	4.1	8.9	0.9	4.1	7.3	1.7
Cycle Q Clear(g_c), s	4.4	4.9	5.3	3.2	7.1	7.7	4.1	8.9	0.9	4.1	7.3	1.7
Prop In Lane	1.00		0.77	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	289	253	78	254	215	102	2459	685	223	2514	701
V/C Ratio(X)	0.80	0.41	0.44	0.81	0.64	0.69	0.80	0.37	0.05	0.69	0.31	0.08
Avail Cap(c_a), veh/h	361	702	614	282	615	520	341	2459	685	569	2514	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	30.5	30.7	38.3	32.9	33.1	37.5	14.1	12.0	36.7	13.2	11.8
Incr Delay (d2), s/veh	5.0	0.9	1.2	7.4	2.7	4.0	5.4	0.4	0.1	1.4	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.0	1.9	1.3	3.0	2.8	1.7	3.3	0.3	1.5	2.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	31.4	31.9	45.7	35.6	37.1	42.9	14.5	12.1	38.1	13.5	12.0
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		318			375			1012			984	
Approach Delay, s/veh		34.6			37.9			16.8			17.3	
Approach LOS		C			D			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	43.0	8.6	19.1	9.8	43.8	10.2	17.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	15.4	37.6	14.4	32.2	17.4	35.6	18.4	28.2				
Max Q Clear Time (g_c+I1), s	6.1	10.9	5.2	7.3	6.1	9.3	6.4	9.7				
Green Ext Time (p_c), s	0.2	6.6	0.0	1.2	0.1	5.6	0.1	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			22.0									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	125	219	128	326	151	68	531	137	146	492	134
Future Volume (vph)	125	219	128	326	151	68	531	137	146	492	134
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	23.0	36.2	36.2	16.0	35.6	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	12.0	20.0	12.1	20.1	20.1	8.4	20.8	20.8	13.3	27.5	41.5
Actuated g/C Ratio	0.14	0.23	0.14	0.23	0.23	0.10	0.24	0.24	0.15	0.31	0.47
v/c Ratio	0.60	0.71	0.61	0.44	0.34	0.46	0.69	0.30	0.63	0.49	0.18
Control Delay	52.4	43.5	52.7	32.9	7.8	54.5	37.6	6.8	51.7	29.0	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.4	43.5	52.7	32.9	7.8	54.5	37.6	6.8	51.7	29.0	3.1
LOS	D	D	D	C	A	D	D	A	D	C	A
Approach Delay		46.3		30.8			33.4			28.8	
Approach LOS		D		C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 88.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 33.4

Intersection LOS: C

Intersection Capacity Utilization 65.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
25.2 s	35.6 s	23 s	36.2 s
			
Ø5	Ø6	Ø7	Ø8
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	219	54	128	326	151	68	531	137	146	492	134
Future Volume (veh/h)	125	219	54	128	326	151	68	531	137	146	492	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	129	226	26	132	336	95	70	547	90	151	507	89
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	301	35	165	658	289	91	789	352	187	993	589
Arrive On Green	0.10	0.19	0.19	0.10	0.20	0.20	0.06	0.23	0.23	0.12	0.30	0.30
Sat Flow, veh/h	1594	1557	179	1594	3367	1482	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	129	0	252	132	336	95	70	547	90	151	507	89
Grp Sat Flow(s),veh/h/ln	1594	0	1736	1594	1683	1482	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	4.8	0.0	8.4	4.9	5.5	3.4	2.6	9.1	3.0	5.6	7.6	2.4
Cycle Q Clear(g_c), s	4.8	0.0	8.4	4.9	5.5	3.4	2.6	9.1	3.0	5.6	7.6	2.4
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	0	335	165	658	289	91	789	352	187	993	589
V/C Ratio(X)	0.80	0.00	0.75	0.80	0.51	0.33	0.77	0.69	0.26	0.81	0.51	0.15
Avail Cap(c_a), veh/h	480	0	864	480	1675	737	297	1664	742	537	2110	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	23.3	26.8	22.0	21.1	28.4	21.4	19.1	26.3	17.9	11.9
Incr Delay (d2), s/veh	3.5	0.0	3.4	3.4	0.6	0.7	5.1	1.1	0.4	3.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	3.3	1.8	1.9	1.1	1.0	3.0	0.9	2.1	2.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	0.0	26.7	30.2	22.6	21.8	33.6	22.5	19.4	29.4	18.3	12.0
LnGrp LOS	C	A	C	C	C	C	C	C	B	C	B	B
Approach Vol, veh/h		381			563			707			747	
Approach Delay, s/veh		27.9			24.2			23.2			19.8	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	20.8	10.9	17.6	8.1	24.5	10.8	17.7				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+I1), s	7.6	11.1	6.9	10.4	4.6	9.6	6.8	7.5				
Green Ext Time (p_c), s	0.1	3.2	0.1	1.2	0.0	3.6	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			23.1									
HCM 6th LOS			C									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	49	64	31	87	91	16	625	88	51	561	45
Future Volume (vph)	49	64	31	87	91	16	625	88	51	561	45
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	49.0	49.0	49.0	49.0	49.0	13.0	52.0	52.0	19.0	58.0	58.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	10.8%	43.3%	43.3%	15.8%	48.3%	48.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	19.5	19.5	19.5		19.5	5.8	50.4	50.4	7.6	54.9	54.9
Actuated g/C Ratio	0.21	0.21	0.21		0.21	0.06	0.55	0.55	0.08	0.60	0.60
v/c Ratio	0.28	0.18	0.08		0.75	0.17	0.35	0.10	0.40	0.29	0.05
Control Delay	34.2	30.3	0.4		47.1	48.0	14.0	2.5	51.2	11.1	2.0
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.2	30.3	0.4		47.1	48.0	14.0	2.5	51.2	11.1	2.0
LOS	C	C	A		D	D	B	A	D	B	A
Approach Delay		25.2			47.1		13.3			13.6	
Approach LOS		C			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 91

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 18.9

Intersection LOS: B

Intersection Capacity Utilization 59.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

 Ø1	 Ø2	 Ø4
19 s	52 s	49 s
 Ø5	 Ø6	 Ø8
13 s	58 s	49 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	64	31	87	91	54	16	625	88	51	561	45
Future Volume (veh/h)	49	64	31	87	91	54	16	625	88	51	561	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	51	67	13	91	95	46	17	651	66	53	584	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	342	290	151	130	55	31	1922	857	66	1997	879
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.57	0.57	0.04	0.59	0.59
Sat Flow, veh/h	1116	1772	1502	483	675	286	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	51	67	13	232	0	0	17	651	66	53	584	36
Grp Sat Flow(s),veh/h/ln	1116	1772	1502	1444	0	0	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	0.0	2.8	0.6	10.7	0.0	0.0	0.9	8.9	1.7	2.9	7.4	0.9
Cycle Q Clear(g_c), s	4.9	2.8	0.6	13.5	0.0	0.0	0.9	8.9	1.7	2.9	7.4	0.9
Prop In Lane	1.00		1.00	0.39		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	342	290	336	0	0	31	1922	857	66	1997	879
V/C Ratio(X)	0.21	0.20	0.04	0.69	0.00	0.00	0.55	0.34	0.08	0.80	0.29	0.04
Avail Cap(c_a), veh/h	585	882	747	785	0	0	154	1922	857	264	1997	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	29.4	28.5	33.8	0.0	0.0	42.2	9.9	8.4	41.3	8.7	7.4
Incr Delay (d2), s/veh	0.4	0.3	0.1	2.5	0.0	0.0	5.6	0.5	0.2	8.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.1	0.2	4.6	0.0	0.0	0.4	2.7	0.5	1.2	2.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	29.7	28.6	36.3	0.0	0.0	47.8	10.4	8.5	49.3	9.1	7.5
LnGrp LOS	C	C	C	D	A	A	D	B	A	D	A	A
Approach Vol, veh/h	131			232			734			673		
Approach Delay, s/veh	30.0			36.3			11.1			12.2		
Approach LOS	C			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	56.1		22.6	6.3	58.0		22.6				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	14.4	* 47		43.2	8.4	51.5		43.2				
Max Q Clear Time (g_c+I1), s	4.9	10.9		6.9	2.9	9.4		15.5				
Green Ext Time (p_c), s	0.0	4.3		0.5	0.0	3.8		1.3				

Intersection Summary

HCM 6th Ctrl Delay 16.2

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	148	57	62	16	23	49	553	12	23	562	93
Future Volume (vph)	148	57	62	16	23	49	553	12	23	562	93
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	42.0	42.0	10.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.0%	35.0%	8.3%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	13.7	18.1	18.1	12.2	10.1	7.9	26.8	26.8	6.6	23.9	23.9
Actuated g/C Ratio	0.21	0.28	0.28	0.19	0.16	0.12	0.41	0.41	0.10	0.37	0.37
v/c Ratio	0.46	0.12	0.13	0.06	0.19	0.27	0.42	0.02	0.15	0.48	0.15
Control Delay	34.8	18.5	0.5	38.1	19.1	40.4	20.0	0.1	43.0	23.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	18.5	0.5	38.1	19.1	40.4	20.0	0.1	43.0	23.4	0.6
LOS	C	B	A	D	B	D	B	A	D	C	A
Approach Delay		23.3			23.8		21.2			21.0	
Approach LOS		C			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 65.1

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 21.6

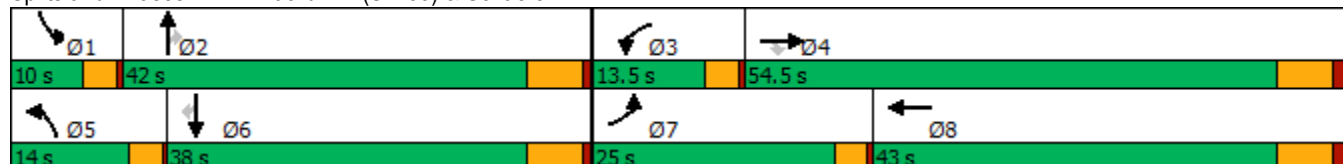
Intersection LOS: C

Intersection Capacity Utilization 51.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	57	62	16	23	27	49	553	12	23	562	93
Future Volume (veh/h)	148	57	62	16	23	27	49	553	12	23	562	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	154	59	13	17	24	6	51	576	11	24	585	58
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	309	261	68	131	33	84	1015	453	46	935	411
Arrive On Green	0.12	0.17	0.17	0.04	0.10	0.10	0.05	0.30	0.30	0.03	0.28	0.28
Sat Flow, veh/h	1594	1772	1496	1594	1368	342	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	154	59	13	17	0	30	51	576	11	24	585	58
Grp Sat Flow(s),veh/h/ln	1594	1772	1496	1594	0	1710	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	4.2	1.3	0.3	0.5	0.0	0.7	1.4	6.4	0.2	0.7	6.7	1.3
Cycle Q Clear(g_c), s	4.2	1.3	0.3	0.5	0.0	0.7	1.4	6.4	0.2	0.7	6.7	1.3
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	309	261	68	0	164	84	1015	453	46	935	411
V/C Ratio(X)	0.80	0.19	0.05	0.25	0.00	0.18	0.61	0.57	0.02	0.52	0.63	0.14
Avail Cap(c_a), veh/h	775	1904	1608	361	0	1393	379	2742	1223	234	2437	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	15.6	15.2	20.5	0.0	18.4	20.5	13.0	10.9	21.2	14.0	12.0
Incr Delay (d2), s/veh	2.8	0.2	0.1	0.7	0.0	0.4	2.6	0.5	0.0	3.4	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.4	0.1	0.2	0.0	0.2	0.5	1.7	0.1	0.2	1.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	15.8	15.3	21.2	0.0	18.8	23.1	13.5	10.9	24.5	14.6	12.2
LnGrp LOS	C	B	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		226			47			638			667	
Approach Delay, s/veh		19.8			19.7			14.2			14.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.8	19.3	5.4	14.7	5.8	18.3	8.9	11.2				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	36.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	2.7	8.4	2.5	3.3	3.4	8.7	6.2	2.7				
Green Ext Time (p_c), s	0.0	3.5	0.0	0.2	0.0	3.6	0.2	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			15.4									
HCM 6th LOS			B									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	110	132	68	51	159	73	497	35	56	501	80
Future Volume (vph)	110	132	68	51	159	73	497	35	56	501	80
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	55.0	55.0	55.0	55.0	55.0	14.0	47.0	47.0	18.0	51.0	51.0
Total Split (%)	45.8%	45.8%	45.8%	45.8%	45.8%	11.7%	39.2%	39.2%	15.0%	42.5%	42.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	15.6	15.6	15.6	15.6	15.6	7.1	16.2	16.2	7.8	16.8	16.8
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.13	0.30	0.30	0.15	0.31	0.31
v/c Ratio	0.37	0.26	0.14	0.16	0.42	0.20	0.50	0.07	0.25	0.49	0.16
Control Delay	21.1	17.8	3.6	17.7	18.4	30.4	19.6	0.3	31.8	18.6	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	17.8	3.6	17.7	18.4	30.4	19.6	0.3	31.8	18.6	6.1
LOS	C	B	A	B	B	C	B	A	C	B	A
Approach Delay		15.8			18.2		19.8			18.2	
Approach LOS		B			B		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 53.5

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 18.3

Intersection LOS: B

Intersection Capacity Utilization 58.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
18 s	47 s	55 s
		
Ø5	Ø6	Ø8
14 s	51 s	55 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	132	68	51	159	45	73	497	35	56	501	80
Future Volume (veh/h)	110	132	68	51	159	45	73	497	35	56	501	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	113	136	36	53	164	38	75	512	22	58	516	44
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	496	420	409	389	90	202	910	406	93	873	384
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.07	0.27	0.27	0.06	0.26	0.26
Sat Flow, veh/h	1055	1772	1500	1084	1391	322	2910	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	113	136	36	53	0	202	75	512	22	58	516	44
Grp Sat Flow(s),veh/h/ln	1055	1772	1500	1084	0	1713	1455	1683	1502	1594	1683	1481
Q Serve(g_s), s	4.1	2.5	0.7	1.7	0.0	4.1	1.0	5.5	0.5	1.5	5.7	1.0
Cycle Q Clear(g_c), s	8.2	2.5	0.7	4.2	0.0	4.1	1.0	5.5	0.5	1.5	5.7	1.0
Prop In Lane	1.00		1.00	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	496	420	409	0	480	202	910	406	93	873	384
V/C Ratio(X)	0.31	0.27	0.09	0.13	0.00	0.42	0.37	0.56	0.05	0.62	0.59	0.11
Avail Cap(c_a), veh/h	1271	2018	1708	1341	0	1951	725	3274	1460	548	3594	1581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	11.8	11.2	13.5	0.0	12.4	18.7	13.2	11.4	19.4	13.7	11.9
Incr Delay (d2), s/veh	0.5	0.3	0.1	0.1	0.0	0.6	0.4	0.5	0.1	2.5	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	0.2	0.3	0.0	1.2	0.3	1.4	0.1	0.5	1.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	12.1	11.3	13.6	0.0	13.0	19.2	13.8	11.4	21.9	14.3	12.0
LnGrp LOS	B	B	B	B	A	B	B	B	B	C	B	B
Approach Vol, veh/h		285			255			609			618	
Approach Delay, s/veh		13.6			13.1			14.4			14.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	17.4		18.8	6.4	16.9		18.8				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	14.5	41.0		48.0	10.5	45.0		48.0				
Max Q Clear Time (g_c+I1), s	3.5	7.5		10.2	3.0	7.7		6.2				
Green Ext Time (p_c), s	0.0	3.1		1.3	0.0	3.3		1.3				
Intersection Summary												
HCM 6th Ctrl Delay				14.2								
HCM 6th LOS				B								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	37	44	104	14	48	93	576	7	17	554	30
Future Volume (vph)	37	44	104	14	48	93	576	7	17	554	30
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	48.0	48.0	48.0	48.0	48.0	23.0	60.0	60.0	12.0	49.0	49.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	19.2%	50.0%	50.0%	10.0%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	11.0	11.0	11.0	11.0	11.0	9.6	33.2	33.2	6.7	23.8	23.8
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21	0.18	0.63	0.63	0.13	0.45	0.45
v/c Ratio	0.16	0.12	0.27	0.06	0.20	0.34	0.29	0.01	0.09	0.38	0.04
Control Delay	19.3	18.3	6.3	18.1	15.0	28.5	10.1	0.0	31.8	17.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	18.3	6.3	18.1	15.0	28.5	10.1	0.0	31.8	17.0	0.1
LOS	B	B	A	B	B	C	B	A	C	B	A
Approach Delay		11.8			15.5		12.5			16.5	
Approach LOS		B			B		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 52.4

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 14.2

Intersection LOS: B

Intersection Capacity Utilization 43.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
12 s	60 s	48 s
		
Ø5	Ø6	Ø8
23 s	49 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	44	104	14	48	22	93	576	7	17	554	30
Future Volume (veh/h)	37	44	104	14	48	22	93	576	7	17	554	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	39	46	28	15	51	11	98	606	7	18	583	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	231	195	360	184	40	147	1326	591	37	1094	481
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.09	0.39	0.39	0.02	0.32	0.32
Sat Flow, veh/h	1199	1772	1502	1186	1412	305	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	39	46	28	15	0	62	98	606	7	18	583	17
Grp Sat Flow(s),veh/h/ln	1199	1772	1502	1186	0	1717	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	0.9	0.7	0.5	0.4	0.0	1.0	1.8	4.1	0.1	0.3	4.4	0.2
Cycle Q Clear(g_c), s	1.9	0.7	0.5	1.1	0.0	1.0	1.8	4.1	0.1	0.3	4.4	0.2
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	231	195	360	0	223	147	1326	591	37	1094	481
V/C Ratio(X)	0.11	0.20	0.14	0.04	0.00	0.28	0.67	0.46	0.01	0.49	0.53	0.04
Avail Cap(c_a), veh/h	1870	2477	2099	1863	0	2400	1006	5914	2638	438	4716	2074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	12.0	11.9	12.5	0.0	12.1	13.6	6.9	5.7	14.9	8.5	7.1
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.0	0.0	0.5	3.9	0.2	0.0	7.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.1	0.1	0.0	0.3	0.5	0.5	0.0	0.2	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	12.3	12.2	12.5	0.0	12.6	17.4	7.2	5.7	22.1	8.9	7.2
LnGrp LOS	B	B	B	B	A	B	B	A	A	C	A	A
Approach Vol, veh/h	113			77			711			618		
Approach Delay, s/veh	12.6			12.6			8.6			9.3		
Approach LOS	B			B			A			A		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	4.2	17.9	8.8		6.3	15.7	8.8					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	8.5	54.3	43.2		19.5	43.3	43.2					
Max Q Clear Time (g_c+I1), s	2.3	6.1	3.9		3.8	6.4	3.1					
Green Ext Time (p_c), s	0.0	3.9	0.3		0.1	3.7	0.3					
Intersection Summary												
HCM 6th Ctrl Delay	9.4											
HCM 6th LOS	A											

APPENDIX 3.3: EXISTING (2023) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

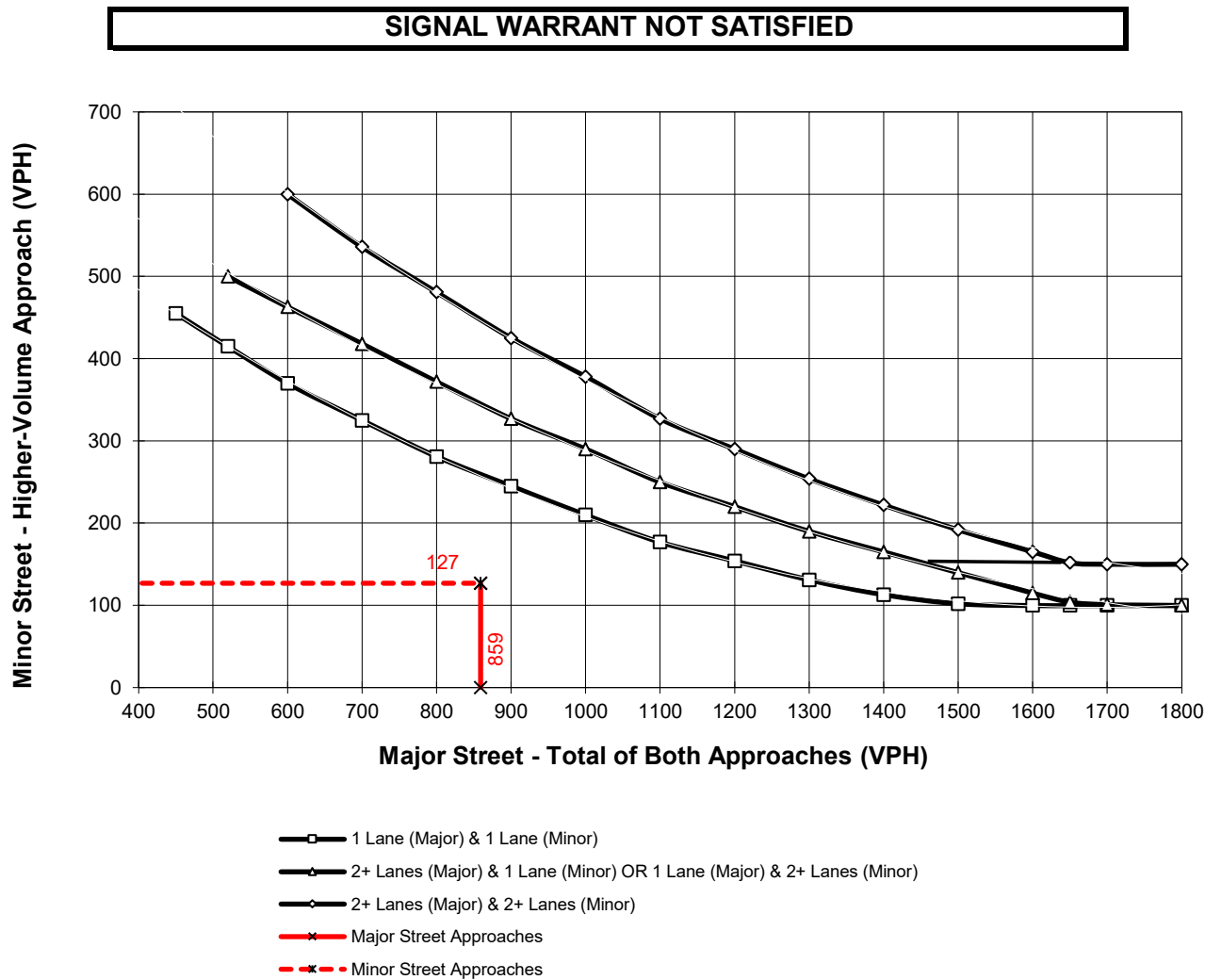
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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = Existing (2023) Conditions - Weekday AM Peak Hour

Major Street Name = Eucalyptus Av. Total of Both Approaches (VPH) = 859
Number of Approach Lanes on Major Street = 2

Minor Street Name = Fern Av. High Volume Approach (VPH) = 127
Number of Approach Lanes On Minor Street = 2



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

Figure 4C-3. Warrant 3, Peak Hour

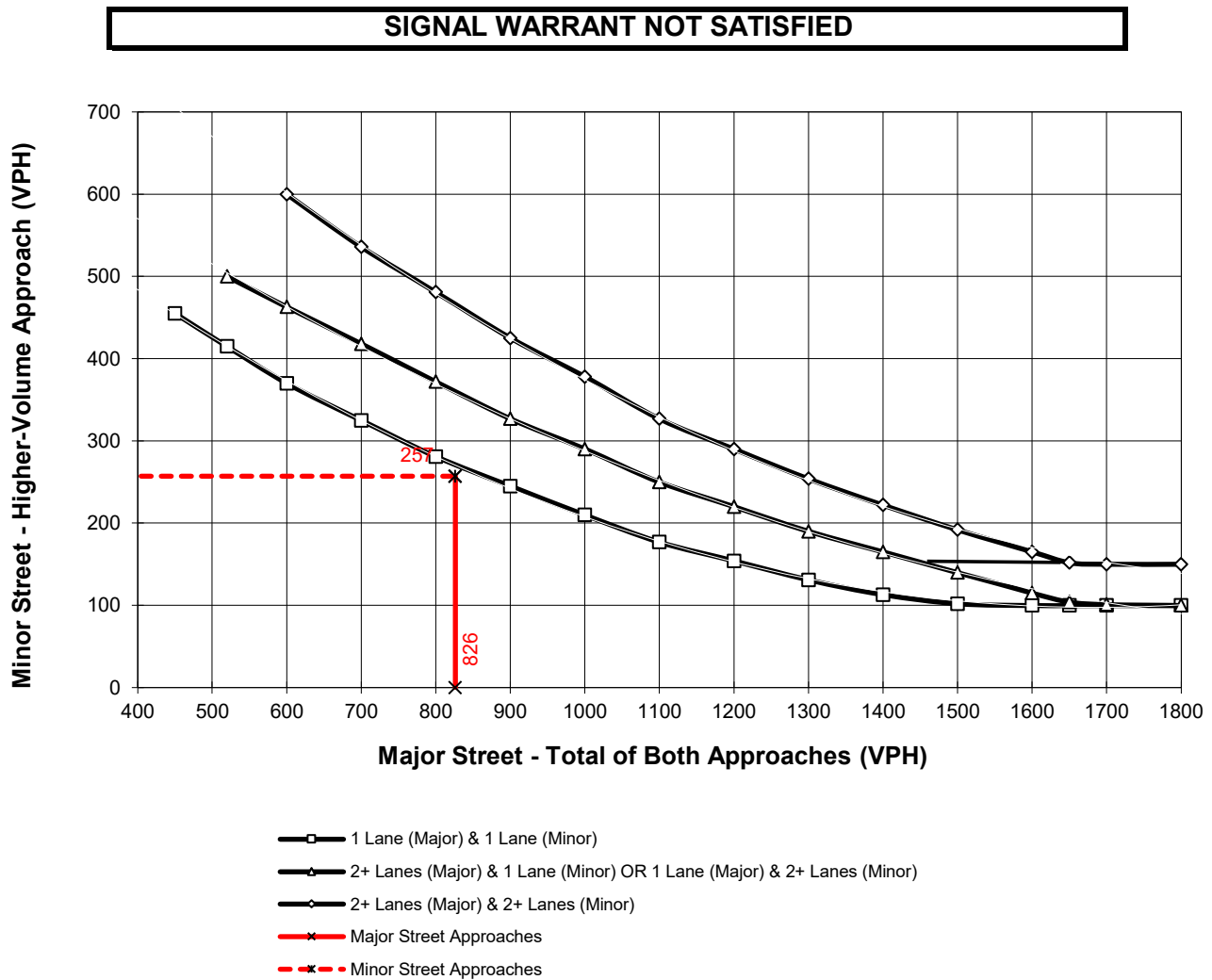
Traffic Conditions = **Existing (2023) Conditions - Weekday PM Peak Hour**

Major Street Name = **Schaefer Av.**

Total of Both Approaches (VPH) = **826**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Driveway 2**

High Volume Approach (VPH) = **257**
Number of Approach Lanes On Minor Street = **2**



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

APPENDIX 3.4: EXISTING (2023) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/18/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	244	237	222	293	695	811	448
v/c Ratio	0.80	0.76	0.49	0.82	0.27	0.47	0.45
Control Delay	65.5	54.0	8.8	67.2	5.7	23.4	3.8
Queue Delay	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	54.1	8.8	67.2	5.7	23.4	3.8
Queue Length 50th (ft)	192	161	0	244	102	212	0
Queue Length 95th (ft)	271	246	65	335	137	337	68
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	406	400	531	494	2585	1737	1005
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	9	9	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.61	0.42	0.59	0.27	0.47	0.45
Intersection Summary							

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/18/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	305	367	648	505	359	811
v/c Ratio	0.84	0.75	0.43	0.54	0.85	0.33
Control Delay	64.6	27.9	27.8	5.0	82.6	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.1
Total Delay	64.6	27.9	27.8	5.0	82.9	8.1
Queue Length 50th (ft)	238	123	184	0	299	117
Queue Length 95th (ft)	327	229	287	85	397	146
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	462	568	1505	943	531	2463
Starvation Cap Reductn	0	0	0	0	17	535
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.65	0.43	0.54	0.70	0.42
Intersection Summary						

Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/18/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	268	259	249	237	901	761	514
v/c Ratio	0.79	0.73	0.57	0.79	0.36	0.43	0.49
Control Delay	61.9	44.4	18.3	74.5	6.2	22.0	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	61.9	44.4	18.3	74.5	6.3	22.0	3.8
Queue Length 50th (ft)	209	156	53	197	118	191	0
Queue Length 95th (ft)	285	239	130	282	136	311	72
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	462	463	537	435	2517	1781	1052
Starvation Cap Reductn	0	0	0	0	468	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.56	0.46	0.54	0.44	0.43	0.49
Intersection Summary							

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/18/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	261	237	860	396	311	830
v/c Ratio	0.82	0.52	0.51	0.42	0.84	0.32
Control Delay	66.1	12.0	24.9	3.9	78.5	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	66.1	12.0	24.9	3.9	78.5	7.1
Queue Length 50th (ft)	205	20	236	0	259	126
Queue Length 95th (ft)	287	91	365	65	353	156
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	420	537	1698	944	472	2556
Starvation Cap Reductn	0	0	0	0	0	594
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.44	0.51	0.42	0.66	0.42
Intersection Summary						

Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/18/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	224	214	209	349	781	831	438
v/c Ratio	0.80	0.57	0.49	0.84	0.30	0.50	0.45
Control Delay	67.7	20.1	9.5	69.1	5.2	25.3	4.0
Queue Delay	0.0	0.0	0.0	0.2	0.2	0.0	0.0
Total Delay	67.7	20.1	9.5	69.3	5.4	25.3	4.0
Queue Length 50th (ft)	176	46	0	291	90	228	0
Queue Length 95th (ft)	256	126	66	387	148	355	69
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	364	439	489	553	2635	1672	979
Starvation Cap Reductn	0	0	0	20	862	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.49	0.43	0.65	0.44	0.50	0.45
Intersection Summary							

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/18/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	287	365	835	421	346	771
v/c Ratio	0.83	0.74	0.53	0.47	0.85	0.31
Control Delay	64.8	25.0	28.3	4.6	83.3	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.1
Total Delay	64.8	25.0	28.3	4.6	83.5	6.3
Queue Length 50th (ft)	225	104	245	0	288	86
Queue Length 95th (ft)	310	209	377	75	385	115
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	448	572	1567	905	516	2499
Starvation Cap Reductn	0	0	0	0	12	520
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.64	0.53	0.47	0.69	0.39
Intersection Summary						

APPENDIX 4.1: POST PROCESSING WORKSHEETS

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: San Antonio Av. & Schaefer Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	81	75	-6	-7%	26	31	5	19%
	Through	37	45	8	22%	52	49	-3	-6%
	Right	45	61	16	36%	17	13	-4	-24%
	NB Total	163	181	18	11%	95	93	-2	-2%
SOUTH BOUND	Left	9	14	5	56%	21	22	1	5%
	Through	35	37	2	6%	31	33	2	6%
	Right	48	50	2	4%	18	28	10	56%
	SB Total	92	101	9	10%	70	83	13	19%
EAST BOUND	Left	36	41	5	14%	29	37	8	28%
	Through	321	406	85	26%	692	735	43	6%
	Right	100	87	-13	-13%	60	65	5	8%
	EB Total	457	534	77	17%	781	837	56	7%
WEST BOUND	Left	35	36	1	3%	19	23	4	21%
	Through	433	446	13	3%	279	501	222	80%
	Right	11	15	4	36%	23	33	10	43%
	WB Total	479	497	18	4%	321	557	236	74%
TOTAL ENTERING VOLUME		1,191	1,313	122	10%	1,267	1,570	303	24%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	101	83			
North Leg	Outbound	101	119			
North Leg	TOTAL	202	202	11%	11%	1,824
South Leg	Inbound	181	93			
South Leg	Outbound	160	121			
South Leg	TOTAL	341	214	17%	11%	2,019
East Leg	Inbound	497	557			
East Leg	Outbound	481	770			
East Leg	TOTAL	978	1,327	5%	7%	19,177
West Leg	Inbound	534	837			
West Leg	Outbound	571	560			
West Leg	TOTAL	1,105	1,397	7%	9%	16,129
OVERALL TOTAL		2,626	3,140	7%	8%	39,149

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: San Antonio Av. & Edison Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	42	98	56	133%	25	28	3	12%
	Through	84	115	31	37%	30	29	-1	-3%
	Right	6	35	29	483%	10	13	3	30%
	NB Total	132	248	116	88%	65	70	5	8%
SOUTH BOUND	Left	18	44	26	144%	10	16	6	60%
	Through	109	103	-6	-6%	33	39	6	18%
	Right	102	101	-1	-1%	33	45	12	36%
	SB Total	229	248	19	8%	76	100	24	32%
EAST BOUND	Left	36	22	-14	-39%	32	43	11	34%
	Through	281	741	460	164%	669	1,212	543	81%
	Right	25	25	0	0%	24	33	9	38%
	EB Total	342	788	446	130%	725	1,288	563	78%
WEST BOUND	Left	8	12	4	50%	5	9	4	80%
	Through	523	831	308	59%	383	775	392	102%
	Right	24	22	-2	-8%	16	28	12	75%
	WB Total	555	865	310	56%	404	812	408	101%
TOTAL ENTERING VOLUME		1,258	2,149	891	71%	1,270	2,270	1000	79%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	248	100	24%	12%	1,726
North Leg	Outbound	159	100			
North Leg	TOTAL	407	200			
South Leg	Inbound	248	70	14%	5%	2,851
South Leg	Outbound	140	81			
South Leg	TOTAL	388	151			
East Leg	Inbound	865	812	4%	5%	43,557
East Leg	Outbound	820	1,241			
East Leg	TOTAL	1,685	2,053			
West Leg	Inbound	788	1,288	4%	5%	43,514
West Leg	Outbound	1,030	848			
West Leg	TOTAL	1,818	2,136			
OVERALL TOTAL		4,298	4,540	5%	5%	91,648

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Fern Av. & Chino Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	34	39	5	15%	27	31	4	15%
	Through	116	111	-5	-4%	150	148	-2	-1%
	Right	47	50	3	6%	98	131	33	34%
	NB Total	197	200	3	2%	275	310	35	13%
SOUTH BOUND	Left	17	20	3	18%	28	41	13	46%
	Through	132	124	-8	-6%	115	112	-3	-3%
	Right	29	37	8	28%	10	13	3	30%
	SB Total	178	181	3	2%	153	166	13	8%
EAST BOUND	Left	15	21	6	40%	23	31	8	35%
	Through	174	270	96	55%	358	649	291	81%
	Right	30	38	8	27%	45	55	10	22%
	EB Total	219	329	110	50%	426	735	309	73%
WEST BOUND	Left	47	65	18	38%	44	53	9	20%
	Through	332	623	291	88%	194	306	112	58%
	Right	21	33	12	57%	16	21	5	31%
	WB Total	400	721	321	80%	254	380	126	50%
TOTAL ENTERING VOLUME		994	1,431	437	44%	1,108	1,591	483	44%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	181	166		
North Leg	Outbound	165	200		
North Leg	TOTAL	346	366	49%	52%
South Leg	Inbound	200	310		
South Leg	Outbound	227	220		
South Leg	TOTAL	427	530	37%	46%
East Leg	Inbound	721	380		
East Leg	Outbound	340	821		
East Leg	TOTAL	1,061	1,201	9%	10%
West Leg	Inbound	329	735		
West Leg	Outbound	699	350		
West Leg	TOTAL	1,028	1,085	8%	8%
OVERALL TOTAL		2,862	3,182	10%	12%

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Fern Av. & Schaefer Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	78	87	9	12%	76	103	27	36%
	Through	110	122	12	11%	161	160	-1	-1%
	Right	30	33	3	10%	25	22	-3	-12%
	NB Total	218	242	24	11%	262	285	23	9%
SOUTH BOUND	Left	31	30	-1	-3%	29	24	-5	-17%
	Through	136	135	-1	-1%	113	126	13	12%
	Right	86	86	0	0%	42	53	11	26%
	SB Total	253	251	-2	-1%	184	203	19	10%
EAST BOUND	Left	36	46	10	28%	71	81	10	14%
	Through	270	337	67	25%	563	583	20	4%
	Right	88	111	23	26%	62	85	23	37%
	EB Total	394	494	100	25%	696	749	53	8%
WEST BOUND	Left	13	13	0	0%	12	19	7	58%
	Through	265	277	12	5%	205	363	158	77%
	Right	31	32	1	3%	45	58	13	29%
	WB Total	309	322	13	4%	262	440	178	68%
TOTAL ENTERING VOLUME		1,174	1,309	135	11%	1,404	1,677	273	19%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	251	203		
North Leg	Outbound	200	299		
North Leg	TOTAL	451	502	36%	40%
South Leg	Inbound	242	285		
South Leg	Outbound	259	230		
South Leg	TOTAL	501	515	36%	37%
East Leg	Inbound	322	440		
East Leg	Outbound	400	629		
East Leg	TOTAL	722	1,069	4%	6%
West Leg	Inbound	494	749		
West Leg	Outbound	450	519		
West Leg	TOTAL	944	1,268	5%	7%
OVERALL TOTAL		2,618	3,354	7%	9%

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Fern Av. & Edison Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	35	62	27	77%	37	47	10	27%
	Through	110	84	-26	-24%	124	113	-11	-9%
	Right	4	4	0	0%	6	16	10	167%
	NB Total	149	150	1	1%	167	176	9	5%
SOUTH BOUND	Left	7	6	-1	-14%	11	44	33	300%
	Through	116	85	-31	-27%	106	57	-49	-46%
	Right	66	111	45	68%	48	94	46	96%
	SB Total	189	202	13	7%	165	195	30	18%
EAST BOUND	Left	56	124	68	121%	88	66	-22	-25%
	Through	223	613	390	175%	561	1,220	659	117%
	Right	28	63	35	125%	20	6	-14	-70%
	EB Total	307	800	493	161%	669	1,292	623	93%
WEST BOUND	Left	13	10	-3	-23%	13	8	-5	-38%
	Through	423	704	281	66%	307	658	351	114%
	Right	19	14	-5	-26%	40	61	21	53%
	WB Total	455	728	273	60%	360	727	367	102%
TOTAL ENTERING VOLUME		1,100	1,880	780	71%	1,361	2,390	1029	76%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	202	195	35%	36%	1,224
North Leg	Outbound	222	240			
North Leg	TOTAL	424	435			
South Leg	Inbound	150	176	21%	17%	1,438
South Leg	Outbound	158	71			
South Leg	TOTAL	308	247			
East Leg	Inbound	728	727	3%	5%	43,770
East Leg	Outbound	623	1,280			
East Leg	TOTAL	1,351	2,007			
West Leg	Inbound	800	1,292	4%	5%	43,557
West Leg	Outbound	877	799			
West Leg	TOTAL	1,677	2,091			
OVERALL TOTAL		3,760	4,780	4%	5%	89,989

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Fern Av. & Eucalyptus Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	35	28	-7	-20%	37	69	32	86%
	Through	110	119	9	8%	124	100	-24	-19%
	Right	4	4	0	0%	6	2	-4	-67%
	NB Total	149	151	2	1%	167	171	4	2%
SOUTH BOUND	Left	7	9	2	29%	11	1	-10	-91%
	Through	116	126	10	9%	106	42	-64	-60%
	Right	66	64	-2	-3%	48	17	-31	-65%
	SB Total	189	199	10	5%	165	60	-105	-64%
EAST BOUND	Left	56	64	8	14%	88	146	58	66%
	Through	223	254	31	14%	561	439	-122	-22%
	Right	28	26	-2	-7%	20	84	64	320%
	EB Total	307	344	37	12%	669	669	0	0%
WEST BOUND	Left	13	13	0	0%	13	22	9	69%
	Through	423	381	-42	-10%	307	471	164	53%
	Right	19	23	4	21%	40	27	-13	-33%
	WB Total	455	417	-38	-8%	360	520	160	44%
TOTAL ENTERING VOLUME		1,100	1,111	11	1%	1,361	1,420	59	4%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	199	60	40%	33%	1,019
North Leg	Outbound	206	273			
North Leg	TOTAL	405	333			
South Leg	Inbound	151	171	#DIV/0!	#DIV/0!	-
South Leg	Outbound	165	148			
South Leg	TOTAL	316	319			
East Leg	Inbound	417	520	11%	16%	6,047
East Leg	Outbound	267	442			
East Leg	TOTAL	684	962			
West Leg	Inbound	344	669	16%	23%	5,247
West Leg	Outbound	473	557			
West Leg	TOTAL	817	1,226			
OVERALL TOTAL		2,222	2,840	18%	23%	12,313

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Project: Euclid Mixed-Use
Scenario: Horizon Year (2050) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & SR-60 WB Ramps
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	284	247	-37	-13%	225	158	-67	-30%
	Through	674	1,455	781	116%	856	1,382	526	61%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	958	1,702	744	78%	1,081	1,540	459	42%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	787	1,314	527	67%	723	1,592	869	120%
	Right	435	451	16	4%	488	571	83	17%
	SB Total	1,222	1,765	543	44%	1,211	2,163	952	79%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	348	276	-72	-21%	349	308	-41	-12%
	Through	3	1	-2	-67%	1	0	-1	-100%
	Right	331	405	74	22%	388	418	30	8%
	WB Total	682	682	0	0%	738	726	-12	-2%
TOTAL ENTERING VOLUME		2,862	4,149	1287	45%	3,030	4,429	1399	46%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	1,765	2,163		
	Outbound	1,860	1,800		
	TOTAL	3,625	3,963	7%	8%
South Leg	Inbound	1,702	1,540		
	Outbound	1,590	1,900		
	TOTAL	3,292	3,440	7%	7%
East Leg	Inbound	682	726		
	Outbound	0	0		
	TOTAL	682	726	9%	9%
West Leg	Inbound	0	0		
	Outbound	699	729		
	TOTAL	699	729	8%	9%
OVERALL TOTAL		8,298	8,858	7%	8%

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Project: Euclid Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & SR-60 EB Ramps
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	629	1,199	570	91%	808	1,284	476	59%
	Right	490	434	-56	-11%	372	222	-150	-40%
	NB Total	1,119	1,633	514	46%	1,180	1,506	326	28%
SOUTH BOUND	Left	348	401	53	15%	292	374	82	28%
	Through	787	1,185	398	51%	780	1,506	726	93%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	1,135	1,586	451	40%	1,072	1,880	808	75%
EAST BOUND	Left	329	470	141	43%	273	336	63	23%
	Through	0	0	0	#DIV/0!	1	0	-1	-100%
	Right	323	281	-42	-13%	195	136	-59	-30%
	EB Total	652	751	99	15%	469	472	3	1%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		2,906	3,970	1064	37%	2,721	3,858	1137	42%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	1,586	1,880		
	Outbound	1,669	1,620		
	TOTAL	3,255	3,500	7%	7%
South Leg	Inbound	1,633	1,506		
	Outbound	1,466	1,642		
	TOTAL	3,099	3,148	6%	6%
East Leg	Inbound	0	0		
	Outbound	835	596		
	TOTAL	835	596	13%	9%
West Leg	Inbound	751	472		
	Outbound	0	0		
	TOTAL	751	472	9%	5%
OVERALL TOTAL		7,940	7,716	7%	7%

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & Walnut Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	98	133	35	36%	122	185	63	52%
	Through	812	1,296	484	60%	788	943	155	20%
	Right	41	84	43	105%	70	59	-11	-16%
	NB Total	951	1,513	562	59%	980	1,187	207	21%
SOUTH BOUND	Left	191	201	10	5%	257	233	-24	-9%
	Through	840	1,201	361	43%	678	1,271	593	87%
	Right	65	45	-20	-31%	104	169	65	63%
	SB Total	1,096	1,447	351	32%	1,039	1,673	634	61%
EAST BOUND	Left	108	112	4	4%	106	160	54	51%
	Through	226	300	74	33%	427	458	31	7%
	Right	106	191	85	80%	119	264	145	122%
	EB Total	440	603	163	37%	652	882	230	35%
WEST BOUND	Left	51	98	47	92%	56	115	59	105%
	Through	326	305	-21	-6%	273	486	213	78%
	Right	148	163	15	10%	140	197	57	41%
	WB Total	525	566	41	8%	469	798	329	70%
TOTAL ENTERING VOLUME		3,012	4,129	1117	37%	3,140	4,540	1400	45%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	1,447	1,673		
North Leg	Outbound	1,571	1,300		
North Leg	TOTAL	3,018	2,973	6%	6%
South Leg	Inbound	1,513	1,187		
South Leg	Outbound	1,490	1,650		
South Leg	TOTAL	3,003	2,837	6%	6%
East Leg	Inbound	566	798		
East Leg	Outbound	585	750		
East Leg	TOTAL	1,151	1,548	6%	8%
West Leg	Inbound	603	882		
West Leg	Outbound	483	840		
West Leg	TOTAL	1,086	1,722	9%	14%
OVERALL TOTAL		8,258	9,080	6%	7%

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & Riverside Dr.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	50	246	196	392%	66	334	268	406%
	Through	663	1,254	591	89%	748	941	193	26%
	Right	107	346	239	223%	181	497	316	175%
	NB Total	820	1,846	1,026	125%	995	1,772	777	78%
SOUTH BOUND	Left	145	142	-3	-2%	100	145	45	45%
	Through	622	1,012	390	63%	592	1,149	557	94%
	Right	107	159	52	49%	144	384	240	167%
	SB Total	874	1,313	439	50%	836	1,678	842	101%
EAST BOUND	Left	134	202	68	51%	124	122	-2	-2%
	Through	302	777	475	157%	404	869	465	115%
	Right	39	167	128	328%	46	133	87	189%
	EB Total	475	1,146	671	141%	574	1,124	550	96%
WEST BOUND	Left	156	197	41	26%	145	188	43	30%
	Through	466	538	72	15%	451	803	352	78%
	Right	90	40	-50	-56%	60	27	-33	-55%
	WB Total	712	775	63	9%	656	1,018	362	55%
TOTAL ENTERING VOLUME		2,881	5,080	2199	76%	3,061	5,592	2531	83%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,313	1,678	6%	5%	50,695
North Leg	Outbound	1,496	1,090			
North Leg	TOTAL	2,809	2,768			
South Leg	Inbound	1,846	1,772	4%	4%	78,655
South Leg	Outbound	1,376	1,470			
South Leg	TOTAL	3,222	3,242			
East Leg	Inbound	775	1,018	6%	8%	31,911
East Leg	Outbound	1,265	1,511			
East Leg	TOTAL	2,040	2,529			
West Leg	Inbound	1,146	1,124	7%	9%	30,271
West Leg	Outbound	943	1,521			
West Leg	TOTAL	2,089	2,645			
OVERALL TOTAL		10,160	11,184	5%	6%	191,533

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & Chino Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	24	57	33	138%	34	103	69	203%
	Through	707	1,742	1,035	146%	887	1,542	655	74%
	Right	135	280	145	107%	240	362	122	51%
	NB Total	866	2,079	1,213	140%	1,161	2,007	846	73%
SOUTH BOUND	Left	52	75	23	44%	49	70	21	43%
	Through	708	1,217	509	72%	669	1,265	596	89%
	Right	71	119	48	68%	48	138	90	188%
	SB Total	831	1,411	580	70%	766	1,473	707	92%
EAST BOUND	Left	56	123	67	120%	69	134	65	94%
	Through	128	236	108	84%	314	528	214	68%
	Right	28	61	33	118%	20	44	24	120%
	EB Total	212	420	208	98%	403	706	303	75%
WEST BOUND	Left	90	135	45	50%	82	176	94	115%
	Through	190	278	88	46%	149	487	338	227%
	Right	51	77	26	51%	33	62	29	88%
	WB Total	331	490	159	48%	264	725	461	175%
TOTAL ENTERING VOLUME		2,240	4,400	2160	96%	2,594	4,911	2317	89%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	1,411	1,473		
North Leg	Outbound	1,942	1,738		
North Leg	TOTAL	3,353	3,211	4%	4%
South Leg	Inbound	2,079	2,007		
South Leg	Outbound	1,413	1,485		
South Leg	TOTAL	3,492	3,492	5%	5%
East Leg	Inbound	490	725		
East Leg	Outbound	591	960		
East Leg	TOTAL	1,081	1,685	7%	11%
West Leg	Inbound	420	706		
West Leg	Outbound	454	728		
West Leg	TOTAL	874	1,434	6%	9%
OVERALL TOTAL		8,800	9,822	5%	5%

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & Schaefer Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	67	86	19	28%	55	71	16	29%
	Through	676	1,608	932	138%	901	1,648	747	83%
	Right	21	57	36	171%	48	67	19	40%
	NB Total	764	1,751	987	129%	1,004	1,786	782	78%
SOUTH BOUND	Left	38	94	56	147%	54	97	43	80%
	Through	707	1,162	455	64%	608	1,191	583	96%
	Right	102	119	17	17%	100	166	66	66%
	SB Total	847	1,375	528	62%	762	1,454	692	91%
EAST BOUND	Left	144	422	278	193%	236	283	47	20%
	Through	59	199	140	237%	250	229	-21	-8%
	Right	72	162	90	125%	99	99	0	0%
	EB Total	275	783	508	185%	585	611	26	4%
WEST BOUND	Left	25	26	1	4%	27	144	117	433%
	Through	88	65	-23	-26%	56	252	196	350%
	Right	73	100	27	37%	35	224	189	540%
	WB Total	186	191	5	3%	118	620	502	425%
TOTAL ENTERING VOLUME		2,072	4,100	2028	98%	2,469	4,471	2002	81%

FORECAST PEAK HOUR TO ADT COMPARISON					
		VOLUMES		PERCENT OF ADT	
		AM	PM	AM	PM
North Leg	Inbound	1,375	1,454		
North Leg	Outbound	2,130	2,155		
North Leg	TOTAL	3,505	3,609	5%	5%
South Leg	Inbound	1,751	1,786		
South Leg	Outbound	1,350	1,434		
South Leg	TOTAL	3,101	3,220	5%	5%
East Leg	Inbound	191	620		
East Leg	Outbound	350	393		
East Leg	TOTAL	541	1,013	6%	11%
West Leg	Inbound	783	611		
West Leg	Outbound	270	489		
West Leg	TOTAL	1,053	1,100	5%	5%
OVERALL TOTAL		8,200	8,942	5%	5%

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & Edison Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	121	50	-71	-59%	87	74	-13	-15%
	Through	661	1,170	509	77%	849	1,393	544	64%
	Right	53	213	160	302%	47	149	102	217%
	NB Total	835	1,433	598	72%	983	1,616	633	64%
SOUTH BOUND	Left	54	450	396	733%	62	303	241	389%
	Through	615	902	287	47%	628	1,073	445	71%
	Right	98	84	-14	-14%	113	148	35	31%
	SB Total	767	1,436	669	87%	803	1,524	721	90%
EAST BOUND	Left	72	155	83	115%	121	189	68	56%
	Through	126	617	491	390%	327	988	661	202%
	Right	54	46	-8	-15%	113	119	6	5%
	EB Total	252	818	566	225%	561	1,296	735	131%
WEST BOUND	Left	86	332	246	286%	37	178	141	381%
	Through	261	586	325	125%	197	728	531	270%
	Right	47	454	407	866%	32	228	196	613%
	WB Total	394	1,372	978	248%	266	1,134	868	326%
TOTAL ENTERING VOLUME		2,248	5,059	2811	125%	2,613	5,570	2957	113%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,436	1,524	5%	5%	64,271
North Leg	Outbound	1,779	1,810			
North Leg	TOTAL	3,215	3,334			
South Leg	Inbound	1,433	1,616	5%	5%	57,123
South Leg	Outbound	1,280	1,370			
South Leg	TOTAL	2,713	2,986			
East Leg	Inbound	1,372	1,134	5%	5%	56,642
East Leg	Outbound	1,280	1,440			
East Leg	TOTAL	2,652	2,574			
West Leg	Inbound	818	1,296	3%	5%	48,851
West Leg	Outbound	720	950			
West Leg	TOTAL	1,538	2,246			
OVERALL TOTAL		10,118	11,140	4%	5%	226,887

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Project: Eden Mixed-Use
Scenario: Horizon Year (2045) Without Project

Job #: 14698
Analyst: CP
Date: 10/18/23

LOCATION: Euclid Av. (SR-83) & Eucalyptus Av.
FORECAST YEAR: 2050

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	111	103	-8	-7%	91	80	-11	-12%
	Through	628	993	365	58%	807	1,151	344	43%
	Right	62	231	169	273%	67	121	54	81%
	NB Total	801	1,327	526	66%	965	1,352	387	40%
SOUTH BOUND	Left	82	284	202	246%	69	183	114	165%
	Through	608	913	305	50%	666	1,131	465	70%
	Right	30	26	-4	-13%	57	74	17	30%
	SB Total	720	1,223	503	70%	792	1,388	596	75%
EAST BOUND	Left	49	66	17	35%	69	51	-18	-26%
	Through	71	225	154	217%	295	276	-19	-6%
	Right	101	139	38	38%	194	116	-78	-40%
	EB Total	221	430	209	95%	558	443	-115	-21%
WEST BOUND	Left	87	137	50	57%	53	193	140	264%
	Through	254	231	-23	-9%	107	296	189	177%
	Right	124	191	67	54%	73	328	255	349%
	WB Total	465	559	94	20%	233	817	584	251%
TOTAL ENTERING VOLUME		2,207	3,539	1332	60%	2,548	4,000	1452	57%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,223	1,388	4%	5%	57,123
North Leg	Outbound	1,250	1,530			
North Leg	TOTAL	2,473	2,918			
South Leg	Inbound	1,327	1,352	5%	6%	50,141
South Leg	Outbound	1,189	1,440			
South Leg	TOTAL	2,516	2,792			
East Leg	Inbound	559	817	8%	8%	16,985
East Leg	Outbound	740	580			
East Leg	TOTAL	1,299	1,397			
West Leg	Inbound	430	443	11%	12%	7,253
West Leg	Outbound	360	450			
West Leg	TOTAL	790	893			
OVERALL TOTAL		7,078	8,000	5%	6%	131,502

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APPENDIX 5.1: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	36	373	100	35	480	81	37	9	35
Future Volume (vph)	36	373	100	35	480	81	37	9	35
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	19.0	49.0	49.0	19.0	49.0	52.0	52.0	52.0	52.0
Total Split (%)	15.8%	40.8%	40.8%	15.8%	40.8%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	7.4	19.6	19.6	7.3	19.6		17.3		17.3
Actuated g/C Ratio	0.13	0.36	0.36	0.13	0.36		0.31		0.31
v/c Ratio	0.25	0.45	0.25	0.24	0.60		0.53		0.26
Control Delay	31.1	16.7	6.8	31.2	18.6		22.2		13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	31.1	16.7	6.8	31.2	18.6		22.2		13.0
LOS	C	B	A	C	B		C		B
Approach Delay		15.8			19.4		22.2		13.0
Approach LOS		B			B		C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 55

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 17.9

Intersection LOS: B

Intersection Capacity Utilization 47.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

		
Ø2	Ø3	Ø4
52 s	19 s	49 s
		
Ø6	Ø7	Ø8
52 s	19 s	49 s

HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	373	100	35	480	11	81	37	45	9	35	48
Future Volume (veh/h)	36	373	100	35	480	11	81	37	45	9	35	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	0.98		0.99	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	52	541	120	51	696	10	117	54	40	13	51	37
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	1115	485	84	1122	16	309	134	74	115	255	160
Arrive On Green	0.05	0.33	0.33	0.05	0.33	0.33	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1594	3367	1465	1594	3395	49	666	494	271	81	939	590
Grp Volume(v), veh/h	52	541	120	51	345	361	211	0	0	101	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1465	1594	1683	1760	1431	0	0	1610	0	0
Q Serve(g_s), s	1.4	5.6	2.6	1.4	7.5	7.5	3.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	5.6	2.6	1.4	7.5	7.5	5.2	0.0	0.0	2.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.55		0.19	0.13		0.37
Lane Grp Cap(c), veh/h	85	1115	485	84	556	582	517	0	0	531	0	0
V/C Ratio(X)	0.61	0.49	0.25	0.61	0.62	0.62	0.41	0.00	0.00	0.19	0.00	0.00
Avail Cap(c_a), veh/h	527	3338	1453	527	1669	1745	1637	0	0	1804	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.2	11.6	10.6	20.2	12.3	12.3	13.3	0.0	0.0	12.3	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.3	0.3	2.6	1.1	1.1	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.5	0.6	0.5	2.1	2.2	1.6	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	11.9	10.9	22.8	13.4	13.4	13.8	0.0	0.0	12.5	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		713			757			211			101	
Approach Delay, s/veh		12.6			14.0			13.8			12.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.4	6.9	20.2		16.4	6.9	20.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		47.4	14.4	43.2		47.4	14.4	43.2				
Max Q Clear Time (g_c+I1), s		7.2	3.4	7.6		4.1	3.4	9.5				
Green Ext Time (p_c), s		1.5	0.0	4.0		0.7	0.0	4.2				
Intersection Summary												
HCM 6th Ctrl Delay			13.3									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	36	295	25	8	540	24	42	84	18	109
Future Volume (vph)	36	295	25	8	540	24	42	84	18	109
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	17.0	57.0	57.0	12.0	52.0	52.0	51.0	51.0	51.0	51.0
Total Split (%)	14.2%	47.5%	47.5%	10.0%	43.3%	43.3%	42.5%	42.5%	42.5%	42.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.9	22.7	22.7	5.8	18.2	18.2		16.1		16.1
Actuated g/C Ratio	0.13	0.44	0.44	0.11	0.35	0.35		0.31		0.31
v/c Ratio	0.21	0.25	0.05	0.06	0.57	0.05		0.35		0.54
Control Delay	28.9	10.5	2.2	29.9	17.4	0.2		19.3		19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	28.9	10.5	2.2	29.9	17.4	0.2		19.3		19.6
LOS	C	B	A	C	B	A		B		B
Approach Delay		11.8			16.9			19.3		19.6
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 51.9

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 16.2

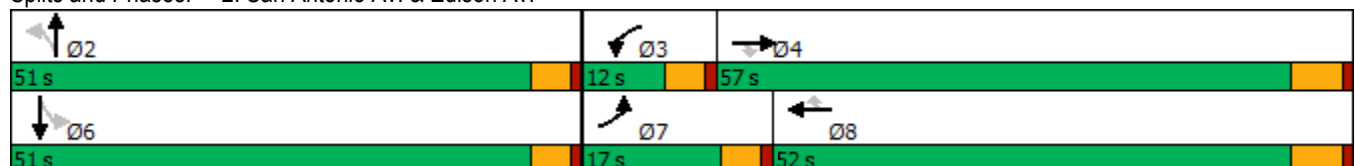
Intersection LOS: B

Intersection Capacity Utilization 51.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	295	25	8	540	24	42	84	6	18	109	102
Future Volume (veh/h)	36	295	25	8	540	24	42	84	6	18	109	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	44	364	22	10	667	26	52	104	2	22	135	52
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1230	536	21	1112	485	201	319	5	119	294	104
Arrive On Green	0.05	0.37	0.37	0.01	0.33	0.33	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	328	1256	20	84	1157	411
Grp Volume(v), veh/h	44	364	22	10	667	26	158	0	0	209	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1604	0	0	1652	0	0
Q Serve(g_s), s	1.1	3.1	0.4	0.3	6.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	3.1	0.4	0.3	6.8	0.5	3.0	0.0	0.0	4.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.33		0.01	0.11		0.25
Lane Grp Cap(c), veh/h	77	1230	536	21	1112	485	525	0	0	517	0	0
V/C Ratio(X)	0.57	0.30	0.04	0.48	0.60	0.05	0.30	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	484	4224	1842	289	3812	1662	1841	0	0	1943	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.0	9.2	8.3	20.0	11.4	9.3	12.5	0.0	0.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.1	0.0	6.2	0.5	0.0	0.3	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.8	0.1	0.1	1.8	0.1	1.1	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	9.3	8.4	26.1	11.9	9.4	12.8	0.0	0.0	13.5	0.0	0.0
LnGrp LOS	C	A	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h	430				703				158		209	
Approach Delay, s/veh	10.5				12.0				12.8		13.5	
Approach LOS	B				B				B		B	
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	15.0		5.1	20.7		15.0	6.6	19.3				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	46.4		7.4	51.2		46.4	12.4	46.2				
Max Q Clear Time (g_c+I1), s	5.0		2.3	5.1		6.3	3.1	8.8				
Green Ext Time (p_c), s	1.1		0.0	2.4		1.4	0.0	4.7				
Intersection Summary												
HCM 6th Ctrl Delay	11.9											
HCM 6th LOS	B											

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	174	69	332	45	124	17	139
Future Volume (vph)	15	174	69	332	45	124	17	139
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	43.0	18.0	47.0	21.0	41.0	18.0	38.0
Total Split (%)	11.7%	35.8%	15.0%	39.2%	17.5%	34.2%	15.0%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	17.9	12.6	22.2	19.7	6.9	16.9	5.9	12.2
Actuated g/C Ratio	0.35	0.24	0.43	0.38	0.13	0.33	0.11	0.24
v/c Ratio	0.05	0.31	0.18	0.32	0.25	0.21	0.11	0.25
Control Delay	11.3	18.3	11.6	14.1	29.0	10.7	29.5	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	18.3	11.6	14.1	29.0	10.7	29.5	18.9
LOS	B	B	B	B	C	B	C	B
Approach Delay		17.9		13.7		14.1		19.9
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 51.8

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 15.8

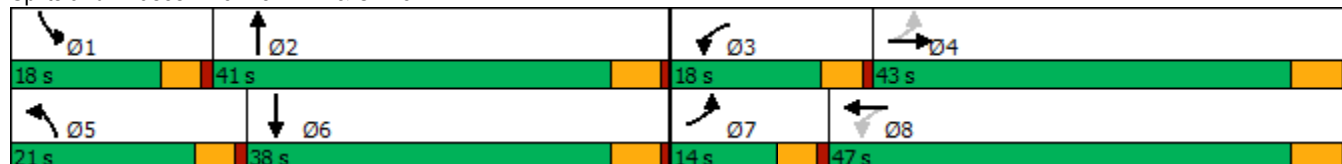
Intersection LOS: B

Intersection Capacity Utilization 46.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.



HCM 6th Signalized Intersection Summary
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	15	174	41	69	332	21	45	124	69	17	139	29
Future Volume (veh/h)	15	174	41	69	332	21	45	124	69	17	139	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	202	41	80	386	19	52	144	46	20	162	22
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	619	123	425	879	43	84	634	195	39	664	89
Arrive On Green	0.02	0.22	0.22	0.07	0.27	0.27	0.05	0.25	0.25	0.02	0.22	0.22
Sat Flow, veh/h	1594	2797	557	1594	3265	160	1594	2526	777	1594	2981	398
Grp Volume(v), veh/h	17	120	123	80	198	207	52	94	96	20	90	94
Grp Sat Flow(s),veh/h/ln	1594	1683	1671	1594	1683	1742	1594	1683	1619	1594	1683	1696
Q Serve(g_s), s	0.4	2.8	2.9	1.8	4.6	4.6	1.5	2.1	2.2	0.6	2.1	2.1
Cycle Q Clear(g_c), s	0.4	2.8	2.9	1.8	4.6	4.6	1.5	2.1	2.2	0.6	2.1	2.1
Prop In Lane	1.00		0.33	1.00		0.09	1.00		0.48	1.00		0.23
Lane Grp Cap(c), veh/h	336	372	370	425	453	469	84	422	406	39	375	378
V/C Ratio(X)	0.05	0.32	0.33	0.19	0.44	0.44	0.62	0.22	0.24	0.51	0.24	0.25
Avail Cap(c_a), veh/h	622	1333	1324	770	1477	1529	557	1276	1227	455	1169	1177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	15.3	15.4	12.6	14.2	14.2	21.8	14.0	14.0	22.6	15.0	15.0
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.1	0.7	0.7	2.8	0.3	0.3	3.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	0.9	0.5	1.4	1.5	0.5	0.7	0.7	0.2	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	15.8	15.9	12.6	14.9	14.9	24.6	14.2	14.3	26.5	15.3	15.3
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h	260			485				242			204	
Approach Delay, s/veh	15.7			14.5				16.5			16.4	
Approach LOS	B			B				B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	17.2	7.8	16.2	7.1	15.9	5.6	18.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	35.6	13.4	37.2	16.4	32.6	9.4	41.2				
Max Q Clear Time (g_c+I1), s	2.6	4.2	3.8	4.9	3.5	4.1	2.4	6.6				
Green Ext Time (p_c), s	0.0	1.0	0.0	1.3	0.0	0.9	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay	15.5											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	7	210	8	6	287
Future Vol, veh/h	38	7	210	8	6	287
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	8	228	9	7	312
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	403	119	0	0	237	0
Stage 1	233	-	-	-	-	-
Stage 2	170	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	575	910	-	-	1327	-
Stage 1	784	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	572	910	-	-	1327	-
Mov Cap-2 Maneuver	630	-	-	-	-	-
Stage 1	784	-	-	-	-	-
Stage 2	839	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.9	0		0.2		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-		662	1327	
HCM Lane V/C Ratio	-	-		0.074	0.005	
HCM Control Delay (s)	-	-		10.9	7.7	
HCM Lane LOS	-	-		B	A	
HCM 95th %tile Q(veh)	-	-		0.2	0	

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	211	8	0	325
Future Vol, veh/h	0	6	211	8	0	325
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	229	9	0	353
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	119	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	910	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	910	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	- 910		-		
HCM Lane V/C Ratio	-	- 0.007		-		
HCM Control Delay (s)	-	- 9		-		
HCM Lane LOS	-	- A		-		
HCM 95th %tile Q(veh)	-	- 0		-		

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	40	318	24	302	78	113	84	145
Future Volume (vph)	40	318	24	302	78	113	84	145
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	41.0	15.0	38.0	27.0	47.0	17.0	37.0
Total Split (%)	15.0%	34.2%	12.5%	31.7%	22.5%	39.2%	14.2%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	8.1	71.9	6.8	68.5	11.5	14.1	10.8	13.3
Actuated g/C Ratio	0.07	0.60	0.06	0.57	0.10	0.12	0.09	0.11
v/c Ratio	0.45	0.25	0.32	0.24	0.62	0.45	0.71	0.65
Control Delay	66.1	13.1	63.1	14.6	69.0	37.6	79.3	36.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	13.1	63.1	14.6	69.0	37.6	79.3	36.9
LOS	E	B	E	B	E	D	E	D
Approach Delay		17.9		17.6		48.0		47.8
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 29.8

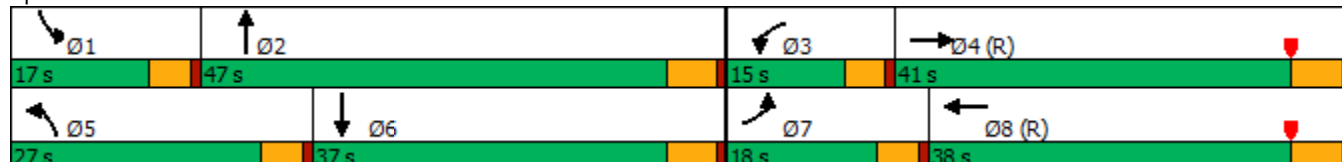
Intersection LOS: C

Intersection Capacity Utilization 54.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	318	88	24	302	66	78	113	44	84	145	96
Future Volume (veh/h)	40	318	88	24	302	66	78	113	44	84	145	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	48	383	89	29	364	72	94	136	46	101	175	81
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	1679	386	41	1702	333	115	272	88	122	257	114
Arrive On Green	0.04	0.62	0.62	0.03	0.61	0.61	0.07	0.11	0.11	0.08	0.11	0.11
Sat Flow, veh/h	1594	2716	624	1594	2805	549	1594	2483	804	1594	2259	998
Grp Volume(v), veh/h	48	236	236	29	217	219	94	90	92	101	128	128
Grp Sat Flow(s),veh/h/ln	1594	1683	1657	1594	1683	1671	1594	1683	1603	1594	1683	1573
Q Serve(g_s), s	3.6	7.5	7.6	2.2	7.0	7.1	7.0	6.1	6.5	7.5	8.8	9.4
Cycle Q Clear(g_c), s	3.6	7.5	7.6	2.2	7.0	7.1	7.0	6.1	6.5	7.5	8.8	9.4
Prop In Lane	1.00		0.38	1.00		0.33	1.00		0.50	1.00		0.63
Lane Grp Cap(c), veh/h	59	1041	1025	41	1021	1014	115	184	175	122	192	179
V/C Ratio(X)	0.81	0.23	0.23	0.70	0.21	0.22	0.82	0.49	0.52	0.83	0.67	0.71
Avail Cap(c_a), veh/h	178	1041	1025	138	1021	1014	298	584	556	165	443	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	10.2	10.2	58.0	10.7	10.7	54.9	50.3	50.5	54.6	51.0	51.3
Incr Delay (d2), s/veh	8.3	0.5	0.5	7.9	0.5	0.5	5.2	2.0	2.4	16.7	4.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.6	2.7	0.9	2.5	2.5	2.9	2.6	2.7	3.5	3.9	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.6	10.6	10.7	65.9	11.1	11.2	60.1	52.3	52.9	71.4	55.0	56.5
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	E	E
Approach Vol, veh/h		520			465			276			357	
Approach Delay, s/veh		15.7			14.6			55.1			60.2	
Approach LOS		B			B			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.8	18.5	7.7	80.0	13.3	19.1	9.1	78.6				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	12.4	41.6	10.4	35.2	22.4	31.6	13.4	32.2				
Max Q Clear Time (g_c+I1), s	9.5	8.5	4.2	9.6	9.0	11.4	5.6	9.1				
Green Ext Time (p_c), s	0.0	1.0	0.0	2.6	0.1	1.3	0.0	2.3				
Intersection Summary												
HCM 6th Ctrl Delay			31.9									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	70	223	28	13	423	19	35	114	7	119
Future Volume (vph)	70	223	28	13	423	19	35	114	7	119
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	22.0	52.0	52.0	13.0	43.0	43.0	17.0	42.0	13.0	38.0
Total Split (%)	18.3%	43.3%	43.3%	10.8%	35.8%	35.8%	14.2%	35.0%	10.8%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	8.3	20.8	20.8	6.2	15.2	15.2	6.9	15.8	6.0	13.5
Actuated g/C Ratio	0.16	0.40	0.40	0.12	0.29	0.29	0.13	0.30	0.11	0.26
v/c Ratio	0.31	0.18	0.05	0.07	0.47	0.04	0.18	0.13	0.04	0.25
Control Delay	29.8	13.0	0.1	32.5	20.5	0.2	31.2	16.6	32.9	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	13.0	0.1	32.5	20.5	0.2	31.2	16.6	32.9	13.5
LOS	C	B	A	C	C	A	C	B	C	B
Approach Delay		15.6			20.0			19.9		14.2
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 52.3

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 17.7

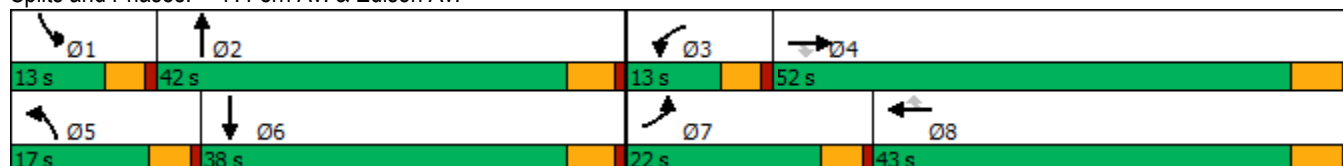
Intersection LOS: B

Intersection Capacity Utilization 47.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	223	28	13	423	19	35	114	4	7	119	83
Future Volume (veh/h)	70	223	28	13	423	19	35	114	4	7	119	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	76	242	20	14	460	16	38	124	2	8	129	56
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	937	412	28	770	343	67	855	14	17	513	212
Arrive On Green	0.07	0.28	0.28	0.02	0.23	0.23	0.04	0.25	0.25	0.01	0.22	0.22
Sat Flow, veh/h	1594	3367	1481	1594	3367	1502	1594	3391	55	1594	2319	959
Grp Volume(v), veh/h	76	242	20	14	460	16	38	61	65	8	92	93
Grp Sat Flow(s),veh/h/ln	1594	1683	1481	1594	1683	1502	1594	1683	1762	1594	1683	1595
Q Serve(g_s), s	2.2	2.6	0.5	0.4	5.6	0.4	1.1	1.3	1.3	0.2	2.1	2.2
Cycle Q Clear(g_c), s	2.2	2.6	0.5	0.4	5.6	0.4	1.1	1.3	1.3	0.2	2.1	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.60
Lane Grp Cap(c), veh/h	107	937	412	28	770	343	67	425	445	17	372	353
V/C Ratio(X)	0.71	0.26	0.05	0.49	0.60	0.05	0.57	0.14	0.15	0.48	0.25	0.26
Avail Cap(c_a), veh/h	600	3363	1479	289	2708	1208	427	1332	1394	289	1186	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	13.0	12.2	22.5	15.9	13.9	21.8	13.4	13.4	22.8	14.8	14.9
Incr Delay (d2), s/veh	3.2	0.1	0.0	4.9	0.7	0.1	2.8	0.2	0.1	7.5	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	0.1	0.2	1.8	0.1	0.4	0.4	0.4	0.1	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	13.1	12.3	27.4	16.7	14.0	24.6	13.6	13.6	30.3	15.2	15.3
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		338			490			164			193	
Approach Delay, s/veh		15.6			16.9			16.1			15.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	17.1	5.4	18.7	6.5	15.6	7.7	16.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	36.6	8.4	46.2	12.4	32.6	17.4	37.2				
Max Q Clear Time (g_c+I1), s	2.2	3.3	2.4	4.6	3.1	4.2	4.2	7.6				
Green Ext Time (p_c), s	0.0	0.6	0.0	1.5	0.0	1.0	0.1	2.9				
Intersection Summary												
HCM 6th Ctrl Delay			16.2									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	199	565	66	46	81
Future Vol, veh/h	29	199	565	66	46	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	240	681	80	55	98
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	761	0	-	0	911	381
Stage 1	-	-	-	-	721	-
Stage 2	-	-	-	-	190	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	847	-	-	-	274	617
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	823	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	847	-	-	-	263	617
Mov Cap-2 Maneuver	-	-	-	-	355	-
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	823	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.2	0		13.7		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	847	-	-	-	355	617
HCM Lane V/C Ratio	0.041	-	-	-	0.156	0.158
HCM Control Delay (s)	9.4	-	-	-	17	11.9
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	0.6

Intersection												
Int Delay, s/veh	6.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Vol, veh/h	133	194	119	28	200	142	83	0	63	154	0	112
Future Vol, veh/h	133	194	119	28	200	142	83	0	63	154	0	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	211	129	30	217	154	90	0	68	167	0	122
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	371	0	0	340	0	0	735	997	170	750	984	186
Stage 1	-	-	-	-	-	-	566	566	-	354	354	-
Stage 2	-	-	-	-	-	-	169	431	-	396	630	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1184	-	-	1305	-	-	358	266	1005	349	272	824
Stage 1	-	-	-	-	-	-	541	550	-	636	629	-
Stage 2	-	-	-	-	-	-	816	581	-	690	513	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	1184	-	-	1305	-	-	272	229	1005	290	233	824
Mov Cap-2 Maneuver	-	-	-	-	-	-	353	309	-	381	327	-
Stage 1	-	-	-	-	-	-	475	483	-	558	615	-
Stage 2	-	-	-	-	-	-	679	568	-	564	450	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.5			0.6			14.4			16.8		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	353	1005	1184	-	-	1305	-	-	381	824		
HCM Lane V/C Ratio	0.256	0.068	0.122	-	-	0.023	-	-	0.439	0.148		
HCM Control Delay (s)	18.7	8.8	8.5	-	-	7.8	-	-	21.6	10.1		
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B		
HCM 95th %tile Q(veh)	1	0.2	0.4	-	-	0.1	-	-	2.2	0.5		

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	371	3	331	306	692	808	435
Future Volume (vph)	371	3	331	306	692	808	435
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	38.0	86.0	48.0	48.0
Total Split (%)	28.3%	28.3%	28.3%	31.7%	71.7%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	22.4	22.4	22.4	25.7	87.1	56.9	56.9
Actuated g/C Ratio	0.19	0.19	0.19	0.21	0.73	0.47	0.47
v/c Ratio	0.80	0.78	0.49	0.83	0.28	0.50	0.45
Control Delay	65.2	56.6	8.6	69.1	5.8	25.2	4.0
Queue Delay	0.1	0.1	0.0	0.0	0.1	0.0	0.0
Total Delay	65.3	56.8	8.6	69.1	6.0	25.2	4.0
LOS	E	E	A	E	A	C	A
Approach Delay		44.6			25.3	17.8	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 26.7

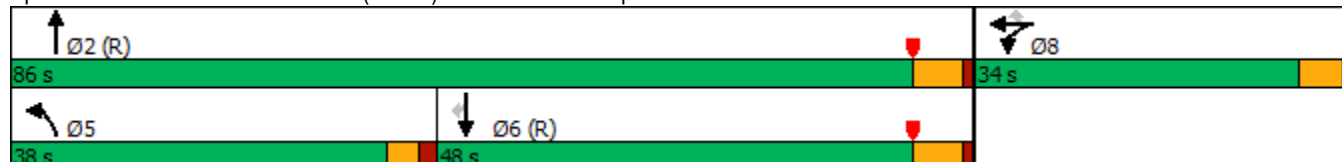
Intersection LOS: C

Intersection Capacity Utilization 83.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	371	3	331	306	692	0	0	808	435
Future Volume (veh/h)	0	0	0	371	3	331	306	692	0	0	808	435
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				436	0	114	315	713	0	0	833	292
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				510	0	227	338	2734	0	0	1927	859
Arrive On Green				0.14	0.00	0.14	0.38	1.00	0.00	0.00	0.54	0.54
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				436	0	114	315	713	0	0	833	292
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				14.3	0.0	8.0	20.4	0.0	0.0	0.0	16.8	12.4
Cycle Q Clear(g_c), s				14.3	0.0	8.0	20.4	0.0	0.0	0.0	16.8	12.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				510	0	227	338	2734	0	0	1927	859
V/C Ratio(X)				0.85	0.00	0.50	0.93	0.26	0.00	0.00	0.43	0.34
Avail Cap(c_a), veh/h				861	0	383	497	2734	0	0	1927	859
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.79	0.79	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.2	0.0	47.5	36.5	0.0	0.0	0.0	16.4	15.4
Incr Delay (d2), s/veh				1.8	0.0	0.6	13.3	0.2	0.0	0.0	0.7	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.3	0.0	3.1	8.1	0.1	0.0	0.0	6.7	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.0	0.0	48.1	49.8	0.2	0.0	0.0	17.1	16.5
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					550			1028			1125	
Approach Delay, s/veh					51.2			15.4			17.0	
Approach LOS					D			B			B	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	97.8			27.2			70.6			22.2		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	80.5			33.5			42.5			29.0		
Max Q Clear Time (g_c+I1), s	2.0			22.4			18.8			16.3		
Green Ext Time (p_c), s	8.2			0.4			9.8			0.9		
Intersection Summary												
HCM 6th Ctrl Delay			23.3									
HCM 6th LOS			C									
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	329	0	669	515	348	831
Future Volume (vph)	329	0	669	515	348	831
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	38.0	38.0	42.0	42.0	40.0	82.0
Total Split (%)	31.7%	31.7%	35.0%	35.0%	33.3%	68.3%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	26.0	26.0	51.0	51.0	28.5	83.5
Actuated g/C Ratio	0.22	0.22	0.42	0.42	0.24	0.70
v/c Ratio	0.84	0.82	0.46	0.55	0.85	0.35
Control Delay	64.6	37.0	28.3	5.1	80.5	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.1
Total Delay	64.6	37.0	28.3	5.1	80.8	8.3
LOS	E	D	C	A	F	A
Approach Delay		49.1	18.2			29.7
Approach LOS		D	B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 29.5

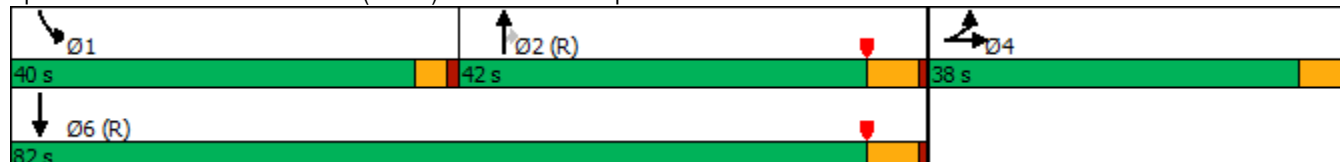
Intersection LOS: C

Intersection Capacity Utilization 83.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	0	345	0	0	0	0	669	515	348	831	0
Future Volume (veh/h)	329	0	345	0	0	0	0	669	515	348	831	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	295	61	252				0	690	365	359	857	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	379	68	280				0	1610	701	380	2487	0
Arrive On Green	0.21	0.21	0.21				0.00	0.45	0.45	0.43	1.00	0.00
Sat Flow, veh/h	1781	318	1315				0	3647	1547	1781	3647	0
Grp Volume(v), veh/h	295	0	313				0	690	365	359	857	0
Grp Sat Flow(s),veh/h/ln	1781	0	1634				0	1777	1547	1781	1777	0
Q Serve(g_s), s	18.8	0.0	22.4				0.0	15.8	20.3	23.2	0.0	0.0
Cycle Q Clear(g_c), s	18.8	0.0	22.4				0.0	15.8	20.3	23.2	0.0	0.0
Prop In Lane	1.00		0.81				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	379	0	348				0	1610	701	380	2487	0
V/C Ratio(X)	0.78	0.00	0.90				0.00	0.43	0.52	0.94	0.34	0.00
Avail Cap(c_a), veh/h	490	0	449				0	1610	701	534	2487	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.88	0.88	0.80	0.80	0.00
Uniform Delay (d), s/veh	44.6	0.0	46.0				0.0	22.3	23.5	33.7	0.0	0.0
Incr Delay (d2), s/veh	4.3	0.0	15.4				0.0	0.7	2.4	15.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	10.3				0.0	6.5	7.6	9.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.9	0.0	61.4				0.0	23.0	25.9	49.3	0.3	0.0
LnGrp LOS	D	A	E				A	C	C	D	A	A
Approach Vol, veh/h	608						1055			1216		
Approach Delay, s/veh	55.3						24.0			14.8		
Approach LOS	E						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	29.6	59.9	30.5		89.5							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	36.0	36.5	33.0		76.5							
Max Q Clear Time (g_c+I1), s	25.2	22.3	24.4		2.0							
Green Ext Time (p_c), s	0.4	6.8	1.1		10.6							
Intersection Summary												
HCM 6th Ctrl Delay			26.7									
HCM 6th LOS			C									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	108	226	51	326	98	877	41	191	906	65
Future Volume (vph)	108	226	51	326	98	877	41	191	906	65
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	41.0	17.0	34.0	22.0	41.0	41.0	21.0	40.0	40.0
Total Split (%)	20.0%	34.2%	14.2%	28.3%	18.3%	34.2%	34.2%	17.5%	33.3%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.4	24.0	7.9	18.2	10.7	36.2	36.2	10.9	38.9	38.9
Actuated g/C Ratio	0.12	0.25	0.08	0.19	0.11	0.37	0.37	0.11	0.40	0.40
v/c Ratio	0.60	0.39	0.41	0.72	0.58	0.46	0.07	0.59	0.44	0.10
Control Delay	56.6	25.9	55.4	39.1	56.6	25.9	0.2	50.2	25.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.6	25.9	55.4	39.1	56.6	25.9	0.2	50.2	25.2	0.3
LOS	E	C	E	D	E	C	A	D	C	A
Approach Delay		33.4		40.7		27.9			27.9	
Approach LOS		C		D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 97.4

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 30.8

Intersection LOS: C

Intersection Capacity Utilization 63.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.

			
21 s	41 s	17 s	41 s
			
22 s	40 s	24 s	34 s

HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			  		  	  	
Traffic Volume (veh/h)	108	226	106	51	326	148	98	877	41	191	906	65
Future Volume (veh/h)	108	226	106	51	326	148	98	877	41	191	906	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	111	233	82	53	336	135	101	904	34	197	934	43
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	577	197	66	447	176	125	2164	603	266	2218	627
Arrive On Green	0.09	0.23	0.23	0.04	0.18	0.18	0.08	0.41	0.41	0.09	0.42	0.42
Sat Flow, veh/h	1594	2517	859	1594	2417	952	1594	5316	1482	3000	5316	1502
Grp Volume(v), veh/h	111	162	153	53	245	226	101	904	34	197	934	43
Grp Sat Flow(s),veh/h/ln	1594	1772	1604	1594	1772	1597	1594	1772	1482	1500	1772	1502
Q Serve(g_s), s	6.0	6.8	7.1	2.9	11.4	11.8	5.5	10.6	1.2	5.6	10.9	1.5
Cycle Q Clear(g_c), s	6.0	6.8	7.1	2.9	11.4	11.8	5.5	10.6	1.2	5.6	10.9	1.5
Prop In Lane	1.00		0.54	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	407	368	66	327	295	125	2164	603	266	2218	627
V/C Ratio(X)	0.81	0.40	0.42	0.80	0.75	0.77	0.81	0.42	0.06	0.74	0.42	0.07
Avail Cap(c_a), veh/h	354	713	646	226	572	515	317	2164	603	563	2218	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	28.6	28.7	41.6	33.7	33.9	39.6	18.5	15.7	38.9	18.0	15.3
Incr Delay (d2), s/veh	4.3	0.6	0.8	8.2	3.4	4.2	4.6	0.6	0.2	1.5	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.8	2.6	1.2	4.9	4.6	2.2	4.1	0.4	2.0	4.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	29.2	29.4	49.7	37.1	38.0	44.2	19.1	15.9	40.4	18.6	15.5
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h	426			524			1039			1174		
Approach Delay, s/veh	33.0			38.8			21.4			22.1		
Approach LOS	C			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	41.0	8.2	25.9	11.5	41.9	12.1	22.0				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	17.4	34.6	19.4	28.2				
Max Q Clear Time (g_c+I1), s	7.6	12.6	4.9	9.1	7.5	12.9	8.0	13.8				
Green Ext Time (p_c), s	0.2	6.4	0.0	1.7	0.1	6.5	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay	26.1											
HCM 6th LOS	C											

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	134	302	156	466	90	50	728	107	145	688	107
Future Volume (vph)	134	302	156	466	90	50	728	107	145	688	107
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.3	37.0	23.0	35.7	35.7	14.7	39.0	39.0	21.0	45.3	24.3
Total Split (%)	20.3%	30.8%	19.2%	29.8%	29.8%	12.3%	32.5%	32.5%	17.5%	37.8%	20.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	14.2	27.0	15.2	27.9	27.9	8.0	30.0	30.0	14.1	37.7	53.9
Actuated g/C Ratio	0.13	0.25	0.14	0.26	0.26	0.07	0.28	0.28	0.13	0.35	0.50
v/c Ratio	0.70	0.85	0.77	0.59	0.20	0.47	0.85	0.22	0.77	0.64	0.15
Control Delay	64.9	58.4	69.2	39.1	1.7	65.3	47.8	3.4	71.8	34.4	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	58.4	69.2	39.1	1.7	65.3	47.8	3.4	71.8	34.4	2.9
LOS	E	E	E	D	A	E	D	A	E	C	A
Approach Delay		60.3		41.0			43.4			36.6	
Approach LOS		E		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 43.4

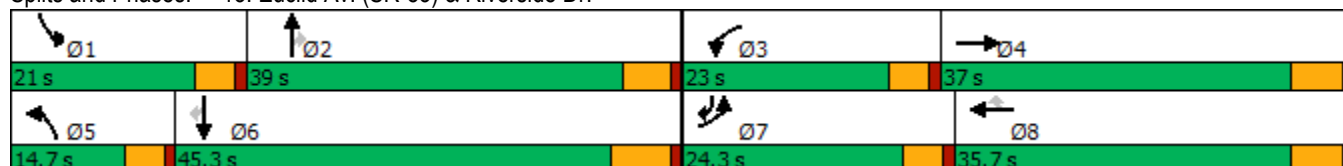
Intersection LOS: D

Intersection Capacity Utilization 76.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.



HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	302	39	156	466	90	50	728	107	145	688	107
Future Volume (veh/h)	134	302	39	156	466	90	50	728	107	145	688	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	147	332	19	171	512	41	55	800	47	159	756	54
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	382	22	202	829	369	67	964	430	189	1221	711
Arrive On Green	0.11	0.23	0.23	0.13	0.25	0.25	0.04	0.29	0.29	0.12	0.36	0.36
Sat Flow, veh/h	1594	1658	95	1594	3367	1500	1594	3367	1502	1594	3367	1500
Grp Volume(v), veh/h	147	0	351	171	512	41	55	800	47	159	756	54
Grp Sat Flow(s),veh/h/ln	1594	0	1753	1594	1683	1500	1594	1683	1502	1594	1683	1500
Q Serve(g_s), s	8.2	0.0	17.4	9.5	12.2	1.9	3.1	20.1	2.1	8.8	16.7	1.8
Cycle Q Clear(g_c), s	8.2	0.0	17.4	9.5	12.2	1.9	3.1	20.1	2.1	8.8	16.7	1.8
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	0	404	202	829	369	67	964	430	189	1221	711
V/C Ratio(X)	0.83	0.00	0.87	0.85	0.62	0.11	0.82	0.83	0.11	0.84	0.62	0.08
Avail Cap(c_a), veh/h	347	0	605	324	1114	496	178	1251	558	289	1445	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	0.0	33.5	38.6	30.3	26.4	42.9	30.2	23.8	39.0	23.7	13.0
Incr Delay (d2), s/veh	3.8	0.0	8.7	5.9	0.8	0.1	8.6	3.8	0.1	7.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	7.9	3.9	4.7	0.7	1.3	7.8	0.7	3.7	6.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	42.2	44.5	31.0	26.5	51.5	34.0	23.9	46.8	24.3	13.0
LnGrp LOS	D	A	D	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h	498			724			902			969		
Approach Delay, s/veh	42.5			34.0			34.5			27.4		
Approach LOS	D			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	32.4	16.0	26.6	8.4	39.3	14.6	28.1				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.4	* 34	18.4	31.2	10.1	38.8	19.7	29.9				
Max Q Clear Time (g_c+l1), s	10.8	22.1	11.5	19.4	5.1	18.7	10.2	14.2				
Green Ext Time (p_c), s	0.1	3.8	0.1	1.4	0.0	5.0	0.1	2.8				

Intersection Summary

HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	78	128	28	110	190	24	750	150	52	753	93
Future Volume (vph)	78	128	28	110	190	24	750	150	52	753	93
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	53.0	53.0	53.0	53.0	53.0	13.0	50.0	50.0	17.0	54.0	54.0
Total Split (%)	44.2%	44.2%	44.2%	44.2%	44.2%	10.8%	41.7%	41.7%	14.2%	45.0%	45.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	29.1	29.1	29.1		29.1	6.3	47.1	47.1	7.9	51.7	51.7
Actuated g/C Ratio	0.30	0.30	0.30		0.30	0.06	0.48	0.48	0.08	0.53	0.53
v/c Ratio	0.37	0.25	0.06		0.83	0.25	0.48	0.21	0.42	0.44	0.12
Control Delay	32.4	27.1	0.2		48.2	54.3	21.3	12.2	56.3	18.0	4.6
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.4	27.1	0.2		48.2	54.3	21.3	12.2	56.3	18.0	4.6
LOS	C	C	A		D	D	C	B	E	B	A
Approach Delay		25.6			48.2		20.6			18.8	
Approach LOS		C			D		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 97.6

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 24.5

Intersection LOS: C

Intersection Capacity Utilization 73.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	50 s	53 s
		
Ø5	Ø6	Ø8
13 s	54 s	53 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	128	28	110	190	51	24	750	150	52	753	93
Future Volume (veh/h)	78	128	28	110	190	51	24	750	150	52	753	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	81	133	12	115	198	43	25	781	126	54	784	72
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	517	438	164	242	49	41	1641	732	66	1695	756
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.49	0.49	0.04	0.50	0.50
Sat Flow, veh/h	1018	1772	1502	388	830	167	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	81	133	12	356	0	0	25	781	126	54	784	72
Grp Sat Flow(s),veh/h/ln	1018	1772	1502	1385	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	5.4	0.5	18.1	0.0	0.0	1.5	14.6	4.4	3.2	14.2	2.4
Cycle Q Clear(g_c), s	10.7	5.4	0.5	23.5	0.0	0.0	1.5	14.6	4.4	3.2	14.2	2.4
Prop In Lane	1.00		1.00	0.32		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	517	438	455	0	0	41	1641	732	66	1695	756
V/C Ratio(X)	0.31	0.26	0.03	0.78	0.00	0.00	0.62	0.48	0.17	0.81	0.46	0.10
Avail Cap(c_a), veh/h	478	887	751	766	0	0	142	1641	732	210	1695	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	25.6	23.8	32.6	0.0	0.0	45.5	16.1	13.5	44.8	15.2	12.2
Incr Delay (d2), s/veh	0.6	0.3	0.0	3.0	0.0	0.0	5.5	1.0	0.5	8.6	0.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.2	0.2	7.6	0.0	0.0	0.6	5.0	1.4	1.3	4.8	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	25.8	23.9	35.6	0.0	0.0	51.0	17.1	14.0	53.4	16.1	12.5
LnGrp LOS	C	C	C	D	A	A	D	B	B	D	B	B
Approach Vol, veh/h	226				356				932			
Approach Delay, s/veh	26.5				35.6				17.6			
Approach LOS	C				D				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	52.5		33.3	7.0	54.0		33.3				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 45		47.2	8.4	47.5		47.2				
Max Q Clear Time (g_c+I1), s	5.2	16.6		12.7	3.5	16.2		25.5				
Green Ext Time (p_c), s	0.0	5.4		1.1	0.0	5.3		2.0				

Intersection Summary

HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	13	0	952	906	5
Future Vol, veh/h	0	13	0	952	906	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	14	0	1035	985	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	493	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	522	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	522	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.1	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 522		-	-		
HCM Lane V/C Ratio	- 0.027		-	-		
HCM Control Delay (s)	- 12.1		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 0.1		-	-		

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	71	0	952	815	105
Future Vol, veh/h	0	71	0	952	815	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	77	0	1035	886	114
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	443	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	562	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	562	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	12.4	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	562	-	-		
HCM Lane V/C Ratio	-	0.137	-	-		
HCM Control Delay (s)	-	12.4	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.5	-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	250	70	92	25	99	159	620	21	47	726	113
Future Volume (vph)	250	70	92	25	99	159	620	21	47	726	113
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	22.0	51.5	51.5	13.5	43.0	14.0	44.0	44.0	11.0	41.0	41.0
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	11.7%	36.7%	36.7%	9.2%	34.2%	34.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	19.0	33.7	33.7	10.3	15.8	10.8	34.7	34.7	6.7	26.4	26.4
Actuated g/C Ratio	0.21	0.36	0.36	0.11	0.17	0.12	0.38	0.38	0.07	0.29	0.29
v/c Ratio	0.81	0.12	0.16	0.15	0.59	0.91	0.52	0.03	0.43	0.80	0.23
Control Delay	58.5	23.5	6.1	45.9	36.6	90.7	26.7	0.1	57.8	38.4	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.5	23.5	6.1	45.9	36.6	90.7	26.7	0.1	57.8	38.4	5.4
LOS	E	C	A	D	D	F	C	A	E	D	A
Approach Delay		40.8			37.8		38.7			35.2	
Approach LOS		D			D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 92.5

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 37.7

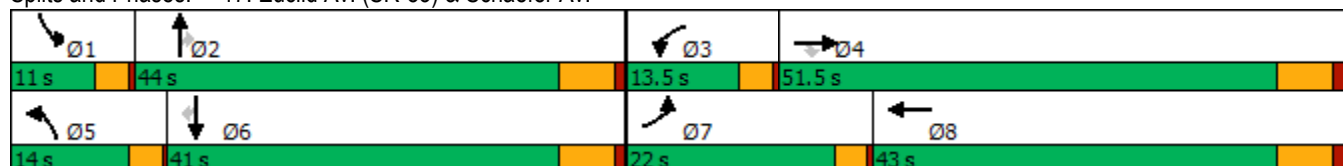
Intersection LOS: D

Intersection Capacity Utilization 74.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	70	92	25	99	73	159	620	21	47	726	113
Future Volume (veh/h)	250	70	92	25	99	73	159	620	21	47	726	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	263	74	72	26	104	63	167	653	16	49	764	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	469	397	89	136	83	199	1264	564	67	985	440
Arrive On Green	0.19	0.26	0.26	0.06	0.13	0.13	0.13	0.38	0.38	0.04	0.29	0.29
Sat Flow, veh/h	1594	1772	1502	1594	1033	626	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	263	74	72	26	0	167	167	653	16	49	764	96
Grp Sat Flow(s),veh/h/ln	1594	1772	1502	1594	0	1659	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	12.2	2.4	2.8	1.2	0.0	7.4	7.8	11.5	0.5	2.3	15.8	3.7
Cycle Q Clear(g_c), s	12.2	2.4	2.8	1.2	0.0	7.4	7.8	11.5	0.5	2.3	15.8	3.7
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	469	397	89	0	219	199	1264	564	67	985	440
V/C Ratio(X)	0.88	0.16	0.18	0.29	0.00	0.76	0.84	0.52	0.03	0.73	0.78	0.22
Avail Cap(c_a), veh/h	387	1034	876	209	0	783	219	1677	748	157	1545	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	21.5	21.7	34.6	0.0	32.0	32.6	18.5	15.0	36.1	24.7	20.4
Incr Delay (d2), s/veh	14.1	0.1	0.2	0.7	0.0	4.1	20.4	0.3	0.0	5.4	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.9	0.9	0.5	0.0	3.0	3.8	3.8	0.2	0.9	5.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	21.6	21.8	35.3	0.0	36.0	53.0	18.8	15.1	41.5	26.0	20.6
LnGrp LOS	D	C	C	D	A	D	D	B	B	D	C	C
Approach Vol, veh/h		409			193			836			909	
Approach Delay, s/veh		36.2			35.9			25.6			26.3	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.7	34.6	7.7	27.2	13.0	28.3	17.8	17.1				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	7.5	38.0	10.0	44.5	10.5	35.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	4.3	13.5	3.2	4.8	9.8	17.8	14.2	9.4				
Green Ext Time (p_c), s	0.0	3.9	0.0	0.4	0.0	4.5	0.2	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			28.6									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	72	126	54	86	261	121	684	53	68	640	98
Future Volume (vph)	72	126	54	86	261	121	684	53	68	640	98
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	16.0	50.0	50.0	16.0	50.0	50.0
Total Split (%)	45.0%	45.0%	45.0%	45.0%	45.0%	13.3%	41.7%	41.7%	13.3%	41.7%	41.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.0	21.0	21.0	21.0	21.0	8.3	21.8	21.8	8.3	21.9	21.9
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.12	0.33	0.33	0.12	0.33	0.33
v/c Ratio	0.29	0.23	0.11	0.25	0.60	0.35	0.64	0.10	0.36	0.60	0.18
Control Delay	23.2	20.2	5.9	21.3	25.3	36.0	24.2	5.0	39.0	23.1	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.2	20.2	5.9	21.3	25.3	36.0	24.2	5.0	39.0	23.1	5.9
LOS	C	C	A	C	C	D	C	A	D	C	A
Approach Delay		17.9			24.5		24.6			22.4	
Approach LOS		B			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 66.6

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 23.1

Intersection LOS: C

Intersection Capacity Utilization 67.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
16 s	50 s	54 s
		
Ø5	Ø6	Ø8
16 s	50 s	54 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	126	54	86	261	60	121	684	53	68	640	98
Future Volume (veh/h)	72	126	54	86	261	60	121	684	53	68	640	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	74	130	27	89	269	53	125	705	40	70	660	66
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	269	526	439	407	426	84	237	1066	476	98	1000	446
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.08	0.32	0.32	0.06	0.30	0.30
Sat Flow, veh/h	946	1772	1481	1100	1438	283	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	74	130	27	89	0	322	125	705	40	70	660	66
Grp Sat Flow(s),veh/h/ln	946	1772	1481	1100	0	1721	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	3.7	2.8	0.7	3.4	0.0	8.2	2.1	9.2	0.9	2.2	8.7	1.6
Cycle Q Clear(g_c), s	11.9	2.8	0.7	6.2	0.0	8.2	2.1	9.2	0.9	2.2	8.7	1.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	526	439	407	0	510	237	1066	476	98	1000	446
V/C Ratio(X)	0.27	0.25	0.06	0.22	0.00	0.63	0.53	0.66	0.08	0.71	0.66	0.15
Avail Cap(c_a), veh/h	864	1640	1371	1099	0	1593	716	2917	1301	392	2917	1301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	13.6	12.8	15.9	0.0	15.5	22.4	15.0	12.2	23.4	15.6	13.1
Incr Delay (d2), s/veh	0.5	0.2	0.1	0.3	0.0	1.3	0.7	0.7	0.1	3.5	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	0.2	0.7	0.0	2.7	0.6	2.6	0.2	0.8	2.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	13.8	12.9	16.2	0.0	16.7	23.1	15.7	12.3	26.9	16.4	13.3
LnGrp LOS	C	B	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		231			411			870			796	
Approach Delay, s/veh		16.1			16.6			16.6			17.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	22.1		22.1	7.6	21.1		22.1				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	12.5	44.0		47.0	12.5	44.0		47.0				
Max Q Clear Time (g_c+I1), s	4.2	11.2		13.9	4.1	10.7		10.2				
Green Ext Time (p_c), s	0.0	4.6		1.1	0.1	4.4		2.2				
Intersection Summary												
HCM 6th Ctrl Delay				16.7								
HCM 6th LOS				B								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	49	71	101	87	254	111	651	62	82	633	30
Future Volume (vph)	49	71	101	87	254	111	651	62	82	633	30
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	52.0	52.0	52.0	52.0	52.0	23.0	49.0	49.0	19.0	45.0	45.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%	19.2%	40.8%	40.8%	15.8%	37.5%	37.5%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	23.7	23.7	23.7	23.7	23.7	11.4	23.5	23.5	9.9	22.2	22.2
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.16	0.34	0.34	0.14	0.32	0.32
v/c Ratio	0.27	0.13	0.18	0.23	0.68	0.45	0.61	0.12	0.39	0.63	0.06
Control Delay	24.1	19.2	5.3	21.0	27.2	38.4	24.1	10.0	39.2	25.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	19.2	5.3	21.0	27.2	38.4	24.1	10.0	39.2	25.7	0.2
LOS	C	B	A	C	C	D	C	B	D	C	A
Approach Delay		13.9			26.1		24.9			26.2	
Approach LOS		B			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 69.5

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 24.5

Intersection LOS: C

Intersection Capacity Utilization 67.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
19 s	49 s	52 s
		
Ø5	Ø6	Ø8
23 s	45 s	52 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	71	101	87	254	124	111	651	62	82	633	30
Future Volume (veh/h)	49	71	101	87	254	124	111	651	62	82	633	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	52	76	66	93	270	112	118	693	43	87	673	21
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	553	469	463	371	154	148	1100	491	114	1027	458
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.09	0.33	0.33	0.07	0.31	0.31
Sat Flow, veh/h	896	1772	1502	1115	1190	493	1594	3367	1502	1594	3367	1500
Grp Volume(v), veh/h	52	76	66	93	0	382	118	693	43	87	673	21
Grp Sat Flow(s),veh/h/ln	896	1772	1502	1115	0	1683	1594	1683	1502	1594	1683	1500
Q Serve(g_s), s	2.6	1.5	1.5	3.2	0.0	9.8	3.5	8.4	1.0	2.6	8.4	0.5
Cycle Q Clear(g_c), s	12.4	1.5	1.5	4.6	0.0	9.8	3.5	8.4	1.0	2.6	8.4	0.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	553	469	463	0	525	148	1100	491	114	1027	458
V/C Ratio(X)	0.21	0.14	0.14	0.20	0.00	0.73	0.80	0.63	0.09	0.77	0.66	0.05
Avail Cap(c_a), veh/h	843	1731	1467	1204	0	1644	643	3017	1346	511	2739	1220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	11.9	12.0	13.6	0.0	14.8	21.5	13.8	11.3	22.0	14.6	11.8
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.2	0.0	1.4	7.1	0.6	0.1	7.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.4	0.6	0.0	3.0	1.3	2.3	0.2	1.0	2.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	12.0	12.1	13.8	0.0	16.2	28.5	14.4	11.3	29.8	15.3	11.9
LnGrp LOS	C	B	B	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		194			475			854			781	
Approach Delay, s/veh		14.3			15.7			16.2			16.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	21.5		19.9	8.0	20.4		19.9				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	15.5	43.3		47.2	19.5	39.3		47.2				
Max Q Clear Time (g_c+I1), s	4.6	10.4		14.4	5.5	10.4		11.8				
Green Ext Time (p_c), s	0.1	4.5		0.7	0.1	4.2		2.1				
Intersection Summary												
HCM 6th Ctrl Delay				16.2								
HCM 6th LOS				B								

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	29	733	60	19	314	26	52	21	31
Future Volume (vph)	29	733	60	19	314	26	52	21	31
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	18.0	66.0	66.0	17.0	65.0	37.0	37.0	37.0	37.0
Total Split (%)	15.0%	55.0%	55.0%	14.2%	54.2%	30.8%	30.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.1	23.5	23.5	5.8	21.2		12.2		12.2
Actuated g/C Ratio	0.14	0.55	0.55	0.13	0.49		0.28		0.28
v/c Ratio	0.14	0.43	0.08	0.09	0.22		0.23		0.17
Control Delay	23.2	10.3	4.5	23.6	10.8		15.1		13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	23.2	10.3	4.5	23.6	10.8		15.1		13.7
LOS	C	B	A	C	B		B		B
Approach Delay		10.3			11.5		15.1		13.7
Approach LOS		B			B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 43

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 11.1

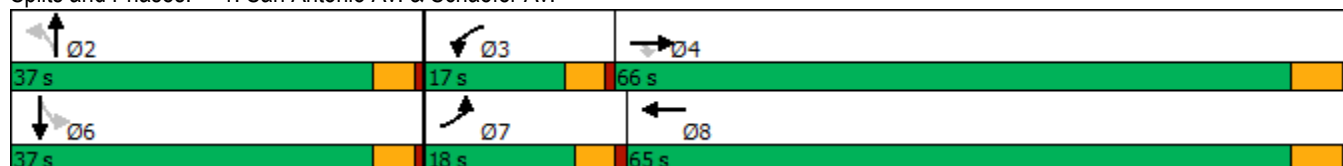
Intersection LOS: B

Intersection Capacity Utilization 44.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	733	60	19	314	23	26	52	17	21	31	18
Future Volume (veh/h)	29	733	60	19	314	23	26	52	17	21	31	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	31	788	49	20	338	24	28	56	12	23	33	7
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	1306	568	40	1199	85	172	247	43	199	223	37
Arrive On Green	0.04	0.39	0.39	0.02	0.38	0.38	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1594	3367	1464	1594	3184	225	263	1170	205	359	1057	177
Grp Volume(v), veh/h	31	788	49	20	178	184	96	0	0	63	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1464	1594	1683	1725	1637	0	0	1592	0	0
Q Serve(g_s), s	0.8	7.5	0.8	0.5	2.9	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	7.5	0.8	0.5	2.9	3.0	1.8	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.13	0.29		0.12	0.37		0.11
Lane Grp Cap(c), veh/h	58	1306	568	40	634	650	462	0	0	459	0	0
V/C Ratio(X)	0.53	0.60	0.09	0.50	0.28	0.28	0.21	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	535	5079	2208	495	2497	2560	1404	0	0	1370	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.9	9.8	7.7	19.2	8.7	8.7	13.1	0.0	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.5	0.1	3.6	0.2	0.2	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.7	0.2	0.2	0.7	0.7	0.6	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	10.2	7.8	22.8	8.9	8.9	13.4	0.0	0.0	13.0	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		868			382			96			63	
Approach Delay, s/veh		10.5			9.6			13.4			13.0	
Approach LOS		B			A			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.0	5.6	21.3		13.0	6.1	20.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		32.4	12.4	60.2		32.4	13.4	59.2				
Max Q Clear Time (g_c+I1), s		3.8	2.5	9.5		3.2	2.8	5.0				
Green Ext Time (p_c), s		0.5	0.0	6.0		0.3	0.0	2.0				
Intersection Summary												
HCM 6th Ctrl Delay			10.6									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	32	684	24	5	395	16	25	30	10	33
Future Volume (vph)	32	684	24	5	395	16	25	30	10	33
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	19.0	67.0	67.0	14.0	62.0	62.0	39.0	39.0	39.0	39.0
Total Split (%)	15.8%	55.8%	55.8%	11.7%	51.7%	51.7%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.3	25.8	25.8	5.7	25.5	25.5		13.0		13.0
Actuated g/C Ratio	0.16	0.64	0.64	0.14	0.64	0.64		0.32		0.32
v/c Ratio	0.14	0.35	0.03	0.03	0.21	0.02		0.15		0.16
Control Delay	22.0	9.5	1.7	23.4	9.1	0.1		12.3		9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	22.0	9.5	1.7	23.4	9.1	0.1		12.3		9.8
LOS	C	A	A	C	A	A		B		A
Approach Delay		9.7			8.9			12.3		9.8
Approach LOS		A			A			B		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 40

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 9.6

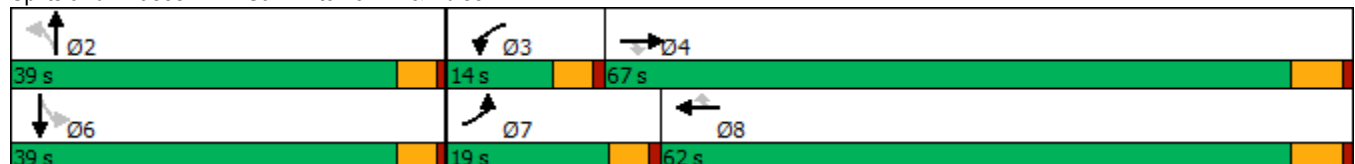
Intersection LOS: A

Intersection Capacity Utilization 45.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	684	24	5	395	16	25	30	10	10	33	33
Future Volume (veh/h)	32	684	24	5	395	16	25	30	10	10	33	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	36	760	25	6	439	15	28	33	4	11	37	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	1299	567	13	1186	528	229	209	20	140	223	83
Arrive On Green	0.04	0.39	0.39	0.01	0.35	0.35	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1594	3367	1468	1594	3367	1499	446	1038	97	128	1110	413
Grp Volume(v), veh/h	36	760	25	6	439	15	65	0	0	64	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1499	1582	0	0	1651	0	0
Q Serve(g_s), s	0.8	6.6	0.4	0.1	3.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	6.6	0.4	0.1	3.6	0.2	1.1	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.43		0.06	0.17		0.25
Lane Grp Cap(c), veh/h	67	1299	567	13	1186	528	457	0	0	446	0	0
V/C Ratio(X)	0.54	0.58	0.04	0.47	0.37	0.03	0.14	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	620	5564	2426	405	5109	2276	1553	0	0	1610	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.4	9.0	7.1	18.3	8.9	7.8	12.3	0.0	0.0	12.3	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.4	0.0	9.4	0.2	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	0.1	0.1	0.8	0.0	0.4	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	9.4	7.1	27.7	9.1	7.9	12.4	0.0	0.0	12.4	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		821			460			65			64	
Approach Delay, s/veh		9.8			9.3			12.4			12.4	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.0	4.9	20.1		12.0	6.1	18.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.4	9.4	61.2		34.4	14.4	56.2				
Max Q Clear Time (g_c+I1), s		3.1	2.1	8.6		3.2	2.8	5.6				
Green Ext Time (p_c), s		0.3	0.0	5.6		0.3	0.0	2.9				
Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			A									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	23	358	63	194	36	155	28	122
Future Volume (vph)	23	358	63	194	36	155	28	122
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	45.0	17.0	48.0	18.0	40.0	18.0	40.0
Total Split (%)	11.7%	37.5%	14.2%	40.0%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	18.3	14.1	20.7	18.4	6.6	12.6	6.4	12.5
Actuated g/C Ratio	0.38	0.29	0.43	0.38	0.14	0.26	0.13	0.26
v/c Ratio	0.06	0.47	0.16	0.18	0.18	0.32	0.14	0.17
Control Delay	10.1	17.9	10.3	12.3	27.9	12.2	28.2	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	17.9	10.3	12.3	27.9	12.2	28.2	18.5
LOS	B	B	B	B	C	B	C	B
Approach Delay		17.5		11.8		14.1		20.2
Approach LOS		B		B		B		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 48.4

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 15.7

Intersection LOS: B

Intersection Capacity Utilization 48.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

 Ø1	 Ø2	 Ø3	 Ø4
18 s	40 s	17 s	45 s
 Ø5	 Ø6	 Ø7	 Ø8
18 s	40 s	14 s	48 s

HCM 6th Signalized Intersection Summary
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	358	55	63	194	16	36	155	114	28	122	10
Future Volume (veh/h)	23	358	55	63	194	16	36	155	114	28	122	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	25	389	47	68	211	14	39	168	75	30	133	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	693	83	351	841	55	68	548	234	55	784	12
Arrive On Green	0.03	0.23	0.23	0.06	0.26	0.26	0.04	0.24	0.24	0.03	0.23	0.23
Sat Flow, veh/h	1594	3020	362	1594	3204	211	1594	2291	978	1594	3394	51
Grp Volume(v), veh/h	25	216	220	68	110	115	39	121	122	30	66	69
Grp Sat Flow(s),veh/h/ln	1594	1683	1699	1594	1683	1732	1594	1683	1586	1594	1683	1761
Q Serve(g_s), s	0.6	5.3	5.4	1.5	2.4	2.5	1.1	2.8	3.0	0.9	1.5	1.5
Cycle Q Clear(g_c), s	0.6	5.3	5.4	1.5	2.4	2.5	1.1	2.8	3.0	0.9	1.5	1.5
Prop In Lane	1.00		0.21	1.00		0.12	1.00		0.62	1.00		0.03
Lane Grp Cap(c), veh/h	416	386	390	351	442	454	68	403	379	55	389	407
V/C Ratio(X)	0.06	0.56	0.57	0.19	0.25	0.25	0.58	0.30	0.32	0.55	0.17	0.17
Avail Cap(c_a), veh/h	688	1405	1419	672	1513	1556	455	1240	1168	455	1240	1298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	16.0	16.0	12.6	13.7	13.7	22.1	14.7	14.7	22.3	14.4	14.4
Incr Delay (d2), s/veh	0.0	1.3	1.3	0.1	0.3	0.3	2.9	0.4	0.5	3.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	1.8	0.4	0.7	0.8	0.4	0.9	0.9	0.3	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	17.3	17.3	12.7	14.0	14.0	24.9	15.1	15.2	25.4	14.6	14.6
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		461			293			282			165	
Approach Delay, s/veh		17.1			13.7			16.5			16.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.2	16.6	7.5	16.6	6.6	16.3	6.0	18.1				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	34.6	12.4	39.2	13.4	34.6	9.4	42.2				
Max Q Clear Time (g_c+I1), s	2.9	5.0	3.5	7.4	3.1	3.5	2.6	4.5				
Green Ext Time (p_c), s	0.0	1.3	0.0	2.4	0.0	0.7	0.0	1.2				
Intersection Summary												
HCM 6th Ctrl Delay			16.0									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	6	301	17	13	207
Future Vol, veh/h	21	6	301	17	13	207
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	327	18	14	225

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	477	173	0
Stage 1	336	-	-
Stage 2	141	-	-
Critical Hdwy	6.84	6.94	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	-
Pot Cap-1 Maneuver	517	840	-
Stage 1	696	-	-
Stage 2	871	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	511	840	-
Mov Cap-2 Maneuver	577	-	-
Stage 1	696	-	-
Stage 2	861	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	620	1211
HCM Lane V/C Ratio	-	-	0.047	0.012
HCM Control Delay (s)	-	-	11.1	8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↘			↗↘
Traffic Vol, veh/h	0	3	314	19	0	228
Future Vol, veh/h	0	3	314	19	0	228
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	341	21	0	248
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	181	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	831	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	831	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.3	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	831		-		
HCM Lane V/C Ratio	-	0.004		-		
HCM Control Delay (s)	-	9.3		-		
HCM Lane LOS	-	A		-		
HCM 95th %tile Q(veh)	-	0		-		

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	80	596	21	234	76	169	62	118
Future Volume (vph)	80	596	21	234	76	169	62	118
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	22.0	51.0	12.0	41.0	24.0	41.0	16.0	33.0
Total Split (%)	18.3%	42.5%	10.0%	34.2%	20.0%	34.2%	13.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	10.6	78.5	6.3	70.3	10.3	13.9	8.8	12.5
Actuated g/C Ratio	0.09	0.65	0.05	0.59	0.09	0.12	0.07	0.10
v/c Ratio	0.59	0.31	0.26	0.17	0.58	0.53	0.55	0.45
Control Delay	68.8	11.9	61.5	13.0	68.7	48.9	70.5	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.8	11.9	61.5	13.0	68.7	48.9	70.5	39.1
LOS	E	B	E	B	E	D	E	D
Approach Delay		18.1		16.0		54.3		47.6
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 28.3

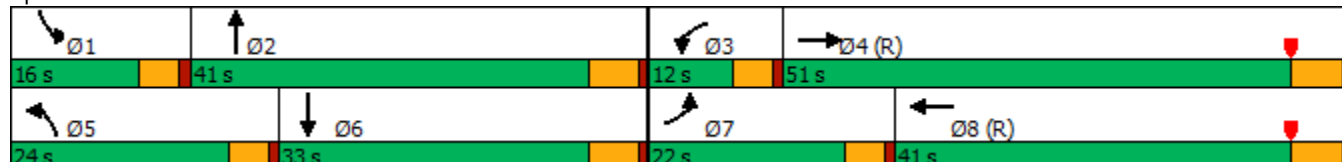
Intersection LOS: C

Intersection Capacity Utilization 56.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	596	62	21	234	84	76	169	35	62	118	48
Future Volume (veh/h)	80	596	62	21	234	84	76	169	35	62	118	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	82	608	59	21	239	79	78	172	33	63	120	31
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	2001	194	33	1511	487	97	320	60	78	271	67
Arrive On Green	0.06	0.65	0.65	0.02	0.60	0.60	0.06	0.11	0.11	0.05	0.10	0.10
Sat Flow, veh/h	1594	3096	300	1594	2503	806	1594	2815	527	1594	2652	660
Grp Volume(v), veh/h	82	330	337	21	159	159	78	101	104	63	75	76
Grp Sat Flow(s),veh/h/ln	1594	1683	1713	1594	1683	1626	1594	1683	1658	1594	1683	1628
Q Serve(g_s), s	6.1	10.4	10.4	1.6	5.0	5.2	5.8	6.8	7.1	4.7	5.0	5.3
Cycle Q Clear(g_c), s	6.1	10.4	10.4	1.6	5.0	5.2	5.8	6.8	7.1	4.7	5.0	5.3
Prop In Lane	1.00		0.18	1.00		0.50	1.00		0.32	1.00		0.41
Lane Grp Cap(c), veh/h	101	1088	1107	33	1016	982	97	191	188	78	172	166
V/C Ratio(X)	0.81	0.30	0.30	0.63	0.16	0.16	0.81	0.53	0.55	0.80	0.43	0.46
Avail Cap(c_a), veh/h	231	1088	1107	98	1016	982	258	499	492	151	387	374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	9.3	9.3	58.3	10.4	10.4	55.7	50.2	50.3	56.5	50.6	50.8
Incr Delay (d2), s/veh	5.2	0.7	0.6	7.0	0.3	0.4	5.8	2.2	2.5	7.0	1.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.6	3.7	0.7	1.8	1.8	2.4	2.9	3.0	2.0	2.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	10.0	10.0	65.3	10.7	10.8	61.4	52.4	52.7	63.5	52.3	52.7
LnGrp LOS	E	A	A	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		749			339			283			214	
Approach Delay, s/veh		15.5			14.1			55.0			55.8	
Approach LOS		B			B			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	19.0	7.1	83.4	11.9	17.7	12.2	78.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	11.4	35.6	7.4	45.2	19.4	27.6	17.4	35.2				
Max Q Clear Time (g_c+I1), s	6.7	9.1	3.6	12.4	7.8	7.3	8.1	7.2				
Green Ext Time (p_c), s	0.0	1.1	0.0	4.0	0.1	0.7	0.0	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			27.7									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	103	561	20	13	307	40	37	127	11	108
Future Volume (vph)	103	561	20	13	307	40	37	127	11	108
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	27.0	53.0	53.0	13.0	39.0	39.0	17.0	41.0	13.0	37.0
Total Split (%)	22.5%	44.2%	44.2%	10.8%	32.5%	32.5%	14.2%	34.2%	10.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	9.3	23.2	23.2	6.0	13.5	13.5	6.9	15.6	5.9	13.2
Actuated g/C Ratio	0.17	0.43	0.43	0.11	0.25	0.25	0.13	0.29	0.11	0.24
v/c Ratio	0.42	0.43	0.03	0.08	0.40	0.09	0.21	0.15	0.07	0.23
Control Delay	30.3	14.4	0.1	32.6	22.2	0.4	31.5	17.2	32.7	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	14.4	0.1	32.6	22.2	0.4	31.5	17.2	32.7	14.9
LOS	C	B	A	C	C	A	C	B	C	B
Approach Delay		16.4			20.1			20.3		16.0
Approach LOS		B			C			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 54.2

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 17.8

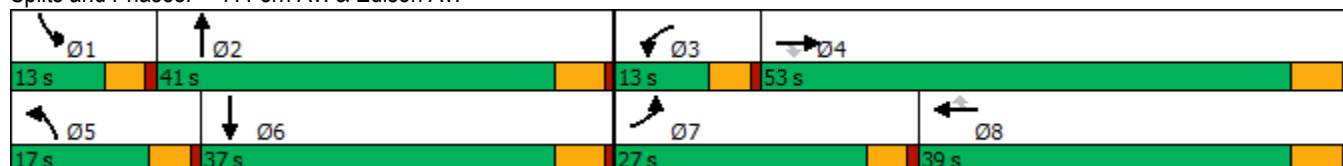
Intersection LOS: B

Intersection Capacity Utilization 50.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	561	20	13	307	40	37	127	6	11	108	60
Future Volume (veh/h)	103	561	20	13	307	40	37	127	6	11	108	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	113	616	14	14	337	33	41	140	6	12	119	45
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	984	439	28	747	333	70	786	34	25	507	183
Arrive On Green	0.09	0.29	0.29	0.02	0.22	0.22	0.04	0.24	0.24	0.02	0.21	0.21
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3290	140	1594	2413	870
Grp Volume(v), veh/h	113	616	14	14	337	33	41	71	75	12	81	83
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1747	1594	1683	1600
Q Serve(g_s), s	3.3	7.4	0.3	0.4	4.1	0.8	1.2	1.6	1.6	0.3	1.9	2.0
Cycle Q Clear(g_c), s	3.3	7.4	0.3	0.4	4.1	0.8	1.2	1.6	1.6	0.3	1.9	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.54
Lane Grp Cap(c), veh/h	141	984	439	28	747	333	70	402	417	25	354	336
V/C Ratio(X)	0.80	0.63	0.03	0.49	0.45	0.10	0.58	0.18	0.18	0.49	0.23	0.25
Avail Cap(c_a), veh/h	762	3392	1511	286	2386	1064	422	1279	1327	286	1136	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	14.4	11.8	22.8	15.8	14.5	22.0	14.2	14.2	22.9	15.3	15.4
Incr Delay (d2), s/veh	4.0	0.7	0.0	4.9	0.4	0.1	2.8	0.2	0.2	5.5	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.2	0.1	0.2	1.3	0.2	0.4	0.5	0.5	0.2	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	15.0	11.9	27.7	16.2	14.6	24.8	14.4	14.4	28.3	15.7	15.8
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		743			384			187			176	
Approach Delay, s/veh		16.5			16.5			16.7			16.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.3	16.6	5.4	19.5	6.7	15.2	8.7	16.2				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	35.6	8.4	47.2	12.4	31.6	22.4	33.2				
Max Q Clear Time (g_c+I1), s	2.3	3.6	2.4	9.4	3.2	4.0	5.3	6.1				
Green Ext Time (p_c), s	0.0	0.7	0.0	4.2	0.0	0.8	0.1	2.1				
Intersection Summary												
HCM 6th Ctrl Delay			16.5									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	564	236	34	51	54
Future Vol, veh/h	54	564	236	34	51	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	56	581	243	35	53	56
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	278	0	-	0	664	139
Stage 1	-	-	-	-	261	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1282	-	-	-	394	884
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	644	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1282	-	-	-	377	884
Mov Cap-2 Maneuver	-	-	-	-	482	-
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	644	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.7	0		11.3		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1282	-	-	-	482	884
HCM Lane V/C Ratio	0.043	-	-	-	0.109	0.063
HCM Control Delay (s)	7.9	-	-	-	13.4	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.2

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	94	431	164	62	142	105	125	0	132	120	0	86
Future Vol, veh/h	94	431	164	62	142	105	125	0	132	120	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	102	468	178	67	154	114	136	0	143	130	0	93
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	268	0	0	646	0	0	972	1163	323	783	1195	134
Stage 1	-	-	-	-	-	-	761	761	-	345	345	-
Stage 2	-	-	-	-	-	-	211	402	-	438	850	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1293	-	-	1127	-	-	315	254	*925	*453	241	890
Stage 1	-	-	-	-	-	-	526	524	-	*644	635	-
Stage 2	-	-	-	-	-	-	771	599	-	*872	471	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1293	-	-	1127	-	-	253	220	*925	*344	209	890
Mov Cap-2 Maneuver	-	-	-	-	-	-	349	316	-	*432	293	-
Stage 1	-	-	-	-	-	-	484	483	-	*593	598	-
Stage 2	-	-	-	-	-	-	649	564	-	*679	433	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			1.7			15.5			13.8		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	349	925	1293	-	-	1127	-	-	432	890		
HCM Lane V/C Ratio	0.389	0.155	0.079	-	-	0.06	-	-	0.302	0.105		
HCM Control Delay (s)	21.7	9.6	8	-	-	8.4	-	-	16.9	9.5		
HCM Lane LOS	C	A	A	-	-	A	-	-	C	A		
HCM 95th %tile Q(veh)	1.8	0.5	0.3	-	-	0.2	-	-	1.3	0.4		
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	371	1	388	241	870	740	488
Future Volume (vph)	371	1	388	241	870	740	488
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	34.0	82.0	48.0	48.0
Total Split (%)	31.7%	31.7%	31.7%	28.3%	68.3%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	24.7	24.7	24.7	21.5	84.8	58.8	58.8
Actuated g/C Ratio	0.21	0.21	0.21	0.18	0.71	0.49	0.49
v/c Ratio	0.81	0.76	0.57	0.80	0.37	0.45	0.50
Control Delay	62.4	48.2	19.5	75.8	6.3	23.3	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	62.4	48.2	19.5	75.8	6.4	23.3	4.0
LOS	E	D	B	E	A	C	A
Approach Delay		44.1			21.4	15.6	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 24.7

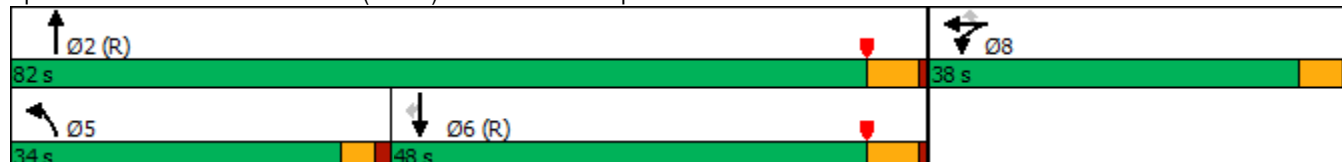
Intersection LOS: C

Intersection Capacity Utilization 70.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	371	1	388	241	870	0	0	740	488
Future Volume (veh/h)	0	0	0	371	1	388	241	870	0	0	740	488
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				475	0	180	254	916	0	0	779	294
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				554	0	247	278	2690	0	0	2002	893
Arrive On Green				0.16	0.00	0.16	0.31	1.00	0.00	0.00	0.56	0.56
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				475	0	180	254	916	0	0	779	294
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				15.6	0.0	13.0	16.5	0.0	0.0	0.0	14.7	11.9
Cycle Q Clear(g_c), s				15.6	0.0	13.0	16.5	0.0	0.0	0.0	14.7	11.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				554	0	247	278	2690	0	0	2002	893
V/C Ratio(X)				0.86	0.00	0.73	0.91	0.34	0.00	0.00	0.39	0.33
Avail Cap(c_a), veh/h				980	0	436	438	2690	0	0	2002	893
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.78	0.78	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.4	0.0	48.3	40.5	0.0	0.0	0.0	14.7	14.0
Incr Delay (d2), s/veh				1.5	0.0	1.6	9.7	0.3	0.0	0.0	0.6	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.9	0.0	5.1	6.6	0.1	0.0	0.0	5.7	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				50.9	0.0	49.8	50.2	0.3	0.0	0.0	15.2	15.0
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					655			1170			1073	
Approach Delay, s/veh					50.6			11.1			15.2	
Approach LOS					D			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		96.3			23.2	73.1		23.7				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		76.5			29.5	42.5		33.0				
Max Q Clear Time (g_c+I1), s		2.0			18.5	16.7		17.6				
Green Ext Time (p_c), s		11.7			0.3	9.6		1.1				
Intersection Summary												
HCM 6th Ctrl Delay				21.5								
HCM 6th LOS				C								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	273	1	838	390	292	819
Future Volume (vph)	273	1	838	390	292	819
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	49.0	49.0	36.0	85.0
Total Split (%)	29.2%	29.2%	40.8%	40.8%	30.0%	70.8%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	22.8	22.8	57.6	57.6	25.1	86.7
Actuated g/C Ratio	0.19	0.19	0.48	0.48	0.21	0.72
v/c Ratio	0.82	0.58	0.52	0.44	0.84	0.34
Control Delay	66.1	16.6	25.2	4.0	76.7	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	66.1	16.6	25.2	4.0	76.7	7.3
LOS	E	B	C	A	E	A
Approach Delay		41.5	18.5			25.6
Approach LOS		D	B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 25.2

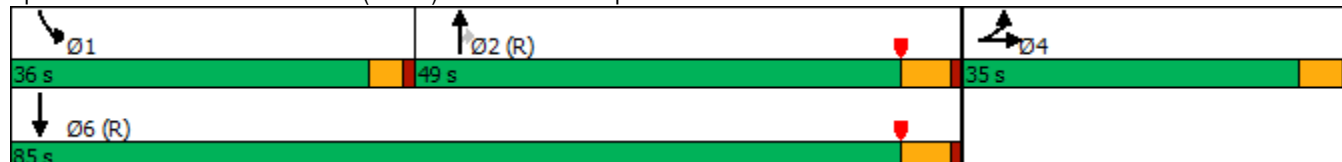
Intersection LOS: C

Intersection Capacity Utilization 70.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	1	214	0	0	0	0	838	390	292	819	0
Future Volume (veh/h)	273	1	214	0	0	0	0	838	390	292	819	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	206	119	121				0	891	244	311	871	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	286	137	139				0	1888	823	333	2672	0
Arrive On Green	0.16	0.16	0.16				0.00	0.53	0.53	0.37	1.00	0.00
Sat Flow, veh/h	1781	850	865				0	3647	1548	1781	3647	0
Grp Volume(v), veh/h	206	0	240				0	891	244	311	871	0
Grp Sat Flow(s),veh/h/ln	1781	0	1715				0	1777	1548	1781	1777	0
Q Serve(g_s), s	13.2	0.0	16.4				0.0	18.8	10.5	20.1	0.0	0.0
Cycle Q Clear(g_c), s	13.2	0.0	16.4				0.0	18.8	10.5	20.1	0.0	0.0
Prop In Lane	1.00		0.50				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	286	0	275				0	1888	823	333	2672	0
V/C Ratio(X)	0.72	0.00	0.87				0.00	0.47	0.30	0.93	0.33	0.00
Avail Cap(c_a), veh/h	445	0	429				0	1888	823	475	2672	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.87	0.87	0.82	0.82	0.00
Uniform Delay (d), s/veh	47.8	0.0	49.2				0.0	17.6	15.6	36.8	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	7.5				0.0	0.7	0.8	15.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	7.4				0.0	7.5	3.7	8.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	0.0	56.6				0.0	18.3	16.4	51.8	0.3	0.0
LnGrp LOS	D	A	E				A	B	B	D	A	A
Approach Vol, veh/h	446						1135			1182		
Approach Delay, s/veh	53.1						17.9			13.8		
Approach LOS	D						B			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	26.5	69.3	24.3		95.7							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	32.0	43.5	30.0		79.5							
Max Q Clear Time (g_c+I1), s	22.1	20.8	18.4		2.0							
Green Ext Time (p_c), s	0.3	10.0	0.9		10.9							
Intersection Summary												
HCM 6th Ctrl Delay	21.9											
HCM 6th LOS	C											
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	106	427	56	273	122	836	70	257	736	104
Future Volume (vph)	106	427	56	273	122	836	70	257	736	104
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	40.0	17.0	33.0	26.0	38.0	38.0	25.0	37.0	37.0
Total Split (%)	20.0%	33.3%	14.2%	27.5%	21.7%	31.7%	31.7%	20.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.1	22.6	8.1	17.2	12.1	33.1	33.1	13.0	34.0	34.0
Actuated g/C Ratio	0.12	0.24	0.09	0.18	0.13	0.35	0.35	0.14	0.36	0.36
v/c Ratio	0.59	0.68	0.43	0.64	0.63	0.47	0.12	0.65	0.40	0.17
Control Delay	55.3	36.8	54.4	34.1	55.1	27.0	0.4	48.3	25.9	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.3	36.8	54.4	34.1	55.1	27.0	0.4	48.3	25.9	2.4
LOS	E	D	D	C	E	C	A	D	C	A
Approach Delay		39.8		36.5		28.6			28.9	
Approach LOS		D		D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 95.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 32.1

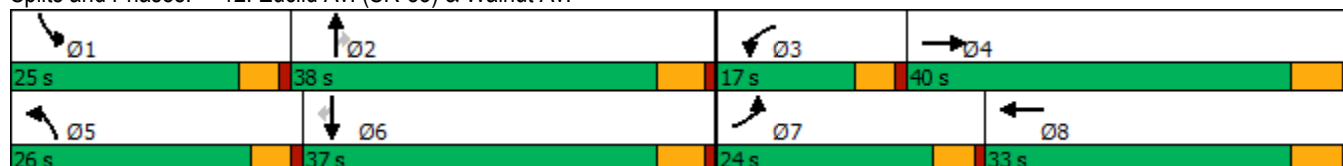
Intersection LOS: C

Intersection Capacity Utilization 65.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	427	119	56	273	140	122	836	70	257	736	104
Future Volume (veh/h)	106	427	119	56	273	140	122	836	70	257	736	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	109	440	97	58	281	126	126	862	61	265	759	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	586	128	71	394	172	155	2069	584	341	2157	600
Arrive On Green	0.08	0.21	0.21	0.04	0.17	0.17	0.10	0.39	0.39	0.11	0.41	0.41
Sat Flow, veh/h	1594	2809	614	1594	2337	1019	1594	5316	1499	3000	5316	1480
Grp Volume(v), veh/h	109	276	261	58	211	196	126	862	61	265	759	72
Grp Sat Flow(s),veh/h/ln	1594	1772	1651	1594	1772	1584	1594	1772	1499	1500	1772	1480
Q Serve(g_s), s	5.6	12.2	12.4	3.0	9.4	9.8	6.5	9.9	2.2	7.2	8.3	2.5
Cycle Q Clear(g_c), s	5.6	12.2	12.4	3.0	9.4	9.8	6.5	9.9	2.2	7.2	8.3	2.5
Prop In Lane	1.00		0.37	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	135	370	345	71	299	267	155	2069	584	341	2157	600
V/C Ratio(X)	0.81	0.75	0.76	0.82	0.71	0.73	0.81	0.42	0.10	0.78	0.35	0.12
Avail Cap(c_a), veh/h	369	724	674	236	575	514	407	2069	584	731	2157	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	31.1	31.1	39.7	32.9	33.0	37.1	18.6	16.3	36.1	17.2	15.5
Incr Delay (d2), s/veh	4.2	3.0	3.4	8.2	3.1	3.9	3.9	0.6	0.4	1.4	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	5.2	4.9	1.3	4.0	3.8	2.6	3.8	0.7	2.6	3.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	34.1	34.5	47.8	35.9	36.9	40.9	19.3	16.6	37.5	17.7	16.0
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		646			465			1049			1096	
Approach Delay, s/veh		35.6			37.8			21.7			22.4	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.1	38.0	8.3	23.3	12.7	39.4	11.7	19.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	20.4	32.6	12.4	34.2	21.4	31.6	19.4	27.2				
Max Q Clear Time (g_c+I1), s	9.2	11.9	5.0	14.4	8.5	10.3	7.6	11.8				
Green Ext Time (p_c), s	0.4	5.9	0.0	2.8	0.1	5.2	0.1	1.9				
Intersection Summary												
HCM 6th Ctrl Delay			27.0									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	124	404	146	451	60	66	796	182	100	650	144
Future Volume (vph)	124	404	146	451	60	66	796	182	100	650	144
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	20.6	41.1	41.1	15.9	40.2	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.1	32.9	13.8	33.6	33.6	8.8	31.5	31.5	10.1	34.3	54.1
Actuated g/C Ratio	0.12	0.30	0.13	0.31	0.31	0.08	0.29	0.29	0.09	0.31	0.50
v/c Ratio	0.68	0.89	0.76	0.46	0.12	0.54	0.86	0.34	0.71	0.64	0.18
Control Delay	66.6	57.5	73.0	33.2	0.8	67.8	47.9	6.4	77.4	38.0	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.6	57.5	73.0	33.2	0.8	67.8	47.9	6.4	77.4	38.0	3.3
LOS	E	E	E	C	A	E	D	A	E	D	A
Approach Delay		59.4		39.0			41.9			36.8	
Approach LOS		E		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 109.2

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 43.1

Intersection LOS: D

Intersection Capacity Utilization 80.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

 Ø1	 Ø2	 Ø3	 Ø4
16 s	40.2 s	20.6 s	43.2 s
 Ø5	 Ø6	 Ø7	 Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	404	46	146	451	60	66	796	182	100	650	144
Future Volume (veh/h)	124	404	46	146	451	60	66	796	182	100	650	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	129	421	24	152	470	30	69	829	110	104	677	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	473	27	181	1011	449	86	990	441	128	1079	628
Arrive On Green	0.10	0.29	0.29	0.11	0.30	0.30	0.05	0.29	0.29	0.08	0.32	0.32
Sat Flow, veh/h	1594	1660	95	1594	3367	1494	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	129	0	445	152	470	30	69	829	110	104	677	67
Grp Sat Flow(s),veh/h/ln	1594	0	1755	1594	1683	1494	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	7.5	0.0	23.0	8.8	10.7	1.4	4.0	21.8	5.3	6.1	16.2	2.6
Cycle Q Clear(g_c), s	7.5	0.0	23.0	8.8	10.7	1.4	4.0	21.8	5.3	6.1	16.2	2.6
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	0	500	181	1011	449	86	990	441	128	1079	628
V/C Ratio(X)	0.83	0.00	0.89	0.84	0.46	0.07	0.81	0.84	0.25	0.81	0.63	0.11
Avail Cap(c_a), veh/h	305	0	694	270	1257	558	191	1240	553	192	1204	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	32.4	41.1	26.9	23.6	44.2	31.3	25.4	42.8	27.3	16.7
Incr Delay (d2), s/veh	4.1	0.0	10.5	9.2	0.3	0.1	6.5	4.3	0.3	8.7	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	10.5	3.8	4.1	0.5	1.7	8.6	1.8	2.6	6.3	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	0.0	42.8	50.3	27.2	23.7	50.7	35.5	25.7	51.5	28.2	16.8
LnGrp LOS	D	A	D	D	C	C	D	D	C	D	C	B
Approach Vol, veh/h	574			652			1008			848		
Approach Delay, s/veh	43.5			32.4			35.5			30.2		
Approach LOS	D			C			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	34.3	15.3	32.7	9.7	36.8	13.9	34.2				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+I1), s	8.1	23.8	10.8	25.0	6.0	18.2	9.5	12.7				
Green Ext Time (p_c), s	0.0	4.0	0.1	2.0	0.0	4.1	0.1	2.9				

Intersection Summary

HCM 6th Ctrl Delay	34.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	85	314	20	96	149	34	919	253	49	708	67
Future Volume (vph)	85	314	20	96	149	34	919	253	49	708	67
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	52.3	52.3	52.3	52.3	52.3	12.0	52.9	52.9	14.8	55.7	55.7
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	10.0%	44.1%	44.1%	12.3%	46.4%	46.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	33.5	33.5	33.5		33.5	6.5	49.9	49.9	7.8	52.1	52.1
Actuated g/C Ratio	0.32	0.32	0.32		0.32	0.06	0.48	0.48	0.07	0.50	0.50
v/c Ratio	0.34	0.60	0.04		1.04	0.38	0.62	0.36	0.45	0.46	0.09
Control Delay	30.5	34.3	0.1		98.2	63.2	25.6	16.3	62.9	21.2	5.4
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	34.3	0.1		98.2	63.2	25.6	16.3	62.9	21.2	5.4
LOS	C	C	A		F	E	C	B	E	C	A
Approach Delay		31.9			98.2		24.7			22.5	
Approach LOS		C			F		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 104.6

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 32.6

Intersection LOS: C

Intersection Capacity Utilization 82.3%

ICU Level of Service E

Analysis Period (min) 15

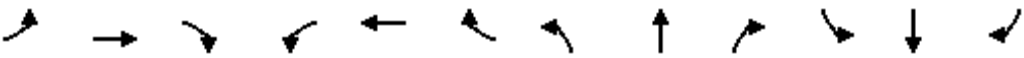
Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14.8 s	52.9 s	52.3 s
		
Ø5	Ø6	Ø8
12 s	55.7 s	52.3 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	314	20	96	149	33	34	919	253	49	708	67
Future Volume (veh/h)	85	314	20	96	149	33	34	919	253	49	708	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	91	338	5	103	160	27	37	988	203	53	761	54
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	615	521	139	199	30	50	1525	680	65	1558	695
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.03	0.45	0.45	0.04	0.46	0.46
Sat Flow, veh/h	1071	1772	1502	269	573	86	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	91	338	5	290	0	0	37	988	203	53	761	54
Grp Sat Flow(s),veh/h/ln	1071	1772	1502	929	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	16.4	0.2	17.3	0.0	0.0	2.4	24.2	9.1	3.5	16.7	2.1
Cycle Q Clear(g_c), s	12.3	16.4	0.2	33.7	0.0	0.0	2.4	24.2	9.1	3.5	16.7	2.1
Prop In Lane	1.00		1.00	0.36		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	292	615	521	368	0	0	50	1525	680	65	1558	695
V/C Ratio(X)	0.31	0.55	0.01	0.79	0.00	0.00	0.74	0.65	0.30	0.81	0.49	0.08
Avail Cap(c_a), veh/h	388	775	657	491	0	0	111	1525	680	153	1558	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	28.0	22.7	36.8	0.0	0.0	51.1	22.5	18.4	50.6	19.8	15.9
Incr Delay (d2), s/veh	0.6	0.8	0.0	6.1	0.0	0.0	7.8	2.1	1.1	8.5	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.7	0.1	7.6	0.0	0.0	1.0	8.9	3.1	1.5	6.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	28.8	22.7	42.9	0.0	0.0	58.9	24.7	19.5	59.1	20.9	16.1
LnGrp LOS	C	C	C	D	A	A	E	C	B	E	C	B
Approach Vol, veh/h	434			290			1228			868		
Approach Delay, s/veh	28.4			42.9			24.8			23.0		
Approach LOS	C			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	54.7		42.7	7.9	55.7		42.7				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	10.2	* 48		46.5	7.4	49.2		46.5				
Max Q Clear Time (g_c+I1), s	5.5	26.2		18.4	4.4	18.7		35.7				
Green Ext Time (p_c), s	0.0	6.9		2.3	0.0	5.1		1.2				

Intersection Summary

HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	8	0	1217	805	10
Future Vol, veh/h	0	8	0	1217	805	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	1323	875	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	438	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	567	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	567	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.4	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 567		-	-		
HCM Lane V/C Ratio	- 0.015		-	-		
HCM Control Delay (s)	- 11.4		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 0		-	-		

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	55	0	1217	737	76
Future Vol, veh/h	0	55	0	1217	737	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	60	0	1323	801	83
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	401	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	599	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	599	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.7	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 599		-	-		
HCM Lane V/C Ratio	- 0.1		-	-		
HCM Control Delay (s)	- 11.7		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 0.3		-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	317	258	113	27	66	132	859	48	60	622	109
Future Volume (vph)	317	258	113	27	66	132	859	48	60	622	109
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.0	43.0	9.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.8%	35.8%	7.5%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	22.1	33.8	33.8	10.3	12.8	10.8	30.2	30.2	5.6	25.0	25.0
Actuated g/C Ratio	0.24	0.37	0.37	0.11	0.14	0.12	0.33	0.33	0.06	0.27	0.27
v/c Ratio	0.87	0.42	0.19	0.16	0.42	0.74	0.82	0.09	0.64	0.71	0.22
Control Delay	60.3	26.0	5.2	45.3	32.9	66.9	35.9	0.3	76.2	35.6	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.3	26.0	5.2	45.3	32.9	66.9	35.9	0.3	76.2	35.6	2.5
LOS	E	C	A	D	C	E	D	A	E	D	A
Approach Delay		38.4			35.5		38.2			34.1	
Approach LOS		D			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 91.2

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 36.9

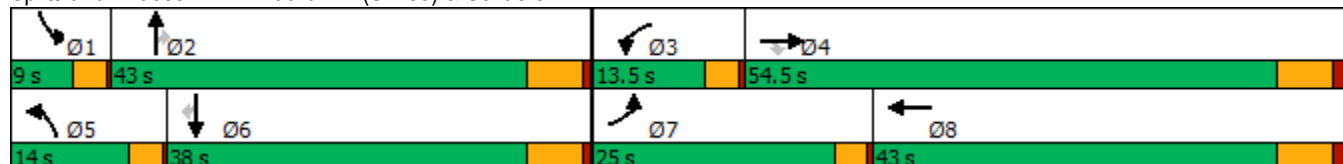
Intersection LOS: D

Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	317	258	113	27	66	35	132	859	48	60	622	109
Future Volume (veh/h)	317	258	113	27	66	35	132	859	48	60	622	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	334	272	70	28	69	26	139	904	48	63	655	72
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	477	398	95	116	44	170	1155	504	79	964	430
Arrive On Green	0.23	0.27	0.27	0.06	0.09	0.09	0.11	0.34	0.34	0.05	0.29	0.29
Sat Flow, veh/h	1594	1772	1479	1594	1227	462	1594	3367	1470	1594	3367	1502
Grp Volume(v), veh/h	334	272	70	28	0	95	139	904	48	63	655	72
Grp Sat Flow(s),veh/h/ln	1594	1772	1479	1594	0	1689	1594	1683	1470	1594	1683	1502
Q Serve(g_s), s	14.6	9.5	2.6	1.2	0.0	3.9	6.1	17.3	1.6	2.8	12.4	2.6
Cycle Q Clear(g_c), s	14.6	9.5	2.6	1.2	0.0	3.9	6.1	17.3	1.6	2.8	12.4	2.6
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	477	398	95	0	160	170	1155	504	79	964	430
V/C Ratio(X)	0.90	0.57	0.18	0.29	0.00	0.59	0.82	0.78	0.10	0.79	0.68	0.17
Avail Cap(c_a), veh/h	477	1171	978	222	0	846	233	1733	757	122	1499	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	22.7	20.1	32.3	0.0	31.2	31.4	21.2	16.0	33.8	22.7	19.2
Incr Delay (d2), s/veh	14.3	0.8	0.2	0.6	0.0	2.6	10.9	1.4	0.1	8.8	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	3.6	0.8	0.4	0.0	1.6	2.6	5.8	0.5	1.2	4.3	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.0	23.5	20.3	33.0	0.0	33.8	42.3	22.6	16.1	42.6	23.6	19.4
LnGrp LOS	D	C	C	C	A	C	D	C	B	D	C	B
Approach Vol, veh/h		676			123			1091			790	
Approach Delay, s/veh		31.8			33.6			24.8			24.7	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	30.6	7.8	26.4	11.2	26.6	20.3	13.8				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.5	37.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	4.8	19.3	3.2	11.5	8.1	14.4	16.6	5.9				
Green Ext Time (p_c), s	0.0	5.3	0.0	1.3	0.0	3.8	0.2	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			26.9									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	121	327	113	37	197	87	871	47	72	646	113
Future Volume (vph)	121	327	113	37	197	87	871	47	72	646	113
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	12.0	54.0	54.0	15.0	57.0	57.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	10.0%	45.0%	45.0%	12.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	22.8	22.8	22.8	22.8	22.8	7.4	28.4	28.4	8.6	29.5	29.5
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.10	0.38	0.38	0.11	0.39	0.39
v/c Ratio	0.43	0.63	0.22	0.17	0.47	0.32	0.71	0.08	0.41	0.51	0.18
Control Delay	29.6	30.6	5.9	24.8	25.9	42.9	25.2	3.3	46.1	20.1	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.6	30.6	5.9	24.8	25.9	42.9	25.2	3.3	46.1	20.1	4.6
LOS	C	C	A	C	C	D	C	A	D	C	A
Approach Delay		25.4			25.7		25.7			20.2	
Approach LOS		C			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 75.2

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 24.0

Intersection LOS: C

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	54 s	51 s
		
Ø5	Ø6	Ø8
12 s	57 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	327	113	37	197	45	87	871	47	72	646	113
Future Volume (veh/h)	121	327	113	37	197	45	87	871	47	72	646	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	125	337	60	38	203	38	90	898	36	74	666	82
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	537	455	242	440	82	187	1232	550	94	1213	541
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.37	0.37	0.06	0.36	0.36
Sat Flow, veh/h	1019	1772	1502	883	1451	272	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	125	337	60	38	0	241	90	898	36	74	666	82
Grp Sat Flow(s),veh/h/ln	1019	1772	1502	883	0	1723	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	6.9	9.9	1.8	2.3	0.0	6.9	1.8	14.0	0.9	2.8	9.6	2.2
Cycle Q Clear(g_c), s	13.7	9.9	1.8	12.3	0.0	6.9	1.8	14.0	0.9	2.8	9.6	2.2
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	312	537	455	242	0	523	187	1232	550	94	1213	541
V/C Ratio(X)	0.40	0.63	0.13	0.16	0.00	0.46	0.48	0.73	0.07	0.79	0.55	0.15
Avail Cap(c_a), veh/h	743	1285	1089	615	0	1250	408	2664	1188	302	2831	1263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.7	18.2	15.3	23.5	0.0	17.1	27.4	16.6	12.5	28.2	15.5	13.1
Incr Delay (d2), s/veh	0.8	1.2	0.1	0.3	0.0	0.6	0.7	0.8	0.0	5.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.6	0.5	0.5	0.0	2.4	0.6	4.2	0.3	1.1	2.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	19.4	15.5	23.8	0.0	17.8	28.1	17.5	12.5	33.7	15.9	13.3
LnGrp LOS	C	B	B	C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		522			279			1024			822	
Approach Delay, s/veh		19.9			18.6			18.2			17.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	28.2		25.4	7.4	27.9		25.4				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	11.5	48.0		44.0	8.5	51.0		44.0				
Max Q Clear Time (g_c+I1), s	4.8	16.0		15.7	3.8	11.6		14.3				
Green Ext Time (p_c), s	0.0	6.2		2.7	0.0	4.5		1.5				
Intersection Summary												
HCM 6th Ctrl Delay				18.3								
HCM 6th LOS				B								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	69	295	194	53	107	91	829	67	69	684	57	
Future Volume (vph)	69	295	194	53	107	91	829	67	69	684	57	
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases		4			8	5	2		1	6		
Permitted Phases	4		4	8				2			6	
Detector Phase	4	4	4	8	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7	
Total Split (s)	51.0	51.0	51.0	51.0	51.0	20.0	53.0	53.0	16.0	49.0	49.0	
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	16.7%	44.2%	44.2%	13.3%	40.8%	40.8%	
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7	
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min	
Act Effct Green (s)	20.8	20.8	20.8	20.8	20.8	10.4	26.3	26.3	9.1	25.1	25.1	
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30	0.15	0.38	0.38	0.13	0.36	0.36	
v/c Ratio	0.24	0.58	0.35	0.26	0.36	0.40	0.68	0.12	0.35	0.59	0.10	
Control Delay	23.3	27.4	5.3	24.9	19.9	38.8	22.8	9.1	40.2	22.3	3.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	23.3	27.4	5.3	24.9	19.9	38.8	22.8	9.1	40.2	22.3	3.8	
LOS	C	C	A	C	B	D	C	A	D	C	A	
Approach Delay		19.2			21.1		23.3			22.5		
Approach LOS		B			C		C			C		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 68.8

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 22.0

Intersection LOS: C

Intersection Capacity Utilization 65.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
16 s	53 s	51 s
		
Ø5	Ø6	Ø8
20 s	49 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	295	194	53	107	73	91	829	67	69	684	57
Future Volume (veh/h)	69	295	194	53	107	73	91	829	67	69	684	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	73	311	102	56	113	64	96	873	47	73	720	28
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	349	488	408	250	293	166	119	1278	570	102	1242	546
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.07	0.38	0.38	0.06	0.37	0.37
Sat Flow, veh/h	1080	1772	1482	871	1062	602	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	73	311	102	56	0	177	96	873	47	73	720	28
Grp Sat Flow(s),veh/h/ln	1080	1772	1482	871	0	1664	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	2.9	7.7	2.7	3.0	0.0	4.3	3.0	10.8	1.0	2.2	8.6	0.6
Cycle Q Clear(g_c), s	7.2	7.7	2.7	10.7	0.0	4.3	3.0	10.8	1.0	2.2	8.6	0.6
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	349	488	408	250	0	458	119	1278	570	102	1242	546
V/C Ratio(X)	0.21	0.64	0.25	0.22	0.00	0.39	0.81	0.68	0.08	0.72	0.58	0.05
Avail Cap(c_a), veh/h	1053	1643	1375	818	0	1543	528	3197	1426	400	2926	1287
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	15.9	14.0	20.6	0.0	14.6	22.7	12.9	9.9	22.9	12.6	10.1
Incr Delay (d2), s/veh	0.2	1.0	0.2	0.3	0.0	0.4	9.2	0.7	0.1	6.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.7	0.7	0.5	0.0	1.3	1.2	2.8	0.2	0.9	2.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	16.9	14.3	20.9	0.0	15.0	31.9	13.6	10.0	29.7	13.0	10.1
LnGrp LOS	B	B	B	C	A	B	C	B	A	C	B	B
Approach Vol, veh/h	486			233			1016			821		
Approach Delay, s/veh	16.5			16.4			15.2			14.4		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.7	24.6	18.5		7.2	24.1	18.5					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	12.5	47.3	46.2		16.5	43.3	46.2					
Max Q Clear Time (g_c+I1), s	4.2	12.8	9.7		5.0	10.6	12.7					
Green Ext Time (p_c), s	0.1	6.1	1.9		0.1	4.7	1.0					
Intersection Summary												
HCM 6th Ctrl Delay				15.3								
HCM 6th LOS				B								

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/18/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	339	29	14	297	27	30	27	39
Future Volume (vph)	18	339	29	14	297	27	30	27	39
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	23.0	53.0	53.0	19.0	49.0	48.0	48.0	48.0	48.0
Total Split (%)	19.2%	44.2%	44.2%	15.8%	40.8%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	5.7	20.6	20.6	5.7	20.5		12.3		12.3
Actuated g/C Ratio	0.16	0.59	0.59	0.16	0.59		0.35		0.35
v/c Ratio	0.07	0.18	0.03	0.05	0.17		0.14		0.18
Control Delay	18.3	9.3	2.6	18.5	9.3		9.3		9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	18.3	9.3	2.6	18.5	9.3		9.3		9.2
LOS	B	A	A	B	A		A		A
Approach Delay		9.2			9.6		9.3		9.2
Approach LOS		A			A		A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 34.8

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.18

Intersection Signal Delay: 9.4

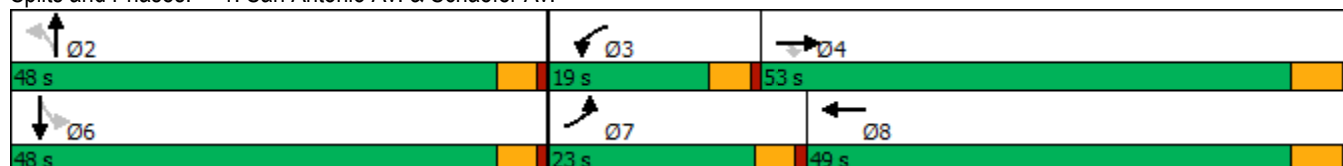
Intersection LOS: A

Intersection Capacity Utilization 33.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	339	29	14	297	24	27	30	15	27	39	26
Future Volume (veh/h)	18	339	29	14	297	24	27	30	15	27	39	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	19	349	25	14	306	21	28	31	6	28	40	11
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1036	452	29	963	66	254	219	32	220	235	50
Arrive On Green	0.02	0.31	0.31	0.02	0.30	0.30	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1594	3367	1470	1594	3193	218	443	988	146	328	1059	224
Grp Volume(v), veh/h	19	349	25	14	160	167	65	0	0	79	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1470	1594	1683	1727	1577	0	0	1612	0	0
Q Serve(g_s), s	0.4	2.7	0.4	0.3	2.4	2.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	2.7	0.4	0.3	2.4	2.5	1.0	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.13	0.43		0.09	0.35		0.14
Lane Grp Cap(c), veh/h	39	1036	452	29	508	521	505	0	0	504	0	0
V/C Ratio(X)	0.49	0.34	0.06	0.48	0.32	0.32	0.13	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	885	4794	2093	692	2194	2251	2137	0	0	2174	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.0	8.9	8.1	16.1	8.9	8.9	10.4	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.2	0.1	4.5	0.4	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.1	0.1	0.6	0.6	0.3	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	9.1	8.1	20.6	9.3	9.3	10.5	0.0	0.0	10.7	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		393			341			65			79	
Approach Delay, s/veh		9.5			9.8			10.5			10.7	
Approach LOS		A			A			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.9	5.2	16.0		11.9	5.4	15.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		43.4	14.4	47.2		43.4	18.4	43.2				
Max Q Clear Time (g_c+l1), s		3.0	2.3	4.7		3.2	2.4	4.5				
Green Ext Time (p_c), s		0.4	0.0	2.3		0.5	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			9.8									
HCM 6th LOS			A									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	30	359	28	15	330	15	16	21	9	19
Future Volume (vph)	30	359	28	15	330	15	16	21	9	19
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	25.0	55.0	55.0	22.0	52.0	52.0	43.0	43.0	43.0	43.0
Total Split (%)	20.8%	45.8%	45.8%	18.3%	43.3%	43.3%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.0	22.5	22.5	5.6	22.3	22.3		12.6		12.6
Actuated g/C Ratio	0.16	0.60	0.60	0.15	0.59	0.59		0.33		0.33
v/c Ratio	0.12	0.19	0.03	0.06	0.17	0.02		0.09		0.11
Control Delay	19.3	9.8	2.6	19.9	10.1	0.1		9.3		7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	19.3	9.8	2.6	19.9	10.1	0.1		9.3		7.0
LOS	B	A	A	B	B	A		A		A
Approach Delay		10.0			10.1			9.3		7.0
Approach LOS		B			B			A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 37.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.19

Intersection Signal Delay: 9.8

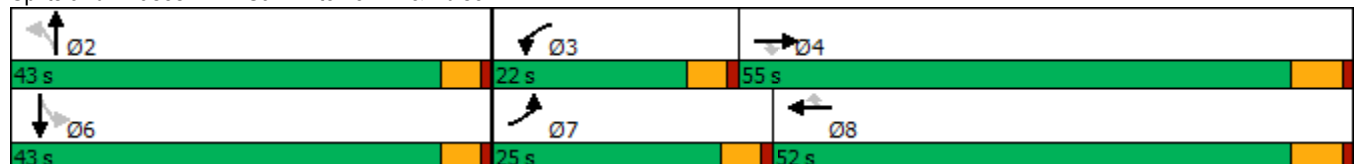
Intersection LOS: A

Intersection Capacity Utilization 37.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	359	28	15	330	15	16	21	6	9	19	28
Future Volume (veh/h)	30	359	28	15	330	15	16	21	6	9	19	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	31	370	22	15	340	12	16	22	2	9	20	-33
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	1219	532	31	1157	505	229	102	8	0	3220	1431
Arrive On Green	0.04	0.36	0.36	0.02	0.34	0.34	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	534	969	79	-1923	-5304	8223
Grp Volume(v), veh/h	31	370	22	15	340	12	40	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1583	0	0	0	0	0
Q Serve(g_s), s	0.6	2.3	0.3	0.3	2.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	2.3	0.3	0.3	2.2	0.2	0.6	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.05	-2.25		8.25
Lane Grp Cap(c), veh/h	61	1219	532	31	1157	505	339	0	0	0	0	0
V/C Ratio(X)	0.51	0.30	0.04	0.48	0.29	0.02	0.12	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1111	5661	2468	948	5316	2318	2215	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	13.8	6.7	6.0	14.2	7.0	6.4	12.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.1	0.0	4.2	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.4	0.0	0.1	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	6.8	6.1	18.4	7.1	6.4	12.1	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h	423			367			40			0		
Approach Delay, s/veh	7.5			7.6			12.1			0.0		
Approach LOS	A			A			B					
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	7.7		5.2	16.4		7.7	5.7	15.9				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	38.4		17.4	49.2		38.4	20.4	46.2				
Max Q Clear Time (g_c+I1), s	2.6		2.3	4.3		0.0	2.6	4.2				
Green Ext Time (p_c), s	0.2		0.0	2.4		0.0	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay	7.7											
HCM 6th LOS	A											

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	17	121	52	158	43	103	16	108
Future Volume (vph)	17	121	52	158	43	103	16	108
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	17.0	41.0	17.0	41.0	24.0	41.0	21.0	38.0
Total Split (%)	14.2%	34.2%	14.2%	34.2%	20.0%	34.2%	17.5%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	15.0	13.7	17.3	17.8	7.1	20.0	6.4	17.8
Actuated g/C Ratio	0.34	0.31	0.39	0.40	0.16	0.45	0.14	0.40
v/c Ratio	0.04	0.16	0.12	0.13	0.18	0.12	0.07	0.09
Control Delay	10.4	14.6	10.3	12.3	26.2	10.2	27.4	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	14.6	10.3	12.3	26.2	10.2	27.4	17.3
LOS	B	B	B	B	C	B	C	B
Approach Delay		14.2		11.9		13.5		18.5
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 44.6

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.18

Intersection Signal Delay: 14.0

Intersection LOS: B

Intersection Capacity Utilization 42.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

			
Ø1	Ø2	Ø3	Ø4
21 s	41 s	17 s	41 s
			
Ø5	Ø6	Ø7	Ø8
24 s	38 s	17 s	41 s

HCM 6th Signalized Intersection Summary
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	121	33	52	158	13	43	103	65	16	108	7
Future Volume (veh/h)	17	121	33	52	158	13	43	103	65	16	108	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	123	31	53	161	7	44	105	47	16	110	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	616	151	453	862	37	75	578	244	32	754	20
Arrive On Green	0.02	0.23	0.23	0.05	0.26	0.26	0.05	0.25	0.25	0.02	0.23	0.23
Sat Flow, veh/h	1594	2680	655	1594	3286	142	1594	2293	968	1594	3346	91
Grp Volume(v), veh/h	17	76	78	53	82	86	44	75	77	16	55	58
Grp Sat Flow(s),veh/h/ln	1594	1683	1651	1594	1683	1745	1594	1683	1578	1594	1683	1754
Q Serve(g_s), s	0.4	1.7	1.8	1.1	1.7	1.8	1.2	1.6	1.8	0.5	1.2	1.2
Cycle Q Clear(g_c), s	0.4	1.7	1.8	1.1	1.7	1.8	1.2	1.6	1.8	0.5	1.2	1.2
Prop In Lane	1.00		0.40	1.00		0.08	1.00		0.61	1.00		0.05
Lane Grp Cap(c), veh/h	433	387	380	453	441	458	75	424	398	32	379	395
V/C Ratio(X)	0.04	0.20	0.21	0.12	0.19	0.19	0.59	0.18	0.19	0.50	0.15	0.15
Avail Cap(c_a), veh/h	830	1291	1266	798	1291	1338	674	1305	1224	569	1195	1245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	14.3	14.3	12.2	13.1	13.1	21.4	13.4	13.5	22.3	14.2	14.2
Incr Delay (d2), s/veh	0.0	0.2	0.3	0.0	0.2	0.2	2.8	0.2	0.2	4.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.5	0.3	0.5	0.6	0.5	0.5	0.5	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	14.5	14.6	12.3	13.3	13.3	24.2	13.6	13.7	26.7	14.4	14.4
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		171			221			196			129	
Approach Delay, s/veh		14.4			13.1			16.0			15.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	17.0	7.1	16.4	6.7	15.7	5.6	17.8				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	19.4	32.6	12.4	35.2				
Max Q Clear Time (g_c+I1), s	2.5	3.8	3.1	3.8	3.2	3.2	2.4	3.8				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.8	0.0	0.5	0.0	0.8				
Intersection Summary												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	6	209	15	12	196
Future Vol, veh/h	26	6	209	15	12	196
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	7	227	16	13	213
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	368	122	0	0	243	0
Stage 1	235	-	-	-	-	-
Stage 2	133	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	605	906	-	-	1320	-
Stage 1	782	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	599	906	-	-	1320	-
Mov Cap-2 Maneuver	646	-	-	-	-	-
Stage 1	782	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.6	0		0.4		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 683		1320	-	
HCM Lane V/C Ratio	-	- 0.051		0.01	-	
HCM Control Delay (s)	-	- 10.6		7.8	-	
HCM Lane LOS	-	- B		A	-	
HCM 95th %tile Q(veh)	-	- 0.2		0	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	219	15	0	222
Future Vol, veh/h	0	4	219	15	0	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	238	16	0	241
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	127	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	900	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	900	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	900		-		
HCM Lane V/C Ratio	-	0.005		-		
HCM Control Delay (s)	-	9		-		
HCM Lane LOS	-	A		-		
HCM 95th %tile Q(veh)	-	0		-		

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	33	323	23	237	46	105	88	96
Future Volume (vph)	33	323	23	237	46	105	88	96
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	45.0	16.0	43.0	21.0	31.0	28.0	38.0
Total Split (%)	15.0%	37.5%	13.3%	35.8%	17.5%	25.8%	23.3%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	7.3	73.2	6.5	72.5	8.1	12.4	11.4	17.6
Actuated g/C Ratio	0.06	0.61	0.05	0.60	0.07	0.10	0.10	0.15
v/c Ratio	0.37	0.18	0.28	0.18	0.45	0.39	0.62	0.28
Control Delay	64.1	12.6	62.1	11.4	66.1	43.8	69.1	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.1	12.6	62.1	11.4	66.1	43.8	69.1	33.5
LOS	E	B	E	B	E	D	E	C
Approach Delay		17.1		14.7		49.5		47.7
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 27.4

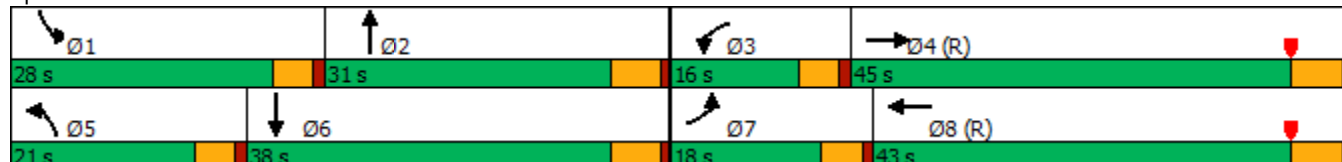
Intersection LOS: C

Intersection Capacity Utilization 53.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	323	25	23	237	97	46	105	27	88	96	38
Future Volume (veh/h)	33	323	25	23	237	97	46	105	27	88	96	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	35	340	23	24	249	89	48	111	26	93	101	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	2067	139	37	1564	544	59	242	55	114	356	59
Arrive On Green	0.03	0.65	0.65	0.02	0.64	0.64	0.04	0.09	0.09	0.07	0.12	0.12
Sat Flow, veh/h	1594	3198	215	1594	2441	849	1594	2713	614	1594	2886	474
Grp Volume(v), veh/h	35	178	185	24	170	168	48	67	70	93	58	60
Grp Sat Flow(s),veh/h/ln	1594	1683	1730	1594	1683	1607	1594	1683	1644	1594	1683	1676
Q Serve(g_s), s	2.6	5.0	5.1	1.8	4.8	5.1	3.6	4.6	4.8	6.9	3.7	3.9
Cycle Q Clear(g_c), s	2.6	5.0	5.1	1.8	4.8	5.1	3.6	4.6	4.8	6.9	3.7	3.9
Prop In Lane	1.00		0.12	1.00		0.53	1.00		0.37	1.00		0.28
Lane Grp Cap(c), veh/h	46	1088	1118	37	1078	1029	59	150	147	114	208	207
V/C Ratio(X)	0.77	0.16	0.17	0.66	0.16	0.16	0.81	0.45	0.47	0.82	0.28	0.29
Avail Cap(c_a), veh/h	178	1088	1118	151	1078	1029	218	359	351	311	457	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	8.4	8.4	58.2	8.6	8.7	57.3	51.8	52.0	54.9	47.7	47.8
Incr Delay (d2), s/veh	9.4	0.3	0.3	7.2	0.3	0.3	9.1	2.1	2.3	5.3	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.7	1.8	0.8	1.7	1.7	1.6	2.0	2.1	2.9	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	8.7	8.7	65.4	8.9	9.0	66.4	53.9	54.3	60.2	48.5	48.6
LnGrp LOS	E	A	A	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h		398			362			185			211	
Approach Delay, s/veh		13.9			12.7			57.3			53.7	
Approach LOS		B			B			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	16.1	7.4	83.3	9.1	20.2	8.0	82.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	23.4	25.6	11.4	39.2	16.4	32.6	13.4	37.2				
Max Q Clear Time (g_c+I1), s	8.9	6.8	3.8	7.1	5.6	5.9	4.6	7.1				
Green Ext Time (p_c), s	0.1	0.6	0.0	1.9	0.0	0.5	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			27.7									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	79	280	14	19	276	19	16	62	13	72
Future Volume (vph)	79	280	14	19	276	19	16	62	13	72
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	25.0	48.0	48.0	17.0	40.0	40.0	17.0	41.0	14.0	38.0
Total Split (%)	20.8%	40.0%	40.0%	14.2%	33.3%	33.3%	14.2%	34.2%	11.7%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	8.1	25.1	25.1	6.3	19.2	19.2	6.2	13.4	6.1	13.3
Actuated g/C Ratio	0.17	0.53	0.53	0.13	0.41	0.41	0.13	0.29	0.13	0.28
v/c Ratio	0.32	0.17	0.02	0.10	0.22	0.03	0.08	0.08	0.07	0.17
Control Delay	26.1	11.6	0.1	28.2	17.2	0.1	28.4	15.4	28.5	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.1	11.6	0.1	28.2	17.2	0.1	28.4	15.4	28.5	10.5
LOS	C	B	A	C	B	A	C	B	C	B
Approach Delay		14.2			16.8			17.7		12.0
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 47

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 15.1

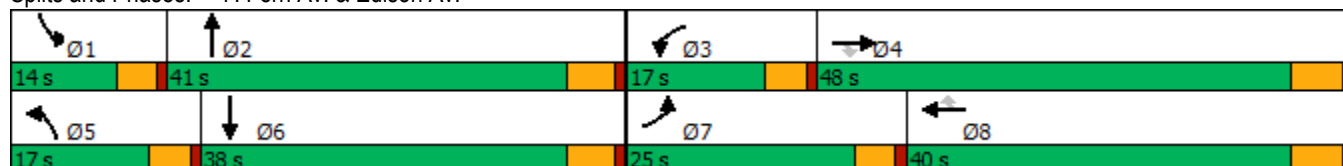
Intersection LOS: B

Intersection Capacity Utilization 41.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	280	14	19	276	19	16	62	8	13	72	70
Future Volume (veh/h)	79	280	14	19	276	19	16	62	8	13	72	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	86	304	11	21	300	13	17	67	5	14	78	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	118	937	417	41	774	345	34	675	50	28	464	216
Arrive On Green	0.07	0.28	0.28	0.03	0.23	0.23	0.02	0.21	0.21	0.02	0.21	0.21
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3178	235	1594	2218	1035
Grp Volume(v), veh/h	86	304	11	21	300	13	17	35	37	14	58	59
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1730	1594	1683	1570
Q Serve(g_s), s	2.3	3.1	0.2	0.6	3.3	0.3	0.5	0.7	0.8	0.4	1.2	1.4
Cycle Q Clear(g_c), s	2.3	3.1	0.2	0.6	3.3	0.3	0.5	0.7	0.8	0.4	1.2	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.66
Lane Grp Cap(c), veh/h	118	937	417	41	774	345	34	358	367	28	352	328
V/C Ratio(X)	0.73	0.32	0.03	0.51	0.39	0.04	0.50	0.10	0.10	0.49	0.16	0.18
Avail Cap(c_a), veh/h	742	3244	1445	451	2629	1172	451	1368	1406	342	1253	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	12.5	11.5	21.1	14.3	13.1	21.2	13.9	13.9	21.3	14.2	14.2
Incr Delay (d2), s/veh	3.2	0.2	0.0	3.6	0.3	0.0	4.2	0.1	0.1	4.8	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.9	0.1	0.2	1.0	0.1	0.2	0.2	0.2	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	12.7	11.5	24.7	14.6	13.1	25.4	14.0	14.0	26.1	14.4	14.5
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		401			334			89			131	
Approach Delay, s/veh		14.9			15.2			16.2			15.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.4	14.7	5.7	18.0	5.5	14.6	7.8	15.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	9.4	35.6	12.4	42.2	12.4	32.6	20.4	34.2				
Max Q Clear Time (g_c+I1), s	2.4	2.8	2.6	5.1	2.5	3.4	4.3	5.3				
Green Ext Time (p_c), s	0.0	0.3	0.0	1.9	0.0	0.6	0.1	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			15.2									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	28	188	140	29	30	37
Future Vol, veh/h	28	188	140	29	30	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	202	151	31	32	40
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	182	0	-	0	328	91
Stage 1	-	-	-	-	167	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1391	-	-	-	641	949
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	851	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1391	-	-	-	627	949
Mov Cap-2 Maneuver	-	-	-	-	669	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	851	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		9.8		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1391	-	-	-	669	949
HCM Lane V/C Ratio	0.022	-	-	-	0.048	0.042
HCM Control Delay (s)	7.6	-	-	-	10.7	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.1

Intersection												
Int Delay, s/veh	10.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	138	149	55	69	174	139	0	104	203	0	148
Future Vol, veh/h	150	138	149	55	69	174	139	0	104	203	0	148
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	163	150	162	60	75	189	151	0	113	221	0	161
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	264	0	0	312	0	0	715	941	156	691	928	132
Stage 1	-	-	-	-	-	-	557	557	-	290	290	-
Stage 2	-	-	-	-	-	-	158	384	-	401	638	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1297	-	-	1293	-	-	345	276	946	360	281	893
Stage 1	-	-	-	-	-	-	516	534	-	694	671	-
Stage 2	-	-	-	-	-	-	828	610	-	642	490	-
Platoon blocked, %	-	-	-	1	-	-	1	1	1	1	1	-
Mov Cap-1 Maneuver	1297	-	-	1293	-	-	247	230	946	276	234	893
Mov Cap-2 Maneuver	-	-	-	-	-	-	326	306	-	350	306	-
Stage 1	-	-	-	-	-	-	451	466	-	607	640	-
Stage 2	-	-	-	-	-	-	647	582	-	495	428	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.8			1.5			18.4			22.3		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	326		946	1297	-	-	1293	-	-	350	893	
HCM Lane V/C Ratio	0.463		0.119	0.126	-	-	0.046	-	-	0.63	0.18	
HCM Control Delay (s)	25.2		9.3	8.2	-	-	7.9	-	-	31.3	9.9	
HCM Lane LOS	D		A	A	-	-	A	-	-	D	A	
HCM 95th %tile Q(veh)	2.3		0.4	0.4	-	-	0.1	-	-	4.1	0.7	

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	280	4	365	360	773	822	420
Future Volume (vph)	280	4	365	360	773	822	420
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	31.0	31.0	31.0	42.0	89.0	47.0	47.0
Total Split (%)	25.8%	25.8%	25.8%	35.0%	74.2%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	20.8	20.8	20.8	29.6	88.7	54.6	54.6
Actuated g/C Ratio	0.17	0.17	0.17	0.25	0.74	0.46	0.46
v/c Ratio	0.81	0.64	0.49	0.86	0.31	0.53	0.46
Control Delay	68.8	31.8	9.2	71.0	5.7	27.2	4.2
Queue Delay	0.0	0.0	0.0	0.4	0.2	0.0	0.0
Total Delay	68.8	31.8	9.2	71.5	5.9	27.2	4.2
LOS	E	C	A	E	A	C	A
Approach Delay		37.5			26.7	19.4	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 26.0

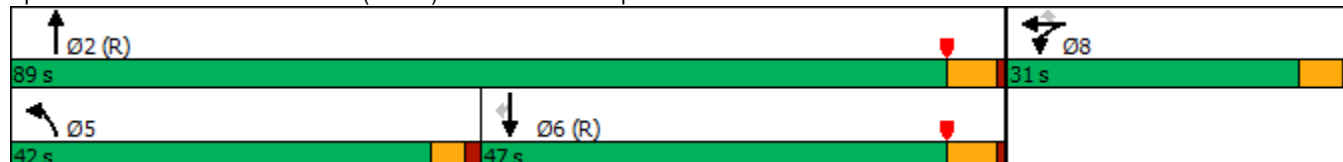
Intersection LOS: C

Intersection Capacity Utilization 75.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	280	4	365	360	773	0	0	822	420
Future Volume (veh/h)	0	0	0	280	4	365	360	773	0	0	822	420
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				351	0	124	375	805	0	0	856	349
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				424	0	188	396	2820	0	0	1897	846
Arrive On Green				0.12	0.00	0.12	0.44	1.00	0.00	0.00	0.53	0.53
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				351	0	124	375	805	0	0	856	349
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				11.6	0.0	9.0	24.2	0.0	0.0	0.0	17.8	15.8
Cycle Q Clear(g_c), s				11.6	0.0	9.0	24.2	0.0	0.0	0.0	17.8	15.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				424	0	188	396	2820	0	0	1897	846
V/C Ratio(X)				0.83	0.00	0.66	0.95	0.29	0.00	0.00	0.45	0.41
Avail Cap(c_a), veh/h				772	0	343	557	2820	0	0	1897	846
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	0.00	1.00	0.74	0.74	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				51.7	0.0	50.5	32.6	0.0	0.0	0.0	17.2	16.7
Incr Delay (d2), s/veh				1.6	0.0	1.5	14.8	0.2	0.0	0.0	0.8	1.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.1	0.0	3.5	9.3	0.1	0.0	0.0	7.1	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.3	0.0	52.0	47.5	0.2	0.0	0.0	18.0	18.2
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					475			1180			1205	
Approach Delay, s/veh					52.9			15.2			18.0	
Approach LOS					D			B			B	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	100.7			31.2			69.6			19.3		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	83.5			37.5			41.5			26.0		
Max Q Clear Time (g_c+l1), s	2.0			26.2			19.8			13.6		
Green Ext Time (p_c), s	9.7			0.4			10.1			0.7		
Intersection Summary												
HCM 6th Ctrl Delay	22.7											
HCM 6th LOS	C											

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	300	0	833	423	325	777
Future Volume (vph)	300	0	833	423	325	777
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	37.0	37.0	44.0	44.0	39.0	83.0
Total Split (%)	30.8%	30.8%	36.7%	36.7%	32.5%	69.2%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	24.8	24.8	53.2	53.2	27.6	84.7
Actuated g/C Ratio	0.21	0.21	0.44	0.44	0.23	0.71
v/c Ratio	0.83	0.83	0.57	0.49	0.85	0.33
Control Delay	64.8	36.4	29.0	4.7	81.0	6.6
Queue Delay	0.5	0.6	0.0	0.0	0.2	0.1
Total Delay	65.2	37.0	29.0	4.7	81.2	6.7
LOS	E	D	C	A	F	A
Approach Delay		48.9	20.8			28.7
Approach LOS		D	C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 29.7

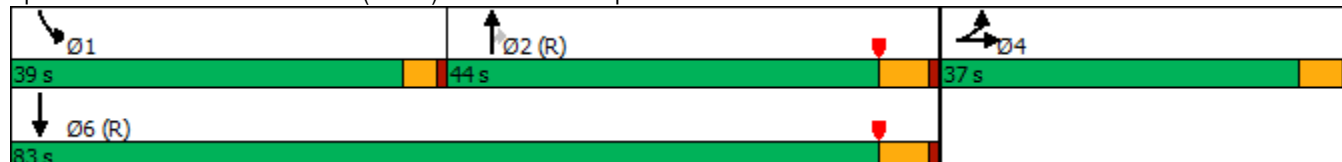
Intersection LOS: C

Intersection Capacity Utilization 75.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	0	339	0	0	0	0	833	423	325	777	0
Future Volume (veh/h)	300	0	339	0	0	0	0	833	423	325	777	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	286	47	252				0	886	334	346	827	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	365	52	281				0	1662	721	368	2514	0
Arrive On Green	0.21	0.21	0.21				0.00	0.47	0.47	0.41	1.00	0.00
Sat Flow, veh/h	1781	255	1369				0	3647	1541	1781	3647	0
Grp Volume(v), veh/h	286	0	299				0	886	334	346	827	0
Grp Sat Flow(s),veh/h/ln	1781	0	1624				0	1777	1541	1781	1777	0
Q Serve(g_s), s	18.2	0.0	21.5				0.0	21.2	17.7	22.4	0.0	0.0
Cycle Q Clear(g_c), s	18.2	0.0	21.5				0.0	21.2	17.7	22.4	0.0	0.0
Prop In Lane	1.00		0.84				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	365	0	333				0	1662	721	368	2514	0
V/C Ratio(X)	0.78	0.00	0.90				0.00	0.53	0.46	0.94	0.33	0.00
Avail Cap(c_a), veh/h	475	0	433				0	1662	721	520	2514	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.90	0.90	0.78	0.78	0.00
Uniform Delay (d), s/veh	45.2	0.0	46.5				0.0	22.6	21.7	34.5	0.0	0.0
Incr Delay (d2), s/veh	4.6	0.0	15.4				0.0	1.1	1.9	15.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	9.8				0.0	8.7	6.5	8.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	0.0	61.8				0.0	23.8	23.6	49.5	0.3	0.0
LnGrp LOS	D	A	E				A	C	C	D	A	A
Approach Vol, veh/h	585						1220			1173		
Approach Delay, s/veh	55.9						23.7			14.8		
Approach LOS	E						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	28.8	61.6	29.6		90.4							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	35.0	38.5	32.0		77.5							
Max Q Clear Time (g_c+I1), s	24.4	23.2	23.5		2.0							
Green Ext Time (p_c), s	0.4	8.4	1.1		10.0							
Intersection Summary												
HCM 6th Ctrl Delay			26.5									
HCM 6th LOS			C									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	83	135	59	164	77	920	44	145	804	91
Future Volume (vph)	83	135	59	164	77	920	44	145	804	91
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	23.0	38.0	19.0	34.0	22.0	43.0	43.0	20.0	41.0	41.0
Total Split (%)	19.2%	31.7%	15.8%	28.3%	18.3%	35.8%	35.8%	16.7%	34.2%	34.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	9.4	14.2	8.1	13.0	9.1	38.5	38.5	9.1	41.0	41.0
Actuated g/C Ratio	0.11	0.16	0.09	0.15	0.10	0.44	0.44	0.10	0.46	0.46
v/c Ratio	0.52	0.43	0.43	0.56	0.51	0.42	0.07	0.50	0.35	0.13
Control Delay	51.3	20.4	50.5	21.4	51.4	20.2	0.2	45.7	19.2	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	20.4	50.5	21.4	51.4	20.2	0.2	45.7	19.2	4.4
LOS	D	C	D	C	D	C	A	D	B	A
Approach Delay		28.0		25.9		21.6			21.6	
Approach LOS		C		C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 88.3

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 23.0

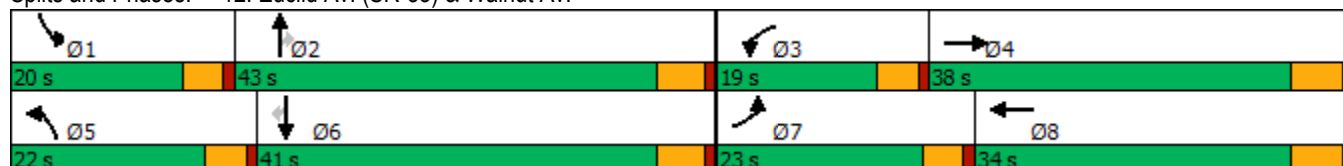
Intersection LOS: C

Intersection Capacity Utilization 56.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	135	117	59	164	163	77	920	44	145	804	91
Future Volume (veh/h)	83	135	117	59	164	163	77	920	44	145	804	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	88	144	86	63	174	138	82	979	31	154	855	58
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	348	195	78	269	199	102	2459	685	223	2514	701
Arrive On Green	0.07	0.16	0.16	0.05	0.14	0.14	0.06	0.46	0.46	0.07	0.47	0.47
Sat Flow, veh/h	1594	2128	1193	1594	1880	1391	1594	5316	1481	3000	5316	1483
Grp Volume(v), veh/h	88	118	112	63	163	149	82	979	31	154	855	58
Grp Sat Flow(s),veh/h/ln	1594	1772	1549	1594	1772	1499	1594	1772	1481	1500	1772	1483
Q Serve(g_s), s	4.4	4.9	5.3	3.2	7.1	7.7	4.1	9.9	0.9	4.1	8.2	1.7
Cycle Q Clear(g_c), s	4.4	4.9	5.3	3.2	7.1	7.7	4.1	9.9	0.9	4.1	8.2	1.7
Prop In Lane	1.00		0.77	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	289	253	78	254	215	102	2459	685	223	2514	701
V/C Ratio(X)	0.80	0.41	0.44	0.81	0.64	0.69	0.80	0.40	0.05	0.69	0.34	0.08
Avail Cap(c_a), veh/h	361	702	614	282	615	520	341	2459	685	569	2514	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	30.5	30.7	38.3	32.9	33.1	37.5	14.4	12.0	36.7	13.5	11.8
Incr Delay (d2), s/veh	5.0	0.9	1.2	7.4	2.7	4.0	5.4	0.5	0.1	1.4	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.0	1.9	1.3	3.0	2.8	1.7	3.6	0.3	1.5	3.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	31.4	31.9	45.7	35.6	37.1	42.9	14.9	12.1	38.1	13.8	12.0
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		318			375			1092			1067	
Approach Delay, s/veh		34.6			37.9			16.9			17.2	
Approach LOS		C			D			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	43.0	8.6	19.1	9.8	43.8	10.2	17.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	15.4	37.6	14.4	32.2	17.4	35.6	18.4	28.2				
Max Q Clear Time (g_c+I1), s	6.1	11.9	5.2	7.3	6.1	10.2	6.4	9.7				
Green Ext Time (p_c), s	0.2	7.2	0.0	1.2	0.1	6.2	0.1	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			21.8									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	125	219	129	326	151	68	606	137	146	570	134
Future Volume (vph)	125	219	129	326	151	68	606	137	146	570	134
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	23.0	36.2	36.2	16.0	35.6	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	12.2	20.5	12.4	20.6	20.6	8.5	23.2	23.2	13.5	30.0	44.2
Actuated g/C Ratio	0.13	0.22	0.14	0.23	0.23	0.09	0.25	0.25	0.15	0.33	0.48
v/c Ratio	0.61	0.72	0.62	0.44	0.34	0.48	0.73	0.29	0.65	0.53	0.17
Control Delay	54.7	45.4	55.0	34.2	7.9	56.6	38.8	6.5	53.8	29.6	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	45.4	55.0	34.2	7.9	56.6	38.8	6.5	53.8	29.6	3.0
LOS	D	D	D	C	A	E	D	A	D	C	A
Approach Delay		48.3		32.0			34.9			29.6	
Approach LOS		D		C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 91.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 34.6

Intersection LOS: C

Intersection Capacity Utilization 67.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
25.2 s	35.6 s	23 s	36.2 s
			
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	219	54	129	326	151	68	606	137	146	570	134
Future Volume (veh/h)	125	219	54	129	326	151	68	606	137	146	570	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	129	226	26	133	336	95	70	625	90	151	588	89
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	296	34	165	651	286	88	863	385	187	1071	623
Arrive On Green	0.10	0.19	0.19	0.10	0.19	0.19	0.06	0.26	0.26	0.12	0.32	0.32
Sat Flow, veh/h	1594	1557	179	1594	3367	1482	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	129	0	252	133	336	95	70	625	90	151	588	89
Grp Sat Flow(s),veh/h/ln	1594	0	1736	1594	1683	1482	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	5.1	0.0	8.9	5.3	5.8	3.6	2.8	11.0	3.1	6.0	9.3	2.4
Cycle Q Clear(g_c), s	5.1	0.0	8.9	5.3	5.8	3.6	2.8	11.0	3.1	6.0	9.3	2.4
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	0	330	165	651	286	88	863	385	187	1071	623
V/C Ratio(X)	0.80	0.00	0.76	0.80	0.52	0.33	0.79	0.72	0.23	0.81	0.55	0.14
Avail Cap(c_a), veh/h	454	0	816	454	1583	697	281	1573	701	508	1994	1029
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	24.8	28.3	23.4	22.5	30.2	22.0	19.0	27.8	18.2	11.6
Incr Delay (d2), s/veh	3.5	0.0	3.7	3.5	0.6	0.7	5.9	1.2	0.3	3.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	3.6	2.0	2.1	1.2	1.1	3.7	1.0	2.2	3.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	0.0	28.5	31.8	24.0	23.2	36.1	23.1	19.3	31.0	18.7	11.7
LnGrp LOS	C	A	C	C	C	C	D	C	B	C	B	B
Approach Vol, veh/h		381			564			785			828	
Approach Delay, s/veh		29.7			25.7			23.9			20.2	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	23.1	11.3	18.1	8.2	27.1	11.1	18.3				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+I1), s	8.0	13.0	7.3	10.9	4.8	11.3	7.1	7.8				
Green Ext Time (p_c), s	0.1	3.6	0.1	1.2	0.0	4.2	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			23.9									
HCM 6th LOS			C									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	74	64	31	109	91	16	675	109	51	614	71	
Future Volume (vph)	74	64	31	109	91	16	675	109	51	614	71	
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases		4			8	5	2		1	6		
Permitted Phases	4		4	8				2			6	
Detector Phase	4	4	4	8	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5	
Total Split (s)	49.0	49.0	49.0	49.0	49.0	13.0	52.0	52.0	19.0	58.0	58.0	
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	10.8%	43.3%	43.3%	15.8%	48.3%	48.3%	
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5	
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	21.8	21.8	21.8		21.8	5.8	49.9	49.9	7.7	54.6	54.6	
Actuated g/C Ratio	0.23	0.23	0.23		0.23	0.06	0.54	0.54	0.08	0.59	0.59	
v/c Ratio	0.38	0.16	0.07		0.77	0.17	0.39	0.13	0.40	0.32	0.08	
Control Delay	35.9	29.3	0.3		47.8	49.7	15.6	4.0	52.7	12.5	3.9	
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	35.9	29.3	0.3		47.8	49.7	15.6	4.0	52.7	12.5	3.9	
LOS	D	C	A		D	D	B	A	D	B	A	
Approach Delay		26.9			47.8		14.8			14.5		
Approach LOS		C			D		B			B		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 92.9

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 20.0

Intersection LOS: B

Intersection Capacity Utilization 60.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
19 s	52 s	49 s
		
Ø5	Ø6	Ø8
13 s	58 s	49 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	64	31	109	91	54	16	675	109	51	614	71
Future Volume (veh/h)	74	64	31	109	91	54	16	675	109	51	614	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	77	67	13	114	95	46	17	703	88	53	640	63
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	382	324	178	126	54	31	1867	833	65	1939	854
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.55	0.55	0.04	0.58	0.58
Sat Flow, veh/h	1116	1772	1502	555	585	251	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	77	67	13	255	0	0	17	703	88	53	640	63
Grp Sat Flow(s),veh/h/ln	1116	1772	1502	1392	0	0	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	0.0	2.8	0.6	13.1	0.0	0.0	0.9	10.5	2.5	2.9	8.9	1.7
Cycle Q Clear(g_c), s	7.4	2.8	0.6	15.9	0.0	0.0	0.9	10.5	2.5	2.9	8.9	1.7
Prop In Lane	1.00		1.00	0.45		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	382	324	358	0	0	31	1867	833	65	1939	854
V/C Ratio(X)	0.29	0.18	0.04	0.71	0.00	0.00	0.55	0.38	0.11	0.81	0.33	0.07
Avail Cap(c_a), veh/h	565	856	726	746	0	0	150	1867	833	257	1939	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	28.6	27.7	34.0	0.0	0.0	43.5	11.2	9.4	42.5	9.9	8.4
Incr Delay (d2), s/veh	0.6	0.2	0.1	2.6	0.0	0.0	5.7	0.6	0.3	8.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.1	0.2	5.2	0.0	0.0	0.4	3.3	0.7	1.2	2.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	28.8	27.8	36.6	0.0	0.0	49.1	11.8	9.7	51.2	10.4	8.6
LnGrp LOS	C	C	C	D	A	A	D	B	A	D	B	A
Approach Vol, veh/h	157			255			808			756		
Approach Delay, s/veh	29.8			36.6			12.4			13.1		
Approach LOS	C			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	56.1		25.1	6.3	58.0		25.1				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	14.4	* 47		43.2	8.4	51.5		43.2				
Max Q Clear Time (g_c+I1), s	4.9	12.5		9.4	2.9	10.9		17.9				
Green Ext Time (p_c), s	0.0	4.8		0.6	0.0	4.3		1.4				

Intersection Summary

HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	9	0	799	743	10
Future Vol, veh/h	0	9	0	799	743	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	0	868	808	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	404	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	596	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	596	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	11.1	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 596		-	-		
HCM Lane V/C Ratio	- 0.016		-	-		
HCM Control Delay (s)	- 11.1		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 0.1		-	-		

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	93	0	799	628	125
Future Vol, veh/h	0	93	0	799	628	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	101	0	868	683	136

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 342	- 0	- 0
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -
Critical Hdwy	- 6.94	- -	- -
Critical Hdwy Stg 1	- -	- -	- -
Critical Hdwy Stg 2	- -	- -	- -
Follow-up Hdwy	- 3.32	- -	- -
Pot Cap-1 Maneuver	0 654	0 -	- -
Stage 1	0 -	0 -	- -
Stage 2	0 -	0 -	- -
Platoon blocked, %		- -	- -
Mov Cap-1 Maneuver	- 654	- -	- -
Mov Cap-2 Maneuver	- -	- -	- -
Stage 1	- -	- -	- -
Stage 2	- -	- -	- -

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

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 654	- -	- -
HCM Lane V/C Ratio	- 0.155	- -	- -
HCM Control Delay (s)	- 11.5	- -	- -
HCM Lane LOS	- B	- -	- -
HCM 95th %tile Q(veh)	- 0.5	- -	- -

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	282	69	83	16	36	165	481	12	32	583	105
Future Volume (vph)	282	69	83	16	36	165	481	12	32	583	105
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	42.0	42.0	10.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.0%	35.0%	8.3%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	22.7	31.9	31.9	10.6	10.8	11.1	30.2	30.2	6.1	20.8	20.8
Actuated g/C Ratio	0.27	0.38	0.38	0.13	0.13	0.13	0.36	0.36	0.07	0.25	0.25
v/c Ratio	0.68	0.11	0.13	0.08	0.28	0.82	0.41	0.02	0.28	0.72	0.22
Control Delay	41.3	18.7	2.0	42.4	24.3	69.6	24.5	0.1	50.4	35.3	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	18.7	2.0	42.4	24.3	69.6	24.5	0.1	50.4	35.3	2.2
LOS	D	B	A	D	C	E	C	A	D	D	A
Approach Delay		30.2			28.0		35.3			31.2	
Approach LOS		C			C		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 83.1

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 32.3

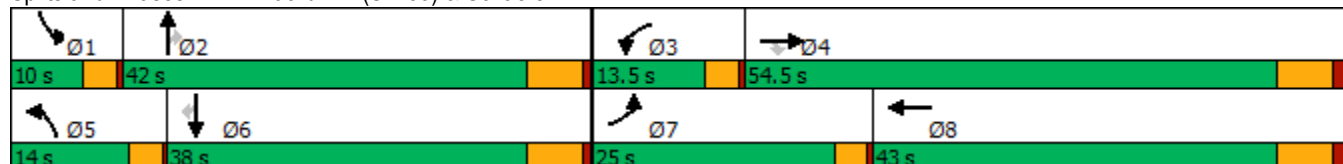
Intersection LOS: C

Intersection Capacity Utilization 65.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	282	69	83	16	36	27	165	481	12	32	583	105
Future Volume (veh/h)	282	69	83	16	36	27	165	481	12	32	583	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	294	72	34	17	38	6	172	501	11	33	607	70
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	454	384	65	126	20	208	1176	524	56	853	375
Arrive On Green	0.21	0.26	0.26	0.04	0.08	0.08	0.13	0.35	0.35	0.03	0.25	0.25
Sat Flow, veh/h	1594	1772	1498	1594	1494	236	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	294	72	34	17	0	44	172	501	11	33	607	70
Grp Sat Flow(s),veh/h/ln	1594	1772	1498	1594	0	1729	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	11.2	2.0	1.1	0.6	0.0	1.5	6.6	7.1	0.3	1.3	10.3	2.3
Cycle Q Clear(g_c), s	11.2	2.0	1.1	0.6	0.0	1.5	6.6	7.1	0.3	1.3	10.3	2.3
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	454	384	65	0	146	208	1176	524	56	853	375
V/C Ratio(X)	0.87	0.16	0.09	0.26	0.00	0.30	0.83	0.43	0.02	0.59	0.71	0.19
Avail Cap(c_a), veh/h	546	1341	1134	254	0	992	267	1932	862	165	1717	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	18.1	17.8	29.2	0.0	27.0	26.6	15.6	13.4	29.8	21.3	18.4
Incr Delay (d2), s/veh	4.8	0.1	0.1	0.8	0.0	0.9	12.2	0.2	0.0	3.7	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.7	0.3	0.2	0.0	0.6	2.9	2.2	0.1	0.5	3.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	18.2	17.8	30.0	0.0	27.9	38.8	15.9	13.4	33.6	22.5	18.6
LnGrp LOS	C	B	B	C	A	C	D	B	B	C	C	B
Approach Vol, veh/h		400			61			684			710	
Approach Delay, s/veh		25.8			28.4			21.6			22.6	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	27.9	6.1	23.1	11.7	21.9	16.9	12.3				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	36.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	3.3	9.1	2.6	4.0	8.6	12.3	13.2	3.5				
Green Ext Time (p_c), s	0.0	2.9	0.0	0.3	0.0	3.6	0.3	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			23.1									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	110	132	68	51	159	73	525	35	71	528	80
Future Volume (vph)	110	132	68	51	159	73	525	35	71	528	80
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	55.0	55.0	55.0	55.0	55.0	14.0	47.0	47.0	18.0	51.0	51.0
Total Split (%)	45.8%	45.8%	45.8%	45.8%	45.8%	11.7%	39.2%	39.2%	15.0%	42.5%	42.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	16.1	16.1	16.1	16.1	16.1	7.0	18.6	18.6	8.2	17.4	17.4
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.12	0.33	0.33	0.14	0.31	0.31
v/c Ratio	0.39	0.27	0.14	0.17	0.46	0.21	0.49	0.06	0.32	0.53	0.16
Control Delay	22.3	18.7	3.6	18.4	19.7	31.6	19.9	0.2	32.7	19.9	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	18.7	3.6	18.4	19.7	31.6	19.9	0.2	32.7	19.9	6.1
LOS	C	B	A	B	B	C	B	A	C	B	A
Approach Delay		16.7			19.4		20.2			19.6	
Approach LOS		B			B		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 56.6

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 19.3

Intersection LOS: B

Intersection Capacity Utilization 60.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
18 s	47 s	55 s
		
Ø5	Ø6	Ø8
14 s	51 s	55 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	132	68	51	159	61	73	525	35	71	528	80
Future Volume (veh/h)	110	132	68	51	159	61	73	525	35	71	528	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	113	136	36	53	164	55	75	541	22	73	544	44
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	511	433	413	366	123	199	901	402	107	897	395
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.07	0.27	0.27	0.07	0.27	0.27
Sat Flow, veh/h	1039	1772	1500	1084	1269	426	2910	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	113	136	36	53	0	219	75	541	22	73	544	44
Grp Sat Flow(s),veh/h/ln	1039	1772	1500	1084	0	1695	1455	1683	1502	1594	1683	1481
Q Serve(g_s), s	4.4	2.6	0.8	1.7	0.0	4.6	1.1	6.1	0.5	2.0	6.2	1.0
Cycle Q Clear(g_c), s	9.0	2.6	0.8	4.3	0.0	4.6	1.1	6.1	0.5	2.0	6.2	1.0
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	354	511	433	413	0	489	199	901	402	107	897	395
V/C Ratio(X)	0.32	0.27	0.08	0.13	0.00	0.45	0.38	0.60	0.05	0.68	0.61	0.11
Avail Cap(c_a), veh/h	1194	1942	1644	1289	0	1858	698	3153	1406	528	3460	1522
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	12.0	11.4	13.7	0.0	12.7	19.5	14.0	11.9	20.0	14.1	12.1
Incr Delay (d2), s/veh	0.5	0.3	0.1	0.1	0.0	0.6	0.4	0.6	0.1	2.8	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.8	0.2	0.3	0.0	1.4	0.3	1.7	0.1	0.6	1.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	12.3	11.4	13.8	0.0	13.4	19.9	14.6	12.0	22.8	14.7	12.3
LnGrp LOS	B	B	B	B	A	B	B	B	B	C	B	B
Approach Vol, veh/h		285			272			638			661	
Approach Delay, s/veh		14.0			13.5			15.2			15.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	17.7		19.6	6.5	17.7		19.6				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	14.5	41.0		48.0	10.5	45.0		48.0				
Max Q Clear Time (g_c+I1), s	4.0	8.1		11.0	3.1	8.2		6.6				
Green Ext Time (p_c), s	0.0	3.3		1.3	0.0	3.5		1.4				
Intersection Summary												
HCM 6th Ctrl Delay				14.8								
HCM 6th LOS				B								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	37	44	104	14	48	93	604	7	17	581	30
Future Volume (vph)	37	44	104	14	48	93	604	7	17	581	30
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	48.0	48.0	48.0	48.0	48.0	23.0	60.0	60.0	12.0	49.0	49.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	19.2%	50.0%	50.0%	10.0%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	10.9	10.9	10.9	10.9	10.9	9.6	33.5	33.5	6.7	24.2	24.2
Actuated g/C Ratio	0.21	0.21	0.21	0.21	0.21	0.18	0.64	0.64	0.13	0.46	0.46
v/c Ratio	0.16	0.13	0.27	0.06	0.20	0.34	0.30	0.01	0.09	0.40	0.04
Control Delay	19.5	18.5	6.3	18.3	15.1	28.7	10.1	0.0	31.9	17.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.5	18.5	6.3	18.3	15.1	28.7	10.1	0.0	31.9	17.1	0.1
LOS	B	B	A	B	B	C	B	A	C	B	A
Approach Delay		11.9			15.6		12.5			16.7	
Approach LOS		B			B		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 52.7

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 14.2

Intersection LOS: B

Intersection Capacity Utilization 43.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
12 s	60 s	48 s
		
Ø5	Ø6	Ø8
23 s	49 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	44	104	14	48	22	93	604	7	17	581	30
Future Volume (veh/h)	37	44	104	14	48	22	93	604	7	17	581	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	39	46	28	15	51	11	98	636	7	18	612	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	228	193	354	182	39	146	1357	605	37	1127	496
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.09	0.40	0.40	0.02	0.33	0.33
Sat Flow, veh/h	1199	1772	1502	1186	1412	305	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	39	46	28	15	0	62	98	636	7	18	612	17
Grp Sat Flow(s),veh/h/ln	1199	1772	1502	1186	0	1717	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	1.0	0.7	0.5	0.4	0.0	1.0	1.9	4.4	0.1	0.4	4.6	0.2
Cycle Q Clear(g_c), s	2.0	0.7	0.5	1.1	0.0	1.0	1.9	4.4	0.1	0.4	4.6	0.2
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	228	193	354	0	221	146	1357	605	37	1127	496
V/C Ratio(X)	0.11	0.20	0.14	0.04	0.00	0.28	0.67	0.47	0.01	0.49	0.54	0.03
Avail Cap(c_a), veh/h	1836	2433	2062	1830	0	2358	988	5811	2592	431	4634	2038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	12.3	12.2	12.7	0.0	12.4	13.8	6.9	5.6	15.2	8.5	7.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.0	0.0	0.5	4.0	0.3	0.0	7.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.1	0.1	0.0	0.3	0.6	0.5	0.0	0.2	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.4	12.6	12.4	12.8	0.0	12.9	17.8	7.2	5.6	22.4	8.9	7.1
LnGrp LOS	B	B	B	B	A	B	B	A	A	C	A	A
Approach Vol, veh/h		113			77			741			647	
Approach Delay, s/veh		12.8			12.9			8.6			9.2	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.2	18.4		8.8	6.4	16.2		8.8				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	8.5	54.3		43.2	19.5	43.3		43.2				
Max Q Clear Time (g_c+I1), s	2.4	6.4		4.0	3.9	6.6		3.1				
Green Ext Time (p_c), s	0.0	4.1		0.3	0.1	3.9		0.3				
Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									

APPENDIX 5.2: E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Eucalyptus Av.**

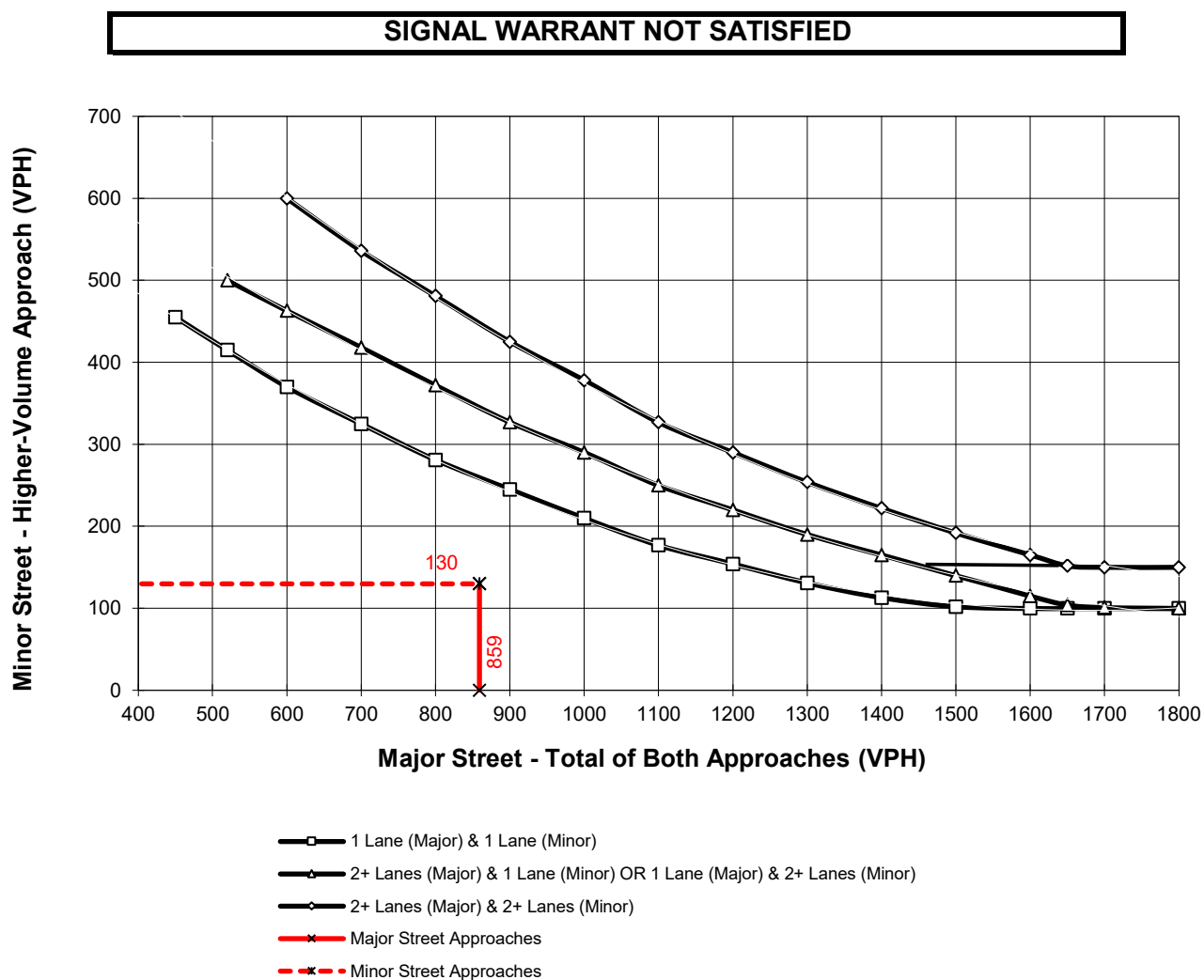
Total of Both Approaches (VPH) = **859**

Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Fern Av.**

High Volume Approach (VPH) = **130**

Number of Approach Lanes On Minor Street = **2**



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

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	CALC	CP	E+P
Jurisdiction:	<u>City of Chino</u>			CHK	<u>CP</u>	DATE <u>10/23/23</u>
Major Street:	<u>Schaefer Av.</u>					DATE <u>10/23/23</u>
Minor Street:	<u>Driveway 2</u>					Critical Approach Speed (Major) <u>45</u> mph
						Critical Approach Speed (Minor) <u>25</u> mph
Major Street Approach Lanes =	<u>2</u>	lane		Minor Street Approach Lanes:	<u>2</u>	lane
Major Street Future ADT =	<u>13,118</u>	vpd		Minor Street Future ADT =	<u>4,166</u>	vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						☒
						or
In built up area of isolated community of < 10,000 population						☐

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>		<u>RURAL</u>		Minimum Requirements			
CONDITION A - Minimum Vehicular Volume		XX		EADT			
<u>Satisfied</u>		<u>Not Satisfied</u>		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
XX				(Total of Both Approaches)		(One Direction Only)	
<u>Major Street</u>		<u>Minor Street</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1		1		8,000	5,600	2,400	1,680
2 +		1		9,600	6,720	2,400	1,680
2 + 13,118		2 + 4,166		9,600	6,720 *	3,200	2,240 *
1		2 +		8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>		<u>Not Satisfied</u>		(Total of Both Approaches)		(One Direction Only)	
XX				<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach							
<u>Major Street</u>		<u>Minor Street</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1		1		12,000	8,400	1,200	850
2 +		1		14,400	10,080	1,200	850
2 + 13,118		2 + 4,166		14,400	10,080 *	1,600	1,120 *
1		2 +		12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>		<u>Not Satisfied</u>		80%		80%	
XX							
No one condition satisfied, but following conditions fulfilled 80% of more							

APPENDIX 5.3: E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/18/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	252	246	228	315	713	833	448
v/c Ratio	0.80	0.78	0.49	0.83	0.28	0.50	0.45
Control Delay	65.2	56.6	8.6	69.1	5.8	25.2	4.0
Queue Delay	0.1	0.1	0.0	0.0	0.1	0.0	0.0
Total Delay	65.3	56.8	8.6	69.1	6.0	25.2	4.0
Queue Length 50th (ft)	196	172	0	263	113	231	0
Queue Length 95th (ft)	281	261	66	357	136	356	70
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	406	397	536	494	2568	1678	986
Starvation Cap Reductn	0	0	0	0	824	0	0
Spillback Cap Reductn	7	7	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.63	0.43	0.64	0.41	0.50	0.45
Intersection Summary							

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/18/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	305	390	690	531	359	857
v/c Ratio	0.84	0.82	0.46	0.55	0.85	0.35
Control Delay	64.6	37.0	28.3	5.1	80.5	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.1
Total Delay	64.6	37.0	28.3	5.1	80.8	8.3
Queue Length 50th (ft)	238	164	199	0	299	128
Queue Length 95th (ft)	327	276	309	89	397	157
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	462	553	1505	958	531	2463
Starvation Cap Reductn	0	0	0	0	17	500
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.71	0.46	0.55	0.70	0.44
Intersection Summary						

Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/18/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	278	269	253	254	916	779	514
v/c Ratio	0.81	0.76	0.57	0.80	0.37	0.45	0.50
Control Delay	62.4	48.2	19.5	75.8	6.3	23.3	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	62.4	48.2	19.5	75.8	6.4	23.3	4.0
Queue Length 50th (ft)	216	172	61	212	121	203	0
Queue Length 95th (ft)	295	259	138	298	136	325	74
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	462	457	533	435	2501	1733	1037
Starvation Cap Reductn	0	0	0	0	477	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.59	0.47	0.58	0.45	0.45	0.50
Intersection Summary							

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/18/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	261	258	891	415	311	871
v/c Ratio	0.82	0.58	0.52	0.44	0.84	0.34
Control Delay	66.1	16.6	25.2	4.0	76.7	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	66.1	16.6	25.2	4.0	76.7	7.3
Queue Length 50th (ft)	205	44	247	0	259	134
Queue Length 95th (ft)	287	124	381	67	351	167
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	420	527	1698	954	472	2556
Starvation Cap Reductn	0	0	0	0	0	569
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.49	0.52	0.44	0.66	0.44
Intersection Summary						

Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/18/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	237	222	217	375	805	856	438
v/c Ratio	0.81	0.64	0.49	0.86	0.31	0.53	0.46
Control Delay	68.8	31.8	9.2	71.0	5.7	27.2	4.2
Queue Delay	0.0	0.0	0.0	0.4	0.2	0.0	0.0
Total Delay	68.8	31.8	9.2	71.5	5.9	27.2	4.2
Queue Length 50th (ft)	187	91	0	312	93	248	0
Queue Length 95th (ft)	272	176	67	412	164	373	70
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	364	406	495	553	2616	1609	958
Starvation Cap Reductn	0	0	0	24	867	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.55	0.44	0.71	0.46	0.53	0.46
Intersection Summary							

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/18/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	287	393	886	450	346	827
v/c Ratio	0.83	0.83	0.57	0.49	0.85	0.33
Control Delay	64.8	36.4	29.0	4.7	81.0	6.6
Queue Delay	0.5	0.6	0.0	0.0	0.2	0.1
Total Delay	65.2	37.0	29.0	4.7	81.2	6.7
Queue Length 50th (ft)	225	154	265	0	287	96
Queue Length 95th (ft)	310	269	405	77	386	131
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	448	553	1567	921	516	2499
Starvation Cap Reductn	0	0	0	0	12	529
Spillback Cap Reductn	22	26	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.75	0.57	0.49	0.69	0.42
Intersection Summary						

APPENDIX 6.1: OPENING YEAR CUMULATIVE (2024) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/20/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	37	374	102	36	548	83	38	9	36
Future Volume (vph)	37	374	102	36	548	83	38	9	36
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	19.0	49.0	49.0	19.0	49.0	52.0	52.0	52.0	52.0
Total Split (%)	15.8%	40.8%	40.8%	15.8%	40.8%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	7.7	23.0	23.0	7.6	22.9		18.6		18.6
Actuated g/C Ratio	0.13	0.38	0.38	0.13	0.38		0.31		0.31
v/c Ratio	0.27	0.42	0.24	0.26	0.63		0.56		0.26
Control Delay	34.4	16.6	6.5	34.5	19.5		24.3		14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	34.4	16.6	6.5	34.5	19.5		24.3		14.1
LOS	C	B	A	C	B		C		B
Approach Delay		15.9			20.4		24.3		14.1
Approach LOS		B			C		C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 59.9

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 18.8

Intersection LOS: B

Intersection Capacity Utilization 49.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

 Ø2	 Ø3	 Ø4
52 s	19 s	49 s
 Ø6	 Ø7	 Ø8
52 s	19 s	49 s

HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	374	102	36	548	11	83	38	46	9	36	49
Future Volume (veh/h)	37	374	102	36	548	11	83	38	46	9	36	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	0.98		0.99	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	54	542	123	52	794	10	120	55	42	13	52	38
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	1197	522	84	1205	15	297	129	73	110	245	156
Arrive On Green	0.05	0.36	0.36	0.05	0.35	0.35	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1594	3367	1468	1594	3402	43	666	490	277	80	935	593
Grp Volume(v), veh/h	54	542	123	52	393	411	217	0	0	103	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1762	1433	0	0	1608	0	0
Q Serve(g_s), s	1.5	5.6	2.7	1.5	9.0	9.0	3.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	5.6	2.7	1.5	9.0	9.0	5.7	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.55		0.19	0.13		0.37
Lane Grp Cap(c), veh/h	87	1197	522	84	596	624	499	0	0	511	0	0
V/C Ratio(X)	0.62	0.45	0.24	0.62	0.66	0.66	0.43	0.00	0.00	0.20	0.00	0.00
Avail Cap(c_a), veh/h	503	3190	1391	503	1595	1669	1563	0	0	1724	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.1	11.3	10.3	21.1	12.4	12.4	14.4	0.0	0.0	13.2	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.3	0.2	2.7	1.3	1.2	0.6	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.5	0.7	0.5	2.6	2.7	1.8	0.0	0.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	11.6	10.6	23.8	13.7	13.6	15.0	0.0	0.0	13.4	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		719			856			217			103	
Approach Delay, s/veh		12.3			14.3			15.0			13.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.6	7.0	22.0		16.6	7.1	21.9				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		47.4	14.4	43.2		47.4	14.4	43.2				
Max Q Clear Time (g_c+I1), s		7.7	3.5	7.6		4.3	3.5	11.0				
Green Ext Time (p_c), s		1.6	0.0	4.0		0.7	0.0	4.9				
Intersection Summary												
HCM 6th Ctrl Delay			13.5									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	37	697	26	8	638	24	43	86	18	111
Future Volume (vph)	37	697	26	8	638	24	43	86	18	111
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	17.0	57.0	57.0	12.0	52.0	52.0	51.0	51.0	51.0	51.0
Total Split (%)	14.2%	47.5%	47.5%	10.0%	43.3%	43.3%	42.5%	42.5%	42.5%	42.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.1	26.5	26.5	5.8	21.8	21.8		17.0		17.0
Actuated g/C Ratio	0.13	0.47	0.47	0.10	0.38	0.38		0.30		0.30
v/c Ratio	0.23	0.55	0.04	0.06	0.61	0.05		0.38		0.57
Control Delay	32.2	13.0	2.0	33.2	18.1	0.1		21.7		21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	32.2	13.0	2.0	33.2	18.1	0.1		21.7		21.9
LOS	C	B	A	C	B	A		C		C
Approach Delay		13.6			17.6			21.7		21.9
Approach LOS		B			B			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 56.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 16.8

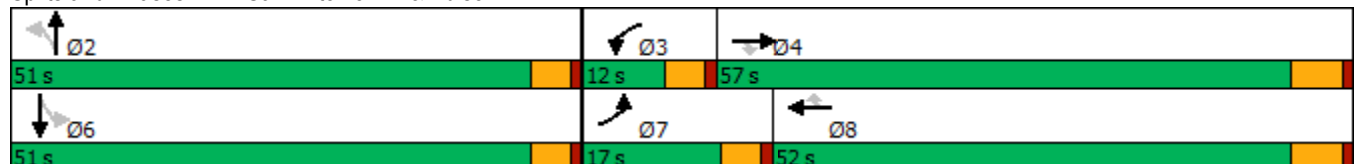
Intersection LOS: B

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary 2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	697	26	8	638	24	43	86	6	18	111	104
Future Volume (veh/h)	37	697	26	8	638	24	43	86	6	18	111	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	46	860	23	10	788	26	53	106	2	22	137	54
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	1365	595	21	1244	543	190	299	5	111	274	100
Arrive On Green	0.05	0.41	0.41	0.01	0.37	0.37	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	340	1254	20	84	1148	418
Grp Volume(v), veh/h	46	860	23	10	788	26	161	0	0	213	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1614	0	0	1650	0	0
Q Serve(g_s), s	1.2	8.9	0.4	0.3	8.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	8.9	0.4	0.3	8.4	0.5	3.3	0.0	0.0	4.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.33		0.01	0.10		0.25
Lane Grp Cap(c), veh/h	78	1365	595	21	1244	543	495	0	0	485	0	0
V/C Ratio(X)	0.59	0.63	0.04	0.48	0.63	0.05	0.33	0.00	0.00	0.44	0.00	0.00
Avail Cap(c_a), veh/h	452	3939	1718	270	3555	1550	1718	0	0	1811	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.4	10.4	7.9	21.4	11.4	8.9	14.0	0.0	0.0	14.5	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.5	0.0	6.2	0.5	0.0	0.4	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.2	0.1	0.1	2.2	0.1	1.2	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	10.9	7.9	27.7	11.9	8.9	14.3	0.0	0.0	15.1	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h	929				824				161		213	
Approach Delay, s/veh	11.4				12.0				14.3		15.1	
Approach LOS	B				B				B		B	
Timer - Assigned Phs	2		3	4		6		7	8			
Phs Duration (G+Y+Rc), s	15.0		5.2	23.5		15.0		6.7	22.0			
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6		4.6	5.8			
Max Green Setting (Gmax), s	46.4		7.4	51.2		46.4		12.4	46.2			
Max Q Clear Time (g_c+I1), s	5.3		2.3	10.9		6.8		3.2	10.4			
Green Ext Time (p_c), s	1.1		0.0	6.5		1.5		0.0	5.7			
Intersection Summary												
HCM 6th Ctrl Delay	12.2											
HCM 6th LOS	B											

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	187	48	352	35	118	17	135
Future Volume (vph)	15	187	48	352	35	118	17	135
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	43.0	18.0	47.0	21.0	41.0	18.0	38.0
Total Split (%)	11.7%	35.8%	15.0%	39.2%	17.5%	34.2%	15.0%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	16.9	12.8	19.4	17.1	6.5	14.5	6.0	12.4
Actuated g/C Ratio	0.36	0.27	0.41	0.36	0.14	0.31	0.13	0.26
v/c Ratio	0.04	0.28	0.13	0.36	0.19	0.19	0.10	0.22
Control Delay	10.4	16.5	10.3	13.6	26.7	11.7	27.6	16.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	16.5	10.3	13.6	26.7	11.7	27.6	16.4
LOS	B	B	B	B	C	B	C	B
Approach Delay		16.1		13.2		14.4		17.5
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 46.9

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 14.8

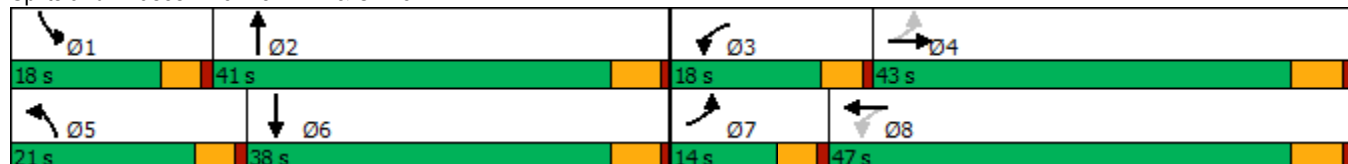
Intersection LOS: B

Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.



HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	187	31	48	352	21	35	118	48	17	135	30
Future Volume (veh/h)	15	187	31	48	352	21	35	118	48	17	135	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	217	29	56	409	19	41	137	22	20	157	23
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	677	89	413	855	40	71	721	113	39	673	97
Arrive On Green	0.02	0.23	0.23	0.06	0.26	0.26	0.04	0.25	0.25	0.02	0.23	0.23
Sat Flow, veh/h	1594	2989	394	1594	3275	152	1594	2908	457	1594	2950	425
Grp Volume(v), veh/h	17	121	125	56	210	218	41	78	81	20	88	92
Grp Sat Flow(s),veh/h/ln	1594	1683	1700	1594	1683	1744	1594	1683	1682	1594	1683	1691
Q Serve(g_s), s	0.4	2.7	2.8	1.2	4.8	4.8	1.2	1.7	1.7	0.6	2.0	2.0
Cycle Q Clear(g_c), s	0.4	2.7	2.8	1.2	4.8	4.8	1.2	1.7	1.7	0.6	2.0	2.0
Prop In Lane	1.00		0.23	1.00		0.09	1.00		0.27	1.00		0.25
Lane Grp Cap(c), veh/h	324	381	385	413	439	455	71	418	417	39	384	386
V/C Ratio(X)	0.05	0.32	0.32	0.14	0.48	0.48	0.58	0.19	0.19	0.51	0.23	0.24
Avail Cap(c_a), veh/h	617	1367	1380	791	1514	1568	570	1308	1307	466	1198	1203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	14.8	14.8	12.3	14.3	14.3	21.5	13.6	13.6	22.1	14.4	14.4
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.1	0.8	0.8	2.8	0.2	0.2	3.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.9	0.9	0.3	1.5	1.6	0.4	0.5	0.6	0.2	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	15.2	15.3	12.4	15.1	15.1	24.3	13.8	13.8	25.9	14.7	14.7
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		263			484			200			200	
Approach Delay, s/veh		15.1			14.8			16.0			15.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	16.8	7.1	16.2	6.6	15.9	5.6	17.8				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	35.6	13.4	37.2	16.4	32.6	9.4	41.2				
Max Q Clear Time (g_c+I1), s	2.6	3.7	3.2	4.8	3.2	4.0	2.4	6.8				
Green Ext Time (p_c), s	0.0	0.8	0.0	1.3	0.0	0.9	0.0	2.4				
Intersection Summary												
HCM 6th Ctrl Delay			15.2									
HCM 6th LOS			B									

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	37	322	13	376	80	112	32	139
Future Volume (vph)	37	322	13	376	80	112	32	139
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	41.0	15.0	38.0	27.0	47.0	17.0	37.0
Total Split (%)	15.0%	34.2%	12.5%	31.7%	22.5%	39.2%	14.2%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	7.9	74.9	6.0	68.9	11.7	21.2	7.5	13.0
Actuated g/C Ratio	0.07	0.62	0.05	0.57	0.10	0.18	0.06	0.11
v/c Ratio	0.43	0.25	0.21	0.26	0.63	0.29	0.39	0.63
Control Delay	65.7	11.8	60.3	15.1	68.9	36.3	64.8	37.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	11.8	60.3	15.1	68.9	36.3	64.8	37.2
LOS	E	B	E	B	E	D	E	D
Approach Delay		16.2		16.5		48.0		40.7
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 26.2

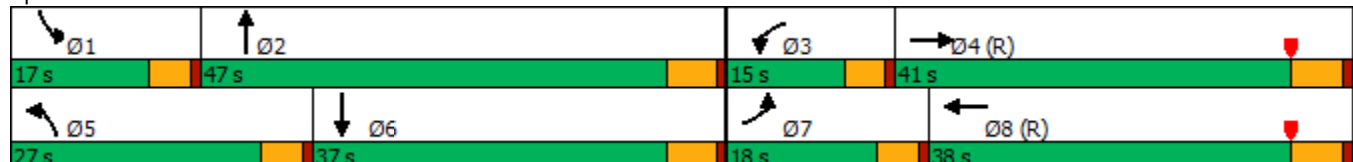
Intersection LOS: C

Intersection Capacity Utilization 54.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	322	90	13	376	32	80	112	31	32	139	88
Future Volume (veh/h)	37	322	90	13	376	32	80	112	31	32	139	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	45	388	91	16	453	31	96	135	30	39	167	71
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	1710	397	27	1961	134	117	416	90	48	252	102
Arrive On Green	0.03	0.63	0.63	0.02	0.61	0.61	0.07	0.15	0.15	0.03	0.11	0.11
Sat Flow, veh/h	1594	2711	629	1594	3197	218	1594	2742	592	1594	2323	944
Grp Volume(v), veh/h	45	239	240	16	238	246	96	81	84	39	119	119
Grp Sat Flow(s),veh/h/ln	1594	1683	1657	1594	1683	1732	1594	1683	1650	1594	1683	1583
Q Serve(g_s), s	3.4	7.3	7.5	1.2	7.6	7.7	7.1	5.2	5.4	2.9	8.1	8.7
Cycle Q Clear(g_c), s	3.4	7.3	7.5	1.2	7.6	7.7	7.1	5.2	5.4	2.9	8.1	8.7
Prop In Lane	1.00		0.38	1.00		0.13	1.00		0.36	1.00		0.60
Lane Grp Cap(c), veh/h	56	1062	1045	27	1032	1062	117	255	250	48	182	172
V/C Ratio(X)	0.81	0.23	0.23	0.58	0.23	0.23	0.82	0.32	0.33	0.81	0.65	0.69
Avail Cap(c_a), veh/h	178	1062	1045	138	1032	1062	298	584	572	165	443	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	9.5	9.6	58.5	10.5	10.5	54.8	45.4	45.5	57.8	51.3	51.6
Incr Delay (d2), s/veh	9.1	0.4	0.5	7.1	0.5	0.5	5.2	0.7	0.8	11.1	3.9	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.6	2.6	0.5	2.7	2.8	3.0	2.2	2.3	1.3	3.6	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.6	10.0	10.0	65.6	11.0	11.0	60.0	46.1	46.3	68.9	55.2	56.6
LnGrp LOS	E	A	B	E	B	B	E	D	D	E	E	E
Approach Vol, veh/h	524			500			261			277		
Approach Delay, s/veh	14.9			12.7			51.3			57.7		
Approach LOS	B			B			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	23.6	6.7	81.5	13.4	18.4	8.8	79.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	12.4	41.6	10.4	35.2	22.4	31.6	13.4	32.2				
Max Q Clear Time (g_c+I1), s	4.9	7.4	3.2	9.5	9.1	10.7	5.4	9.7				
Green Ext Time (p_c), s	0.0	0.9	0.0	2.6	0.1	1.2	0.0	2.5				
Intersection Summary												
HCM 6th Ctrl Delay	27.9											
HCM 6th LOS	C											

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	57	637	29	13	536	19	36	112	7	118
Future Volume (vph)	57	637	29	13	536	19	36	112	7	118
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	22.0	52.0	52.0	13.0	43.0	43.0	17.0	42.0	13.0	38.0
Total Split (%)	18.3%	43.3%	43.3%	10.8%	35.8%	35.8%	14.2%	35.0%	10.8%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	8.0	22.7	22.7	6.3	17.6	17.6	7.1	18.2	6.1	13.7
Actuated g/C Ratio	0.14	0.40	0.40	0.11	0.31	0.31	0.12	0.32	0.11	0.24
v/c Ratio	0.28	0.52	0.05	0.08	0.56	0.04	0.20	0.12	0.05	0.25
Control Delay	33.3	16.0	0.1	35.4	21.7	0.1	34.2	17.4	35.6	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.3	16.0	0.1	35.4	21.7	0.1	34.2	17.4	35.6	16.3
LOS	C	B	A	D	C	A	C	B	D	B
Approach Delay		16.7			21.3			21.4		17.0
Approach LOS		B			C			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 56.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 18.8

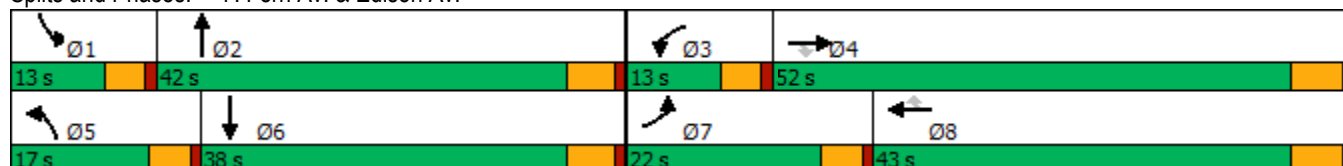
Intersection LOS: B

Intersection Capacity Utilization 53.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	637	29	13	536	19	36	112	4	7	118	67
Future Volume (veh/h)	57	637	29	13	536	19	36	112	4	7	118	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	62	692	22	14	583	16	39	122	2	8	128	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	1065	469	28	929	415	67	814	13	17	535	157
Arrive On Green	0.06	0.32	0.32	0.02	0.28	0.28	0.04	0.24	0.24	0.01	0.21	0.21
Sat Flow, veh/h	1594	3367	1481	1594	3367	1502	1594	3390	55	1594	2563	753
Grp Volume(v), veh/h	62	692	22	14	583	16	39	60	64	8	82	85
Grp Sat Flow(s),veh/h/ln	1594	1683	1481	1594	1683	1502	1594	1683	1762	1594	1683	1633
Q Serve(g_s), s	1.9	8.7	0.5	0.4	7.4	0.4	1.2	1.4	1.4	0.2	2.0	2.1
Cycle Q Clear(g_c), s	1.9	8.7	0.5	0.4	7.4	0.4	1.2	1.4	1.4	0.2	2.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.46
Lane Grp Cap(c), veh/h	93	1065	469	28	929	415	67	404	423	17	351	341
V/C Ratio(X)	0.67	0.65	0.05	0.50	0.63	0.04	0.58	0.15	0.15	0.48	0.23	0.25
Avail Cap(c_a), veh/h	565	3166	1393	273	2549	1137	402	1254	1313	273	1117	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.7	14.4	11.6	23.9	15.6	13.0	23.1	14.7	14.7	24.2	16.2	16.2
Incr Delay (d2), s/veh	3.1	0.7	0.0	4.9	0.7	0.0	3.0	0.2	0.2	7.6	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.6	0.1	0.2	2.3	0.1	0.4	0.5	0.5	0.1	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	15.1	11.7	28.8	16.3	13.1	26.1	14.9	14.9	31.8	16.5	16.6
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h	776			613			163			175		
Approach Delay, s/veh	15.9			16.5			17.6			17.3		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	17.2	5.5	21.3	6.7	15.6	7.5	19.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	36.6	8.4	46.2	12.4	32.6	17.4	37.2				
Max Q Clear Time (g_c+I1), s	2.2	3.4	2.4	10.7	3.2	4.1	3.9	9.4				
Green Ext Time (p_c), s	0.0	0.6	0.0	4.9	0.0	0.9	0.0	3.8				
Intersection Summary												
HCM 6th Ctrl Delay	16.4											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	455	592	67	47	83
Future Vol, veh/h	30	455	592	67	47	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	548	713	81	57	100
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	794	0	-	0	1100	397
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	346	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	823	-	-	-	206	602
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	688	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	823	-	-	-	197	602
Mov Cap-2 Maneuver	-	-	-	-	314	-
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	688	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		14.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	823	-	-	-	314	602
HCM Lane V/C Ratio	0.044	-	-	-	0.18	0.166
HCM Control Delay (s)	9.6	-	-	-	19	12.2
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6	0.6

Intersection						
Int Delay, s/veh	2.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	263	121	29	340	85	64
Future Vol, veh/h	263	121	29	340	85	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	309	142	34	400	100	75
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	451	0	648	226
Stage 1	-	-	-	-	380	-
Stage 2	-	-	-	-	268	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1221	-	493	*1001
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	753	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1221	-	479	*1001
Mov Cap-2 Maneuver	-	-	-	-	563	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	732	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.6		11.9	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	693	-	-	1221	-	
HCM Lane V/C Ratio	0.253	-	-	0.028	-	
HCM Control Delay (s)	11.9	-	-	8	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	1	-	-	0.1	-	
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	512	3	338	484	704	842	444
Future Volume (vph)	512	3	338	484	704	842	444
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	38.0	86.0	48.0	48.0
Total Split (%)	28.3%	28.3%	28.3%	31.7%	71.7%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	25.5	25.5	25.5	36.3	84.0	43.2	43.2
Actuated g/C Ratio	0.21	0.21	0.21	0.30	0.70	0.36	0.36
v/c Ratio	0.86	0.87	0.52	0.93	0.29	0.68	0.53
Control Delay	68.0	67.7	8.8	75.3	7.3	36.1	4.9
Queue Delay	0.2	0.2	0.0	8.0	0.2	0.0	0.0
Total Delay	68.2	67.9	8.8	83.3	7.5	36.1	4.9
LOS	E	E	A	F	A	D	A
Approach Delay		49.5			38.4	25.3	
Approach LOS		D			D	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 36.2

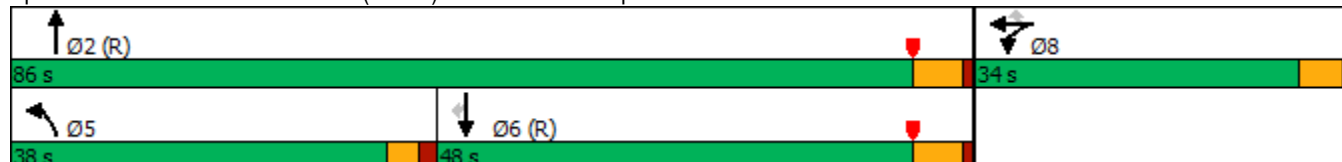
Intersection LOS: D

Intersection Capacity Utilization 101.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	512	3	338	484	704	0	0	842	444
Future Volume (veh/h)	0	0	0	512	3	338	484	704	0	0	842	444
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				584	0	118	499	726	0	0	868	302
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				658	0	293	497	2587	0	0	1461	652
Arrive On Green				0.18	0.00	0.18	0.56	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				584	0	118	499	726	0	0	868	302
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				19.2	0.0	7.9	33.5	0.0	0.0	0.0	22.8	16.6
Cycle Q Clear(g_c), s				19.2	0.0	7.9	33.5	0.0	0.0	0.0	22.8	16.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				658	0	293	497	2587	0	0	1461	652
V/C Ratio(X)				0.89	0.00	0.40	1.00	0.28	0.00	0.00	0.59	0.46
Avail Cap(c_a), veh/h				861	0	383	497	2587	0	0	1461	652
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.67	0.67	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.7	0.0	43.1	26.5	0.0	0.0	0.0	27.5	25.7
Incr Delay (d2), s/veh				7.7	0.0	0.3	33.9	0.2	0.0	0.0	1.8	2.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.9	0.0	3.0	13.7	0.1	0.0	0.0	9.7	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.4	0.0	43.4	60.4	0.2	0.0	0.0	29.3	28.1
LnGrp LOS				E	A	D	F	A	A	A	C	C
Approach Vol, veh/h					702			1225			1170	
Approach Delay, s/veh					53.4			24.7			29.0	
Approach LOS					D			C			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	92.8			38.0			54.8			27.2		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	80.5			33.5			42.5			29.0		
Max Q Clear Time (g_c+I1), s	2.0			35.5			24.8			21.2		
Green Ext Time (p_c), s	8.4			0.0			8.8			1.0		
Intersection Summary												
HCM 6th Ctrl Delay				32.8								
HCM 6th LOS				C								
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	336	0	852	571	355	999
Future Volume (vph)	336	0	852	571	355	999
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	38.0	38.0	42.0	42.0	40.0	82.0
Total Split (%)	31.7%	31.7%	35.0%	35.0%	33.3%	68.3%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	34.3	34.3	42.4	42.4	28.8	75.2
Actuated g/C Ratio	0.29	0.29	0.35	0.35	0.24	0.63
v/c Ratio	0.65	1.66	0.70	0.64	0.86	0.46
Control Delay	45.5	329.9	37.9	6.1	75.7	12.8
Queue Delay	8.9	2.6	0.0	0.0	0.3	0.3
Total Delay	54.3	332.6	37.9	6.1	76.0	13.1
LOS	D	F	D	A	E	B
Approach Delay		259.2	25.1			29.6
Approach LOS		F	C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.66

Intersection Signal Delay: 94.9

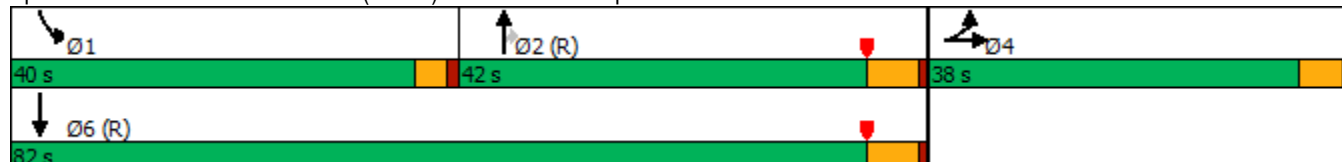
Intersection LOS: F

Intersection Capacity Utilization 101.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	0	808	0	0	0	0	852	571	355	999	0
Future Volume (veh/h)	336	0	808	0	0	0	0	852	571	355	999	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	346	0	729				0	878	423	366	1030	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	490	0	436				0	1375	598	387	2265	0
Arrive On Green	0.28	0.00	0.28				0.00	0.39	0.39	0.43	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1546	1781	3647	0
Grp Volume(v), veh/h	346	0	729				0	878	423	366	1030	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1546	1781	1777	0
Q Serve(g_s), s	21.0	0.0	33.0				0.0	24.1	27.7	23.7	0.0	0.0
Cycle Q Clear(g_c), s	21.0	0.0	33.0				0.0	24.1	27.7	23.7	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	490	0	436				0	1375	598	387	2265	0
V/C Ratio(X)	0.71	0.00	1.67				0.00	0.64	0.71	0.95	0.45	0.00
Avail Cap(c_a), veh/h	490	0	436				0	1375	598	534	2265	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.78	0.78	0.61	0.61	0.00
Uniform Delay (d), s/veh	39.1	0.0	43.5				0.0	30.0	31.1	33.2	0.0	0.0
Incr Delay (d2), s/veh	3.9	0.0	312.5				0.0	1.8	5.4	13.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	50.2				0.0	10.3	10.9	9.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	0.0	356.0				0.0	31.7	36.5	46.6	0.4	0.0
LnGrp LOS	D	A	F				A	C	D	D	A	A
Approach Vol, veh/h	1075						1301			1396		
Approach Delay, s/veh	255.3						33.3			12.5		
Approach LOS	F						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	30.1	51.9	38.0		82.0							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	36.0	36.5	33.0		76.5							
Max Q Clear Time (g_c+I1), s	25.7	29.7	35.0		2.0							
Green Ext Time (p_c), s	0.4	4.7	0.0		14.1							
Intersection Summary												
HCM 6th Ctrl Delay			88.9									
HCM 6th LOS			F									
Notes												

Timings

12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	←	↑↑	←	↑↑	←	↑↑↑	↑	←	↑↑↑	←
Traffic Volume (vph)	110	231	67	333	115	1110	52	195	1531	66
Future Volume (vph)	110	231	67	333	115	1110	52	195	1531	66
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	41.0	17.0	34.0	22.0	41.0	41.0	21.0	40.0	40.0
Total Split (%)	20.0%	34.2%	14.2%	28.3%	18.3%	34.2%	34.2%	17.5%	33.3%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.5	23.9	8.6	18.6	11.7	36.3	36.3	11.1	35.8	35.8
Actuated g/C Ratio	0.12	0.24	0.09	0.19	0.12	0.37	0.37	0.11	0.36	0.36
v/c Ratio	0.61	0.42	0.50	0.73	0.64	0.59	0.08	0.60	0.82	0.11
Control Delay	57.2	22.6	58.5	39.6	58.7	28.3	0.2	50.8	34.7	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	22.6	58.5	39.6	58.7	28.3	0.2	50.8	34.7	0.3
LOS	E	C	E	D	E	C	A	D	C	A
Approach Delay		30.5		41.9		29.9			35.2	
Approach LOS		C		D		C			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 33.9

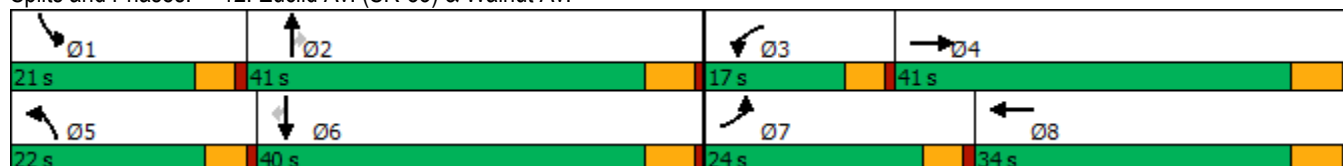
Intersection LOS: C

Intersection Capacity Utilization 77.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	231	141	67	333	151	115	1110	52	195	1531	66
Future Volume (veh/h)	110	231	141	67	333	151	115	1110	52	195	1531	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	113	238	118	69	343	138	119	1144	46	201	1578	44
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	499	238	86	453	179	146	2147	598	270	2137	604
Arrive On Green	0.09	0.22	0.22	0.05	0.19	0.19	0.09	0.40	0.40	0.09	0.40	0.40
Sat Flow, veh/h	1594	2256	1077	1594	2415	954	1594	5316	1482	3000	5316	1502
Grp Volume(v), veh/h	113	185	171	69	250	231	119	1144	46	201	1578	44
Grp Sat Flow(s),veh/h/ln	1594	1772	1561	1594	1772	1597	1594	1772	1482	1500	1772	1502
Q Serve(g_s), s	6.1	8.0	8.4	3.8	11.8	12.1	6.5	14.4	1.7	5.8	22.3	1.6
Cycle Q Clear(g_c), s	6.1	8.0	8.4	3.8	11.8	12.1	6.5	14.4	1.7	5.8	22.3	1.6
Prop In Lane	1.00		0.69	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	392	345	86	332	299	146	2147	598	270	2137	604
V/C Ratio(X)	0.81	0.47	0.50	0.81	0.75	0.77	0.81	0.53	0.08	0.75	0.74	0.07
Avail Cap(c_a), veh/h	351	707	623	224	567	511	315	2147	598	558	2137	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	29.8	30.0	41.3	33.9	34.0	39.3	20.0	16.2	39.1	22.4	16.2
Incr Delay (d2), s/veh	4.2	0.9	1.1	6.5	3.5	4.2	4.1	1.0	0.3	1.5	2.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.3	3.1	1.6	5.1	4.8	2.6	5.7	0.6	2.1	8.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	30.7	31.1	47.8	37.3	38.3	43.4	20.9	16.4	40.7	24.7	16.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		469			550			1309			1823	
Approach Delay, s/veh		34.0			39.0			22.8			26.3	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	41.0	9.3	25.3	12.7	40.8	12.3	22.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	17.4	34.6	19.4	28.2				
Max Q Clear Time (g_c+I1), s	7.8	16.4	5.8	10.4	8.5	24.3	8.1	14.1				
Green Ext Time (p_c), s	0.2	7.8	0.0	1.9	0.1	7.1	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			27.8									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	137	308	182	475	92	78	983	127	148	1357	109
Future Volume (vph)	137	308	182	475	92	78	983	127	148	1357	109
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.3	37.0	23.0	35.7	35.7	14.7	39.0	39.0	21.0	45.3	24.3
Total Split (%)	20.3%	30.8%	19.2%	29.8%	29.8%	12.3%	32.5%	32.5%	17.5%	37.8%	20.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	15.1	31.2	17.0	33.2	33.2	9.1	34.3	34.3	14.7	38.8	55.8
Actuated g/C Ratio	0.13	0.27	0.14	0.28	0.28	0.08	0.29	0.29	0.12	0.33	0.47
v/c Ratio	0.75	1.03	0.87	0.55	0.19	0.70	1.11	0.26	0.83	1.35	0.16
Control Delay	71.5	92.6	84.2	39.5	1.8	83.3	101.8	5.6	81.9	195.8	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	92.6	84.2	39.5	1.8	83.3	101.8	5.6	81.9	195.8	4.2
LOS	E	F	F	D	A	F	F	A	F	F	A
Approach Delay		87.5		45.8			90.2			172.4	
Approach LOS		F		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 117.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay: 114.0

Intersection LOS: F

Intersection Capacity Utilization 98.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
21 s	39 s	23 s	37 s
			
14.7 s	45.3 s	24.3 s	35.7 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	308	123	182	475	92	78	983	127	148	1357	109
Future Volume (veh/h)	137	308	123	182	475	92	78	983	127	148	1357	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	151	338	111	200	522	43	86	1080	69	163	1491	56
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	341	112	224	1005	448	105	972	434	187	1145	676
Arrive On Green	0.11	0.27	0.27	0.14	0.30	0.30	0.07	0.29	0.29	0.12	0.34	0.34
Sat Flow, veh/h	1594	1272	418	1594	3367	1500	1594	3367	1502	1594	3367	1500
Grp Volume(v), veh/h	151	0	449	200	522	43	86	1080	69	163	1491	56
Grp Sat Flow(s),veh/h/ln	1594	0	1690	1594	1683	1500	1594	1683	1502	1594	1683	1500
Q Serve(g_s), s	10.8	0.0	30.8	14.3	15.0	2.4	6.2	33.6	4.0	11.7	39.6	2.5
Cycle Q Clear(g_c), s	10.8	0.0	30.8	14.3	15.0	2.4	6.2	33.6	4.0	11.7	39.6	2.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	176	0	453	224	1005	448	105	972	434	187	1145	676
V/C Ratio(X)	0.86	0.00	0.99	0.89	0.52	0.10	0.82	1.11	0.16	0.87	1.30	0.08
Avail Cap(c_a), veh/h	270	0	453	252	1005	448	138	972	434	225	1145	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	42.4	49.1	33.9	29.5	53.6	41.4	30.8	50.5	38.4	18.3
Incr Delay (d2), s/veh	10.2	0.0	39.7	26.5	0.5	0.1	18.7	64.3	0.2	22.9	142.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	17.3	7.2	6.0	0.9	2.9	21.6	1.4	5.8	38.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	0.0	82.2	75.6	34.3	29.6	72.3	105.7	31.0	73.3	180.8	18.3
LnGrp LOS	E	A	F	E	C	C	E	F	C	E	F	B
Approach Vol, veh/h	600				765				1235			
Approach Delay, s/veh	76.8				44.9				99.2			
Approach LOS	E				D				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.3	40.1	21.0	37.0	12.3	46.1	17.4	40.5				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.4	* 34	18.4	31.2	10.1	38.8	19.7	29.9				
Max Q Clear Time (g_c+I1), s	13.7	35.6	16.3	32.8	8.2	41.6	12.8	17.0				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	0.0	0.1	2.7				

Intersection Summary

HCM 6th Ctrl Delay 112.6

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	57	131	58	107	194	37	1073	148	53	1549	72
Future Volume (vph)	57	131	58	107	194	37	1073	148	53	1549	72
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	53.0	53.0	53.0	53.0	53.0	13.0	50.0	50.0	17.0	54.0	54.0
Total Split (%)	44.2%	44.2%	44.2%	44.2%	44.2%	10.8%	41.7%	41.7%	14.2%	45.0%	45.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	29.0	29.0	29.0		29.0	6.8	47.9	47.9	8.0	50.0	50.0
Actuated g/C Ratio	0.29	0.29	0.29		0.29	0.07	0.49	0.49	0.08	0.51	0.51
v/c Ratio	0.28	0.26	0.12		0.84	0.36	0.69	0.20	0.43	0.95	0.09
Control Delay	30.3	27.7	4.6		49.3	57.6	25.5	12.0	57.1	39.1	6.4
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	27.7	4.6		49.3	57.6	25.5	12.0	57.1	39.1	6.4
LOS	C	C	A		D	E	C	B	E	D	A
Approach Delay		22.8			49.3		24.8			38.3	
Approach LOS		C			D		C			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.4

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 33.5

Intersection LOS: C

Intersection Capacity Utilization 93.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	50 s	53 s
		
Ø5	Ø6	Ø8
13 s	54 s	53 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	131	58	107	194	52	37	1073	148	53	1549	72
Future Volume (veh/h)	57	131	58	107	194	52	37	1073	148	53	1549	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	59	136	43	111	202	44	39	1118	124	55	1614	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	519	440	157	246	50	54	1643	733	68	1672	746
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.03	0.49	0.49	0.04	0.50	0.50
Sat Flow, veh/h	1014	1772	1502	369	841	170	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	59	136	43	357	0	0	39	1118	124	55	1614	50
Grp Sat Flow(s),veh/h/ln	1014	1772	1502	1380	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	5.6	2.0	18.4	0.0	0.0	2.3	24.3	4.4	3.3	44.3	1.7
Cycle Q Clear(g_c), s	7.9	5.6	2.0	24.0	0.0	0.0	2.3	24.3	4.4	3.3	44.3	1.7
Prop In Lane	1.00		1.00	0.31		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	519	440	453	0	0	54	1643	733	68	1672	746
V/C Ratio(X)	0.23	0.26	0.10	0.79	0.00	0.00	0.73	0.68	0.17	0.81	0.97	0.07
Avail Cap(c_a), veh/h	463	875	741	751	0	0	140	1643	733	207	1672	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	25.9	24.6	33.0	0.0	0.0	45.8	18.8	13.7	45.4	23.3	12.5
Incr Delay (d2), s/veh	0.4	0.3	0.1	3.1	0.0	0.0	6.7	2.3	0.5	8.4	15.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.3	0.7	7.8	0.0	0.0	1.0	8.6	1.4	1.4	18.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	26.2	24.7	36.1	0.0	0.0	52.5	21.1	14.2	53.8	38.4	12.7
LnGrp LOS	C	C	C	D	A	A	D	C	B	D	D	B
Approach Vol, veh/h	238			357			1281			1719		
Approach Delay, s/veh	26.1			36.1			21.4			38.2		
Approach LOS	C			D			C			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	53.2		33.8	7.8	54.0		33.8				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 45		47.2	8.4	47.5		47.2				
Max Q Clear Time (g_c+I1), s	5.3	26.3		9.9	4.3	46.3		26.0				
Green Ext Time (p_c), s	0.0	7.2		1.1	0.0	1.0		2.0				
Intersection Summary												
HCM 6th Ctrl Delay	31.2											
HCM 6th LOS	C											
Notes												

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	224	86	101	27	112	121	982	21	60	1481	135	
Future Volume (vph)	224	86	101	27	112	121	982	21	60	1481	135	
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases			4					2			6	
Detector Phase	7	4	4	3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0	
Total Split (s)	22.0	51.5	51.5	13.5	43.0	14.0	44.0	44.0	11.0	41.0	41.0	
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	11.7%	36.7%	36.7%	9.2%	34.2%	34.2%	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min	
Act Effct Green (s)	18.4	31.6	31.6	10.1	17.3	10.5	40.8	40.8	7.0	35.3	35.3	
Actuated g/C Ratio	0.18	0.31	0.31	0.10	0.17	0.10	0.40	0.40	0.07	0.35	0.35	
v/c Ratio	0.83	0.17	0.20	0.18	0.65	0.78	0.77	0.03	0.58	1.34	0.23	
Control Delay	65.5	27.8	6.1	48.8	42.8	77.2	33.6	0.1	70.4	189.1	7.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	65.5	27.8	6.1	48.8	42.8	77.2	33.6	0.1	70.4	189.1	7.1	
LOS	E	C	A	D	D	E	C	A	E	F	A	
Approach Delay		43.0			43.6		37.7			170.2		
Approach LOS		D			D		D			F		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 101.8

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.34

Intersection Signal Delay: 103.5

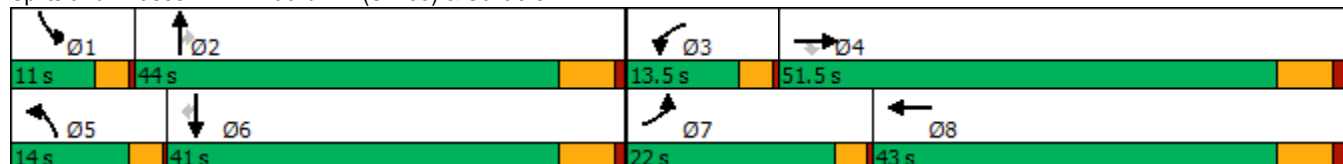
Intersection LOS: F

Intersection Capacity Utilization 93.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	86	101	27	112	77	121	982	21	60	1481	135
Future Volume (veh/h)	224	86	101	27	112	77	121	982	21	60	1481	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	236	91	81	28	118	67	127	1034	16	63	1559	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	442	374	89	146	83	153	1443	644	78	1283	572
Arrive On Green	0.17	0.25	0.25	0.06	0.14	0.14	0.10	0.43	0.43	0.05	0.38	0.38
Sat Flow, veh/h	1594	1772	1502	1594	1061	602	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	236	91	81	28	0	185	127	1034	16	63	1559	119
Grp Sat Flow(s),veh/h/ln	1594	1772	1502	1594	0	1663	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	13.3	3.7	3.9	1.6	0.0	9.9	7.2	23.3	0.6	3.6	35.0	4.9
Cycle Q Clear(g_c), s	13.3	3.7	3.9	1.6	0.0	9.9	7.2	23.3	0.6	3.6	35.0	4.9
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	442	374	89	0	229	153	1443	644	78	1283	572
V/C Ratio(X)	0.89	0.21	0.22	0.32	0.00	0.81	0.83	0.72	0.02	0.81	1.22	0.21
Avail Cap(c_a), veh/h	321	858	728	174	0	652	182	1443	644	130	1283	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	27.3	27.4	41.7	0.0	38.4	40.8	21.6	15.2	43.3	28.4	19.1
Incr Delay (d2), s/veh	19.4	0.2	0.2	0.8	0.0	5.0	19.8	1.7	0.0	7.3	104.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	1.5	1.4	0.6	0.0	4.2	3.5	8.2	0.2	1.5	30.8	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	27.4	27.6	42.4	0.0	43.4	60.6	23.4	15.2	50.6	132.6	19.3
LnGrp LOS	E	C	C	D	A	D	E	C	B	D	F	B
Approach Vol, veh/h	408			213			1177			1741		
Approach Delay, s/veh	44.5			43.3			27.3			121.9		
Approach LOS	D			D			C			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	45.4	8.6	29.9	12.3	41.0	18.9	19.6				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	7.5	38.0	10.0	44.5	10.5	35.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	5.6	25.3	3.6	5.9	9.2	37.0	15.3	11.9				
Green Ext Time (p_c), s	0.0	5.2	0.0	0.5	0.0	0.0	0.1	0.7				
Intersection Summary												
HCM 6th Ctrl Delay	76.8											
HCM 6th LOS	E											

Timings

18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	88	367	149	94	332	158	963	57	224	1254	104
Future Volume (vph)	88	367	149	94	332	158	963	57	224	1254	104
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	16.0	50.0	50.0	16.0	50.0	50.0
Total Split (%)	45.0%	45.0%	45.0%	45.0%	45.0%	13.3%	41.7%	41.7%	13.3%	41.7%	41.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	33.2	33.2	33.2	33.2	33.2	9.9	41.8	41.8	12.6	44.5	44.5
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.09	0.40	0.40	0.12	0.43	0.43
v/c Ratio	0.76	0.67	0.27	0.53	0.85	0.59	0.74	0.09	1.21	0.90	0.16
Control Delay	71.0	37.0	5.1	40.4	47.4	56.5	32.1	5.2	173.1	39.9	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.0	37.0	5.1	40.4	47.4	56.5	32.1	5.2	173.1	39.9	10.6
LOS	E	D	A	D	D	E	C	A	F	D	B
Approach Delay		34.1			46.2		34.0			56.9	
Approach LOS		C			D		C			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 104.3

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 45.0

Intersection LOS: D

Intersection Capacity Utilization 93.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
16 s	50 s	54 s
		
Ø5	Ø6	Ø8
16 s	50 s	54 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	367	149	94	332	124	158	963	57	224	1254	104
Future Volume (veh/h)	88	367	149	94	332	124	158	963	57	224	1254	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	91	378	125	97	342	119	163	993	44	231	1293	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	665	556	231	471	164	214	1210	540	182	1347	601
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.07	0.36	0.36	0.11	0.40	0.40
Sat Flow, veh/h	833	1772	1482	801	1256	437	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	91	378	125	97	0	461	163	993	44	231	1293	72
Grp Sat Flow(s),veh/h/ln	833	1772	1482	801	0	1693	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	11.5	18.5	6.3	11.9	0.0	25.5	6.0	29.3	2.1	12.5	40.8	3.3
Cycle Q Clear(g_c), s	37.0	18.5	6.3	30.5	0.0	25.5	6.0	29.3	2.1	12.5	40.8	3.3
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	665	556	231	0	635	214	1210	540	182	1347	601
V/C Ratio(X)	0.50	0.57	0.22	0.42	0.00	0.73	0.76	0.82	0.08	1.27	0.96	0.12
Avail Cap(c_a), veh/h	230	763	638	275	0	729	333	1356	605	182	1356	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	27.1	23.3	39.2	0.0	29.3	49.6	31.8	23.1	48.4	31.9	20.6
Incr Delay (d2), s/veh	2.1	0.8	0.2	1.2	0.0	3.1	2.1	3.8	0.1	155.9	15.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	7.5	2.1	2.3	0.0	10.3	2.1	11.5	0.7	12.6	17.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	27.9	23.5	40.4	0.0	32.4	51.7	35.6	23.1	204.2	47.7	20.7
LnGrp LOS	D	C	C	D	A	C	D	D	C	F	D	C
Approach Vol, veh/h	594			558			1200			1596		
Approach Delay, s/veh	29.9			33.8			37.3			69.1		
Approach LOS	C			C			D			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	45.2		48.0	11.5	49.7		48.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	12.5	44.0		47.0	12.5	44.0		47.0				
Max Q Clear Time (g_c+I1), s	14.5	31.3		39.0	8.0	42.8		32.5				
Green Ext Time (p_c), s	0.0	5.0		1.9	0.1	0.9		2.9				
Intersection Summary												
HCM 6th Ctrl Delay	48.6											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	51	92	121	89	266	122	904	63	316	1114	31
Future Volume (vph)	51	92	121	89	266	122	904	63	316	1114	31
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	52.0	52.0	52.0	52.0	52.0	23.0	49.0	49.0	19.0	45.0	45.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%	19.2%	40.8%	40.8%	15.8%	37.5%	37.5%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	32.4	32.4	32.4	32.4	32.4	13.1	37.6	37.6	15.8	40.4	40.4
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.13	0.38	0.38	0.16	0.40	0.40
v/c Ratio	0.54	0.17	0.23	0.25	0.87	0.63	0.76	0.11	1.34	0.88	0.05
Control Delay	49.7	24.7	5.2	26.6	46.0	57.5	33.4	10.7	215.4	38.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.7	24.7	5.2	26.6	46.0	57.5	33.4	10.7	215.4	38.8	0.2
LOS	D	C	A	C	D	E	C	B	F	D	A
Approach Delay		20.5			42.8		34.8			76.2	
Approach LOS		C			D		C			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.2

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.34

Intersection Signal Delay: 53.0

Intersection LOS: D

Intersection Capacity Utilization 93.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
19 s	49 s	52 s
		
Ø5	Ø6	Ø8
23 s	45 s	52 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	92	121	89	266	189	122	904	63	316	1114	31
Future Volume (veh/h)	51	92	121	89	266	189	122	904	63	316	1114	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	54	98	88	95	283	181	130	962	44	336	1185	22
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	614	520	406	350	224	158	1153	514	261	1369	610
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.10	0.34	0.34	0.16	0.41	0.41
Sat Flow, veh/h	831	1772	1502	1072	1010	646	1594	3367	1502	1594	3367	1501
Grp Volume(v), veh/h	54	98	88	95	0	464	130	962	44	336	1185	22
Grp Sat Flow(s),veh/h/ln	831	1772	1502	1072	0	1656	1594	1683	1502	1594	1683	1501
Q Serve(g_s), s	6.0	3.6	3.9	6.4	0.0	24.1	7.6	24.9	1.9	15.5	30.5	0.8
Cycle Q Clear(g_c), s	30.1	3.6	3.9	10.0	0.0	24.1	7.6	24.9	1.9	15.5	30.5	0.8
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	614	520	406	0	573	158	1153	514	261	1369	610
V/C Ratio(X)	0.35	0.16	0.17	0.23	0.00	0.81	0.82	0.83	0.09	1.29	0.87	0.04
Avail Cap(c_a), veh/h	278	883	748	569	0	825	328	1539	686	261	1397	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	21.4	21.5	24.9	0.0	28.1	41.8	28.7	21.1	39.6	25.7	16.9
Incr Delay (d2), s/veh	1.0	0.1	0.1	0.2	0.0	3.4	7.7	3.1	0.1	155.6	5.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.5	1.3	1.5	0.0	9.3	3.1	9.5	0.6	16.9	11.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	21.5	21.6	25.1	0.0	31.5	49.5	31.8	21.2	195.2	31.6	16.9
LnGrp LOS	D	C	C	C	A	C	D	C	C	F	C	B
Approach Vol, veh/h		240			559			1136			1543	
Approach Delay, s/veh		26.3			30.4			33.4			67.0	
Approach LOS		C			C			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	38.1		37.6	12.9	44.2		37.6				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	15.5	43.3		47.2	19.5	39.3		47.2				
Max Q Clear Time (g_c+I1), s	17.5	26.9		32.1	9.6	32.5		26.1				
Green Ext Time (p_c), s	0.0	5.5		0.7	0.1	3.9		2.5				
Intersection Summary												
HCM 6th Ctrl Delay				47.4								
HCM 6th LOS				D								

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	146	7	15	214	0	2	0	1	0	0	0
Future Vol, veh/h	0	146	7	15	214	0	2	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	159	8	16	233	0	2	0	1	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	233	0	0	167	0	0	428	428	163	429	432	233
Stage 1	-	-	-	-	-	-	163	163	-	265	265	-
Stage 2	-	-	-	-	-	-	265	265	-	164	167	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1335	-	-	1411	-	-	537	519	882	536	516	806
Stage 1	-	-	-	-	-	-	839	763	-	740	689	-
Stage 2	-	-	-	-	-	-	740	689	-	838	760	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1335	-	-	1411	-	-	532	512	882	530	509	806
Mov Cap-2 Maneuver	-	-	-	-	-	-	532	512	-	530	509	-
Stage 1	-	-	-	-	-	-	839	763	-	740	680	-
Stage 2	-	-	-	-	-	-	730	680	-	837	760	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.5			10.9			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	613	1335	-	-	1411	-	-	-				
HCM Lane V/C Ratio	0.005	-	-	-	0.012	-	-	-				
HCM Control Delay (s)	10.9	0	-	-	7.6	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/20/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	742	61	19	451	27	53	21	32
Future Volume (vph)	30	742	61	19	451	27	53	21	32
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	18.0	66.0	66.0	17.0	65.0	37.0	37.0	37.0	37.0
Total Split (%)	15.0%	55.0%	55.0%	14.2%	54.2%	30.8%	30.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.2	24.5	24.5	5.8	22.3		12.3		12.3
Actuated g/C Ratio	0.14	0.56	0.56	0.13	0.51		0.28		0.28
v/c Ratio	0.14	0.43	0.08	0.10	0.30		0.24		0.18
Control Delay	23.9	10.1	4.4	24.4	11.1		15.8		14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	23.9	10.1	4.4	24.4	11.1		15.8		14.3
LOS	C	B	A	C	B		B		B
Approach Delay		10.2			11.6		15.8		14.3
Approach LOS		B			B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 44

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 11.2

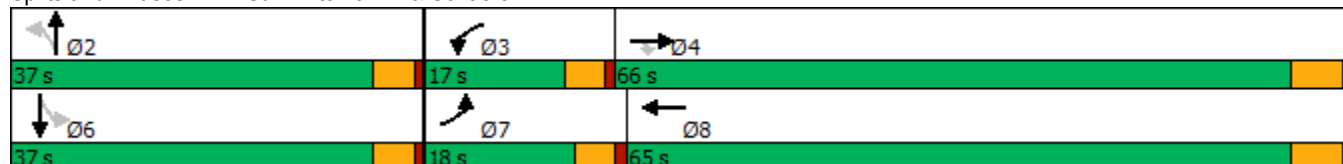
Intersection LOS: B

Intersection Capacity Utilization 45.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	742	61	19	451	23	27	53	17	21	32	18
Future Volume (veh/h)	30	742	61	19	451	23	27	53	17	21	32	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	32	798	50	20	485	24	29	57	12	23	34	7
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	1316	572	40	1234	61	173	247	42	196	226	37
Arrive On Green	0.04	0.39	0.39	0.02	0.38	0.38	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1594	3367	1464	1594	3261	161	269	1167	200	351	1069	174
Grp Volume(v), veh/h	32	798	50	20	250	259	98	0	0	64	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1464	1594	1683	1739	1636	0	0	1595	0	0
Q Serve(g_s), s	0.8	7.6	0.9	0.5	4.4	4.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	7.6	0.9	0.5	4.4	4.4	1.9	0.0	0.0	1.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.09	0.30		0.12	0.36		0.11
Lane Grp Cap(c), veh/h	60	1316	572	40	637	658	462	0	0	459	0	0
V/C Ratio(X)	0.54	0.61	0.09	0.50	0.39	0.39	0.21	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	531	5037	2190	491	2476	2558	1391	0	0	1360	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.0	9.8	7.7	19.4	9.1	9.1	13.3	0.0	0.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.5	0.1	3.6	0.4	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.2	0.2	1.1	1.1	0.7	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	10.2	7.8	23.0	9.5	9.5	13.5	0.0	0.0	13.1	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		880			529			98			64	
Approach Delay, s/veh		10.5			10.0			13.5			13.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.1	5.6	21.5		13.1	6.1	21.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		32.4	12.4	60.2		32.4	13.4	59.2				
Max Q Clear Time (g_c+I1), s		3.9	2.5	9.6		3.2	2.8	6.4				
Green Ext Time (p_c), s		0.5	0.0	6.1		0.3	0.0	2.9				
Intersection Summary												
HCM 6th Ctrl Delay			10.6									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	33	868	24	5	780	16	26	31	10	34
Future Volume (vph)	33	868	24	5	780	16	26	31	10	34
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	19.0	67.0	67.0	14.0	62.0	62.0	39.0	39.0	39.0	39.0
Total Split (%)	15.8%	55.8%	55.8%	11.7%	51.7%	51.7%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.6	30.1	30.1	5.7	27.7	27.7		13.0		13.0
Actuated g/C Ratio	0.13	0.61	0.61	0.12	0.56	0.56		0.26		0.26
v/c Ratio	0.18	0.47	0.03	0.03	0.46	0.02		0.19		0.20
Control Delay	28.1	10.0	1.3	30.0	12.2	0.1		18.3		14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	28.1	10.0	1.3	30.0	12.2	0.1		18.3		14.1
LOS	C	B	A	C	B	A		B		B
Approach Delay		10.4			12.1			18.3		14.1
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 49.5

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 11.6

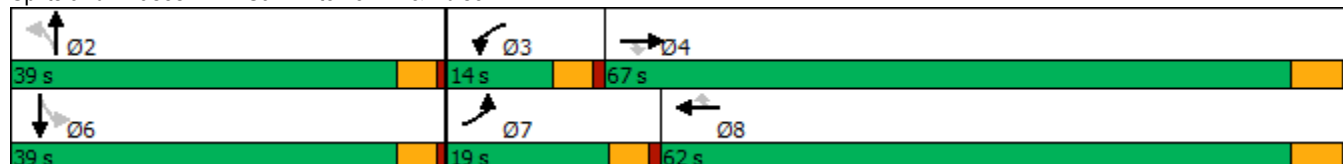
Intersection LOS: B

Intersection Capacity Utilization 48.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	868	24	5	780	16	26	31	10	10	34	34
Future Volume (veh/h)	33	868	24	5	780	16	26	31	10	10	34	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	37	964	25	6	867	15	29	34	4	11	38	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	1515	661	13	1402	625	208	193	18	122	208	80
Arrive On Green	0.04	0.45	0.45	0.01	0.42	0.42	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1594	3367	1469	1594	3367	1500	460	1022	94	123	1102	425
Grp Volume(v), veh/h	37	964	25	6	867	15	67	0	0	66	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1469	1594	1683	1500	1576	0	0	1650	0	0
Q Serve(g_s), s	1.0	9.4	0.4	0.2	8.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	9.4	0.4	0.2	8.6	0.3	1.4	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.43		0.06	0.17		0.26
Lane Grp Cap(c), veh/h	66	1515	661	13	1402	625	419	0	0	410	0	0
V/C Ratio(X)	0.56	0.64	0.04	0.47	0.62	0.02	0.16	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	540	4850	2116	353	4454	1984	1352	0	0	1404	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.0	9.0	6.5	21.0	9.7	7.3	14.5	0.0	0.0	14.5	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.4	0.0	9.5	0.4	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.1	0.1	0.1	2.0	0.1	0.5	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.7	9.4	6.6	30.5	10.2	7.3	14.7	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	C	A	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h		1026			888			67			66	
Approach Delay, s/veh		9.9			10.3			14.7			14.7	
Approach LOS		A			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.6	4.9	24.9		12.6	6.4	23.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.4	9.4	61.2		34.4	14.4	56.2				
Max Q Clear Time (g_c+I1), s		3.4	2.2	11.4		3.4	3.0	10.6				
Green Ext Time (p_c), s		0.3	0.0	7.7		0.3	0.0	6.6				
Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			B									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	23	381	45	232	28	153	29	117
Future Volume (vph)	23	381	45	232	28	153	29	117
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	45.0	17.0	48.0	18.0	40.0	18.0	40.0
Total Split (%)	11.7%	37.5%	14.2%	40.0%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	18.4	14.2	20.5	18.2	6.4	12.5	6.4	12.6
Actuated g/C Ratio	0.38	0.29	0.43	0.38	0.13	0.26	0.13	0.26
v/c Ratio	0.06	0.47	0.12	0.21	0.14	0.31	0.15	0.16
Control Delay	10.1	17.9	10.2	12.6	28.0	12.6	27.9	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	17.9	10.2	12.6	28.0	12.6	27.9	18.0
LOS	B	B	B	B	C	B	C	B
Approach Delay		17.5		12.2		14.1		19.9
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 48.2

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 15.7

Intersection LOS: B

Intersection Capacity Utilization 48.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

 Ø1	 Ø2	 Ø3	 Ø4
18 s	40 s	17 s	45 s
 Ø5	 Ø6	 Ø7	 Ø8
18 s	40 s	14 s	48 s

HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	381	46	45	232	16	28	153	100	29	117	10
Future Volume (veh/h)	23	381	46	45	232	16	28	153	100	29	117	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	25	414	37	49	252	14	30	166	60	32	127	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	729	65	334	824	46	55	579	202	58	810	13
Arrive On Green	0.03	0.23	0.23	0.05	0.25	0.25	0.03	0.24	0.24	0.04	0.24	0.24
Sat Flow, veh/h	1594	3122	278	1594	3242	179	1594	2443	850	1594	3391	53
Grp Volume(v), veh/h	25	222	229	49	130	136	30	112	114	32	63	66
Grp Sat Flow(s),veh/h/ln	1594	1683	1716	1594	1683	1738	1594	1683	1610	1594	1683	1761
Q Serve(g_s), s	0.5	5.4	5.4	1.0	2.9	2.9	0.9	2.5	2.7	0.9	1.4	1.4
Cycle Q Clear(g_c), s	0.5	5.4	5.4	1.0	2.9	2.9	0.9	2.5	2.7	0.9	1.4	1.4
Prop In Lane	1.00		0.16	1.00		0.10	1.00		0.53	1.00		0.03
Lane Grp Cap(c), veh/h	393	393	401	334	428	442	55	399	382	58	402	421
V/C Ratio(X)	0.06	0.57	0.57	0.15	0.30	0.31	0.54	0.28	0.30	0.55	0.16	0.16
Avail Cap(c_a), veh/h	670	1431	1459	682	1541	1591	463	1263	1208	463	1263	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	15.6	15.6	12.5	13.9	13.9	21.9	14.4	14.4	21.8	13.9	13.9
Incr Delay (d2), s/veh	0.0	1.3	1.3	0.1	0.4	0.4	3.1	0.4	0.4	3.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	1.8	0.3	0.9	0.9	0.3	0.8	0.8	0.3	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	16.9	16.9	12.6	14.3	14.3	25.0	14.8	14.9	24.8	14.0	14.0
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		476			315			256			161	
Approach Delay, s/veh		16.7			14.0			16.0			16.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	16.3	6.9	16.6	6.2	16.4	6.0	17.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	34.6	12.4	39.2	13.4	34.6	9.4	42.2				
Max Q Clear Time (g_c+I1), s	2.9	4.7	3.0	7.4	2.9	3.4	2.5	4.9				
Green Ext Time (p_c), s	0.0	1.2	0.0	2.5	0.0	0.6	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay			15.8									
HCM 6th LOS			B									

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	72	610	12	375	78	164	30	115
Future Volume (vph)	72	610	12	375	78	164	30	115
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	22.0	51.0	12.0	41.0	24.0	41.0	16.0	33.0
Total Split (%)	18.3%	42.5%	10.0%	34.2%	20.0%	34.2%	13.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	9.9	79.3	5.7	71.3	10.4	17.4	7.0	12.0
Actuated g/C Ratio	0.08	0.66	0.05	0.59	0.09	0.14	0.06	0.10
v/c Ratio	0.56	0.31	0.16	0.22	0.58	0.40	0.34	0.45
Control Delay	68.4	11.4	59.2	14.3	68.6	44.7	63.4	40.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.4	11.4	59.2	14.3	68.6	44.7	63.4	40.8
LOS	E	B	E	B	E	D	E	D
Approach Delay		16.9		15.5		51.6		44.4
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 25.4

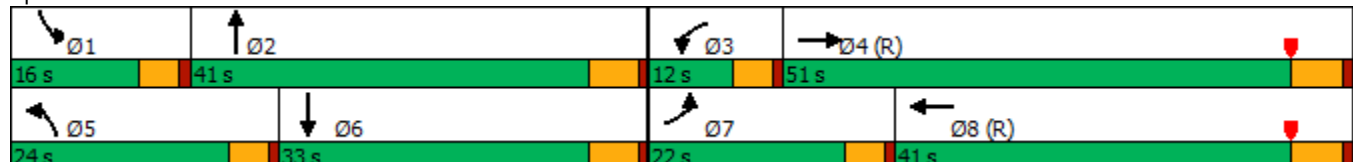
Intersection LOS: C

Intersection Capacity Utilization 56.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	610	63	12	375	46	78	164	26	30	115	43
Future Volume (veh/h)	72	610	63	12	375	46	78	164	26	30	115	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	73	622	60	12	383	40	80	167	24	31	117	26
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	2020	195	22	1874	195	99	405	57	43	280	60
Arrive On Green	0.06	0.65	0.65	0.01	0.61	0.61	0.06	0.14	0.14	0.03	0.10	0.10
Sat Flow, veh/h	1594	3098	298	1594	3078	320	1594	2952	417	1594	2738	589
Grp Volume(v), veh/h	73	337	345	12	208	215	80	94	97	31	70	73
Grp Sat Flow(s),veh/h/ln	1594	1683	1713	1594	1683	1714	1594	1683	1685	1594	1683	1643
Q Serve(g_s), s	5.4	10.5	10.5	0.9	6.6	6.7	5.9	6.1	6.3	2.3	4.7	5.0
Cycle Q Clear(g_c), s	5.4	10.5	10.5	0.9	6.6	6.7	5.9	6.1	6.3	2.3	4.7	5.0
Prop In Lane	1.00		0.17	1.00		0.19	1.00		0.25	1.00		0.36
Lane Grp Cap(c), veh/h	91	1098	1117	22	1025	1044	99	231	231	43	172	168
V/C Ratio(X)	0.81	0.31	0.31	0.55	0.20	0.21	0.81	0.41	0.42	0.72	0.41	0.43
Avail Cap(c_a), veh/h	231	1098	1117	98	1025	1044	258	499	500	151	387	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	9.1	9.1	58.8	10.5	10.5	55.6	47.3	47.4	57.9	50.5	50.6
Incr Delay (d2), s/veh	5.7	0.7	0.7	7.7	0.4	0.4	5.7	1.1	1.2	8.3	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.6	3.7	0.4	2.4	2.5	2.5	2.6	2.7	1.0	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	9.7	9.7	66.5	10.9	10.9	61.3	48.4	48.6	66.3	52.0	52.4
LnGrp LOS	E	A	A	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		755			435			271			174	
Approach Delay, s/veh		14.8			12.5			52.3			54.7	
Approach LOS		B			B			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	21.9	6.2	84.0	12.0	17.7	11.4	78.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	11.4	35.6	7.4	45.2	19.4	27.6	17.4	35.2				
Max Q Clear Time (g_c+I1), s	4.3	8.3	2.9	12.5	7.9	7.0	7.4	8.7				
Green Ext Time (p_c), s	0.0	1.0	0.0	4.1	0.1	0.6	0.0	2.3				
Intersection Summary												
HCM 6th Ctrl Delay			24.6									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	90	758	20	13	702	41	38	126	11	108
Future Volume (vph)	90	758	20	13	702	41	38	126	11	108
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	27.0	53.0	53.0	13.0	39.0	39.0	17.0	41.0	13.0	37.0
Total Split (%)	22.5%	44.2%	44.2%	10.8%	32.5%	32.5%	14.2%	34.2%	10.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	9.8	33.0	33.0	6.2	23.3	23.3	7.3	18.1	6.1	13.4
Actuated g/C Ratio	0.15	0.49	0.49	0.09	0.35	0.35	0.11	0.27	0.09	0.20
v/c Ratio	0.43	0.50	0.03	0.10	0.66	0.07	0.25	0.16	0.08	0.25
Control Delay	38.7	14.6	0.1	40.5	24.5	0.2	39.7	22.3	40.6	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.7	14.6	0.1	40.5	24.5	0.2	39.7	22.3	40.6	21.4
LOS	D	B	A	D	C	A	D	C	D	C
Approach Delay		16.8			23.5			26.2		22.6
Approach LOS		B			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 67

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 20.7

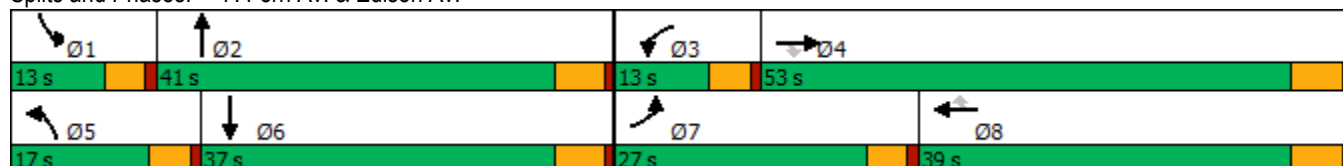
Intersection LOS: C

Intersection Capacity Utilization 55.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	90	758	20	13	702	41	38	126	6	11	108	49
Future Volume (veh/h)	90	758	20	13	702	41	38	126	6	11	108	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	99	833	14	14	771	34	42	138	6	12	119	33
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	1301	580	28	1100	490	69	686	30	24	473	126
Arrive On Green	0.08	0.39	0.39	0.02	0.33	0.33	0.04	0.21	0.21	0.02	0.18	0.18
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3287	142	1594	2617	700
Grp Volume(v), veh/h	99	833	14	14	771	34	42	70	74	12	75	77
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1746	1594	1683	1633
Q Serve(g_s), s	3.3	11.1	0.3	0.5	11.0	0.9	1.4	1.9	1.9	0.4	2.1	2.2
Cycle Q Clear(g_c), s	3.3	11.1	0.3	0.5	11.0	0.9	1.4	1.9	1.9	0.4	2.1	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.43
Lane Grp Cap(c), veh/h	123	1301	580	28	1100	490	69	351	364	24	304	295
V/C Ratio(X)	0.80	0.64	0.02	0.50	0.70	0.07	0.61	0.20	0.20	0.49	0.25	0.26
Avail Cap(c_a), veh/h	651	2899	1292	244	2039	910	361	1093	1134	244	971	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	13.7	10.4	26.7	16.1	12.7	25.8	17.9	17.9	26.8	19.2	19.3
Incr Delay (d2), s/veh	4.6	0.5	0.0	5.1	0.8	0.1	3.2	0.3	0.3	5.7	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.3	0.1	0.2	3.5	0.2	0.5	0.7	0.7	0.2	0.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	14.2	10.4	31.8	16.9	12.8	29.0	18.2	18.2	32.4	19.7	19.8
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		946			819			186			164	
Approach Delay, s/veh		15.8			17.0			20.6			20.6	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.4	16.8	5.6	27.0	7.0	15.3	8.8	23.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	35.6	8.4	47.2	12.4	31.6	22.4	33.2				
Max Q Clear Time (g_c+I1), s	2.4	3.9	2.5	13.1	3.4	4.2	5.3	13.0				
Green Ext Time (p_c), s	0.0	0.7	0.0	6.1	0.0	0.8	0.1	4.9				
Intersection Summary												
HCM 6th Ctrl Delay			17.1									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	669	288	35	52	55
Future Vol, veh/h	55	669	288	35	52	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	690	297	36	54	57
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	333	0	-	0	774	167
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	459	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1223	-	-	-	335	848
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1223	-	-	-	319	848
Mov Cap-2 Maneuver	-	-	-	-	436	-
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	603	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		11.9		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1223	-	-	-	436	848
HCM Lane V/C Ratio	0.046	-	-	-	0.123	0.067
HCM Control Delay (s)	8.1	-	-	-	14.4	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.2

Intersection						
Int Delay, s/veh	3.8					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	494	167	63	320	128	135
Future Vol, veh/h	494	167	63	320	128	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	574	194	73	372	149	157
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	768	0	1003	384
Stage 1	-	-	-	-	671	-
Stage 2	-	-	-	-	332	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1034	-	362	*899
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	699	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1034	-	336	*899
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	680	-
Stage 2	-	-	-	-	649	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.4		16.7	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	610	-	-	1034	-	
HCM Lane V/C Ratio	0.501	-	-	0.071	-	
HCM Control Delay (s)	16.7	-	-	8.7	-	
HCM Lane LOS	C	-	-	A	-	
HCM 95th %tile Q(veh)	2.8	-	-	0.2	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	448	1	396	734	920	758	498
Future Volume (vph)	448	1	396	734	920	758	498
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	34.0	82.0	48.0	48.0
Total Split (%)	31.7%	31.7%	31.7%	28.3%	68.3%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	26.5	26.5	26.5	39.7	83.0	38.8	38.8
Actuated g/C Ratio	0.22	0.22	0.22	0.33	0.69	0.32	0.32
v/c Ratio	0.83	0.82	0.64	1.32	0.40	0.70	0.61
Control Delay	62.6	56.9	25.5	195.0	8.4	38.8	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	62.6	56.9	25.5	195.0	8.7	38.8	5.6
LOS	E	E	C	F	A	D	A
Approach Delay		48.9			91.4	25.6	
Approach LOS		D			F	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.32

Intersection Signal Delay: 59.8

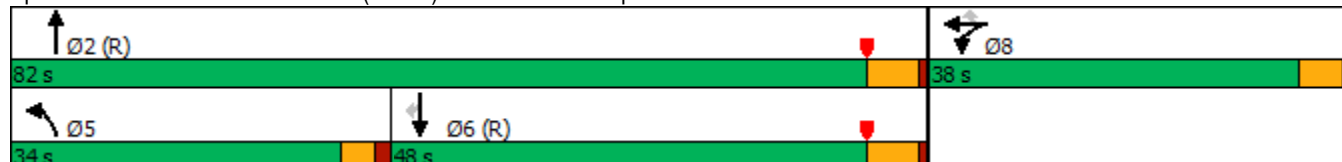
Intersection LOS: E

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	448	1	396	734	920	0	0	758	498
Future Volume (veh/h)	0	0	0	448	1	396	734	920	0	0	758	498
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				559	0	186	773	968	0	0	798	304
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				639	0	284	438	2605	0	0	1598	713
Arrive On Green				0.18	0.00	0.18	0.49	1.00	0.00	0.00	0.45	0.45
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				559	0	186	773	968	0	0	798	304
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				18.3	0.0	13.1	29.5	0.0	0.0	0.0	19.1	15.7
Cycle Q Clear(g_c), s				18.3	0.0	13.1	29.5	0.0	0.0	0.0	19.1	15.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				639	0	284	438	2605	0	0	1598	713
V/C Ratio(X)				0.87	0.00	0.65	1.77	0.37	0.00	0.00	0.50	0.43
Avail Cap(c_a), veh/h				980	0	436	438	2605	0	0	1598	713
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.24	0.24	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.9	0.0	45.8	30.5	0.0	0.0	0.0	23.4	22.5
Incr Delay (d2), s/veh				3.9	0.0	1.0	346.6	0.1	0.0	0.0	1.1	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.2	0.0	5.1	51.0	0.0	0.0	0.0	8.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.8	0.0	46.7	377.1	0.1	0.0	0.0	24.5	24.3
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					745			1741			1102	
Approach Delay, s/veh					50.5			167.5			24.5	
Approach LOS					D			F			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		93.5			34.0	59.5		26.5				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		76.5			29.5	42.5		33.0				
Max Q Clear Time (g_c+I1), s		2.0			31.5	21.1		20.3				
Green Ext Time (p_c), s		12.7			0.0	9.1		1.2				
Intersection Summary												
HCM 6th Ctrl Delay				99.3								
HCM 6th LOS				F								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	278	1	1372	548	298	909
Future Volume (vph)	278	1	1372	548	298	909
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	49.0	49.0	36.0	85.0
Total Split (%)	29.2%	29.2%	40.8%	40.8%	30.0%	70.8%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	30.0	30.0	50.1	50.1	25.4	79.5
Actuated g/C Ratio	0.25	0.25	0.42	0.42	0.21	0.66
v/c Ratio	0.63	1.00	0.99	0.67	0.85	0.41
Control Delay	48.0	71.9	56.4	13.7	72.1	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	48.0	71.9	56.4	13.7	72.1	11.0
LOS	D	E	E	B	E	B
Approach Delay		63.6	44.2			26.1
Approach LOS		E	D			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 42.2

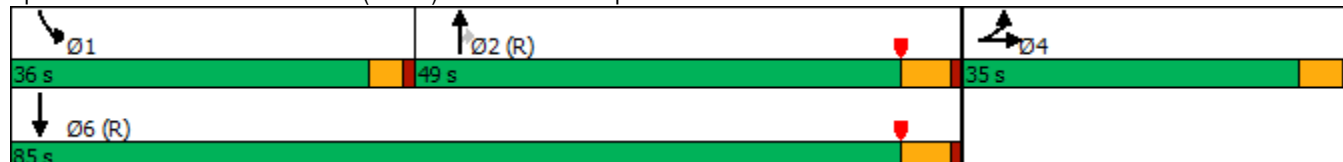
Intersection LOS: D

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	1	441	0	0	0	0	1372	548	298	909	0
Future Volume (veh/h)	278	1	441	0	0	0	0	1372	548	298	909	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	296	1	362				0	1460	412	317	967	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	434	1	385				0	1582	689	339	2377	0
Arrive On Green	0.24	0.24	0.24				0.00	0.45	0.45	0.38	1.00	0.00
Sat Flow, veh/h	1781	4	1581				0	3647	1547	1781	3647	0
Grp Volume(v), veh/h	296	0	363				0	1460	412	317	967	0
Grp Sat Flow(s),veh/h/ln	1781	0	1586				0	1777	1547	1781	1777	0
Q Serve(g_s), s	18.1	0.0	27.0				0.0	46.4	24.2	20.5	0.0	0.0
Cycle Q Clear(g_c), s	18.1	0.0	27.0				0.0	46.4	24.2	20.5	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	434	0	386				0	1582	689	339	2377	0
V/C Ratio(X)	0.68	0.00	0.94				0.00	0.92	0.60	0.93	0.41	0.00
Avail Cap(c_a), veh/h	445	0	396				0	1582	689	475	2377	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.42	0.42	0.60	0.60	0.00
Uniform Delay (d), s/veh	41.2	0.0	44.5				0.0	31.3	25.2	36.4	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.0	29.5				0.0	5.0	1.6	12.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	13.4				0.0	19.9	8.8	8.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	0.0	74.1				0.0	36.3	26.8	48.8	0.3	0.0
LnGrp LOS	D	A	E				A	D	C	D	A	A
Approach Vol, veh/h	659						1872			1284		
Approach Delay, s/veh	60.8						34.2			12.3		
Approach LOS	E						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	26.9	58.9	34.2		85.8							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	32.0	43.5	30.0		79.5							
Max Q Clear Time (g_c+I1), s	22.5	48.4	29.0		2.0							
Green Ext Time (p_c), s	0.3	0.0	0.3		12.8							
Intersection Summary												
HCM 6th Ctrl Delay			31.4									
HCM 6th LOS			C									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	108	436	72	278	161	1520	87	262	1048	106
Future Volume (vph)	108	436	72	278	161	1520	87	262	1048	106
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	40.0	17.0	33.0	26.0	38.0	38.0	25.0	37.0	37.0
Total Split (%)	20.0%	33.3%	14.2%	27.5%	21.7%	31.7%	31.7%	20.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.4	24.0	8.8	18.9	14.5	33.7	33.7	13.4	32.6	32.6
Actuated g/C Ratio	0.12	0.24	0.09	0.19	0.15	0.34	0.34	0.14	0.33	0.33
v/c Ratio	0.60	0.70	0.52	0.61	0.71	0.86	0.15	0.67	0.61	0.18
Control Delay	57.6	37.4	59.5	33.8	58.9	38.1	0.9	50.2	31.7	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	37.4	59.5	33.8	58.9	38.1	0.9	50.2	31.7	2.7
LOS	E	D	E	C	E	D	A	D	C	A
Approach Delay		40.6		37.6		38.2			33.0	
Approach LOS		D		D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 36.8

Intersection LOS: D

Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.

			
25 s	38 s	17 s	40 s
			
26 s	37 s	24 s	33 s

HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	436	142	72	278	143	161	1520	87	262	1048	106
Future Volume (veh/h)	108	436	142	72	278	143	161	1520	87	262	1048	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	111	449	120	74	287	129	166	1567	79	270	1080	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	586	155	92	442	193	198	1995	563	344	1943	541
Arrive On Green	0.09	0.22	0.22	0.06	0.19	0.19	0.12	0.38	0.38	0.11	0.37	0.37
Sat Flow, veh/h	1594	2691	713	1594	2334	1022	1594	5316	1499	3000	5316	1479
Grp Volume(v), veh/h	111	294	275	74	216	200	166	1567	79	270	1080	74
Grp Sat Flow(s),veh/h/ln	1594	1772	1631	1594	1772	1584	1594	1772	1499	1500	1772	1479
Q Serve(g_s), s	5.9	13.5	13.8	4.0	9.8	10.2	8.8	22.7	3.0	7.6	14.1	2.9
Cycle Q Clear(g_c), s	5.9	13.5	13.8	4.0	9.8	10.2	8.8	22.7	3.0	7.6	14.1	2.9
Prop In Lane	1.00		0.44	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	386	355	92	335	300	198	1995	563	344	1943	541
V/C Ratio(X)	0.81	0.76	0.77	0.81	0.64	0.67	0.84	0.79	0.14	0.79	0.56	0.14
Avail Cap(c_a), veh/h	356	698	642	227	555	496	393	1995	563	704	1943	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	31.9	32.0	40.5	32.5	32.7	37.2	24.0	17.9	37.4	21.9	18.4
Incr Delay (d2), s/veh	4.2	3.2	3.6	6.1	2.1	2.6	3.6	3.2	0.5	1.5	1.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.7	5.4	1.6	4.1	3.9	3.5	9.3	1.0	2.7	5.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	35.0	35.6	46.5	34.6	35.2	40.8	27.2	18.4	38.9	23.1	18.9
LnGrp LOS	D	D	D	D	C	D	D	C	B	D	C	B
Approach Vol, veh/h	680			490			1812			1424		
Approach Delay, s/veh	36.6			36.7			28.1			25.9		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	38.0	9.6	24.7	15.4	37.2	12.1	22.2				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	20.4	32.6	12.4	34.2	21.4	31.6	19.4	27.2				
Max Q Clear Time (g_c+I1), s	9.6	24.7	6.0	15.8	10.8	16.1	7.9	12.2				
Green Ext Time (p_c), s	0.4	5.7	0.0	3.0	0.1	6.6	0.1	1.9				
Intersection Summary												
HCM 6th Ctrl Delay	29.6											
HCM 6th LOS	C											

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	126	412	172	460	61	162	1532	210	102	996	147
Future Volume (vph)	126	412	172	460	61	162	1532	210	102	996	147
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	20.6	41.1	41.1	15.9	40.2	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.7	36.4	15.2	37.9	37.9	11.3	35.8	35.8	10.4	33.8	54.0
Actuated g/C Ratio	0.12	0.31	0.13	0.32	0.32	0.10	0.30	0.30	0.09	0.29	0.46
v/c Ratio	0.72	0.96	0.88	0.45	0.12	1.12	1.57	0.41	0.76	1.08	0.20
Control Delay	71.7	70.9	89.7	34.1	0.9	156.9	292.0	17.7	85.5	94.4	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.7	70.9	89.7	34.1	0.9	156.9	292.0	17.7	85.5	94.4	6.0
LOS	E	E	F	C	A	F	F	B	F	F	A
Approach Delay		71.1		44.9			250.2			83.3	
Approach LOS		E		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 118.2

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.57

Intersection Signal Delay: 146.9

Intersection LOS: F

Intersection Capacity Utilization 106.8%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

 Ø1	 Ø2	 Ø3	 Ø4
16 s	40.2 s	20.6 s	43.2 s
 Ø5	 Ø6	 Ø7	 Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	412	82	172	460	61	162	1532	210	102	996	147
Future Volume (veh/h)	126	412	82	172	460	61	162	1532	210	102	996	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	429	61	179	479	32	169	1596	139	106	1038	70
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	456	65	203	1114	494	155	1034	461	128	977	582
Arrive On Green	0.10	0.30	0.30	0.13	0.33	0.33	0.10	0.31	0.31	0.08	0.29	0.29
Sat Flow, veh/h	1594	1517	216	1594	3367	1495	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	131	0	490	179	479	32	169	1596	139	106	1038	70
Grp Sat Flow(s),veh/h/ln	1594	0	1733	1594	1683	1495	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	9.4	0.0	32.1	12.9	12.9	1.7	11.3	35.8	8.2	7.6	33.8	3.5
Cycle Q Clear(g_c), s	9.4	0.0	32.1	12.9	12.9	1.7	11.3	35.8	8.2	7.6	33.8	3.5
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	0	521	203	1114	494	155	1034	461	128	977	582
V/C Ratio(X)	0.85	0.00	0.94	0.88	0.43	0.06	1.09	1.54	0.30	0.83	1.06	0.12
Avail Cap(c_a), veh/h	248	0	556	219	1114	494	155	1034	461	156	977	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	39.7	49.9	30.4	26.6	52.6	40.3	30.8	52.8	41.3	22.9
Incr Delay (d2), s/veh	7.6	0.0	23.6	28.5	0.3	0.1	99.3	249.4	0.4	21.9	46.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	16.4	6.6	5.1	0.6	8.6	49.5	2.9	3.8	19.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.3	0.0	63.3	78.4	30.7	26.7	151.9	289.8	31.2	74.6	88.1	23.0
LnGrp LOS	E	A	E	E	C	C	F	F	C	E	F	C
Approach Vol, veh/h	621				690				1904			
Approach Delay, s/veh	62.5				42.9				258.7			
Approach LOS	E				D				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	42.3	19.4	40.8	15.9	40.3	15.9	44.3				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+l1), s	9.6	37.8	14.9	34.1	13.3	35.8	11.4	14.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	0.0	0.1	2.9				
Intersection Summary												
HCM 6th Ctrl Delay	149.4											
HCM 6th LOS	F											
Notes												

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	70	320	35	99	152	69	1792	261	50	1133	49
Future Volume (vph)	70	320	35	99	152	69	1792	261	50	1133	49
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	52.3	52.3	52.3	52.3	52.3	12.0	52.9	52.9	14.8	55.7	55.7
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	10.0%	44.1%	44.1%	12.3%	46.4%	46.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	36.5	36.5	36.5		36.5	7.2	52.4	52.4	7.9	49.6	49.6
Actuated g/C Ratio	0.33	0.33	0.33		0.33	0.07	0.48	0.48	0.07	0.45	0.45
v/c Ratio	0.27	0.59	0.07		1.03	0.72	1.21	0.38	0.48	0.81	0.07
Control Delay	28.8	34.5	1.1		96.5	89.3	129.3	18.6	65.9	33.2	3.8
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.8	34.5	1.1		96.5	89.3	129.3	18.6	65.9	33.2	3.8
LOS	C	C	A		F	F	F	B	E	C	A
Approach Delay		30.8			96.5		114.4			33.3	
Approach LOS		C			F		F			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 110.3

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 79.8

Intersection LOS: E

Intersection Capacity Utilization 108.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14.8 s	52.9 s	52.3 s
		
Ø5	Ø6	Ø8
12 s	55.7 s	52.3 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	320	35	99	152	34	69	1792	261	50	1133	49
Future Volume (veh/h)	70	320	35	99	152	34	69	1792	261	50	1133	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	75	344	21	106	163	29	74	1927	212	54	1218	35
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	630	534	139	198	32	91	1523	679	67	1471	656
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.06	0.45	0.45	0.04	0.44	0.44
Sat Flow, veh/h	1066	1772	1502	270	557	89	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	75	344	21	298	0	0	74	1927	212	54	1218	35
Grp Sat Flow(s),veh/h/ln	1066	1772	1502	916	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	17.5	1.0	19.6	0.0	0.0	5.2	50.9	10.1	3.8	35.9	1.5
Cycle Q Clear(g_c), s	10.3	17.5	1.0	37.1	0.0	0.0	5.2	50.9	10.1	3.8	35.9	1.5
Prop In Lane	1.00		1.00	0.36		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	630	534	369	0	0	91	1523	679	67	1471	656
V/C Ratio(X)	0.26	0.55	0.04	0.81	0.00	0.00	0.81	1.27	0.31	0.81	0.83	0.05
Avail Cap(c_a), veh/h	351	732	620	446	0	0	105	1523	679	144	1471	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	29.0	23.7	39.0	0.0	0.0	52.5	30.8	19.7	53.5	28.0	18.3
Incr Delay (d2), s/veh	0.5	0.7	0.0	8.9	0.0	0.0	28.8	124.9	1.2	8.3	5.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	7.2	0.4	8.6	0.0	0.0	2.7	44.6	3.5	1.6	14.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	29.7	23.7	47.9	0.0	0.0	81.2	155.7	20.9	61.8	33.5	18.4
LnGrp LOS	C	C	C	D	A	A	F	F	C	E	C	B
Approach Vol, veh/h	440			298			2213			1307		
Approach Delay, s/veh	29.0			47.9			140.3			34.2		
Approach LOS	C			D			F			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	57.4		45.9	11.1	55.7		45.9				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	10.2	* 48		46.5	7.4	49.2		46.5				
Max Q Clear Time (g_c+I1), s	5.8	52.9		19.5	7.2	37.9		39.1				
Green Ext Time (p_c), s	0.0	0.0		2.3	0.0	5.7		1.0				

Intersection Summary

HCM 6th Ctrl Delay 89.8

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	358	279	121	29	91	155	1731	49	67	999	135
Future Volume (vph)	358	279	121	29	91	155	1731	49	67	999	135
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.0	43.0	9.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.8%	35.8%	7.5%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.7	32.3	32.3	10.1	14.9	10.6	37.4	37.4	5.6	32.3	32.3
Actuated g/C Ratio	0.22	0.32	0.32	0.10	0.15	0.11	0.38	0.38	0.06	0.32	0.32
v/c Ratio	1.10	0.51	0.22	0.19	0.53	0.97	1.45	0.08	0.82	0.97	0.24
Control Delay	115.1	31.9	5.5	48.0	39.4	109.6	234.7	0.3	104.6	55.4	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.1	31.9	5.5	48.0	39.4	109.6	234.7	0.3	104.6	55.4	4.5
LOS	F	C	A	D	D	F	F	A	F	E	A
Approach Delay		67.0			40.9		218.7			52.4	
Approach LOS		E			D		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 99.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.45

Intersection Signal Delay: 134.0

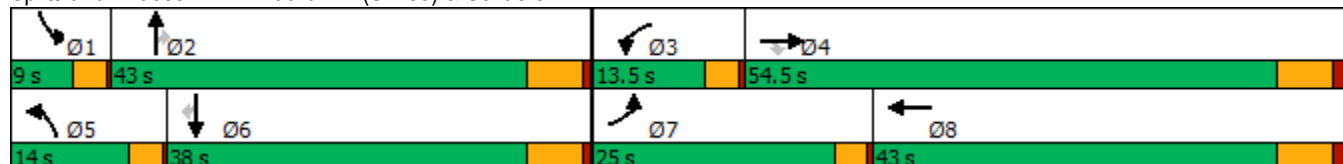
Intersection LOS: F

Intersection Capacity Utilization 102.3%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	279	121	29	91	45	155	1731	49	67	999	135
Future Volume (veh/h)	358	279	121	29	91	45	155	1731	49	67	999	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	377	294	78	31	96	36	163	1822	49	71	1052	99
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	495	413	94	134	50	178	1326	579	88	1135	506
Arrive On Green	0.23	0.28	0.28	0.06	0.11	0.11	0.11	0.39	0.39	0.06	0.34	0.34
Sat Flow, veh/h	1594	1772	1479	1594	1228	461	1594	3367	1470	1594	3367	1502
Grp Volume(v), veh/h	377	294	78	31	0	132	163	1822	49	71	1052	99
Grp Sat Flow(s),veh/h/ln	1594	1772	1479	1594	0	1689	1594	1683	1470	1594	1683	1502
Q Serve(g_s), s	21.5	13.5	3.8	1.8	0.0	7.1	9.5	37.0	2.0	4.1	28.3	4.4
Cycle Q Clear(g_c), s	21.5	13.5	3.8	1.8	0.0	7.1	9.5	37.0	2.0	4.1	28.3	4.4
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	495	413	94	0	185	178	1326	579	88	1135	506
V/C Ratio(X)	1.03	0.59	0.19	0.33	0.00	0.71	0.92	1.37	0.08	0.81	0.93	0.20
Avail Cap(c_a), veh/h	365	896	748	170	0	647	178	1326	579	93	1147	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	29.3	25.8	42.4	0.0	40.4	41.3	28.5	17.9	43.9	30.0	22.1
Incr Delay (d2), s/veh	56.1	0.8	0.2	0.8	0.0	3.8	43.2	173.3	0.1	34.6	12.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	5.5	1.3	0.7	0.0	3.0	5.6	44.8	0.6	2.4	12.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.3	30.1	25.9	43.2	0.0	44.2	84.5	201.8	17.9	78.5	42.7	22.3
LnGrp LOS	F	C	C	D	A	D	F	F	B	E	D	C
Approach Vol, veh/h		749			163			2034			1222	
Approach Delay, s/veh		61.0			44.0			188.0			43.1	
Approach LOS		E			D			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	43.0	9.0	33.2	14.0	37.7	25.0	17.3				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.5	37.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	6.1	39.0	3.8	15.5	11.5	30.3	23.5	9.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.0	1.1	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			117.0									
HCM 6th LOS			F									

Timings

18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	127	427	162	45	467	198	1540	54	150	981	129
Future Volume (vph)	127	427	162	45	467	198	1540	54	150	981	129
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	12.0	54.0	54.0	15.0	57.0	57.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	10.0%	45.0%	45.0%	12.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	44.0	44.0	44.0	44.0	44.0	8.5	48.0	48.0	11.5	51.0	51.0
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.42	0.42
v/c Ratio	2.38	0.68	0.25	0.25	1.13	1.00	1.18	0.09	1.03	0.71	0.19
Control Delay	695.1	38.5	4.8	31.1	111.1	119.0	124.3	4.3	133.8	31.8	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	695.1	38.5	4.8	31.1	111.1	119.0	124.3	4.3	133.8	31.8	5.7
LOS	F	D	A	C	F	F	F	A	F	C	A
Approach Delay		147.4			106.2		120.1			41.3	
Approach LOS		F			F		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.38

Intersection Signal Delay: 100.1

Intersection LOS: F

Intersection Capacity Utilization 122.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	54 s	51 s
		
Ø5	Ø6	Ø8
12 s	57 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	427	162	45	467	222	198	1540	54	150	981	129
Future Volume (veh/h)	127	427	162	45	467	222	198	1540	54	150	981	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	440	111	46	481	221	204	1588	44	155	1011	99
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	650	551	181	421	194	206	1347	601	153	1431	638
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.43	0.43
Sat Flow, veh/h	666	1772	1502	767	1149	528	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	131	440	111	46	0	702	204	1588	44	155	1011	99
Grp Sat Flow(s),veh/h/ln	666	1772	1502	767	0	1677	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	25.1	6.1	6.5	0.0	44.0	8.4	48.0	2.2	11.5	29.6	4.9
Cycle Q Clear(g_c), s	44.0	25.1	6.1	31.6	0.0	44.0	8.4	48.0	2.2	11.5	29.6	4.9
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	650	551	181	0	615	206	1347	601	153	1431	638
V/C Ratio(X)	2.18	0.68	0.20	0.25	0.00	1.14	0.99	1.18	0.07	1.01	0.71	0.16
Avail Cap(c_a), veh/h	60	650	551	181	0	615	206	1347	601	153	1431	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	32.0	26.0	45.3	0.0	38.0	55.7	36.0	22.3	54.2	28.4	21.2
Incr Delay (d2), s/veh	583.1	2.8	0.2	0.7	0.0	82.1	59.5	88.6	0.1	76.8	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	10.8	2.1	1.2	0.0	31.0	4.7	34.5	0.7	7.7	11.3	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	643.1	34.8	26.2	46.0	0.0	120.1	115.2	124.6	22.3	131.0	30.0	21.3
LnGrp LOS	F	C	C	D	A	F	F	F	C	F	C	C
Approach Vol, veh/h	682			748			1836			1265		
Approach Delay, s/veh	150.3			115.5			121.1			41.7		
Approach LOS	F			F			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	54.0		51.0	12.0	57.0		51.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	11.5	48.0		44.0	8.5	51.0		44.0				
Max Q Clear Time (g_c+I1), s	13.5	50.0		46.0	10.4	31.6		46.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	102.4											
HCM 6th LOS	F											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	70	309	210	54	133	115	1354	68	156	985	59
Future Volume (vph)	70	309	210	54	133	115	1354	68	156	985	59
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	51.0	51.0	51.0	51.0	51.0	20.0	53.0	53.0	16.0	49.0	49.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	16.7%	44.2%	44.2%	13.3%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	31.1	31.1	31.1	31.1	31.1	12.3	47.7	47.7	12.6	48.0	48.0
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.12	0.45	0.45	0.12	0.45	0.45
v/c Ratio	1.17	0.63	0.37	0.33	0.89	0.66	0.94	0.10	0.87	0.68	0.09
Control Delay	205.6	37.1	5.2	33.3	45.6	63.3	42.3	9.7	87.3	28.3	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	205.6	37.1	5.2	33.3	45.6	63.3	42.3	9.7	87.3	28.3	3.7
LOS	F	D	A	C	D	E	D	A	F	C	A
Approach Delay		45.8			44.3		42.4			34.8	
Approach LOS		D			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105.5

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.17

Intersection Signal Delay: 40.8

Intersection LOS: D

Intersection Capacity Utilization 98.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
16 s	53 s	51 s
 Ø5	 Ø6	 Ø8
20 s	49 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	309	210	54	133	333	115	1354	68	156	985	59
Future Volume (veh/h)	70	309	210	54	133	333	115	1354	68	156	985	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	74	325	119	57	140	338	121	1425	48	164	1037	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	672	563	264	175	422	144	1339	597	168	1388	611
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.40	0.40	0.11	0.41	0.41
Sat Flow, veh/h	820	1772	1483	846	460	1111	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	74	325	119	57	0	478	121	1425	48	164	1037	30
Grp Sat Flow(s),veh/h/ln	820	1772	1483	846	0	1572	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	10.5	16.6	6.4	6.5	0.0	32.2	8.9	47.3	2.4	12.2	31.1	1.4
Cycle Q Clear(g_c), s	42.8	16.6	6.4	23.1	0.0	32.2	8.9	47.3	2.4	12.2	31.1	1.4
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	672	563	264	0	596	144	1339	597	168	1388	611
V/C Ratio(X)	0.50	0.48	0.21	0.22	0.00	0.80	0.84	1.06	0.08	0.98	0.75	0.05
Avail Cap(c_a), veh/h	157	688	576	271	0	611	221	1339	597	168	1388	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	28.0	24.9	36.8	0.0	32.9	53.2	35.8	22.3	53.1	29.7	21.0
Incr Delay (d2), s/veh	1.9	0.4	0.1	0.3	0.0	7.2	13.1	43.7	0.1	63.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.9	2.2	1.3	0.0	12.8	3.9	25.8	0.8	7.6	12.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	28.4	25.0	37.1	0.0	40.1	66.4	79.5	22.3	116.1	31.9	21.0
LnGrp LOS	D	C	C	D	A	D	E	F	C	F	C	C
Approach Vol, veh/h		518			535			1594			1231	
Approach Delay, s/veh		31.3			39.8			76.8			42.9	
Approach LOS		C			D			E			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	53.0		49.9	14.3	54.7		49.9				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	12.5	47.3		46.2	16.5	43.3		46.2				
Max Q Clear Time (g_c+I1), s	14.2	49.3		44.8	10.9	33.1		34.2				
Green Ext Time (p_c), s	0.0	0.0		0.4	0.1	4.6		2.2				
Intersection Summary												
HCM 6th Ctrl Delay			54.8									
HCM 6th LOS			D									

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	396	6	4	151	0	7	0	3	0	0	0
Future Vol, veh/h	0	396	6	4	151	0	7	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	430	7	4	164	0	8	0	3	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	164	0	0	437	0	0	606	606	434	607	609	164
Stage 1	-	-	-	-	-	-	434	434	-	172	172	-
Stage 2	-	-	-	-	-	-	172	172	-	435	437	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1414	-	-	1123	-	-	409	411	622	408	410	881
Stage 1	-	-	-	-	-	-	600	581	-	830	756	-
Stage 2	-	-	-	-	-	-	830	756	-	600	579	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1414	-	-	1123	-	-	408	409	622	405	408	881
Mov Cap-2 Maneuver	-	-	-	-	-	-	408	409	-	405	408	-
Stage 1	-	-	-	-	-	-	600	581	-	830	753	-
Stage 2	-	-	-	-	-	-	827	753	-	597	579	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			13.1			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	455	1414	-	-	1123	-	-	-				
HCM Lane V/C Ratio	0.024	-	-	-	0.004	-	-	-				
HCM Control Delay (s)	13.1	0	-	-	8.2	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/20/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	317	30	14	381	28	31	28	40
Future Volume (vph)	18	317	30	14	381	28	31	28	40
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	23.0	53.0	53.0	19.0	49.0	48.0	48.0	48.0	48.0
Total Split (%)	19.2%	44.2%	44.2%	15.8%	40.8%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	5.8	20.8	20.8	5.7	20.7		12.4		12.4
Actuated g/C Ratio	0.17	0.60	0.60	0.16	0.59		0.36		0.36
v/c Ratio	0.07	0.16	0.03	0.05	0.21		0.15		0.18
Control Delay	18.5	9.2	2.8	18.6	9.4		9.5		9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	18.5	9.2	2.8	18.6	9.4		9.5		9.4
LOS	B	A	A	B	A		A		A
Approach Delay		9.2			9.7		9.5		9.4
Approach LOS		A			A		A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 34.9

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.21

Intersection Signal Delay: 9.4

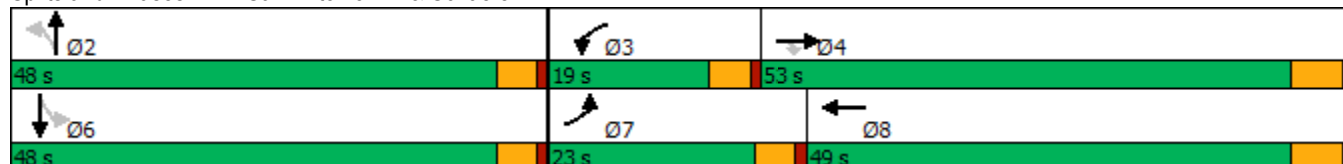
Intersection LOS: A

Intersection Capacity Utilization 33.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	317	30	14	381	24	28	31	15	28	40	27
Future Volume (veh/h)	18	317	30	14	381	24	28	31	15	28	40	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	19	327	26	14	393	21	29	32	6	29	41	12
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1032	450	29	975	52	256	221	32	220	235	53
Arrive On Green	0.02	0.31	0.31	0.02	0.30	0.30	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1594	3367	1470	1594	3247	173	449	985	141	329	1045	235
Grp Volume(v), veh/h	19	327	26	14	203	211	67	0	0	82	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1470	1594	1683	1736	1574	0	0	1609	0	0
Q Serve(g_s), s	0.4	2.5	0.4	0.3	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	2.5	0.4	0.3	3.2	3.2	1.0	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.10	0.43		0.09	0.35		0.15
Lane Grp Cap(c), veh/h	39	1032	450	29	506	522	509	0	0	508	0	0
V/C Ratio(X)	0.49	0.32	0.06	0.48	0.40	0.40	0.13	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	881	4774	2084	690	2185	2254	2126	0	0	2163	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.0	8.9	8.1	16.2	9.3	9.3	10.4	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.2	0.1	4.5	0.5	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.1	0.1	0.7	0.8	0.3	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	9.0	8.2	20.7	9.8	9.8	10.5	0.0	0.0	10.6	0.0	0.0
LnGrp LOS	B	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h	372			428			67			82		
Approach Delay, s/veh	9.5			10.1			10.5			10.6		
Approach LOS	A			B			B			B		
Timer - Assigned Phs	2		3	4	6		7	8				
Phs Duration (G+Y+Rc), s	12.1		5.2	16.0	12.1		5.4	15.8				
Change Period (Y+Rc), s	4.6		4.6	5.8	4.6		4.6	5.8				
Max Green Setting (Gmax), s	43.4		14.4	47.2	43.4		18.4	43.2				
Max Q Clear Time (g_c+I1), s	3.0		2.3	4.5	3.3		2.4	5.2				
Green Ext Time (p_c), s	0.4		0.0	2.1	0.5		0.0	2.3				
Intersection Summary												
HCM 6th Ctrl Delay	10.0											
HCM 6th LOS	A											

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	492	29	15	615	15	16	21	9	19
Future Volume (vph)	31	492	29	15	615	15	16	21	9	19
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	25.0	55.0	55.0	22.0	52.0	52.0	43.0	43.0	43.0	43.0
Total Split (%)	20.8%	45.8%	45.8%	18.3%	43.3%	43.3%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.2	29.3	29.3	5.8	27.1	27.1		12.9		12.9
Actuated g/C Ratio	0.14	0.67	0.67	0.13	0.62	0.62		0.30		0.30
v/c Ratio	0.14	0.23	0.03	0.07	0.30	0.02		0.10		0.12
Control Delay	24.1	8.5	2.2	24.7	11.1	0.0		13.5		10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	24.1	8.5	2.2	24.7	11.1	0.0		13.5		10.0
LOS	C	A	A	C	B	A		B		B
Approach Delay		9.0			11.1			13.5		10.0
Approach LOS		A			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 43.6

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.30

Intersection Signal Delay: 10.3

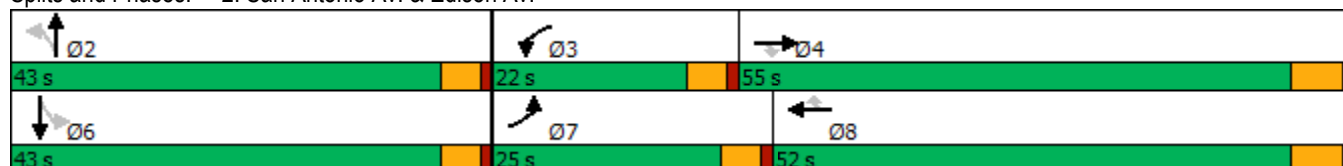
Intersection LOS: B

Intersection Capacity Utilization 44.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	492	29	15	615	15	16	21	6	9	19	29
Future Volume (veh/h)	31	492	29	15	615	15	16	21	6	9	19	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	32	507	23	15	634	12	16	22	2	9	20	-32
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1278	557	31	1213	529	221	106	8	0	9999	4204
Arrive On Green	0.04	0.38	0.38	0.02	0.36	0.36	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	517	992	79	-2235	-6307	9426
Grp Volume(v), veh/h	32	507	23	15	634	12	40	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1588	0	0	0	0	0
Q Serve(g_s), s	0.6	3.3	0.3	0.3	4.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	3.3	0.3	0.3	4.5	0.2	0.6	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.05	-3.00		10.67
Lane Grp Cap(c), veh/h	62	1278	557	31	1213	529	336	0	0	0	0	0
V/C Ratio(X)	0.52	0.40	0.04	0.48	0.52	0.02	0.12	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1070	5452	2378	913	5120	2232	2134	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	14.3	6.9	5.9	14.7	7.7	6.3	12.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.4	0.2	0.0	4.2	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.5	0.0	0.1	0.8	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	7.1	6.0	19.0	8.0	6.3	12.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		562			661			40			0	
Approach Delay, s/veh		7.6			8.2			12.6			0.0	
Approach LOS		A			A			B				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.9	5.2	17.3		7.9	5.8	16.7				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		38.4	17.4	49.2		38.4	20.4	46.2				
Max Q Clear Time (g_c+I1), s		2.6	2.3	5.3		0.0	2.6	6.5				
Green Ext Time (p_c), s		0.2	0.0	3.4		0.0	0.0	4.4				
Intersection Summary												
HCM 6th Ctrl Delay			8.1									
HCM 6th LOS			A									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	17	135	27	187	31	97	16	102
Future Volume (vph)	17	135	27	187	31	97	16	102
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	17.0	41.0	17.0	41.0	24.0	41.0	21.0	38.0
Total Split (%)	14.2%	34.2%	14.2%	34.2%	20.0%	34.2%	17.5%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	13.0	13.5	13.1	13.5	6.8	16.7	6.4	16.6
Actuated g/C Ratio	0.35	0.36	0.35	0.36	0.18	0.45	0.17	0.44
v/c Ratio	0.04	0.13	0.06	0.17	0.11	0.10	0.06	0.08
Control Delay	9.4	11.6	9.4	11.9	21.3	10.0	22.1	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	11.6	9.4	11.9	21.3	10.0	22.1	12.7
LOS	A	B	A	B	C	B	C	B
Approach Delay		11.4		11.6		12.1		13.9
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 37.4

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.17

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 42.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

 Ø1	 Ø2	 Ø3	 Ø4
21 s	41 s	17 s	41 s
 Ø5	 Ø6	 Ø7	 Ø8
24 s	38 s	17 s	41 s

HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	135	19	27	187	13	31	97	41	16	102	7
Future Volume (veh/h)	17	135	19	27	187	13	31	97	41	16	102	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	138	16	28	191	7	32	99	23	16	104	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	724	83	436	826	30	59	679	152	32	778	22
Arrive On Green	0.02	0.24	0.24	0.03	0.25	0.25	0.04	0.25	0.25	0.02	0.23	0.23
Sat Flow, veh/h	1594	3043	348	1594	3312	121	1594	2721	611	1594	3340	96
Grp Volume(v), veh/h	17	75	79	28	97	101	32	60	62	16	52	55
Grp Sat Flow(s),veh/h/ln	1594	1683	1708	1594	1683	1749	1594	1683	1649	1594	1683	1753
Q Serve(g_s), s	0.4	1.6	1.6	0.6	2.0	2.0	0.9	1.2	1.3	0.4	1.1	1.1
Cycle Q Clear(g_c), s	0.4	1.6	1.6	0.6	2.0	2.0	0.9	1.2	1.3	0.4	1.1	1.1
Prop In Lane	1.00		0.20	1.00		0.07	1.00		0.37	1.00		0.05
Lane Grp Cap(c), veh/h	411	401	406	436	420	436	59	420	411	32	392	408
V/C Ratio(X)	0.04	0.19	0.19	0.06	0.23	0.23	0.55	0.14	0.15	0.50	0.13	0.13
Avail Cap(c_a), veh/h	822	1335	1354	829	1335	1387	697	1350	1323	589	1236	1287
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	13.5	13.5	12.0	13.3	13.3	21.0	13.0	13.0	21.5	13.5	13.5
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.3	0.3	2.9	0.2	0.2	4.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.5	0.2	0.6	0.6	0.3	0.4	0.4	0.2	0.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	13.7	13.7	12.1	13.5	13.5	23.9	13.1	13.2	25.9	13.6	13.6
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		171			226			154			123	
Approach Delay, s/veh		13.6			13.4			15.4			15.2	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	16.5	6.1	16.4	6.2	15.7	5.5	16.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	19.4	32.6	12.4	35.2				
Max Q Clear Time (g_c+I1), s	2.4	3.3	2.6	3.6	2.9	3.1	2.4	4.0				
Green Ext Time (p_c), s	0.0	0.6	0.0	0.7	0.0	0.5	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

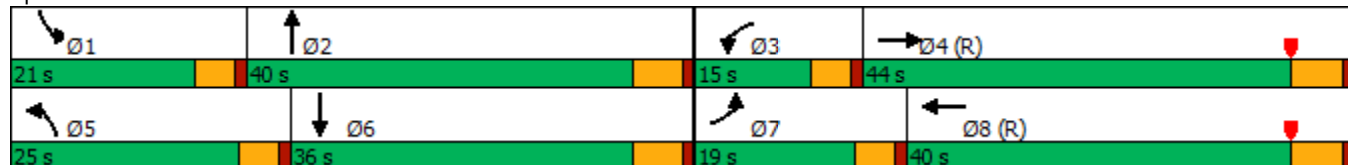
10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	26	309	8	326	47	100	40	92
Future Volume (vph)	26	309	8	326	47	100	40	92
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	19.0	44.0	15.0	40.0	25.0	40.0	21.0	36.0
Total Split (%)	15.8%	36.7%	12.5%	33.3%	20.8%	33.3%	17.5%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	6.7	83.6	5.4	78.4	8.2	12.6	7.8	12.1
Actuated g/C Ratio	0.06	0.70	0.04	0.65	0.07	0.10	0.06	0.10
v/c Ratio	0.31	0.15	0.11	0.18	0.45	0.33	0.41	0.37
Control Delay	62.7	8.1	58.1	10.5	66.2	47.0	65.2	39.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.7	8.1	58.1	10.5	66.2	47.0	65.2	39.2
LOS	E	A	E	B	E	D	E	D
Approach Delay		12.0		11.4		52.7		45.5
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 23.0
Intersection Capacity Utilization 50.4%
Analysis Period (min) 15
Intersection LOS: C
ICU Level of Service A

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	309	26	8	326	47	47	100	11	40	92	32
Future Volume (veh/h)	26	309	26	8	326	47	47	100	11	40	92	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	27	325	24	8	343	36	49	105	10	42	97	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	2204	162	16	2086	217	61	292	27	52	269	30
Arrive On Green	0.02	0.69	0.69	0.01	0.68	0.68	0.04	0.09	0.09	0.03	0.09	0.09
Sat Flow, veh/h	1594	3176	233	1594	3073	320	1594	3103	291	1594	3046	339
Grp Volume(v), veh/h	27	171	178	8	187	192	49	56	59	42	53	55
Grp Sat Flow(s),veh/h/ln	1594	1683	1726	1594	1683	1710	1594	1683	1711	1594	1683	1702
Q Serve(g_s), s	2.0	4.2	4.2	0.6	4.8	4.9	3.7	3.8	3.9	3.1	3.5	3.7
Cycle Q Clear(g_c), s	2.0	4.2	4.2	0.6	4.8	4.9	3.7	3.8	3.9	3.1	3.5	3.7
Prop In Lane	1.00		0.14	1.00		0.19	1.00		0.17	1.00		0.20
Lane Grp Cap(c), veh/h	39	1168	1198	16	1143	1161	61	158	161	52	149	150
V/C Ratio(X)	0.69	0.15	0.15	0.51	0.16	0.17	0.81	0.36	0.37	0.81	0.36	0.37
Avail Cap(c_a), veh/h	191	1168	1198	138	1143	1161	271	485	493	218	429	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	6.3	6.3	59.1	7.0	7.0	57.3	51.0	51.0	57.7	51.5	51.5
Incr Delay (d2), s/veh	7.5	0.3	0.3	9.4	0.3	0.3	8.8	1.3	1.4	10.8	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.4	1.4	0.3	1.6	1.6	1.6	1.6	1.7	1.4	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.6	6.5	6.5	68.6	7.3	7.3	66.1	52.3	52.4	68.5	52.9	53.0
LnGrp LOS	E	A	A	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h	376			387			164			150		
Approach Delay, s/veh	10.8			8.5			56.4			57.3		
Approach LOS	B			A			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	16.7	5.8	89.1	9.2	16.0	7.6	87.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	34.6	10.4	38.2	20.4	30.6	14.4	34.2				
Max Q Clear Time (g_c+I1), s	5.1	5.9	2.6	6.2	5.7	5.7	4.0	6.9				
Green Ext Time (p_c), s	0.0	0.5	0.0	1.9	0.0	0.5	0.0	2.0				
Intersection Summary												
HCM 6th Ctrl Delay	23.4											
HCM 6th LOS	C											

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	62	429	14	19	577	19	16	59	13	69
Future Volume (vph)	62	429	14	19	577	19	16	59	13	69
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	25.0	48.0	48.0	17.0	40.0	40.0	17.0	41.0	14.0	38.0
Total Split (%)	20.8%	40.0%	40.0%	14.2%	33.3%	33.3%	14.2%	34.2%	11.7%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.9	27.2	27.2	6.2	21.3	21.3	6.0	13.0	5.9	13.0
Actuated g/C Ratio	0.14	0.49	0.49	0.11	0.38	0.38	0.11	0.23	0.11	0.23
v/c Ratio	0.30	0.28	0.02	0.12	0.49	0.03	0.10	0.09	0.08	0.17
Control Delay	30.3	11.4	0.1	32.1	17.6	0.1	32.3	18.4	32.5	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	11.4	0.1	32.1	17.6	0.1	32.3	18.4	32.5	13.4
LOS	C	B	A	C	B	A	C	B	C	B
Approach Delay		13.4			17.5			21.1		15.2
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 55.5

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 15.9

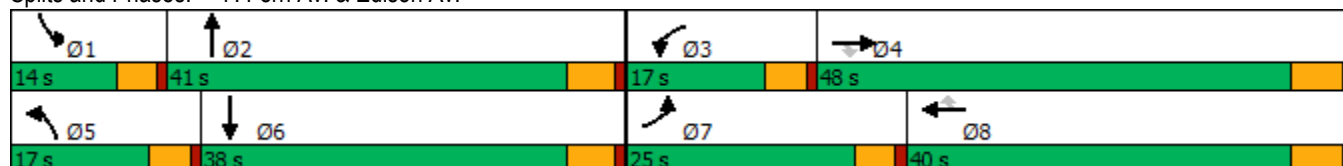
Intersection LOS: B

Intersection Capacity Utilization 49.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	429	14	19	577	19	16	59	8	13	69	54
Future Volume (veh/h)	62	429	14	19	577	19	16	59	8	13	69	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	67	466	11	21	627	13	17	64	5	14	75	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	1103	492	41	980	437	34	620	48	28	497	140
Arrive On Green	0.06	0.33	0.33	0.03	0.29	0.29	0.02	0.20	0.20	0.02	0.19	0.19
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3167	245	1594	2586	727
Grp Volume(v), veh/h	67	466	11	21	627	13	17	34	35	14	48	49
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1728	1594	1683	1630
Q Serve(g_s), s	1.9	5.1	0.2	0.6	7.6	0.3	0.5	0.8	0.8	0.4	1.1	1.2
Cycle Q Clear(g_c), s	1.9	5.1	0.2	0.6	7.6	0.3	0.5	0.8	0.8	0.4	1.1	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.45
Lane Grp Cap(c), veh/h	99	1103	492	41	980	437	34	329	338	28	324	313
V/C Ratio(X)	0.68	0.42	0.02	0.52	0.64	0.03	0.50	0.10	0.10	0.49	0.15	0.16
Avail Cap(c_a), veh/h	691	3018	1345	420	2446	1091	420	1273	1307	318	1166	1129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	12.3	10.7	22.6	14.5	11.9	22.8	15.5	15.5	22.9	15.8	15.8
Incr Delay (d2), s/veh	3.0	0.3	0.0	3.7	0.7	0.0	4.3	0.1	0.1	4.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.5	0.1	0.2	2.3	0.1	0.2	0.3	0.3	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	12.6	10.7	26.4	15.2	12.0	27.1	15.7	15.7	27.8	16.0	16.1
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		544			661			86			111	
Approach Delay, s/veh		14.0			15.5			17.9			17.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.4	14.6	5.8	21.2	5.6	14.4	7.5	19.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	9.4	35.6	12.4	42.2	12.4	32.6	20.4	34.2				
Max Q Clear Time (g_c+I1), s	2.4	2.8	2.6	7.1	2.5	3.2	3.9	9.6				
Green Ext Time (p_c), s	0.0	0.3	0.0	3.0	0.0	0.5	0.1	4.0				
Intersection Summary												
HCM 6th Ctrl Delay			15.3									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	262	178	30	31	38
Future Vol, veh/h	29	262	178	30	31	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	282	191	32	33	41
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	223	0	-	0	410	112
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	203	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1343	-	-	-	570	920
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	811	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1343	-	-	-	557	920
Mov Cap-2 Maneuver	-	-	-	-	619	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	811	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		10		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1343	-	-	-	619	920
HCM Lane V/C Ratio	0.023	-	-	-	0.054	0.044
HCM Control Delay (s)	7.7	-	-	-	11.1	9.1
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.1

Intersection						
Int Delay, s/veh	4.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↖	
Traffic Vol, veh/h	207	152	56	240	142	106
Future Vol, veh/h	207	152	56	240	142	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	244	179	66	282	167	125

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	423	0	607	212
Stage 1	-	-	-	-	334	-
Stage 2	-	-	-	-	273	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1211	-	491	942
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	748	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1211	-	464	942
Mov Cap-2 Maneuver	-	-	-	-	549	-
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	707	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	668	-	-	1211	-
HCM Lane V/C Ratio	0.437	-	-	0.054	-
HCM Control Delay (s)	14.5	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	2.2	-	-	0.2	-

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	327	4	372	723	801	830	428
Future Volume (vph)	327	4	372	723	801	830	428
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	31.0	31.0	31.0	42.0	89.0	47.0	47.0
Total Split (%)	25.8%	25.8%	25.8%	35.0%	74.2%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	21.9	21.9	21.9	44.0	87.6	39.1	39.1
Actuated g/C Ratio	0.18	0.18	0.18	0.37	0.73	0.33	0.33
v/c Ratio	0.84	0.74	0.51	1.16	0.32	0.75	0.55
Control Delay	69.8	46.8	9.6	130.5	6.9	40.5	5.3
Queue Delay	0.0	0.1	0.0	1.2	0.3	0.0	0.0
Total Delay	69.8	46.8	9.6	131.7	7.2	40.5	5.3
LOS	E	D	A	F	A	D	A
Approach Delay		43.0			66.3	28.5	
Approach LOS		D			E	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 47.9

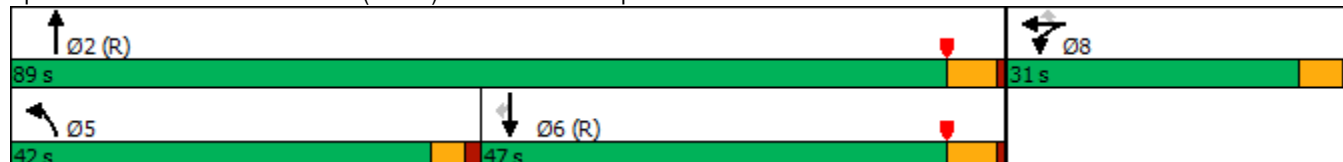
Intersection LOS: D

Intersection Capacity Utilization 92.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	327	4	372	723	801	0	0	830	428
Future Volume (veh/h)	0	0	0	327	4	372	723	801	0	0	830	428
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				402	0	129	753	834	0	0	865	357
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				475	0	211	557	2769	0	0	1525	680
Arrive On Green				0.13	0.00	0.13	0.63	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				402	0	129	753	834	0	0	865	357
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				13.2	0.0	9.2	37.5	0.0	0.0	0.0	22.0	19.9
Cycle Q Clear(g_c), s				13.2	0.0	9.2	37.5	0.0	0.0	0.0	22.0	19.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				475	0	211	557	2769	0	0	1525	680
V/C Ratio(X)				0.85	0.00	0.61	1.35	0.30	0.00	0.00	0.57	0.52
Avail Cap(c_a), veh/h				772	0	343	557	2769	0	0	1525	680
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.30	0.30	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.8	0.0	49.1	22.5	0.0	0.0	0.0	25.8	25.2
Incr Delay (d2), s/veh				2.4	0.0	1.1	162.4	0.1	0.0	0.0	1.5	2.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.9	0.0	3.6	33.8	0.0	0.0	0.0	9.3	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.2	0.0	50.1	184.9	0.1	0.0	0.0	27.4	28.1
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					531			1587			1222	
Approach Delay, s/veh					52.4			87.8			27.6	
Approach LOS					D			F			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	99.0			42.0			57.0			21.0		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	83.5			37.5			41.5			26.0		
Max Q Clear Time (g_c+I1), s	2.0			39.5			24.0			15.2		
Green Ext Time (p_c), s	10.2			0.0			9.0			0.8		
Intersection Summary												
HCM 6th Ctrl Delay			60.1									
HCM 6th LOS			E									
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	306	0	1215	533	332	826
Future Volume (vph)	306	0	1215	533	332	826
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	37.0	37.0	44.0	44.0	39.0	83.0
Total Split (%)	30.8%	30.8%	36.7%	36.7%	32.5%	69.2%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	32.0	32.0	45.6	45.6	27.9	77.5
Actuated g/C Ratio	0.27	0.27	0.38	0.38	0.23	0.65
v/c Ratio	0.65	1.06	0.96	0.69	0.86	0.38
Control Delay	47.1	83.9	54.4	14.1	76.7	9.2
Queue Delay	61.5	21.8	42.4	0.0	0.2	0.2
Total Delay	108.6	105.7	96.8	14.1	77.0	9.5
LOS	F	F	F	B	E	A
Approach Delay		106.7	71.6			28.8
Approach LOS		F	E			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 65.9

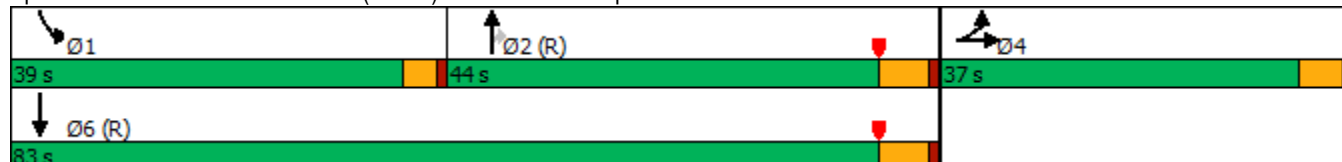
Intersection LOS: E

Intersection Capacity Utilization 92.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	0	502	0	0	0	0	1215	533	332	826	0
Future Volume (veh/h)	306	0	502	0	0	0	0	1215	533	332	826	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	326	0	425				0	1293	451	353	879	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	475	0	423				0	1430	619	374	2295	0
Arrive On Green	0.27	0.00	0.27				0.00	0.40	0.40	0.42	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1539	1781	3647	0
Grp Volume(v), veh/h	326	0	425				0	1293	451	353	879	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1539	1781	1777	0
Q Serve(g_s), s	19.7	0.0	32.0				0.0	41.0	29.7	22.8	0.0	0.0
Cycle Q Clear(g_c), s	19.7	0.0	32.0				0.0	41.0	29.7	22.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	475	0	423				0	1430	619	374	2295	0
V/C Ratio(X)	0.69	0.00	1.01				0.00	0.90	0.73	0.94	0.38	0.00
Avail Cap(c_a), veh/h	475	0	423				0	1430	619	520	2295	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.72	0.72	0.55	0.55	0.00
Uniform Delay (d), s/veh	39.5	0.0	44.0				0.0	33.7	30.3	34.1	0.0	0.0
Incr Delay (d2), s/veh	3.4	0.0	45.1				0.0	7.3	5.4	12.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.0	17.3				0.0	18.3	11.5	8.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.9	0.0	89.1				0.0	41.0	35.7	46.2	0.3	0.0
LnGrp LOS	D	A	F				A	D	D	D	A	A
Approach Vol, veh/h	751						1744			1232		
Approach Delay, s/veh	69.1						39.6			13.4		
Approach LOS	E						D			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	29.2	53.8	37.0		83.0							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	35.0	38.5	32.0		77.5							
Max Q Clear Time (g_c+I1), s	24.8	43.0	34.0		2.0							
Green Ext Time (p_c), s	0.4	0.0	0.0		11.0							
Intersection Summary												
HCM 6th Ctrl Delay			36.9									
HCM 6th LOS			D									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	85	138	71	167	107	1405	57	148	1011	93
Future Volume (vph)	85	138	71	167	107	1405	57	148	1011	93
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	23.0	38.0	19.0	34.0	22.0	43.0	43.0	20.0	41.0	41.0
Total Split (%)	19.2%	31.7%	15.8%	28.3%	18.3%	35.8%	35.8%	16.7%	34.2%	34.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	9.6	13.7	8.8	13.0	10.9	38.9	38.9	9.2	40.0	40.0
Actuated g/C Ratio	0.11	0.15	0.10	0.15	0.12	0.44	0.44	0.10	0.45	0.45
v/c Ratio	0.53	0.47	0.49	0.57	0.59	0.65	0.09	0.51	0.45	0.14
Control Delay	52.1	20.4	51.9	21.9	52.3	23.6	1.0	46.3	21.7	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.1	20.4	51.9	21.9	52.3	23.6	1.0	46.3	21.7	4.9
LOS	D	C	D	C	D	C	A	D	C	A
Approach Delay		27.9		27.2		24.8			23.3	
Approach LOS		C		C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 89.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 24.8

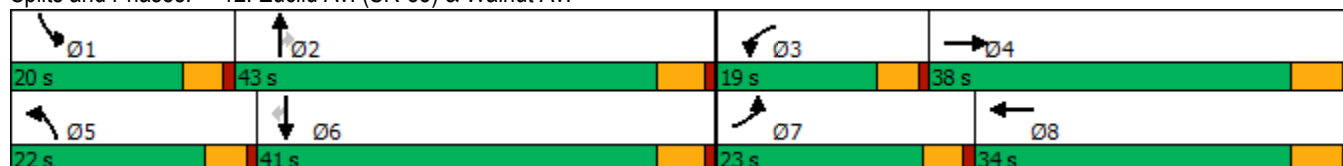
Intersection LOS: C

Intersection Capacity Utilization 66.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	138	135	71	167	166	107	1405	57	148	1011	93
Future Volume (veh/h)	85	138	135	71	167	166	107	1405	57	148	1011	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	90	147	106	76	178	142	114	1495	45	157	1076	60
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	309	208	94	273	203	141	2442	680	226	2372	662
Arrive On Green	0.07	0.16	0.16	0.06	0.15	0.15	0.09	0.46	0.46	0.08	0.45	0.45
Sat Flow, veh/h	1594	1972	1324	1594	1874	1396	1594	5316	1481	3000	5316	1483
Grp Volume(v), veh/h	90	131	122	76	168	152	114	1495	45	157	1076	60
Grp Sat Flow(s),veh/h/ln	1594	1772	1525	1594	1772	1498	1594	1772	1481	1500	1772	1483
Q Serve(g_s), s	4.6	5.5	6.0	3.9	7.3	7.9	5.7	17.3	1.4	4.2	11.5	1.9
Cycle Q Clear(g_c), s	4.6	5.5	6.0	3.9	7.3	7.9	5.7	17.3	1.4	4.2	11.5	1.9
Prop In Lane	1.00		0.87	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	112	278	239	94	258	218	141	2442	680	226	2372	662
V/C Ratio(X)	0.80	0.47	0.51	0.80	0.65	0.70	0.81	0.61	0.07	0.69	0.45	0.09
Avail Cap(c_a), veh/h	358	697	600	280	611	516	339	2442	680	565	2372	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	31.4	31.6	38.0	33.0	33.3	36.6	16.6	12.3	36.9	15.7	13.1
Incr Delay (d2), s/veh	4.9	1.2	1.7	5.9	2.8	4.0	4.1	1.2	0.2	1.4	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.3	2.2	1.6	3.1	2.9	2.3	6.5	0.4	1.5	4.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.4	32.7	33.3	43.9	35.8	37.3	40.7	17.8	12.5	38.4	16.4	13.3
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h		343			396			1654			1293	
Approach Delay, s/veh		35.5			37.9			19.2			18.9	
Approach LOS		D			D			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	43.0	9.4	18.6	11.8	41.9	10.4	17.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	15.4	37.6	14.4	32.2	17.4	35.6	18.4	28.2				
Max Q Clear Time (g_c+I1), s	6.2	19.3	5.9	8.0	7.7	13.5	6.6	9.9				
Green Ext Time (p_c), s	0.2	10.1	0.0	1.3	0.1	7.8	0.1	1.6				
Intersection Summary												
HCM 6th Ctrl Delay			22.6									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	128	223	149	333	154	141	1125	158	149	799	137
Future Volume (vph)	128	223	149	333	154	141	1125	158	149	799	137
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	23.0	36.2	36.2	16.0	35.6	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	12.8	23.1	13.9	24.2	24.2	11.7	31.3	31.3	14.3	32.8	47.6
Actuated g/C Ratio	0.12	0.22	0.13	0.23	0.23	0.11	0.30	0.30	0.14	0.32	0.46
v/c Ratio	0.67	0.81	0.73	0.44	0.34	0.81	1.15	0.29	0.70	0.78	0.19
Control Delay	62.9	54.4	65.0	36.4	7.7	81.6	112.5	8.5	62.2	39.0	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.9	54.4	65.0	36.4	7.7	81.6	112.5	8.5	62.2	39.0	3.0
LOS	E	D	E	D	A	F	F	A	E	D	A
Approach Delay		56.9		36.2			97.9			37.7	
Approach LOS		E		D			F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.5

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 63.7

Intersection LOS: E

Intersection Capacity Utilization 86.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
25.2 s	35.6 s	23 s	36.2 s
			
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	223	82	149	333	154	141	1125	158	149	799	137
Future Volume (veh/h)	128	223	82	149	333	154	141	1125	158	149	799	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	132	230	55	154	343	98	145	1160	112	154	824	92
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	272	65	184	715	315	173	1124	501	184	1147	656
Arrive On Green	0.10	0.20	0.20	0.12	0.21	0.21	0.11	0.33	0.33	0.12	0.34	0.34
Sat Flow, veh/h	1594	1377	329	1594	3367	1482	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	132	0	285	154	343	98	145	1160	112	154	824	92
Grp Sat Flow(s),veh/h/ln	1594	0	1706	1594	1683	1482	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	7.3	0.0	14.6	8.6	8.1	5.0	8.1	30.2	4.9	8.6	19.3	3.3
Cycle Q Clear(g_c), s	7.3	0.0	14.6	8.6	8.1	5.0	8.1	30.2	4.9	8.6	19.3	3.3
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	337	184	715	315	173	1124	501	184	1147	656
V/C Ratio(X)	0.82	0.00	0.85	0.84	0.48	0.31	0.84	1.03	0.22	0.84	0.72	0.14
Avail Cap(c_a), veh/h	324	0	573	324	1131	498	201	1124	501	363	1425	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	0.0	35.0	39.2	31.3	30.1	39.5	30.1	21.7	39.2	26.0	15.1
Incr Delay (d2), s/veh	4.0	0.0	5.8	3.8	0.5	0.6	20.5	35.5	0.2	3.8	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	6.2	3.4	3.2	1.8	3.9	16.3	1.6	3.4	7.4	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	0.0	40.8	43.0	31.8	30.6	60.0	65.6	21.9	42.9	27.4	15.1
LnGrp LOS	D	A	D	D	C	C	E	F	C	D	C	B
Approach Vol, veh/h	417		595				1417		1070			
Approach Delay, s/veh	41.8		34.5				61.6		28.6			
Approach LOS	D		C				E		C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	36.7	15.0	23.7	14.4	37.3	13.7	25.0				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+I1), s	10.6	32.2	10.6	16.6	10.1	21.3	9.3	10.1				
Green Ext Time (p_c), s	0.1	0.0	0.1	1.2	0.0	5.3	0.1	2.2				

Intersection Summary

HCM 6th Ctrl Delay 44.5

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	50	65	43	100	93	42	1310	102	52	914	46
Future Volume (vph)	50	65	43	100	93	42	1310	102	52	914	46
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	49.0	49.0	49.0	49.0	49.0	13.0	52.0	52.0	19.0	58.0	58.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	10.8%	43.3%	43.3%	15.8%	48.3%	48.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	21.5	21.5	21.5		21.5	6.9	51.8	51.8	7.8	53.7	53.7
Actuated g/C Ratio	0.23	0.23	0.23		0.23	0.07	0.55	0.55	0.08	0.57	0.57
v/c Ratio	0.27	0.17	0.10		0.77	0.38	0.74	0.12	0.42	0.50	0.06
Control Delay	34.1	30.5	0.5		48.6	55.1	22.3	3.4	53.8	15.9	2.3
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.1	30.5	0.5		48.6	55.1	22.3	3.4	53.8	15.9	2.3
LOS	C	C	A		D	E	C	A	D	B	A
Approach Delay		23.5			48.6		22.0			17.3	
Approach LOS		C			D		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 94.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 22.7

Intersection LOS: C

Intersection Capacity Utilization 76.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
19 s	52 s	49 s
		
Ø5	Ø6	Ø8
13 s	58 s	49 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	65	43	100	93	55	42	1310	102	52	914	46
Future Volume (veh/h)	50	65	43	100	93	55	42	1310	102	52	914	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	52	68	26	104	97	47	44	1365	80	54	952	37
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	369	313	164	129	55	59	1898	846	66	1913	842
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.04	0.56	0.56	0.04	0.57	0.57
Sat Flow, veh/h	1113	1772	1502	517	622	266	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	52	68	26	248	0	0	44	1365	80	54	952	37
Grp Sat Flow(s),veh/h/ln	1113	1772	1502	1404	0	0	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	0.0	2.9	1.3	12.7	0.0	0.0	2.5	27.0	2.2	3.0	15.4	1.0
Cycle Q Clear(g_c), s	5.2	2.9	1.3	15.5	0.0	0.0	2.5	27.0	2.2	3.0	15.4	1.0
Prop In Lane	1.00		1.00	0.42		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	369	313	349	0	0	59	1898	846	66	1913	842
V/C Ratio(X)	0.21	0.18	0.08	0.71	0.00	0.00	0.75	0.72	0.09	0.81	0.50	0.04
Avail Cap(c_a), veh/h	552	845	716	739	0	0	148	1898	846	253	1913	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	29.5	28.9	34.7	0.0	0.0	43.2	14.5	9.1	43.1	11.8	8.7
Incr Delay (d2), s/veh	0.4	0.2	0.1	2.7	0.0	0.0	6.8	2.4	0.2	8.7	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.2	0.4	5.2	0.0	0.0	1.0	8.6	0.6	1.3	4.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.8	29.8	29.0	37.4	0.0	0.0	50.1	16.9	9.3	51.8	12.7	8.8
LnGrp LOS	C	C	C	D	A	A	D	B	A	D	B	A
Approach Vol, veh/h	146			248			1489			1043		
Approach Delay, s/veh	30.0			37.4			17.5			14.6		
Approach LOS	C			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	57.6		24.7	7.9	58.0		24.7				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	14.4	* 47		43.2	8.4	51.5		43.2				
Max Q Clear Time (g_c+I1), s	5.0	29.0		7.2	4.5	17.4		17.5				
Green Ext Time (p_c), s	0.0	8.7		0.6	0.0	6.8		1.3				

Intersection Summary

HCM 6th Ctrl Delay 18.8

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	239	76	78	17	50	134	1179	12	35	858	120
Future Volume (vph)	239	76	78	17	50	134	1179	12	35	858	120
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	42.0	42.0	10.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.0%	35.0%	8.3%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	18.9	26.2	26.2	10.4	11.8	11.0	41.1	41.1	6.1	31.9	31.9
Actuated g/C Ratio	0.21	0.29	0.29	0.11	0.13	0.12	0.45	0.45	0.07	0.35	0.35
v/c Ratio	0.76	0.16	0.16	0.10	0.37	0.74	0.81	0.02	0.34	0.76	0.20
Control Delay	52.9	24.9	1.9	45.4	29.8	66.7	32.0	0.1	55.9	34.2	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	24.9	1.9	45.4	29.8	66.7	32.0	0.1	55.9	34.2	3.0
LOS	D	C	A	D	C	E	C	A	E	C	A
Approach Delay		37.4			32.4		35.2			31.2	
Approach LOS		D			C		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 91

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 34.0

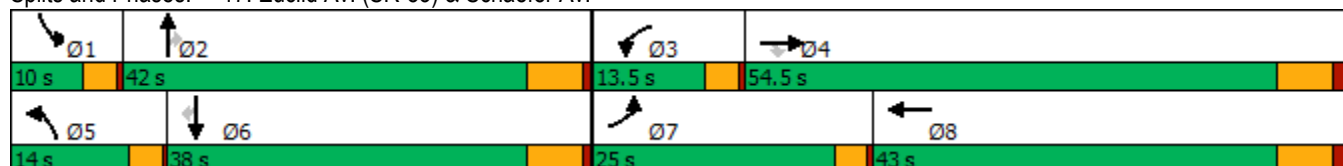
Intersection LOS: C

Intersection Capacity Utilization 74.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	76	78	17	50	37	134	1179	12	35	858	120
Future Volume (veh/h)	239	76	78	17	50	37	134	1179	12	35	858	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	249	79	29	18	52	17	140	1228	11	36	894	86
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	384	324	67	99	32	171	1447	645	57	1205	531
Arrive On Green	0.18	0.22	0.22	0.04	0.08	0.08	0.11	0.43	0.43	0.04	0.36	0.36
Sat Flow, veh/h	1594	1772	1497	1594	1279	418	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	249	79	29	18	0	69	140	1228	11	36	894	86
Grp Sat Flow(s),veh/h/ln	1594	1772	1497	1594	0	1697	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	11.0	2.6	1.1	0.8	0.0	2.8	6.2	23.7	0.3	1.6	16.8	2.9
Cycle Q Clear(g_c), s	11.0	2.6	1.1	0.8	0.0	2.8	6.2	23.7	0.3	1.6	16.8	2.9
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	384	324	67	0	131	171	1447	645	57	1205	531
V/C Ratio(X)	0.86	0.21	0.09	0.27	0.00	0.53	0.82	0.85	0.02	0.63	0.74	0.16
Avail Cap(c_a), veh/h	473	1163	983	220	0	844	231	1675	747	143	1488	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	23.3	22.7	33.6	0.0	32.1	31.6	18.5	11.9	34.4	20.3	15.8
Incr Delay (d2), s/veh	4.7	0.2	0.1	0.8	0.0	2.4	11.5	3.8	0.0	4.3	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	1.0	0.4	0.3	0.0	1.2	2.7	8.0	0.1	0.6	5.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	23.5	22.7	34.4	0.0	34.5	43.1	22.4	11.9	38.8	21.9	16.0
LnGrp LOS	C	C	C	C	A	C	D	C	B	D	C	B
Approach Vol, veh/h		357			87			1379			1016	
Approach Delay, s/veh		30.3			34.5			24.4			22.0	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.1	37.1	6.5	22.7	11.3	31.9	16.6	12.6				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	36.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	3.6	25.7	2.8	4.6	8.2	18.8	13.0	4.8				
Green Ext Time (p_c), s	0.0	5.4	0.0	0.4	0.0	4.7	0.2	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			24.6									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	116	204	105	58	362	156	1014	40	127	770	96
Future Volume (vph)	116	204	105	58	362	156	1014	40	127	770	96
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	55.0	55.0	55.0	55.0	55.0	14.0	47.0	47.0	18.0	51.0	51.0
Total Split (%)	45.8%	45.8%	45.8%	45.8%	45.8%	11.7%	39.2%	39.2%	15.0%	42.5%	42.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	40.0	40.0	40.0	40.0	40.0	9.4	37.5	37.5	12.3	40.4	40.4
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.09	0.35	0.35	0.12	0.38	0.38
v/c Ratio	1.05	0.32	0.17	0.16	0.89	0.63	0.89	0.07	0.72	0.63	0.16
Control Delay	134.6	25.8	5.1	24.5	47.7	62.0	44.5	0.2	70.9	30.6	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	134.6	25.8	5.1	24.5	47.7	62.0	44.5	0.2	70.9	30.6	5.6
LOS	F	C	A	C	D	E	D	A	E	C	A
Approach Delay		50.5			45.5		45.3			33.4	
Approach LOS		D			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.8

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 42.3

Intersection LOS: D

Intersection Capacity Utilization 97.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
18 s	47 s	55 s
		
Ø5	Ø6	Ø8
14 s	51 s	55 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	204	105	58	362	190	156	1014	40	127	770	96
Future Volume (veh/h)	116	204	105	58	362	190	156	1014	40	127	770	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	120	210	74	60	373	188	161	1045	27	131	794	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	744	630	398	466	235	209	1141	509	155	1226	539
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.07	0.34	0.34	0.10	0.36	0.36
Sat Flow, veh/h	759	1772	1501	979	1111	560	2910	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	120	210	74	60	0	561	161	1045	27	131	794	61
Grp Sat Flow(s),veh/h/ln	759	1772	1501	979	0	1671	1455	1683	1502	1594	1683	1482
Q Serve(g_s), s	14.5	8.9	3.4	4.9	0.0	33.5	6.2	34.0	1.4	9.2	22.4	3.1
Cycle Q Clear(g_c), s	48.0	8.9	3.4	13.8	0.0	33.5	6.2	34.0	1.4	9.2	22.4	3.1
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	744	630	398	0	701	209	1141	509	155	1226	539
V/C Ratio(X)	0.75	0.28	0.12	0.15	0.00	0.80	0.77	0.92	0.05	0.85	0.65	0.11
Avail Cap(c_a), veh/h	159	744	630	398	0	701	267	1207	538	202	1325	583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	21.8	20.2	26.4	0.0	29.0	52.1	36.2	25.5	50.8	30.3	24.1
Incr Delay (d2), s/veh	18.4	0.2	0.1	0.2	0.0	6.6	7.2	10.6	0.0	17.9	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.6	1.2	1.1	0.0	13.8	2.4	14.6	0.5	4.3	8.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	22.0	20.3	26.6	0.0	35.5	59.4	46.9	25.5	68.7	31.3	24.2
LnGrp LOS	E	C	C	C	A	D	E	D	C	E	C	C
Approach Vol, veh/h	404			621			1233			986		
Approach Delay, s/veh	35.9			34.7			48.0			35.8		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	14.6	44.7	55.0		11.7	47.6	55.0					
Change Period (Y+Rc), s	3.5	6.0	7.0		3.5	6.0	7.0					
Max Green Setting (Gmax), s	14.5	41.0	48.0		10.5	45.0	48.0					
Max Q Clear Time (g_c+I1), s	11.2	36.0	50.0		8.2	24.4	35.5					
Green Ext Time (p_c), s	0.0	2.7	0.0		0.1	4.9	3.0					
Intersection Summary												
HCM 6th Ctrl Delay	40.2											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	38	51	115	14	67	111	988	7	82	798	32
Future Volume (vph)	38	51	115	14	67	111	988	7	82	798	32
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	48.0	48.0	48.0	48.0	48.0	23.0	60.0	60.0	12.0	49.0	49.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	19.2%	50.0%	50.0%	10.0%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	15.3	15.3	15.3	15.3	15.3	11.2	29.3	29.3	8.9	30.1	30.1
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.16	0.42	0.42	0.13	0.43	0.43
v/c Ratio	0.30	0.14	0.28	0.06	0.65	0.46	0.73	0.01	0.42	0.58	0.05
Control Delay	30.4	23.4	6.9	23.2	19.5	38.0	21.0	0.0	43.3	20.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	23.4	6.9	23.2	19.5	38.0	21.0	0.0	43.3	20.5	0.1
LOS	C	C	A	C	B	D	C	A	D	C	A
Approach Delay		15.4			19.7		22.5			21.8	
Approach LOS		B			B		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 69.2

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 21.4

Intersection LOS: C

Intersection Capacity Utilization 72.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
12 s	60 s	48 s
		
Ø5	Ø6	Ø8
23 s	49 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	51	115	14	67	217	111	988	7	82	798	32
Future Volume (veh/h)	38	51	115	14	67	217	111	988	7	82	798	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	40	54	40	15	71	216	117	1040	7	86	840	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	445	377	396	97	295	147	1446	645	106	1358	597
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.09	0.43	0.43	0.07	0.40	0.40
Sat Flow, veh/h	977	1772	1502	1165	386	1174	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	40	54	40	15	0	287	117	1040	7	86	840	19
Grp Sat Flow(s),veh/h/ln	977	1772	1502	1165	0	1561	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	2.2	1.3	1.1	0.6	0.0	9.3	4.0	14.1	0.1	2.9	11.0	0.4
Cycle Q Clear(g_c), s	11.5	1.3	1.1	1.9	0.0	9.3	4.0	14.1	0.1	2.9	11.0	0.4
Prop In Lane	1.00		1.00	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	445	377	396	0	392	147	1446	645	106	1358	597
V/C Ratio(X)	0.19	0.12	0.11	0.04	0.00	0.73	0.79	0.72	0.01	0.81	0.62	0.03
Avail Cap(c_a), veh/h	728	1383	1172	1012	0	1218	561	3303	1473	245	2634	1159
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	16.0	15.9	16.7	0.0	19.0	24.6	13.0	9.1	25.5	13.1	10.0
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.0	2.0	7.1	0.7	0.0	10.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.3	0.1	0.0	3.0	1.5	3.7	0.0	1.3	3.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	16.1	16.0	16.7	0.0	21.0	31.7	13.7	9.1	36.1	13.6	10.0
LnGrp LOS	C	B	B	B	A	C	C	B	A	D	B	B
Approach Vol, veh/h	134			302			1164			945		
Approach Delay, s/veh	18.6			20.8			15.5			15.6		
Approach LOS	B			C			B			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	7.2	29.5	18.7		8.6	28.0	18.7					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	8.5	54.3	43.2		19.5	43.3	43.2					
Max Q Clear Time (g_c+I1), s	4.9	16.1	13.5		6.0	13.0	11.3					
Green Ext Time (p_c), s	0.0	7.7	0.4		0.1	5.6	1.4					
Intersection Summary												
HCM 6th Ctrl Delay	16.3											
HCM 6th LOS	B											

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	125	6	4	91	0	7	0	3	0	0	0
Future Vol, veh/h	0	125	6	4	91	0	7	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	136	7	4	99	0	8	0	3	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	143	0	0	247	247	140	248	250	99
Stage 1	-	-	-	-	-	-	140	140	-	107	107	-
Stage 2	-	-	-	-	-	-	107	107	-	141	143	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1494	-	-	1440	-	-	707	655	908	706	653	957
Stage 1	-	-	-	-	-	-	863	781	-	898	807	-
Stage 2	-	-	-	-	-	-	898	807	-	862	779	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1494	-	-	1440	-	-	706	653	908	702	651	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	706	653	-	702	651	-
Stage 1	-	-	-	-	-	-	863	781	-	898	805	-
Stage 2	-	-	-	-	-	-	895	805	-	859	779	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			9.8			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	756	1494	-	-	1440	-	-	-				
HCM Lane V/C Ratio	0.014	-	-	-	0.003	-	-	-				
HCM Control Delay (s)	9.8	0	-	-	7.5	0	-	0				
HCM Lane LOS	A	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-				

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APPENDIX 6.2: OPENING YEAR CUMULATIVE (2024) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/20/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	37	426	102	36	595	83	38	9	36
Future Volume (vph)	37	426	102	36	595	83	38	9	36
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	19.0	49.0	49.0	19.0	49.0	52.0	52.0	52.0	52.0
Total Split (%)	15.8%	40.8%	40.8%	15.8%	40.8%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	7.8	25.3	25.3	7.7	25.2		19.1		19.1
Actuated g/C Ratio	0.12	0.40	0.40	0.12	0.40		0.30		0.30
v/c Ratio	0.28	0.46	0.24	0.27	0.66		0.57		0.27
Control Delay	36.5	16.8	7.4	36.5	19.7		26.1		15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	36.5	16.8	7.4	36.5	19.7		26.1		15.1
LOS	D	B	A	D	B		C		B
Approach Delay		16.4			20.7		26.1		15.1
Approach LOS		B			C		C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 62.8

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 19.3

Intersection LOS: B

Intersection Capacity Utilization 51.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

		
Ø2	Ø3	Ø4
52 s	19 s	49 s
		
Ø6	Ø7	Ø8
52 s	19 s	49 s

HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	426	102	36	595	11	83	38	46	9	36	49
Future Volume (veh/h)	37	426	102	36	595	11	83	38	46	9	36	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	0.98		0.99	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	54	617	123	52	862	10	120	55	42	13	52	38
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	1256	548	84	1266	15	290	125	71	107	239	152
Arrive On Green	0.05	0.37	0.37	0.05	0.37	0.37	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1594	3367	1469	1594	3406	40	668	489	278	81	933	593
Grp Volume(v), veh/h	54	617	123	52	426	446	217	0	0	103	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1469	1594	1683	1762	1435	0	0	1608	0	0
Q Serve(g_s), s	1.6	6.6	2.7	1.5	10.0	10.0	3.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	6.6	2.7	1.5	10.0	10.0	5.9	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	0.55		0.19	0.13		0.37
Lane Grp Cap(c), veh/h	86	1256	548	84	626	655	486	0	0	498	0	0
V/C Ratio(X)	0.63	0.49	0.22	0.62	0.68	0.68	0.45	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	487	3089	1348	487	1544	1617	1514	0	0	1668	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.8	11.3	10.1	21.9	12.4	12.4	15.1	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.3	0.2	2.8	1.3	1.3	0.6	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.8	0.7	0.5	2.9	3.0	1.9	0.0	0.0	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	11.6	10.3	24.7	13.8	13.7	15.7	0.0	0.0	14.1	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h	794			924			217			103		
Approach Delay, s/veh	12.3			14.3			15.7			14.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	16.7		7.1	23.4		16.7	7.1	23.3				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	47.4		14.4	43.2		47.4	14.4	43.2				
Max Q Clear Time (g_c+I1), s	7.9		3.5	8.6		4.3	3.6	12.0				
Green Ext Time (p_c), s	1.6		0.0	4.6		0.7	0.0	5.5				
Intersection Summary												
HCM 6th Ctrl Delay	13.7											
HCM 6th LOS	B											

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	37	711	26	8	655	24	43	86	18	111
Future Volume (vph)	37	711	26	8	655	24	43	86	18	111
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	17.0	57.0	57.0	12.0	52.0	52.0	51.0	51.0	51.0	51.0
Total Split (%)	14.2%	47.5%	47.5%	10.0%	43.3%	43.3%	42.5%	42.5%	42.5%	42.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.2	27.4	27.4	5.9	22.7	22.7		17.3		17.3
Actuated g/C Ratio	0.12	0.47	0.47	0.10	0.39	0.39		0.30		0.30
v/c Ratio	0.23	0.55	0.04	0.06	0.62	0.05		0.38		0.57
Control Delay	33.1	13.1	2.0	34.2	18.2	0.1		22.3		22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	33.1	13.1	2.0	34.2	18.2	0.1		22.3		22.4
LOS	C	B	A	C	B	A		C		C
Approach Delay		13.7			17.7			22.3		22.4
Approach LOS		B			B			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 57.9

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 16.9

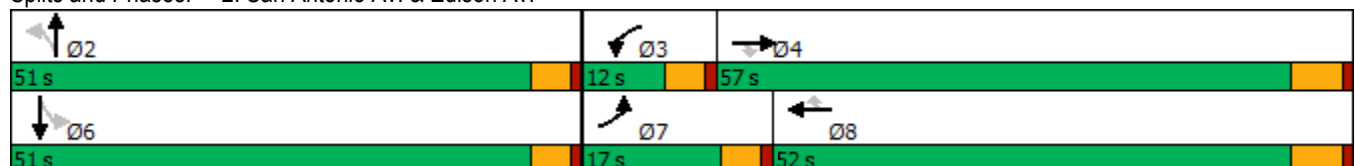
Intersection LOS: B

Intersection Capacity Utilization 57.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

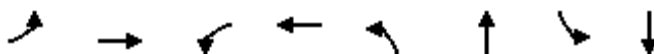
10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	711	26	8	655	24	43	86	6	18	111	104
Future Volume (veh/h)	37	711	26	8	655	24	43	86	6	18	111	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	46	878	23	10	809	26	53	106	2	22	137	54
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	1387	605	21	1267	552	189	296	5	110	271	99
Arrive On Green	0.05	0.41	0.41	0.01	0.38	0.38	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	341	1254	20	84	1147	418
Grp Volume(v), veh/h	46	878	23	10	809	26	161	0	0	213	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1615	0	0	1650	0	0
Q Serve(g_s), s	1.3	9.2	0.4	0.3	8.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	9.2	0.4	0.3	8.7	0.5	3.4	0.0	0.0	4.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.33		0.01	0.10		0.25
Lane Grp Cap(c), veh/h	78	1387	605	21	1267	552	490	0	0	479	0	0
V/C Ratio(X)	0.59	0.63	0.04	0.48	0.64	0.05	0.33	0.00	0.00	0.44	0.00	0.00
Avail Cap(c_a), veh/h	446	3893	1698	266	3513	1532	1698	0	0	1790	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.6	10.4	7.8	21.7	11.3	8.8	14.2	0.0	0.0	14.8	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.5	0.0	6.2	0.5	0.0	0.4	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.3	0.1	0.1	2.3	0.1	1.2	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	10.8	7.8	27.9	11.9	8.8	14.6	0.0	0.0	15.4	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h		947			845			161			213	
Approach Delay, s/veh		11.4			12.0			14.6			15.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.1	5.2	24.0		15.1	6.8	22.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		46.4	7.4	51.2		46.4	12.4	46.2				
Max Q Clear Time (g_c+I1), s		5.4	2.3	11.2		6.9	3.3	10.7				
Green Ext Time (p_c), s		1.1	0.0	6.7		1.5	0.0	5.9				
Intersection Summary												
HCM 6th Ctrl Delay			12.2									
HCM 6th LOS			B									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	187	70	352	46	126	17	142
Future Volume (vph)	15	187	70	352	46	126	17	142
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	43.0	18.0	47.0	21.0	41.0	18.0	38.0
Total Split (%)	11.7%	35.8%	15.0%	39.2%	17.5%	34.2%	15.0%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	18.0	12.7	22.3	19.8	6.9	16.9	5.9	12.2
Actuated g/C Ratio	0.35	0.24	0.43	0.38	0.13	0.32	0.11	0.23
v/c Ratio	0.05	0.33	0.19	0.34	0.25	0.21	0.11	0.26
Control Delay	11.3	18.7	11.6	14.3	29.1	10.7	29.6	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	18.7	11.6	14.3	29.1	10.7	29.6	19.0
LOS	B	B	B	B	C	B	C	B
Approach Delay		18.2		13.9		14.2		20.0
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 52

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 15.9

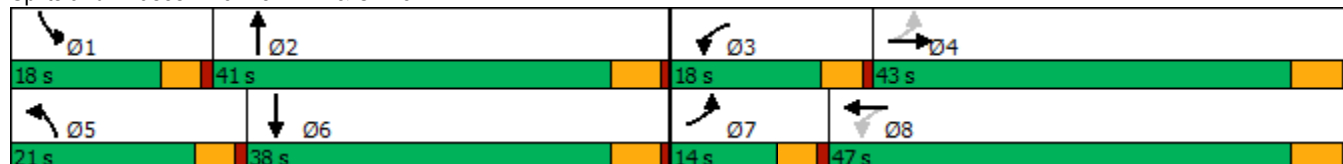
Intersection LOS: B

Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.



HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	187	42	70	352	21	46	126	70	17	142	30
Future Volume (veh/h)	15	187	42	70	352	21	46	126	70	17	142	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	217	42	81	409	19	53	147	47	20	165	23
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	624	119	419	882	41	85	634	195	39	661	91
Arrive On Green	0.02	0.22	0.22	0.07	0.27	0.27	0.05	0.25	0.25	0.02	0.22	0.22
Sat Flow, veh/h	1594	2821	536	1594	3275	152	1594	2525	777	1594	2970	407
Grp Volume(v), veh/h	17	128	131	81	210	218	53	96	98	20	92	96
Grp Sat Flow(s),veh/h/ln	1594	1683	1675	1594	1683	1744	1594	1683	1619	1594	1683	1694
Q Serve(g_s), s	0.4	3.0	3.1	1.8	4.9	4.9	1.5	2.1	2.3	0.6	2.1	2.2
Cycle Q Clear(g_c), s	0.4	3.0	3.1	1.8	4.9	4.9	1.5	2.1	2.3	0.6	2.1	2.2
Prop In Lane	1.00		0.32	1.00		0.09	1.00		0.48	1.00		0.24
Lane Grp Cap(c), veh/h	328	372	370	419	453	470	85	423	407	39	375	377
V/C Ratio(X)	0.05	0.34	0.35	0.19	0.46	0.46	0.63	0.23	0.24	0.51	0.25	0.25
Avail Cap(c_a), veh/h	613	1332	1325	762	1475	1528	556	1274	1226	454	1167	1174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	15.4	15.5	12.6	14.3	14.4	21.8	14.0	14.0	22.7	15.0	15.1
Incr Delay (d2), s/veh	0.0	0.5	0.6	0.1	0.7	0.7	2.8	0.3	0.3	3.8	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.0	1.0	0.5	1.5	1.6	0.6	0.7	0.7	0.2	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	16.0	16.1	12.7	15.1	15.1	24.6	14.2	14.3	26.5	15.4	15.4
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h	276			509			247			208		
Approach Delay, s/veh	15.9			14.7			16.5			16.5		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	17.2	7.9	16.2	7.1	15.9	5.6	18.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	35.6	13.4	37.2	16.4	32.6	9.4	41.2				
Max Q Clear Time (g_c+I1), s	2.6	4.3	3.8	5.1	3.5	4.2	2.4	6.9				
Green Ext Time (p_c), s	0.0	1.0	0.0	1.4	0.0	1.0	0.0	2.4				
Intersection Summary												
HCM 6th Ctrl Delay	15.6											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	7	214	8	6	292
Future Vol, veh/h	38	7	214	8	6	292
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	8	233	9	7	317
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	411	121	0	0	242	0
Stage 1	238	-	-	-	-	-
Stage 2	173	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	569	908	-	-	1322	-
Stage 1	779	-	-	-	-	-
Stage 2	840	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	566	908	-	-	1322	-
Mov Cap-2 Maneuver	625	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	836	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	10.9	0		0.2		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	657	1322	-	
HCM Lane V/C Ratio	-	-	0.074	0.005	-	
HCM Control Delay (s)	-	-	10.9	7.7	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	6	215	8	0	330
Future Vol, veh/h	0	6	215	8	0	330
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	234	9	0	359
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	122	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	906	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	906	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	906		-		
HCM Lane V/C Ratio	-	0.007		-		
HCM Control Delay (s)	-	9		-		
HCM Lane LOS	-	A		-		
HCM 95th %tile Q(veh)	-	0		-		

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	41	370	24	413	80	115	85	148
Future Volume (vph)	41	370	24	413	80	115	85	148
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	41.0	15.0	38.0	27.0	47.0	17.0	37.0
Total Split (%)	15.0%	34.2%	12.5%	31.7%	22.5%	39.2%	14.2%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	8.2	71.6	6.8	68.2	11.7	14.2	10.8	13.4
Actuated g/C Ratio	0.07	0.60	0.06	0.57	0.10	0.12	0.09	0.11
v/c Ratio	0.45	0.28	0.32	0.31	0.63	0.46	0.72	0.65
Control Delay	66.2	13.8	63.1	15.8	68.9	38.1	79.6	37.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.2	13.8	63.1	15.8	68.9	38.1	79.6	37.1
LOS	E	B	E	B	E	D	E	D
Approach Delay		18.0		18.1		48.3		48.0
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 28.9

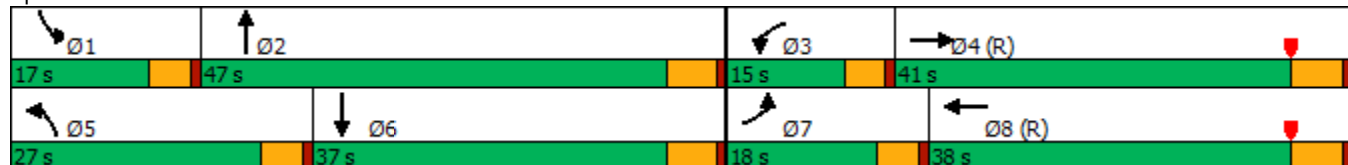
Intersection LOS: C

Intersection Capacity Utilization 54.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	370	90	24	413	67	80	115	45	85	148	98
Future Volume (veh/h)	41	370	90	24	413	67	80	115	45	85	148	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	49	446	91	29	498	73	96	139	47	102	178	83
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	1715	347	41	1777	259	117	277	90	123	260	116
Arrive On Green	0.04	0.62	0.62	0.03	0.60	0.60	0.07	0.11	0.11	0.08	0.12	0.12
Sat Flow, veh/h	1594	2787	565	1594	2946	430	1594	2483	804	1594	2253	1003
Grp Volume(v), veh/h	49	268	269	29	284	287	96	92	94	102	131	130
Grp Sat Flow(s),veh/h/ln	1594	1683	1668	1594	1683	1693	1594	1683	1603	1594	1683	1573
Q Serve(g_s), s	3.7	8.7	8.9	2.2	9.7	9.7	7.1	6.2	6.6	7.6	9.0	9.6
Cycle Q Clear(g_c), s	3.7	8.7	8.9	2.2	9.7	9.7	7.1	6.2	6.6	7.6	9.0	9.6
Prop In Lane	1.00		0.34	1.00		0.25	1.00		0.50	1.00		0.64
Lane Grp Cap(c), veh/h	61	1036	1027	41	1015	1021	117	188	179	123	194	181
V/C Ratio(X)	0.81	0.26	0.26	0.70	0.28	0.28	0.82	0.49	0.52	0.83	0.67	0.72
Avail Cap(c_a), veh/h	178	1036	1027	138	1015	1021	298	584	556	165	443	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	10.6	10.6	58.0	11.4	11.4	54.8	50.1	50.3	54.6	50.9	51.2
Incr Delay (d2), s/veh	8.1	0.5	0.6	7.9	0.7	0.7	5.2	2.0	2.3	17.2	4.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.1	3.1	0.9	3.5	3.5	3.0	2.7	2.7	3.6	3.9	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.4	11.1	11.1	65.9	12.1	12.1	60.0	52.1	52.6	71.8	55.0	56.4
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	D	E
Approach Vol, veh/h		586			600			282			363	
Approach Delay, s/veh		15.7			14.7			54.9			60.2	
Approach LOS		B			B			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	18.8	7.7	79.6	13.4	19.2	9.2	78.2				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	12.4	41.6	10.4	35.2	22.4	31.6	13.4	32.2				
Max Q Clear Time (g_c+I1), s	9.6	8.6	4.2	10.9	9.1	11.6	5.7	11.7				
Green Ext Time (p_c), s	0.0	1.0	0.0	3.0	0.1	1.3	0.0	3.0				
Intersection Summary												
HCM 6th Ctrl Delay			30.2									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	71	637	29	13	536	19	36	116	7	121
Future Volume (vph)	71	637	29	13	536	19	36	116	7	121
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	22.0	52.0	52.0	13.0	43.0	43.0	17.0	42.0	13.0	38.0
Total Split (%)	18.3%	43.3%	43.3%	10.8%	35.8%	35.8%	14.2%	35.0%	10.8%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	8.6	23.4	23.4	6.4	17.9	17.9	7.2	18.3	6.2	13.8
Actuated g/C Ratio	0.15	0.40	0.40	0.11	0.31	0.31	0.12	0.32	0.11	0.24
v/c Ratio	0.33	0.51	0.05	0.08	0.56	0.04	0.20	0.12	0.05	0.27
Control Delay	33.7	15.8	0.1	36.2	22.1	0.1	34.9	18.0	36.4	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	15.8	0.1	36.2	22.1	0.1	34.9	18.0	36.4	15.8
LOS	C	B	A	D	C	A	C	B	D	B
Approach Delay		16.9			21.6			21.9		16.5
Approach LOS		B			C			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 57.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 18.9

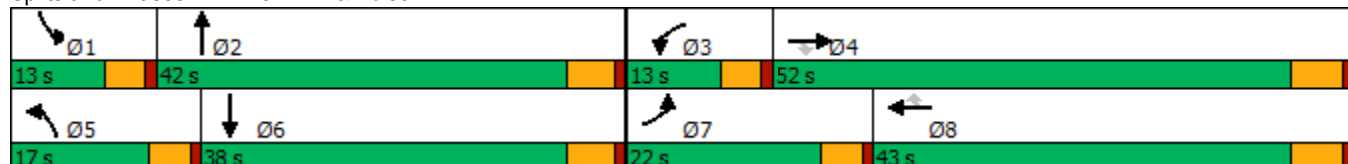
Intersection LOS: B

Intersection Capacity Utilization 53.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	637	29	13	536	19	36	116	4	7	121	84
Future Volume (veh/h)	71	637	29	13	536	19	36	116	4	7	121	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	77	692	22	14	583	16	39	126	2	8	132	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	1073	472	28	910	406	67	814	13	17	485	199
Arrive On Green	0.07	0.32	0.32	0.02	0.27	0.27	0.04	0.24	0.24	0.01	0.21	0.21
Sat Flow, veh/h	1594	3367	1482	1594	3367	1502	1594	3392	54	1594	2323	956
Grp Volume(v), veh/h	77	692	22	14	583	16	39	62	66	8	94	95
Grp Sat Flow(s),veh/h/ln	1594	1683	1482	1594	1683	1502	1594	1683	1762	1594	1683	1595
Q Serve(g_s), s	2.3	8.7	0.5	0.4	7.5	0.4	1.2	1.4	1.5	0.2	2.3	2.5
Cycle Q Clear(g_c), s	2.3	8.7	0.5	0.4	7.5	0.4	1.2	1.4	1.5	0.2	2.3	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.60
Lane Grp Cap(c), veh/h	105	1073	472	28	910	406	67	404	423	17	351	333
V/C Ratio(X)	0.73	0.65	0.05	0.50	0.64	0.04	0.58	0.15	0.16	0.48	0.27	0.29
Avail Cap(c_a), veh/h	562	3150	1386	271	2536	1131	400	1248	1306	271	1111	1053
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	14.4	11.6	24.0	15.9	13.3	23.2	14.8	14.8	24.3	16.4	16.4
Incr Delay (d2), s/veh	3.6	0.7	0.0	4.9	0.8	0.0	3.0	0.2	0.2	7.6	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.6	0.1	0.2	2.4	0.1	0.4	0.5	0.5	0.1	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	15.1	11.7	29.0	16.7	13.3	26.2	15.0	15.0	31.9	16.8	16.9
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		791			613			167			197	
Approach Delay, s/veh		16.1			16.9			17.6			17.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.1	17.3	5.5	21.5	6.7	15.7	7.9	19.1				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	36.6	8.4	46.2	12.4	32.6	17.4	37.2				
Max Q Clear Time (g_c+I1), s	2.2	3.5	2.4	10.7	3.2	4.5	4.3	9.5				
Green Ext Time (p_c), s	0.0	0.6	0.0	4.9	0.0	1.0	0.1	3.8				
Intersection Summary												
HCM 6th Ctrl Delay			16.6									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	455	592	67	47	83
Future Vol, veh/h	30	455	592	67	47	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	548	713	81	57	100
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	794	0	-	0	1100	397
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	346	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	823	-	-	-	206	602
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	688	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	823	-	-	-	197	602
Mov Cap-2 Maneuver	-	-	-	-	314	-
Stage 1	-	-	-	-	406	-
Stage 2	-	-	-	-	688	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		14.7		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	823	-	-	-	314	602
HCM Lane V/C Ratio	0.044	-	-	-	0.18	0.166
HCM Control Delay (s)	9.6	-	-	-	19	12.2
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6	0.6

Intersection												
Int Delay, s/veh	6.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	133	245	121	29	311	142	85	0	64	154	0	112
Future Vol, veh/h	133	245	121	29	311	142	85	0	64	154	0	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	266	132	32	338	154	92	0	70	167	0	122
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	492	0	0	398	0	0	855	1178	199	902	1167	246
Stage 1	-	-	-	-	-	-	622	622	-	479	479	-
Stage 2	-	-	-	-	-	-	233	556	-	423	688	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1068	-	-	1282	-	-	312	215	*1001	287	218	754
Stage 1	-	-	-	-	-	-	532	539	-	537	553	-
Stage 2	-	-	-	-	-	-	749	511	-	711	501	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1068	-	-	1282	-	-	230	181	*1001	234	184	754
Mov Cap-2 Maneuver	-	-	-	-	-	-	316	263	-	333	291	-
Stage 1	-	-	-	-	-	-	459	466	-	464	539	-
Stage 2	-	-	-	-	-	-	612	498	-	572	433	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.4			0.5			15.8			19.7		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	316	1001	1068	-	-	1282	-	-	333	754		
HCM Lane V/C Ratio	0.292	0.069	0.135	-	-	0.025	-	-	0.503	0.161		
HCM Control Delay (s)	21	8.9	8.9	-	-	7.9	-	-	26.3	10.7		
HCM Lane LOS	C	A	A	-	-	A	-	-	D	B		
HCM 95th %tile Q(veh)	1.2	0.2	0.5	-	-	0.1	-	-	2.7	0.6		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	535	3	338	506	722	863	444
Future Volume (vph)	535	3	338	506	722	863	444
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	38.0	86.0	48.0	48.0
Total Split (%)	28.3%	28.3%	28.3%	31.7%	71.7%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	25.9	25.9	25.9	37.7	83.6	41.4	41.4
Actuated g/C Ratio	0.22	0.22	0.22	0.31	0.70	0.34	0.34
v/c Ratio	0.87	0.88	0.54	0.94	0.30	0.73	0.54
Control Delay	68.8	68.8	10.4	76.4	7.5	38.4	5.1
Queue Delay	0.2	0.3	0.0	5.7	0.2	0.0	0.0
Total Delay	69.0	69.0	10.4	82.1	7.7	38.4	5.1
LOS	E	E	B	F	A	D	A
Approach Delay		50.7			38.3	27.1	
Approach LOS		D			D	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 37.2

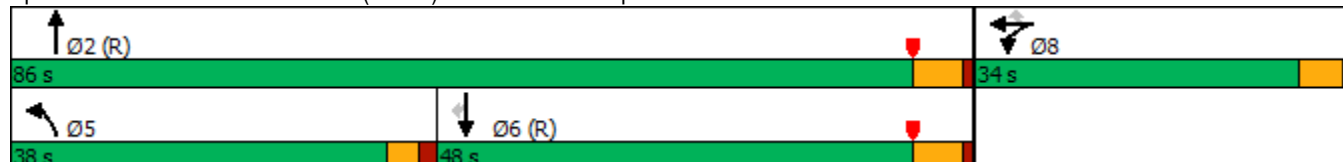
Intersection LOS: D

Intersection Capacity Utilization 103.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary 10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	535	3	338	506	722	0	0	863	444
Future Volume (veh/h)	0	0	0	535	3	338	506	722	0	0	863	444
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				608	0	118	522	744	0	0	890	302
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				681	0	303	497	2564	0	0	1438	642
Arrive On Green				0.19	0.00	0.19	0.56	1.00	0.00	0.00	0.40	0.40
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				608	0	118	522	744	0	0	890	302
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				20.0	0.0	7.8	33.5	0.0	0.0	0.0	23.9	16.8
Cycle Q Clear(g_c), s				20.0	0.0	7.8	33.5	0.0	0.0	0.0	23.9	16.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				681	0	303	497	2564	0	0	1438	642
V/C Ratio(X)				0.89	0.00	0.39	1.05	0.29	0.00	0.00	0.62	0.47
Avail Cap(c_a), veh/h				861	0	383	497	2564	0	0	1438	642
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.63	0.63	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.3	0.0	42.4	26.5	0.0	0.0	0.0	28.4	26.3
Incr Delay (d2), s/veh				8.6	0.0	0.3	45.9	0.2	0.0	0.0	2.0	2.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.4	0.0	3.0	15.4	0.1	0.0	0.0	10.2	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.9	0.0	42.7	72.4	0.2	0.0	0.0	30.4	28.7
LnGrp LOS				E	A	D	F	A	A	A	C	C
Approach Vol, veh/h					726			1266			1192	
Approach Delay, s/veh					53.8			29.9			30.0	
Approach LOS					D			C			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	92.1			38.0			54.1			27.9		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	80.5			33.5			42.5			29.0		
Max Q Clear Time (g_c+I1), s	2.0			35.5			25.9			22.0		
Green Ext Time (p_c), s	8.7			0.0			8.7			1.0		
Intersection Summary												
HCM 6th Ctrl Delay	35.4											
HCM 6th LOS	D											

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	336	0	892	596	355	1043
Future Volume (vph)	336	0	892	596	355	1043
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	38.0	38.0	42.0	42.0	40.0	82.0
Total Split (%)	31.7%	31.7%	35.0%	35.0%	33.3%	68.3%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	34.1	34.1	42.6	42.6	28.8	75.4
Actuated g/C Ratio	0.28	0.28	0.36	0.36	0.24	0.63
v/c Ratio	0.65	1.74	0.73	0.66	0.86	0.48
Control Delay	45.8	366.2	38.7	6.7	73.4	13.0
Queue Delay	18.3	3.3	0.0	0.0	0.3	0.3
Total Delay	64.1	369.5	38.8	6.7	73.7	13.3
LOS	E	F	D	A	E	B
Approach Delay		290.4	25.9			28.7
Approach LOS		F	C			C

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.74
Intersection Signal Delay: 103.0
Intersection Capacity Utilization 103.7%
Analysis Period (min) 15
Intersection LOS: F
ICU Level of Service G

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps

 Ø1	 Ø2 (R)	 Ø4
40 s	42 s	38 s
 Ø6 (R)		
82 s		

HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	0	830	0	0	0	0	892	596	355	1043	0
Future Volume (veh/h)	336	0	830	0	0	0	0	892	596	355	1043	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	346	0	752				0	920	448	366	1075	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	490	0	436				0	1375	598	387	2265	0
Arrive On Green	0.28	0.00	0.28				0.00	0.39	0.39	0.43	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1546	1781	3647	0
Grp Volume(v), veh/h	346	0	752				0	920	448	366	1075	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1546	1781	1777	0
Q Serve(g_s), s	21.0	0.0	33.0				0.0	25.7	30.0	23.7	0.0	0.0
Cycle Q Clear(g_c), s	21.0	0.0	33.0				0.0	25.7	30.0	23.7	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	490	0	436				0	1375	598	387	2265	0
V/C Ratio(X)	0.71	0.00	1.73				0.00	0.67	0.75	0.95	0.47	0.00
Avail Cap(c_a), veh/h	490	0	436				0	1375	598	534	2265	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.75	0.75	0.55	0.55	0.00
Uniform Delay (d), s/veh	39.1	0.0	43.5				0.0	30.4	31.8	33.2	0.0	0.0
Incr Delay (d2), s/veh	3.9	0.0	335.9				0.0	2.0	6.4	12.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	53.0				0.0	11.0	11.8	8.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	0.0	379.4				0.0	32.4	38.1	45.6	0.4	0.0
LnGrp LOS	D	A	F				A	C	D	D	A	A
Approach Vol, veh/h	1098						1368			1441		
Approach Delay, s/veh	273.4						34.3			11.9		
Approach LOS	F						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	30.1	51.9	38.0		82.0							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	36.0	36.5	33.0		76.5							
Max Q Clear Time (g_c+I1), s	25.7	32.0	35.0		2.0							
Green Ext Time (p_c), s	0.4	3.4	0.0		15.1							

Intersection Summary

HCM 6th Ctrl Delay 93.2

HCM 6th LOS F

Notes

User approved volume balancing among the lanes for turning movement.

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	110	231	67	333	115	1175	52	195	1597	66
Future Volume (vph)	110	231	67	333	115	1175	52	195	1597	66
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	41.0	17.0	34.0	22.0	41.0	41.0	21.0	40.0	40.0
Total Split (%)	20.0%	34.2%	14.2%	28.3%	18.3%	34.2%	34.2%	17.5%	33.3%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.5	23.9	8.6	18.6	11.7	36.3	36.3	11.1	35.8	35.8
Actuated g/C Ratio	0.12	0.24	0.09	0.19	0.12	0.37	0.37	0.11	0.36	0.36
v/c Ratio	0.61	0.42	0.50	0.73	0.64	0.62	0.08	0.60	0.85	0.11
Control Delay	57.2	22.6	58.5	39.6	58.7	28.9	0.2	50.8	36.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	22.6	58.5	39.6	58.7	28.9	0.2	50.8	36.3	0.3
LOS	E	C	E	D	E	C	A	D	D	A
Approach Delay		30.5		41.9		30.4			36.5	
Approach LOS		C		D		C			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 34.6

Intersection LOS: C

Intersection Capacity Utilization 78.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.

			
21 s	41 s	17 s	41 s
			
22 s	40 s	24 s	34 s

HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	231	141	67	333	151	115	1175	52	195	1597	66
Future Volume (veh/h)	110	231	141	67	333	151	115	1175	52	195	1597	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	113	238	118	69	343	138	119	1211	46	201	1646	44
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	499	238	86	453	179	146	2147	598	270	2137	604
Arrive On Green	0.09	0.22	0.22	0.05	0.19	0.19	0.09	0.40	0.40	0.09	0.40	0.40
Sat Flow, veh/h	1594	2256	1077	1594	2415	954	1594	5316	1482	3000	5316	1502
Grp Volume(v), veh/h	113	185	171	69	250	231	119	1211	46	201	1646	44
Grp Sat Flow(s),veh/h/ln	1594	1772	1561	1594	1772	1597	1594	1772	1482	1500	1772	1502
Q Serve(g_s), s	6.1	8.0	8.4	3.8	11.8	12.1	6.5	15.5	1.7	5.8	23.6	1.6
Cycle Q Clear(g_c), s	6.1	8.0	8.4	3.8	11.8	12.1	6.5	15.5	1.7	5.8	23.6	1.6
Prop In Lane	1.00		0.69	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	139	392	345	86	332	299	146	2147	598	270	2137	604
V/C Ratio(X)	0.81	0.47	0.50	0.81	0.75	0.77	0.81	0.56	0.08	0.75	0.77	0.07
Avail Cap(c_a), veh/h	351	707	623	224	567	511	315	2147	598	558	2137	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	29.8	30.0	41.3	33.9	34.0	39.3	20.3	16.2	39.1	22.8	16.2
Incr Delay (d2), s/veh	4.2	0.9	1.1	6.5	3.5	4.2	4.1	1.1	0.3	1.5	2.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.3	3.1	1.6	5.1	4.8	2.6	6.1	0.6	2.1	9.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	30.7	31.1	47.8	37.3	38.3	43.4	21.4	16.4	40.7	25.6	16.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		469			550			1376			1891	
Approach Delay, s/veh		34.0			39.0			23.1			27.0	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	41.0	9.3	25.3	12.7	40.8	12.3	22.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	17.4	34.6	19.4	28.2				
Max Q Clear Time (g_c+I1), s	7.8	17.5	5.8	10.4	8.5	25.6	8.1	14.1				
Green Ext Time (p_c), s	0.2	8.0	0.0	1.9	0.1	6.5	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			28.1									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	137	308	182	475	92	78	1048	127	148	1423	109
Future Volume (vph)	137	308	182	475	92	78	1048	127	148	1423	109
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.3	37.0	23.0	35.7	35.7	14.7	39.0	39.0	21.0	45.3	24.3
Total Split (%)	20.3%	30.8%	19.2%	29.8%	29.8%	12.3%	32.5%	32.5%	17.5%	37.8%	20.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	15.1	31.2	17.0	33.2	33.2	9.1	34.3	34.3	14.7	38.8	55.8
Actuated g/C Ratio	0.13	0.27	0.14	0.28	0.28	0.08	0.29	0.29	0.12	0.33	0.47
v/c Ratio	0.75	1.03	0.87	0.55	0.19	0.70	1.18	0.26	0.83	1.41	0.16
Control Delay	71.5	92.6	84.2	39.5	1.8	83.3	129.2	5.6	81.9	223.8	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	92.6	84.2	39.5	1.8	83.3	129.2	5.6	81.9	223.8	4.6
LOS	E	F	F	D	A	F	F	A	F	F	A
Approach Delay		87.5		45.8			113.7			197.1	
Approach LOS		F		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 117.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.41

Intersection Signal Delay: 131.2

Intersection LOS: F

Intersection Capacity Utilization 100.6%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
21 s	39 s	23 s	37 s
			
14.7 s	45.3 s	24.3 s	35.7 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	308	123	182	475	92	78	1048	127	148	1423	109
Future Volume (veh/h)	137	308	123	182	475	92	78	1048	127	148	1423	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	151	338	111	200	522	43	86	1152	69	163	1564	56
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	341	112	224	1005	448	105	972	434	187	1145	676
Arrive On Green	0.11	0.27	0.27	0.14	0.30	0.30	0.07	0.29	0.29	0.12	0.34	0.34
Sat Flow, veh/h	1594	1272	418	1594	3367	1500	1594	3367	1502	1594	3367	1500
Grp Volume(v), veh/h	151	0	449	200	522	43	86	1152	69	163	1564	56
Grp Sat Flow(s),veh/h/ln	1594	0	1690	1594	1683	1500	1594	1683	1502	1594	1683	1500
Q Serve(g_s), s	10.8	0.0	30.8	14.3	15.0	2.4	6.2	33.6	4.0	11.7	39.6	2.5
Cycle Q Clear(g_c), s	10.8	0.0	30.8	14.3	15.0	2.4	6.2	33.6	4.0	11.7	39.6	2.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	176	0	453	224	1005	448	105	972	434	187	1145	676
V/C Ratio(X)	0.86	0.00	0.99	0.89	0.52	0.10	0.82	1.18	0.16	0.87	1.37	0.08
Avail Cap(c_a), veh/h	270	0	453	252	1005	448	138	972	434	225	1145	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	42.4	49.1	33.9	29.5	53.6	41.4	30.8	50.5	38.4	18.3
Incr Delay (d2), s/veh	10.2	0.0	39.7	26.5	0.5	0.1	18.7	93.8	0.2	22.9	170.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	17.3	7.2	6.0	0.9	2.9	25.6	1.4	5.8	42.7	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	0.0	82.2	75.6	34.3	29.6	72.3	135.1	31.0	73.3	208.6	18.3
LnGrp LOS	E	A	F	E	C	C	E	F	C	E	F	B
Approach Vol, veh/h	600				765				1307			
Approach Delay, s/veh	76.8				44.9				125.5			
Approach LOS	E				D				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.3	40.1	21.0	37.0	12.3	46.1	17.4	40.5				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.4	* 34	18.4	31.2	10.1	38.8	19.7	29.9				
Max Q Clear Time (g_c+l1), s	13.7	35.6	16.3	32.8	8.2	41.6	12.8	17.0				
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	0.0	0.1	2.7				

Intersection Summary

HCM 6th Ctrl Delay 131.0

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	79	131	58	127	194	37	1116	163	53	1594	94
Future Volume (vph)	79	131	58	127	194	37	1116	163	53	1594	94
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	53.0	53.0	53.0	53.0	53.0	13.0	50.0	50.0	17.0	54.0	54.0
Total Split (%)	44.2%	44.2%	44.2%	44.2%	44.2%	10.8%	41.7%	41.7%	14.2%	45.0%	45.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	31.7	31.7	31.7		31.7	6.8	47.9	47.9	8.1	50.1	50.1
Actuated g/C Ratio	0.31	0.31	0.31		0.31	0.07	0.47	0.47	0.08	0.50	0.50
v/c Ratio	0.35	0.25	0.12		0.85	0.36	0.73	0.23	0.44	1.00	0.13
Control Delay	31.4	26.8	4.3		50.1	59.7	28.3	13.6	59.0	51.0	8.9
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	26.8	4.3		50.1	59.7	28.3	13.6	59.0	51.0	8.9
LOS	C	C	A		D	E	C	B	E	D	A
Approach Delay		23.3			50.1		27.4			48.9	
Approach LOS		C			D		C			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 101.2

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 39.5

Intersection LOS: D

Intersection Capacity Utilization 94.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	50 s	53 s
		
Ø5	Ø6	Ø8
13 s	54 s	53 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	131	58	127	194	52	37	1116	163	53	1594	94
Future Volume (veh/h)	79	131	58	127	194	52	37	1116	163	53	1594	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	82	136	43	132	202	44	39	1162	140	55	1660	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	560	474	181	241	49	53	1585	707	68	1616	721
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.03	0.47	0.47	0.04	0.48	0.48
Sat Flow, veh/h	1014	1772	1502	418	763	156	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	82	136	43	378	0	0	39	1162	140	55	1660	73
Grp Sat Flow(s),veh/h/ln	1014	1772	1502	1336	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	5.6	2.0	21.6	0.0	0.0	2.4	27.6	5.4	3.4	47.5	2.6
Cycle Q Clear(g_c), s	10.6	5.6	2.0	27.2	0.0	0.0	2.4	27.6	5.4	3.4	47.5	2.6
Prop In Lane	1.00		1.00	0.35		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	560	474	471	0	0	53	1585	707	68	1616	721
V/C Ratio(X)	0.29	0.24	0.09	0.80	0.00	0.00	0.74	0.73	0.20	0.81	1.03	0.10
Avail Cap(c_a), veh/h	445	845	716	707	0	0	135	1585	707	200	1616	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	25.1	23.8	33.4	0.0	0.0	47.4	21.2	15.3	47.0	25.7	14.1
Incr Delay (d2), s/veh	0.6	0.2	0.1	4.0	0.0	0.0	7.2	3.0	0.6	8.3	29.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.3	0.7	8.7	0.0	0.0	1.0	10.0	1.7	1.4	22.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	25.3	23.9	37.4	0.0	0.0	54.6	24.2	15.9	55.2	55.3	14.3
LnGrp LOS	C	C	C	D	A	A	D	C	B	E	F	B
Approach Vol, veh/h					378		1341				1788	
Approach Delay, s/veh	25.7				37.4		24.2				53.6	
Approach LOS	C				D		C				D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	53.1		37.0	7.9	54.0		37.0				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 45		47.2	8.4	47.5		47.2				
Max Q Clear Time (g_c+I1), s	5.4	29.6		12.6	4.4	49.5		29.2				
Green Ext Time (p_c), s	0.0	6.8		1.2	0.0	0.0		2.0				

Intersection Summary

HCM 6th Ctrl Delay 39.6

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	13	0	1342	1735	5
Future Vol, veh/h	0	13	0	1342	1735	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	14	0	1459	1886	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	943	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	264	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	264	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19.4	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 264		-	-		
HCM Lane V/C Ratio	- 0.054		-	-		
HCM Control Delay (s)	- 19.4		-	-		
HCM Lane LOS	- C		-	-		
HCM 95th %tile Q(veh)	- 0.2		-	-		

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	71	0	1342	1644	105
Future Vol, veh/h	0	71	0	1342	1644	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	77	0	1459	1787	114
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	894	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	284	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	284	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	22.3	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 284		-	-		
HCM Lane V/C Ratio	- 0.272		-	-		
HCM Control Delay (s)	- 22.3		-	-		
HCM Lane LOS	- C		-	-		
HCM 95th %tile Q(veh)	- 1.1		-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	330	97	121	27	123	213	926	21	69	1500	146
Future Volume (vph)	330	97	121	27	123	213	926	21	69	1500	146
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	22.0	51.5	51.5	13.5	43.0	14.0	44.0	44.0	11.0	41.0	41.0
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	11.7%	36.7%	36.7%	9.2%	34.2%	34.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	18.6	32.4	32.4	10.1	18.0	10.6	38.6	38.6	7.3	35.3	35.3
Actuated g/C Ratio	0.18	0.32	0.32	0.10	0.18	0.10	0.38	0.38	0.07	0.34	0.34
v/c Ratio	1.21	0.18	0.23	0.18	0.67	1.37	0.77	0.03	0.66	1.37	0.26
Control Delay	160.0	27.8	5.7	49.1	44.2	240.3	34.8	0.1	76.1	202.5	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	160.0	27.8	5.7	49.1	44.2	240.3	34.8	0.1	76.1	202.5	8.2
LOS	F	C	A	D	D	F	C	A	E	F	A
Approach Delay		102.6			44.8		71.8			180.8	
Approach LOS		F			D		E			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 102.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 126.0

Intersection LOS: F

Intersection Capacity Utilization 106.7%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.

			
Ø1	Ø2	Ø3	Ø4
11 s	44 s	13.5 s	51.5 s
			
Ø5	Ø6	Ø7	Ø8
14 s	41 s	22 s	43 s

HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	97	121	27	123	77	213	926	21	69	1500	146
Future Volume (veh/h)	330	97	121	27	123	77	213	926	21	69	1500	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	347	102	102	28	129	67	224	975	16	73	1579	131
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	491	416	87	156	81	171	1373	612	90	1203	537
Arrive On Green	0.19	0.28	0.28	0.05	0.14	0.14	0.11	0.41	0.41	0.06	0.36	0.36
Sat Flow, veh/h	1594	1772	1502	1594	1099	571	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	347	102	102	28	0	196	224	975	16	73	1579	131
Grp Sat Flow(s),veh/h/ln	1594	1772	1502	1594	0	1669	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	18.5	4.3	5.2	1.7	0.0	11.2	10.5	23.6	0.6	4.4	35.0	6.0
Cycle Q Clear(g_c), s	18.5	4.3	5.2	1.7	0.0	11.2	10.5	23.6	0.6	4.4	35.0	6.0
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	491	416	87	0	238	171	1373	612	90	1203	537
V/C Ratio(X)	1.15	0.21	0.25	0.32	0.00	0.82	1.31	0.71	0.03	0.81	1.31	0.24
Avail Cap(c_a), veh/h	301	805	682	163	0	614	171	1373	612	122	1203	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	27.2	27.5	44.6	0.0	40.8	43.7	24.2	17.4	45.7	31.5	22.2
Incr Delay (d2), s/veh	99.8	0.2	0.2	0.8	0.0	5.3	175.4	1.7	0.0	18.0	146.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	1.8	1.8	0.7	0.0	4.7	12.2	8.6	0.2	2.1	37.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	139.5	27.3	27.7	45.4	0.0	46.2	219.1	25.9	17.4	63.7	178.1	22.4
LnGrp LOS	F	C	C	D	A	D	F	C	B	E	F	C
Approach Vol, veh/h		551			224			1215			1783	
Approach Delay, s/veh		98.0			46.1			61.4			162.0	
Approach LOS		F			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	45.9	8.8	34.1	14.0	41.0	22.0	20.9				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	7.5	38.0	10.0	44.5	10.5	35.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	6.4	25.6	3.7	7.2	12.5	37.0	20.5	13.2				
Green Ext Time (p_c), s	0.0	4.8	0.0	0.6	0.0	0.0	0.0	0.8				
Intersection Summary												
HCM 6th Ctrl Delay			113.4									
HCM 6th LOS			F									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	88	367	149	94	332	158	986	57	238	1279	104
Future Volume (vph)	88	367	149	94	332	158	986	57	238	1279	104
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	16.0	50.0	50.0	16.0	50.0	50.0
Total Split (%)	45.0%	45.0%	45.0%	45.0%	45.0%	13.3%	41.7%	41.7%	13.3%	41.7%	41.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	34.0	34.0	34.0	34.0	34.0	10.0	41.9	41.9	12.6	44.6	44.6
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.10	0.40	0.40	0.12	0.42	0.42
v/c Ratio	0.79	0.66	0.26	0.52	0.87	0.60	0.76	0.09	1.29	0.93	0.16
Control Delay	76.3	36.5	5.0	39.4	48.3	57.0	33.2	5.2	203.5	43.2	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.3	36.5	5.0	39.4	48.3	57.0	33.2	5.2	203.5	43.2	10.7
LOS	E	D	A	D	D	E	C	A	F	D	B
Approach Delay		34.5			46.8		35.0			64.6	
Approach LOS		C			D		D			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105.2

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 48.6

Intersection LOS: D

Intersection Capacity Utilization 96.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
16 s	50 s	54 s
		
Ø5	Ø6	Ø8
16 s	50 s	54 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	367	149	94	332	137	158	986	57	238	1279	104
Future Volume (veh/h)	88	367	149	94	332	137	158	986	57	238	1279	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	91	378	125	97	342	132	163	1016	44	245	1319	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	676	565	236	464	179	214	1203	536	180	1335	595
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.07	0.36	0.36	0.11	0.40	0.40
Sat Flow, veh/h	823	1772	1482	801	1217	470	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	91	378	125	97	0	474	163	1016	44	245	1319	72
Grp Sat Flow(s),veh/h/ln	823	1772	1482	801	0	1687	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	11.9	18.6	6.3	12.0	0.0	26.8	6.1	30.8	2.2	12.5	43.1	3.4
Cycle Q Clear(g_c), s	38.7	18.6	6.3	30.6	0.0	26.8	6.1	30.8	2.2	12.5	43.1	3.4
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	676	565	236	0	644	214	1203	536	180	1335	595
V/C Ratio(X)	0.51	0.56	0.22	0.41	0.00	0.74	0.76	0.84	0.08	1.36	0.99	0.12
Avail Cap(c_a), veh/h	215	750	628	270	0	715	328	1335	595	180	1335	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	27.0	23.2	39.0	0.0	29.5	50.5	32.8	23.6	49.2	33.2	21.2
Incr Delay (d2), s/veh	2.2	0.7	0.2	1.1	0.0	3.6	2.1	4.8	0.1	195.7	21.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	7.6	2.1	2.4	0.0	10.9	2.2	12.3	0.7	14.5	19.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	27.7	23.4	40.2	0.0	33.1	52.6	37.6	23.7	244.9	55.0	21.3
LnGrp LOS	D	C	C	D	A	C	D	D	C	F	D	C
Approach Vol, veh/h	594			571			1223			1636		
Approach Delay, s/veh	30.0			34.3			39.1			82.0		
Approach LOS	C			C			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	45.6		49.3	11.6	50.0		49.3				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	12.5	44.0		47.0	12.5	44.0		47.0				
Max Q Clear Time (g_c+I1), s	14.5	32.8		40.7	8.1	45.1		32.6				
Green Ext Time (p_c), s	0.0	4.8		1.7	0.1	0.0		2.9				
Intersection Summary												
HCM 6th Ctrl Delay	54.5											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	51	92	121	89	266	122	927	63	316	1139	31
Future Volume (vph)	51	92	121	89	266	122	927	63	316	1139	31
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	52.0	52.0	52.0	52.0	52.0	23.0	49.0	49.0	19.0	45.0	45.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%	19.2%	40.8%	40.8%	15.8%	37.5%	37.5%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	32.5	32.5	32.5	32.5	32.5	13.1	38.0	38.0	15.8	40.8	40.8
Actuated g/C Ratio	0.32	0.32	0.32	0.32	0.32	0.13	0.38	0.38	0.16	0.41	0.41
v/c Ratio	0.55	0.17	0.23	0.25	0.87	0.63	0.78	0.11	1.35	0.89	0.05
Control Delay	50.5	24.9	5.2	26.8	46.3	57.9	34.0	10.7	217.3	40.2	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.5	24.9	5.2	26.8	46.3	57.9	34.0	10.7	217.3	40.2	0.2
LOS	D	C	A	C	D	E	C	B	F	D	A
Approach Delay		20.8			43.1		35.3			77.0	
Approach LOS		C			D		D			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.7

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay: 53.6

Intersection LOS: D

Intersection Capacity Utilization 93.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
19 s	49 s	52 s
		
Ø5	Ø6	Ø8
23 s	45 s	52 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	92	121	89	266	189	122	927	63	316	1139	31
Future Volume (veh/h)	51	92	121	89	266	189	122	927	63	316	1139	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	54	98	88	95	283	181	130	986	44	336	1212	22
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	613	519	404	349	223	158	1171	522	257	1379	615
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.10	0.35	0.35	0.16	0.41	0.41
Sat Flow, veh/h	831	1772	1502	1072	1010	646	1594	3367	1502	1594	3367	1501
Grp Volume(v), veh/h	54	98	88	95	0	464	130	986	44	336	1212	22
Grp Sat Flow(s),veh/h/ln	831	1772	1502	1072	0	1656	1594	1683	1502	1594	1683	1501
Q Serve(g_s), s	6.1	3.7	3.9	6.5	0.0	24.5	7.7	26.0	1.9	15.5	32.0	0.8
Cycle Q Clear(g_c), s	30.6	3.7	3.9	10.2	0.0	24.5	7.7	26.0	1.9	15.5	32.0	0.8
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	613	519	404	0	573	158	1171	522	257	1379	615
V/C Ratio(X)	0.36	0.16	0.17	0.23	0.00	0.81	0.82	0.84	0.08	1.31	0.88	0.04
Avail Cap(c_a), veh/h	270	868	736	559	0	811	323	1514	675	257	1379	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	21.8	21.9	25.3	0.0	28.6	42.6	29.0	21.1	40.4	26.2	17.0
Incr Delay (d2), s/veh	1.1	0.1	0.1	0.2	0.0	3.6	7.8	3.5	0.1	164.6	6.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.5	1.3	1.6	0.0	9.5	3.2	9.9	0.6	17.4	12.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.6	21.9	22.0	25.6	0.0	32.2	50.3	32.5	21.2	205.0	33.0	17.1
LnGrp LOS	D	C	C	C	A	C	D	C	C	F	C	B
Approach Vol, veh/h	240			559			1160			1570		
Approach Delay, s/veh	26.8			31.1			34.1			69.6		
Approach LOS	C			C			C			E		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	19.0	39.2	38.1		13.0	45.2	38.1					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	15.5	43.3	47.2		19.5	39.3	47.2					
Max Q Clear Time (g_c+I1), s	17.5	28.0	32.6		9.7	34.0	26.5					
Green Ext Time (p_c), s	0.0	5.5	0.7		0.1	3.2	2.5					
Intersection Summary												
HCM 6th Ctrl Delay	48.9											
HCM 6th LOS	D											

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	157	7	15	225	0	2	0	1	0	0	0
Future Vol, veh/h	0	157	7	15	225	0	2	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	171	8	16	245	0	2	0	1	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	245	0	0	179	0	0	452	452	175	453	456	245
Stage 1	-	-	-	-	-	-	175	175	-	277	277	-
Stage 2	-	-	-	-	-	-	277	277	-	176	179	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1321	-	-	1397	-	-	518	503	868	517	501	794
Stage 1	-	-	-	-	-	-	827	754	-	729	681	-
Stage 2	-	-	-	-	-	-	729	681	-	826	751	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1321	-	-	1397	-	-	513	496	868	511	494	794
Mov Cap-2 Maneuver	-	-	-	-	-	-	513	496	-	511	494	-
Stage 1	-	-	-	-	-	-	827	754	-	729	672	-
Stage 2	-	-	-	-	-	-	720	672	-	825	751	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.5			11.1			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	594	1321	-	-	1397	-	-	-				
HCM Lane V/C Ratio	0.005	-	-	-	0.012	-	-	-				
HCM Control Delay (s)	11.1	0	-	-	7.6	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/20/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	783	61	19	486	27	53	21	32
Future Volume (vph)	30	783	61	19	486	27	53	21	32
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	18.0	66.0	66.0	17.0	65.0	37.0	37.0	37.0	37.0
Total Split (%)	15.0%	55.0%	55.0%	14.2%	54.2%	30.8%	30.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.2	25.3	25.3	5.9	23.1		12.3		12.3
Actuated g/C Ratio	0.14	0.56	0.56	0.13	0.52		0.27		0.27
v/c Ratio	0.15	0.44	0.08	0.10	0.32		0.24		0.18
Control Delay	24.5	10.2	4.3	24.9	11.1		16.3		14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	24.5	10.2	4.3	24.9	11.1		16.3		14.7
LOS	C	B	A	C	B		B		B
Approach Delay		10.2			11.5		16.3		14.7
Approach LOS		B			B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 44.8

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 11.3

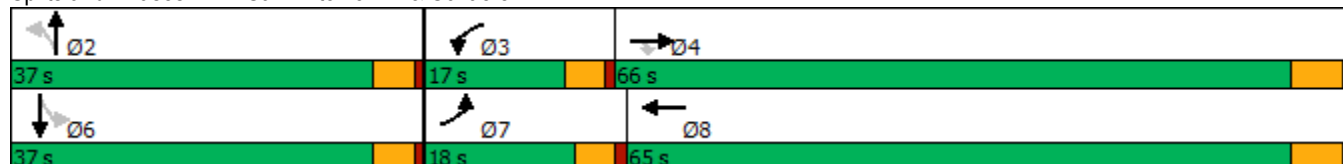
Intersection LOS: B

Intersection Capacity Utilization 45.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	783	61	19	486	23	27	53	17	21	32	18
Future Volume (veh/h)	30	783	61	19	486	23	27	53	17	21	32	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	32	842	50	20	523	24	29	57	12	23	34	7
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	1363	593	40	1285	59	169	242	42	192	222	36
Arrive On Green	0.04	0.40	0.40	0.02	0.39	0.39	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1594	3367	1464	1594	3274	150	270	1165	200	353	1068	174
Grp Volume(v), veh/h	32	842	50	20	268	279	98	0	0	64	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1464	1594	1683	1741	1635	0	0	1595	0	0
Q Serve(g_s), s	0.8	8.2	0.9	0.5	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	8.2	0.9	0.5	4.8	4.8	2.0	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.09	0.30		0.12	0.36		0.11
Lane Grp Cap(c), veh/h	59	1363	593	40	661	683	452	0	0	450	0	0
V/C Ratio(X)	0.54	0.62	0.08	0.51	0.41	0.41	0.22	0.00	0.00	0.14	0.00	0.00
Avail Cap(c_a), veh/h	516	4899	2130	478	2409	2491	1353	0	0	1323	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.6	9.8	7.6	19.9	9.1	9.1	13.8	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.5	0.1	3.7	0.4	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.9	0.2	0.2	1.2	1.2	0.7	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	10.2	7.6	23.6	9.5	9.5	14.0	0.0	0.0	13.6	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		924			567			98			64	
Approach Delay, s/veh		10.5			10.0			14.0			13.6	
Approach LOS		B			A			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.2	5.6	22.5		13.2	6.1	22.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		32.4	12.4	60.2		32.4	13.4	59.2				
Max Q Clear Time (g_c+I1), s		4.0	2.5	10.2		3.3	2.8	6.8				
Green Ext Time (p_c), s		0.5	0.0	6.5		0.3	0.0	3.2				
Intersection Summary												
HCM 6th Ctrl Delay			10.7									
HCM 6th LOS			B									

Timings

Eden Mixed-Use TA (JN:14698)

2: San Antonio Av. & Edison Av.

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	33	883	24	5	792	16	26	31	10	34
Future Volume (vph)	33	883	24	5	792	16	26	31	10	34
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	19.0	67.0	67.0	14.0	62.0	62.0	39.0	39.0	39.0	39.0
Total Split (%)	15.8%	55.8%	55.8%	11.7%	51.7%	51.7%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.6	30.4	30.4	5.7	28.0	28.0		13.0		13.0
Actuated g/C Ratio	0.13	0.61	0.61	0.11	0.56	0.56		0.26		0.26
v/c Ratio	0.18	0.48	0.03	0.03	0.47	0.02		0.19		0.20
Control Delay	28.3	10.0	1.3	30.0	12.2	0.1		18.4		14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	28.3	10.0	1.3	30.0	12.2	0.1		18.4		14.2
LOS	C	B	A	C	B	A		B		B
Approach Delay		10.5			12.1			18.4		14.2
Approach LOS		B			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 49.8

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 11.6

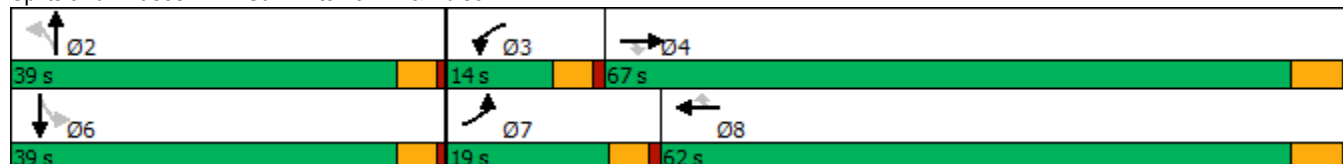
Intersection LOS: B

Intersection Capacity Utilization 48.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	883	24	5	792	16	26	31	10	10	34	34
Future Volume (veh/h)	33	883	24	5	792	16	26	31	10	10	34	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	37	981	25	6	880	15	29	34	4	11	38	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	1533	669	13	1420	633	206	192	18	121	207	80
Arrive On Green	0.04	0.46	0.46	0.01	0.42	0.42	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1594	3367	1469	1594	3367	1500	461	1021	94	123	1102	425
Grp Volume(v), veh/h	37	981	25	6	880	15	67	0	0	66	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1469	1594	1683	1500	1576	0	0	1650	0	0
Q Serve(g_s), s	1.0	9.6	0.4	0.2	8.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	9.6	0.4	0.2	8.8	0.3	1.4	0.0	0.0	1.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.43		0.06	0.17		0.26
Lane Grp Cap(c), veh/h	66	1533	669	13	1420	633	416	0	0	407	0	0
V/C Ratio(X)	0.56	0.64	0.04	0.47	0.62	0.02	0.16	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	534	4795	2092	349	4403	1962	1337	0	0	1388	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.2	9.0	6.5	21.2	9.7	7.3	14.7	0.0	0.0	14.8	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.4	0.0	9.5	0.4	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.1	0.1	0.1	2.1	0.1	0.5	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	9.4	6.5	30.8	10.2	7.3	14.9	0.0	0.0	14.9	0.0	0.0
LnGrp LOS	C	A	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h	1043			901			67			66		
Approach Delay, s/veh	9.9			10.3			14.9			14.9		
Approach LOS	A			B			B			B		
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	12.7		4.9	25.4		12.7	6.4	23.9				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	34.4		9.4	61.2		34.4	14.4	56.2				
Max Q Clear Time (g_c+I1), s	3.4		2.2	11.6		3.4	3.0	10.8				
Green Ext Time (p_c), s	0.3		0.0	7.9		0.3	0.0	6.7				
Intersection Summary												
HCM 6th Ctrl Delay	10.4											
HCM 6th LOS	B											

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	23	381	64	232	37	158	29	124
Future Volume (vph)	23	381	64	232	37	158	29	124
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	45.0	17.0	48.0	18.0	40.0	18.0	40.0
Total Split (%)	11.7%	37.5%	14.2%	40.0%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	18.6	14.4	20.4	17.0	6.7	12.7	6.4	12.5
Actuated g/C Ratio	0.38	0.30	0.42	0.35	0.14	0.26	0.13	0.26
v/c Ratio	0.06	0.49	0.17	0.23	0.19	0.33	0.15	0.17
Control Delay	10.1	18.2	10.4	14.4	28.1	12.4	28.4	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	18.2	10.4	14.4	28.1	12.4	28.4	18.7
LOS	B	B	B	B	C	B	C	B
Approach Delay		17.8		13.6		14.3		20.5
Approach LOS		B		B		B		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 48.8

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 16.2

Intersection LOS: B

Intersection Capacity Utilization 49.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

 Ø1	 Ø2	 Ø3	 Ø4
18 s	40 s	17 s	45 s
 Ø5	 Ø6	 Ø7	 Ø8
18 s	40 s	14 s	48 s

HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	381	56	64	232	16	37	158	116	29	124	10
Future Volume (veh/h)	23	381	56	64	232	16	37	158	116	29	124	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	25	414	48	70	252	14	40	172	77	32	135	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	711	82	346	869	48	69	540	231	58	778	11
Arrive On Green	0.03	0.23	0.23	0.06	0.27	0.27	0.04	0.24	0.24	0.04	0.23	0.23
Sat Flow, veh/h	1594	3035	350	1594	3242	179	1594	2288	980	1594	3395	50
Grp Volume(v), veh/h	25	228	234	70	130	136	40	124	125	32	67	70
Grp Sat Flow(s),veh/h/ln	1594	1683	1702	1594	1683	1738	1594	1683	1585	1594	1683	1761
Q Serve(g_s), s	0.6	5.7	5.8	1.5	2.9	2.9	1.2	2.9	3.1	0.9	1.5	1.5
Cycle Q Clear(g_c), s	0.6	5.7	5.8	1.5	2.9	2.9	1.2	2.9	3.1	0.9	1.5	1.5
Prop In Lane	1.00		0.21	1.00		0.10	1.00		0.62	1.00		0.03
Lane Grp Cap(c), veh/h	403	394	398	346	451	466	69	397	374	58	386	403
V/C Ratio(X)	0.06	0.58	0.59	0.20	0.29	0.29	0.58	0.31	0.33	0.55	0.17	0.17
Avail Cap(c_a), veh/h	672	1391	1407	662	1498	1546	450	1228	1156	450	1228	1285
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	16.1	16.1	12.6	13.8	13.8	22.3	14.9	15.0	22.5	14.7	14.7
Incr Delay (d2), s/veh	0.0	1.4	1.4	0.1	0.3	0.3	2.9	0.4	0.5	3.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.9	1.9	0.4	0.9	0.9	0.4	1.0	1.0	0.4	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	17.4	17.5	12.7	14.1	14.1	25.1	15.4	15.5	25.5	14.9	14.9
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		487			336			289			169	
Approach Delay, s/veh		17.2			13.8			16.8			16.9	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	16.6	7.6	16.9	6.6	16.3	6.0	18.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	34.6	12.4	39.2	13.4	34.6	9.4	42.2				
Max Q Clear Time (g_c+I1), s	2.9	5.1	3.5	7.8	3.2	3.5	2.6	4.9				
Green Ext Time (p_c), s	0.0	1.4	0.0	2.6	0.0	0.7	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay			16.2									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	6	307	17	13	211
Future Vol, veh/h	21	6	307	17	13	211
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	334	18	14	229
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	486	176	0	0	352	0
Stage 1	343	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	510	837	-	-	1203	-
Stage 1	690	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	504	837	-	-	1203	-
Mov Cap-2 Maneuver	571	-	-	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.2	0	0.5			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	614	1203	-	
HCM Lane V/C Ratio	-	-	0.048	0.012	-	
HCM Control Delay (s)	-	-	11.2	8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	320	19	0	232
Future Vol, veh/h	0	3	320	19	0	232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	348	21	0	252

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	185	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	826	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	826	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	826	-
HCM Lane V/C Ratio	-	0.004	-
HCM Control Delay (s)	-	9.4	-
HCM Lane LOS	-	A	-
HCM 95th %tile Q(veh)	-	0	-

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	643	21	404	78	172	63	120
Future Volume (vph)	81	643	21	404	78	172	63	120
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	22.0	51.0	12.0	41.0	24.0	41.0	16.0	33.0
Total Split (%)	18.3%	42.5%	10.0%	34.2%	20.0%	34.2%	13.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	10.7	78.3	6.3	70.1	10.4	14.1	8.8	12.6
Actuated g/C Ratio	0.09	0.65	0.05	0.58	0.09	0.12	0.07	0.10
v/c Ratio	0.59	0.33	0.26	0.26	0.58	0.53	0.56	0.46
Control Delay	68.8	12.2	61.5	15.1	68.6	49.0	71.0	39.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.8	12.2	61.5	15.1	68.6	49.0	71.0	39.4
LOS	E	B	E	B	E	D	E	D
Approach Delay		18.1		17.0		54.3		48.0
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 27.3

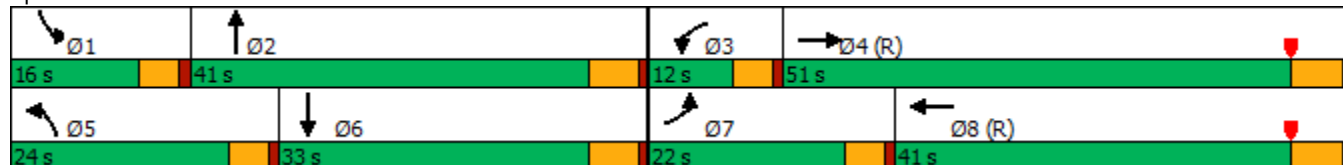
Intersection LOS: C

Intersection Capacity Utilization 57.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	643	63	21	404	85	78	172	36	63	120	49
Future Volume (veh/h)	81	643	63	21	404	85	78	172	36	63	120	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	83	656	60	21	412	80	80	176	34	64	122	32
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	2008	183	33	1693	326	99	321	61	79	270	68
Arrive On Green	0.06	0.64	0.64	0.02	0.60	0.60	0.06	0.11	0.11	0.05	0.10	0.10
Sat Flow, veh/h	1594	3115	285	1594	2815	542	1594	2811	530	1594	2642	667
Grp Volume(v), veh/h	83	354	362	21	245	247	80	104	106	64	76	78
Grp Sat Flow(s),veh/h/ln	1594	1683	1716	1594	1683	1674	1594	1683	1658	1594	1683	1626
Q Serve(g_s), s	6.2	11.4	11.4	1.6	8.1	8.3	5.9	7.0	7.3	4.8	5.1	5.4
Cycle Q Clear(g_c), s	6.2	11.4	11.4	1.6	8.1	8.3	5.9	7.0	7.3	4.8	5.1	5.4
Prop In Lane	1.00		0.17	1.00		0.32	1.00		0.32	1.00		0.41
Lane Grp Cap(c), veh/h	102	1085	1106	33	1013	1007	99	192	190	79	172	166
V/C Ratio(X)	0.81	0.33	0.33	0.63	0.24	0.25	0.81	0.54	0.56	0.81	0.44	0.47
Avail Cap(c_a), veh/h	231	1085	1106	98	1013	1007	258	499	492	151	387	374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.90	0.90	0.90	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	9.6	9.6	58.3	11.1	11.2	55.6	50.2	50.3	56.4	50.7	50.8
Incr Delay (d2), s/veh	5.2	0.7	0.7	7.0	0.6	0.6	5.6	2.3	2.5	7.0	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	3.9	4.0	0.7	2.9	3.0	2.5	3.0	3.1	2.0	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	10.3	10.3	65.3	11.7	11.8	61.2	52.4	52.8	63.4	52.4	52.9
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		799			513			290			218	
Approach Delay, s/veh		15.5			13.9			55.0			55.8	
Approach LOS		B			B			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	19.1	7.1	83.2	12.0	17.7	12.3	78.0				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	11.4	35.6	7.4	45.2	19.4	27.6	17.4	35.2				
Max Q Clear Time (g_c+I1), s	6.8	9.3	3.6	13.4	7.9	7.4	8.2	10.3				
Green Ext Time (p_c), s	0.0	1.1	0.0	4.3	0.1	0.7	0.0	2.7				
Intersection Summary												
HCM 6th Ctrl Delay			26.2									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	105	758	20	13	702	41	38	129	11	110
Future Volume (vph)	105	758	20	13	702	41	38	129	11	110
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	27.0	53.0	53.0	13.0	39.0	39.0	17.0	41.0	13.0	37.0
Total Split (%)	22.5%	44.2%	44.2%	10.8%	32.5%	32.5%	14.2%	34.2%	10.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	10.6	34.0	34.0	6.2	23.6	23.6	7.3	18.2	6.1	13.4
Actuated g/C Ratio	0.16	0.50	0.50	0.09	0.35	0.35	0.11	0.27	0.09	0.20
v/c Ratio	0.47	0.50	0.03	0.10	0.66	0.07	0.25	0.17	0.08	0.28
Control Delay	39.2	14.4	0.1	41.4	25.0	0.2	40.4	22.9	41.5	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.2	14.4	0.1	41.4	25.0	0.2	40.4	22.9	41.5	20.7
LOS	D	B	A	D	C	A	D	C	D	C
Approach Delay		17.0			23.9			26.8		21.9
Approach LOS		B			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 68

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 20.9

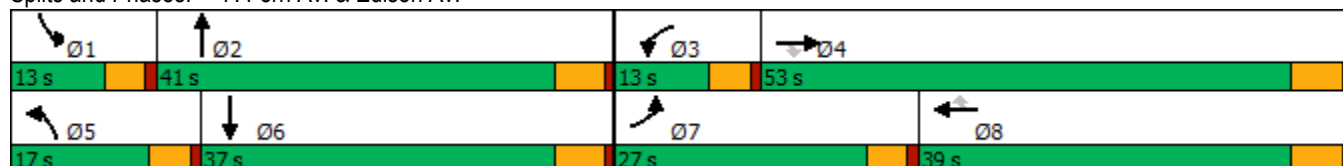
Intersection LOS: C

Intersection Capacity Utilization 56.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	105	758	20	13	702	41	38	129	6	11	110	61
Future Volume (veh/h)	105	758	20	13	702	41	38	129	6	11	110	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	115	833	14	14	771	34	42	142	6	12	121	46
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	1337	596	28	1092	487	68	676	28	24	428	155
Arrive On Green	0.09	0.40	0.40	0.02	0.32	0.32	0.04	0.21	0.21	0.02	0.18	0.18
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3292	138	1594	2409	873
Grp Volume(v), veh/h	115	833	14	14	771	34	42	72	76	12	83	84
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1747	1594	1683	1598
Q Serve(g_s), s	4.0	11.1	0.3	0.5	11.2	0.9	1.4	2.0	2.0	0.4	2.4	2.6
Cycle Q Clear(g_c), s	4.0	11.1	0.3	0.5	11.2	0.9	1.4	2.0	2.0	0.4	2.4	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.55
Lane Grp Cap(c), veh/h	144	1337	596	28	1092	487	68	346	359	24	299	284
V/C Ratio(X)	0.80	0.62	0.02	0.50	0.71	0.07	0.62	0.21	0.21	0.50	0.28	0.30
Avail Cap(c_a), veh/h	638	2842	1267	239	1999	892	353	1072	1112	239	951	903
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	13.5	10.3	27.2	16.6	13.1	26.3	18.4	18.5	27.3	19.9	20.0
Incr Delay (d2), s/veh	3.8	0.5	0.0	5.1	0.9	0.1	3.3	0.3	0.3	5.7	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.3	0.1	0.2	3.6	0.2	0.6	0.7	0.7	0.2	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	14.0	10.3	32.4	17.4	13.1	29.6	18.7	18.7	33.0	20.4	20.5
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	C	C
Approach Vol, veh/h		962			819			190			179	
Approach Delay, s/veh		15.7			17.5			21.2			21.3	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	16.9	5.6	28.0	7.0	15.3	9.6	23.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	35.6	8.4	47.2	12.4	31.6	22.4	33.2				
Max Q Clear Time (g_c+I1), s	2.4	4.0	2.5	13.1	3.4	4.6	6.0	13.2				
Green Ext Time (p_c), s	0.0	0.7	0.0	6.1	0.0	0.8	0.1	4.9				
Intersection Summary												
HCM 6th Ctrl Delay			17.3									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	669	288	35	52	55
Future Vol, veh/h	55	669	288	35	52	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	690	297	36	54	57
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	333	0	-	0	774	167
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	459	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1223	-	-	-	335	848
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	603	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1223	-	-	-	319	848
Mov Cap-2 Maneuver	-	-	-	-	436	-
Stage 1	-	-	-	-	679	-
Stage 2	-	-	-	-	603	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		11.9		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1223	-	-	-	436	848
HCM Lane V/C Ratio	0.046	-	-	-	0.123	0.067
HCM Control Delay (s)	8.1	-	-	-	14.4	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.2

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	94	476	167	63	311	105	128	0	135	120	0	86
Future Vol, veh/h	94	476	167	63	311	105	128	0	135	120	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	102	517	182	68	338	114	139	0	147	130	0	93
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	452	0	0	699	0	0	1117	1400	350	994	1434	226
Stage 1	-	-	-	-	-	-	812	812	-	531	531	-
Stage 2	-	-	-	-	-	-	305	588	-	463	903	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1105	-	-	1109	-	-	257	182	*899	*328	172	777
Stage 1	-	-	-	-	-	-	521	516	-	*500	524	-
Stage 2	-	-	-	-	-	-	680	494	-	*848	462	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1105	-	-	1109	-	-	200	155	*899	*243	147	777
Mov Cap-2 Maneuver	-	-	-	-	-	-	304	255	-	*340	251	-
Stage 1	-	-	-	-	-	-	473	469	-	*454	492	-
Stage 2	-	-	-	-	-	-	562	464	-	*644	419	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			1.1			17.9			17.1		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	304	899	1105	-	-	1109	-	-	340	777		
HCM Lane V/C Ratio	0.458	0.163	0.092	-	-	0.062	-	-	0.384	0.12		
HCM Control Delay (s)	26.5	9.8	8.6	-	-	8.5	-	-	22	10.3		
HCM Lane LOS	D	A	A	-	-	A	-	-	C	B		
HCM 95th %tile Q(veh)	2.3	0.6	0.3	-	-	0.2	-	-	1.8	0.4		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	470	1	396	750	934	775	498
Future Volume (vph)	470	1	396	750	934	775	498
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	34.0	82.0	48.0	48.0
Total Split (%)	31.7%	31.7%	31.7%	28.3%	68.3%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	27.1	27.1	27.1	38.9	82.4	39.1	39.1
Actuated g/C Ratio	0.23	0.23	0.23	0.32	0.69	0.33	0.33
v/c Ratio	0.84	0.83	0.64	1.38	0.40	0.71	0.60
Control Delay	63.1	58.3	26.6	217.7	8.6	38.9	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	63.1	58.3	26.6	217.7	8.9	38.9	5.6
LOS	E	E	C	F	A	D	A
Approach Delay		50.0			101.9	25.9	
Approach LOS		D			F	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.38

Intersection Signal Delay: 64.8

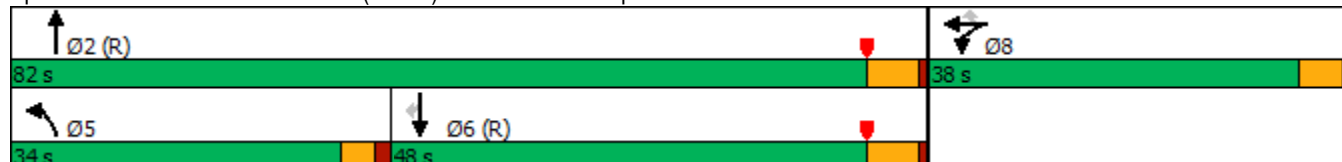
Intersection LOS: E

Intersection Capacity Utilization 102.0%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	470	1	396	750	934	0	0	775	498
Future Volume (veh/h)	0	0	0	470	1	396	750	934	0	0	775	498
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				582	0	186	789	983	0	0	816	304
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				662	0	295	438	2582	0	0	1575	703
Arrive On Green				0.19	0.00	0.19	0.49	1.00	0.00	0.00	0.44	0.44
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				582	0	186	789	983	0	0	816	304
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				19.1	0.0	13.0	29.5	0.0	0.0	0.0	19.9	15.9
Cycle Q Clear(g_c), s				19.1	0.0	13.0	29.5	0.0	0.0	0.0	19.9	15.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				662	0	295	438	2582	0	0	1575	703
V/C Ratio(X)				0.88	0.00	0.63	1.80	0.38	0.00	0.00	0.52	0.43
Avail Cap(c_a), veh/h				980	0	436	438	2582	0	0	1575	703
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.20	0.20	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.5	0.0	45.1	30.5	0.0	0.0	0.0	24.1	23.0
Incr Delay (d2), s/veh				4.6	0.0	0.8	362.6	0.1	0.0	0.0	1.2	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.6	0.0	5.0	52.9	0.0	0.0	0.0	8.3	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.1	0.0	45.9	393.1	0.1	0.0	0.0	25.4	24.9
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					768			1772			1120	
Approach Delay, s/veh					50.6			175.1			25.2	
Approach LOS					D			F			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	92.7			34.0			58.7			27.3		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	76.5			29.5			42.5			33.0		
Max Q Clear Time (g_c+I1), s	2.0			31.5			21.9			21.1		
Green Ext Time (p_c), s	13.1			0.0			9.1			1.2		
Intersection Summary												
HCM 6th Ctrl Delay			103.1									
HCM 6th LOS			F									
Notes												

Timings 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	278	1	1402	566	298	948
Future Volume (vph)	278	1	1402	566	298	948
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	49.0	49.0	36.0	85.0
Total Split (%)	29.2%	29.2%	40.8%	40.8%	30.0%	70.8%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	30.0	30.0	50.1	50.1	25.4	79.5
Actuated g/C Ratio	0.25	0.25	0.42	0.42	0.21	0.66
v/c Ratio	0.63	1.06	1.01	0.69	0.85	0.43
Control Delay	48.0	90.1	61.4	14.6	71.0	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	48.0	90.1	61.4	14.6	71.0	11.2
LOS	D	F	E	B	E	B
Approach Delay		75.8	47.9			25.5
Approach LOS		E	D			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 46.1

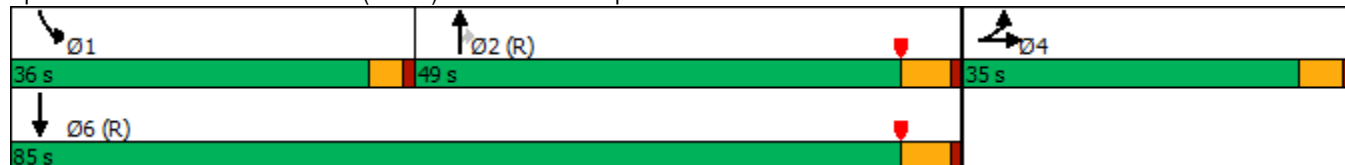
Intersection LOS: D

Intersection Capacity Utilization 102.0%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	1	460	0	0	0	0	1402	566	298	948	0
Future Volume (veh/h)	278	1	460	0	0	0	0	1402	566	298	948	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	296	1	382				0	1491	431	317	1009	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	445	1	395				0	1559	679	339	2354	0
Arrive On Green	0.25	0.25	0.25				0.00	0.44	0.44	0.38	1.00	0.00
Sat Flow, veh/h	1781	4	1582				0	3647	1547	1781	3647	0
Grp Volume(v), veh/h	296	0	383				0	1491	431	317	1009	0
Grp Sat Flow(s),veh/h/ln	1781	0	1586				0	1777	1547	1781	1777	0
Q Serve(g_s), s	17.9	0.0	28.7				0.0	48.7	26.0	20.5	0.0	0.0
Cycle Q Clear(g_c), s	17.9	0.0	28.7				0.0	48.7	26.0	20.5	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	445	0	396				0	1559	679	339	2354	0
V/C Ratio(X)	0.66	0.00	0.97				0.00	0.96	0.64	0.93	0.43	0.00
Avail Cap(c_a), veh/h	445	0	396				0	1559	679	475	2354	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.37	0.37	0.59	0.59	0.00
Uniform Delay (d), s/veh	40.5	0.0	44.5				0.0	32.6	26.2	36.4	0.0	0.0
Incr Delay (d2), s/veh	3.0	0.0	36.1				0.0	6.9	1.7	12.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	14.8				0.0	21.2	9.5	8.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	0.0	80.6				0.0	39.5	27.9	48.7	0.3	0.0
LnGrp LOS	D	A	F				A	D	C	D	A	A
Approach Vol, veh/h	679						1922			1326		
Approach Delay, s/veh	64.4						36.9			11.9		
Approach LOS	E						D			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	26.9	58.1	35.0		85.0							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	32.0	43.5	30.0		79.5							
Max Q Clear Time (g_c+I1), s	22.5	50.7	30.7		2.0							
Green Ext Time (p_c), s	0.3	0.0	0.0		13.7							
Intersection Summary												
HCM 6th Ctrl Delay	33.2											
HCM 6th LOS	C											
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	108	436	72	278	161	1568	87	262	1106	106
Future Volume (vph)	108	436	72	278	161	1568	87	262	1106	106
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	40.0	17.0	33.0	26.0	38.0	38.0	25.0	37.0	37.0
Total Split (%)	20.0%	33.3%	14.2%	27.5%	21.7%	31.7%	31.7%	20.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	11.4	24.0	8.8	18.9	14.5	33.7	33.7	13.4	32.6	32.6
Actuated g/C Ratio	0.12	0.24	0.09	0.19	0.15	0.34	0.34	0.14	0.33	0.33
v/c Ratio	0.60	0.70	0.52	0.61	0.71	0.89	0.15	0.67	0.65	0.18
Control Delay	57.6	37.4	59.5	33.8	58.9	39.8	0.9	50.2	32.4	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	37.4	59.5	33.8	58.9	39.8	0.9	50.2	32.4	2.7
LOS	E	D	E	C	E	D	A	D	C	A
Approach Delay		40.6		37.6		39.6			33.4	
Approach LOS		D		D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 37.5

Intersection LOS: D

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.

			
25 s	38 s	17 s	40 s
			
26 s	37 s	24 s	33 s

HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	436	142	72	278	143	161	1568	87	262	1106	106
Future Volume (veh/h)	108	436	142	72	278	143	161	1568	87	262	1106	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	111	449	120	74	287	129	166	1616	79	270	1140	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	586	155	92	442	193	198	1995	563	344	1943	541
Arrive On Green	0.09	0.22	0.22	0.06	0.19	0.19	0.12	0.38	0.38	0.11	0.37	0.37
Sat Flow, veh/h	1594	2691	713	1594	2334	1022	1594	5316	1499	3000	5316	1479
Grp Volume(v), veh/h	111	294	275	74	216	200	166	1616	79	270	1140	74
Grp Sat Flow(s),veh/h/ln	1594	1772	1631	1594	1772	1584	1594	1772	1499	1500	1772	1479
Q Serve(g_s), s	5.9	13.5	13.8	4.0	9.8	10.2	8.8	23.7	3.0	7.6	15.0	2.9
Cycle Q Clear(g_c), s	5.9	13.5	13.8	4.0	9.8	10.2	8.8	23.7	3.0	7.6	15.0	2.9
Prop In Lane	1.00		0.44	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	386	355	92	335	300	198	1995	563	344	1943	541
V/C Ratio(X)	0.81	0.76	0.77	0.81	0.64	0.67	0.84	0.81	0.14	0.79	0.59	0.14
Avail Cap(c_a), veh/h	356	698	642	227	555	496	393	1995	563	704	1943	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	31.9	32.0	40.5	32.5	32.7	37.2	24.4	17.9	37.4	22.3	18.4
Incr Delay (d2), s/veh	4.2	3.2	3.6	6.1	2.1	2.6	3.6	3.7	0.5	1.5	1.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.7	5.4	1.6	4.1	3.9	3.5	9.8	1.0	2.7	6.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	35.0	35.6	46.5	34.6	35.2	40.8	28.1	18.4	38.9	23.6	18.9
LnGrp LOS	D	D	D	D	C	D	D	C	B	D	C	B
Approach Vol, veh/h		680			490			1861			1484	
Approach Delay, s/veh		36.6			36.7			28.8			26.1	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	38.0	9.6	24.7	15.4	37.2	12.1	22.2				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	20.4	32.6	12.4	34.2	21.4	31.6	19.4	27.2				
Max Q Clear Time (g_c+I1), s	9.6	25.7	6.0	15.8	10.8	17.0	7.9	12.2				
Green Ext Time (p_c), s	0.4	5.2	0.0	3.0	0.1	6.8	0.1	1.9				
Intersection Summary												
HCM 6th Ctrl Delay			29.9									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	126	412	173	460	61	162	1580	211	102	1054	147
Future Volume (vph)	126	412	173	460	61	162	1580	211	102	1054	147
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	20.6	41.1	41.1	15.9	40.2	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.7	36.4	15.2	37.9	37.9	11.3	35.8	35.8	10.4	33.8	54.0
Actuated g/C Ratio	0.12	0.31	0.13	0.32	0.32	0.10	0.30	0.30	0.09	0.29	0.46
v/c Ratio	0.72	0.96	0.89	0.45	0.12	1.12	1.62	0.41	0.76	1.14	0.20
Control Delay	71.7	70.9	90.4	34.1	0.9	157.3	314.1	18.2	85.4	116.7	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.7	70.9	90.4	34.1	0.9	157.3	314.1	18.2	85.4	116.7	6.0
LOS	E	E	F	C	A	F	F	B	F	F	A
Approach Delay		71.0		45.1			269.1			101.8	
Approach LOS		E		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 118.3

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.62

Intersection Signal Delay: 160.5

Intersection LOS: F

Intersection Capacity Utilization 108.3%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

 Ø1	 Ø2	 Ø3	 Ø4
16 s	40.2 s	20.6 s	43.2 s
 Ø5	 Ø6	 Ø7	 Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary

13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	412	82	173	460	61	162	1580	211	102	1054	147
Future Volume (veh/h)	126	412	82	173	460	61	162	1580	211	102	1054	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	429	61	180	479	32	169	1646	140	106	1098	70
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	456	65	204	1116	495	155	1033	461	128	976	581
Arrive On Green	0.10	0.30	0.30	0.13	0.33	0.33	0.10	0.31	0.31	0.08	0.29	0.29
Sat Flow, veh/h	1594	1517	216	1594	3367	1495	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	131	0	490	180	479	32	169	1646	140	106	1098	70
Grp Sat Flow(s),veh/h/ln	1594	0	1733	1594	1683	1495	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	9.4	0.0	32.1	12.9	12.9	1.7	11.3	35.8	8.3	7.6	33.8	3.5
Cycle Q Clear(g_c), s	9.4	0.0	32.1	12.9	12.9	1.7	11.3	35.8	8.3	7.6	33.8	3.5
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	0	521	204	1116	495	155	1033	461	128	976	581
V/C Ratio(X)	0.85	0.00	0.94	0.88	0.43	0.06	1.09	1.59	0.30	0.83	1.12	0.12
Avail Cap(c_a), veh/h	248	0	556	219	1116	495	155	1033	461	156	976	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	39.8	50.0	30.4	26.6	52.6	40.4	30.9	52.8	41.4	23.0
Incr Delay (d2), s/veh	7.7	0.0	23.7	28.8	0.3	0.1	99.7	271.8	0.4	21.9	69.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	16.5	6.6	5.1	0.6	8.6	52.7	3.0	3.8	22.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.4	0.0	63.4	78.8	30.6	26.7	152.3	312.2	31.3	74.7	110.9	23.0
LnGrp LOS	E	A	E	E	C	C	F	F	C	E	F	C
Approach Vol, veh/h	621		691			1955			1274			
Approach Delay, s/veh	62.6		43.0			278.2			103.1			
Approach LOS	E		D			F			F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	42.3	19.5	40.8	15.9	40.3	15.9	44.4				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+l1), s	9.6	37.8	14.9	34.1	13.3	35.8	11.4	14.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	0.0	0.1	2.9				
Intersection Summary												
HCM 6th Ctrl Delay			163.8									
HCM 6th LOS			F									
Notes												

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	86	320	35	113	152	69	1824	274	50	1172	68
Future Volume (vph)	86	320	35	113	152	69	1824	274	50	1172	68
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	52.3	52.3	52.3	52.3	52.3	12.0	52.9	52.9	14.8	55.7	55.7
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	10.0%	44.1%	44.1%	12.3%	46.4%	46.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	41.1	41.1	41.1		41.1	7.2	52.1	52.1	8.0	49.4	49.4
Actuated g/C Ratio	0.36	0.36	0.36		0.36	0.06	0.45	0.45	0.07	0.43	0.43
v/c Ratio	0.30	0.54	0.07		0.98	0.75	1.29	0.41	0.49	0.87	0.11
Control Delay	29.0	32.6	1.0		81.9	95.9	164.0	20.4	68.0	38.9	6.5
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	32.6	1.0		81.9	95.9	164.0	20.4	68.0	38.9	6.5
LOS	C	C	A		F	F	F	C	E	D	A
Approach Delay		29.4			81.9		143.7			38.3	
Approach LOS		C			F		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 114.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay: 94.9

Intersection LOS: F

Intersection Capacity Utilization 110.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14.8 s	52.9 s	52.3 s
		
Ø5	Ø6	Ø8
12 s	55.7 s	52.3 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	320	35	113	152	34	69	1824	274	50	1172	68
Future Volume (veh/h)	86	320	35	113	152	34	69	1824	274	50	1172	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	92	344	21	122	163	29	74	1961	226	54	1260	55
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	658	558	156	194	31	91	1483	662	67	1432	639
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.06	0.44	0.44	0.04	0.43	0.43
Sat Flow, veh/h	1066	1772	1502	304	521	84	1594	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	92	344	21	314	0	0	74	1961	226	54	1260	55
Grp Sat Flow(s),veh/h/ln	1066	1772	1502	909	0	0	1594	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	17.5	1.0	22.7	0.0	0.0	5.3	51.0	11.5	3.9	39.8	2.5
Cycle Q Clear(g_c), s	11.9	17.5	1.0	40.2	0.0	0.0	5.3	51.0	11.5	3.9	39.8	2.5
Prop In Lane	1.00		1.00	0.39		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	658	558	381	0	0	91	1483	662	67	1432	639
V/C Ratio(X)	0.29	0.52	0.04	0.82	0.00	0.00	0.81	1.32	0.34	0.81	0.88	0.09
Avail Cap(c_a), veh/h	347	712	604	421	0	0	102	1483	662	141	1432	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	28.4	23.2	39.9	0.0	0.0	53.9	32.4	21.3	54.9	30.5	19.8
Incr Delay (d2), s/veh	0.5	0.6	0.0	11.7	0.0	0.0	30.6	149.7	1.4	8.2	8.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.2	0.4	9.6	0.0	0.0	2.8	49.4	4.0	1.6	16.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.1	29.0	23.2	51.6	0.0	0.0	84.5	182.0	22.7	63.2	38.6	20.1
LnGrp LOS	C	C	C	D	A	A	F	F	C	E	D	C
Approach Vol, veh/h	457				314			2261			1369	
Approach Delay, s/veh	28.4				51.6			162.9			38.8	
Approach LOS	C				D			F			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	57.5		48.7	11.2	55.7		48.7				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	10.2	* 48		46.5	7.4	49.2		46.5				
Max Q Clear Time (g_c+I1), s	5.9	53.0		19.5	7.3	41.8		42.2				
Green Ext Time (p_c), s	0.0	0.0		2.4	0.0	4.4		0.7				

Intersection Summary

HCM 6th Ctrl Delay 102.4

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	8	0	2178	1244	10
Future Vol, veh/h	0	8	0	2178	1244	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	2367	1352	11
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	676	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	396	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	396	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	14.3	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	396	-	-		
HCM Lane V/C Ratio	-	0.022	-	-		
HCM Control Delay (s)	-	14.3	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.1	-	-		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	55	0	2178	1176	76
Future Vol, veh/h	0	55	0	2178	1176	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	60	0	2367	1278	83
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	639	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	419	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	419	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	15	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 419		-	-		
HCM Lane V/C Ratio	- 0.143		-	-		
HCM Control Delay (s)	- 15		-	-		
HCM Lane LOS	- C		-	-		
HCM 95th %tile Q(veh)	- 0.5		-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	439	287	135	29	101	232	1689	49	73	1013	144
Future Volume (vph)	439	287	135	29	101	232	1689	49	73	1013	144
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.0	43.0	9.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.8%	35.8%	7.5%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.7	32.9	32.9	10.1	15.5	10.6	37.3	37.3	5.5	32.3	32.3
Actuated g/C Ratio	0.22	0.33	0.33	0.10	0.15	0.11	0.37	0.37	0.05	0.32	0.32
v/c Ratio	1.35	0.52	0.24	0.19	0.56	1.46	1.42	0.08	0.89	0.99	0.26
Control Delay	209.2	32.0	5.3	48.3	40.8	271.6	223.4	0.3	118.2	59.8	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	209.2	32.0	5.3	48.3	40.8	271.6	223.4	0.3	118.2	59.8	5.3
LOS	F	C	A	D	D	F	F	A	F	E	A
Approach Delay		118.2			42.1		223.5			56.8	
Approach LOS		F			D		F			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.2

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.46

Intersection Signal Delay: 146.2

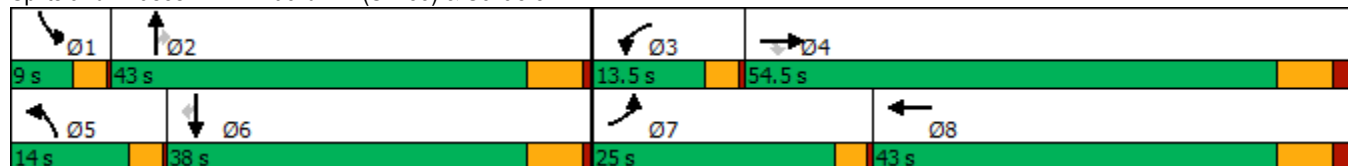
Intersection LOS: F

Intersection Capacity Utilization 107.0%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	439	287	135	29	101	45	232	1689	49	73	1013	144
Future Volume (veh/h)	439	287	135	29	101	45	232	1689	49	73	1013	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	462	302	93	31	106	36	244	1778	49	77	1066	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	361	501	418	94	145	49	176	1313	573	92	1135	506
Arrive On Green	0.23	0.28	0.28	0.06	0.11	0.11	0.11	0.39	0.39	0.06	0.34	0.34
Sat Flow, veh/h	1594	1772	1479	1594	1265	430	1594	3367	1470	1594	3367	1502
Grp Volume(v), veh/h	462	302	93	31	0	142	244	1778	49	77	1066	109
Grp Sat Flow(s),veh/h/ln	1594	1772	1479	1594	0	1695	1594	1683	1470	1594	1683	1502
Q Serve(g_s), s	21.5	14.0	4.6	1.8	0.0	7.7	10.5	37.0	2.0	4.5	29.1	4.9
Cycle Q Clear(g_c), s	21.5	14.0	4.6	1.8	0.0	7.7	10.5	37.0	2.0	4.5	29.1	4.9
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	361	501	418	94	0	195	176	1313	573	92	1135	506
V/C Ratio(X)	1.28	0.60	0.22	0.33	0.00	0.73	1.38	1.35	0.09	0.83	0.94	0.22
Avail Cap(c_a), veh/h	361	887	740	168	0	643	176	1313	573	92	1135	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	29.4	26.1	42.9	0.0	40.6	42.2	29.0	18.3	44.2	30.5	22.5
Incr Delay (d2), s/veh	145.5	0.9	0.2	0.8	0.0	3.9	203.9	164.7	0.1	43.0	14.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.4	5.7	1.5	0.7	0.0	3.3	13.8	43.0	0.6	2.8	12.8	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	182.2	30.3	26.3	43.6	0.0	44.4	246.1	193.6	18.3	87.3	45.0	22.7
LnGrp LOS	F	C	C	D	A	D	F	F	B	F	D	C
Approach Vol, veh/h		857			173			2071			1252	
Approach Delay, s/veh		111.8			44.3			195.6			45.6	
Approach LOS		F			D			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	43.0	9.1	33.8	14.0	38.0	25.0	17.9				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.5	37.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	6.5	39.0	3.8	16.0	12.5	31.1	23.5	9.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.5	0.0	0.6	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			130.0									
HCM 6th LOS			F									

Timings

18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	127	427	162	45	467	198	1562	54	160	999	129
Future Volume (vph)	127	427	162	45	467	198	1562	54	160	999	129
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	12.0	54.0	54.0	15.0	57.0	57.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	10.0%	45.0%	45.0%	12.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	44.0	44.0	44.0	44.0	44.0	8.5	48.0	48.0	11.5	51.0	51.0
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.42	0.42
v/c Ratio	2.38	0.68	0.25	0.25	1.15	1.00	1.20	0.09	1.09	0.72	0.19
Control Delay	695.1	38.5	4.8	31.1	119.3	119.0	131.0	4.3	150.6	32.2	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	695.1	38.5	4.8	31.1	119.3	119.0	131.0	4.3	150.6	32.2	5.9
LOS	F	D	A	C	F	F	F	A	F	C	A
Approach Delay		147.4			114.0		125.9			44.3	
Approach LOS		F			F		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.38

Intersection Signal Delay: 104.3

Intersection LOS: F

Intersection Capacity Utilization 124.4%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	54 s	51 s
		
Ø5	Ø6	Ø8
12 s	57 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	427	162	45	467	235	198	1562	54	160	999	129
Future Volume (veh/h)	127	427	162	45	467	235	198	1562	54	160	999	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	440	111	46	481	234	204	1610	44	165	1030	99
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	650	551	181	413	201	206	1347	601	153	1431	638
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.43	0.43
Sat Flow, veh/h	658	1772	1502	767	1126	548	2910	3367	1502	1594	3367	1502
Grp Volume(v), veh/h	131	440	111	46	0	715	204	1610	44	165	1030	99
Grp Sat Flow(s),veh/h/ln	658	1772	1502	767	0	1673	1455	1683	1502	1594	1683	1502
Q Serve(g_s), s	0.0	25.1	6.1	6.5	0.0	44.0	8.4	48.0	2.2	11.5	30.4	4.9
Cycle Q Clear(g_c), s	44.0	25.1	6.1	31.6	0.0	44.0	8.4	48.0	2.2	11.5	30.4	4.9
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	650	551	181	0	614	206	1347	601	153	1431	638
V/C Ratio(X)	2.18	0.68	0.20	0.25	0.00	1.17	0.99	1.20	0.07	1.08	0.72	0.16
Avail Cap(c_a), veh/h	60	650	551	181	0	614	206	1347	601	153	1431	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	32.0	26.0	45.3	0.0	38.0	55.7	36.0	22.3	54.2	28.6	21.2
Incr Delay (d2), s/veh	583.1	2.8	0.2	0.7	0.0	91.3	59.5	95.5	0.1	95.9	1.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	10.8	2.1	1.2	0.0	32.5	4.7	35.8	0.7	8.5	11.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	643.1	34.8	26.2	46.0	0.0	129.3	115.2	131.5	22.3	150.1	30.4	21.3
LnGrp LOS	F	C	C	D	A	F	F	F	C	F	C	C
Approach Vol, veh/h	682			761			1858			1294		
Approach Delay, s/veh	150.3			124.2			127.1			44.9		
Approach LOS	F			F			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	54.0		51.0	12.0	57.0		51.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	11.5	48.0		44.0	8.5	51.0		44.0				
Max Q Clear Time (g_c+I1), s	13.5	50.0		46.0	10.4	32.4		46.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.5		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	106.9											
HCM 6th LOS	F											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	70	309	210	54	133	115	1376	68	156	1003	59
Future Volume (vph)	70	309	210	54	133	115	1376	68	156	1003	59
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	51.0	51.0	51.0	51.0	51.0	20.0	53.0	53.0	16.0	49.0	49.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	16.7%	44.2%	44.2%	13.3%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	31.1	31.1	31.1	31.1	31.1	12.3	47.7	47.7	12.6	48.0	48.0
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.12	0.45	0.45	0.12	0.45	0.45
v/c Ratio	1.17	0.63	0.37	0.33	0.89	0.66	0.96	0.10	0.87	0.69	0.09
Control Delay	205.6	37.1	5.2	33.3	45.6	63.3	44.5	9.7	87.3	28.6	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	205.6	37.1	5.2	33.3	45.6	63.3	44.5	9.7	87.3	28.6	3.7
LOS	F	D	A	C	D	E	D	A	F	C	A
Approach Delay		45.8			44.3		44.4			34.9	
Approach LOS		D			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105.5

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.17

Intersection Signal Delay: 41.6

Intersection LOS: D

Intersection Capacity Utilization 99.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
16 s	53 s	51 s
 Ø5	 Ø6	 Ø8
20 s	49 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	309	210	54	133	333	115	1376	68	156	1003	59
Future Volume (veh/h)	70	309	210	54	133	333	115	1376	68	156	1003	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	74	325	119	57	140	338	121	1448	48	164	1056	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	672	563	264	175	422	144	1339	597	168	1388	611
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.40	0.40	0.11	0.41	0.41
Sat Flow, veh/h	820	1772	1483	846	460	1111	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	74	325	119	57	0	478	121	1448	48	164	1056	30
Grp Sat Flow(s),veh/h/ln	820	1772	1483	846	0	1572	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	10.5	16.6	6.4	6.5	0.0	32.2	8.9	47.3	2.4	12.2	31.9	1.4
Cycle Q Clear(g_c), s	42.8	16.6	6.4	23.1	0.0	32.2	8.9	47.3	2.4	12.2	31.9	1.4
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	672	563	264	0	596	144	1339	597	168	1388	611
V/C Ratio(X)	0.50	0.48	0.21	0.22	0.00	0.80	0.84	1.08	0.08	0.98	0.76	0.05
Avail Cap(c_a), veh/h	157	688	576	271	0	611	221	1339	597	168	1388	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	28.0	24.9	36.8	0.0	32.9	53.2	35.8	22.3	53.1	29.9	21.0
Incr Delay (d2), s/veh	1.9	0.4	0.1	0.3	0.0	7.2	13.1	49.8	0.1	63.0	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.9	2.2	1.3	0.0	12.8	3.9	26.9	0.8	7.6	12.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	28.4	25.0	37.1	0.0	40.1	66.4	85.6	22.3	116.1	32.4	21.0
LnGrp LOS	D	C	C	D	A	D	E	F	C	F	C	C
Approach Vol, veh/h	518			535			1617			1250		
Approach Delay, s/veh	31.3			39.8			82.3			43.1		
Approach LOS	C			D			F			D		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	16.0	53.0	49.9		14.3	54.7	49.9					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	12.5	47.3	46.2		16.5	43.3	46.2					
Max Q Clear Time (g_c+I1), s	14.2	49.3	44.8		10.9	33.9	34.2					
Green Ext Time (p_c), s	0.0	0.0	0.4		0.1	4.4	2.2					
Intersection Summary												
HCM 6th Ctrl Delay	57.3											
HCM 6th LOS	E											

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	404	6	4	161	0	7	0	3	0	0	0
Future Vol, veh/h	0	404	6	4	161	0	7	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	439	7	4	175	0	8	0	3	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	175	0	0	446	0	0	626	626	443	627	629	175
Stage 1	-	-	-	-	-	-	443	443	-	183	183	-
Stage 2	-	-	-	-	-	-	183	183	-	444	446	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1401	-	-	1114	-	-	397	401	615	396	399	868
Stage 1	-	-	-	-	-	-	594	576	-	819	748	-
Stage 2	-	-	-	-	-	-	819	748	-	593	574	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1401	-	-	1114	-	-	396	399	615	393	397	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	396	399	-	393	397	-
Stage 1	-	-	-	-	-	-	594	576	-	819	745	-
Stage 2	-	-	-	-	-	-	816	745	-	590	574	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			13.3			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	443	1401	-	-	1114	-	-	-				
HCM Lane V/C Ratio	0.025	-	-	-	0.004	-	-	-				
HCM Control Delay (s)	13.3	0	-	-	8.2	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/20/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	375	30	14	438	28	31	28	40
Future Volume (vph)	18	375	30	14	438	28	31	28	40
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	23.0	53.0	53.0	19.0	49.0	48.0	48.0	48.0	48.0
Total Split (%)	19.2%	44.2%	44.2%	15.8%	40.8%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	5.8	21.1	21.1	5.7	21.1		12.4		12.4
Actuated g/C Ratio	0.16	0.60	0.60	0.16	0.60		0.35		0.35
v/c Ratio	0.07	0.19	0.03	0.05	0.24		0.15		0.18
Control Delay	18.6	9.2	2.7	18.8	9.4		9.7		9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	18.6	9.2	2.7	18.8	9.4		9.7		9.5
LOS	B	A	A	B	A		A		A
Approach Delay		9.2			9.7		9.7		9.5
Approach LOS		A			A		A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 35.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.24

Intersection Signal Delay: 9.5

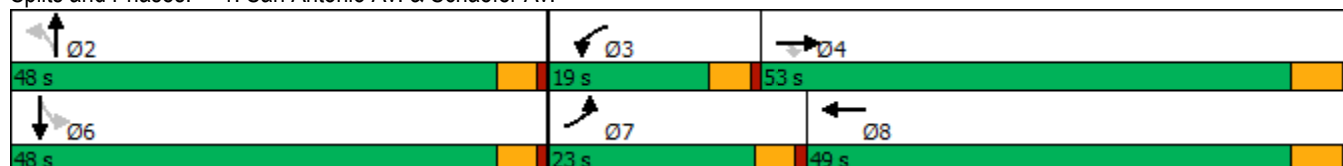
Intersection LOS: A

Intersection Capacity Utilization 33.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	375	30	14	438	24	28	31	15	28	40	27
Future Volume (veh/h)	18	375	30	14	438	24	28	31	15	28	40	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	19	387	26	14	452	21	29	32	6	29	41	12
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	1032	450	29	983	46	256	221	32	220	235	53
Arrive On Green	0.02	0.31	0.31	0.02	0.30	0.30	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1594	3367	1470	1594	3272	152	449	985	141	329	1045	235
Grp Volume(v), veh/h	19	387	26	14	232	241	67	0	0	82	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1470	1594	1683	1741	1574	0	0	1609	0	0
Q Serve(g_s), s	0.4	3.0	0.4	0.3	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	3.0	0.4	0.3	3.7	3.7	1.0	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.09	0.43		0.09	0.35		0.15
Lane Grp Cap(c), veh/h	39	1032	450	29	506	523	509	0	0	508	0	0
V/C Ratio(X)	0.49	0.38	0.06	0.48	0.46	0.46	0.13	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	881	4774	2084	690	2185	2259	2126	0	0	2163	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.0	9.0	8.1	16.2	9.4	9.5	10.4	0.0	0.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.2	0.1	4.5	0.6	0.6	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.7	0.1	0.1	0.9	0.9	0.3	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	9.3	8.2	20.7	10.1	10.1	10.5	0.0	0.0	10.6	0.0	0.0
LnGrp LOS	B	A	A	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		432			487			67			82	
Approach Delay, s/veh		9.7			10.4			10.5			10.6	
Approach LOS		A			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.1	5.2	16.0		12.1	5.4	15.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		43.4	14.4	47.2		43.4	18.4	43.2				
Max Q Clear Time (g_c+I1), s		3.0	2.3	5.0		3.3	2.4	5.7				
Green Ext Time (p_c), s		0.4	0.0	2.6		0.5	0.0	2.7				
Intersection Summary												
HCM 6th Ctrl Delay			10.1									
HCM 6th LOS			B									

Timings
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	31	510	29	15	632	15	16	21	9	19
Future Volume (vph)	31	510	29	15	632	15	16	21	9	19
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	25.0	55.0	55.0	22.0	52.0	52.0	43.0	43.0	43.0	43.0
Total Split (%)	20.8%	45.8%	45.8%	18.3%	43.3%	43.3%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.2	29.5	29.5	5.8	27.3	27.3		12.9		12.9
Actuated g/C Ratio	0.14	0.67	0.67	0.13	0.62	0.62		0.29		0.29
v/c Ratio	0.14	0.23	0.03	0.07	0.31	0.02		0.10		0.12
Control Delay	24.3	8.5	2.1	24.9	11.1	0.0		13.7		10.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	24.3	8.5	2.1	24.9	11.1	0.0		13.7		10.1
LOS	C	A	A	C	B	A		B		B
Approach Delay		9.0			11.1			13.7		10.1
Approach LOS		A			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 43.8

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.31

Intersection Signal Delay: 10.3

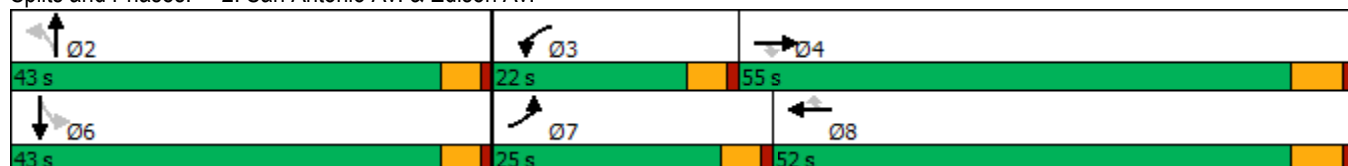
Intersection LOS: B

Intersection Capacity Utilization 45.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	510	29	15	632	15	16	21	6	9	19	29
Future Volume (veh/h)	31	510	29	15	632	15	16	21	6	9	19	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1772	1772	1772	1772	1772	1772
Adj Flow Rate, veh/h	32	526	23	15	652	12	16	22	2	9	20	-32
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1299	566	31	1233	538	219	106	8	0	9999	4204
Arrive On Green	0.04	0.39	0.39	0.02	0.37	0.37	0.11	0.11	0.11	0.11	0.11	0.00
Sat Flow, veh/h	1594	3367	1468	1594	3367	1468	514	996	79	-2220	-6304	9406
Grp Volume(v), veh/h	32	526	23	15	652	12	40	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1594	1683	1468	1594	1683	1468	1589	0	0	0	0	0
Q Serve(g_s), s	0.6	3.5	0.3	0.3	4.7	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	3.5	0.3	0.3	4.7	0.2	0.6	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.05	-3.00		10.67
Lane Grp Cap(c), veh/h	62	1299	566	31	1233	538	334	0	0	0	0	0
V/C Ratio(X)	0.52	0.41	0.04	0.48	0.53	0.02	0.12	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1058	5388	2350	902	5059	2206	2109	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	14.5	6.9	5.9	14.9	7.7	6.2	12.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.2	0.0	4.2	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	0.0	0.1	0.8	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.9	7.1	5.9	19.1	8.0	6.2	12.7	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		581			679			40			0	
Approach Delay, s/veh		7.6			8.2			12.7			0.0	
Approach LOS		A			A			B				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		7.9	5.2	17.7		7.9	5.8	17.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		38.4	17.4	49.2		38.4	20.4	46.2				
Max Q Clear Time (g_c+I1), s		2.6	2.3	5.5		0.0	2.6	6.7				
Green Ext Time (p_c), s		0.2	0.0	3.6		0.0	0.0	4.5				
Intersection Summary												
HCM 6th Ctrl Delay			8.1									
HCM 6th LOS			A									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	17	135	53	187	44	105	16	110
Future Volume (vph)	17	135	53	187	44	105	16	110
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	17.0	41.0	17.0	41.0	24.0	41.0	21.0	38.0
Total Split (%)	14.2%	34.2%	14.2%	34.2%	20.0%	34.2%	17.5%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	15.2	14.2	17.5	18.3	7.4	19.7	6.7	17.6
Actuated g/C Ratio	0.35	0.32	0.40	0.42	0.17	0.45	0.15	0.40
v/c Ratio	0.04	0.16	0.12	0.15	0.17	0.12	0.07	0.09
Control Delay	10.4	15.1	10.3	12.3	26.0	10.2	27.4	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	15.1	10.3	12.3	26.0	10.2	27.4	17.4
LOS	B	B	B	B	C	B	C	B
Approach Delay		14.7		11.9		13.4		18.6
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 44

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.17

Intersection Signal Delay: 14.1

Intersection LOS: B

Intersection Capacity Utilization 42.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

			
Ø1	Ø2	Ø3	Ø4
21 s	41 s	17 s	41 s
			
Ø5	Ø6	Ø7	Ø8
24 s	38 s	17 s	41 s

HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	135	33	53	187	13	44	105	66	16	110	7
Future Volume (veh/h)	17	135	33	53	187	13	44	105	66	16	110	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	17	138	31	54	191	7	45	107	48	16	112	3
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	420	633	138	447	873	32	76	578	244	32	752	20
Arrive On Green	0.02	0.23	0.23	0.05	0.26	0.26	0.05	0.25	0.25	0.02	0.22	0.22
Sat Flow, veh/h	1594	2744	600	1594	3312	121	1594	2291	969	1594	3348	89
Grp Volume(v), veh/h	17	83	86	54	97	101	45	77	78	16	56	59
Grp Sat Flow(s),veh/h/ln	1594	1683	1661	1594	1683	1749	1594	1683	1577	1594	1683	1754
Q Serve(g_s), s	0.4	1.8	1.9	1.2	2.1	2.1	1.3	1.6	1.8	0.5	1.2	1.2
Cycle Q Clear(g_c), s	0.4	1.8	1.9	1.2	2.1	2.1	1.3	1.6	1.8	0.5	1.2	1.2
Prop In Lane	1.00		0.36	1.00		0.07	1.00		0.61	1.00		0.05
Lane Grp Cap(c), veh/h	420	388	383	447	444	461	76	424	398	32	378	394
V/C Ratio(X)	0.04	0.21	0.22	0.12	0.22	0.22	0.59	0.18	0.20	0.50	0.15	0.15
Avail Cap(c_a), veh/h	816	1287	1270	790	1287	1337	672	1302	1220	568	1192	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	14.3	14.4	12.2	13.2	13.3	21.5	13.5	13.5	22.3	14.3	14.3
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.2	0.2	2.8	0.2	0.2	4.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.6	0.3	0.6	0.7	0.5	0.5	0.5	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	14.6	14.7	12.3	13.5	13.5	24.2	13.7	13.8	26.7	14.5	14.5
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		186			252			200			131	
Approach Delay, s/veh		14.5			13.2			16.1			16.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	17.0	7.1	16.4	6.8	15.7	5.6	17.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	19.4	32.6	12.4	35.2				
Max Q Clear Time (g_c+I1), s	2.5	3.8	3.2	3.9	3.3	3.2	2.4	4.1				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.8	0.0	0.5	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay			14.8									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	6	212	15	12	199
Future Vol, veh/h	26	6	212	15	12	199
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	7	230	16	13	216

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	372	123	0
Stage 1	238	-	-
Stage 2	134	-	-
Critical Hdwy	6.84	6.94	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	-
Pot Cap-1 Maneuver	602	905	-
Stage 1	779	-	-
Stage 2	878	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	596	905	-
Mov Cap-2 Maneuver	644	-	-
Stage 1	779	-	-
Stage 2	869	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	681	1317
HCM Lane V/C Ratio	-	-	0.051	0.01
HCM Control Delay (s)	-	-	10.6	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	222	15	0	225
Future Vol, veh/h	0	4	222	15	0	225
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	241	16	0	245

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	129	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	897	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	897	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	- 897	-
HCM Lane V/C Ratio	-	- 0.005	-
HCM Control Delay (s)	-	- 9	-
HCM Lane LOS	-	- A	-
HCM 95th %tile Q(veh)	-	- 0	-

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	359	23	376	47	107	89	98
Future Volume (vph)	34	359	23	376	47	107	89	98
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	45.0	16.0	43.0	21.0	31.0	28.0	38.0
Total Split (%)	15.0%	37.5%	13.3%	35.8%	17.5%	25.8%	23.3%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	7.3	73.1	6.5	72.4	8.2	12.4	11.5	17.6
Actuated g/C Ratio	0.06	0.61	0.05	0.60	0.07	0.10	0.10	0.15
v/c Ratio	0.38	0.20	0.28	0.25	0.45	0.40	0.62	0.29
Control Delay	64.4	12.8	62.1	13.2	66.2	44.4	69.0	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.4	12.8	62.1	13.2	66.2	44.4	69.0	33.5
LOS	E	B	E	B	E	D	E	C
Approach Delay		17.1		15.5		50.0		47.5
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 26.2

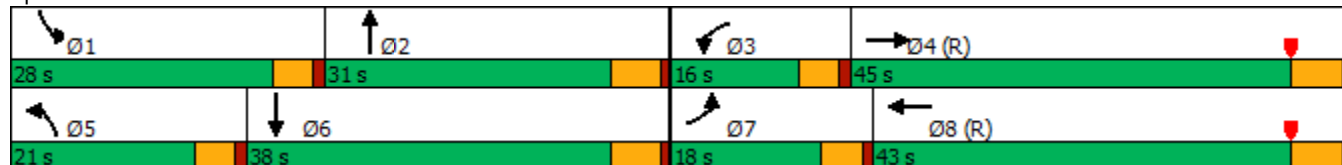
Intersection LOS: C

Intersection Capacity Utilization 53.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	359	26	23	376	98	47	107	27	89	98	39
Future Volume (veh/h)	34	359	26	23	376	98	47	107	27	89	98	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	36	378	24	24	396	90	49	113	26	94	103	18
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	2074	131	37	1741	392	61	243	54	115	354	60
Arrive On Green	0.03	0.65	0.65	0.02	0.64	0.64	0.04	0.09	0.09	0.07	0.12	0.12
Sat Flow, veh/h	1594	3212	203	1594	2723	613	1594	2723	606	1594	2868	489
Grp Volume(v), veh/h	36	197	205	24	243	243	49	68	71	94	59	62
Grp Sat Flow(s),veh/h/ln	1594	1683	1732	1594	1683	1653	1594	1683	1646	1594	1683	1673
Q Serve(g_s), s	2.7	5.6	5.7	1.8	7.3	7.5	3.7	4.6	4.9	7.0	3.8	4.0
Cycle Q Clear(g_c), s	2.7	5.6	5.7	1.8	7.3	7.5	3.7	4.6	4.9	7.0	3.8	4.0
Prop In Lane	1.00		0.12	1.00		0.37	1.00		0.37	1.00		0.29
Lane Grp Cap(c), veh/h	46	1087	1118	37	1076	1057	61	150	147	115	208	206
V/C Ratio(X)	0.78	0.18	0.18	0.66	0.23	0.23	0.81	0.45	0.48	0.82	0.29	0.30
Avail Cap(c_a), veh/h	178	1087	1118	151	1076	1057	218	359	351	311	457	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	8.5	8.6	58.2	9.1	9.1	57.3	51.9	52.0	54.9	47.8	47.9
Incr Delay (d2), s/veh	9.7	0.4	0.4	7.2	0.5	0.5	8.8	2.1	2.4	5.3	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.0	2.0	0.8	2.6	2.6	1.6	2.0	2.1	2.9	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	8.9	8.9	65.4	9.6	9.7	66.1	54.0	54.4	60.1	48.5	48.7
LnGrp LOS	E	A	A	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h	438			510			188			215		
Approach Delay, s/veh	13.7			12.3			57.3			53.7		
Approach LOS	B			B			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	16.1	7.4	83.3	9.2	20.2	8.1	82.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	23.4	25.6	11.4	39.2	16.4	32.6	13.4	37.2				
Max Q Clear Time (g_c+I1), s	9.0	6.9	3.8	7.7	5.7	6.0	4.7	9.5				
Green Ext Time (p_c), s	0.1	0.6	0.0	2.2	0.0	0.6	0.0	2.7				
Intersection Summary												
HCM 6th Ctrl Delay	25.6											
HCM 6th LOS	C											

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	80	429	14	19	577	19	16	63	13	73
Future Volume (vph)	80	429	14	19	577	19	16	63	13	73
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	25.0	48.0	48.0	17.0	40.0	40.0	17.0	41.0	14.0	38.0
Total Split (%)	20.8%	40.0%	40.0%	14.2%	33.3%	33.3%	14.2%	34.2%	11.7%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	8.6	29.3	29.3	6.1	20.0	20.0	6.0	12.9	5.9	12.9
Actuated g/C Ratio	0.15	0.51	0.51	0.11	0.35	0.35	0.10	0.22	0.10	0.22
v/c Ratio	0.37	0.27	0.02	0.12	0.54	0.03	0.10	0.10	0.09	0.21
Control Delay	31.4	10.9	0.1	33.3	19.6	0.1	33.4	19.6	33.5	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	10.9	0.1	33.3	19.6	0.1	33.4	19.6	33.5	13.2
LOS	C	B	A	C	B	A	C	B	C	B
Approach Delay		13.8			19.5			22.1		14.9
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 57.4

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 17.0

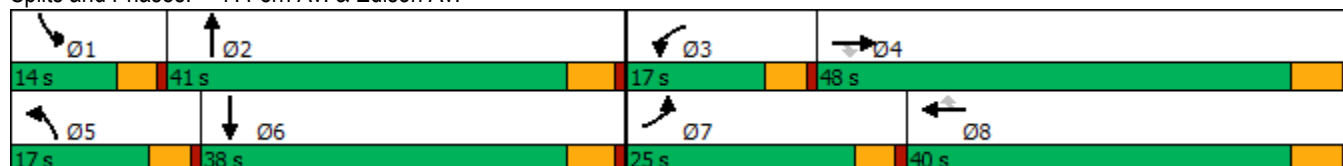
Intersection LOS: B

Intersection Capacity Utilization 49.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	429	14	19	577	19	16	63	8	13	73	71
Future Volume (veh/h)	80	429	14	19	577	19	16	63	8	13	73	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	87	466	11	21	627	13	17	68	5	14	79	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	1127	502	41	972	434	34	630	46	28	430	203
Arrive On Green	0.07	0.33	0.33	0.03	0.29	0.29	0.02	0.20	0.20	0.02	0.19	0.19
Sat Flow, veh/h	1594	3367	1500	1594	3367	1502	1594	3182	231	1594	2209	1043
Grp Volume(v), veh/h	87	466	11	21	627	13	17	36	37	14	59	60
Grp Sat Flow(s),veh/h/ln	1594	1683	1500	1594	1683	1502	1594	1683	1730	1594	1683	1568
Q Serve(g_s), s	2.6	5.1	0.2	0.6	7.8	0.3	0.5	0.8	0.9	0.4	1.4	1.5
Cycle Q Clear(g_c), s	2.6	5.1	0.2	0.6	7.8	0.3	0.5	0.8	0.9	0.4	1.4	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.67
Lane Grp Cap(c), veh/h	114	1127	502	41	972	434	34	333	343	28	328	305
V/C Ratio(X)	0.76	0.41	0.02	0.52	0.64	0.03	0.51	0.11	0.11	0.50	0.18	0.20
Avail Cap(c_a), veh/h	676	2953	1316	411	2393	1068	411	1246	1280	311	1141	1063
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	12.4	10.7	23.2	15.0	12.3	23.3	15.8	15.8	23.4	16.2	16.2
Incr Delay (d2), s/veh	4.0	0.2	0.0	3.8	0.7	0.0	4.3	0.1	0.1	4.9	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.5	0.1	0.2	2.4	0.1	0.2	0.3	0.3	0.2	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	12.6	10.7	26.9	15.7	12.3	27.6	15.9	16.0	28.3	16.4	16.5
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		564			661			90			133	
Approach Delay, s/veh		14.6			16.0			18.1			17.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.5	14.9	5.8	21.9	5.6	14.8	8.0	19.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	9.4	35.6	12.4	42.2	12.4	32.6	20.4	34.2				
Max Q Clear Time (g_c+I1), s	2.4	2.9	2.6	7.1	2.5	3.5	4.6	9.8				
Green Ext Time (p_c), s	0.0	0.3	0.0	3.0	0.0	0.6	0.1	4.0				
Intersection Summary												
HCM 6th Ctrl Delay			15.7									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	262	178	30	31	38
Future Vol, veh/h	29	262	178	30	31	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	282	191	32	33	41
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	223	0	-	0	410	112
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	203	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1343	-	-	-	570	920
Stage 1	-	-	-	-	807	-
Stage 2	-	-	-	-	811	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1343	-	-	-	557	920
Mov Cap-2 Maneuver	-	-	-	-	619	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	811	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		10		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1343	-	-	-	619	920
HCM Lane V/C Ratio	0.023	-	-	-	0.054	0.044
HCM Control Delay (s)	7.7	-	-	-	11.1	9.1
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.1

Intersection												
Int Delay, s/veh	10.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	172	152	56	207	174	142	0	106	203	0	148
Future Vol, veh/h	150	172	152	56	207	174	142	0	106	203	0	148
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	163	187	165	61	225	189	154	0	115	221	0	161

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	414	0	0	352	0	0	831	1132	176	862	1120	207
Stage 1	-	-	-	-	-	-	596	596	-	442	442	-
Stage 2	-	-	-	-	-	-	235	536	-	420	678	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	6.5	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1141	-	-	1291	-	-	302	220	996	356	224	799
Stage 1	-	-	-	-	-	-	519	532	-	564	575	-
Stage 2	-	-	-	-	-	-	747	522	-	668	486	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1141	-	-	1291	-	-	208	180	996	270	183	799
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	255	-	334	274	-
Stage 1	-	-	-	-	-	-	445	456	-	483	548	-
Stage 2	-	-	-	-	-	-	568	497	-	506	417	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.7	1	21.7	24.4
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	288	996	1141	-	-	1291	-	-	334	799
HCM Lane V/C Ratio	0.536	0.116	0.143	-	-	0.047	-	-	0.661	0.201
HCM Control Delay (s)	31.1	9.1	8.7	-	-	7.9	-	-	34.5	10.6
HCM Lane LOS	D	A	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	2.9	0.4	0.5	-	-	0.1	-	-	4.4	0.7

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	355	4	372	748	824	854	428
Future Volume (vph)	355	4	372	748	824	854	428
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	31.0	31.0	31.0	42.0	89.0	47.0	47.0
Total Split (%)	25.8%	25.8%	25.8%	35.0%	74.2%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	22.4	22.4	22.4	43.2	87.1	39.4	39.4
Actuated g/C Ratio	0.19	0.19	0.19	0.36	0.73	0.33	0.33
v/c Ratio	0.85	0.78	0.53	1.22	0.33	0.77	0.54
Control Delay	70.6	53.6	11.7	154.2	7.2	41.0	5.3
Queue Delay	0.0	0.0	0.0	1.1	0.3	0.0	0.0
Total Delay	70.6	53.6	11.7	155.3	7.5	41.0	5.3
LOS	E	D	B	F	A	D	A
Approach Delay		46.3			77.8	29.1	
Approach LOS		D			E	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.22

Intersection Signal Delay: 53.9

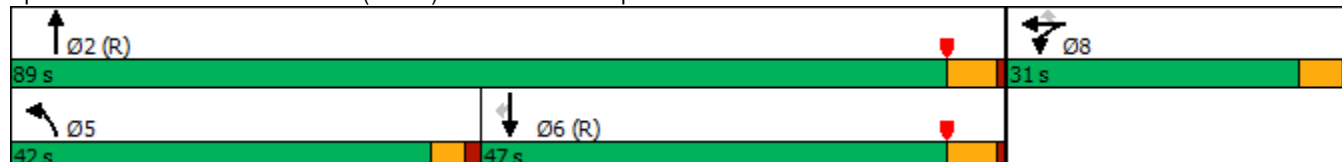
Intersection LOS: D

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary 10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	355	4	372	748	824	0	0	854	428
Future Volume (veh/h)	0	0	0	355	4	372	748	824	0	0	854	428
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				431	0	129	779	858	0	0	890	357
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				504	0	224	557	2740	0	0	1496	667
Arrive On Green				0.14	0.00	0.14	0.63	1.00	0.00	0.00	0.42	0.42
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				431	0	129	779	858	0	0	890	357
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				14.2	0.0	9.1	37.5	0.0	0.0	0.0	23.2	20.2
Cycle Q Clear(g_c), s				14.2	0.0	9.1	37.5	0.0	0.0	0.0	23.2	20.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				504	0	224	557	2740	0	0	1496	667
V/C Ratio(X)				0.85	0.00	0.58	1.40	0.31	0.00	0.00	0.59	0.54
Avail Cap(c_a), veh/h				772	0	343	557	2740	0	0	1496	667
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.23	0.23	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.3	0.0	48.1	22.5	0.0	0.0	0.0	26.8	26.0
Incr Delay (d2), s/veh				3.7	0.0	0.9	182.3	0.1	0.0	0.0	1.8	3.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.4	0.0	3.6	36.8	0.0	0.0	0.0	9.8	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				54.0	0.0	49.0	204.8	0.1	0.0	0.0	28.6	29.0
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					560			1637			1247	
Approach Delay, s/veh					52.9			97.5			28.7	
Approach LOS					D			F			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	98.0			42.0			56.0			22.0		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	83.5			37.5			41.5			26.0		
Max Q Clear Time (g_c+I1), s	2.0			39.5			25.2			16.2		
Green Ext Time (p_c), s	10.6			0.0			8.8			0.8		
Intersection Summary												
HCM 6th Ctrl Delay			65.3									
HCM 6th LOS			E									
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	306	0	1263	560	332	878
Future Volume (vph)	306	0	1263	560	332	878
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	37.0	37.0	44.0	44.0	39.0	83.0
Total Split (%)	30.8%	30.8%	36.7%	36.7%	32.5%	69.2%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	32.0	32.0	45.6	45.6	27.9	77.5
Actuated g/C Ratio	0.27	0.27	0.38	0.38	0.23	0.65
v/c Ratio	0.65	1.14	1.00	0.72	0.86	0.41
Control Delay	47.1	113.9	62.5	15.8	75.4	9.8
Queue Delay	61.5	5.7	36.2	0.0	0.2	0.2
Total Delay	108.6	119.7	98.7	15.8	75.6	10.1
LOS	F	F	F	B	E	B
Approach Delay		116.0	73.3			28.1
Approach LOS		F	E			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.14

Intersection Signal Delay: 68.3

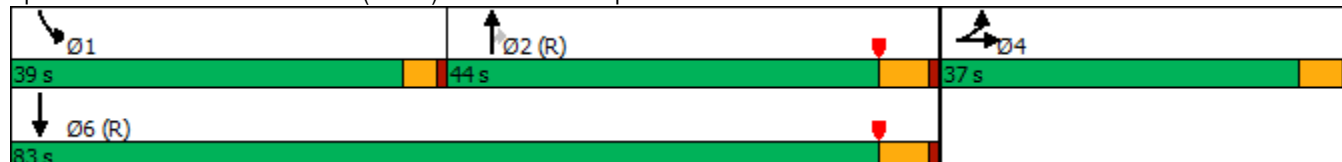
Intersection LOS: E

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary

11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	0	528	0	0	0	0	1263	560	332	878	0
Future Volume (veh/h)	306	0	528	0	0	0	0	1263	560	332	878	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	326	0	453				0	1344	480	353	934	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	475	0	423				0	1430	619	374	2295	0
Arrive On Green	0.27	0.00	0.27				0.00	0.40	0.40	0.42	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1539	1781	3647	0
Grp Volume(v), veh/h	326	0	453				0	1344	480	353	934	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1539	1781	1777	0
Q Serve(g_s), s	19.7	0.0	32.0				0.0	43.6	32.5	22.8	0.0	0.0
Cycle Q Clear(g_c), s	19.7	0.0	32.0				0.0	43.6	32.5	22.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	475	0	423				0	1430	619	374	2295	0
V/C Ratio(X)	0.69	0.00	1.07				0.00	0.94	0.78	0.94	0.41	0.00
Avail Cap(c_a), veh/h	475	0	423				0	1430	619	520	2295	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.69	0.69	0.52	0.52	0.00
Uniform Delay (d), s/veh	39.5	0.0	44.0				0.0	34.5	31.2	34.1	0.0	0.0
Incr Delay (d2), s/veh	3.4	0.0	64.2				0.0	10.0	6.5	11.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.0	19.6				0.0	19.9	12.7	8.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.9	0.0	108.2				0.0	44.4	37.7	45.7	0.3	0.0
LnGrp LOS	D	A	F				A	D	D	D	A	A
Approach Vol, veh/h	779						1824			1287		
Approach Delay, s/veh	80.9						42.6			12.7		
Approach LOS	F						D			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	29.2	53.8	37.0		83.0							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	35.0	38.5	32.0		77.5							
Max Q Clear Time (g_c+I1), s	24.8	45.6	34.0		2.0							
Green Ext Time (p_c), s	0.4	0.0	0.0		12.1							
Intersection Summary												
HCM 6th Ctrl Delay			40.4									
HCM 6th LOS			D									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	85	138	71	167	107	1480	57	148	1089	93
Future Volume (vph)	85	138	71	167	107	1480	57	148	1089	93
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	23.0	38.0	19.0	34.0	22.0	43.0	43.0	20.0	41.0	41.0
Total Split (%)	19.2%	31.7%	15.8%	28.3%	18.3%	35.8%	35.8%	16.7%	34.2%	34.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	9.6	13.7	8.8	13.0	10.9	38.9	38.9	9.2	40.0	40.0
Actuated g/C Ratio	0.11	0.15	0.10	0.15	0.12	0.44	0.44	0.10	0.45	0.45
v/c Ratio	0.53	0.47	0.49	0.57	0.59	0.68	0.09	0.51	0.49	0.14
Control Delay	52.1	20.4	51.9	21.9	52.3	24.3	1.0	46.3	22.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.1	20.4	51.9	21.9	52.3	24.3	1.0	46.3	22.1	4.9
LOS	D	C	D	C	D	C	A	D	C	A
Approach Delay		27.9		27.2		25.3			23.6	
Approach LOS		C		C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 89.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 25.2

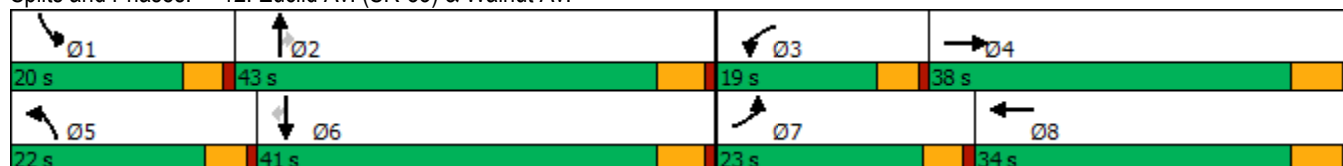
Intersection LOS: C

Intersection Capacity Utilization 68.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	138	135	71	167	166	107	1480	57	148	1089	93
Future Volume (veh/h)	85	138	135	71	167	166	107	1480	57	148	1089	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1575	1772	1772
Adj Flow Rate, veh/h	90	147	106	76	178	142	114	1574	45	157	1159	60
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	309	208	94	273	203	141	2442	680	226	2372	662
Arrive On Green	0.07	0.16	0.16	0.06	0.15	0.15	0.09	0.46	0.46	0.08	0.45	0.45
Sat Flow, veh/h	1594	1972	1324	1594	1874	1396	1594	5316	1481	3000	5316	1483
Grp Volume(v), veh/h	90	131	122	76	168	152	114	1574	45	157	1159	60
Grp Sat Flow(s),veh/h/ln	1594	1772	1525	1594	1772	1498	1594	1772	1481	1500	1772	1483
Q Serve(g_s), s	4.6	5.5	6.0	3.9	7.3	7.9	5.7	18.6	1.4	4.2	12.6	1.9
Cycle Q Clear(g_c), s	4.6	5.5	6.0	3.9	7.3	7.9	5.7	18.6	1.4	4.2	12.6	1.9
Prop In Lane	1.00		0.87	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	112	278	239	94	258	218	141	2442	680	226	2372	662
V/C Ratio(X)	0.80	0.47	0.51	0.80	0.65	0.70	0.81	0.64	0.07	0.69	0.49	0.09
Avail Cap(c_a), veh/h	358	697	600	280	611	516	339	2442	680	565	2372	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	31.4	31.6	38.0	33.0	33.3	36.6	17.0	12.3	36.9	16.0	13.1
Incr Delay (d2), s/veh	4.9	1.2	1.7	5.9	2.8	4.0	4.1	1.3	0.2	1.4	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.3	2.2	1.6	3.1	2.9	2.3	7.0	0.4	1.5	4.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.4	32.7	33.3	43.9	35.8	37.3	40.7	18.3	12.5	38.4	16.8	13.3
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h	343			396			1733			1376		
Approach Delay, s/veh	35.5			37.9			19.6			19.1		
Approach LOS	D			D			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	43.0	9.4	18.6	11.8	41.9	10.4	17.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	15.4	37.6	14.4	32.2	17.4	35.6	18.4	28.2				
Max Q Clear Time (g_c+I1), s	6.2	20.6	5.9	8.0	7.7	14.6	6.6	9.9				
Green Ext Time (p_c), s	0.2	10.1	0.0	1.3	0.1	8.3	0.1	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	22.7											
HCM 6th LOS	C											

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	128	223	150	333	154	141	1200	158	149	877	137
Future Volume (vph)	128	223	150	333	154	141	1200	158	149	877	137
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	23.0	36.2	36.2	16.0	35.6	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.0	23.5	14.1	24.6	24.6	11.7	32.3	32.3	14.5	34.0	49.0
Actuated g/C Ratio	0.12	0.22	0.13	0.23	0.23	0.11	0.31	0.31	0.14	0.32	0.47
v/c Ratio	0.68	0.81	0.73	0.44	0.34	0.83	1.20	0.29	0.71	0.84	0.18
Control Delay	63.9	55.0	66.4	37.0	7.7	84.8	134.9	8.4	63.3	42.1	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.9	55.0	66.4	37.0	7.7	84.8	134.9	8.4	63.3	42.1	3.0
LOS	E	D	E	D	A	F	F	A	E	D	A
Approach Delay		57.6		36.8			116.8			40.2	
Approach LOS		E		D			F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105.3

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.20

Intersection Signal Delay: 72.4

Intersection LOS: E

Intersection Capacity Utilization 88.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
25.2 s	35.6 s	23 s	36.2 s
			
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary

13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	223	82	150	333	154	141	1200	158	149	877	137
Future Volume (veh/h)	128	223	82	150	333	154	141	1200	158	149	877	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	132	230	55	155	343	98	145	1237	112	154	904	92
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	272	65	185	717	316	173	1122	501	184	1146	655
Arrive On Green	0.10	0.20	0.20	0.12	0.21	0.21	0.11	0.33	0.33	0.12	0.34	0.34
Sat Flow, veh/h	1594	1377	329	1594	3367	1482	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	132	0	285	155	343	98	145	1237	112	154	904	92
Grp Sat Flow(s),veh/h/ln	1594	0	1706	1594	1683	1482	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	7.4	0.0	14.6	8.6	8.1	5.0	8.1	30.2	4.9	8.6	21.9	3.4
Cycle Q Clear(g_c), s	7.4	0.0	14.6	8.6	8.1	5.0	8.1	30.2	4.9	8.6	21.9	3.4
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	337	185	717	316	173	1122	501	184	1146	655
V/C Ratio(X)	0.82	0.00	0.85	0.84	0.48	0.31	0.84	1.10	0.22	0.84	0.79	0.14
Avail Cap(c_a), veh/h	324	0	572	324	1130	497	201	1122	501	362	1424	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	0.0	35.0	39.2	31.2	30.0	39.6	30.2	21.7	39.2	26.9	15.1
Incr Delay (d2), s/veh	4.0	0.0	5.9	3.8	0.5	0.6	20.5	59.3	0.2	3.8	2.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	6.2	3.4	3.1	1.8	3.9	20.0	1.6	3.4	8.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	0.0	40.9	43.0	31.7	30.6	60.1	89.5	22.0	43.0	29.4	15.2
LnGrp LOS	D	A	D	D	C	C	E	F	C	D	C	B
Approach Vol, veh/h		417			596			1494			1150	
Approach Delay, s/veh		41.8			34.5			81.6			30.1	
Approach LOS		D			C			F			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	36.7	15.1	23.7	14.4	37.3	13.7	25.1				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+I1), s	10.6	32.2	10.6	16.6	10.1	23.9	9.4	10.1				
Green Ext Time (p_c), s	0.1	0.0	0.1	1.2	0.0	5.4	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			53.2									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	75	65	43	122	93	42	1360	123	52	967	72
Future Volume (vph)	75	65	43	122	93	42	1360	123	52	967	72
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	49.0	49.0	49.0	49.0	49.0	13.0	52.0	52.0	19.0	58.0	58.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	10.8%	43.3%	43.3%	15.8%	48.3%	48.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	23.9	23.9	23.9		23.9	6.9	51.6	51.6	7.9	53.5	53.5
Actuated g/C Ratio	0.25	0.25	0.25		0.25	0.07	0.53	0.53	0.08	0.55	0.55
v/c Ratio	0.36	0.16	0.10		0.79	0.39	0.79	0.15	0.42	0.54	0.09
Control Delay	35.6	29.5	0.4		49.4	57.1	25.5	5.1	55.6	17.9	4.3
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	29.5	0.4		49.4	57.1	25.5	5.1	55.6	17.9	4.3
LOS	D	C	A		D	E	C	A	E	B	A
Approach Delay		25.2			49.4		24.8			18.8	
Approach LOS		C			D		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 96.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 24.8

Intersection LOS: C

Intersection Capacity Utilization 79.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

 Ø1	 Ø2	 Ø4
19 s	52 s	49 s
 Ø5	 Ø6	 Ø8
13 s	58 s	49 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	65	43	122	93	55	42	1360	123	52	967	72
Future Volume (veh/h)	75	65	43	122	93	55	42	1360	123	52	967	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	78	68	26	127	97	47	44	1417	102	54	1007	64
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	409	347	191	125	54	58	1839	820	66	1857	817
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.55	0.55	0.04	0.55	0.55
Sat Flow, veh/h	1113	1772	1502	581	542	236	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	78	68	26	271	0	0	44	1417	102	54	1007	64
Grp Sat Flow(s),veh/h/ln	1113	1772	1502	1359	0	0	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	0.0	2.9	1.3	15.2	0.0	0.0	2.6	30.8	3.1	3.1	17.9	1.9
Cycle Q Clear(g_c), s	7.6	2.9	1.3	18.1	0.0	0.0	2.6	30.8	3.1	3.1	17.9	1.9
Prop In Lane	1.00		1.00	0.47		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	409	347	371	0	0	58	1839	820	66	1857	817
V/C Ratio(X)	0.28	0.17	0.07	0.73	0.00	0.00	0.76	0.77	0.12	0.81	0.54	0.08
Avail Cap(c_a), veh/h	535	820	695	702	0	0	143	1839	820	246	1857	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	28.7	28.1	35.0	0.0	0.0	44.6	16.6	10.3	44.4	13.4	9.8
Incr Delay (d2), s/veh	0.5	0.2	0.1	2.8	0.0	0.0	7.3	3.2	0.3	8.6	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.2	0.4	5.9	0.0	0.0	1.1	10.3	0.9	1.3	5.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.1	28.9	28.2	37.8	0.0	0.0	51.9	19.8	10.6	53.0	14.5	10.0
LnGrp LOS	C	C	C	D	A	A	D	B	B	D	B	A
Approach Vol, veh/h	172				271				1563			
Approach Delay, s/veh	29.8				37.8				20.1			
Approach LOS	C				D				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	57.5		27.4	8.0	58.0		27.4				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	14.4	* 47		43.2	8.4	51.5		43.2				
Max Q Clear Time (g_c+I1), s	5.1	32.8		9.6	4.6	19.9		20.1				
Green Ext Time (p_c), s	0.0	7.9		0.7	0.0	7.3		1.5				

Intersection Summary

HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗	↗	↗
Traffic Vol, veh/h	0	9	0	1525	1078	10
Future Vol, veh/h	0	9	0	1525	1078	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	0	1658	1172	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	586	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	454	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	454	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	13.1	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 454		-	-		
HCM Lane V/C Ratio	- 0.022		-	-		
HCM Control Delay (s)	- 13.1		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 0.1		-	-		

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	93	0	1525	963	125
Future Vol, veh/h	0	93	0	1525	963	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	101	0	1658	1047	136
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	524	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	498	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	498	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	14.1	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 498		-	-		
HCM Lane V/C Ratio	- 0.203		-	-		
HCM Control Delay (s)	- 14.1		-	-		
HCM Lane LOS	- B		-	-		
HCM 95th %tile Q(veh)	- 0.8		-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	373	88	99	17	63	250	1107	12	44	879	132
Future Volume (vph)	373	88	99	17	63	250	1107	12	44	879	132
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	42.0	42.0	10.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.0%	35.0%	8.3%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.7	33.3	33.3	10.1	13.0	10.6	38.7	38.7	6.2	32.4	32.4
Actuated g/C Ratio	0.22	0.34	0.34	0.10	0.13	0.11	0.40	0.40	0.06	0.33	0.33
v/c Ratio	1.11	0.15	0.18	0.11	0.43	1.52	0.87	0.02	0.46	0.83	0.23
Control Delay	118.0	24.5	3.7	46.1	33.7	294.3	37.9	0.1	63.0	39.1	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.0	24.5	3.7	46.1	33.7	294.3	37.9	0.1	63.0	39.1	4.1
LOS	F	C	A	D	C	F	D	A	E	D	A
Approach Delay		83.1			35.5		84.3			35.7	
Approach LOS		F			D		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 97.9

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.52

Intersection Signal Delay: 65.7

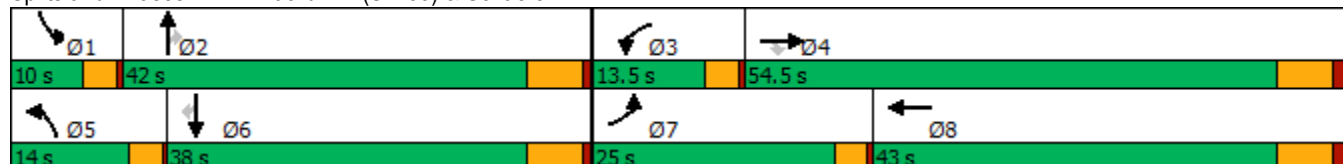
Intersection LOS: E

Intersection Capacity Utilization 85.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	373	88	99	17	63	37	250	1107	12	44	879	132
Future Volume (veh/h)	373	88	99	17	63	37	250	1107	12	44	879	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	389	92	51	18	66	17	260	1153	11	46	916	99
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	395	512	433	65	111	28	193	1351	602	62	1073	472
Arrive On Green	0.25	0.29	0.29	0.04	0.08	0.08	0.12	0.40	0.40	0.04	0.32	0.32
Sat Flow, veh/h	1594	1772	1499	1594	1359	350	1594	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	389	92	51	18	0	83	260	1153	11	46	916	99
Grp Sat Flow(s),veh/h/ln	1594	1772	1499	1594	0	1709	1594	1683	1502	1594	1683	1482
Q Serve(g_s), s	21.0	3.4	2.2	0.9	0.0	4.1	10.5	27.0	0.4	2.5	22.1	4.2
Cycle Q Clear(g_c), s	21.0	3.4	2.2	0.9	0.0	4.1	10.5	27.0	0.4	2.5	22.1	4.2
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	395	512	433	65	0	139	193	1351	602	62	1073	472
V/C Ratio(X)	0.98	0.18	0.12	0.28	0.00	0.60	1.35	0.85	0.02	0.75	0.85	0.21
Avail Cap(c_a), veh/h	395	971	821	184	0	710	193	1398	624	120	1243	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	23.1	22.7	40.3	0.0	38.4	38.1	23.6	15.7	41.2	27.6	21.6
Incr Delay (d2), s/veh	40.8	0.1	0.1	0.9	0.0	3.0	186.3	5.2	0.0	6.6	5.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	1.3	0.7	0.4	0.0	1.7	13.8	10.1	0.1	1.0	8.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	23.2	22.8	41.2	0.0	41.5	224.4	28.9	15.7	47.8	33.0	21.8
LnGrp LOS	E	C	C	D	A	D	F	C	B	D	C	C
Approach Vol, veh/h		532			101			1424			1061	
Approach Delay, s/veh		59.7			41.4			64.5			32.6	
Approach LOS		E			D			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.8	40.8	7.0	32.0	14.0	33.6	25.0	14.1				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	36.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	4.5	29.0	2.9	5.4	12.5	24.1	23.0	6.1				
Green Ext Time (p_c), s	0.0	3.8	0.0	0.5	0.0	3.5	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			52.0									
HCM 6th LOS			D									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	116	204	105	58	362	156	1042	40	142	797	96
Future Volume (vph)	116	204	105	58	362	156	1042	40	142	797	96
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	55.0	55.0	55.0	55.0	55.0	14.0	47.0	47.0	18.0	51.0	51.0
Total Split (%)	45.8%	45.8%	45.8%	45.8%	45.8%	11.7%	39.2%	39.2%	15.0%	42.5%	42.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	41.7	41.7	41.7	41.7	41.7	9.4	38.9	38.9	12.9	42.4	42.4
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.09	0.35	0.35	0.12	0.38	0.38
v/c Ratio	1.14	0.31	0.17	0.16	0.91	0.65	0.91	0.07	0.79	0.64	0.16
Control Delay	165.1	26.1	5.0	24.7	50.7	64.4	47.3	0.2	78.8	31.4	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	165.1	26.1	5.0	24.7	50.7	64.4	47.3	0.2	78.8	31.4	5.6
LOS	F	C	A	C	D	E	D	A	E	C	A
Approach Delay		59.0			48.3		47.9			35.5	
Approach LOS		E			D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 110.4

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.14

Intersection Signal Delay: 45.5

Intersection LOS: D

Intersection Capacity Utilization 99.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
18 s	47 s	55 s
		
Ø5	Ø6	Ø8
14 s	51 s	55 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	204	105	58	362	206	156	1042	40	142	797	96
Future Volume (veh/h)	116	204	105	58	362	206	156	1042	40	142	797	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	120	210	74	60	373	204	161	1074	27	146	822	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	728	617	387	443	242	208	1148	512	170	1266	557
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.07	0.34	0.34	0.11	0.38	0.38
Sat Flow, veh/h	748	1772	1501	979	1077	589	2910	3367	1502	1594	3367	1482
Grp Volume(v), veh/h	120	210	74	60	0	577	161	1074	27	146	822	61
Grp Sat Flow(s),veh/h/ln	748	1772	1501	979	0	1665	1455	1683	1502	1594	1683	1482
Q Serve(g_s), s	11.5	9.2	3.6	5.1	0.0	36.5	6.3	36.0	1.4	10.5	23.5	3.1
Cycle Q Clear(g_c), s	48.0	9.2	3.6	14.3	0.0	36.5	6.3	36.0	1.4	10.5	23.5	3.1
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	728	617	387	0	685	208	1148	512	170	1266	557
V/C Ratio(X)	0.88	0.29	0.12	0.16	0.00	0.84	0.77	0.94	0.05	0.86	0.65	0.11
Avail Cap(c_a), veh/h	136	728	617	387	0	685	262	1182	527	198	1297	571
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	23.0	21.3	27.8	0.0	31.0	53.3	37.2	25.8	51.3	30.1	23.7
Incr Delay (d2), s/veh	44.8	0.2	0.1	0.2	0.0	9.4	8.0	13.3	0.0	24.3	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	3.7	1.2	1.2	0.0	15.5	2.5	15.8	0.5	5.2	9.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.6	23.2	21.4	27.9	0.0	40.4	61.3	50.6	25.9	75.6	31.2	23.8
LnGrp LOS	F	C	C	C	A	D	E	D	C	E	C	C
Approach Vol, veh/h	404		637				1262				1029	
Approach Delay, s/veh	45.5		39.2				51.4				37.0	
Approach LOS	D		D				D				D	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	15.9	45.8	55.0		11.9	49.9	55.0					
Change Period (Y+Rc), s	3.5	6.0	7.0		3.5	6.0	7.0					
Max Green Setting (Gmax), s	14.5	41.0	48.0		10.5	45.0	48.0					
Max Q Clear Time (g_c+I1), s	12.5	38.0	50.0		8.3	25.5	38.5					
Green Ext Time (p_c), s	0.0	1.8	0.0		0.1	5.0	2.7					
Intersection Summary												
HCM 6th Ctrl Delay			43.9									
HCM 6th LOS			D									

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	38	51	115	14	67	111	1016	7	82	825	32
Future Volume (vph)	38	51	115	14	67	111	1016	7	82	825	32
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	48.0	48.0	48.0	48.0	48.0	23.0	60.0	60.0	12.0	49.0	49.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	19.2%	50.0%	50.0%	10.0%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	15.5	15.5	15.5	15.5	15.5	11.2	30.1	30.1	8.9	30.9	30.9
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.16	0.43	0.43	0.13	0.44	0.44
v/c Ratio	0.31	0.14	0.28	0.06	0.65	0.46	0.74	0.01	0.43	0.59	0.05
Control Delay	31.1	23.8	6.9	23.6	19.7	38.5	21.2	0.0	44.1	20.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	23.8	6.9	23.6	19.7	38.5	21.2	0.0	44.1	20.7	0.1
LOS	C	C	A	C	B	D	C	A	D	C	A
Approach Delay		15.7			19.9		22.8			22.0	
Approach LOS		B			B		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 70.1

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 21.6

Intersection LOS: C

Intersection Capacity Utilization 72.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
12 s	60 s	48 s
		
23 s	49 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/20/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	51	115	14	67	217	111	1016	7	82	825	32
Future Volume (veh/h)	38	51	115	14	67	217	111	1016	7	82	825	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	40	54	40	15	71	216	117	1069	7	86	868	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	444	376	391	97	294	147	1471	656	105	1383	608
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.09	0.44	0.44	0.07	0.41	0.41
Sat Flow, veh/h	977	1772	1502	1165	386	1174	1594	3367	1502	1594	3367	1481
Grp Volume(v), veh/h	40	54	40	15	0	287	117	1069	7	86	868	19
Grp Sat Flow(s),veh/h/ln	977	1772	1502	1165	0	1561	1594	1683	1502	1594	1683	1481
Q Serve(g_s), s	2.2	1.3	1.2	0.6	0.0	9.6	4.1	14.9	0.1	3.0	11.6	0.4
Cycle Q Clear(g_c), s	11.8	1.3	1.2	1.9	0.0	9.6	4.1	14.9	0.1	3.0	11.6	0.4
Prop In Lane	1.00		1.00	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	444	376	391	0	391	147	1471	656	105	1383	608
V/C Ratio(X)	0.19	0.12	0.11	0.04	0.00	0.73	0.79	0.73	0.01	0.82	0.63	0.03
Avail Cap(c_a), veh/h	705	1348	1142	985	0	1187	547	3218	1435	238	2566	1129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	16.5	16.4	17.2	0.0	19.5	25.3	13.2	9.0	26.2	13.3	10.0
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.0	2.0	7.1	0.7	0.0	10.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.3	0.1	0.0	3.1	1.6	3.9	0.0	1.3	3.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	16.5	16.5	17.2	0.0	21.6	32.3	13.9	9.1	36.9	13.8	10.0
LnGrp LOS	C	B	B	B	A	C	C	B	A	D	B	B
Approach Vol, veh/h	134			302			1193			973		
Approach Delay, s/veh	19.1			21.3			15.7			15.7		
Approach LOS	B			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	30.5		19.0	8.7	29.0		19.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	8.5	54.3		43.2	19.5	43.3		43.2				
Max Q Clear Time (g_c+I1), s	5.0	16.9		13.8	6.1	13.6		11.6				
Green Ext Time (p_c), s	0.0	7.9		0.4	0.1	5.8		1.4				
Intersection Summary												
HCM 6th Ctrl Delay	16.5											
HCM 6th LOS	B											

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	137	6	4	104	0	7	0	3	0	0	0
Future Vol, veh/h	0	137	6	4	104	0	7	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	149	7	4	113	0	8	0	3	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	113	0	0	156	0	0	274	274	153	275	277	113
Stage 1	-	-	-	-	-	-	153	153	-	121	121	-
Stage 2	-	-	-	-	-	-	121	121	-	154	156	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1476	-	-	1424	-	-	678	633	893	677	631	940
Stage 1	-	-	-	-	-	-	849	771	-	883	796	-
Stage 2	-	-	-	-	-	-	883	796	-	848	769	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1476	-	-	1424	-	-	677	631	893	673	629	940
Mov Cap-2 Maneuver	-	-	-	-	-	-	677	631	-	673	629	-
Stage 1	-	-	-	-	-	-	849	771	-	883	794	-
Stage 2	-	-	-	-	-	-	880	794	-	845	769	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			10			0		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	730	1476	-	-	1424	-	-	-
HCM Lane V/C Ratio	0.015	-	-	-	0.003	-	-	-
HCM Control Delay (s)	10	0	-	-	7.5	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

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APPENDIX 6.3: OPENING YEAR CUMULATIVE (2024) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Eucalyptus Av.**

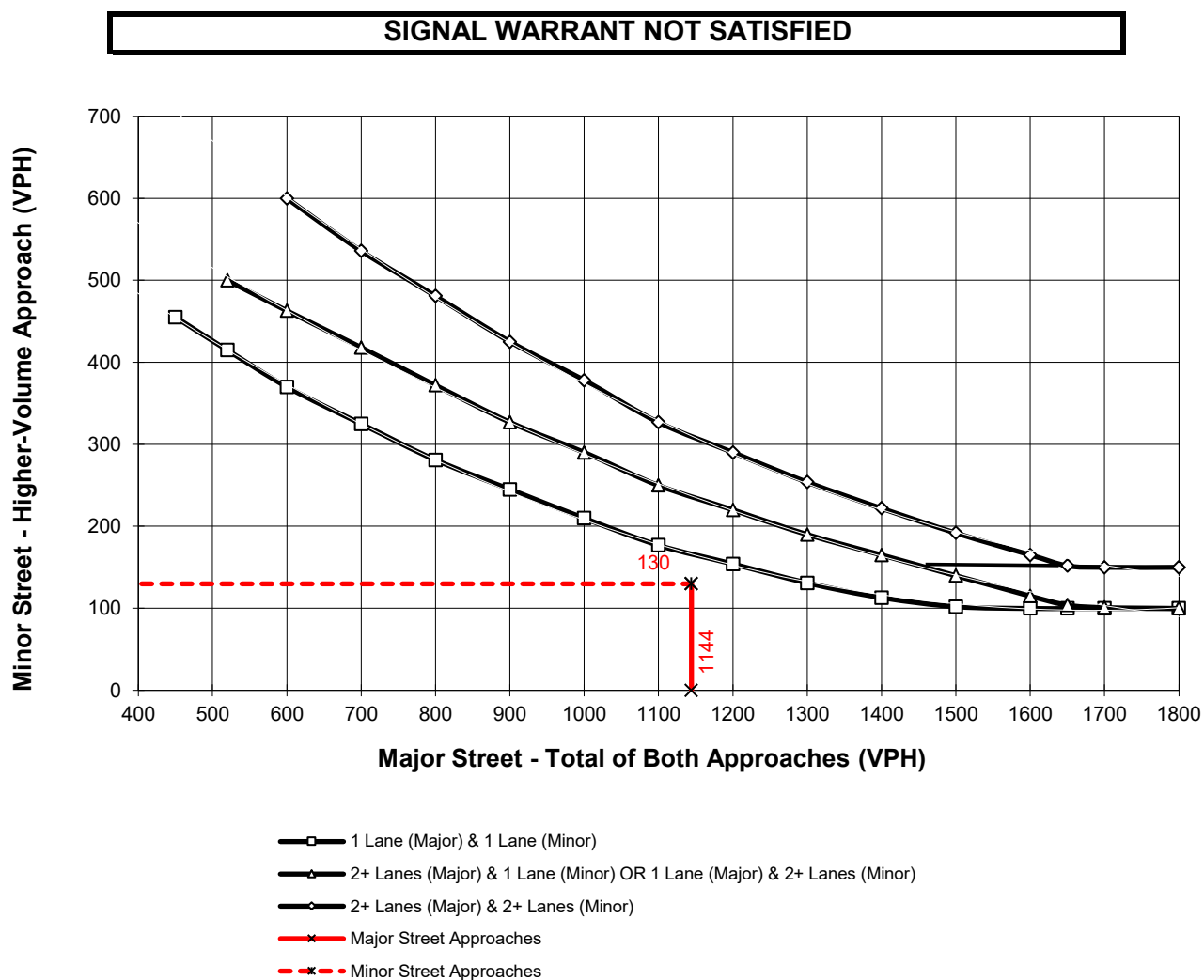
Total of Both Approaches (VPH) = **1144**

Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Fern Av.**

High Volume Approach (VPH) = **130**

Number of Approach Lanes On Minor Street = **2**



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

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	OYC NP
Jurisdiction: <u>City of Chino</u>				CHK	<u>CP</u>	DATE <u>10/23/23</u>
Major Street: <u>Schaefer Av.</u>						DATE <u>10/23/23</u>
Minor Street: <u>Sultana Av.</u>					Critical Approach Speed (Major)	<u>45</u> mph
					Critical Approach Speed (Minor)	<u>25</u> mph
Major Street Approach Lanes = <u>1</u> lane				Minor Street Approach Lanes: <u>1</u> lane		
Major Street Future ADT = <u>6,620</u> vpd				Minor Street Future ADT = <u>138</u> vpd		
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						☒
						or
In built up area of isolated community of < 10,000 population						☐

RURAL (R)**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u>		<u>RURAL</u>		Minimum Requirements			
		XX		EADT			
CONDITION A - Minimum Vehicular Volume				Vehicles Per Day on		Vehicles Per Day	
<u>Satisfied</u>		<u>Not Satisfied</u>		Major Street		on Higher-Volume	
		XX		(Total of Both Approaches)		Minor Street Approach	
Number of lanes for moving traffic on each approach						(One Direction Only)	
<u>Major Street</u>		<u>Minor Street</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 6,620		1 138		8,000	5,600 *	2,400	1,680
2 +		1		9,600	6,720	2,400	1,680
2 +		2 +		9,600	6,720	3,200	2,240
1		2 +		8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				Vehicles Per Day		Vehicles Per Day	
<u>Satisfied</u>		<u>Not Satisfied</u>		on Major Street		on Higher-Volume	
		XX		(Total of Both Approaches)		Minor Street Approach	
Number of lanes for moving traffic on each approach						(One Direction Only)	
<u>Major Street</u>		<u>Minor Street</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 6,620		1 138		12,000	8,400	1,200	850
2 +		1		14,400	10,080	1,200	850
2 +		2 +		14,400	10,080	1,600	1,120
1		2 +		12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>		<u>Not Satisfied</u>		80%		80%	
		XX					
No one condition satisfied, but following conditions fulfilled 80% of more							

APPENDIX 6.4: OPENING YEAR CUMULATIVE (2024) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Eucalyptus Av.**

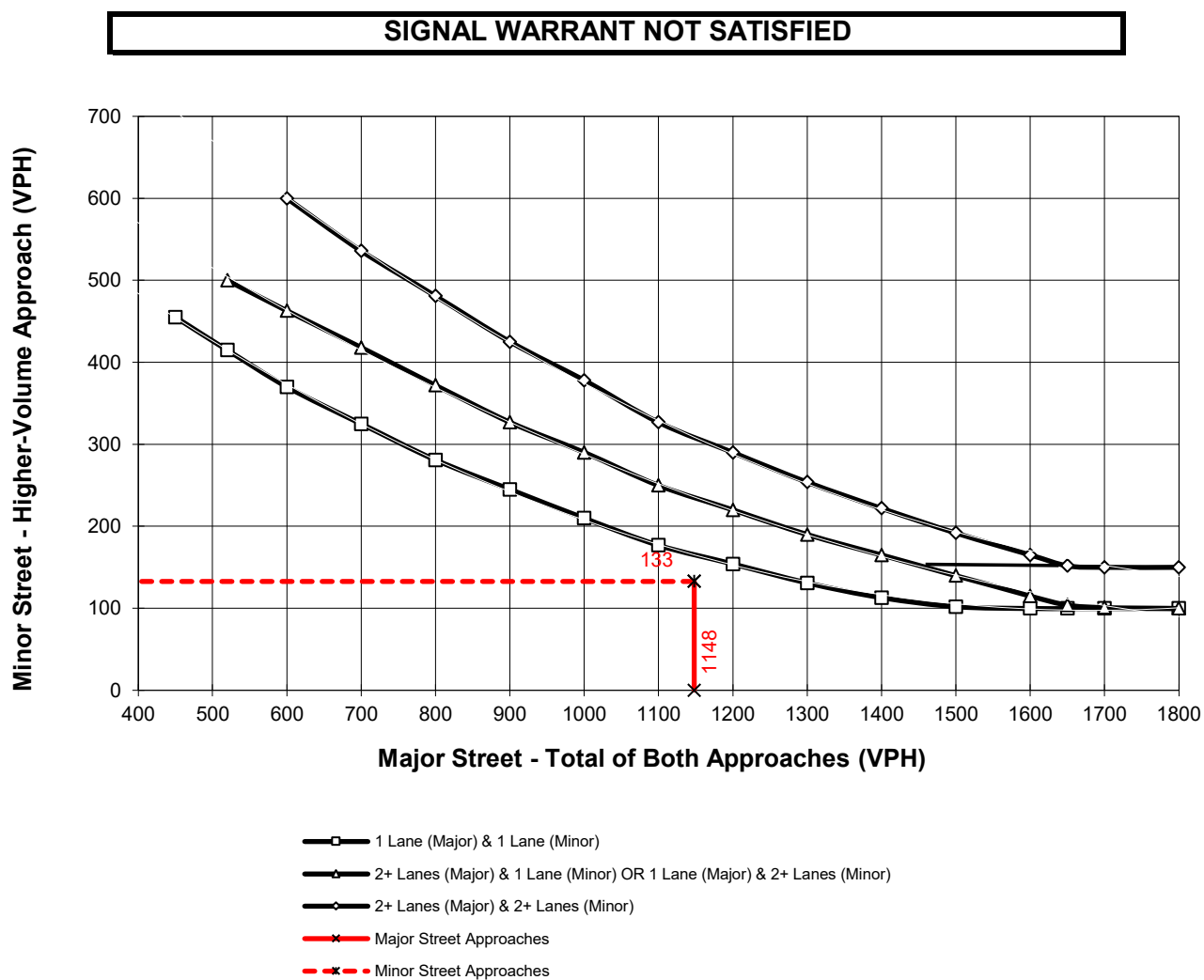
Total of Both Approaches (VPH) = **1148**

Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Fern Av.**

High Volume Approach (VPH) = **133**

Number of Approach Lanes On Minor Street = **2**



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

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	CALC	CP	OYC WP	DATE	10/23/23
Jurisdiction: <u>City of Chino</u>				CHK		DATE		10/23/23
Major Street: <u>Schaefer Av.</u>				Critical Approach Speed (Major)				45 mph
Minor Street: <u>Sultana Av.</u>				Critical Approach Speed (Minor)				25 mph
Major Street Approach Lanes =				1		lane		Minor Street Approach Lanes: 1 lane
Major Street Future ADT =				6,844		vpd		Minor Street Future ADT = 138 vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);							☒	RURAL (R)
In built up area of isolated community of < 10,000 population							☐	

(Based on Estimated Average Daily Traffic - See Note)

URBAN		RURAL		Minimum Requirements			
				EADT			
CONDITION A - Minimum Vehicular Volume							
<u>Satisfied</u>		<u>Not Satisfied</u>		Vehicles Per Day on		Vehicles Per Day	
				(Total of Both Approaches)		on Higher-Volume	
						Minor Street Approach	
						(One Direction Only)	
<u>Major Street</u>		<u>Minor Street</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1	6,844	1	138	8,000	5,600 *	2,400	1,680
2 +		1		9,600	6,720	2,400	1,680
2 +		2 +		9,600	6,720	3,200	2,240
1		2 +		8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic							
<u>Satisfied</u>		<u>Not Satisfied</u>		Vehicles Per Day		Vehicles Per Day	
				(Total of Both Approaches)		on Higher-Volume	
						Minor Street Approach	
						(One Direction Only)	
<u>Major Street</u>		<u>Minor Street</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1	6,844	1	138	12,000	8,400	1,200	850
2 +		1		14,400	10,080	1,200	850
2 +		2 +		14,400	10,080	1,600	1,120
1		2 +		12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B							
<u>Satisfied</u>		<u>Not Satisfied</u>					
No one condition satisfied, but following conditions				2 CONDITIONS		2 CONDITIONS	
fulfilled 80% of more				80%		80%	

APPENDIX 6.5: OPENING YEAR CUMULATIVE (2024) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/20/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	306	298	275	499	726	868	458
v/c Ratio	0.86	0.87	0.52	0.93	0.29	0.68	0.53
Control Delay	68.0	67.7	8.8	75.3	7.3	36.1	4.9
Queue Delay	0.2	0.2	0.0	8.0	0.2	0.0	0.0
Total Delay	68.2	67.9	8.8	83.3	7.5	36.1	4.9
Queue Length 50th (ft)	236	230	5	416	98	300	0
Queue Length 95th (ft)	#364	#370	80	m#625	m166	374	71
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	406	390	565	535	2478	1287	867
Starvation Cap Reductn	0	0	0	28	868	0	0
Spillback Cap Reductn	4	4	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.77	0.49	0.98	0.45	0.67	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10/20/2023

11: Euclid Av. (SR-83) & SR-60 EB Ramps



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	311	868	878	589	366	1030
v/c Ratio	0.65	1.66	0.70	0.64	0.86	0.46
Control Delay	45.5	329.9	37.9	6.1	75.7	12.8
Queue Delay	8.9	2.6	0.0	0.0	0.3	0.3
Total Delay	54.3	332.6	37.9	6.1	76.0	13.1
Queue Length 50th (ft)	226	~969	302	0	305	188
Queue Length 95th (ft)	334	#1231	412	95	m403	218
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	480	524	1249	923	531	2256
Starvation Cap Reductn	0	0	0	0	17	554
Spillback Cap Reductn	133	133	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.90	2.22	0.70	0.64	0.71	0.61

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/20/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	307	299	284	773	968	798	524
v/c Ratio	0.83	0.82	0.64	1.32	0.40	0.70	0.61
Control Delay	62.6	56.9	25.5	195.0	8.4	38.8	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	62.6	56.9	25.5	195.0	8.7	38.8	5.6
Queue Length 50th (ft)	238	217	98	~839	135	274	0
Queue Length 95th (ft)	330	315	186	m#976	m143	338	76
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	462	447	520	585	2447	1253	899
Starvation Cap Reductn	0	0	0	0	778	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.67	0.55	1.32	0.58	0.64	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/20/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	266	500	1460	583	317	967
v/c Ratio	0.63	1.00	0.99	0.67	0.85	0.41
Control Delay	48.0	71.9	56.4	13.7	72.1	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	48.0	71.9	56.4	13.7	72.1	11.0
Queue Length 50th (ft)	193	~303	585	111	264	170
Queue Length 95th (ft)	293	#546	#833	272	358	201
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	420	499	1476	870	472	2344
Starvation Cap Reductn	0	0	0	0	0	620
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.00	0.99	0.67	0.67	0.56

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	256	244	233	753	834	865	446
v/c Ratio	0.84	0.74	0.51	1.16	0.32	0.75	0.55
Control Delay	69.8	46.8	9.6	130.5	6.9	40.5	5.3
Queue Delay	0.0	0.1	0.0	1.2	0.3	0.0	0.0
Total Delay	69.8	46.8	9.6	131.7	7.2	40.5	5.3
Queue Length 50th (ft)	200	142	3	~762	113	303	0
Queue Length 95th (ft)	294	240	74	m#878	m137	378	70
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	364	379	504	648	2583	1223	839
Starvation Cap Reductn	0	0	0	99	1020	0	0
Spillback Cap Reductn	0	2	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.65	0.46	1.37	0.53	0.71	0.53

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/20/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	293	567	1293	567	353	879
v/c Ratio	0.65	1.06	0.96	0.69	0.86	0.38
Control Delay	47.1	83.9	54.4	14.1	76.7	9.2
Queue Delay	61.5	21.8	42.4	0.0	0.2	0.2
Total Delay	108.6	105.7	96.8	14.1	77.0	9.5
Queue Length 50th (ft)	212	~389	513	97	293	124
Queue Length 95th (ft)	316	#626	#752	262	391	154
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	448	537	1344	826	516	2285
Starvation Cap Reductn	0	0	0	0	12	615
Spillback Cap Reductn	224	230	170	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.31	1.85	1.10	0.69	0.70	0.53

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

APPENDIX 6.6: OPENING YEAR CUMULATIVE (2024) WITH PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	315	306	282	522	744	890	458
v/c Ratio	0.87	0.88	0.54	0.94	0.30	0.73	0.54
Control Delay	68.8	68.8	10.4	76.4	7.5	38.4	5.1
Queue Delay	0.2	0.3	0.0	5.7	0.2	0.0	0.0
Total Delay	69.0	69.0	10.4	82.1	7.7	38.4	5.1
Queue Length 50th (ft)	243	238	15	~450	98	311	0
Queue Length 95th (ft)	#382	#387	96	m#664	m167	386	71
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	406	390	558	555	2465	1253	856
Starvation Cap Reductn	0	0	0	21	857	0	0
Spillback Cap Reductn	4	4	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.79	0.51	0.98	0.46	0.71	0.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10/20/2023

11: Euclid Av. (SR-83) & SR-60 EB Ramps



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	311	891	920	614	366	1075
v/c Ratio	0.65	1.74	0.73	0.66	0.86	0.48
Control Delay	45.8	366.2	38.7	6.7	73.4	13.0
Queue Delay	18.3	3.3	0.0	0.0	0.3	0.3
Total Delay	64.1	369.5	38.8	6.7	73.7	13.3
Queue Length 50th (ft)	226	~1024	321	6	305	199
Queue Length 95th (ft)	334	#1288	436	111	m399	234
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	477	512	1256	933	531	2256
Starvation Cap Reductn	0	0	0	0	17	547
Spillback Cap Reductn	155	153	6	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.97	2.48	0.74	0.66	0.71	0.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/20/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	317	308	288	789	983	816	524
v/c Ratio	0.84	0.83	0.64	1.38	0.40	0.71	0.60
Control Delay	63.1	58.3	26.6	217.7	8.6	38.9	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	63.1	58.3	26.6	217.7	8.9	38.9	5.6
Queue Length 50th (ft)	246	226	105	~881	134	280	0
Queue Length 95th (ft)	341	328	195	m#978	m141	347	76
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	462	446	517	573	2431	1253	899
Starvation Cap Reductn	0	0	0	0	760	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.69	0.56	1.38	0.59	0.65	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/20/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	266	520	1491	602	317	1009
v/c Ratio	0.63	1.06	1.01	0.69	0.85	0.43
Control Delay	48.0	90.1	61.4	14.6	71.0	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	48.0	90.1	61.4	14.6	71.0	11.2
Queue Length 50th (ft)	193	~371	~644	124	264	181
Queue Length 95th (ft)	293	#601	#860	294	358	213
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	420	489	1476	873	472	2344
Starvation Cap Reductn	0	0	0	0	0	614
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	1.06	1.01	0.69	0.67	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/20/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	266	255	241	779	858	890	446
v/c Ratio	0.85	0.78	0.53	1.22	0.33	0.77	0.54
Control Delay	70.6	53.6	11.7	154.2	7.2	41.0	5.3
Queue Delay	0.0	0.0	0.0	1.1	0.3	0.0	0.0
Total Delay	70.6	53.6	11.7	155.3	7.5	41.0	5.3
Queue Length 50th (ft)	207	163	15	~817	122	315	0
Queue Length 95th (ft)	#322	267	91	m#879	m135	392	70
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	364	369	496	637	2568	1223	839
Starvation Cap Reductn	0	0	0	89	1003	0	0
Spillback Cap Reductn	0	1	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.69	0.49	1.42	0.55	0.73	0.53

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/20/2023



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	293	595	1344	596	353	934
v/c Ratio	0.65	1.14	1.00	0.72	0.86	0.41
Control Delay	47.1	113.9	62.5	15.8	75.4	9.8
Queue Delay	61.5	5.7	36.2	0.0	0.2	0.2
Total Delay	108.6	119.7	98.7	15.8	75.6	10.1
Queue Length 50th (ft)	212	~464	~555	118	293	137
Queue Length 95th (ft)	316	#704	#796	297	391	174
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	448	522	1344	829	516	2285
Starvation Cap Reductn	0	0	0	0	12	603
Spillback Cap Reductn	224	228	180	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.31	2.02	1.15	0.72	0.70	0.56

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

**APPENDIX 6.7: OPENING YEAR CUMULATIVE (2024) WITHOUT
PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS
WORKSHEETS WITH IMPROVEMENTS**

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Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	512	3	338	484	704	842	444
Future Volume (vph)	512	3	338	484	704	842	444
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	40.0	40.0	40.0	31.0	80.0	49.0	49.0
Total Split (%)	33.3%	33.3%	33.3%	25.8%	66.7%	40.8%	40.8%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	27.0	27.0	27.0	21.6	82.5	56.4	56.4
Actuated g/C Ratio	0.22	0.22	0.22	0.18	0.69	0.47	0.47
v/c Ratio	0.81	0.82	0.53	0.81	0.30	0.52	0.46
Control Delay	60.2	59.3	10.8	65.5	6.6	25.7	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	60.2	59.3	10.8	65.5	6.7	25.7	4.0
LOS	E	E	B	E	A	C	A
Approach Delay		44.4			30.7	18.2	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 29.4

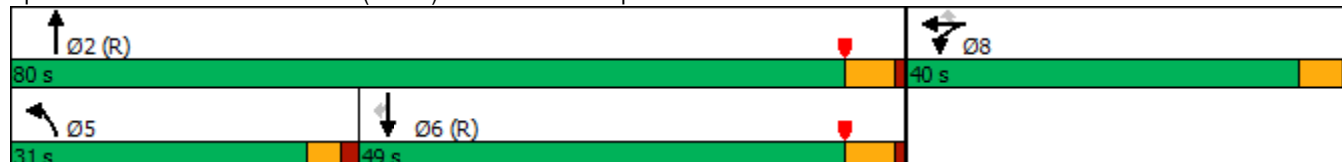
Intersection LOS: C

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary 10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	512	3	338	484	704	0	0	842	444
Future Volume (veh/h)	0	0	0	512	3	338	484	704	0	0	842	444
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				584	0	118	499	726	0	0	868	302
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				663	0	295	554	2582	0	0	1879	838
Arrive On Green				0.19	0.00	0.19	0.32	1.00	0.00	0.00	0.53	0.53
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				584	0	118	499	726	0	0	868	302
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1777	1585
Q Serve(g_s), s				19.2	0.0	7.9	16.6	0.0	0.0	0.0	18.3	13.3
Cycle Q Clear(g_c), s				19.2	0.0	7.9	16.6	0.0	0.0	0.0	18.3	13.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				663	0	295	554	2582	0	0	1879	838
V/C Ratio(X)				0.88	0.00	0.40	0.90	0.28	0.00	0.00	0.46	0.36
Avail Cap(c_a), veh/h				1039	0	462	763	2582	0	0	1879	838
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.79	0.79	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.6	0.0	43.0	39.9	0.0	0.0	0.0	17.6	16.5
Incr Delay (d2), s/veh				3.7	0.0	0.3	7.3	0.2	0.0	0.0	0.8	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.6	0.0	3.0	6.2	0.1	0.0	0.0	7.3	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.2	0.0	43.3	47.1	0.2	0.0	0.0	18.5	17.7
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					702			1225			1170	
Approach Delay, s/veh					49.9			19.3			18.2	
Approach LOS					D			B			B	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	92.7			23.7			68.9			27.3		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	74.5			26.5			43.5			35.0		
Max Q Clear Time (g_c+I1), s	2.0			18.6			20.3			21.2		
Green Ext Time (p_c), s	8.4			0.7			10.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	25.8											
HCM 6th LOS	C											

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	336	0	808	852	571	355	999
Future Volume (vph)	336	0	808	852	571	355	999
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	50.0	50.0	50.0	49.0	49.0	21.0	70.0
Total Split (%)	41.7%	41.7%	41.7%	40.8%	40.8%	17.5%	58.3%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	36.1	36.1	36.1	53.2	53.2	16.2	73.4
Actuated g/C Ratio	0.30	0.30	0.30	0.44	0.44	0.14	0.61
v/c Ratio	0.62	0.88	0.85	0.56	0.58	0.79	0.48
Control Delay	40.4	50.2	46.4	28.4	4.7	74.6	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	40.4	50.2	46.4	28.4	4.7	74.6	14.3
LOS	D	D	D	C	A	E	B
Approach Delay		46.2		18.9			30.1
Approach LOS		D		B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 30.7

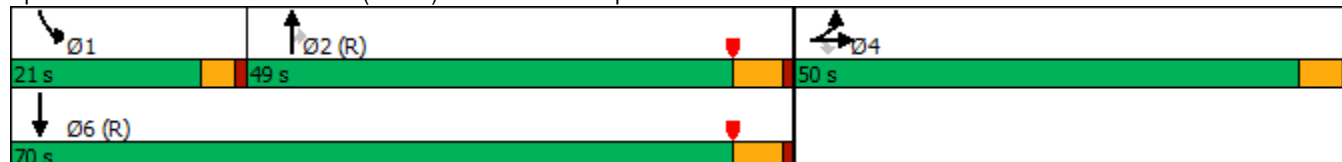
Intersection LOS: C

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	0	808	0	0	0	0	852	571	355	999	0
Future Volume (veh/h)	336	0	808	0	0	0	0	852	571	355	999	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	231	0	852				0	878	423	366	1030	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	523	0	930				0	1653	727	416	2200	0
Arrive On Green	0.29	0.00	0.29				0.00	0.47	0.47	0.24	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	3647	1563	3456	3647	0
Grp Volume(v), veh/h	231	0	852				0	878	423	366	1030	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1563	1728	1777	0
Q Serve(g_s), s	12.6	0.0	31.2				0.0	21.1	23.8	12.2	0.0	0.0
Cycle Q Clear(g_c), s	12.6	0.0	31.2				0.0	21.1	23.8	12.2	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	523	0	930				0	1653	727	416	2200	0
V/C Ratio(X)	0.44	0.00	0.92				0.00	0.53	0.58	0.88	0.47	0.00
Avail Cap(c_a), veh/h	668	0	1189				0	1653	727	490	2200	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.78	0.78	0.77	0.77	0.00
Uniform Delay (d), s/veh	34.4	0.0	41.0				0.0	22.8	23.5	44.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	8.3				0.0	1.0	2.7	10.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	12.7				0.0	8.7	8.9	5.1	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	49.2				0.0	23.7	26.2	55.5	0.6	0.0
LnGrp LOS	C	A	D				A	C	C	E	A	A
Approach Vol, veh/h	1083						1301			1396		
Approach Delay, s/veh	46.1						24.5			15.0		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	18.5	61.3	40.2		79.8							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	17.0	43.5	45.0		64.5							
Max Q Clear Time (g_c+I1), s	14.2	25.8	33.2		2.0							
Green Ext Time (p_c), s	0.2	9.6	2.0		13.8							
Intersection Summary												
HCM 6th Ctrl Delay			27.2									
HCM 6th LOS			C									
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		 			 			  		  	
Traffic Volume (vph)	137	308	123	182	475	92	78	983	148	1357	109
Future Volume (vph)	137	308	123	182	475	92	78	983	148	1357	109
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	9.6	34.5	9.6
Total Split (s)	21.0	27.8	27.8	25.0	31.8	31.8	15.0	45.2	22.0	52.2	21.0
Total Split (%)	17.5%	23.2%	23.2%	20.8%	26.5%	26.5%	12.5%	37.7%	18.3%	43.5%	17.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	13.8	18.6	18.6	17.1	22.0	22.0	9.1	35.4	14.6	42.8	58.5
Actuated g/C Ratio	0.13	0.17	0.17	0.16	0.21	0.21	0.09	0.33	0.14	0.40	0.55
v/c Ratio	0.74	0.58	0.35	0.79	0.76	0.24	0.64	0.77	0.76	0.77	0.14
Control Delay	69.7	46.6	7.0	67.7	49.2	2.4	73.5	36.1	69.5	32.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	46.6	7.0	67.7	49.2	2.4	73.5	36.1	69.5	32.8	2.5
LOS	E	D	A	E	D	A	E	D	E	C	A
Approach Delay		43.7			48.0			38.5		34.1	
Approach LOS		D			D			D		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 39.2

Intersection LOS: D

Intersection Capacity Utilization 73.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

 Ø1	 Ø2	 Ø3	 Ø4
22 s	45.2 s	25 s	27.8 s
 Ø5	 Ø6	 Ø7	 Ø8
15 s	52.2 s	21 s	31.8 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			  			  	
Traffic Volume (veh/h)	137	308	123	182	475	92	78	983	127	148	1357	109
Future Volume (veh/h)	137	308	123	182	475	92	78	983	127	148	1357	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	151	338	111	200	522	43	86	1080	69	163	1491	56
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	549	241	231	656	292	107	1595	102	192	1921	765
Arrive On Green	0.11	0.16	0.16	0.14	0.19	0.19	0.07	0.34	0.34	0.12	0.40	0.40
Sat Flow, veh/h	1594	3367	1482	1594	3367	1499	1594	4647	297	1594	4837	1500
Grp Volume(v), veh/h	151	338	111	200	522	43	86	749	400	163	1491	56
Grp Sat Flow(s),veh/h/ln	1594	1683	1482	1594	1683	1499	1594	1612	1719	1594	1612	1500
Q Serve(g_s), s	8.7	8.8	6.4	11.6	13.9	2.2	5.0	18.7	18.8	9.4	25.3	1.8
Cycle Q Clear(g_c), s	8.7	8.8	6.4	11.6	13.9	2.2	5.0	18.7	18.8	9.4	25.3	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	180	549	241	231	656	292	107	1107	590	192	1921	765
V/C Ratio(X)	0.84	0.62	0.46	0.87	0.80	0.15	0.81	0.68	0.68	0.85	0.78	0.07
Avail Cap(c_a), veh/h	277	786	346	345	929	414	176	1363	726	294	2347	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	36.7	35.7	39.4	36.1	31.4	43.4	26.5	26.5	40.6	24.7	11.7
Incr Delay (d2), s/veh	7.7	1.1	1.4	9.9	3.2	0.2	5.4	1.0	1.9	8.3	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.5	2.3	4.9	5.7	0.8	2.0	6.6	7.2	4.0	9.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	37.8	37.0	49.3	39.3	31.7	48.7	27.5	28.3	48.8	26.1	11.8
LnGrp LOS	D	D	D	D	D	C	D	C	C	D	C	B
Approach Vol, veh/h	600		765				1235		1710			
Approach Delay, s/veh	40.4		41.5				29.2		27.8			
Approach LOS	D		D				C		C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	38.8	18.2	21.2	10.9	43.9	15.2	24.2				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	17.4	* 40	20.4	22.0	10.4	45.7	16.4	26.0				
Max Q Clear Time (g_c+I1), s	11.4	20.8	13.6	10.8	7.0	27.3	10.7	15.9				
Green Ext Time (p_c), s	0.1	6.5	0.1	1.8	0.0	10.1	0.1	2.3				

Intersection Summary

HCM 6th Ctrl Delay	32.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	57	131	58	107	194	37	1073	148	53	1549	72
Future Volume (vph)	57	131	58	107	194	37	1073	148	53	1549	72
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	38.0	38.0	38.0	38.0	38.0	14.0	65.0	65.0	17.0	68.0	68.0
Total Split (%)	31.7%	31.7%	31.7%	31.7%	31.7%	11.7%	54.2%	54.2%	14.2%	56.7%	56.7%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	20.3	20.3	20.3	20.3	20.3	7.0	62.0	62.0	8.1	63.9	63.9
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.07	0.60	0.60	0.08	0.62	0.62
v/c Ratio	0.51	0.39	0.17	0.54	0.75	0.37	0.39	0.17	0.44	0.54	0.08
Control Delay	54.7	40.2	6.8	48.4	52.1	59.4	13.3	7.5	59.7	14.5	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.7	40.2	6.8	48.4	52.1	59.4	13.3	7.5	59.7	14.5	3.4
LOS	D	D	A	D	D	E	B	A	E	B	A
Approach Delay		35.7			51.0		14.0			15.4	
Approach LOS		D			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 19.9

Intersection LOS: B

Intersection Capacity Utilization 77.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	65 s	38 s
		
Ø5	Ø6	Ø8
14 s	68 s	38 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	131	58	107	194	52	37	1073	148	53	1549	72
Future Volume (veh/h)	57	131	58	107	194	52	37	1073	148	53	1549	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	59	136	43	111	202	44	39	1118	124	55	1614	50
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	380	322	230	302	66	52	2808	872	68	2857	887
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.03	0.58	0.58	0.04	0.59	0.59
Sat Flow, veh/h	1013	1772	1502	1078	1409	307	1594	4837	1502	1594	4837	1502
Grp Volume(v), veh/h	59	136	43	111	0	246	39	1118	124	55	1614	50
Grp Sat Flow(s),veh/h/ln	1013	1772	1502	1078	0	1716	1594	1612	1502	1594	1612	1502
Q Serve(g_s), s	5.9	6.8	2.4	10.2	0.0	13.7	2.5	13.1	3.9	3.6	21.3	1.5
Cycle Q Clear(g_c), s	19.6	6.8	2.4	17.0	0.0	13.7	2.5	13.1	3.9	3.6	21.3	1.5
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	380	322	230	0	368	52	2808	872	68	2857	887
V/C Ratio(X)	0.38	0.36	0.13	0.48	0.00	0.67	0.75	0.40	0.14	0.81	0.56	0.06
Avail Cap(c_a), veh/h	249	548	464	332	0	531	144	2808	872	190	2857	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	34.8	33.1	42.0	0.0	37.5	50.0	11.9	10.0	49.4	13.1	9.0
Incr Delay (d2), s/veh	1.6	0.6	0.2	1.6	0.0	2.1	8.0	0.4	0.3	8.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.9	0.9	2.7	0.0	5.7	1.1	4.0	1.2	1.5	6.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	35.4	33.3	43.6	0.0	39.6	57.9	12.3	10.3	57.6	13.9	9.1
LnGrp LOS	D	D	C	D	A	D	E	B	B	E	B	A
Approach Vol, veh/h	238				357				1281			
Approach Delay, s/veh	38.1				40.8				13.5			
Approach LOS	D				D				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	66.9		28.1	8.0	68.0		28.1				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 60		32.2	9.4	61.5		32.2				
Max Q Clear Time (g_c+I1), s	5.6	15.1		21.6	4.5	23.3		19.0				
Green Ext Time (p_c), s	0.0	9.0		0.7	0.0	14.3		1.4				

Intersection Summary

HCM 6th Ctrl Delay 18.6

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	224	86	101	27	112	121	982	21	60	1481	135	
Future Volume (vph)	224	86	101	27	112	121	982	21	60	1481	135	
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases			4					2			6	
Detector Phase	7	4	4	3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0	
Total Split (s)	24.0	53.5	53.5	13.5	43.0	11.0	43.0	43.0	10.0	42.0	42.0	
Total Split (%)	20.0%	44.6%	44.6%	11.3%	35.8%	9.2%	35.8%	35.8%	8.3%	35.0%	35.0%	
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min	
Act Effct Green (s)	18.5	31.6	31.6	10.1	17.2	7.2	39.7	39.7	6.0	36.5	36.5	
Actuated g/C Ratio	0.19	0.32	0.32	0.10	0.17	0.07	0.40	0.40	0.06	0.37	0.37	
v/c Ratio	0.81	0.16	0.19	0.17	0.64	0.57	0.54	0.03	0.34	0.88	0.22	
Control Delay	61.7	26.4	5.8	48.6	42.1	58.1	26.9	0.1	53.8	38.4	6.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	61.7	26.4	5.8	48.6	42.1	58.1	26.9	0.1	53.8	38.4	6.9	
LOS	E	C	A	D	D	E	C	A	D	D	A	
Approach Delay		40.6			42.9		29.7			36.4		
Approach LOS		D			D		C			D		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 99.6

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 35.1

Intersection LOS: D

Intersection Capacity Utilization 76.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.

			
10 s	43 s	13.5 s	53.5 s
			
11 s	42 s	24 s	43 s

HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	86	101	27	112	77	121	982	21	60	1481	135
Future Volume (veh/h)	224	86	101	27	112	77	121	982	21	60	1481	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	236	91	81	28	118	67	127	1034	16	63	1559	119
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	448	379	91	149	84	189	1963	609	142	1889	586
Arrive On Green	0.17	0.25	0.25	0.06	0.14	0.14	0.06	0.41	0.41	0.05	0.39	0.39
Sat Flow, veh/h	1594	1772	1502	1594	1061	602	3092	4837	1502	3092	4837	1502
Grp Volume(v), veh/h	236	91	81	28	0	185	127	1034	16	63	1559	119
Grp Sat Flow(s),veh/h/ln	1594	1772	1502	1594	0	1663	1546	1612	1502	1546	1612	1502
Q Serve(g_s), s	12.1	3.4	3.6	1.4	0.0	9.0	3.4	13.5	0.5	1.7	24.3	4.4
Cycle Q Clear(g_c), s	12.1	3.4	3.6	1.4	0.0	9.0	3.4	13.5	0.5	1.7	24.3	4.4
Prop In Lane	1.00		1.00	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	448	379	91	0	233	189	1963	609	142	1889	586
V/C Ratio(X)	0.87	0.20	0.21	0.31	0.00	0.79	0.67	0.53	0.03	0.44	0.83	0.20
Avail Cap(c_a), veh/h	390	983	833	190	0	714	277	2135	663	240	2077	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	24.7	24.7	37.9	0.0	34.9	38.5	18.8	15.0	39.0	23.0	16.9
Incr Delay (d2), s/veh	10.6	0.2	0.2	0.7	0.0	4.5	1.5	0.2	0.0	0.8	2.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	1.3	1.2	0.5	0.0	3.7	1.2	4.3	0.2	0.6	8.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.6	24.8	25.0	38.6	0.0	39.4	40.1	19.0	15.0	39.8	25.6	17.1
LnGrp LOS	D	C	C	D	A	D	D	B	B	D	C	B
Approach Vol, veh/h		408			213			1177			1741	
Approach Delay, s/veh		36.3			39.3			21.3			25.6	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	40.0	8.3	28.2	8.6	38.7	17.7	18.8				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	37.0	10.0	46.5	7.5	36.0	20.5	36.0				
Max Q Clear Time (g_c+I1), s	3.7	15.5	3.4	5.6	5.4	26.3	14.1	11.0				
Green Ext Time (p_c), s	0.0	6.5	0.0	0.5	0.0	6.4	0.2	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			26.2									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	88	367	149	94	332	158	963	57	224	1254	104
Future Volume (vph)	88	367	149	94	332	158	963	57	224	1254	104
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	15.8	39.0	39.0	30.0	53.2	53.2
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	13.2%	32.5%	32.5%	25.0%	44.3%	44.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	31.0	31.0	31.0	31.0	31.0	9.8	26.2	26.2	18.3	34.7	34.7
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.11	0.28	0.28	0.20	0.37	0.37
v/c Ratio	0.63	0.64	0.26	0.46	0.82	0.54	0.67	0.12	0.75	0.72	0.17
Control Delay	49.8	33.0	5.3	35.1	40.9	50.8	33.7	1.9	53.2	28.3	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.8	33.0	5.3	35.1	40.9	50.8	33.7	1.9	53.2	28.3	6.3
LOS	D	C	A	D	D	D	C	A	D	C	A
Approach Delay		28.6			39.9		34.4			30.4	
Approach LOS		C			D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 93

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 32.7

Intersection LOS: C

Intersection Capacity Utilization 85.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
30 s	39 s	51 s
		
Ø5	Ø6	Ø8
15.8 s	53.2 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	367	149	94	332	124	158	963	57	224	1254	104
Future Volume (veh/h)	88	367	149	94	332	124	158	963	57	224	1254	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	91	378	125	97	342	119	163	993	44	231	1293	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	679	568	253	482	168	224	1427	403	264	1728	536
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.08	0.27	0.27	0.17	0.36	0.36
Sat Flow, veh/h	833	1772	1482	801	1256	437	2910	5316	1502	1594	4837	1502
Grp Volume(v), veh/h	91	378	125	97	0	461	163	993	44	231	1293	72
Grp Sat Flow(s),veh/h/ln	833	1772	1482	801	0	1693	1455	1772	1502	1594	1612	1502
Q Serve(g_s), s	9.4	15.1	5.1	9.8	0.0	20.8	4.9	15.2	2.0	12.8	21.2	2.9
Cycle Q Clear(g_c), s	30.2	15.1	5.1	24.9	0.0	20.8	4.9	15.2	2.0	12.8	21.2	2.9
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	679	568	253	0	649	224	1427	403	264	1728	536
V/C Ratio(X)	0.44	0.56	0.22	0.38	0.00	0.71	0.73	0.70	0.11	0.88	0.75	0.13
Avail Cap(c_a), veh/h	293	863	722	336	0	825	396	1942	548	467	2527	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	21.8	18.8	31.6	0.0	23.6	40.8	29.7	24.9	36.8	25.5	19.6
Incr Delay (d2), s/veh	1.5	0.7	0.2	1.0	0.0	2.1	1.7	0.7	0.1	3.6	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.9	1.7	1.8	0.0	7.9	1.7	5.9	0.7	4.8	7.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	22.6	19.0	32.5	0.0	25.7	42.5	30.4	25.0	40.4	26.2	19.7
LnGrp LOS	D	C	B	C	A	C	D	C	C	D	C	B
Approach Vol, veh/h	594			558			1200			1596		
Approach Delay, s/veh	24.1			26.9			31.8			28.0		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	30.3		41.6	10.4	38.3		41.6				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	26.5	33.0		44.0	12.3	47.2		44.0				
Max Q Clear Time (g_c+I1), s	14.8	17.2		32.2	6.9	23.2		26.9				
Green Ext Time (p_c), s	0.2	5.6		2.4	0.1	9.1		3.1				
Intersection Summary												
HCM 6th Ctrl Delay				28.4								
HCM 6th LOS				C								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	51	92	121	89	266	122	904	63	316	1114	31
Future Volume (vph)	51	92	121	89	266	122	904	63	316	1114	31
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	47.0	47.0	47.0	47.0	47.0	21.6	37.0	37.0	36.0	51.4	51.4
Total Split (%)	39.2%	39.2%	39.2%	39.2%	39.2%	18.0%	30.8%	30.8%	30.0%	42.8%	42.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	32.9	32.9	32.9	32.9	32.9	13.2	26.6	26.6	25.9	39.3	39.3
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.13	0.27	0.27	0.26	0.39	0.39
v/c Ratio	0.50	0.17	0.22	0.25	0.86	0.62	0.75	0.15	0.82	0.63	0.05
Control Delay	48.8	26.7	5.8	28.8	46.4	59.0	39.6	6.4	54.4	27.3	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.8	26.7	5.8	28.8	46.4	59.0	39.6	6.4	54.4	27.3	3.9
LOS	D	C	A	C	D	E	D	A	D	C	A
Approach Delay		21.3			43.5		39.9			32.7	
Approach LOS		C			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.1

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 35.9

Intersection LOS: D

Intersection Capacity Utilization 85.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
36 s	37 s	47 s
 Ø5	 Ø6	 Ø8
21.6 s	51.4 s	47 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	92	121	89	266	189	122	904	63	316	1114	31
Future Volume (veh/h)	51	92	121	89	266	189	122	904	63	316	1114	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	54	98	88	95	283	181	130	962	44	336	1185	22
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	615	521	412	351	224	159	1264	392	372	1911	593
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.10	0.26	0.26	0.23	0.40	0.40
Sat Flow, veh/h	831	1772	1502	1072	1010	646	1594	4837	1502	1594	4837	1500
Grp Volume(v), veh/h	54	98	88	95	0	464	130	962	44	336	1185	22
Grp Sat Flow(s),veh/h/ln	831	1772	1502	1072	0	1656	1594	1612	1502	1594	1612	1500
Q Serve(g_s), s	5.6	3.4	3.6	6.0	0.0	22.5	7.1	16.2	2.0	18.1	17.4	0.8
Cycle Q Clear(g_c), s	28.1	3.4	3.6	9.3	0.0	22.5	7.1	16.2	2.0	18.1	17.4	0.8
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	615	521	412	0	575	159	1264	392	372	1911	593
V/C Ratio(X)	0.34	0.16	0.17	0.23	0.00	0.81	0.82	0.76	0.11	0.90	0.62	0.04
Avail Cap(c_a), veh/h	266	844	716	551	0	789	326	1710	531	585	2496	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	20.0	20.0	23.2	0.0	26.2	39.1	30.2	24.9	33.0	21.5	16.4
Incr Delay (d2), s/veh	0.9	0.1	0.1	0.2	0.0	3.9	7.5	1.4	0.1	10.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.3	1.2	1.4	0.0	8.7	2.9	5.8	0.7	7.4	5.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.9	20.1	20.2	23.4	0.0	30.1	46.5	31.6	25.0	43.3	21.8	16.5
LnGrp LOS	D	C	C	C	A	C	D	C	C	D	C	B
Approach Vol, veh/h		240			559			1136			1543	
Approach Delay, s/veh		24.6			29.0			33.0			26.4	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.2	28.8		35.5	12.3	40.7		35.5				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	32.5	31.3		42.2	18.1	45.7		42.2				
Max Q Clear Time (g_c+I1), s	20.1	18.2		30.1	9.1	19.4		24.5				
Green Ext Time (p_c), s	0.5	4.9		0.6	0.1	8.2		2.4				
Intersection Summary												
HCM 6th Ctrl Delay				28.9								
HCM 6th LOS				C								

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	448	1	396	734	920	758	498
Future Volume (vph)	448	1	396	734	920	758	498
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	40.0	83.0	43.0	43.0
Total Split (%)	30.8%	30.8%	30.8%	33.3%	69.2%	35.8%	35.8%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	26.3	26.3	26.3	30.9	83.2	47.8	47.8
Actuated g/C Ratio	0.22	0.22	0.22	0.26	0.69	0.40	0.40
v/c Ratio	0.83	0.83	0.63	0.88	0.39	0.57	0.55
Control Delay	63.8	57.9	25.1	67.4	5.4	31.9	5.1
Queue Delay	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Total Delay	63.8	57.9	25.1	67.5	5.6	31.9	5.1
LOS	E	E	C	E	A	C	A
Approach Delay		49.5			33.1	21.3	
Approach LOS		D			C	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 32.8

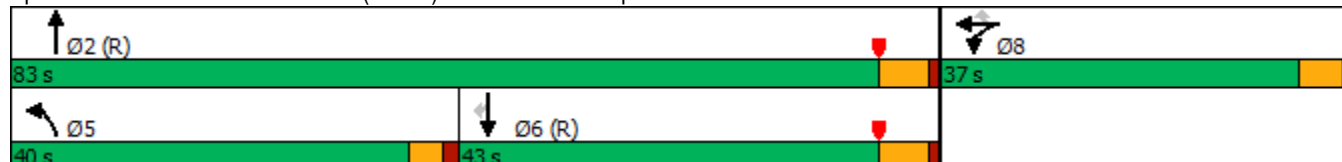
Intersection LOS: C

Intersection Capacity Utilization 80.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	448	1	396	734	920	0	0	758	498
Future Volume (veh/h)	0	0	0	448	1	396	734	920	0	0	758	498
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				559	0	186	773	968	0	0	798	304
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				639	0	284	823	2606	0	0	1626	725
Arrive On Green				0.18	0.00	0.18	0.48	1.00	0.00	0.00	0.46	0.46
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				559	0	186	773	968	0	0	798	304
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1777	1585
Q Serve(g_s), s				18.3	0.0	13.1	25.4	0.0	0.0	0.0	18.9	15.4
Cycle Q Clear(g_c), s				18.3	0.0	13.1	25.4	0.0	0.0	0.0	18.9	15.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				639	0	284	823	2606	0	0	1626	725
V/C Ratio(X)				0.88	0.00	0.65	0.94	0.37	0.00	0.00	0.49	0.42
Avail Cap(c_a), veh/h				950	0	423	1022	2606	0	0	1626	725
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.59	0.59	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.9	0.0	45.8	30.6	0.0	0.0	0.0	22.8	21.8
Incr Delay (d2), s/veh				4.5	0.0	1.0	8.4	0.2	0.0	0.0	1.1	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.3	0.0	5.1	8.5	0.1	0.0	0.0	7.8	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.4	0.0	46.7	39.0	0.2	0.0	0.0	23.8	23.6
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					745			1741			1102	
Approach Delay, s/veh					51.0			17.4			23.8	
Approach LOS					D			B			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	93.5			33.1			60.4			26.5		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	77.5			35.5			37.5			32.0		
Max Q Clear Time (g_c+I1), s	2.0			27.4			20.9			20.3		
Green Ext Time (p_c), s	12.8			1.2			7.9			1.2		
Intersection Summary												
HCM 6th Ctrl Delay			26.3									
HCM 6th LOS			C									
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	278	1	441	1372	548	298	909
Future Volume (vph)	278	1	441	1372	548	298	909
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	33.0	33.0	33.0	68.0	68.0	19.0	87.0
Total Split (%)	27.5%	27.5%	27.5%	56.7%	56.7%	15.8%	72.5%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	22.9	22.9	22.9	68.4	68.4	14.2	86.6
Actuated g/C Ratio	0.19	0.19	0.19	0.57	0.57	0.12	0.72
v/c Ratio	0.83	0.60	0.59	0.72	0.52	0.78	0.38
Control Delay	67.5	20.9	20.2	22.8	4.1	56.8	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	67.5	20.9	20.2	22.8	4.1	56.8	8.5
LOS	E	C	C	C	A	E	A
Approach Delay		36.8		17.4			20.5
Approach LOS		D		B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 22.0

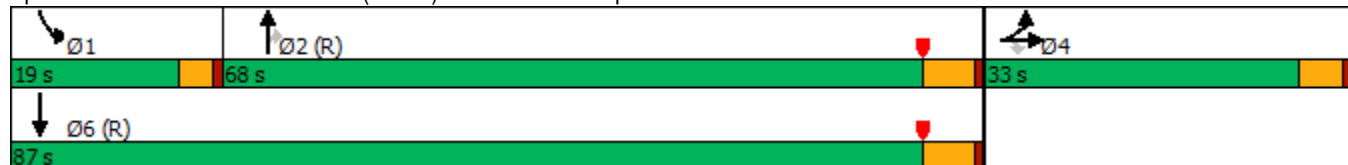
Intersection LOS: C

Intersection Capacity Utilization 80.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	1	441	0	0	0	0	1372	548	298	909	0
Future Volume (veh/h)	278	1	441	0	0	0	0	1372	548	298	909	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	419	0	230				0	1460	412	317	967	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	591	0	263				0	2157	949	368	2653	0
Arrive On Green	0.17	0.00	0.17				0.00	0.61	0.61	0.21	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1563	3456	3647	0
Grp Volume(v), veh/h	419	0	230				0	1460	412	317	967	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1563	1728	1777	0
Q Serve(g_s), s	13.3	0.0	17.0				0.0	32.9	16.9	10.6	0.0	0.0
Cycle Q Clear(g_c), s	13.3	0.0	17.0				0.0	32.9	16.9	10.6	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	591	0	263				0	2157	949	368	2653	0
V/C Ratio(X)	0.71	0.00	0.87				0.00	0.68	0.43	0.86	0.36	0.00
Avail Cap(c_a), veh/h	831	0	370				0	2157	949	432	2653	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.42	0.42	0.72	0.72	0.00
Uniform Delay (d), s/veh	47.3	0.0	48.8				0.0	15.7	12.6	46.4	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	12.0				0.0	0.7	0.6	9.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	7.4				0.0	12.3	5.6	4.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	60.8				0.0	16.5	13.2	56.1	0.3	0.0
LnGrp LOS	D	A	E				A	B	B	E	A	A
Approach Vol, veh/h	649						1872			1284		
Approach Delay, s/veh	52.5						15.8			14.1		
Approach LOS	D						B			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.8	78.3		24.9		95.1						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	15.0	62.5		28.0		81.5						
Max Q Clear Time (g_c+I1), s	12.6	34.9		19.0		2.0						
Green Ext Time (p_c), s	0.2	19.3		0.9		12.8						
Intersection Summary												
HCM 6th Ctrl Delay				21.5								
HCM 6th LOS				C								
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	126	412	82	172	460	61	162	1532	102	996	147
Future Volume (vph)	126	412	82	172	460	61	162	1532	102	996	147
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	43.2	20.6	41.1	41.1	15.9	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	12.4	19.3	19.3	14.6	21.5	21.5	11.4	35.1	10.0	32.6	51.6
Actuated g/C Ratio	0.12	0.19	0.19	0.15	0.22	0.22	0.11	0.35	0.10	0.33	0.52
v/c Ratio	0.67	0.66	0.22	0.77	0.66	0.16	0.94	1.08	0.67	0.66	0.18
Control Delay	59.4	42.4	4.2	65.1	41.1	1.5	99.4	79.5	66.0	32.0	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.4	42.4	4.2	65.1	41.1	1.5	99.4	79.5	66.0	32.0	4.7
LOS	E	D	A	E	D	A	F	E	E	C	A
Approach Delay		40.8			43.5			81.2		31.6	
Approach LOS		D			D			F		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 99.6

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 55.9

Intersection LOS: E

Intersection Capacity Utilization 82.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
16 s	40.2 s	20.6 s	43.2 s
			
Ø5	Ø6	Ø7	Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			  			  	
Traffic Volume (veh/h)	126	412	82	172	460	61	162	1532	210	102	996	147
Future Volume (veh/h)	126	412	82	172	460	61	162	1532	210	102	996	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	429	61	179	479	32	169	1596	139	106	1038	70
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	593	264	209	699	310	196	1705	148	130	1620	653
Arrive On Green	0.10	0.18	0.18	0.13	0.21	0.21	0.12	0.38	0.38	0.08	0.33	0.33
Sat Flow, veh/h	1594	3367	1497	1594	3367	1491	1594	4532	394	1594	4837	1502
Grp Volume(v), veh/h	131	429	61	179	479	32	169	1135	600	106	1038	70
Grp Sat Flow(s),veh/h/ln	1594	1683	1497	1594	1683	1491	1594	1612	1701	1594	1612	1502
Q Serve(g_s), s	7.4	11.0	3.2	10.1	12.0	1.6	9.5	31.1	31.1	6.0	16.7	2.5
Cycle Q Clear(g_c), s	7.4	11.0	3.2	10.1	12.0	1.6	9.5	31.1	31.1	6.0	16.7	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	159	593	264	209	699	310	196	1214	640	130	1620	653
V/C Ratio(X)	0.82	0.72	0.23	0.86	0.69	0.10	0.86	0.94	0.94	0.81	0.64	0.11
Avail Cap(c_a), veh/h	315	1373	610	278	1296	574	196	1224	646	198	1783	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	35.7	32.4	39.0	33.6	29.4	39.4	27.5	27.5	41.4	25.8	15.4
Incr Delay (d2), s/veh	4.0	1.7	0.4	14.4	1.2	0.1	28.8	13.1	21.2	8.0	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.4	1.1	4.6	4.8	0.6	5.0	12.6	14.8	2.6	6.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	37.3	32.9	53.4	34.8	29.6	68.2	40.6	48.8	49.4	26.5	15.4
LnGrp LOS	D	D	C	D	C	C	E	D	D	D	C	B
Approach Vol, veh/h	621				690		1904				1214	
Approach Delay, s/veh	38.4				39.3		45.6				27.9	
Approach LOS	D				D		D				C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.1	41.0	16.6	22.0	15.9	37.2	13.7	24.8				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+I1), s	8.0	33.1	12.1	13.0	11.5	18.7	9.4	14.0				
Green Ext Time (p_c), s	0.0	1.4	0.1	2.8	0.0	6.3	0.1	2.9				

Intersection Summary

HCM 6th Ctrl Delay	38.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	70	320	35	99	152	69	1792	261	50	1133	49
Future Volume (vph)	70	320	35	99	152	69	1792	261	50	1133	49
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	44.0	44.0	44.0	44.0	44.0	16.3	63.0	63.0	13.0	59.7	59.7
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	13.6%	52.5%	52.5%	10.8%	49.8%	49.8%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	25.9	25.9	25.9	25.9	25.9	8.9	58.7	58.7	7.2	55.7	55.7
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.08	0.56	0.56	0.07	0.53	0.53
v/c Ratio	0.35	0.79	0.09	0.95	0.47	0.56	0.72	0.32	0.50	0.48	0.06
Control Delay	37.6	51.2	1.4	115.0	35.7	65.2	21.4	12.3	67.0	18.6	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.6	51.2	1.4	115.0	35.7	65.2	21.4	12.3	67.0	18.6	3.3
LOS	D	D	A	F	D	E	C	B	E	B	A
Approach Delay		44.8			63.2		21.7			19.9	
Approach LOS		D			E		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105.2

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 26.5

Intersection LOS: C

Intersection Capacity Utilization 84.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
13 s	63 s	44 s
		
Ø5	Ø6	Ø8
16.3 s	59.7 s	44 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	320	35	99	152	34	69	1792	261	50	1133	49
Future Volume (veh/h)	70	320	35	99	152	34	69	1792	261	50	1133	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	75	344	21	106	163	29	74	1927	212	54	1218	35
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	539	456	187	445	79	92	2448	760	67	2373	737
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.51	0.51	0.04	0.49	0.49
Sat Flow, veh/h	1066	1772	1502	910	1464	261	1594	4837	1502	1594	4837	1502
Grp Volume(v), veh/h	75	344	21	106	0	192	74	1927	212	54	1218	35
Grp Sat Flow(s),veh/h/ln	1066	1772	1502	910	0	1725	1594	1612	1502	1594	1612	1502
Q Serve(g_s), s	6.8	19.2	1.1	13.0	0.0	10.0	5.2	37.3	9.3	3.8	19.6	1.4
Cycle Q Clear(g_c), s	16.7	19.2	1.1	32.2	0.0	10.0	5.2	37.3	9.3	3.8	19.6	1.4
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	539	456	187	0	524	92	2448	760	67	2373	737
V/C Ratio(X)	0.26	0.64	0.05	0.57	0.00	0.37	0.81	0.79	0.28	0.81	0.51	0.05
Avail Cap(c_a), veh/h	327	593	502	215	0	577	163	2448	760	117	2373	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	34.3	28.1	48.2	0.0	31.1	53.2	23.1	16.2	54.2	19.8	15.2
Incr Delay (d2), s/veh	0.5	2.0	0.0	2.7	0.0	0.4	6.2	2.6	0.9	8.3	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.2	0.4	3.0	0.0	4.1	2.2	13.1	3.1	1.6	6.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	36.3	28.1	50.9	0.0	31.6	59.3	25.8	17.1	62.5	20.6	15.3
LnGrp LOS	D	D	C	D	A	C	E	C	B	E	C	B
Approach Vol, veh/h	440			298			2213			1307		
Approach Delay, s/veh	36.2			38.4			26.1			22.2		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	64.3		40.5	11.2	62.5		40.5				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	8.4	* 58		38.2	11.7	53.2		38.2				
Max Q Clear Time (g_c+I1), s	5.8	39.3		21.2	7.2	21.6		34.2				
Green Ext Time (p_c), s	0.0	12.7		2.0	0.0	9.1		0.5				

Intersection Summary

HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	358	279	121	29	91	155	1731	49	67	999	135
Future Volume (vph)	358	279	121	29	91	155	1731	49	67	999	135
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.5	43.5	8.5	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	36.3%	36.3%	7.1%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.8	32.5	32.5	10.2	14.7	9.0	38.1	38.1	5.1	32.2	32.2
Actuated g/C Ratio	0.22	0.33	0.33	0.10	0.15	0.09	0.39	0.39	0.05	0.33	0.33
v/c Ratio	1.07	0.50	0.22	0.19	0.53	0.58	0.97	0.08	0.45	0.67	0.24
Control Delay	107.1	31.3	5.5	47.9	39.1	53.6	46.7	0.2	58.3	32.3	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.1	31.3	5.5	47.9	39.1	53.6	46.7	0.2	58.3	32.3	4.5
LOS	F	C	A	D	D	D	D	A	E	C	A
Approach Delay		63.0			40.6		46.1			30.6	
Approach LOS		E			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 44.4

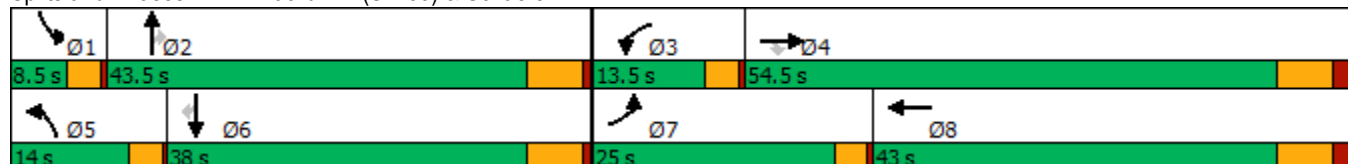
Intersection LOS: D

Intersection Capacity Utilization 87.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	279	121	29	91	45	155	1731	49	67	999	135
Future Volume (veh/h)	358	279	121	29	91	45	155	1731	49	67	999	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	377	294	78	31	96	36	163	1822	49	71	1052	99
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	498	416	94	135	51	225	1934	588	139	1800	559
Arrive On Green	0.23	0.28	0.28	0.06	0.11	0.11	0.07	0.40	0.40	0.05	0.37	0.37
Sat Flow, veh/h	1594	1772	1479	1594	1228	461	3092	4837	1470	3092	4837	1502
Grp Volume(v), veh/h	377	294	78	31	0	132	163	1822	49	71	1052	99
Grp Sat Flow(s),veh/h/ln	1594	1772	1479	1594	0	1689	1546	1612	1470	1546	1612	1502
Q Serve(g_s), s	21.5	13.3	3.7	1.7	0.0	7.0	4.8	33.8	1.9	2.1	16.3	4.1
Cycle Q Clear(g_c), s	21.5	13.3	3.7	1.7	0.0	7.0	4.8	33.8	1.9	2.1	16.3	4.1
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	368	498	416	94	0	185	225	1934	588	139	1800	559
V/C Ratio(X)	1.03	0.59	0.19	0.33	0.00	0.71	0.72	0.94	0.08	0.51	0.58	0.18
Avail Cap(c_a), veh/h	368	903	754	171	0	653	348	1947	592	166	1800	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	28.9	25.4	42.1	0.0	40.1	42.3	26.9	17.4	43.5	23.5	19.7
Incr Delay (d2), s/veh	53.5	0.8	0.2	0.7	0.0	3.8	1.7	9.9	0.1	1.1	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	5.4	1.3	0.7	0.0	3.0	1.8	13.0	0.6	0.8	5.6	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.4	29.7	25.6	42.8	0.0	43.8	43.9	36.8	17.4	44.5	24.0	19.8
LnGrp LOS	F	C	C	D	A	D	D	D	B	D	C	B
Approach Vol, veh/h	749				163				2034		1222	
Approach Delay, s/veh	59.3				43.6				36.9		24.8	
Approach LOS	E				D				D		C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	43.3	9.0	33.2	10.3	40.7	25.0	17.2				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	37.5	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	4.1	35.8	3.7	15.3	6.8	18.3	23.5	9.0				
Green Ext Time (p_c), s	0.0	1.5	0.0	1.4	0.1	5.6	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			37.6									
HCM 6th LOS			D									

Timings

18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	127	427	162	45	467	198	1540	54	150	981	129
Future Volume (vph)	127	427	162	45	467	198	1540	54	150	981	129
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	63.0	63.0	63.0	63.0	63.0	13.8	42.0	42.0	15.0	43.2	43.2
Total Split (%)	52.5%	52.5%	52.5%	52.5%	52.5%	11.5%	35.0%	35.0%	12.5%	36.0%	36.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	56.0	56.0	56.0	56.0	56.0	10.1	36.0	36.0	11.5	37.4	37.4
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.08	0.30	0.30	0.10	0.31	0.31
v/c Ratio	1.13	0.53	0.21	0.15	0.89	0.84	1.00	0.11	1.03	0.67	0.24
Control Delay	155.5	25.7	3.4	20.2	43.1	82.1	64.7	5.9	133.8	38.7	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	155.5	25.7	3.4	20.2	43.1	82.1	64.7	5.9	133.8	38.7	6.2
LOS	F	C	A	C	D	F	E	A	F	D	A
Approach Delay		43.7			41.7		64.9			46.7	
Approach LOS		D			D		E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 52.7

Intersection LOS: D

Intersection Capacity Utilization 108.8%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	42 s	63 s
		
Ø5	Ø6	Ø8
13.8 s	43.2 s	63 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	427	162	45	467	222	198	1540	54	150	981	129
Future Volume (veh/h)	127	427	162	45	467	222	198	1540	54	150	981	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	440	111	46	481	183	204	1588	44	155	1011	99
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	827	701	283	571	217	249	1595	450	153	1501	466
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.09	0.30	0.30	0.10	0.31	0.31
Sat Flow, veh/h	690	1772	1502	767	1223	465	2910	5316	1502	1594	4837	1502
Grp Volume(v), veh/h	131	440	111	46	0	664	204	1588	44	155	1011	99
Grp Sat Flow(s),veh/h/ln	690	1772	1502	767	0	1688	1455	1772	1502	1594	1612	1502
Q Serve(g_s), s	14.5	21.1	5.1	5.4	0.0	41.5	8.3	35.8	2.5	11.5	21.9	5.8
Cycle Q Clear(g_c), s	56.0	21.1	5.1	26.6	0.0	41.5	8.3	35.8	2.5	11.5	21.9	5.8
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	827	701	283	0	788	249	1595	450	153	1501	466
V/C Ratio(X)	0.91	0.53	0.16	0.16	0.00	0.84	0.82	1.00	0.10	1.01	0.67	0.21
Avail Cap(c_a), veh/h	143	827	701	283	0	788	250	1595	450	153	1501	466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	22.7	18.4	32.1	0.0	28.1	54.0	41.9	30.3	54.2	36.1	30.6
Incr Delay (d2), s/veh	50.0	0.7	0.1	0.3	0.0	8.3	17.9	21.5	0.1	76.8	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	8.5	1.7	1.0	0.0	17.3	3.5	17.8	0.9	7.7	8.3	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.4	23.4	18.5	32.4	0.0	36.4	71.8	63.4	30.4	131.0	37.3	30.8
LnGrp LOS	F	C	B	C	A	D	E	E	C	F	D	C
Approach Vol, veh/h	682			710			1836			1265		
Approach Delay, s/veh	38.3			36.1			63.6			48.3		
Approach LOS	D			D			E			D		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	15.0	42.0	63.0		13.8	43.2	63.0					
Change Period (Y+Rc), s	3.5	6.0	7.0		3.5	6.0	7.0					
Max Green Setting (Gmax), s	11.5	36.0	56.0		10.3	37.2	56.0					
Max Q Clear Time (g_c+I1), s	13.5	37.8	58.0		10.3	23.9	43.5					
Green Ext Time (p_c), s	0.0	0.0	0.0		0.0	5.3	3.7					
Intersection Summary												
HCM 6th Ctrl Delay	51.1											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	70	309	210	54	133	115	1354	68	156	985	59
Future Volume (vph)	70	309	210	54	133	115	1354	68	156	985	59
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	48.0	48.0	48.0	48.0	48.0	20.9	50.0	50.0	22.0	51.1	51.1
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	17.4%	41.7%	41.7%	18.3%	42.6%	42.6%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	30.2	30.2	30.2	30.2	30.2	12.5	36.8	36.8	14.6	39.0	39.0
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.13	0.38	0.38	0.15	0.40	0.40
v/c Ratio	0.86	0.59	0.36	0.28	0.86	0.59	0.78	0.12	0.68	0.53	0.10
Control Delay	102.2	33.7	5.3	31.3	39.8	56.7	31.0	11.2	58.2	24.4	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	102.2	33.7	5.3	31.3	39.8	56.7	31.0	11.2	58.2	24.4	6.4
LOS	F	C	A	C	D	E	C	B	E	C	A
Approach Delay		31.8			39.0		32.1			27.9	
Approach LOS		C			D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 96.5

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 31.7

Intersection LOS: C

Intersection Capacity Utilization 86.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
22 s	50 s	48 s
		
Ø5	Ø6	Ø8
20.9 s	51.1 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	309	210	54	133	333	115	1354	68	156	985	59
Future Volume (veh/h)	70	309	210	54	133	333	115	1354	68	156	985	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	74	325	119	57	140	338	121	1425	48	164	1037	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	681	570	277	177	427	147	1744	541	192	1882	576
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.36	0.36	0.12	0.39	0.39
Sat Flow, veh/h	820	1772	1483	846	460	1111	1594	4837	1502	1594	4837	1481
Grp Volume(v), veh/h	74	325	119	57	0	478	121	1425	48	164	1037	30
Grp Sat Flow(s),veh/h/ln	820	1772	1483	846	0	1572	1594	1612	1502	1594	1612	1481
Q Serve(g_s), s	9.1	14.4	5.6	5.7	0.0	28.0	7.8	27.8	2.2	10.5	17.3	1.3
Cycle Q Clear(g_c), s	37.1	14.4	5.6	20.0	0.0	28.0	7.8	27.8	2.2	10.5	17.3	1.3
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	681	570	277	0	604	147	1744	541	192	1882	576
V/C Ratio(X)	0.45	0.48	0.21	0.21	0.00	0.79	0.83	0.82	0.09	0.85	0.55	0.05
Avail Cap(c_a), veh/h	189	736	616	304	0	653	267	2060	640	283	2111	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	24.1	21.4	31.7	0.0	28.3	46.4	30.1	22.0	44.9	24.7	19.8
Incr Delay (d2), s/veh	1.4	0.4	0.1	0.3	0.0	5.8	8.4	2.3	0.1	13.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.8	1.9	1.1	0.0	10.8	3.2	10.1	0.7	4.6	6.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	24.5	21.6	32.0	0.0	34.2	54.8	32.5	22.0	58.2	25.0	19.9
LnGrp LOS	D	C	C	C	A	C	D	C	C	E	C	B
Approach Vol, veh/h		518			535			1594			1231	
Approach Delay, s/veh		26.9			33.9			33.8			29.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	43.2		44.8	13.1	46.2		44.8				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	18.5	44.3		43.2	17.4	45.4		43.2				
Max Q Clear Time (g_c+I1), s	12.5	29.8		39.1	9.8	19.3		30.0				
Green Ext Time (p_c), s	0.1	7.7		0.9	0.1	7.0		2.3				
Intersection Summary												
HCM 6th Ctrl Delay			31.5									
HCM 6th LOS			C									

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	327	4	372	723	801	830	428
Future Volume (vph)	327	4	372	723	801	830	428
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	40.0	87.0	47.0	47.0
Total Split (%)	27.5%	27.5%	27.5%	33.3%	72.5%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	22.4	22.4	22.4	30.4	87.1	52.2	52.2
Actuated g/C Ratio	0.19	0.19	0.19	0.25	0.73	0.44	0.44
v/c Ratio	0.82	0.72	0.51	0.87	0.32	0.56	0.47
Control Delay	66.7	44.8	10.4	71.8	4.6	28.9	4.3
Queue Delay	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Total Delay	66.7	44.8	10.4	71.9	4.7	28.9	4.3
LOS	E	D	B	E	A	C	A
Approach Delay		41.5			36.6	20.6	
Approach LOS		D			D	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 31.8

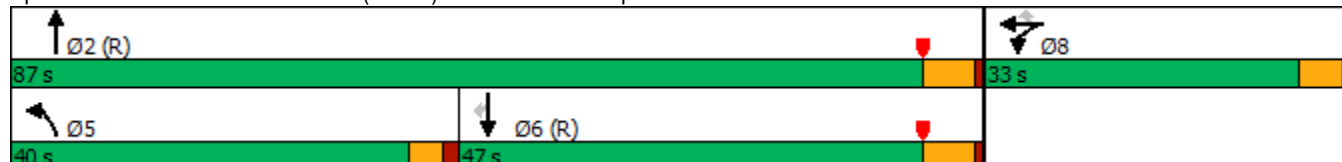
Intersection LOS: C

Intersection Capacity Utilization 72.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	327	4	372	723	801	0	0	830	428
Future Volume (veh/h)	0	0	0	327	4	372	723	801	0	0	830	428
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				402	0	129	753	834	0	0	865	357
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				476	0	212	804	2768	0	0	1807	806
Arrive On Green				0.13	0.00	0.13	0.47	1.00	0.00	0.00	0.51	0.51
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				402	0	129	753	834	0	0	865	357
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1777	1585
Q Serve(g_s), s				13.2	0.0	9.2	24.8	0.0	0.0	0.0	19.0	17.1
Cycle Q Clear(g_c), s				13.2	0.0	9.2	24.8	0.0	0.0	0.0	19.0	17.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				476	0	212	804	2768	0	0	1807	806
V/C Ratio(X)				0.84	0.00	0.61	0.94	0.30	0.00	0.00	0.48	0.44
Avail Cap(c_a), veh/h				831	0	370	1022	2768	0	0	1807	806
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.64	0.64	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.8	0.0	49.0	31.2	0.0	0.0	0.0	19.2	18.7
Incr Delay (d2), s/veh				1.6	0.0	1.1	8.4	0.2	0.0	0.0	0.9	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.8	0.0	3.6	8.4	0.1	0.0	0.0	7.7	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.4	0.0	50.1	39.6	0.2	0.0	0.0	20.1	20.5
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					531			1587			1222	
Approach Delay, s/veh					51.8			18.9			20.2	
Approach LOS					D			B			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	99.0			32.4			66.5			21.0		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	81.5			35.5			41.5			28.0		
Max Q Clear Time (g_c+I1), s	2.0			26.8			21.0			15.2		
Green Ext Time (p_c), s	10.2			1.2			9.9			0.8		
Intersection Summary												
HCM 6th Ctrl Delay	24.6											
HCM 6th LOS	C											

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	306	0	502	1215	533	332	826
Future Volume (vph)	306	0	502	1215	533	332	826
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	35.0	64.0	64.0	21.0	85.0
Total Split (%)	29.2%	29.2%	29.2%	53.3%	53.3%	17.5%	70.8%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	25.1	25.1	25.1	64.9	64.9	15.5	84.4
Actuated g/C Ratio	0.21	0.21	0.21	0.54	0.54	0.13	0.70
v/c Ratio	0.83	0.62	0.61	0.68	0.53	0.80	0.35
Control Delay	65.2	20.1	19.5	23.4	4.0	67.0	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	65.2	20.1	19.5	23.4	4.0	67.0	7.4
LOS	E	C	B	C	A	E	A
Approach Delay		35.3		17.5			24.5
Approach LOS		D		B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 23.5

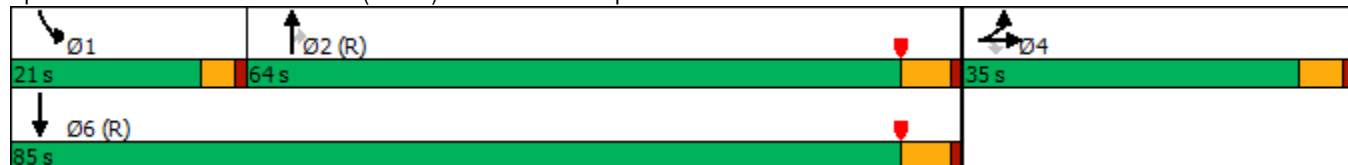
Intersection LOS: C

Intersection Capacity Utilization 72.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	0	502	0	0	0	0	1215	533	332	826	0
Future Volume (veh/h)	306	0	502	0	0	0	0	1215	533	332	826	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	474	0	267				0	1293	451	353	879	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	675	0	300				0	2035	893	404	2569	0
Arrive On Green	0.19	0.00	0.19				0.00	0.57	0.57	0.23	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1560	3456	3647	0
Grp Volume(v), veh/h	474	0	267				0	1293	451	353	879	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1560	1728	1777	0
Q Serve(g_s), s	14.9	0.0	19.7				0.0	29.3	20.9	11.8	0.0	0.0
Cycle Q Clear(g_c), s	14.9	0.0	19.7				0.0	29.3	20.9	11.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	675	0	300				0	2035	893	404	2569	0
V/C Ratio(X)	0.70	0.00	0.89				0.00	0.64	0.50	0.87	0.34	0.00
Avail Cap(c_a), veh/h	891	0	396				0	2035	893	490	2569	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.72	0.72	0.75	0.75	0.00
Uniform Delay (d), s/veh	45.5	0.0	47.4				0.0	17.2	15.4	45.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	14.8				0.0	1.1	1.5	9.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	8.8				0.0	11.4	7.3	4.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	0.0	62.2				0.0	18.3	16.9	54.7	0.3	0.0
LnGrp LOS	D	A	E				A	B	B	D	A	A
Approach Vol, veh/h	741						1744			1232		
Approach Delay, s/veh	52.1						17.9			15.9		
Approach LOS	D						B			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	18.0	74.2	27.7		92.3							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	17.0	58.5	30.0		79.5							
Max Q Clear Time (g_c+I1), s	13.8	31.3	21.7		2.0							
Green Ext Time (p_c), s	0.2	17.5	1.0		11.0							
Intersection Summary												
HCM 6th Ctrl Delay			24.1									
HCM 6th LOS			C									
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	128	223	82	149	333	154	141	1125	149	799	137
Future Volume (vph)	128	223	82	149	333	154	141	1125	149	799	137
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	36.2	23.0	36.2	36.2	16.0	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	12.1	15.1	15.1	13.1	16.1	16.1	11.6	30.8	13.4	31.5	45.5
Actuated g/C Ratio	0.13	0.16	0.16	0.14	0.17	0.17	0.12	0.33	0.14	0.34	0.49
v/c Ratio	0.64	0.42	0.23	0.70	0.59	0.41	0.74	0.84	0.68	0.51	0.18
Control Delay	55.5	38.5	1.4	57.1	40.8	9.3	65.6	36.5	54.9	26.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	38.5	1.4	57.1	40.8	9.3	65.6	36.5	54.9	26.8	2.6
LOS	E	D	A	E	D	A	E	D	D	C	A
Approach Delay		36.5			37.0			39.4		27.6	
Approach LOS		D			D			D		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 93.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 35.1

Intersection LOS: D

Intersection Capacity Utilization 71.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
25.2 s	35.6 s	23 s	36.2 s
			
Ø5	Ø6	Ø7	Ø8
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			  			  	
Traffic Volume (veh/h)	128	223	82	149	333	154	141	1125	158	149	799	137
Future Volume (veh/h)	128	223	82	149	333	154	141	1125	158	149	799	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	132	230	55	154	343	98	145	1160	112	154	824	92
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	481	210	188	534	235	176	1491	144	188	1643	657
Arrive On Green	0.10	0.14	0.14	0.12	0.16	0.16	0.11	0.33	0.33	0.12	0.34	0.34
Sat Flow, veh/h	1594	3367	1472	1594	3367	1482	1594	4486	433	1594	4837	1482
Grp Volume(v), veh/h	132	230	55	154	343	98	145	834	438	154	824	92
Grp Sat Flow(s),veh/h/ln	1594	1683	1472	1594	1683	1482	1594	1612	1694	1594	1612	1482
Q Serve(g_s), s	6.0	4.7	2.5	7.0	7.1	4.4	6.6	17.3	17.3	7.0	10.1	2.7
Cycle Q Clear(g_c), s	6.0	4.7	2.5	7.0	7.1	4.4	6.6	17.3	17.3	7.0	10.1	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	163	481	210	188	534	235	176	1072	563	188	1643	657
V/C Ratio(X)	0.81	0.48	0.26	0.82	0.64	0.42	0.82	0.78	0.78	0.82	0.50	0.14
Avail Cap(c_a), veh/h	394	1375	601	394	1375	605	244	1308	687	441	2489	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	29.3	28.4	32.1	29.3	28.2	32.4	22.4	22.4	32.0	19.6	12.4
Incr Delay (d2), s/veh	3.6	0.7	0.7	3.4	1.3	1.2	10.6	2.5	4.6	3.3	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.8	0.8	2.7	2.7	1.5	2.8	5.9	6.5	2.7	3.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	30.1	29.0	35.4	30.6	29.4	42.9	24.8	27.0	35.4	19.8	12.5
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h	417			595			1417			1070		
Approach Delay, s/veh	31.9			31.7			27.4			21.4		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.4	31.2	13.4	16.4	12.8	31.8	12.2	17.6				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+I1), s	9.0	19.3	9.0	6.7	8.6	12.1	8.0	9.1				
Green Ext Time (p_c), s	0.1	5.4	0.1	1.4	0.0	6.2	0.1	2.2				

Intersection Summary

HCM 6th Ctrl Delay	26.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	50	65	43	100	93	42	1310	102	52	914	46
Future Volume (vph)	50	65	43	100	93	42	1310	102	52	914	46
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	15.0	63.0	63.0	18.0	66.0	66.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	12.5%	52.5%	52.5%	15.0%	55.0%	55.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	15.5	15.5	15.5	15.5	15.5	7.3	61.9	61.9	7.9	63.5	63.5
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.16	0.07	0.63	0.63	0.08	0.64	0.64
v/c Ratio	0.35	0.25	0.15	0.56	0.55	0.38	0.45	0.11	0.43	0.31	0.05
Control Delay	44.0	38.5	3.9	50.5	39.9	55.4	12.0	5.2	55.7	10.1	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.0	38.5	3.9	50.5	39.9	55.4	12.0	5.2	55.7	10.1	2.0
LOS	D	D	A	D	D	E	B	A	E	B	A
Approach Delay		30.8			44.2		12.8			12.0	
Approach LOS		C			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.9

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 16.2

Intersection LOS: B

Intersection Capacity Utilization 65.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
18 s	63 s	39 s
		
Ø5	Ø6	Ø8
15 s	66 s	39 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	65	43	100	93	55	42	1310	102	52	914	46
Future Volume (veh/h)	50	65	43	100	93	55	42	1310	102	52	914	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	52	68	26	104	97	47	44	1365	80	54	952	37
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	270	229	214	171	83	58	3031	941	66	3057	936
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.04	0.63	0.63	0.04	0.63	0.63
Sat Flow, veh/h	1113	1772	1502	1165	1122	544	1594	4837	1502	1594	4837	1482
Grp Volume(v), veh/h	52	68	26	104	0	144	44	1365	80	54	952	37
Grp Sat Flow(s),veh/h/ln	1113	1772	1502	1165	0	1665	1594	1612	1502	1594	1612	1482
Q Serve(g_s), s	4.3	3.2	1.4	8.1	0.0	7.6	2.6	13.8	2.0	3.2	8.5	0.9
Cycle Q Clear(g_c), s	11.8	3.2	1.4	11.3	0.0	7.6	2.6	13.8	2.0	3.2	8.5	0.9
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	270	229	214	0	254	58	3031	941	66	3057	936
V/C Ratio(X)	0.33	0.25	0.11	0.48	0.00	0.57	0.76	0.45	0.09	0.81	0.31	0.04
Avail Cap(c_a), veh/h	380	625	529	448	0	587	176	3031	941	227	3057	936
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	35.2	34.4	40.2	0.0	37.0	45.0	9.1	6.9	44.8	7.9	6.5
Incr Delay (d2), s/veh	1.2	0.5	0.2	1.7	0.0	2.0	7.4	0.5	0.2	8.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.4	0.5	2.3	0.0	3.1	1.1	3.8	0.5	1.3	2.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	35.7	34.6	41.9	0.0	39.0	52.4	9.6	7.1	53.3	8.2	6.6
LnGrp LOS	D	D	C	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h					248		1489				1043	
Approach Delay, s/veh	38.4				40.2		10.8				10.5	
Approach LOS	D				D		B				B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	65.5		20.1	8.0	66.0		20.1				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	13.4	* 58		33.2	10.4	59.5		33.2				
Max Q Clear Time (g_c+I1), s	5.2	15.8		13.8	4.6	10.5		13.3				
Green Ext Time (p_c), s	0.0	11.6		0.5	0.0	7.0		1.0				

Intersection Summary

HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	239	76	78	17	50	134	1179	12	35	858	120
Future Volume (vph)	239	76	78	17	50	134	1179	12	35	858	120
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	33.0	62.5	62.5	13.5	43.0	14.2	35.5	35.5	8.5	29.8	29.8
Total Split (%)	27.5%	52.1%	52.1%	11.3%	35.8%	11.8%	29.6%	29.6%	7.1%	24.8%	24.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	17.2	26.5	26.5	11.0	11.4	8.3	32.1	32.1	5.5	24.3	24.3
Actuated g/C Ratio	0.22	0.34	0.34	0.14	0.14	0.10	0.41	0.41	0.07	0.31	0.31
v/c Ratio	0.72	0.13	0.14	0.08	0.34	0.43	0.63	0.02	0.17	0.60	0.22
Control Delay	45.0	17.8	1.5	42.2	26.4	44.1	26.2	0.1	46.2	29.6	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.0	17.8	1.5	42.2	26.4	44.1	26.2	0.1	46.2	29.6	3.7
LOS	D	B	A	D	C	D	C	A	D	C	A
Approach Delay		31.1			29.0		27.7			27.1	
Approach LOS		C			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 79.1

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 28.0

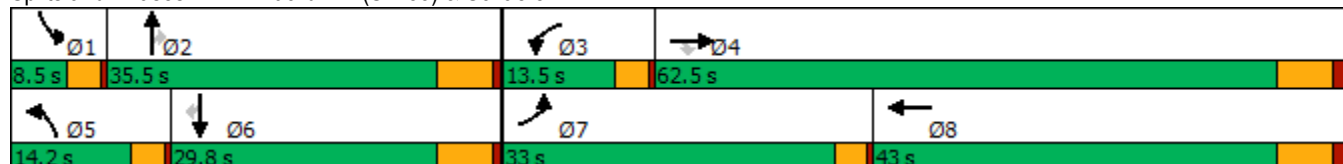
Intersection LOS: C

Intersection Capacity Utilization 64.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	76	78	17	50	37	134	1179	12	35	858	120
Future Volume (veh/h)	239	76	78	17	50	37	134	1179	12	35	858	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	249	79	29	18	52	17	140	1228	11	36	894	86
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	409	346	69	113	37	231	1734	538	116	1554	476
Arrive On Green	0.19	0.23	0.23	0.04	0.09	0.09	0.07	0.36	0.36	0.04	0.32	0.32
Sat Flow, veh/h	1594	1772	1498	1594	1279	418	3092	4837	1502	3092	4837	1482
Grp Volume(v), veh/h	249	79	29	18	0	69	140	1228	11	36	894	86
Grp Sat Flow(s),veh/h/ln	1594	1772	1498	1594	0	1697	1546	1612	1502	1546	1612	1482
Q Serve(g_s), s	9.1	2.2	0.9	0.7	0.0	2.3	2.7	13.2	0.3	0.7	9.3	2.5
Cycle Q Clear(g_c), s	9.1	2.2	0.9	0.7	0.0	2.3	2.7	13.2	0.3	0.7	9.3	2.5
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	409	346	69	0	150	231	1734	538	116	1554	476
V/C Ratio(X)	0.84	0.19	0.08	0.26	0.00	0.46	0.61	0.71	0.02	0.31	0.58	0.18
Avail Cap(c_a), veh/h	776	1623	1372	263	0	1008	546	2355	731	255	1900	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	18.8	18.3	28.1	0.0	26.3	27.2	16.7	12.6	28.4	17.1	14.8
Incr Delay (d2), s/veh	2.5	0.2	0.1	0.7	0.0	1.6	1.0	0.6	0.0	0.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.8	0.3	0.2	0.0	0.9	0.9	3.8	0.1	0.2	2.8	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	18.9	18.3	28.8	0.0	27.9	28.1	17.3	12.6	29.0	17.5	15.0
LnGrp LOS	C	B	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		357			87			1379			1016	
Approach Delay, s/veh		24.0			28.1			18.4			17.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	27.7	6.1	21.0	8.0	25.5	14.8	12.3				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	29.5	10.0	55.5	10.7	23.8	29.5	36.0				
Max Q Clear Time (g_c+I1), s	2.7	15.2	2.7	4.2	4.7	11.3	11.1	4.3				
Green Ext Time (p_c), s	0.0	6.5	0.0	0.4	0.1	4.5	0.3	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			19.1									
HCM 6th LOS			B									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	116	204	105	58	362	156	1014	40	127	770	96
Future Volume (vph)	116	204	105	58	362	156	1014	40	127	770	96
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	61.0	61.0	61.0	61.0	61.0	15.4	39.0	39.0	20.0	43.6	43.6
Total Split (%)	50.8%	50.8%	50.8%	50.8%	50.8%	12.8%	32.5%	32.5%	16.7%	36.3%	36.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	36.7	36.7	36.7	36.7	36.7	9.6	26.0	26.0	12.0	28.4	28.4
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.10	0.28	0.28	0.13	0.31	0.31
v/c Ratio	0.80	0.30	0.17	0.15	0.84	0.54	0.70	0.08	0.64	0.54	0.19
Control Delay	64.2	20.9	4.5	19.9	36.5	51.0	34.1	0.3	57.4	29.2	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.2	20.9	4.5	19.9	36.5	51.0	34.1	0.3	57.4	29.2	7.0
LOS	E	C	A	B	D	D	C	A	E	C	A
Approach Delay		28.7			34.9		35.2			30.6	
Approach LOS		C			C		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 92.3

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 32.9

Intersection LOS: C

Intersection Capacity Utilization 88.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
20 s	39 s	61 s
		
Ø5	Ø6	Ø8
15.4 s	43.6 s	61 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	204	105	58	362	190	156	1014	40	127	770	96
Future Volume (veh/h)	116	204	105	58	362	190	156	1014	40	127	770	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	120	210	74	60	373	188	161	1045	27	131	794	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	820	695	460	514	259	220	1387	392	158	1378	422
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.08	0.26	0.26	0.10	0.28	0.28
Sat Flow, veh/h	759	1772	1501	980	1111	560	2910	5316	1502	1594	4837	1481
Grp Volume(v), veh/h	120	210	74	60	0	561	161	1045	27	131	794	61
Grp Sat Flow(s),veh/h/ln	759	1772	1501	980	0	1671	1455	1772	1502	1594	1612	1481
Q Serve(g_s), s	14.2	6.7	2.6	3.7	0.0	25.4	5.1	16.9	1.3	7.5	13.1	2.9
Cycle Q Clear(g_c), s	39.5	6.7	2.6	10.5	0.0	25.4	5.1	16.9	1.3	7.5	13.1	2.9
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	820	695	460	0	773	220	1387	392	158	1378	422
V/C Ratio(X)	0.54	0.26	0.11	0.13	0.00	0.73	0.73	0.75	0.07	0.83	0.58	0.14
Avail Cap(c_a), veh/h	310	1025	868	573	0	966	371	1878	531	282	1948	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	15.3	14.2	18.5	0.0	20.3	42.2	31.7	26.0	41.3	28.6	24.9
Incr Delay (d2), s/veh	2.0	0.2	0.1	0.1	0.0	2.1	1.8	1.2	0.1	4.1	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.5	0.8	0.8	0.0	9.2	1.8	6.7	0.4	2.9	4.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	15.4	14.2	18.6	0.0	22.4	44.0	32.9	26.0	45.4	28.9	25.1
LnGrp LOS	D	B	B	B	A	C	D	C	C	D	C	C
Approach Vol, veh/h	404			621			1233			986		
Approach Delay, s/veh	22.0			22.0			34.2			30.9		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.8	30.4		50.2	10.5	32.6		50.2				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	16.5	33.0		54.0	11.9	37.6		54.0				
Max Q Clear Time (g_c+I1), s	9.5	18.9		41.5	7.1	15.1		27.4				
Green Ext Time (p_c), s	0.1	5.5		1.7	0.1	5.0		3.9				
Intersection Summary												
HCM 6th Ctrl Delay				29.3								
HCM 6th LOS				C								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	38	51	115	14	67	111	988	7	82	798	32	
Future Volume (vph)	38	51	115	14	67	111	988	7	82	798	32	
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases		4			8	5	2		1	6		
Permitted Phases	4		4	8				2			6	
Detector Phase	4	4	4	8	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7	
Total Split (s)	51.0	51.0	51.0	51.0	51.0	23.0	49.0	49.0	20.0	46.0	46.0	
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	19.2%	40.8%	40.8%	16.7%	38.3%	38.3%	
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7	
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min	
Act Effct Green (s)	14.6	14.6	14.6	14.6	14.6	11.0	21.9	21.9	9.6	20.8	20.8	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.19	0.37	0.37	0.16	0.35	0.35	
v/c Ratio	0.23	0.12	0.26	0.05	0.59	0.40	0.58	0.01	0.33	0.50	0.06	
Control Delay	23.4	19.8	6.0	19.6	15.6	32.6	18.9	0.0	33.4	19.0	5.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	23.4	19.8	6.0	19.6	15.6	32.6	18.9	0.0	33.4	19.0	5.2	
LOS	C	B	A	B	B	C	B	A	C	B	A	
Approach Delay		12.7			15.8		20.1			19.8		
Approach LOS		B			B		C			B		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 59.3

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 18.9

Intersection LOS: B

Intersection Capacity Utilization 63.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
20 s	49 s	51 s
		
Ø5	Ø6	Ø8
23 s	46 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	51	115	14	67	217	111	988	7	82	798	32
Future Volume (veh/h)	38	51	115	14	67	217	111	988	7	82	798	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	40	54	40	15	71	216	117	1040	7	86	840	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	456	387	427	99	302	147	1798	558	115	1700	520
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.37	0.37	0.07	0.35	0.35
Sat Flow, veh/h	977	1772	1502	1165	386	1174	1594	4837	1502	1594	4837	1481
Grp Volume(v), veh/h	40	54	40	15	0	287	117	1040	7	86	840	19
Grp Sat Flow(s),veh/h/ln	977	1772	1502	1165	0	1561	1594	1612	1502	1594	1612	1481
Q Serve(g_s), s	1.8	1.1	1.0	0.5	0.0	7.8	3.4	8.1	0.1	2.5	6.4	0.4
Cycle Q Clear(g_c), s	9.7	1.1	1.0	1.6	0.0	7.8	3.4	8.1	0.1	2.5	6.4	0.4
Prop In Lane	1.00		1.00	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	456	387	427	0	402	147	1798	558	115	1700	520
V/C Ratio(X)	0.17	0.12	0.10	0.04	0.00	0.71	0.80	0.58	0.01	0.75	0.49	0.04
Avail Cap(c_a), veh/h	955	1749	1482	1276	0	1540	664	4474	1389	562	4164	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	13.3	13.3	13.9	0.0	15.8	20.8	11.8	9.3	21.3	11.9	10.0
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.0	1.8	7.2	0.3	0.0	7.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.3	0.1	0.0	2.3	1.3	1.9	0.0	1.0	1.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	13.4	13.3	13.9	0.0	17.6	28.0	12.1	9.3	28.4	12.1	10.0
LnGrp LOS	C	B	B	B	A	B	C	B	A	C	B	B
Approach Vol, veh/h	134			302			1164			945		
Approach Delay, s/veh	15.5			17.4			13.7			13.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	6.9	23.1	16.9		7.8	22.1	16.9					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	16.5	43.3	46.2		19.5	40.3	46.2					
Max Q Clear Time (g_c+I1), s	4.5	10.1	11.7		5.4	8.4	9.8					
Green Ext Time (p_c), s	0.1	7.3	0.4		0.1	5.6	1.4					
Intersection Summary												
HCM 6th Ctrl Delay	14.2											
HCM 6th LOS	B											

APPENDIX 6.8: OPENING YEAR CUMULATIVE (2024) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

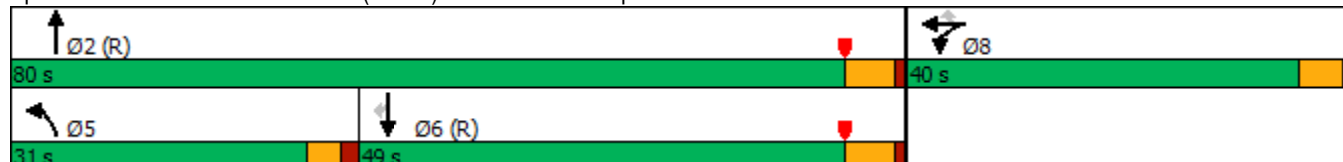
10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	535	3	338	506	722	863	444
Future Volume (vph)	535	3	338	506	722	863	444
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	40.0	40.0	40.0	31.0	80.0	49.0	49.0
Total Split (%)	33.3%	33.3%	33.3%	25.8%	66.7%	40.8%	40.8%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	27.5	27.5	27.5	22.2	82.0	55.3	55.3
Actuated g/C Ratio	0.23	0.23	0.23	0.18	0.68	0.46	0.46
v/c Ratio	0.82	0.83	0.54	0.82	0.31	0.55	0.47
Control Delay	60.6	60.1	12.4	65.8	6.7	26.7	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	60.6	60.1	12.4	65.8	6.8	26.7	4.1
LOS	E	E	B	E	A	C	A
Approach Delay		45.4			31.1	19.0	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 30.1
Intersection Capacity Utilization 77.1%
Analysis Period (min) 15
Intersection LOS: C
ICU Level of Service D

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	535	3	338	506	722	0	0	863	444
Future Volume (veh/h)	0	0	0	535	3	338	506	722	0	0	863	444
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				608	0	118	522	744	0	0	890	302
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				687	0	306	576	2558	0	0	1832	817
Arrive On Green				0.19	0.00	0.19	0.33	1.00	0.00	0.00	0.52	0.52
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				608	0	118	522	744	0	0	890	302
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1777	1585
Q Serve(g_s), s				19.9	0.0	7.8	17.3	0.0	0.0	0.0	19.4	13.7
Cycle Q Clear(g_c), s				19.9	0.0	7.8	17.3	0.0	0.0	0.0	19.4	13.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				687	0	306	576	2558	0	0	1832	817
V/C Ratio(X)				0.89	0.00	0.39	0.91	0.29	0.00	0.00	0.49	0.37
Avail Cap(c_a), veh/h				1039	0	462	763	2558	0	0	1832	817
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.77	0.77	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.1	0.0	42.2	39.1	0.0	0.0	0.0	18.8	17.4
Incr Delay (d2), s/veh				4.4	0.0	0.3	8.2	0.2	0.0	0.0	0.9	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.0	0.0	3.0	6.5	0.1	0.0	0.0	7.8	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.6	0.0	42.5	47.3	0.2	0.0	0.0	19.7	18.7
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					726			1266			1192	
Approach Delay, s/veh					50.1			19.6			19.4	
Approach LOS					D			B			B	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	91.9			24.5			67.4			28.1		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	74.5			26.5			43.5			35.0		
Max Q Clear Time (g_c+I1), s	2.0			19.3			21.4			21.9		
Green Ext Time (p_c), s	8.6			0.7			10.2			1.2		
Intersection Summary												
HCM 6th Ctrl Delay				26.5								
HCM 6th LOS				C								
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	336	0	830	892	596	355	1043
Future Volume (vph)	336	0	830	892	596	355	1043
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	50.0	50.0	50.0	49.0	49.0	21.0	70.0
Total Split (%)	41.7%	41.7%	41.7%	40.8%	40.8%	17.5%	58.3%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	37.2	37.2	37.2	52.2	52.2	16.1	72.3
Actuated g/C Ratio	0.31	0.31	0.31	0.44	0.44	0.13	0.60
v/c Ratio	0.60	0.89	0.86	0.60	0.60	0.80	0.50
Control Delay	39.0	51.9	48.0	29.7	4.9	75.5	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	39.0	51.9	48.0	29.7	4.9	75.5	15.1
LOS	D	D	D	C	A	E	B
Approach Delay		47.1		19.8			30.4
Approach LOS		D		B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 31.3

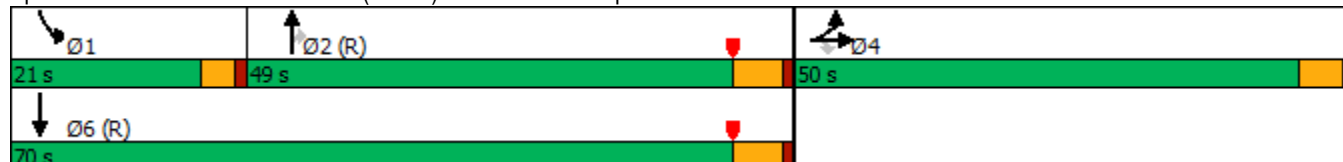
Intersection LOS: C

Intersection Capacity Utilization 77.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	0	830	0	0	0	0	892	596	355	1043	0
Future Volume (veh/h)	336	0	830	0	0	0	0	892	596	355	1043	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	231	0	875				0	920	448	366	1075	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	535	0	953				0	1628	716	416	2175	0
Arrive On Green	0.30	0.00	0.30				0.00	0.46	0.46	0.24	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	3647	1562	3456	3647	0
Grp Volume(v), veh/h	231	0	875				0	920	448	366	1075	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1562	1728	1777	0
Q Serve(g_s), s	12.5	0.0	32.0				0.0	22.7	26.1	12.2	0.0	0.0
Cycle Q Clear(g_c), s	12.5	0.0	32.0				0.0	22.7	26.1	12.2	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	535	0	953				0	1628	716	416	2175	0
V/C Ratio(X)	0.43	0.00	0.92				0.00	0.57	0.63	0.88	0.49	0.00
Avail Cap(c_a), veh/h	668	0	1189				0	1628	716	490	2175	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.75	0.75	0.75	0.75	0.00
Uniform Delay (d), s/veh	33.7	0.0	40.6				0.0	23.8	24.7	44.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	8.8				0.0	1.1	3.1	10.5	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	13.1				0.0	9.4	9.9	5.1	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	49.4				0.0	24.8	27.8	55.2	0.6	0.0
LnGrp LOS	C	A	D				A	C	C	E	A	A
Approach Vol, veh/h	1106						1368			1441		
Approach Delay, s/veh	46.2						25.8			14.5		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	18.5	60.5	41.1		78.9							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	17.0	43.5	45.0		64.5							
Max Q Clear Time (g_c+I1), s	14.2	28.1	34.0		2.0							
Green Ext Time (p_c), s	0.2	9.2	2.1		14.8							
Intersection Summary												
HCM 6th Ctrl Delay			27.4									
HCM 6th LOS			C									
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations		 			 			  		  	
Traffic Volume (vph)	137	308	123	182	475	92	78	1048	148	1423	109
Future Volume (vph)	137	308	123	182	475	92	78	1048	148	1423	109
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	9.6	34.5	9.6
Total Split (s)	21.0	27.8	27.8	25.0	31.8	31.8	15.0	45.2	22.0	52.2	21.0
Total Split (%)	17.5%	23.2%	23.2%	20.8%	26.5%	26.5%	12.5%	37.7%	18.3%	43.5%	17.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	13.8	18.7	18.7	17.2	22.1	22.1	9.1	36.6	14.7	44.0	59.8
Actuated g/C Ratio	0.13	0.17	0.17	0.16	0.20	0.20	0.08	0.34	0.14	0.41	0.55
v/c Ratio	0.75	0.58	0.35	0.80	0.76	0.24	0.65	0.80	0.76	0.80	0.14
Control Delay	70.7	47.1	7.0	68.8	49.9	2.5	74.7	37.2	70.3	33.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.7	47.1	7.0	68.8	49.9	2.5	74.7	37.2	70.3	33.8	2.5
LOS	E	D	A	E	D	A	E	D	E	C	A
Approach Delay		44.2			48.7			39.5		35.0	
Approach LOS		D			D			D		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 108.2

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 40.0

Intersection LOS: D

Intersection Capacity Utilization 74.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
22 s	45.2 s	25 s	27.8 s
			
Ø5	Ø6	Ø7	Ø8
15 s	52.2 s	21 s	31.8 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	308	123	182	475	92	78	1048	127	148	1423	109
Future Volume (veh/h)	137	308	123	182	475	92	78	1048	127	148	1423	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	151	338	111	200	522	43	86	1152	69	163	1564	56
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	544	239	230	651	290	106	1643	98	192	1962	777
Arrive On Green	0.11	0.16	0.16	0.14	0.19	0.19	0.07	0.35	0.35	0.12	0.41	0.41
Sat Flow, veh/h	1594	3367	1482	1594	3367	1499	1594	4667	279	1594	4837	1501
Grp Volume(v), veh/h	151	338	111	200	522	43	86	796	425	163	1564	56
Grp Sat Flow(s),veh/h/ln	1594	1683	1482	1594	1683	1499	1594	1612	1722	1594	1612	1501
Q Serve(g_s), s	9.0	9.1	6.6	11.9	14.3	2.3	5.2	20.6	20.6	9.7	27.5	1.8
Cycle Q Clear(g_c), s	9.0	9.1	6.6	11.9	14.3	2.3	5.2	20.6	20.6	9.7	27.5	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	179	544	239	230	651	290	106	1135	606	192	1962	777
V/C Ratio(X)	0.84	0.62	0.46	0.87	0.80	0.15	0.81	0.70	0.70	0.85	0.80	0.07
Avail Cap(c_a), veh/h	270	765	336	336	904	402	171	1325	707	286	2282	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	37.9	36.8	40.6	37.3	32.4	44.6	27.0	27.0	41.7	25.3	11.7
Incr Delay (d2), s/veh	9.1	1.2	1.4	11.3	3.6	0.2	5.7	1.4	2.6	9.7	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.7	2.4	5.2	5.9	0.8	2.1	7.3	8.0	4.2	10.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.2	39.0	38.2	51.8	40.9	32.7	50.3	28.4	29.6	51.4	27.1	11.7
LnGrp LOS	D	D	D	D	D	C	D	C	C	D	C	B
Approach Vol, veh/h	600			765			1307			1783		
Approach Delay, s/veh	41.9			43.3			30.2			28.8		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.3	40.6	18.6	21.4	11.1	45.8	15.5	24.5				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	17.4	* 40	20.4	22.0	10.4	45.7	16.4	26.0				
Max Q Clear Time (g_c+I1), s	11.7	22.6	13.9	11.1	7.2	29.5	11.0	16.3				
Green Ext Time (p_c), s	0.1	6.7	0.1	1.7	0.0	9.8	0.1	2.3				

Intersection Summary

HCM 6th Ctrl Delay	33.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	79	131	58	127	194	37	1116	163	53	1594	94
Future Volume (vph)	79	131	58	127	194	37	1116	163	53	1594	94
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	38.0	38.0	38.0	38.0	38.0	14.0	65.0	65.0	17.0	68.0	68.0
Total Split (%)	31.7%	31.7%	31.7%	31.7%	31.7%	11.7%	54.2%	54.2%	14.2%	56.7%	56.7%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	20.3	20.3	20.3	20.3	20.3	7.0	62.0	62.0	8.1	63.9	63.9
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.07	0.60	0.60	0.08	0.62	0.62
v/c Ratio	0.71	0.39	0.17	0.64	0.75	0.37	0.40	0.18	0.44	0.56	0.10
Control Delay	72.9	40.2	6.8	53.9	52.1	59.4	13.5	7.7	59.7	14.7	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.9	40.2	6.8	53.9	52.1	59.4	13.5	7.7	59.7	14.7	3.0
LOS	E	D	A	D	D	E	B	A	E	B	A
Approach Delay		42.6			52.7		14.1			15.5	
Approach LOS		D			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 20.7

Intersection LOS: C

Intersection Capacity Utilization 78.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	65 s	38 s
		
Ø5	Ø6	Ø8
14 s	68 s	38 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	131	58	127	194	52	37	1116	163	53	1594	94
Future Volume (veh/h)	79	131	58	127	194	52	37	1116	163	53	1594	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	82	136	43	132	202	44	39	1162	140	55	1660	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	412	349	249	328	71	51	2739	850	68	2790	866
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.57	0.57	0.04	0.58	0.58
Sat Flow, veh/h	1013	1772	1502	1078	1409	307	1594	4837	1502	1594	4837	1502
Grp Volume(v), veh/h	82	136	43	132	0	246	39	1162	140	55	1660	73
Grp Sat Flow(s),veh/h/ln	1013	1772	1502	1078	0	1716	1594	1612	1502	1594	1612	1502
Q Serve(g_s), s	8.4	6.8	2.4	12.4	0.0	13.7	2.6	14.6	4.8	3.6	23.6	2.3
Cycle Q Clear(g_c), s	22.1	6.8	2.4	19.2	0.0	13.7	2.6	14.6	4.8	3.6	23.6	2.3
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	412	349	249	0	399	51	2739	850	68	2790	866
V/C Ratio(X)	0.47	0.33	0.12	0.53	0.00	0.62	0.76	0.42	0.16	0.81	0.59	0.08
Avail Cap(c_a), veh/h	243	535	454	324	0	518	141	2739	850	185	2790	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	34.0	32.3	42.0	0.0	36.7	51.2	13.2	11.1	50.6	14.5	10.0
Incr Delay (d2), s/veh	2.0	0.5	0.2	1.7	0.0	1.6	8.4	0.5	0.4	8.1	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	2.9	0.9	3.3	0.0	5.7	1.1	4.6	1.5	1.5	7.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.6	34.5	32.5	43.7	0.0	38.2	59.6	13.7	11.5	58.7	15.5	10.2
LnGrp LOS	D	C	C	D	A	D	E	B	B	E	B	B
Approach Vol, veh/h					378		1341				1788	
Approach Delay, s/veh	38.6				40.1		14.8				16.6	
Approach LOS	D				D		B				B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	66.9		30.6	8.0	68.0		30.6				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 60		32.2	9.4	61.5		32.2				
Max Q Clear Time (g_c+I1), s	5.6	16.6		24.1	4.6	25.6		21.2				
Green Ext Time (p_c), s	0.0	9.6		0.7	0.0	14.8		1.4				

Intersection Summary

HCM 6th Ctrl Delay 19.8

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	330	97	121	27	123	213	926	21	69	1500	146
Future Volume (vph)	330	97	121	27	123	213	926	21	69	1500	146
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	24.0	53.5	53.5	13.5	43.0	11.0	43.0	43.0	10.0	42.0	42.0
Total Split (%)	20.0%	44.6%	44.6%	11.3%	35.8%	9.2%	35.8%	35.8%	8.3%	35.0%	35.0%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	20.7	34.4	34.4	10.1	18.0	7.6	39.6	39.6	6.1	36.3	36.3
Actuated g/C Ratio	0.20	0.33	0.33	0.10	0.18	0.07	0.39	0.39	0.06	0.35	0.35
v/c Ratio	1.09	0.17	0.22	0.18	0.67	0.99	0.52	0.03	0.40	0.93	0.25
Control Delay	117.4	26.2	5.4	49.1	44.2	107.5	27.5	0.1	55.8	43.5	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	117.4	26.2	5.4	49.1	44.2	107.5	27.5	0.1	55.8	43.5	8.0
LOS	F	C	A	D	D	F	C	A	E	D	A
Approach Delay		76.6			44.8		41.7			41.0	
Approach LOS		E			D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 102.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 46.8

Intersection LOS: D

Intersection Capacity Utilization 87.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.

			
10 s	43 s	13.5 s	53.5 s
			
11 s	42 s	24 s	43 s

HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	97	121	27	123	77	213	926	21	69	1500	146
Future Volume (veh/h)	330	97	121	27	123	77	213	926	21	69	1500	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	347	102	102	28	129	67	224	975	16	73	1579	131
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	531	450	87	157	81	239	1911	593	137	1751	544
Arrive On Green	0.21	0.30	0.30	0.05	0.14	0.14	0.08	0.39	0.39	0.04	0.36	0.36
Sat Flow, veh/h	1594	1772	1502	1594	1099	571	3092	4837	1502	3092	4837	1502
Grp Volume(v), veh/h	347	102	102	28	0	196	224	975	16	73	1579	131
Grp Sat Flow(s),veh/h/ln	1594	1772	1502	1594	0	1669	1546	1612	1502	1546	1612	1502
Q Serve(g_s), s	20.5	4.1	4.9	1.6	0.0	11.1	7.0	14.8	0.6	2.2	30.0	5.9
Cycle Q Clear(g_c), s	20.5	4.1	4.9	1.6	0.0	11.1	7.0	14.8	0.6	2.2	30.0	5.9
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	337	531	450	87	0	238	239	1911	593	137	1751	544
V/C Ratio(X)	1.03	0.19	0.23	0.32	0.00	0.82	0.94	0.51	0.03	0.53	0.90	0.24
Avail Cap(c_a), veh/h	337	850	721	164	0	620	239	1911	593	207	1797	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	25.2	25.5	44.1	0.0	40.3	44.5	22.2	17.9	45.3	29.3	21.6
Incr Delay (d2), s/veh	56.7	0.1	0.2	0.8	0.0	5.3	40.4	0.2	0.0	1.2	6.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	1.7	1.7	0.6	0.0	4.7	3.9	5.0	0.2	0.8	11.4	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	94.9	25.3	25.7	44.9	0.0	45.6	84.8	22.4	17.9	46.5	35.9	21.8
LnGrp LOS	F	C	C	D	A	D	F	C	B	D	D	C
Approach Vol, veh/h		551			224			1215			1783	
Approach Delay, s/veh		69.2			45.5			33.9			35.3	
Approach LOS		E			D			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	44.3	8.8	36.0	11.0	41.1	24.0	20.8				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	37.0	10.0	46.5	7.5	36.0	20.5	36.0				
Max Q Clear Time (g_c+I1), s	4.2	16.8	3.6	6.9	9.0	32.0	22.5	13.1				
Green Ext Time (p_c), s	0.0	5.9	0.0	0.6	0.0	3.1	0.0	0.8				
Intersection Summary												
HCM 6th Ctrl Delay			40.4									
HCM 6th LOS			D									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	88	367	149	94	332	158	986	57	238	1279	104
Future Volume (vph)	88	367	149	94	332	158	986	57	238	1279	104
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	15.8	39.0	39.0	30.0	53.2	53.2
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	13.2%	32.5%	32.5%	25.0%	44.3%	44.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	32.3	32.3	32.3	32.3	32.3	9.9	26.8	26.8	19.4	36.4	36.4
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.10	0.28	0.28	0.20	0.38	0.38
v/c Ratio	0.66	0.64	0.26	0.46	0.83	0.55	0.69	0.12	0.77	0.72	0.17
Control Delay	54.9	33.5	5.3	35.6	42.7	52.8	35.2	1.9	55.5	28.9	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.9	33.5	5.3	35.6	42.7	52.8	35.2	1.9	55.5	28.9	6.3
LOS	D	C	A	D	D	D	D	A	E	C	A
Approach Delay		29.6			41.5		35.9			31.3	
Approach LOS		C			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 96

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 33.9

Intersection LOS: C

Intersection Capacity Utilization 87.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

 Ø1	 Ø2	 Ø4
30 s	39 s	51 s
 Ø5	 Ø6	 Ø8
15.8 s	53.2 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	367	149	94	332	137	158	986	57	238	1279	104
Future Volume (veh/h)	88	367	149	94	332	137	158	986	57	238	1279	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	91	378	125	97	342	132	163	1016	44	245	1319	72
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	689	576	256	474	183	222	1389	392	277	1735	539
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.08	0.26	0.26	0.17	0.36	0.36
Sat Flow, veh/h	823	1772	1482	801	1217	470	2910	5316	1502	1594	4837	1502
Grp Volume(v), veh/h	91	378	125	97	0	474	163	1016	44	245	1319	72
Grp Sat Flow(s),veh/h/ln	823	1772	1482	801	0	1687	1455	1772	1502	1594	1612	1502
Q Serve(g_s), s	9.9	15.5	5.3	10.0	0.0	22.4	5.1	16.4	2.1	14.1	22.5	3.0
Cycle Q Clear(g_c), s	32.3	15.5	5.3	25.5	0.0	22.4	5.1	16.4	2.1	14.1	22.5	3.0
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	689	576	256	0	656	222	1389	392	277	1735	539
V/C Ratio(X)	0.45	0.55	0.22	0.38	0.00	0.72	0.73	0.73	0.11	0.89	0.76	0.13
Avail Cap(c_a), veh/h	267	832	696	320	0	792	382	1872	529	451	2437	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	22.2	19.1	32.2	0.0	24.3	42.4	31.6	26.3	37.8	26.5	20.2
Incr Delay (d2), s/veh	1.6	0.7	0.2	0.9	0.0	2.6	1.8	1.0	0.1	7.1	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	6.1	1.7	1.9	0.0	8.6	1.8	6.5	0.7	5.6	7.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	22.9	19.3	33.1	0.0	26.9	44.1	32.6	26.5	44.9	27.4	20.3
LnGrp LOS	D	C	B	C	A	C	D	C	C	D	C	C
Approach Vol, veh/h	594			571			1223			1636		
Approach Delay, s/veh	24.7			28.0			33.9			29.7		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.8	30.5		43.4	10.6	39.6		43.4				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	26.5	33.0		44.0	12.3	47.2		44.0				
Max Q Clear Time (g_c+I1), s	16.1	18.4		34.3	7.1	24.5		27.5				
Green Ext Time (p_c), s	0.2	5.5		2.2	0.1	9.1		3.1				
Intersection Summary												
HCM 6th Ctrl Delay				30.0								
HCM 6th LOS				C								

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations							  			  	
Traffic Volume (vph)	51	92	121	89	266	122	927	63	316	1139	31
Future Volume (vph)	51	92	121	89	266	122	927	63	316	1139	31
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	47.0	47.0	47.0	47.0	47.0	21.6	37.0	37.0	36.0	51.4	51.4
Total Split (%)	39.2%	39.2%	39.2%	39.2%	39.2%	18.0%	30.8%	30.8%	30.0%	42.8%	42.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	33.0	33.0	33.0	33.0	33.0	13.2	26.9	26.9	26.0	39.7	39.7
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.13	0.27	0.27	0.26	0.39	0.39
v/c Ratio	0.51	0.17	0.22	0.25	0.86	0.63	0.76	0.15	0.82	0.64	0.05
Control Delay	49.2	26.8	5.8	28.9	46.7	59.3	40.1	6.4	54.8	27.5	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.2	26.8	5.8	28.9	46.7	59.3	40.1	6.4	54.8	27.5	3.9
LOS	D	C	A	C	D	E	D	A	D	C	A
Approach Delay		21.5			43.7		40.3			32.8	
Approach LOS		C			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.6

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 36.1

Intersection LOS: D

Intersection Capacity Utilization 85.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
36 s	37 s	47 s
 Ø5	 Ø6	 Ø8
21.6 s	51.4 s	47 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	92	121	89	266	189	122	927	63	316	1139	31
Future Volume (veh/h)	51	92	121	89	266	189	122	927	63	316	1139	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	54	98	88	95	283	181	130	986	44	336	1212	22
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	614	521	411	350	224	159	1280	397	372	1926	597
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.10	0.26	0.26	0.23	0.40	0.40
Sat Flow, veh/h	831	1772	1502	1072	1010	646	1594	4837	1502	1594	4837	1500
Grp Volume(v), veh/h	54	98	88	95	0	464	130	986	44	336	1212	22
Grp Sat Flow(s),veh/h/ln	831	1772	1502	1072	0	1656	1594	1612	1502	1594	1612	1500
Q Serve(g_s), s	5.7	3.4	3.7	6.1	0.0	22.9	7.2	16.9	2.0	18.4	18.1	0.8
Cycle Q Clear(g_c), s	28.6	3.4	3.7	9.5	0.0	22.9	7.2	16.9	2.0	18.4	18.1	0.8
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	614	521	411	0	574	159	1280	397	372	1926	597
V/C Ratio(X)	0.34	0.16	0.17	0.23	0.00	0.81	0.82	0.77	0.11	0.90	0.63	0.04
Avail Cap(c_a), veh/h	258	831	704	542	0	777	321	1683	522	576	2457	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	20.3	20.4	23.6	0.0	26.7	39.7	30.6	25.1	33.5	21.7	16.5
Incr Delay (d2), s/veh	1.0	0.1	0.1	0.2	0.0	4.1	7.5	1.6	0.1	11.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.4	1.2	1.5	0.0	8.9	2.9	6.1	0.7	7.6	6.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	20.4	20.5	23.8	0.0	30.8	47.2	32.2	25.2	44.5	22.1	16.6
LnGrp LOS	D	C	C	C	A	C	D	C	C	D	C	B
Approach Vol, veh/h		240			559			1160			1570	
Approach Delay, s/veh		25.0			29.6			33.6			26.8	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.5	29.5		36.0	12.5	41.5		36.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	32.5	31.3		42.2	18.1	45.7		42.2				
Max Q Clear Time (g_c+I1), s	20.4	18.9		30.6	9.2	20.1		24.9				
Green Ext Time (p_c), s	0.5	4.9		0.6	0.1	8.4		2.4				
Intersection Summary												
HCM 6th Ctrl Delay				29.4								
HCM 6th LOS				C								

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	470	1	396	750	934	775	498
Future Volume (vph)	470	1	396	750	934	775	498
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	40.0	83.0	43.0	43.0
Total Split (%)	30.8%	30.8%	30.8%	33.3%	69.2%	35.8%	35.8%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	26.8	26.8	26.8	31.3	82.7	46.9	46.9
Actuated g/C Ratio	0.22	0.22	0.22	0.26	0.69	0.39	0.39
v/c Ratio	0.85	0.84	0.64	0.88	0.40	0.59	0.56
Control Delay	64.3	59.8	26.2	66.8	5.7	33.0	5.2
Queue Delay	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Total Delay	64.3	59.8	26.2	66.9	5.9	33.0	5.2
LOS	E	E	C	E	A	C	A
Approach Delay		50.7			33.1	22.1	
Approach LOS		D			C	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 33.4

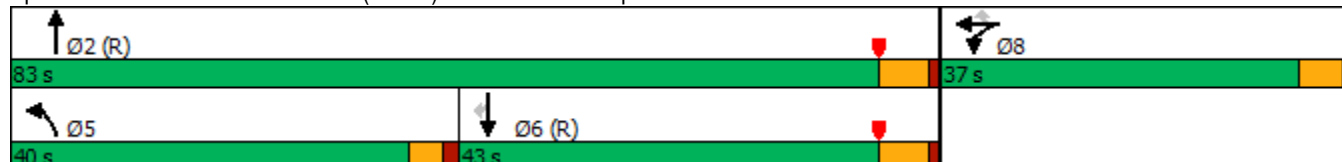
Intersection LOS: C

Intersection Capacity Utilization 81.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	470	1	396	750	934	0	0	775	498
Future Volume (veh/h)	0	0	0	470	1	396	750	934	0	0	775	498
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				582	0	186	789	983	0	0	816	304
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				662	0	294	838	2583	0	0	1587	708
Arrive On Green				0.19	0.00	0.19	0.49	1.00	0.00	0.00	0.45	0.45
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				582	0	186	789	983	0	0	816	304
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1777	1585
Q Serve(g_s), s				19.1	0.0	13.0	26.0	0.0	0.0	0.0	19.8	15.8
Cycle Q Clear(g_c), s				19.1	0.0	13.0	26.0	0.0	0.0	0.0	19.8	15.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				662	0	294	838	2583	0	0	1587	708
V/C Ratio(X)				0.88	0.00	0.63	0.94	0.38	0.00	0.00	0.51	0.43
Avail Cap(c_a), veh/h				950	0	423	1022	2583	0	0	1587	708
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.57	0.57	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.6	0.0	45.1	30.1	0.0	0.0	0.0	23.8	22.7
Incr Delay (d2), s/veh				5.2	0.0	0.8	8.6	0.2	0.0	0.0	1.2	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.7	0.0	5.0	8.6	0.1	0.0	0.0	8.3	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.8	0.0	45.9	38.6	0.2	0.0	0.0	25.0	24.6
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					768			1772			1120	
Approach Delay, s/veh					51.1			17.3			24.9	
Approach LOS					D			B			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	92.7			33.6			59.1			27.3		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	77.5			35.5			37.5			32.0		
Max Q Clear Time (g_c+I1), s	2.0			28.0			21.8			21.1		
Green Ext Time (p_c), s	13.1			1.2			7.8			1.2		
Intersection Summary												
HCM 6th Ctrl Delay	26.7											
HCM 6th LOS	C											

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	278	1	460	1402	566	298	948
Future Volume (vph)	278	1	460	1402	566	298	948
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	33.0	33.0	33.0	68.0	68.0	19.0	87.0
Total Split (%)	27.5%	27.5%	27.5%	56.7%	56.7%	15.8%	72.5%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	22.9	22.9	22.9	68.4	68.4	14.2	86.6
Actuated g/C Ratio	0.19	0.19	0.19	0.57	0.57	0.12	0.72
v/c Ratio	0.83	0.65	0.63	0.74	0.54	0.78	0.40
Control Delay	67.5	24.9	24.1	23.3	4.5	55.5	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	67.5	24.9	24.1	23.3	4.5	55.5	8.9
LOS	E	C	C	C	A	E	A
Approach Delay		39.1		17.9			20.0
Approach LOS		D		B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 22.5

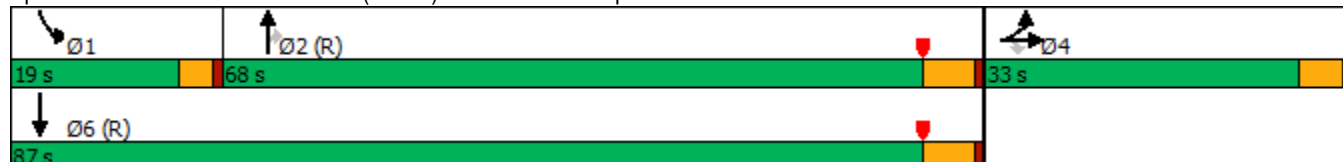
Intersection LOS: C

Intersection Capacity Utilization 81.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	1	460	0	0	0	0	1402	566	298	948	0
Future Volume (veh/h)	278	1	460	0	0	0	0	1402	566	298	948	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	428	0	240				0	1491	431	317	1009	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	613	0	273				0	2135	939	368	2631	0
Arrive On Green	0.17	0.00	0.17				0.00	0.60	0.60	0.21	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1563	3456	3647	0
Grp Volume(v), veh/h	428	0	240				0	1491	431	317	1009	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1563	1728	1777	0
Q Serve(g_s), s	13.6	0.0	17.7				0.0	34.6	18.2	10.6	0.0	0.0
Cycle Q Clear(g_c), s	13.6	0.0	17.7				0.0	34.6	18.2	10.6	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	613	0	273				0	2135	939	368	2631	0
V/C Ratio(X)	0.70	0.00	0.88				0.00	0.70	0.46	0.86	0.38	0.00
Avail Cap(c_a), veh/h	831	0	370				0	2135	939	432	2631	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.37	0.37	0.70	0.70	0.00
Uniform Delay (d), s/veh	46.8	0.0	48.5				0.0	16.5	13.2	46.4	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	13.7				0.0	0.7	0.6	9.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	7.8				0.0	13.0	6.1	4.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	0.0	62.2				0.0	17.2	13.8	55.8	0.3	0.0
LnGrp LOS	D	A	E				A	B	B	E	A	A
Approach Vol, veh/h	668						1922			1326		
Approach Delay, s/veh	52.8						16.4			13.6		
Approach LOS	D						B			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	16.8	77.6	25.6		94.4							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	15.0	62.5	28.0		81.5							
Max Q Clear Time (g_c+I1), s	12.6	36.6	19.7		2.0							
Green Ext Time (p_c), s	0.2	18.9	0.9		13.7							
Intersection Summary												
HCM 6th Ctrl Delay			21.7									
HCM 6th LOS			C									
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	126	412	82	173	460	61	162	1580	102	1054	147
Future Volume (vph)	126	412	82	173	460	61	162	1580	102	1054	147
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	43.2	20.6	41.1	41.1	15.9	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	12.4	19.3	19.3	14.7	21.6	21.6	11.4	35.1	10.0	32.6	51.6
Actuated g/C Ratio	0.12	0.19	0.19	0.15	0.22	0.22	0.11	0.35	0.10	0.33	0.52
v/c Ratio	0.67	0.66	0.22	0.77	0.66	0.16	0.94	1.11	0.67	0.70	0.18
Control Delay	59.4	42.4	4.2	65.1	41.0	1.5	99.4	91.2	66.1	32.9	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.4	42.4	4.2	65.1	41.0	1.5	99.4	91.2	66.1	32.9	4.7
LOS	E	D	A	E	D	A	F	F	E	C	A
Approach Delay		40.8			43.5			91.9		32.3	
Approach LOS		D			D			F		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 99.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 60.7

Intersection LOS: E

Intersection Capacity Utilization 83.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
16 s	40.2 s	20.6 s	43.2 s
			
Ø5	Ø6	Ø7	Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			  			  	
Traffic Volume (veh/h)	126	412	82	173	460	61	162	1580	211	102	1054	147
Future Volume (veh/h)	126	412	82	173	460	61	162	1580	211	102	1054	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	429	61	180	479	32	169	1646	140	106	1098	70
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	592	263	210	700	310	195	1714	146	130	1628	655
Arrive On Green	0.10	0.18	0.18	0.13	0.21	0.21	0.12	0.38	0.38	0.08	0.34	0.34
Sat Flow, veh/h	1594	3367	1497	1594	3367	1491	1594	4542	386	1594	4837	1502
Grp Volume(v), veh/h	131	429	61	180	479	32	169	1168	618	106	1098	70
Grp Sat Flow(s),veh/h/ln	1594	1683	1497	1594	1683	1491	1594	1612	1702	1594	1612	1502
Q Serve(g_s), s	7.4	11.1	3.2	10.2	12.1	1.6	9.6	32.6	32.7	6.0	18.0	2.5
Cycle Q Clear(g_c), s	7.4	11.1	3.2	10.2	12.1	1.6	9.6	32.6	32.7	6.0	18.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	159	592	263	210	700	310	195	1217	642	130	1628	655
V/C Ratio(X)	0.82	0.72	0.23	0.86	0.68	0.10	0.86	0.96	0.96	0.81	0.67	0.11
Avail Cap(c_a), veh/h	313	1366	607	277	1289	571	195	1217	643	197	1774	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	35.9	32.6	39.2	33.7	29.5	39.7	28.0	28.0	41.6	26.2	15.4
Incr Delay (d2), s/veh	4.1	1.7	0.4	14.9	1.2	0.1	29.8	17.0	26.2	8.3	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.5	1.1	4.7	4.8	0.6	5.1	13.8	16.2	2.6	6.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.8	37.6	33.1	54.1	34.9	29.7	69.5	45.1	54.3	49.9	27.2	15.4
LnGrp LOS	D	D	C	D	C	C	E	D	D	D	C	B
Approach Vol, veh/h		621			691			1955			1274	
Approach Delay, s/veh		38.6			39.7			50.1			28.4	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.1	41.3	16.7	22.0	15.9	37.5	13.8	25.0				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+I1), s	8.0	34.7	12.2	13.1	11.6	20.0	9.4	14.1				
Green Ext Time (p_c), s	0.0	0.1	0.1	2.8	0.0	6.3	0.1	2.9				

Intersection Summary

HCM 6th Ctrl Delay	40.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	86	320	35	113	152	69	1824	274	50	1172	68
Future Volume (vph)	86	320	35	113	152	69	1824	274	50	1172	68
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	44.0	44.0	44.0	44.0	44.0	16.3	63.0	63.0	13.0	59.7	59.7
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%	13.6%	52.5%	52.5%	10.8%	49.8%	49.8%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	27.0	27.0	27.0	27.0	27.0	8.9	58.7	58.7	7.2	55.7	55.7
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.08	0.55	0.55	0.07	0.52	0.52
v/c Ratio	0.41	0.77	0.09	1.02	0.45	0.56	0.74	0.34	0.50	0.50	0.09
Control Delay	38.9	48.8	1.4	128.9	34.9	66.2	22.7	13.1	68.2	19.6	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	48.8	1.4	128.9	34.9	66.2	22.7	13.1	68.2	19.6	4.8
LOS	D	D	A	F	C	E	C	B	E	B	A
Approach Delay		43.1			70.5		22.8			20.7	
Approach LOS		D			E		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.4

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 27.7

Intersection LOS: C

Intersection Capacity Utilization 85.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

 Ø1	 Ø2	 Ø4
13 s	63 s	44 s
 Ø5	 Ø6	 Ø8
16.3 s	59.7 s	44 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	320	35	113	152	34	69	1824	274	50	1172	68
Future Volume (veh/h)	86	320	35	113	152	34	69	1824	274	50	1172	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	92	344	21	122	163	29	74	1961	226	54	1260	55
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	307	560	474	199	463	82	92	2404	746	67	2329	723
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.50	0.50	0.04	0.48	0.48
Sat Flow, veh/h	1066	1772	1502	910	1464	261	1594	4837	1502	1594	4837	1502
Grp Volume(v), veh/h	92	344	21	122	0	192	74	1961	226	54	1260	55
Grp Sat Flow(s),veh/h/ln	1066	1772	1502	910	0	1725	1594	1612	1502	1594	1612	1502
Q Serve(g_s), s	8.5	19.2	1.1	15.3	0.0	10.0	5.3	39.9	10.4	3.9	21.2	2.3
Cycle Q Clear(g_c), s	18.4	19.2	1.1	34.5	0.0	10.0	5.3	39.9	10.4	3.9	21.2	2.3
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	560	474	199	0	545	92	2404	746	67	2329	723
V/C Ratio(X)	0.30	0.61	0.04	0.61	0.00	0.35	0.81	0.82	0.30	0.81	0.54	0.08
Avail Cap(c_a), veh/h	321	582	493	211	0	566	160	2404	746	115	2329	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	33.8	27.6	48.4	0.0	30.6	54.2	24.8	17.3	55.3	21.2	16.2
Incr Delay (d2), s/veh	0.5	1.8	0.0	4.7	0.0	0.4	6.2	3.2	1.0	8.3	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	8.2	0.4	3.6	0.0	4.1	2.2	14.2	3.5	1.7	7.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	35.6	27.6	53.1	0.0	31.0	60.4	28.0	18.4	63.5	22.1	16.4
LnGrp LOS	D	D	C	D	A	C	E	C	B	E	C	B
Approach Vol, veh/h	457			314			2261			1369		
Approach Delay, s/veh	35.8			39.6			28.1			23.5		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	64.3		42.5	11.3	62.5		42.5				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	8.4	* 58		38.2	11.7	53.2		38.2				
Max Q Clear Time (g_c+I1), s	5.9	41.9		21.2	7.3	23.2		36.5				
Green Ext Time (p_c), s	0.0	11.5		2.1	0.0	9.4		0.3				
Intersection Summary												
HCM 6th Ctrl Delay	28.3											
HCM 6th LOS	C											
Notes												

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	439	287	135	29	101	232	1689	49	73	1013	144
Future Volume (vph)	439	287	135	29	101	232	1689	49	73	1013	144
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.5	43.5	8.5	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	36.3%	36.3%	7.1%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.8	33.0	33.0	10.1	15.3	10.5	38.0	38.0	5.1	30.6	30.6
Actuated g/C Ratio	0.22	0.34	0.34	0.10	0.16	0.11	0.39	0.39	0.05	0.31	0.31
v/c Ratio	1.32	0.51	0.24	0.19	0.55	0.75	0.96	0.08	0.49	0.71	0.26
Control Delay	196.3	31.4	5.3	48.1	40.4	59.9	44.0	0.2	60.0	34.3	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	196.3	31.4	5.3	48.1	40.4	59.9	44.0	0.2	60.0	34.3	5.4
LOS	F	C	A	D	D	E	D	A	E	C	A
Approach Delay		111.4			41.7		44.8			32.4	
Approach LOS		F			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.5

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.32

Intersection Signal Delay: 54.6

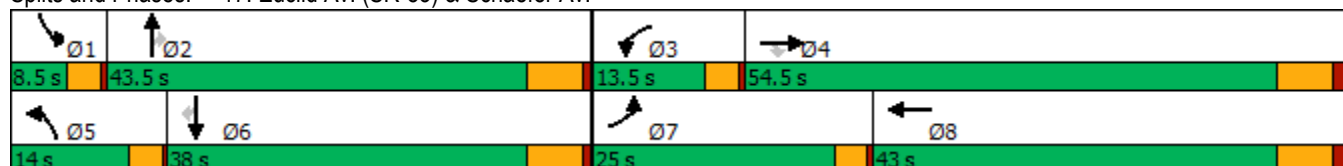
Intersection LOS: D

Intersection Capacity Utilization 91.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	439	287	135	29	101	45	232	1689	49	73	1013	144
Future Volume (veh/h)	439	287	135	29	101	45	232	1689	49	73	1013	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	462	302	93	31	106	36	244	1778	49	77	1066	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	506	423	94	146	50	306	1914	582	143	1658	515
Arrive On Green	0.23	0.29	0.29	0.06	0.12	0.12	0.10	0.40	0.40	0.05	0.34	0.34
Sat Flow, veh/h	1594	1772	1479	1594	1265	430	3092	4837	1470	3092	4837	1502
Grp Volume(v), veh/h	462	302	93	31	0	142	244	1778	49	77	1066	109
Grp Sat Flow(s),veh/h/ln	1594	1772	1479	1594	0	1695	1546	1612	1470	1546	1612	1502
Q Serve(g_s), s	21.5	13.8	4.5	1.7	0.0	7.6	7.2	32.9	2.0	2.3	17.4	4.8
Cycle Q Clear(g_c), s	21.5	13.8	4.5	1.7	0.0	7.6	7.2	32.9	2.0	2.3	17.4	4.8
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	366	506	423	94	0	195	306	1914	582	143	1658	515
V/C Ratio(X)	1.26	0.60	0.22	0.33	0.00	0.73	0.80	0.93	0.08	0.54	0.64	0.21
Avail Cap(c_a), veh/h	366	898	750	170	0	651	346	1936	588	165	1658	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	28.8	25.5	42.3	0.0	40.0	41.3	27.1	17.7	43.7	26.0	21.8
Incr Delay (d2), s/veh	138.6	0.8	0.2	0.8	0.0	3.8	9.5	8.5	0.1	1.2	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.9	5.6	1.5	0.7	0.0	3.2	3.0	12.5	0.6	0.8	6.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	174.7	29.7	25.7	43.0	0.0	43.8	50.8	35.5	17.8	44.9	26.8	22.0
LnGrp LOS	F	C	C	D	A	D	D	D	B	D	C	C
Approach Vol, veh/h	857			173			2071			1252		
Approach Delay, s/veh	107.4			43.7			36.9			27.5		
Approach LOS	F			D			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.8	43.1	9.0	33.8	12.8	38.1	25.0	17.8				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	37.5	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	4.3	34.9	3.7	15.8	9.2	19.4	23.5	9.6				
Green Ext Time (p_c), s	0.0	2.2	0.0	1.5	0.1	5.5	0.0	0.5				
Intersection Summary												
HCM 6th Ctrl Delay	48.4											
HCM 6th LOS	D											

Timings

18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	127	427	162	45	467	198	1562	54	160	999	129
Future Volume (vph)	127	427	162	45	467	198	1562	54	160	999	129
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	63.0	63.0	63.0	63.0	63.0	13.8	42.0	42.0	15.0	43.2	43.2
Total Split (%)	52.5%	52.5%	52.5%	52.5%	52.5%	11.5%	35.0%	35.0%	12.5%	36.0%	36.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	56.0	56.0	56.0	56.0	56.0	10.1	36.0	36.0	11.5	37.4	37.4
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47	0.08	0.30	0.30	0.10	0.31	0.31
v/c Ratio	1.21	0.53	0.21	0.15	0.91	0.84	1.01	0.11	1.09	0.69	0.24
Control Delay	186.4	25.7	3.4	20.2	45.3	82.1	67.9	5.9	150.6	39.1	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	186.4	25.7	3.4	20.2	45.3	82.1	67.9	5.9	150.6	39.1	6.2
LOS	F	C	A	C	D	F	E	A	F	D	A
Approach Delay		49.2			43.8		67.6			49.6	
Approach LOS		D			D		E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 55.7

Intersection LOS: E

Intersection Capacity Utilization 110.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	42 s	63 s
		
Ø5	Ø6	Ø8
13.8 s	43.2 s	63 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	427	162	45	467	235	198	1562	54	160	999	129
Future Volume (veh/h)	127	427	162	45	467	235	198	1562	54	160	999	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	131	440	111	46	481	196	204	1610	44	165	1030	99
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	827	701	283	558	228	249	1595	450	153	1501	466
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.09	0.30	0.30	0.10	0.31	0.31
Sat Flow, veh/h	682	1772	1502	767	1197	488	2910	5316	1502	1594	4837	1502
Grp Volume(v), veh/h	131	440	111	46	0	677	204	1610	44	165	1030	99
Grp Sat Flow(s),veh/h/ln	682	1772	1502	767	0	1684	1455	1772	1502	1594	1612	1502
Q Serve(g_s), s	13.0	21.1	5.1	5.4	0.0	43.0	8.3	36.0	2.5	11.5	22.4	5.8
Cycle Q Clear(g_c), s	56.0	21.1	5.1	26.6	0.0	43.0	8.3	36.0	2.5	11.5	22.4	5.8
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	134	827	701	283	0	786	249	1595	450	153	1501	466
V/C Ratio(X)	0.98	0.53	0.16	0.16	0.00	0.86	0.82	1.01	0.10	1.08	0.69	0.21
Avail Cap(c_a), veh/h	134	827	701	283	0	786	250	1595	450	153	1501	466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	22.7	18.4	32.1	0.0	28.5	54.0	42.0	30.3	54.2	36.3	30.6
Incr Delay (d2), s/veh	71.2	0.7	0.1	0.3	0.0	9.6	17.9	24.9	0.1	95.9	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.5	1.7	1.0	0.0	18.2	3.5	18.3	0.9	8.5	8.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	127.6	23.4	18.5	32.4	0.0	38.2	71.8	66.9	30.4	150.1	37.6	30.8
LnGrp LOS	F	C	B	C	A	D	E	F	C	F	D	C
Approach Vol, veh/h	682			723			1858			1294		
Approach Delay, s/veh	42.6			37.8			66.6			51.4		
Approach LOS	D			D			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	42.0		63.0	13.8	43.2		63.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	11.5	36.0		56.0	10.3	37.2		56.0				
Max Q Clear Time (g_c+I1), s	13.5	38.0		58.0	10.3	24.4		45.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	5.3		3.5				
Intersection Summary												
HCM 6th Ctrl Delay	54.1											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	70	309	210	54	133	115	1376	68	156	1003	59
Future Volume (vph)	70	309	210	54	133	115	1376	68	156	1003	59
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	48.0	48.0	48.0	48.0	48.0	20.9	50.0	50.0	22.0	51.1	51.1
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	17.4%	41.7%	41.7%	18.3%	42.6%	42.6%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	30.2	30.2	30.2	30.2	30.2	12.5	37.3	37.3	14.6	39.5	39.5
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.13	0.38	0.38	0.15	0.41	0.41
v/c Ratio	0.88	0.59	0.36	0.29	0.86	0.60	0.78	0.12	0.69	0.54	0.10
Control Delay	106.3	34.0	5.3	31.6	40.3	57.3	31.2	11.2	58.7	24.5	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.3	34.0	5.3	31.6	40.3	57.3	31.2	11.2	58.7	24.5	6.4
LOS	F	C	A	C	D	E	C	B	E	C	A
Approach Delay		32.4			39.4		32.2			28.0	
Approach LOS		C			D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 97

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 31.9

Intersection LOS: C

Intersection Capacity Utilization 87.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
22 s	50 s	48 s
 Ø5	 Ø6	 Ø8
20.9 s	51.1 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	309	210	54	133	333	115	1376	68	156	1003	59
Future Volume (veh/h)	70	309	210	54	133	333	115	1376	68	156	1003	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	74	325	119	57	140	338	121	1448	48	164	1056	30
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	680	569	276	177	427	146	1756	545	192	1893	580
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.36	0.36	0.12	0.39	0.39
Sat Flow, veh/h	820	1772	1483	846	460	1111	1594	4837	1502	1594	4837	1481
Grp Volume(v), veh/h	74	325	119	57	0	478	121	1448	48	164	1056	30
Grp Sat Flow(s),veh/h/ln	820	1772	1483	846	0	1572	1594	1612	1502	1594	1612	1481
Q Serve(g_s), s	9.2	14.6	5.7	5.7	0.0	28.3	7.8	28.6	2.2	10.6	17.9	1.3
Cycle Q Clear(g_c), s	37.6	14.6	5.7	20.3	0.0	28.3	7.8	28.6	2.2	10.6	17.9	1.3
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	680	569	276	0	603	146	1756	545	192	1893	580
V/C Ratio(X)	0.46	0.48	0.21	0.21	0.00	0.79	0.83	0.82	0.09	0.86	0.56	0.05
Avail Cap(c_a), veh/h	184	728	609	299	0	645	264	2037	632	280	2087	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	24.5	21.7	32.1	0.0	28.7	46.9	30.5	22.1	45.4	24.9	19.9
Incr Delay (d2), s/veh	1.5	0.4	0.1	0.3	0.0	6.0	8.5	2.6	0.1	13.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.9	1.9	1.1	0.0	10.9	3.3	10.5	0.7	4.7	6.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	24.9	21.9	32.4	0.0	34.7	55.4	33.0	22.1	59.3	25.2	19.9
LnGrp LOS	D	C	C	C	A	C	E	C	C	E	C	B
Approach Vol, veh/h	518			535			1617			1250		
Approach Delay, s/veh	27.3			34.5			34.4			29.6		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.1	43.9		45.2	13.2	46.9		45.2				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	18.5	44.3		43.2	17.4	45.4		43.2				
Max Q Clear Time (g_c+I1), s	12.6	30.6		39.6	9.8	19.9		30.3				
Green Ext Time (p_c), s	0.1	7.6		0.8	0.1	7.1		2.2				
Intersection Summary												
HCM 6th Ctrl Delay				31.9								
HCM 6th LOS				C								

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	355	4	372	748	824	854	428
Future Volume (vph)	355	4	372	748	824	854	428
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	40.0	87.0	47.0	47.0
Total Split (%)	27.5%	27.5%	27.5%	33.3%	72.5%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	22.9	22.9	22.9	31.0	86.6	51.0	51.0
Actuated g/C Ratio	0.19	0.19	0.19	0.26	0.72	0.42	0.42
v/c Ratio	0.83	0.77	0.53	0.88	0.34	0.59	0.48
Control Delay	67.5	51.1	12.4	71.6	4.7	30.2	4.4
Queue Delay	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Total Delay	67.5	51.1	12.4	71.7	4.8	30.2	4.4
LOS	E	D	B	E	A	C	A
Approach Delay		44.6			36.7	21.6	
Approach LOS		D			D	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 32.9

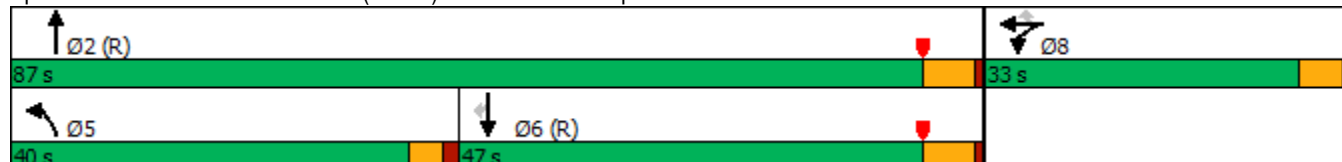
Intersection LOS: C

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	355	4	372	748	824	0	0	854	428
Future Volume (veh/h)	0	0	0	355	4	372	748	824	0	0	854	428
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				431	0	129	779	858	0	0	890	357
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				506	0	225	829	2738	0	0	1753	782
Arrive On Green				0.14	0.00	0.14	0.48	1.00	0.00	0.00	0.49	0.49
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				431	0	129	779	858	0	0	890	357
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1777	1585
Q Serve(g_s), s				14.2	0.0	9.1	25.6	0.0	0.0	0.0	20.3	17.7
Cycle Q Clear(g_c), s				14.2	0.0	9.1	25.6	0.0	0.0	0.0	20.3	17.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				506	0	225	829	2738	0	0	1753	782
V/C Ratio(X)				0.85	0.00	0.57	0.94	0.31	0.00	0.00	0.51	0.46
Avail Cap(c_a), veh/h				831	0	370	1022	2738	0	0	1753	782
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.61	0.61	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.3	0.0	48.1	30.4	0.0	0.0	0.0	20.6	19.9
Incr Delay (d2), s/veh				2.3	0.0	0.9	8.8	0.2	0.0	0.0	1.1	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.3	0.0	3.6	8.6	0.1	0.0	0.0	8.3	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.5	0.0	49.0	39.2	0.2	0.0	0.0	21.6	21.8
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					560			1637			1247	
Approach Delay, s/veh					51.7			18.7			21.7	
Approach LOS					D			B			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	98.0			33.3			64.7			22.0		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	81.5			35.5			41.5			28.0		
Max Q Clear Time (g_c+I1), s	2.0			27.6			22.3			16.2		
Green Ext Time (p_c), s	10.6			1.2			9.8			0.9		
Intersection Summary												
HCM 6th Ctrl Delay	25.2											
HCM 6th LOS	C											

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	306	0	528	1263	560	332	878
Future Volume (vph)	306	0	528	1263	560	332	878
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	35.0	64.0	64.0	21.0	85.0
Total Split (%)	29.2%	29.2%	29.2%	53.3%	53.3%	17.5%	70.8%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	25.1	25.1	25.1	64.9	64.9	15.5	84.4
Actuated g/C Ratio	0.21	0.21	0.21	0.54	0.54	0.13	0.70
v/c Ratio	0.83	0.68	0.66	0.70	0.55	0.80	0.38
Control Delay	65.2	25.6	25.0	24.2	4.5	65.5	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	65.2	25.6	25.0	24.2	4.5	65.5	8.0
LOS	E	C	C	C	A	E	A
Approach Delay		38.5		18.2			23.7
Approach LOS		D		B			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 24.3

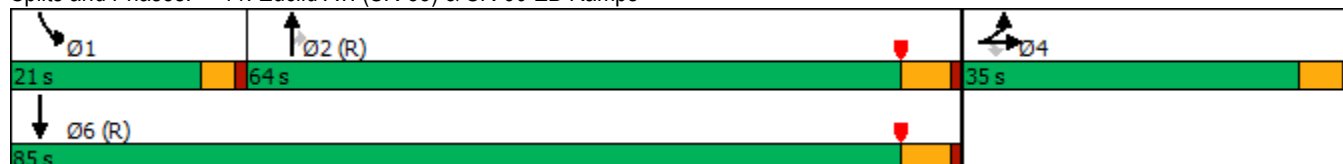
Intersection LOS: C

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	0	528	0	0	0	0	1263	560	332	878	0
Future Volume (veh/h)	306	0	528	0	0	0	0	1263	560	332	878	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	487	0	281				0	1344	480	353	934	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	705	0	314				0	2005	880	404	2539	0
Arrive On Green	0.20	0.00	0.20				0.00	0.56	0.56	0.23	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1560	3456	3647	0
Grp Volume(v), veh/h	487	0	281				0	1344	480	353	934	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1560	1728	1777	0
Q Serve(g_s), s	15.2	0.0	20.7				0.0	31.8	23.2	11.8	0.0	0.0
Cycle Q Clear(g_c), s	15.2	0.0	20.7				0.0	31.8	23.2	11.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	705	0	314				0	2005	880	404	2539	0
V/C Ratio(X)	0.69	0.00	0.90				0.00	0.67	0.55	0.87	0.37	0.00
Avail Cap(c_a), veh/h	891	0	396				0	2005	880	490	2539	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.69	0.69	0.72	0.72	0.00
Uniform Delay (d), s/veh	44.7	0.0	46.9				0.0	18.3	16.5	45.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	16.8				0.0	1.2	1.7	9.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	9.4				0.0	12.4	8.2	4.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	0.0	63.8				0.0	19.6	18.1	54.3	0.3	0.0
LnGrp LOS	D	A	E				A	B	B	D	A	A
Approach Vol, veh/h	768						1824			1287		
Approach Delay, s/veh	52.3						19.2			15.1		
Approach LOS	D						B			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.0	73.2		28.8		91.2						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	17.0	58.5		30.0		79.5						
Max Q Clear Time (g_c+I1), s	13.8	33.8		22.7		2.0						
Green Ext Time (p_c), s	0.2	17.1		1.0		12.1						
Intersection Summary												
HCM 6th Ctrl Delay	24.4											
HCM 6th LOS	C											
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	128	223	82	150	333	154	141	1200	149	877	137
Future Volume (vph)	128	223	82	150	333	154	141	1200	149	877	137
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	36.2	23.0	36.2	36.2	16.0	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	12.1	15.1	15.1	13.1	16.1	16.1	11.6	30.8	13.4	31.5	45.5
Actuated g/C Ratio	0.13	0.16	0.16	0.14	0.17	0.17	0.12	0.33	0.14	0.34	0.49
v/c Ratio	0.64	0.42	0.23	0.70	0.59	0.41	0.74	0.89	0.68	0.56	0.18
Control Delay	55.5	38.5	1.5	57.3	40.8	9.3	65.6	39.5	54.9	27.6	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	38.5	1.5	57.3	40.8	9.3	65.6	39.5	54.9	27.6	2.6
LOS	E	D	A	E	D	A	E	D	D	C	A
Approach Delay		36.5			37.1			42.0		28.1	
Approach LOS		D			D			D		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 93.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 36.2

Intersection LOS: D

Intersection Capacity Utilization 72.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
25.2 s	35.6 s	23 s	36.2 s
			
Ø5	Ø6	Ø7	Ø8
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			  			  	
Traffic Volume (veh/h)	128	223	82	150	333	154	141	1200	158	149	877	137
Future Volume (veh/h)	128	223	82	150	333	154	141	1200	158	149	877	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	132	230	55	155	343	98	145	1237	112	154	904	92
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	475	207	188	529	233	176	1542	140	188	1688	670
Arrive On Green	0.10	0.14	0.14	0.12	0.16	0.16	0.11	0.34	0.34	0.12	0.35	0.35
Sat Flow, veh/h	1594	3367	1472	1594	3367	1481	1594	4515	409	1594	4837	1482
Grp Volume(v), veh/h	132	230	55	155	343	98	145	884	465	154	904	92
Grp Sat Flow(s),veh/h/ln	1594	1683	1472	1594	1683	1481	1594	1612	1698	1594	1612	1482
Q Serve(g_s), s	6.2	4.8	2.5	7.3	7.3	4.6	6.8	19.0	19.0	7.2	11.4	2.8
Cycle Q Clear(g_c), s	6.2	4.8	2.5	7.3	7.3	4.6	6.8	19.0	19.0	7.2	11.4	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	163	475	207	188	529	233	176	1102	580	188	1688	670
V/C Ratio(X)	0.81	0.48	0.27	0.82	0.65	0.42	0.82	0.80	0.80	0.82	0.54	0.14
Avail Cap(c_a), veh/h	384	1340	586	384	1340	590	238	1275	672	430	2426	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	30.2	29.3	32.9	30.2	29.0	33.2	22.8	22.8	32.9	19.9	12.3
Incr Delay (d2), s/veh	3.7	0.8	0.7	3.4	1.3	1.2	11.7	3.3	6.1	3.4	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.9	0.9	2.8	2.8	1.6	2.9	6.6	7.4	2.8	3.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	31.0	29.9	36.3	31.5	30.3	45.0	26.1	28.9	36.3	20.2	12.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h		417			596			1494			1150	
Approach Delay, s/veh		32.8			32.6			28.8			21.7	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.6	32.6	13.6	16.6	13.0	33.1	12.4	17.8				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+l1), s	9.2	21.0	9.3	6.8	8.8	13.4	8.2	9.3				
Green Ext Time (p_c), s	0.1	5.1	0.1	1.4	0.0	6.8	0.1	2.2				

Intersection Summary

HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	75	65	43	122	93	42	1360	123	52	967	72
Future Volume (vph)	75	65	43	122	93	42	1360	123	52	967	72
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	15.0	63.0	63.0	18.0	66.0	66.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	12.5%	52.5%	52.5%	15.0%	55.0%	55.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	16.7	16.7	16.7	16.7	16.7	7.3	61.1	61.1	7.9	62.6	62.6
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17	0.07	0.62	0.62	0.08	0.63	0.63
v/c Ratio	0.48	0.23	0.14	0.64	0.52	0.38	0.48	0.14	0.43	0.33	0.08
Control Delay	48.3	37.7	3.7	53.7	38.0	56.1	12.8	6.3	56.3	10.7	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.3	37.7	3.7	53.7	38.0	56.1	12.8	6.3	56.3	10.7	3.2
LOS	D	D	A	D	D	E	B	A	E	B	A
Approach Delay		34.0			45.1		13.5			12.4	
Approach LOS		C			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 99.2

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 17.1

Intersection LOS: B

Intersection Capacity Utilization 66.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.



HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	65	43	122	93	55	42	1360	123	52	967	72
Future Volume (veh/h)	75	65	43	122	93	55	42	1360	123	52	967	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	78	68	26	127	97	47	44	1417	102	54	1007	64
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	307	260	238	194	94	57	2952	916	67	2980	913
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.04	0.61	0.61	0.04	0.62	0.62
Sat Flow, veh/h	1113	1772	1502	1165	1122	544	1594	4837	1502	1594	4837	1482
Grp Volume(v), veh/h	78	68	26	127	0	144	44	1417	102	54	1007	64
Grp Sat Flow(s),veh/h/ln	1113	1772	1502	1165	0	1665	1594	1612	1502	1594	1612	1482
Q Serve(g_s), s	6.6	3.2	1.4	10.2	0.0	7.6	2.6	15.6	2.7	3.2	9.7	1.7
Cycle Q Clear(g_c), s	14.1	3.2	1.4	13.3	0.0	7.6	2.6	15.6	2.7	3.2	9.7	1.7
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	307	260	238	0	288	57	2952	916	67	2980	913
V/C Ratio(X)	0.43	0.22	0.10	0.53	0.00	0.50	0.77	0.48	0.11	0.81	0.34	0.07
Avail Cap(c_a), veh/h	370	609	516	437	0	573	172	2952	916	221	2980	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	34.3	33.6	40.1	0.0	36.1	46.2	10.4	7.9	45.9	9.0	7.4
Incr Delay (d2), s/veh	1.6	0.4	0.2	1.9	0.0	1.3	7.8	0.6	0.2	8.5	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.3	0.5	2.9	0.0	3.0	1.1	4.5	0.8	1.4	2.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	34.7	33.8	41.9	0.0	37.5	54.0	10.9	8.1	54.4	9.3	7.6
LnGrp LOS	D	C	C	D	A	D	D	B	A	D	A	A
Approach Vol, veh/h	172			271			1563			1125		
Approach Delay, s/veh	38.9			39.6			12.0			11.4		
Approach LOS	D			D			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	65.4		22.5	8.1	66.0		22.5				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	13.4	* 58		33.2	10.4	59.5		33.2				
Max Q Clear Time (g_c+I1), s	5.2	17.6		16.1	4.6	11.7		15.3				
Green Ext Time (p_c), s	0.0	12.3		0.6	0.0	7.6		1.1				

Intersection Summary

HCM 6th Ctrl Delay 15.6

HCM 6th LOS B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	373	88	99	17	63	250	1107	12	44	879	132
Future Volume (vph)	373	88	99	17	63	250	1107	12	44	879	132
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	33.0	62.5	62.5	13.5	43.0	14.2	35.5	35.5	8.5	29.8	29.8
Total Split (%)	27.5%	52.1%	52.1%	11.3%	35.8%	11.8%	29.6%	29.6%	7.1%	24.8%	24.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	29.7	41.2	41.2	10.1	12.9	10.8	32.9	32.9	5.1	23.4	23.4
Actuated g/C Ratio	0.31	0.42	0.42	0.10	0.13	0.11	0.34	0.34	0.05	0.24	0.24
v/c Ratio	0.81	0.12	0.15	0.11	0.43	0.76	0.71	0.02	0.29	0.79	0.29
Control Delay	47.2	19.0	2.8	46.1	33.8	58.9	33.1	0.1	53.0	41.5	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.2	19.0	2.8	46.1	33.8	58.9	33.1	0.1	53.0	41.5	5.3
LOS	D	B	A	D	C	E	C	A	D	D	A
Approach Delay		35.0			35.6		37.5			37.4	
Approach LOS		C			D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 97.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 36.9

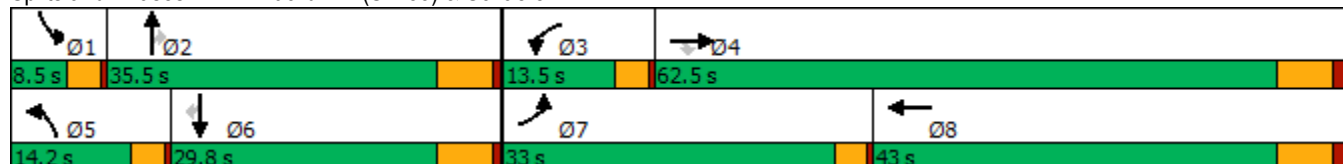
Intersection LOS: D

Intersection Capacity Utilization 70.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	373	88	99	17	63	37	250	1107	12	44	879	132
Future Volume (veh/h)	373	88	99	17	63	37	250	1107	12	44	879	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	389	92	51	18	66	17	260	1153	11	46	916	99
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	556	470	67	117	30	342	1571	488	129	1238	379
Arrive On Green	0.27	0.31	0.31	0.04	0.09	0.09	0.11	0.32	0.32	0.04	0.26	0.26
Sat Flow, veh/h	1594	1772	1499	1594	1359	350	3092	4837	1502	3092	4837	1481
Grp Volume(v), veh/h	389	92	51	18	0	83	260	1153	11	46	916	99
Grp Sat Flow(s),veh/h/ln	1594	1772	1499	1594	0	1709	1546	1612	1502	1546	1612	1481
Q Serve(g_s), s	17.0	2.7	1.7	0.8	0.0	3.4	5.9	15.2	0.4	1.0	12.5	3.8
Cycle Q Clear(g_c), s	17.0	2.7	1.7	0.8	0.0	3.4	5.9	15.2	0.4	1.0	12.5	3.8
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	430	556	470	67	0	148	342	1571	488	129	1238	379
V/C Ratio(X)	0.91	0.17	0.11	0.27	0.00	0.56	0.76	0.73	0.02	0.36	0.74	0.26
Avail Cap(c_a), veh/h	652	1365	1154	221	0	854	459	1980	615	215	1597	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	17.9	17.6	33.5	0.0	31.6	31.1	21.6	16.5	33.6	24.6	21.4
Incr Delay (d2), s/veh	8.6	0.1	0.1	0.8	0.0	2.5	3.3	1.1	0.0	0.6	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	1.0	0.5	0.3	0.0	1.4	2.1	5.0	0.1	0.4	4.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	18.0	17.6	34.2	0.0	34.1	34.4	22.6	16.6	34.2	26.0	21.7
LnGrp LOS	C	B	B	C	A	C	C	C	B	C	C	C
Approach Vol, veh/h	532			101			1424			1061		
Approach Delay, s/veh	29.7			34.1			24.7			25.9		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.5	29.4	6.5	29.6	11.5	24.4	22.9	13.2				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	29.5	10.0	55.5	10.7	23.8	29.5	36.0				
Max Q Clear Time (g_c+I1), s	3.0	17.2	2.8	4.7	7.9	14.5	19.0	5.4				
Green Ext Time (p_c), s	0.0	5.6	0.0	0.5	0.1	3.9	0.4	0.3				
Intersection Summary												
HCM 6th Ctrl Delay	26.3											
HCM 6th LOS	C											

Timings

18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	116	204	105	58	362	156	1042	40	142	797	96
Future Volume (vph)	116	204	105	58	362	156	1042	40	142	797	96
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	61.0	61.0	61.0	61.0	61.0	15.4	39.0	39.0	20.0	43.6	43.6
Total Split (%)	50.8%	50.8%	50.8%	50.8%	50.8%	12.8%	32.5%	32.5%	16.7%	36.3%	36.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	38.6	38.6	38.6	38.6	38.6	9.7	27.1	27.1	13.0	30.3	30.3
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.10	0.28	0.28	0.14	0.32	0.32
v/c Ratio	0.85	0.30	0.16	0.14	0.85	0.55	0.72	0.08	0.69	0.54	0.19
Control Delay	75.5	21.3	4.5	20.3	38.5	53.1	35.7	0.3	60.9	29.8	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	21.3	4.5	20.3	38.5	53.1	35.7	0.3	60.9	29.8	6.9
LOS	E	C	A	C	D	D	D	A	E	C	A
Approach Delay		32.0			36.8		36.8			31.9	
Approach LOS		C			D		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 96

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 34.7

Intersection LOS: C

Intersection Capacity Utilization 90.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
20 s	39 s	61 s
		
Ø5	Ø6	Ø8
15.4 s	43.6 s	61 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	204	105	58	362	206	156	1042	40	142	797	96
Future Volume (veh/h)	116	204	105	58	362	206	156	1042	40	142	797	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1575	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	120	210	74	60	373	204	161	1074	27	146	822	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	832	704	461	505	276	216	1375	388	173	1418	434
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.07	0.26	0.26	0.11	0.29	0.29
Sat Flow, veh/h	748	1772	1501	980	1077	589	2910	5316	1502	1594	4837	1481
Grp Volume(v), veh/h	120	210	74	60	0	577	161	1074	27	146	822	61
Grp Sat Flow(s),veh/h/ln	748	1772	1501	980	0	1665	1455	1772	1502	1594	1612	1481
Q Serve(g_s), s	15.7	7.2	2.8	4.0	0.0	28.4	5.5	19.0	1.4	9.1	14.6	3.1
Cycle Q Clear(g_c), s	44.1	7.2	2.8	11.2	0.0	28.4	5.5	19.0	1.4	9.1	14.6	3.1
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	832	704	461	0	782	216	1375	388	173	1418	434
V/C Ratio(X)	0.57	0.25	0.11	0.13	0.00	0.74	0.75	0.78	0.07	0.84	0.58	0.14
Avail Cap(c_a), veh/h	261	948	803	525	0	891	343	1738	491	260	1802	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	16.1	15.0	19.5	0.0	21.8	45.8	34.8	28.3	44.2	30.4	26.3
Incr Delay (d2), s/veh	2.4	0.2	0.1	0.1	0.0	2.8	1.9	1.8	0.1	9.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.7	0.9	0.9	0.0	10.6	1.9	7.8	0.5	3.8	5.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.0	16.3	15.0	19.6	0.0	24.6	47.7	36.6	28.3	53.6	30.8	26.5
LnGrp LOS	D	B	B	B	A	C	D	D	C	D	C	C
Approach Vol, veh/h	404		637				1262				1029	
Approach Delay, s/veh	23.7		24.1				37.8				33.8	
Approach LOS	C		C				D				C	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	14.5	32.1	54.4		11.0	35.6	54.4					
Change Period (Y+Rc), s	3.5	6.0	7.0		3.5	6.0	7.0					
Max Green Setting (Gmax), s	16.5	33.0	54.0		11.9	37.6	54.0					
Max Q Clear Time (g_c+I1), s	11.1	21.0	46.1		7.5	16.6	30.4					
Green Ext Time (p_c), s	0.1	5.2	1.3		0.1	5.1	4.0					
Intersection Summary												
HCM 6th Ctrl Delay			32.2									
HCM 6th LOS			C									

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	38	51	115	14	67	111	1016	7	82	825	32
Future Volume (vph)	38	51	115	14	67	111	1016	7	82	825	32
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	51.0	51.0	51.0	51.0	51.0	23.0	49.0	49.0	20.0	46.0	46.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	19.2%	40.8%	40.8%	16.7%	38.3%	38.3%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	14.7	14.7	14.7	14.7	14.7	11.1	22.6	22.6	9.7	21.5	21.5
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24	0.18	0.38	0.38	0.16	0.36	0.36
v/c Ratio	0.23	0.12	0.26	0.05	0.60	0.40	0.59	0.01	0.34	0.50	0.06
Control Delay	24.2	20.3	6.1	20.2	15.9	33.2	18.9	0.0	34.0	19.0	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	20.3	6.1	20.2	15.9	33.2	18.9	0.0	34.0	19.0	5.1
LOS	C	C	A	C	B	C	B	A	C	B	A
Approach Delay		13.0			16.1		20.2			19.8	
Approach LOS		B			B		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 60.2

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 19.0

Intersection LOS: B

Intersection Capacity Utilization 63.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
20 s	49 s	51 s
		
Ø5	Ø6	Ø8
23 s	46 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	51	115	14	67	217	111	1016	7	82	825	32
Future Volume (veh/h)	38	51	115	14	67	217	111	1016	7	82	825	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	40	54	40	15	71	216	117	1069	7	86	868	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	455	386	423	99	302	147	1828	567	114	1727	529
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.38	0.38	0.07	0.36	0.36
Sat Flow, veh/h	977	1772	1502	1165	386	1174	1594	4837	1502	1594	4837	1481
Grp Volume(v), veh/h	40	54	40	15	0	287	117	1069	7	86	868	19
Grp Sat Flow(s),veh/h/ln	977	1772	1502	1165	0	1561	1594	1612	1502	1594	1612	1481
Q Serve(g_s), s	1.9	1.1	1.0	0.5	0.0	8.0	3.4	8.4	0.1	2.5	6.7	0.4
Cycle Q Clear(g_c), s	9.8	1.1	1.0	1.6	0.0	8.0	3.4	8.4	0.1	2.5	6.7	0.4
Prop In Lane	1.00		1.00	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	455	386	423	0	401	147	1828	567	114	1727	529
V/C Ratio(X)	0.17	0.12	0.10	0.04	0.00	0.72	0.80	0.58	0.01	0.76	0.50	0.04
Avail Cap(c_a), veh/h	936	1719	1457	1254	0	1514	653	4398	1365	552	4094	1253
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	13.6	13.5	14.2	0.0	16.1	21.2	11.8	9.3	21.7	12.0	10.0
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.0	1.8	7.1	0.3	0.0	7.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.3	0.1	0.0	2.4	1.3	2.0	0.0	1.0	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.8	13.7	13.6	14.2	0.0	17.9	28.3	12.1	9.3	29.1	12.2	10.0
LnGrp LOS	C	B	B	B	A	B	C	B	A	C	B	A
Approach Vol, veh/h	134				302				1193			
Approach Delay, s/veh	15.8				17.7				13.7			
Approach LOS	B				B				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	23.7		17.0	7.9	22.7		17.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	16.5	43.3		46.2	19.5	40.3		46.2				
Max Q Clear Time (g_c+I1), s	4.5	10.4		11.8	5.4	8.7		10.0				
Green Ext Time (p_c), s	0.1	7.6		0.4	0.1	5.8		1.4				
Intersection Summary												
HCM 6th Ctrl Delay	14.3											
HCM 6th LOS	B											

APPENDIX 7.1: HORIZON YEAR (2045) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/23/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	41	412	112	39	602	91	45	14	39
Future Volume (vph)	41	412	112	39	602	91	45	14	39
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	19.0	49.0	49.0	19.0	49.0	52.0	52.0	52.0	52.0
Total Split (%)	15.8%	40.8%	40.8%	15.8%	40.8%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.7	19.0	19.0	6.6	16.9		14.5		14.5
Actuated g/C Ratio	0.14	0.39	0.39	0.14	0.35		0.30		0.30
v/c Ratio	0.20	0.32	0.19	0.19	0.55		0.49		0.23
Control Delay	26.2	12.7	4.5	26.4	16.2		19.6		11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	26.2	12.7	4.5	26.4	16.2		19.6		11.6
LOS	C	B	A	C	B		B		B
Approach Delay		12.0			16.8		19.6		11.6
Approach LOS		B			B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 48.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 15.0

Intersection LOS: B

Intersection Capacity Utilization 51.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

 Ø2	 Ø3	 Ø4
52 s	19 s	49 s
 Ø6	 Ø7	 Ø8
52 s	19 s	49 s

HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	412	112	39	602	15	91	45	61	14	39	54
Future Volume (veh/h)	41	412	112	39	602	15	91	45	61	14	39	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	0.98		0.99	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	45	448	104	42	654	12	99	49	48	15	42	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1133	493	78	1128	21	301	147	104	132	261	175
Arrive On Green	0.05	0.32	0.32	0.05	0.32	0.32	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1688	3554	1545	1688	3566	65	620	530	373	116	939	629
Grp Volume(v), veh/h	45	448	104	42	326	340	196	0	0	91	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1545	1688	1777	1854	1523	0	0	1684	0	0
Q Serve(g_s), s	1.1	4.1	2.1	1.0	6.4	6.5	2.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	4.1	2.1	1.0	6.4	6.5	4.2	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.04	0.51		0.24	0.16		0.37
Lane Grp Cap(c), veh/h	82	1133	493	78	562	587	552	0	0	568	0	0
V/C Ratio(X)	0.55	0.40	0.21	0.54	0.58	0.58	0.35	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	579	3655	1590	579	1828	1907	1803	0	0	1947	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.5	11.1	10.4	19.6	12.0	12.0	12.4	0.0	0.0	11.6	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.2	0.2	2.2	0.9	0.9	0.4	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.2	0.5	0.4	1.9	2.0	1.3	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.6	11.4	10.7	21.7	13.0	12.9	12.8	0.0	0.0	11.7	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		597			708			196			91	
Approach Delay, s/veh		12.0			13.5			12.8			11.7	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.3	6.5	19.2		16.3	6.6	19.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		47.4	14.4	43.2		47.4	14.4	43.2				
Max Q Clear Time (g_c+I1), s		6.2	3.0	6.1		3.7	3.1	8.5				
Green Ext Time (p_c), s		1.4	0.0	3.2		0.6	0.0	3.9				
Intersection Summary												
HCM 6th Ctrl Delay			12.7									
HCM 6th LOS			B									

Timings
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	40	766	28	12	831	27	98	115	44	122
Future Volume (vph)	40	766	28	12	831	27	98	115	44	122
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	17.0	57.0	57.0	12.0	52.0	52.0	51.0	51.0	51.0	51.0
Total Split (%)	14.2%	47.5%	47.5%	10.0%	43.3%	43.3%	42.5%	42.5%	42.5%	42.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.3	30.3	30.3	6.1	25.7	25.7		21.0		21.0
Actuated g/C Ratio	0.11	0.47	0.47	0.09	0.40	0.40		0.32		0.32
v/c Ratio	0.23	0.50	0.04	0.08	0.64	0.04		0.65		0.56
Control Delay	37.9	14.2	1.8	39.2	20.2	0.1		29.3		22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	37.9	14.2	1.8	39.2	20.2	0.1		29.3		22.9
LOS	D	B	A	D	C	A		C		C
Approach Delay		14.9			19.8			29.3		22.9
Approach LOS		B			B			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 64.8

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 19.4

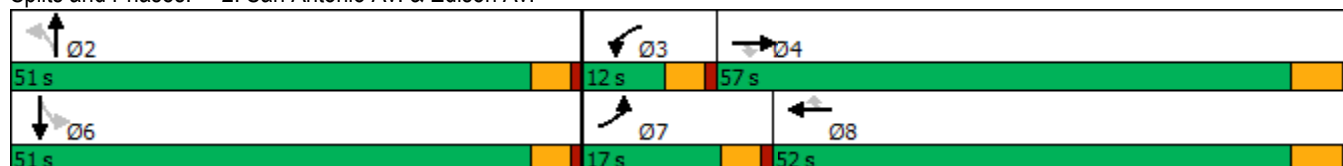
Intersection LOS: B

Intersection Capacity Utilization 68.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	766	28	12	831	27	98	115	35	44	122	114
Future Volume (veh/h)	40	766	28	12	831	27	98	115	35	44	122	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	43	833	22	13	903	26	107	125	34	48	133	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1513	660	28	1409	615	237	209	49	146	251	99
Arrive On Green	0.05	0.43	0.43	0.02	0.40	0.40	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1688	3554	1550	1688	3554	1550	549	902	213	223	1081	425
Grp Volume(v), veh/h	43	833	22	13	903	26	266	0	0	240	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1550	1688	1777	1550	1663	0	0	1730	0	0
Q Serve(g_s), s	1.1	8.1	0.4	0.4	9.5	0.5	0.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	8.1	0.4	0.4	9.5	0.5	6.2	0.0	0.0	5.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.13	0.20		0.25
Lane Grp Cap(c), veh/h	77	1513	660	28	1409	615	496	0	0	495	0	0
V/C Ratio(X)	0.55	0.55	0.03	0.46	0.64	0.04	0.54	0.00	0.00	0.48	0.00	0.00
Avail Cap(c_a), veh/h	454	3947	1722	271	3562	1553	1651	0	0	1750	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.5	9.9	7.7	22.5	11.3	8.5	15.9	0.0	0.0	15.7	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.3	0.0	4.4	0.5	0.0	0.9	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.1	0.1	0.2	2.6	0.1	2.3	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	10.2	7.7	26.8	11.7	8.6	16.8	0.0	0.0	16.4	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h		898			942			266			240	
Approach Delay, s/veh		10.8			11.9			16.8			16.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.3	5.4	25.4		15.3	6.7	24.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		46.4	7.4	51.2		46.4	12.4	46.2				
Max Q Clear Time (g_c+I1), s		8.2	2.4	10.1		7.4	3.1	11.5				
Green Ext Time (p_c), s		2.0	0.0	6.2		1.7	0.0	6.8				
Intersection Summary												
HCM 6th Ctrl Delay			12.5									
HCM 6th LOS			B									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	21	270	65	623	39	130	20	148
Future Volume (vph)	21	270	65	623	39	130	20	148
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	43.0	18.0	47.0	21.0	41.0	18.0	38.0
Total Split (%)	11.7%	35.8%	15.0%	39.2%	17.5%	34.2%	15.0%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	20.0	15.8	21.7	18.3	6.8	17.0	6.3	12.7
Actuated g/C Ratio	0.38	0.30	0.41	0.35	0.13	0.32	0.12	0.24
v/c Ratio	0.07	0.32	0.15	0.59	0.19	0.18	0.11	0.24
Control Delay	10.6	17.1	10.7	18.0	30.4	13.0	31.4	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	17.1	10.7	18.0	30.4	13.0	31.4	19.5
LOS	B	B	B	B	C	B	C	B
Approach Delay		16.7		17.4		16.0		20.7
Approach LOS		B		B		B		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 52.7

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 17.5

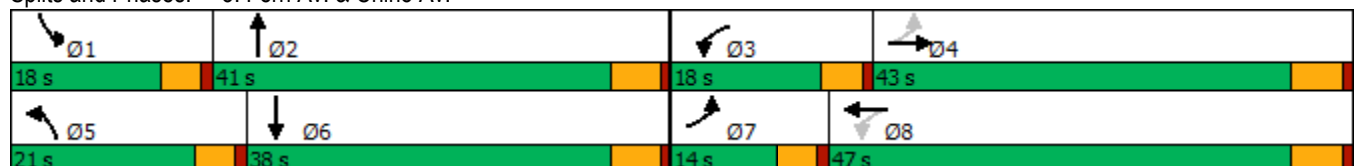
Intersection LOS: B

Intersection Capacity Utilization 53.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.



HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	270	38	65	623	33	39	130	53	20	148	37
Future Volume (veh/h)	21	270	38	65	623	33	39	130	53	20	148	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	23	293	34	71	677	32	42	141	26	22	161	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	854	98	443	1042	49	75	692	125	45	641	113
Arrive On Green	0.03	0.27	0.27	0.06	0.30	0.30	0.04	0.23	0.23	0.03	0.21	0.21
Sat Flow, veh/h	1688	3211	369	1688	3454	163	1688	3000	540	1688	3014	532
Grp Volume(v), veh/h	23	161	166	71	348	361	42	82	85	22	94	96
Grp Sat Flow(s),veh/h/ln	1688	1777	1803	1688	1777	1840	1688	1777	1764	1688	1777	1768
Q Serve(g_s), s	0.5	3.6	3.7	1.5	8.4	8.4	1.2	1.8	1.9	0.6	2.2	2.2
Cycle Q Clear(g_c), s	0.5	3.6	3.7	1.5	8.4	8.4	1.2	1.8	1.9	0.6	2.2	2.2
Prop In Lane	1.00		0.20	1.00		0.09	1.00		0.31	1.00		0.30
Lane Grp Cap(c), veh/h	284	473	480	443	536	555	75	410	407	45	378	376
V/C Ratio(X)	0.08	0.34	0.35	0.16	0.65	0.65	0.56	0.20	0.21	0.49	0.25	0.26
Avail Cap(c_a), veh/h	560	1341	1361	796	1485	1538	561	1283	1274	459	1175	1170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	14.6	14.6	11.7	15.0	15.0	23.1	15.3	15.3	23.7	16.1	16.2
Incr Delay (d2), s/veh	0.0	0.4	0.4	0.1	1.3	1.3	2.4	0.2	0.3	3.1	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.2	1.2	0.4	2.8	2.9	0.5	0.6	0.7	0.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	15.0	15.1	11.8	16.3	16.2	25.5	15.5	15.6	26.8	16.5	16.5
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		350			780			209			212	
Approach Delay, s/veh		14.9			15.9			17.6			17.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	16.8	7.7	18.9	6.8	15.9	6.0	20.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	35.6	13.4	37.2	16.4	32.6	9.4	41.2				
Max Q Clear Time (g_c+l1), s	2.6	3.9	3.5	5.7	3.2	4.2	2.5	10.4				
Green Ext Time (p_c), s	0.0	0.9	0.0	1.7	0.0	1.0	0.0	4.2				
Intersection Summary												
HCM 6th Ctrl Delay			16.1									
HCM 6th LOS			B									

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	355	15	414	88	123	35	153
Future Volume (vph)	46	355	15	414	88	123	35	153
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	41.0	15.0	38.0	27.0	47.0	17.0	37.0
Total Split (%)	15.0%	34.2%	12.5%	31.7%	22.5%	39.2%	14.2%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	8.1	75.5	5.9	69.4	11.3	20.7	7.3	12.8
Actuated g/C Ratio	0.07	0.63	0.05	0.58	0.09	0.17	0.06	0.11
v/c Ratio	0.44	0.24	0.20	0.24	0.61	0.28	0.37	0.61
Control Delay	65.2	11.2	59.7	14.6	68.1	36.1	63.7	36.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	11.2	59.7	14.6	68.1	36.1	63.7	36.7
LOS	E	B	E	B	E	D	E	D
Approach Delay		16.0		16.0		47.6		40.0
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 25.7

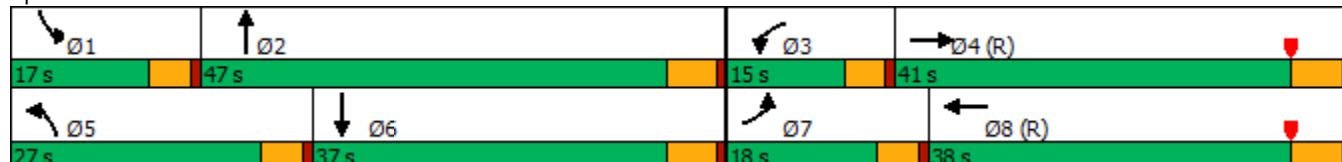
Intersection LOS: C

Intersection Capacity Utilization 54.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	355	111	15	414	35	88	123	34	35	153	96
Future Volume (veh/h)	46	355	111	15	414	35	88	123	34	35	153	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	50	386	106	16	450	30	96	134	30	38	166	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	1759	477	29	2086	139	119	421	92	51	256	106
Arrive On Green	0.04	0.64	0.64	0.02	0.62	0.62	0.07	0.15	0.15	0.03	0.11	0.11
Sat Flow, veh/h	1688	2761	749	1688	3381	225	1688	2890	628	1688	2436	1009
Grp Volume(v), veh/h	50	247	245	16	236	244	96	81	83	38	119	119
Grp Sat Flow(s),veh/h/ln	1688	1777	1733	1688	1777	1829	1688	1777	1741	1688	1777	1668
Q Serve(g_s), s	3.5	7.0	7.2	1.1	7.0	7.1	6.7	4.9	5.1	2.7	7.7	8.3
Cycle Q Clear(g_c), s	3.5	7.0	7.2	1.1	7.0	7.1	6.7	4.9	5.1	2.7	7.7	8.3
Prop In Lane	1.00		0.43	1.00		0.12	1.00		0.36	1.00		0.60
Lane Grp Cap(c), veh/h	63	1132	1104	29	1096	1128	119	259	254	51	187	176
V/C Ratio(X)	0.79	0.22	0.22	0.55	0.22	0.22	0.81	0.31	0.33	0.75	0.64	0.68
Avail Cap(c_a), veh/h	188	1132	1104	146	1096	1128	315	616	604	174	468	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	9.2	9.2	58.5	10.2	10.2	55.0	45.9	46.0	57.8	51.5	51.7
Incr Delay (d2), s/veh	7.6	0.4	0.4	5.9	0.4	0.4	4.7	0.7	0.7	8.1	3.6	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.6	2.6	0.5	2.6	2.7	3.0	2.2	2.2	1.2	3.6	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.9	9.6	9.6	64.4	10.6	10.6	59.6	46.5	46.7	65.9	55.0	56.3
LnGrp LOS	E	A	A	E	B	B	E	D	D	E	E	E
Approach Vol, veh/h		542			496			260			276	
Approach Delay, s/veh		14.7			12.3			51.4			57.1	
Approach LOS		B			B			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	22.9	6.7	82.3	13.1	18.0	9.1	79.8				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	12.4	41.6	10.4	35.2	22.4	31.6	13.4	32.2				
Max Q Clear Time (g_c+I1), s	4.7	7.1	3.1	9.2	8.7	10.3	5.5	9.1				
Green Ext Time (p_c), s	0.0	0.9	0.0	2.7	0.1	1.2	0.0	2.5				
Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	124	701	63	15	704	21	62	123	8	130
Future Volume (vph)	124	701	63	15	704	21	62	123	8	130
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	22.0	52.0	52.0	13.0	43.0	43.0	17.0	42.0	13.0	38.0
Total Split (%)	18.3%	43.3%	43.3%	10.8%	35.8%	35.8%	14.2%	35.0%	10.8%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	11.1	38.0	38.0	6.0	23.5	23.5	8.1	21.5	5.7	13.1
Actuated g/C Ratio	0.15	0.51	0.51	0.08	0.31	0.31	0.11	0.29	0.08	0.18
v/c Ratio	0.54	0.42	0.08	0.12	0.69	0.04	0.37	0.14	0.07	0.39
Control Delay	43.2	14.5	1.5	43.8	27.6	0.1	43.4	22.6	43.9	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.2	14.5	1.5	43.8	27.6	0.1	43.4	22.6	43.9	19.2
LOS	D	B	A	D	C	A	D	C	D	B
Approach Delay		17.6			27.1			29.4		20.0
Approach LOS		B			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 74.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 22.4

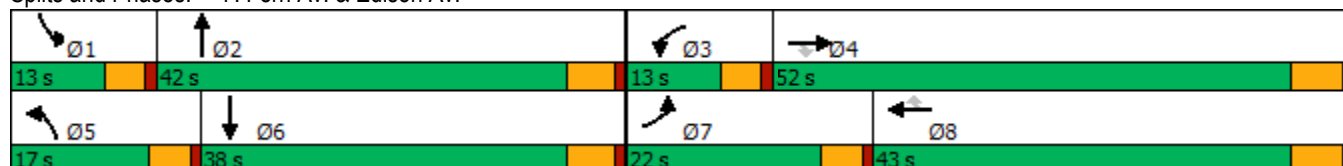
Intersection LOS: C

Intersection Capacity Utilization 57.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	124	701	63	15	704	21	62	123	4	8	130	111
Future Volume (veh/h)	124	701	63	15	704	21	62	123	4	8	130	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	135	762	58	16	765	18	67	134	2	9	141	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	1396	614	33	1105	493	96	807	12	20	389	226
Arrive On Green	0.10	0.39	0.39	0.02	0.31	0.31	0.06	0.23	0.23	0.01	0.18	0.18
Sat Flow, veh/h	1688	3554	1564	1688	3554	1585	1688	3584	53	1688	2161	1253
Grp Volume(v), veh/h	135	762	58	16	765	18	67	66	70	9	114	114
Grp Sat Flow(s),veh/h/ln	1688	1777	1564	1688	1777	1585	1688	1777	1861	1688	1777	1637
Q Serve(g_s), s	4.5	9.6	1.4	0.5	11.0	0.5	2.3	1.7	1.8	0.3	3.3	3.6
Cycle Q Clear(g_c), s	4.5	9.6	1.4	0.5	11.0	0.5	2.3	1.7	1.8	0.3	3.3	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.77
Lane Grp Cap(c), veh/h	171	1396	614	33	1105	493	96	400	419	20	320	295
V/C Ratio(X)	0.79	0.55	0.09	0.48	0.69	0.04	0.70	0.17	0.17	0.46	0.36	0.39
Avail Cap(c_a), veh/h	505	2823	1243	244	2273	1014	360	1118	1171	244	996	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	13.6	11.1	28.2	17.6	14.0	26.9	18.1	18.1	28.6	20.9	21.0
Incr Delay (d2), s/veh	3.0	0.3	0.1	4.0	0.8	0.0	3.4	0.2	0.2	6.1	0.7	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.1	0.4	0.2	3.8	0.1	0.9	0.7	0.7	0.1	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.6	14.0	11.2	32.2	18.4	14.0	30.3	18.3	18.3	34.6	21.6	21.8
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	C	C
Approach Vol, veh/h		955			799			203			237	
Approach Delay, s/veh		15.9			18.6			22.3			22.2	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.3	18.5	5.7	28.6	7.9	15.9	10.5	23.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	36.6	8.4	46.2	12.4	32.6	17.4	37.2				
Max Q Clear Time (g_c+I1), s	2.3	3.8	2.5	11.6	4.3	5.6	6.5	13.0				
Green Ext Time (p_c), s	0.0	0.7	0.0	5.6	0.0	1.2	0.1	5.1				
Intersection Summary												
HCM 6th Ctrl Delay			18.1									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	64	500	652	74	52	91
Future Vol, veh/h	64	500	652	74	52	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	543	709	80	57	99

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	789	0	0	1161	395
Stage 1	-	-	-	749	-
Stage 2	-	-	-	412	-
Critical Hdwy	4.14	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	3.52	3.32
Pot Cap-1 Maneuver	827	-	-	188	604
Stage 1	-	-	-	428	-
Stage 2	-	-	-	637	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	827	-	-	172	604
Mov Cap-2 Maneuver	-	-	-	293	-
Stage 1	-	-	-	392	-
Stage 2	-	-	-	637	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	827	-	-	-	293	604
HCM Lane V/C Ratio	0.084	-	-	-	0.193	0.164
HCM Control Delay (s)	9.8	-	-	-	20.2	12.1
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.7	0.6

Intersection						
Int Delay, s/veh	2.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	290	134	31	374	93	71
Future Vol, veh/h	290	134	31	374	93	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	341	158	36	440	109	84
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	499	0	712	250
Stage 1	-	-	-	-	420	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1208	-	477	*976
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	732	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1208	-	462	*976
Mov Cap-2 Maneuver	-	-	-	-	550	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	710	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.6		12.4	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	678	-	-	1208	-	
HCM Lane V/C Ratio	0.285	-	-	0.03	-	
HCM Control Delay (s)	12.4	-	-	8.1	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	1.2	-	-	0.1	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	563	3	405	532	1455	1314	488
Future Volume (vph)	563	3	405	532	1455	1314	488
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	38.0	86.0	48.0	48.0
Total Split (%)	28.3%	28.3%	28.3%	31.7%	71.7%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	27.3	27.3	27.3	35.2	82.2	42.5	42.5
Actuated g/C Ratio	0.23	0.23	0.23	0.29	0.68	0.35	0.35
v/c Ratio	0.91	0.92	0.80	1.06	0.62	1.08	0.63
Control Delay	73.7	73.8	50.5	94.6	12.4	87.9	12.7
Queue Delay	3.2	3.7	0.0	10.9	1.3	0.0	0.0
Total Delay	76.9	77.5	50.5	105.5	13.7	87.9	12.7
LOS	E	E	D	F	B	F	B
Approach Delay		68.8			38.3	67.5	
Approach LOS		E			D	E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 55.6

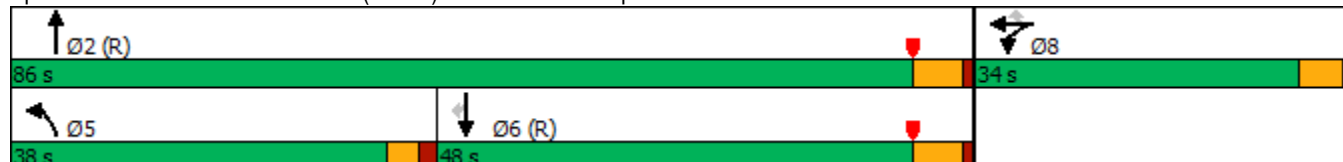
Intersection LOS: E

Intersection Capacity Utilization 113.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	563	3	405	532	1455	0	0	1314	488
Future Volume (veh/h)	0	0	0	563	3	405	532	1455	0	0	1314	488
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				658	0	165	548	1500	0	0	1355	347
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				730	0	325	497	2515	0	0	1390	620
Arrive On Green				0.20	0.00	0.20	0.56	1.00	0.00	0.00	0.39	0.39
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				658	0	165	548	1500	0	0	1355	347
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				21.6	0.0	11.1	33.5	0.0	0.0	0.0	45.0	20.5
Cycle Q Clear(g_c), s				21.6	0.0	11.1	33.5	0.0	0.0	0.0	45.0	20.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				730	0	325	497	2515	0	0	1390	620
V/C Ratio(X)				0.90	0.00	0.51	1.10	0.60	0.00	0.00	0.98	0.56
Avail Cap(c_a), veh/h				861	0	383	497	2515	0	0	1390	620
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.5	0.0	42.3	26.5	0.0	0.0	0.0	36.0	28.5
Incr Delay (d2), s/veh				10.4	0.0	0.5	49.2	0.1	0.0	0.0	18.9	3.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.3	0.0	4.3	15.9	0.0	0.0	0.0	22.2	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				56.9	0.0	42.8	75.7	0.1	0.0	0.0	54.8	32.1
LnGrp LOS				E	A	D	F	A	A	A	D	C
Approach Vol, veh/h					823			2048			1702	
Approach Delay, s/veh					54.1			20.3			50.2	
Approach LOS					D			C			D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		90.4			38.0	52.4		29.6				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		80.5			33.5	42.5		29.0				
Max Q Clear Time (g_c+I1), s		2.0			35.5	47.0		23.6				
Green Ext Time (p_c), s		28.2			0.0	0.0		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				37.5								
HCM 6th LOS				D								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	470	0	1199	628	401	1185
Future Volume (vph)	470	0	1199	628	401	1185
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	38.0	38.0	42.0	42.0	40.0	82.0
Total Split (%)	31.7%	31.7%	35.0%	35.0%	33.3%	68.3%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	33.0	33.0	41.1	41.1	31.4	76.5
Actuated g/C Ratio	0.28	0.28	0.34	0.34	0.26	0.64
v/c Ratio	0.94	2.02	1.02	0.77	0.89	0.54
Control Delay	73.2	491.4	70.9	17.2	62.2	13.9
Queue Delay	45.8	3.0	0.3	0.0	0.8	0.8
Total Delay	119.0	494.4	71.1	17.2	63.0	14.7
LOS	F	F	E	B	E	B
Approach Delay		377.6	52.6			26.9
Approach LOS		F	D			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.02

Intersection Signal Delay: 136.6

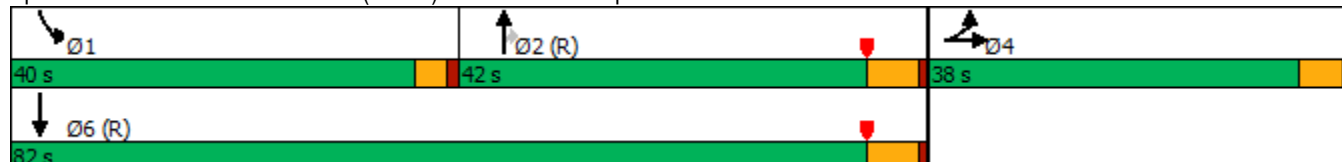
Intersection LOS: F

Intersection Capacity Utilization 113.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	0	889	0	0	0	0	1199	628	401	1185	0
Future Volume (veh/h)	470	0	889	0	0	0	0	1199	628	401	1185	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	485	0	812				0	1236	481	413	1222	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	490	0	436				0	1285	559	432	2265	0
Arrive On Green	0.28	0.00	0.28				0.00	0.36	0.36	0.49	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1546	1781	3647	0
Grp Volume(v), veh/h	485	0	812				0	1236	481	413	1222	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1546	1781	1777	0
Q Serve(g_s), s	32.6	0.0	33.0				0.0	40.9	34.6	26.7	0.0	0.0
Cycle Q Clear(g_c), s	32.6	0.0	33.0				0.0	40.9	34.6	26.7	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	490	0	436				0	1285	559	432	2265	0
V/C Ratio(X)	0.99	0.00	1.86				0.00	0.96	0.86	0.96	0.54	0.00
Avail Cap(c_a), veh/h	490	0	436				0	1285	559	534	2265	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.71	0.71	0.09	0.09	0.00
Uniform Delay (d), s/veh	43.3	0.0	43.5				0.0	37.5	35.5	30.3	0.0	0.0
Incr Delay (d2), s/veh	37.9	0.0	397.0				0.0	13.9	11.9	3.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	0.0	60.4				0.0	19.5	14.4	8.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.3	0.0	440.5				0.0	51.4	47.4	34.2	0.1	0.0
LnGrp LOS	F	A	F				A	D	D	C	A	A
Approach Vol, veh/h	1297						1717			1635		
Approach Delay, s/veh	306.2						50.3			8.7		
Approach LOS	F						D			A		
Timer - Assigned Phs	1	2		4			6					
Phs Duration (G+Y+Rc), s	33.1	48.9		38.0			82.0					
Change Period (Y+Rc), s	4.0	5.5		5.0			5.5					
Max Green Setting (Gmax), s	36.0	36.5		33.0			76.5					
Max Q Clear Time (g_c+I1), s	28.7	42.9		35.0			2.0					
Green Ext Time (p_c), s	0.4	0.0		0.0			18.9					

Intersection Summary

HCM 6th Ctrl Delay	107.0
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	121	300	98	366	133	1296	84	214	1684	73
Future Volume (vph)	121	300	98	366	133	1296	84	214	1684	73
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	41.0	17.0	34.0	22.0	41.0	41.0	21.0	40.0	40.0
Total Split (%)	20.0%	34.2%	14.2%	28.3%	18.3%	34.2%	34.2%	17.5%	33.3%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	12.0	24.3	9.8	19.6	12.3	36.3	36.3	11.5	35.6	35.6
Actuated g/C Ratio	0.12	0.24	0.10	0.20	0.12	0.36	0.36	0.11	0.36	0.36
v/c Ratio	0.62	0.53	0.62	0.74	0.67	0.66	0.13	0.61	0.87	0.11
Control Delay	57.6	26.7	62.8	40.3	60.0	30.4	0.5	51.1	38.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	26.7	62.8	40.3	60.0	30.4	0.5	51.1	38.1	0.4
LOS	E	C	E	D	E	C	A	D	D	A
Approach Delay		32.8		43.8		31.4			38.2	
Approach LOS		C		D		C			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 36.0

Intersection LOS: D

Intersection Capacity Utilization 80.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.

			
21 s	41 s	17 s	41 s
			
22 s	40 s	24 s	34 s

HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	300	191	98	366	166	133	1296	84	214	1684	73
Future Volume (veh/h)	121	300	191	98	366	166	133	1296	84	214	1684	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	125	309	170	101	377	153	137	1336	79	221	1736	51
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	481	257	127	493	197	168	2219	618	294	2178	615
Arrive On Green	0.09	0.21	0.21	0.08	0.19	0.19	0.10	0.40	0.40	0.09	0.39	0.39
Sat Flow, veh/h	1688	2281	1221	1688	2539	1015	1688	5611	1564	3188	5611	1585
Grp Volume(v), veh/h	125	252	227	101	276	254	137	1336	79	221	1736	51
Grp Sat Flow(s),veh/h/ln	1688	1870	1632	1688	1870	1684	1688	1870	1564	1594	1870	1585
Q Serve(g_s), s	6.5	11.1	11.5	5.3	12.6	12.9	7.2	17.0	2.9	6.1	24.7	1.8
Cycle Q Clear(g_c), s	6.5	11.1	11.5	5.3	12.6	12.9	7.2	17.0	2.9	6.1	24.7	1.8
Prop In Lane	1.00		0.75	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	394	344	127	363	327	168	2219	618	294	2178	615
V/C Ratio(X)	0.81	0.64	0.66	0.80	0.76	0.78	0.82	0.60	0.13	0.75	0.80	0.08
Avail Cap(c_a), veh/h	364	731	638	232	586	527	326	2219	618	581	2178	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	32.4	32.6	41.0	34.3	34.4	39.7	21.6	17.3	39.9	24.4	17.4
Incr Delay (d2), s/veh	3.7	1.7	2.2	4.3	3.3	4.0	3.6	1.2	0.4	1.5	3.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	4.9	4.5	2.2	5.7	5.3	3.0	7.1	1.0	2.4	10.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	34.1	34.7	45.3	37.6	38.4	43.4	22.8	17.8	41.3	27.5	17.7
LnGrp LOS	D	C	C	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		604			631			1552			2008	
Approach Delay, s/veh		36.4			39.2			24.4			28.8	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	41.0	11.4	24.8	13.6	40.3	12.9	23.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	17.4	34.6	19.4	28.2				
Max Q Clear Time (g_c+I1), s	8.1	19.0	7.3	13.5	9.2	26.7	8.5	14.9				
Green Ext Time (p_c), s	0.2	8.6	0.0	2.6	0.1	6.1	0.1	2.4				
Intersection Summary												
HCM 6th Ctrl Delay			29.7									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	202	777	200	538	101	246	1254	346	163	1493	159
Future Volume (vph)	202	777	200	538	101	246	1254	346	163	1493	159
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.3	37.0	23.0	35.7	35.7	14.7	39.0	39.0	21.0	45.3	24.3
Total Split (%)	20.3%	30.8%	19.2%	29.8%	29.8%	12.3%	32.5%	32.5%	17.5%	37.8%	20.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	18.0	31.2	17.5	30.7	30.7	10.1	35.0	35.0	15.0	38.8	58.7
Actuated g/C Ratio	0.15	0.26	0.15	0.26	0.26	0.08	0.29	0.29	0.13	0.33	0.49
v/c Ratio	0.87	2.14	0.89	0.64	0.21	1.88	1.31	0.59	0.84	1.41	0.21
Control Delay	80.8	544.5	84.7	43.5	2.6	451.9	181.9	17.3	82.4	221.2	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.8	544.5	84.7	43.5	2.6	451.9	181.9	17.3	82.4	221.2	9.3
LOS	F	F	F	D	A	F	F	B	F	F	A
Approach Delay		462.7		48.4			187.0			190.2	
Approach LOS		F		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.14

Intersection Signal Delay: 223.4

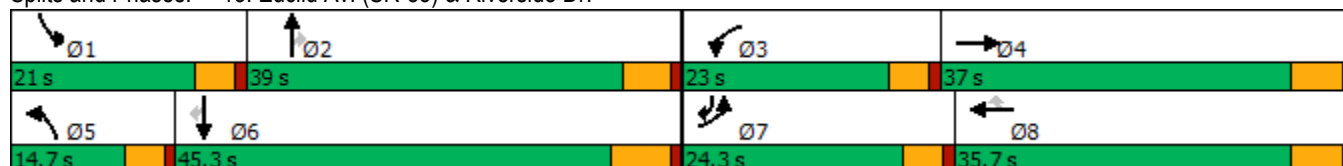
Intersection LOS: F

Intersection Capacity Utilization 136.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.



HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	777	167	200	538	101	246	1254	346	163	1493	159
Future Volume (veh/h)	202	777	167	200	538	101	246	1254	346	163	1493	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	220	845	158	217	585	52	267	1363	305	177	1623	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	402	75	242	928	413	144	1038	463	203	1162	749
Arrive On Green	0.15	0.26	0.26	0.14	0.26	0.26	0.09	0.29	0.29	0.12	0.33	0.33
Sat Flow, veh/h	1688	1529	286	1688	3554	1583	1688	3554	1585	1688	3554	1584
Grp Volume(v), veh/h	220	0	1003	217	585	52	267	1363	305	177	1623	110
Grp Sat Flow(s),veh/h/ln	1688	0	1815	1688	1777	1583	1688	1777	1585	1688	1777	1584
Q Serve(g_s), s	15.2	0.0	31.2	15.0	17.3	3.0	10.1	34.7	20.0	12.2	38.8	4.7
Cycle Q Clear(g_c), s	15.2	0.0	31.2	15.0	17.3	3.0	10.1	34.7	20.0	12.2	38.8	4.7
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	0	477	242	928	413	144	1038	463	203	1162	749
V/C Ratio(X)	0.90	0.00	2.10	0.90	0.63	0.13	1.86	1.31	0.66	0.87	1.40	0.15
Avail Cap(c_a), veh/h	280	0	477	262	928	413	144	1038	463	233	1162	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	0.0	43.7	49.9	38.8	33.5	54.3	42.0	36.8	51.3	39.9	17.7
Incr Delay (d2), s/veh	24.9	0.0	502.8	27.6	1.4	0.1	411.7	147.6	3.4	24.0	183.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	80.1	8.0	7.5	1.1	20.5	35.5	7.9	6.4	45.9	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	0.0	546.5	77.5	40.2	33.6	465.9	189.6	40.2	75.3	223.6	17.8
LnGrp LOS	E	A	F	E	D	C	F	F	D	E	F	B
Approach Vol, veh/h	1223				854				1935			
Approach Delay, s/veh	461.7				49.3				204.2			
Approach LOS	F				D				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.8	41.2	21.6	37.0	14.7	45.3	21.9	36.8				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.4	* 34	18.4	31.2	10.1	38.8	19.7	29.9				
Max Q Clear Time (g_c+I1), s	14.2	36.7	17.0	33.2	12.1	40.8	17.2	19.3				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.8				

Intersection Summary

HCM 6th Ctrl Delay 233.0

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	123	236	63	135	278	57	1742	280	75	1704	119
Future Volume (vph)	123	236	63	135	278	57	1742	280	75	1704	119
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	53.0	53.0	53.0	53.0	53.0	13.0	50.0	50.0	17.0	54.0	54.0
Total Split (%)	44.2%	44.2%	44.2%	44.2%	44.2%	10.8%	41.7%	41.7%	14.2%	45.0%	45.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	46.2	46.2	46.2		46.2	7.4	47.1	47.1	9.4	47.7	47.7
Actuated g/C Ratio	0.40	0.40	0.40		0.40	0.06	0.41	0.41	0.08	0.41	0.41
v/c Ratio	0.46	0.33	0.10		0.96	0.56	1.26	0.43	0.58	1.22	0.18
Control Delay	33.2	26.4	4.8		65.7	74.0	156.6	22.4	69.0	137.8	11.3
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.2	26.4	4.8		65.7	74.0	156.6	22.4	69.0	137.8	11.3
LOS	C	C	A		E	E	F	C	E	F	B
Approach Delay		25.2			65.7		136.2			127.2	
Approach LOS		C			E		F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 116.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 116.1

Intersection LOS: F

Intersection Capacity Utilization 109.6%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	50 s	53 s
		
Ø5	Ø6	Ø8
13 s	54 s	53 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	236	63	135	278	77	57	1742	280	75	1704	119
Future Volume (veh/h)	123	236	63	135	278	77	57	1742	280	75	1704	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	128	246	49	141	290	70	59	1815	262	78	1775	99
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	752	637	173	315	73	75	1403	626	98	1452	648
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.04	0.39	0.39	0.06	0.41	0.41
Sat Flow, veh/h	968	1870	1585	332	783	181	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	128	246	49	501	0	0	59	1815	262	78	1775	99
Grp Sat Flow(s),veh/h/ln	968	1870	1585	1296	0	0	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	10.5	2.2	33.9	0.0	0.0	4.0	45.9	13.9	5.3	47.5	4.6
Cycle Q Clear(g_c), s	23.5	10.5	2.2	44.5	0.0	0.0	4.0	45.9	13.9	5.3	47.5	4.6
Prop In Lane	1.00		1.00	0.28		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	752	637	560	0	0	75	1403	626	98	1452	648
V/C Ratio(X)	0.47	0.33	0.08	0.89	0.00	0.00	0.79	1.29	0.42	0.80	1.22	0.15
Avail Cap(c_a), veh/h	279	759	644	567	0	0	122	1403	626	180	1452	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	23.9	21.5	36.8	0.0	0.0	55.0	35.2	25.5	54.1	34.4	21.7
Incr Delay (d2), s/veh	1.2	0.3	0.1	16.5	0.0	0.0	6.8	137.6	2.1	5.5	106.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.5	0.8	15.8	0.0	0.0	1.8	44.8	5.2	2.3	40.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	24.2	21.5	53.3	0.0	0.0	61.9	172.7	27.6	59.5	140.8	22.2
LnGrp LOS	C	C	C	D	A	A	E	F	C	E	F	C
Approach Vol, veh/h	423			501			2136			1952		
Approach Delay, s/veh	25.4			53.3			151.9			131.6		
Approach LOS	C			D			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	52.4		52.5	9.7	54.0		52.5				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 45		47.2	8.4	47.5		47.2				
Max Q Clear Time (g_c+I1), s	7.3	47.9		25.5	6.0	49.5		46.5				
Green Ext Time (p_c), s	0.0	0.0		2.0	0.0	0.0		0.2				

Intersection Summary

HCM 6th Ctrl Delay 123.4

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	422	199	162	29	123	133	1608	57	94	1629	149
Future Volume (vph)	422	199	162	29	123	133	1608	57	94	1629	149
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	22.0	51.5	51.5	13.5	43.0	14.0	44.0	44.0	11.0	41.0	41.0
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	11.7%	36.7%	36.7%	9.2%	34.2%	34.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	18.6	32.8	32.8	10.1	18.4	10.6	38.3	38.3	7.6	35.2	35.2
Actuated g/C Ratio	0.18	0.32	0.32	0.10	0.18	0.10	0.37	0.37	0.07	0.34	0.34
v/c Ratio	1.47	0.35	0.28	0.19	0.69	0.81	1.29	0.09	0.81	1.42	0.25
Control Delay	260.2	30.0	5.3	49.2	43.6	81.2	165.5	0.3	92.2	221.7	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	260.2	30.0	5.3	49.2	43.6	81.2	165.5	0.3	92.2	221.7	8.4
LOS	F	C	A	D	D	F	F	A	F	F	A
Approach Delay	148.9			44.3			154.0			198.2	
Approach LOS	F			D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.47

Intersection Signal Delay: 164.9

Intersection LOS: F

Intersection Capacity Utilization 107.6%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.

			
Ø1	Ø2	Ø3	Ø4
11 s	44 s	13.5 s	51.5 s
			
Ø5	Ø6	Ø7	Ø8
14 s	41 s	22 s	43 s

HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	422	199	162	29	123	100	133	1608	57	94	1629	149
Future Volume (veh/h)	422	199	162	29	123	100	133	1608	57	94	1629	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	444	209	146	31	129	91	140	1693	54	99	1715	134
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	316	526	446	98	155	109	168	1368	610	123	1273	568
Arrive On Green	0.19	0.28	0.28	0.06	0.15	0.15	0.10	0.39	0.39	0.07	0.36	0.36
Sat Flow, veh/h	1688	1870	1585	1688	1021	720	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	444	209	146	31	0	220	140	1693	54	99	1715	134
Grp Sat Flow(s),veh/h/ln	1688	1870	1585	1688	0	1741	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	18.5	8.9	7.2	1.7	0.0	12.1	8.0	38.0	2.1	5.7	35.4	5.8
Cycle Q Clear(g_c), s	18.5	8.9	7.2	1.7	0.0	12.1	8.0	38.0	2.1	5.7	35.4	5.8
Prop In Lane	1.00		1.00	1.00		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	526	446	98	0	264	168	1368	610	123	1273	568
V/C Ratio(X)	1.40	0.40	0.33	0.32	0.00	0.83	0.83	1.24	0.09	0.81	1.35	0.24
Avail Cap(c_a), veh/h	316	843	715	171	0	635	180	1368	610	128	1273	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	28.7	28.1	44.6	0.0	40.6	43.6	30.3	19.3	45.1	31.7	22.2
Incr Delay (d2), s/veh	199.6	0.4	0.3	0.7	0.0	5.1	24.1	113.2	0.1	26.9	161.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.8	3.9	2.6	0.7	0.0	5.3	4.3	35.8	0.8	3.2	42.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	239.6	29.0	28.4	45.3	0.0	45.7	67.7	143.5	19.4	71.9	193.0	22.4
LnGrp LOS	F	C	C	D	A	D	E	F	B	E	F	C
Approach Vol, veh/h		799			251			1887			1948	
Approach Delay, s/veh		146.0			45.6			134.4			175.1	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	44.0	9.2	34.8	13.3	41.4	22.0	22.0				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	7.5	38.0	10.0	44.5	10.5	35.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	7.7	40.0	3.7	10.9	10.0	37.4	20.5	14.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			148.0									
HCM 6th LOS			F									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	155	617	164	332	586	174	1170	213	450	1380	114
Future Volume (vph)	155	617	164	332	586	174	1170	213	450	1380	114
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	16.0	50.0	50.0	16.0	50.0	50.0
Total Split (%)	45.0%	45.0%	45.0%	45.0%	45.0%	13.3%	41.7%	41.7%	13.3%	41.7%	41.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	47.0	47.0	47.0	47.0	47.0	10.7	43.3	43.3	12.5	45.0	45.0
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.09	0.36	0.36	0.10	0.38	0.38
v/c Ratio	2.76	0.87	0.24	3.76	1.51	0.65	0.94	0.36	2.65	1.07	0.18
Control Delay	847.4	47.4	6.5	1289.3	265.8	63.6	51.5	20.6	779.6	80.5	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	847.4	47.4	6.5	1289.3	265.8	63.6	51.5	20.6	779.6	80.5	12.5
LOS	F	D	A	F	F	E	D	C	F	F	B
Approach Delay		172.9			513.4		48.6			238.3	
Approach LOS		F			F		D			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.3

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 3.76

Intersection Signal Delay: 241.9

Intersection LOS: F

Intersection Capacity Utilization 146.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
16 s	50 s	54 s
		
Ø5	Ø6	Ø8
16 s	50 s	54 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	617	164	332	586	454	174	1170	213	450	1380	114
Future Volume (veh/h)	155	617	164	332	586	454	174	1170	213	450	1380	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	160	636	140	342	604	459	179	1206	205	464	1423	83
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	738	617	115	389	296	230	1286	574	177	1395	622
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.07	0.36	0.36	0.10	0.39	0.39
Sat Flow, veh/h	503	1870	1564	659	986	749	3092	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	160	636	140	342	0	1063	179	1206	205	464	1423	83
Grp Sat Flow(s),veh/h/ln	503	1870	1564	659	0	1735	1546	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	37.2	7.1	9.8	0.0	47.0	6.8	39.0	11.3	12.5	46.8	4.0
Cycle Q Clear(g_c), s	47.0	37.2	7.1	47.0	0.0	47.0	6.8	39.0	11.3	12.5	46.8	4.0
Prop In Lane	1.00		1.00	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	738	617	115	0	685	230	1286	574	177	1395	622
V/C Ratio(X)	2.65	0.86	0.23	2.98	0.00	1.55	0.78	0.94	0.36	2.62	1.02	0.13
Avail Cap(c_a), veh/h	60	738	617	115	0	685	324	1313	586	177	1395	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	33.1	24.0	57.2	0.0	36.1	54.2	36.7	27.8	53.3	36.2	23.2
Incr Delay (d2), s/veh	786.2	10.2	0.2	912.6	0.0	255.7	4.6	12.7	0.4	745.1	29.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	18.0	2.6	32.5	0.0	67.3	2.7	17.9	4.1	41.7	24.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	845.7	43.3	24.2	969.8	0.0	291.7	58.8	49.4	28.2	798.4	65.4	23.3
LnGrp LOS	F	D	C	F	A	F	E	D	C	F	F	C
Approach Vol, veh/h		936			1405			1590			1970	
Approach Delay, s/veh		177.6			456.8			47.7			236.3	
Approach LOS		F			F			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	49.1		54.0	12.3	52.8		54.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	12.5	44.0		47.0	12.5	44.0		47.0				
Max Q Clear Time (g_c+I1), s	14.5	41.0		49.0	8.8	48.8		49.0				
Green Ext Time (p_c), s	0.0	2.1		0.0	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			228.7									
HCM 6th LOS			F									

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	66	225	139	137	293	134	994	231	347	1226	34
Future Volume (vph)	66	225	139	137	293	134	994	231	347	1226	34
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	52.0	52.0	52.0	52.0	52.0	23.0	49.0	49.0	19.0	45.0	45.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%	19.2%	40.8%	40.8%	15.8%	37.5%	37.5%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	34.6	34.6	34.6	34.6	34.6	13.6	38.7	38.7	15.8	41.0	41.0
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.13	0.37	0.37	0.15	0.40	0.40
v/c Ratio	0.84	0.38	0.24	0.49	0.88	0.65	0.80	0.38	1.44	0.93	0.05
Control Delay	97.5	28.0	4.8	33.4	46.8	59.1	35.4	18.0	254.5	44.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.5	28.0	4.8	33.4	46.8	59.1	35.4	18.0	254.5	44.8	0.1
LOS	F	C	A	C	D	E	D	B	F	D	A
Approach Delay		31.1			43.9		34.8			89.2	
Approach LOS		C			D		C			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.4

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.44

Intersection Signal Delay: 57.5

Intersection LOS: E

Intersection Capacity Utilization 96.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
19 s	49 s	52 s
		
Ø5	Ø6	Ø8
23 s	45 s	52 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	225	139	137	293	208	134	994	231	347	1226	34
Future Volume (veh/h)	66	225	139	137	293	208	134	994	231	347	1226	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	70	239	107	146	312	201	143	1057	223	369	1304	25
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	695	589	342	395	254	172	1239	553	248	1399	624
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.10	0.35	0.35	0.15	0.39	0.39
Sat Flow, veh/h	841	1870	1585	980	1063	685	1688	3554	1585	1688	3554	1584
Grp Volume(v), veh/h	70	239	107	146	0	513	143	1057	223	369	1304	25
Grp Sat Flow(s),veh/h/ln	841	1870	1585	980	0	1747	1688	1777	1585	1688	1777	1584
Q Serve(g_s), s	8.5	9.7	4.8	13.3	0.0	27.6	8.8	29.1	11.2	15.5	37.1	1.0
Cycle Q Clear(g_c), s	36.1	9.7	4.8	23.0	0.0	27.6	8.8	29.1	11.2	15.5	37.1	1.0
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	695	589	342	0	649	172	1239	553	248	1399	624
V/C Ratio(X)	0.43	0.34	0.18	0.43	0.00	0.79	0.83	0.85	0.40	1.49	0.93	0.04
Avail Cap(c_a), veh/h	225	837	709	417	0	782	312	1458	651	248	1399	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	23.9	22.3	32.2	0.0	29.5	46.5	31.8	26.0	45.0	30.6	19.7
Incr Delay (d2), s/veh	1.4	0.2	0.1	0.6	0.0	4.2	7.5	4.5	0.5	240.0	11.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.2	1.7	3.1	0.0	11.5	3.8	12.1	4.0	22.6	16.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.9	24.1	22.4	32.8	0.0	33.7	54.0	36.3	26.5	285.0	42.1	19.7
LnGrp LOS	D	C	C	C	A	C	D	D	C	F	D	B
Approach Vol, veh/h	416			659			1423			1698		
Approach Delay, s/veh	27.5			33.5			36.6			94.6		
Approach LOS	C			C			D			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	42.5		44.0	14.3	47.2		44.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	15.5	43.3		47.2	19.5	39.3		47.2				
Max Q Clear Time (g_c+I1), s	17.5	31.1		38.1	10.8	39.1		29.6				
Green Ext Time (p_c), s	0.0	5.7		1.1	0.1	0.2		2.9				
Intersection Summary												
HCM 6th Ctrl Delay	58.7											
HCM 6th LOS	E											

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	155	7	17	38	0	2	0	1	0	0	0
Future Vol, veh/h	0	155	7	17	38	0	2	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	168	8	18	41	0	2	0	1	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	41	0	0	176	0	0	249	249	172	250	253	41
Stage 1	-	-	-	-	-	-	172	172	-	77	77	-
Stage 2	-	-	-	-	-	-	77	77	-	173	176	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1568	-	-	1400	-	-	705	654	872	703	650	1030
Stage 1	-	-	-	-	-	-	830	756	-	932	831	-
Stage 2	-	-	-	-	-	-	932	831	-	829	753	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1568	-	-	1400	-	-	698	645	872	695	642	1030
Mov Cap-2 Maneuver	-	-	-	-	-	-	698	645	-	695	642	-
Stage 1	-	-	-	-	-	-	830	756	-	932	820	-
Stage 2	-	-	-	-	-	-	920	820	-	828	753	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			2.4			9.8			0		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	748	1568	-	-	1400	-	-	-				
HCM Lane V/C Ratio	0.004	-	-	-	0.013	-	-	-				
HCM Control Delay (s)	9.8	0	-	-	7.6	0	-	0				
HCM Lane LOS	A	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/23/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	37	816	67	23	501	31	58	24	35
Future Volume (vph)	37	816	67	23	501	31	58	24	35
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	18.0	66.0	66.0	17.0	65.0	37.0	37.0	37.0	37.0
Total Split (%)	15.0%	55.0%	55.0%	14.2%	54.2%	30.8%	30.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.4	26.5	26.5	6.0	24.1		12.4		12.4
Actuated g/C Ratio	0.14	0.58	0.58	0.13	0.53		0.27		0.27
v/c Ratio	0.17	0.43	0.08	0.11	0.31		0.26		0.21
Control Delay	24.8	9.9	4.6	25.6	10.9		17.1		15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	24.8	9.9	4.6	25.6	10.9		17.1		15.2
LOS	C	A	A	C	B		B		B
Approach Delay		10.1			11.5		17.1		15.2
Approach LOS		B			B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 45.9

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 11.3

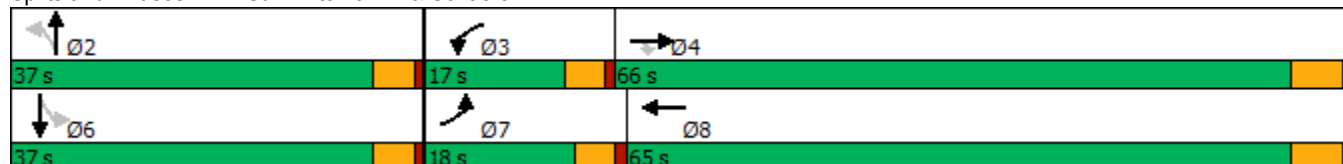
Intersection LOS: B

Intersection Capacity Utilization 48.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	816	67	23	501	33	31	58	19	24	35	28
Future Volume (veh/h)	37	816	67	23	501	33	31	58	19	24	35	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	40	877	56	25	539	34	33	62	14	26	38	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	1438	625	51	1323	83	173	256	47	177	213	78
Arrive On Green	0.04	0.40	0.40	0.03	0.39	0.39	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1688	3554	1545	1688	3390	213	297	1197	220	308	996	367
Grp Volume(v), veh/h	40	877	56	25	282	291	109	0	0	82	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1545	1688	1777	1826	1715	0	0	1670	0	0
Q Serve(g_s), s	1.0	8.3	1.0	0.6	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	8.3	1.0	0.6	4.9	4.9	2.1	0.0	0.0	1.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.12	0.30		0.13	0.32		0.22
Lane Grp Cap(c), veh/h	75	1438	625	51	694	713	476	0	0	468	0	0
V/C Ratio(X)	0.54	0.61	0.09	0.49	0.41	0.41	0.23	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	530	5019	2182	491	2468	2536	1372	0	0	1338	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	19.9	10.0	7.8	20.4	9.4	9.4	14.0	0.0	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.4	0.1	2.7	0.4	0.4	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.1	0.2	0.2	1.3	1.3	0.8	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	10.5	7.9	23.1	9.8	9.8	14.3	0.0	0.0	14.0	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		973			598			109			82	
Approach Delay, s/veh		10.8			10.4			14.3			14.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.7	5.9	23.0		13.7	6.5	22.4				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		32.4	12.4	60.2		32.4	13.4	59.2				
Max Q Clear Time (g_c+I1), s		4.1	2.6	10.3		3.6	3.0	6.9				
Green Ext Time (p_c), s		0.6	0.0	6.9		0.4	0.0	3.4				
Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	1212	33	9	858	28	28	34	16	39
Future Volume (vph)	43	1212	33	9	858	28	28	34	16	39
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	19.0	67.0	67.0	14.0	62.0	62.0	39.0	39.0	39.0	39.0
Total Split (%)	15.8%	55.8%	55.8%	11.7%	51.7%	51.7%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.1	38.8	38.8	5.8	33.5	33.5		12.9		12.9
Actuated g/C Ratio	0.12	0.66	0.66	0.10	0.57	0.57		0.22		0.22
v/c Ratio	0.23	0.56	0.03	0.06	0.46	0.03		0.22		0.28
Control Delay	33.3	9.8	1.7	35.0	12.4	0.1		23.0		19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	33.3	9.8	1.7	35.0	12.4	0.1		23.0		19.3
LOS	C	A	A	C	B	A		C		B
Approach Delay		10.4			12.2			23.0		19.3
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 58.5

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 11.9

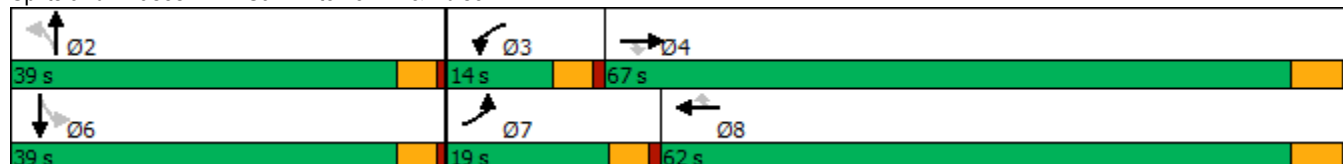
Intersection LOS: B

Intersection Capacity Utilization 55.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary 2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1212	33	9	858	28	28	34	13	16	39	45
Future Volume (veh/h)	43	1212	33	9	858	28	28	34	13	16	39	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	47	1317	34	10	933	27	30	37	7	17	42	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	1912	834	22	1791	798	172	179	27	109	169	94
Arrive On Green	0.05	0.54	0.54	0.01	0.50	0.50	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1688	3554	1551	1688	3554	1583	456	1044	157	169	989	550
Grp Volume(v), veh/h	47	1317	34	10	933	27	74	0	0	87	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1551	1688	1777	1583	1656	0	0	1708	0	0
Q Serve(g_s), s	1.5	14.7	0.6	0.3	9.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	14.7	0.6	0.3	9.5	0.5	1.9	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.41		0.09	0.20		0.32
Lane Grp Cap(c), veh/h	79	1912	834	22	1791	798	377	0	0	372	0	0
V/C Ratio(X)	0.59	0.69	0.04	0.46	0.52	0.03	0.20	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	451	4033	1760	294	3703	1650	1116	0	0	1144	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.2	9.1	5.9	26.4	9.0	6.8	19.3	0.0	0.0	19.5	0.0	0.0
Incr Delay (d2), s/veh	2.6	0.4	0.0	5.5	0.2	0.0	0.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.6	0.1	0.1	2.5	0.1	0.8	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	9.6	5.9	31.9	9.2	6.8	19.6	0.0	0.0	19.8	0.0	0.0
LnGrp LOS	C	A	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h	1398				970				74			
Approach Delay, s/veh	10.1				9.4				19.6			
Approach LOS	B				A				B			
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	13.8		5.3	34.8		13.8	7.1	33.0				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	34.4		9.4	61.2		34.4	14.4	56.2				
Max Q Clear Time (g_c+I1), s	3.9		2.3	16.7		4.3	3.5	11.5				
Green Ext Time (p_c), s	0.4		0.0	12.3		0.5	0.0	7.3				
Intersection Summary												
HCM 6th Ctrl Delay	10.5											
HCM 6th LOS	B											

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	31	649	53	306	31	168	41	129
Future Volume (vph)	31	649	53	306	31	168	41	129
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	45.0	17.0	48.0	18.0	40.0	18.0	40.0
Total Split (%)	11.7%	37.5%	14.2%	40.0%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	25.4	21.1	26.5	23.1	6.8	13.0	7.2	15.3
Actuated g/C Ratio	0.44	0.36	0.45	0.40	0.12	0.22	0.12	0.26
v/c Ratio	0.07	0.60	0.17	0.26	0.18	0.39	0.22	0.17
Control Delay	10.1	19.5	10.8	14.4	34.2	15.6	33.7	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	19.5	10.8	14.4	34.2	15.6	33.7	21.2
LOS	B	B	B	B	C	B	C	C
Approach Delay		19.1		13.9		17.3		24.0
Approach LOS		B		B		B		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 58.3

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 18.1

Intersection LOS: B

Intersection Capacity Utilization 55.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

 Ø1	 Ø2	 Ø3	 Ø4
18 s	40 s	17 s	45 s
 Ø5	 Ø6	 Ø7	 Ø8
18 s	40 s	14 s	48 s

HCM 6th Signalized Intersection Summary 3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	649	55	53	306	21	31	168	131	41	129	13
Future Volume (veh/h)	31	649	55	53	306	21	31	168	131	41	129	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	34	705	47	58	333	20	34	183	93	45	140	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	445	1050	70	313	1117	67	63	479	232	77	755	27
Arrive On Green	0.04	0.31	0.31	0.05	0.33	0.33	0.04	0.21	0.21	0.05	0.22	0.22
Sat Flow, veh/h	1688	3377	225	1688	3405	204	1688	2311	1121	1688	3497	124
Grp Volume(v), veh/h	34	371	381	58	173	180	34	139	137	45	71	74
Grp Sat Flow(s),veh/h/ln	1688	1777	1826	1688	1777	1832	1688	1777	1655	1688	1777	1844
Q Serve(g_s), s	0.7	9.7	9.7	1.2	3.9	3.9	1.1	3.6	3.8	1.4	1.7	1.8
Cycle Q Clear(g_c), s	0.7	9.7	9.7	1.2	3.9	3.9	1.1	3.6	3.8	1.4	1.7	1.8
Prop In Lane	1.00		0.12	1.00		0.11	1.00		0.68	1.00		0.07
Lane Grp Cap(c), veh/h	445	553	568	313	583	601	63	368	343	77	384	398
V/C Ratio(X)	0.08	0.67	0.67	0.19	0.30	0.30	0.54	0.38	0.40	0.58	0.18	0.19
Avail Cap(c_a), veh/h	679	1304	1340	614	1404	1448	423	1151	1072	423	1151	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	16.0	16.0	12.1	13.4	13.4	25.3	18.2	18.3	25.0	17.1	17.1
Incr Delay (d2), s/veh	0.0	1.4	1.4	0.1	0.3	0.3	2.7	0.6	0.8	2.6	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.3	3.4	0.4	1.3	1.3	0.4	1.3	1.3	0.6	0.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.7	17.4	17.4	12.2	13.6	13.6	28.0	18.8	19.0	27.6	17.3	17.3
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h	786			411			310			190		
Approach Delay, s/veh	17.2			13.4			19.9			19.8		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	16.5	7.5	22.4	6.6	16.9	6.6	23.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	34.6	12.4	39.2	13.4	34.6	9.4	42.2				
Max Q Clear Time (g_c+I1), s	3.4	5.8	3.2	11.7	3.1	3.8	2.7	5.9				
Green Ext Time (p_c), s	0.0	1.5	0.0	4.5	0.0	0.7	0.0	1.9				
Intersection Summary												
HCM 6th Ctrl Delay	17.1											
HCM 6th LOS	B											

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	81	671	19	413	103	181	33	127
Future Volume (vph)	81	671	19	413	103	181	33	127
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	22.0	51.0	12.0	41.0	24.0	41.0	16.0	33.0
Total Split (%)	18.3%	42.5%	10.0%	34.2%	20.0%	34.2%	13.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	10.3	75.4	6.1	67.3	11.9	21.0	7.0	12.2
Actuated g/C Ratio	0.09	0.63	0.05	0.56	0.10	0.18	0.06	0.10
v/c Ratio	0.58	0.35	0.22	0.25	0.64	0.35	0.35	0.48
Control Delay	67.8	13.1	60.4	15.8	68.3	42.0	63.4	40.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.8	13.1	60.4	15.8	68.3	42.0	63.4	40.7
LOS	E	B	E	B	E	D	E	D
Approach Delay		18.4		17.5		50.7		44.2
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 26.6

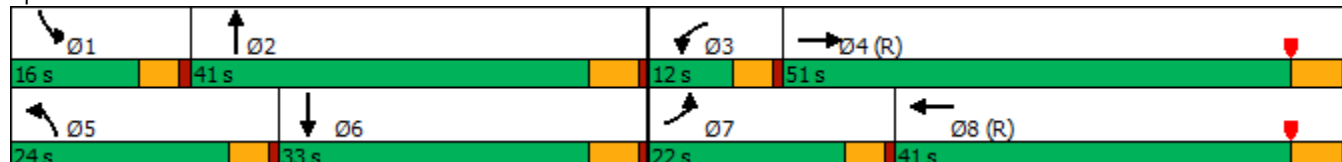
Intersection LOS: C

Intersection Capacity Utilization 58.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	671	85	19	413	58	103	181	28	33	127	53
Future Volume (veh/h)	81	671	85	19	413	58	103	181	28	33	127	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	83	685	83	19	421	52	105	185	26	34	130	36
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	2014	244	33	1880	231	129	469	65	48	281	75
Arrive On Green	0.06	0.63	0.63	0.02	0.59	0.59	0.08	0.15	0.15	0.03	0.10	0.10
Sat Flow, veh/h	1688	3186	386	1688	3185	391	1688	3126	432	1688	2754	734
Grp Volume(v), veh/h	83	382	386	19	234	239	105	104	107	34	82	84
Grp Sat Flow(s),veh/h/ln	1688	1777	1794	1688	1777	1799	1688	1777	1781	1688	1777	1710
Q Serve(g_s), s	5.8	12.1	12.1	1.3	7.5	7.5	7.4	6.3	6.5	2.4	5.2	5.6
Cycle Q Clear(g_c), s	5.8	12.1	12.1	1.3	7.5	7.5	7.4	6.3	6.5	2.4	5.2	5.6
Prop In Lane	1.00		0.21	1.00		0.22	1.00		0.24	1.00		0.43
Lane Grp Cap(c), veh/h	104	1123	1134	33	1049	1062	129	267	267	48	182	175
V/C Ratio(X)	0.80	0.34	0.34	0.58	0.22	0.23	0.82	0.39	0.40	0.71	0.45	0.48
Avail Cap(c_a), veh/h	245	1123	1134	104	1049	1062	273	527	528	160	409	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	10.3	10.3	58.3	11.6	11.6	54.6	46.0	46.1	57.8	50.7	50.9
Incr Delay (d2), s/veh	4.8	0.7	0.7	5.8	0.5	0.5	4.6	0.9	0.9	7.1	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.5	4.5	0.6	2.9	2.9	3.2	2.8	2.9	1.1	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	11.1	11.1	64.1	12.1	12.1	59.2	46.9	47.1	65.0	52.5	52.9
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		851			492			316			200	
Approach Delay, s/veh		15.9			14.1			51.0			54.8	
Approach LOS		B			B			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	23.4	6.9	81.6	13.7	17.7	12.0	76.6				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	11.4	35.6	7.4	45.2	19.4	27.6	17.4	35.2				
Max Q Clear Time (g_c+I1), s	4.4	8.5	3.3	14.1	9.4	7.6	7.8	9.5				
Green Ext Time (p_c), s	0.0	1.1	0.0	4.7	0.1	0.8	0.1	2.6				
Intersection Summary												
HCM 6th Ctrl Delay			25.6									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	99	1220	22	15	772	61	47	139	44	119
Future Volume (vph)	99	1220	22	15	772	61	47	139	44	119
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	27.0	53.0	53.0	13.0	39.0	39.0	17.0	41.0	13.0	37.0
Total Split (%)	22.5%	44.2%	44.2%	10.8%	32.5%	32.5%	14.2%	34.2%	10.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	10.2	39.1	39.1	6.0	28.8	28.8	7.5	13.5	7.1	13.1
Actuated g/C Ratio	0.14	0.54	0.54	0.08	0.40	0.40	0.10	0.19	0.10	0.18
v/c Ratio	0.46	0.70	0.03	0.12	0.60	0.09	0.30	0.26	0.30	0.34
Control Delay	41.3	17.7	0.0	43.5	22.9	0.3	42.4	28.8	43.8	19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	17.7	0.0	43.5	22.9	0.3	42.4	28.8	43.8	19.3
LOS	D	B	A	D	C	A	D	C	D	B
Approach Delay		19.2			21.7			32.0		23.6
Approach LOS		B			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 72.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 21.4

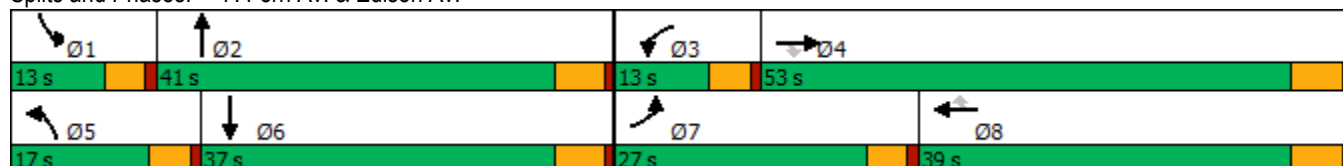
Intersection LOS: C

Intersection Capacity Utilization 67.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1220	22	15	772	61	47	139	16	44	119	94
Future Volume (veh/h)	99	1220	22	15	772	61	47	139	16	44	119	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	108	1326	16	16	839	55	51	151	16	48	129	81
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1727	770	32	1506	672	77	485	51	74	317	185
Arrive On Green	0.08	0.49	0.49	0.02	0.42	0.42	0.05	0.15	0.15	0.04	0.15	0.15
Sat Flow, veh/h	1688	3554	1584	1688	3554	1585	1688	3246	340	1688	2143	1254
Grp Volume(v), veh/h	108	1326	16	16	839	55	51	82	85	48	105	105
Grp Sat Flow(s),veh/h/ln	1688	1777	1584	1688	1777	1585	1688	1777	1809	1688	1777	1620
Q Serve(g_s), s	4.2	20.7	0.4	0.6	12.1	1.4	2.0	2.8	2.8	1.9	3.6	4.0
Cycle Q Clear(g_c), s	4.2	20.7	0.4	0.6	12.1	1.4	2.0	2.8	2.8	1.9	3.6	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.77
Lane Grp Cap(c), veh/h	138	1727	770	32	1506	672	77	265	270	74	262	239
V/C Ratio(X)	0.79	0.77	0.02	0.49	0.56	0.08	0.66	0.31	0.32	0.65	0.40	0.44
Avail Cap(c_a), veh/h	559	2479	1105	209	1743	778	309	935	952	209	830	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	14.3	9.0	32.9	14.7	11.6	31.8	25.7	25.7	31.8	26.1	26.3
Incr Delay (d2), s/veh	3.7	0.9	0.0	4.3	0.3	0.1	3.6	0.7	0.7	3.5	1.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.7	0.1	0.3	4.0	0.4	0.8	1.1	1.2	0.8	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.2	15.2	9.0	37.1	15.0	11.7	35.4	26.3	26.4	35.3	27.1	27.5
LnGrp LOS	C	B	A	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h	1450			910			218			258		
Approach Delay, s/veh	16.5			15.2			28.5			28.8		
Approach LOS	B			B			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	15.5	5.9	38.7	7.7	15.4	10.1	34.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	35.6	8.4	47.2	12.4	31.6	22.4	33.2				
Max Q Clear Time (g_c+I1), s	3.9	4.8	2.6	22.7	4.0	6.0	6.2	14.1				
Green Ext Time (p_c), s	0.0	0.9	0.0	10.2	0.0	1.1	0.1	5.4				
Intersection Summary												
HCM 6th Ctrl Delay	18.1											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	146	736	471	38	57	127
Future Vol, veh/h	146	736	471	38	57	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	151	759	486	39	59	131
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	525	0	-	0	1188	263
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	682	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1038	-	-	-	181	735
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	464	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1038	-	-	-	155	735
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	464	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.5	0		14		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1038	-	-	-	288	735
HCM Lane V/C Ratio	0.145	-	-	-	0.204	0.178
HCM Control Delay (s)	9.1	-	-	-	20.7	11
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.7	0.6

Intersection						
Int Delay, s/veh	4.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑	↘	
Traffic Vol, veh/h	543	184	70	352	140	148
Future Vol, veh/h	543	184	70	352	140	148
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	631	214	81	409	163	172
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	845	0	1105	423
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	367	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	990	-	324	*874
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	671	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	990	-	297	*874
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	660	-
Stage 2	-	-	-	-	616	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.5		19.5	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	578	-	-	990	-	
HCM Lane V/C Ratio	0.579	-	-	0.082	-	
HCM Control Delay (s)	19.5	-	-	9	-	
HCM Lane LOS	C	-	-	A	-	
HCM 95th %tile Q(veh)	3.7	-	-	0.3	-	
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

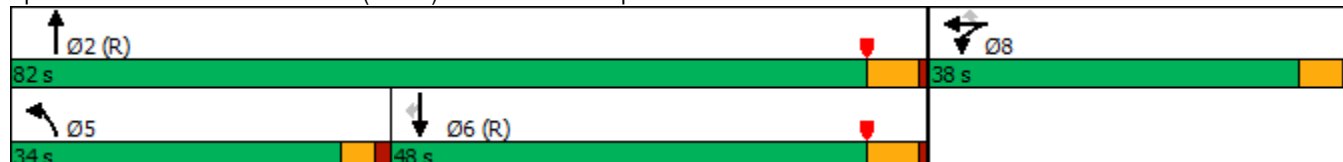
10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	493	1	435	807	1382	1592	571
Future Volume (vph)	493	1	435	807	1382	1592	571
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	34.0	82.0	48.0	48.0
Total Split (%)	31.7%	31.7%	31.7%	28.3%	68.3%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	28.0	28.0	28.0	34.5	81.5	42.5	42.5
Actuated g/C Ratio	0.23	0.23	0.23	0.29	0.68	0.35	0.35
v/c Ratio	0.86	0.86	0.78	1.67	0.61	1.34	0.77
Control Delay	64.6	60.4	47.2	341.0	10.6	190.4	21.2
Queue Delay	0.8	0.9	0.0	0.0	1.0	0.0	0.0
Total Delay	65.4	61.3	47.2	341.0	11.6	190.4	21.2
LOS	E	E	D	F	B	F	C
Approach Delay		58.2			133.0	145.7	
Approach LOS		E			F	F	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.67
Intersection Signal Delay: 125.0
Intersection Capacity Utilization 119.3%
Analysis Period (min) 15
Intersection LOS: F
ICU Level of Service H

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	493	1	435	807	1382	0	0	1592	571
Future Volume (veh/h)	0	0	0	493	1	435	807	1382	0	0	1592	571
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				619	0	214	849	1455	0	0	1676	381
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				700	0	312	438	2544	0	0	1537	686
Arrive On Green				0.20	0.00	0.20	0.49	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				619	0	214	849	1455	0	0	1676	381
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				20.3	0.0	15.0	29.5	0.0	0.0	0.0	51.9	21.5
Cycle Q Clear(g_c), s				20.3	0.0	15.0	29.5	0.0	0.0	0.0	51.9	21.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				700	0	312	438	2544	0	0	1537	686
V/C Ratio(X)				0.88	0.00	0.69	1.94	0.57	0.00	0.00	1.09	0.56
Avail Cap(c_a), veh/h				980	0	436	438	2544	0	0	1537	686
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.9	0.0	44.8	30.5	0.0	0.0	0.0	34.0	25.4
Incr Delay (d2), s/veh				5.7	0.0	1.0	423.2	0.1	0.0	0.0	51.7	3.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.3	0.0	5.8	60.3	0.0	0.0	0.0	32.1	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.6	0.0	45.8	453.7	0.1	0.0	0.0	85.7	28.7
LnGrp LOS				D	A	D	F	A	A	A	F	C
Approach Vol, veh/h					833			2304			2057	
Approach Delay, s/veh					50.8			167.2			75.2	
Approach LOS					D			F			E	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.4			34.0	57.4		28.6				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		76.5			29.5	42.5		33.0				
Max Q Clear Time (g_c+I1), s		2.0			31.5	53.9		22.3				
Green Ext Time (p_c), s		26.2			0.0	0.0		1.3				
Intersection Summary												
HCM 6th Ctrl Delay				112.1								
HCM 6th LOS				F								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	336	1	1509	603	374	1506
Future Volume (vph)	336	1	1509	603	374	1506
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	49.0	49.0	36.0	85.0
Total Split (%)	29.2%	29.2%	40.8%	40.8%	30.0%	70.8%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	30.0	30.0	46.0	46.0	29.5	79.5
Actuated g/C Ratio	0.25	0.25	0.38	0.38	0.25	0.66
v/c Ratio	0.76	1.35	1.18	0.77	0.91	0.68
Control Delay	55.0	206.1	124.8	19.7	61.6	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	3.9
Total Delay	55.0	206.1	124.8	19.7	61.6	18.9
LOS	D	F	F	B	E	B
Approach Delay		150.6	94.8			27.4
Approach LOS		F	F			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay: 78.0

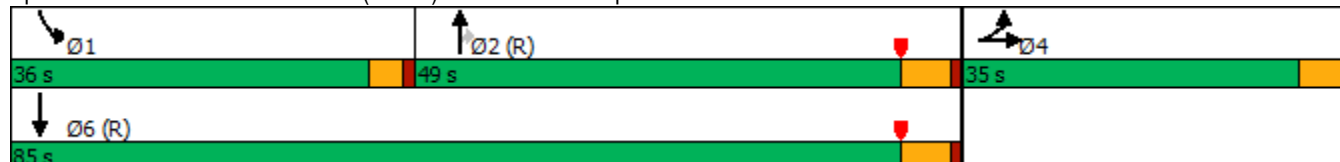
Intersection LOS: E

Intersection Capacity Utilization 119.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	1	485	0	0	0	0	1509	603	374	1506	0
Future Volume (veh/h)	336	1	485	0	0	0	0	1509	603	374	1506	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	357	1	409				0	1605	470	398	1602	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	445	1	395				0	1404	611	417	2354	0
Arrive On Green	0.25	0.25	0.25				0.00	0.40	0.40	0.47	1.00	0.00
Sat Flow, veh/h	1781	4	1582				0	3647	1546	1781	3647	0
Grp Volume(v), veh/h	357	0	410				0	1605	470	398	1602	0
Grp Sat Flow(s),veh/h/ln	1781	0	1586				0	1777	1546	1781	1777	0
Q Serve(g_s), s	22.6	0.0	30.0				0.0	47.4	31.7	25.8	0.0	0.0
Cycle Q Clear(g_c), s	22.6	0.0	30.0				0.0	47.4	31.7	25.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	445	0	396				0	1404	611	417	2354	0
V/C Ratio(X)	0.80	0.00	1.03				0.00	1.14	0.77	0.96	0.68	0.00
Avail Cap(c_a), veh/h	445	0	396				0	1404	611	475	2354	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.18	0.18	0.09	0.09	0.00
Uniform Delay (d), s/veh	42.2	0.0	45.0				0.0	36.3	31.5	31.3	0.0	0.0
Incr Delay (d2), s/veh	9.4	0.0	54.3				0.0	66.0	1.7	4.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	17.3				0.0	32.4	11.7	8.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.6	0.0	99.3				0.0	102.3	33.3	36.0	0.1	0.0
LnGrp LOS	D	A	F				A	F	C	D	A	A
Approach Vol, veh/h	767						2075			2000		
Approach Delay, s/veh	77.1						86.7			7.3		
Approach LOS	E						F			A		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	32.1	52.9	35.0		85.0							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	32.0	43.5	30.0		79.5							
Max Q Clear Time (g_c+I1), s	27.8	49.4	32.0		2.0							
Green Ext Time (p_c), s	0.3	0.0	0.0		32.0							
Intersection Summary												
HCM 6th Ctrl Delay			52.4									
HCM 6th LOS			D									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	160	479	115	486	185	1672	96	288	1271	169
Future Volume (vph)	160	479	115	486	185	1672	96	288	1271	169
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	40.0	17.0	33.0	26.0	38.0	38.0	25.0	37.0	37.0
Total Split (%)	20.0%	33.3%	14.2%	27.5%	21.7%	31.7%	31.7%	20.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	14.5	28.0	10.8	24.2	16.1	33.8	33.8	14.6	32.3	32.3
Actuated g/C Ratio	0.13	0.26	0.10	0.22	0.15	0.31	0.31	0.14	0.30	0.30
v/c Ratio	0.73	0.78	0.71	0.84	0.76	0.98	0.17	0.69	0.78	0.30
Control Delay	65.2	38.2	72.4	47.7	65.1	56.3	1.8	54.5	40.3	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	38.2	72.4	47.7	65.1	56.3	1.8	54.5	40.3	9.4
LOS	E	D	E	D	E	E	A	D	D	A
Approach Delay		43.0		51.2		54.5			39.7	
Approach LOS		D		D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 47.3

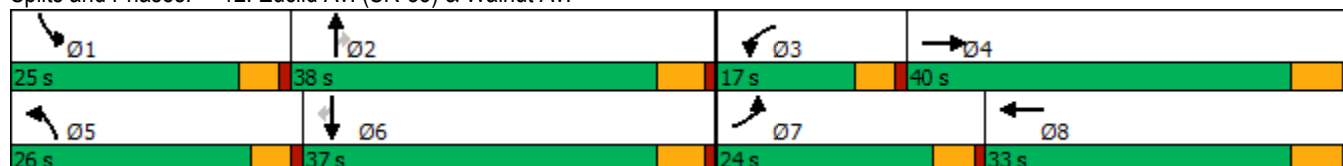
Intersection LOS: D

Intersection Capacity Utilization 87.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	479	264	115	486	197	185	1672	96	288	1271	169
Future Volume (veh/h)	160	479	264	115	486	197	185	1672	96	288	1271	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	165	494	246	119	501	185	191	1724	88	297	1310	139
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	604	299	146	594	218	223	1883	531	366	1788	497
Arrive On Green	0.12	0.26	0.26	0.09	0.23	0.23	0.13	0.34	0.34	0.11	0.32	0.32
Sat Flow, veh/h	1688	2349	1163	1688	2608	957	1688	5611	1582	3188	5611	1561
Grp Volume(v), veh/h	165	393	347	119	358	328	191	1724	88	297	1310	139
Grp Sat Flow(s),veh/h/ln	1688	1870	1642	1688	1870	1695	1688	1870	1582	1594	1870	1561
Q Serve(g_s), s	9.5	19.6	19.8	6.9	18.2	18.3	11.0	29.2	3.9	9.0	20.6	6.6
Cycle Q Clear(g_c), s	9.5	19.6	19.8	6.9	18.2	18.3	11.0	29.2	3.9	9.0	20.6	6.6
Prop In Lane	1.00		0.71	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	481	422	146	426	386	223	1883	531	366	1788	497
V/C Ratio(X)	0.84	0.82	0.82	0.82	0.84	0.85	0.86	0.92	0.17	0.81	0.73	0.28
Avail Cap(c_a), veh/h	330	645	566	211	513	465	364	1883	531	656	1788	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	34.6	34.7	44.5	36.6	36.6	42.1	31.6	23.2	42.8	30.0	25.3
Incr Delay (d2), s/veh	3.8	6.0	7.1	9.7	10.3	11.9	5.6	8.5	0.7	1.7	2.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	9.2	8.3	3.2	9.1	8.5	4.8	13.9	1.5	3.5	9.2	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7	40.6	41.8	54.2	46.9	48.5	47.8	40.1	23.9	44.5	32.7	26.7
LnGrp LOS	D	D	D	D	D	D	D	D	C	D	C	C
Approach Vol, veh/h		905			805			2003			1746	
Approach Delay, s/veh		42.2			48.6			40.1			34.3	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	38.7	13.2	31.3	17.7	37.0	16.1	28.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	20.4	32.6	12.4	34.2	21.4	31.6	19.4	27.2				
Max Q Clear Time (g_c+I1), s	11.0	31.2	8.9	21.8	13.0	22.6	11.5	20.3				
Green Ext Time (p_c), s	0.4	1.2	0.0	3.5	0.2	5.7	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			39.8									
HCM 6th LOS			D									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	139	869	189	803	67	334	1685	497	145	1149	384
Future Volume (vph)	139	869	189	803	67	334	1685	497	145	1149	384
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	20.6	41.1	41.1	15.9	40.2	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	14.1	37.4	15.5	38.8	38.8	11.3	34.8	34.8	11.4	33.8	54.4
Actuated g/C Ratio	0.12	0.31	0.13	0.32	0.32	0.09	0.29	0.29	0.10	0.28	0.46
v/c Ratio	0.74	1.82	0.91	0.73	0.12	2.20	1.70	0.80	0.94	1.20	0.53
Control Delay	71.9	401.6	93.2	40.8	1.6	588.5	349.6	29.7	112.6	136.4	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.9	401.6	93.2	40.8	1.6	588.5	349.6	29.7	112.6	136.4	21.5
LOS	E	F	F	D	A	F	F	C	F	F	C
Approach Delay		361.4		47.7			318.1			108.1	
Approach LOS		F		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.5

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.20

Intersection Signal Delay: 225.9

Intersection LOS: F

Intersection Capacity Utilization 136.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
16 s	40.2 s	20.6 s	43.2 s
			
Ø5	Ø6	Ø7	Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	869	133	189	803	67	334	1685	497	145	1149	384
Future Volume (veh/h)	139	869	133	189	803	67	334	1685	497	145	1149	384
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	145	905	115	197	836	38	348	1755	438	151	1197	317
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	503	64	221	1206	536	158	1022	456	159	1025	617
Arrive On Green	0.10	0.31	0.31	0.13	0.34	0.34	0.09	0.29	0.29	0.09	0.29	0.29
Sat Flow, veh/h	1688	1626	207	1688	3554	1578	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	145	0	1020	197	836	38	348	1755	438	151	1197	317
Grp Sat Flow(s),veh/h/ln	1688	0	1833	1688	1777	1578	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	10.2	0.0	37.4	13.9	24.6	2.0	11.3	34.8	32.9	10.8	34.9	18.5
Cycle Q Clear(g_c), s	10.2	0.0	37.4	13.9	24.6	2.0	11.3	34.8	32.9	10.8	34.9	18.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	0	567	221	1206	536	158	1022	456	159	1025	617
V/C Ratio(X)	0.85	0.00	1.80	0.89	0.69	0.07	2.21	1.72	0.96	0.95	1.17	0.51
Avail Cap(c_a), veh/h	252	0	567	223	1206	536	158	1022	456	159	1025	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	0.0	41.8	51.7	34.5	27.0	54.8	43.1	42.4	54.5	43.0	28.2
Incr Delay (d2), s/veh	11.2	0.0	367.1	31.5	1.7	0.1	563.6	326.7	32.1	55.8	86.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	73.9	7.7	10.5	0.7	29.3	60.7	16.4	7.0	27.1	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.7	0.0	408.9	83.2	36.2	27.1	618.4	369.8	74.5	110.3	129.1	28.9
LnGrp LOS	E	A	F	F	D	C	F	F	E	F	F	C
Approach Vol, veh/h		1165			1071			2541			1665	
Approach Delay, s/veh		366.1			44.5			352.9			108.4	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	41.3	20.5	43.2	15.9	41.4	16.8	46.9				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+I1), s	12.8	36.8	15.9	39.4	13.3	36.9	12.2	26.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.5				
Intersection Summary												
HCM 6th Ctrl Delay			240.8									
HCM 6th LOS			F									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	134	528	44	176	487	103	1971	362	70	1265	138
Future Volume (vph)	134	528	44	176	487	103	1971	362	70	1265	138
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	52.3	52.3	52.3	52.3	52.3	12.0	52.9	52.9	14.8	55.7	55.7
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	10.0%	44.1%	44.1%	12.3%	46.4%	46.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	46.5	46.5	46.5		46.5	7.4	51.2	51.2	8.7	49.2	49.2
Actuated g/C Ratio	0.39	0.39	0.39		0.39	0.06	0.43	0.43	0.07	0.41	0.41
v/c Ratio	0.72	0.79	0.07		3.79	1.08	1.40	0.55	0.62	0.94	0.21
Control Delay	54.2	41.7	2.2		1279.8	163.9	215.4	25.4	75.4	47.2	7.1
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.2	41.7	2.2		1279.8	163.9	215.4	25.4	75.4	47.2	7.1
LOS	D	D	A		F	F	F	C	E	D	A
Approach Delay		41.6			1279.8		185.0			44.8	
Approach LOS		D			F		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 3.79

Intersection Signal Delay: 276.1

Intersection LOS: F

Intersection Capacity Utilization 143.4%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14.8 s	52.9 s	52.3 s
		
Ø5	Ø6	Ø8
12 s	55.7 s	52.3 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	528	44	176	487	62	103	1971	362	70	1265	138
Future Volume (veh/h)	134	528	44	176	487	62	103	1971	362	70	1265	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	144	568	30	189	524	59	111	2119	320	75	1360	130
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	725	614	79	130	14	104	1478	659	94	1457	650
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.06	0.42	0.42	0.06	0.41	0.41
Sat Flow, veh/h	788	1870	1585	107	334	37	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	144	568	30	772	0	0	111	2119	320	75	1360	130
Grp Sat Flow(s),veh/h/ln	788	1870	1585	478	0	0	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	32.1	1.4	14.4	0.0	0.0	7.4	49.9	17.7	5.3	43.9	6.3
Cycle Q Clear(g_c), s	35.1	32.1	1.4	46.5	0.0	0.0	7.4	49.9	17.7	5.3	43.9	6.3
Prop In Lane	1.00		1.00	0.24		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	725	614	223	0	0	104	1478	659	94	1457	650
V/C Ratio(X)	0.62	0.78	0.05	3.47	0.00	0.00	1.07	1.43	0.49	0.80	0.93	0.20
Avail Cap(c_a), veh/h	233	725	614	223	0	0	104	1478	659	143	1457	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	32.3	22.9	51.3	0.0	0.0	56.3	35.0	25.6	56.0	33.8	22.8
Incr Delay (d2), s/veh	4.9	5.6	0.0	1122.4	0.0	0.0	107.3	199.1	2.5	8.4	12.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.9	0.5	76.0	0.0	0.0	6.1	60.4	6.7	2.4	19.7	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	37.9	23.0	1173.7	0.0	0.0	163.6	234.1	28.2	64.4	46.1	23.4
LnGrp LOS	D	D	C	F	A	A	F	F	C	E	D	C
Approach Vol, veh/h	742			772			2550			1565		
Approach Delay, s/veh	37.4			1173.7			205.2			45.1		
Approach LOS	D			F			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	56.4		52.3	12.0	55.7		52.3				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	10.2	* 48		46.5	7.4	49.2		46.5				
Max Q Clear Time (g_c+l1), s	7.3	51.9		37.1	9.4	45.9		48.5				
Green Ext Time (p_c), s	0.0	0.0		3.1	0.0	2.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay 271.4

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	393	307	133	144	252	171	1904	67	97	1191	166
Future Volume (vph)	393	307	133	144	252	171	1904	67	97	1191	166
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.0	43.0	9.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.8%	35.8%	7.5%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.5	45.8	45.8	10.0	34.3	10.5	37.0	37.0	5.5	32.0	32.0
Actuated g/C Ratio	0.18	0.39	0.39	0.08	0.29	0.09	0.31	0.31	0.05	0.27	0.27
v/c Ratio	1.36	0.45	0.20	1.08	0.95	1.22	1.81	0.12	1.32	1.31	0.32
Control Delay	219.8	29.2	4.5	149.5	67.0	188.6	395.3	0.4	254.2	183.0	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	219.8	29.2	4.5	149.5	67.0	188.6	395.3	0.4	254.2	183.0	8.0
LOS	F	C	A	F	E	F	F	A	F	F	A
Approach Delay	115.3			86.2			366.4			167.7	
Approach LOS	F			F			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 118.3

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.81

Intersection Signal Delay: 233.3

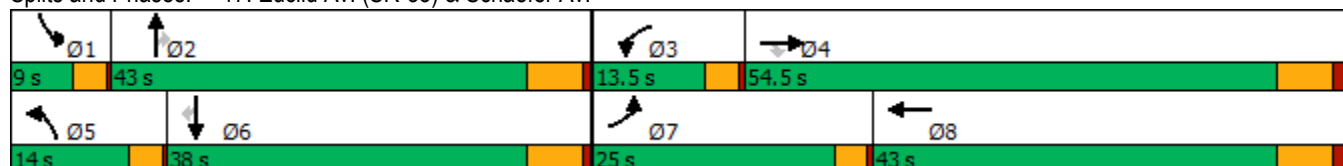
Intersection LOS: F

Intersection Capacity Utilization 125.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	393	307	133	144	252	224	171	1904	67	97	1191	166
Future Volume (veh/h)	393	307	133	144	252	224	171	1904	67	97	1191	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	414	323	91	152	265	225	180	2004	68	102	1254	132
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	304	735	614	141	277	236	148	1100	480	78	952	425
Arrive On Green	0.18	0.39	0.39	0.08	0.30	0.30	0.09	0.31	0.31	0.05	0.27	0.27
Sat Flow, veh/h	1688	1870	1563	1688	934	793	1688	3554	1551	1688	3554	1585
Grp Volume(v), veh/h	414	323	91	152	0	490	180	2004	68	102	1254	132
Grp Sat Flow(s),veh/h/ln	1688	1870	1563	1688	0	1728	1688	1777	1551	1688	1777	1585
Q Serve(g_s), s	21.5	15.1	4.5	10.0	0.0	33.3	10.5	37.0	3.8	5.5	32.0	7.9
Cycle Q Clear(g_c), s	21.5	15.1	4.5	10.0	0.0	33.3	10.5	37.0	3.8	5.5	32.0	7.9
Prop In Lane	1.00		1.00	1.00		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	735	614	141	0	513	148	1100	480	78	952	425
V/C Ratio(X)	1.36	0.44	0.15	1.08	0.00	0.96	1.21	1.82	0.14	1.31	1.32	0.31
Avail Cap(c_a), veh/h	304	744	621	141	0	521	148	1100	480	78	952	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	26.6	23.4	54.7	0.0	41.2	54.5	41.2	29.8	57.0	43.7	34.9
Incr Delay (d2), s/veh	183.3	0.3	0.1	97.6	0.0	28.1	142.7	373.1	0.1	207.0	150.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.2	6.5	1.6	8.0	0.0	17.5	10.1	72.1	1.4	6.7	33.1	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	232.3	26.9	23.4	152.3	0.0	69.4	197.1	414.3	29.9	264.0	194.1	35.3
LnGrp LOS	F	C	C	F	A	E	F	F	C	F	F	D
Approach Vol, veh/h		828			642			2252			1488	
Approach Delay, s/veh		129.2			89.0			385.3			184.8	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	43.0	13.5	54.0	14.0	38.0	25.0	42.5				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.5	37.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	7.5	39.0	12.0	17.1	12.5	34.0	23.5	35.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.2				
Intersection Summary												
HCM 6th Ctrl Delay			250.8									
HCM 6th LOS			F									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	189	988	178	178	728	218	1694	149	303	1079	148
Future Volume (vph)	189	988	178	178	728	218	1694	149	303	1079	148
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	12.0	54.0	54.0	15.0	57.0	57.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	10.0%	45.0%	45.0%	12.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	44.0	44.0	44.0	44.0	44.0	8.5	48.0	48.0	11.5	51.0	51.0
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.42	0.42
v/c Ratio	3.31	1.49	0.29	3.12	1.50	1.04	1.23	0.23	1.95	0.74	0.22
Control Delay	1095.5	259.4	14.2	1013.3	264.2	125.1	144.4	14.0	478.7	32.6	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1095.5	259.4	14.2	1013.3	264.2	125.1	144.4	14.0	478.7	32.6	12.8
LOS	F	F	B	F	F	F	F	B	F	C	B
Approach Delay		343.8			380.4		132.9			118.9	
Approach LOS		F			F		F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 3.31

Intersection Signal Delay: 223.0

Intersection LOS: F

Intersection Capacity Utilization 148.8%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	54 s	51 s
		
Ø5	Ø6	Ø8
12 s	57 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	988	178	178	728	244	218	1694	149	303	1079	148
Future Volume (veh/h)	189	988	178	178	728	244	218	1694	149	303	1079	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	195	1019	128	184	751	244	225	1746	142	312	1112	119
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	686	581	60	496	161	219	1421	634	162	1510	674
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.43	0.43
Sat Flow, veh/h	536	1870	1585	464	1352	439	3092	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	195	1019	128	184	0	995	225	1746	142	312	1112	119
Grp Sat Flow(s),veh/h/ln	536	1870	1585	464	0	1791	1546	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	44.0	6.7	0.0	0.0	44.0	8.5	48.0	7.1	11.5	31.4	5.6
Cycle Q Clear(g_c), s	44.0	44.0	6.7	44.0	0.0	44.0	8.5	48.0	7.1	11.5	31.4	5.6
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	686	581	60	0	657	219	1421	634	162	1510	674
V/C Ratio(X)	3.25	1.49	0.22	3.07	0.00	1.51	1.03	1.23	0.22	1.93	0.74	0.18
Avail Cap(c_a), veh/h	60	686	581	60	0	657	219	1421	634	162	1510	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	38.0	26.2	60.0	0.0	38.0	55.7	36.0	23.7	54.3	28.9	21.4
Incr Delay (d2), s/veh	1054.1	226.4	0.2	972.6	0.0	239.5	68.1	109.1	0.2	440.1	1.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.4	62.1	2.5	18.0	0.0	61.9	5.2	40.5	2.5	24.4	12.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1114.1	264.4	26.4	1032.6	0.0	277.5	123.8	145.1	23.9	494.4	30.8	21.6
LnGrp LOS	F	F	C	F	A	F	F	F	C	F	C	C
Approach Vol, veh/h	1342			1179			2113			1543		
Approach Delay, s/veh	365.2			395.3			134.7			123.8		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	54.0		51.0	12.0	57.0		51.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	11.5	48.0		44.0	8.5	51.0		44.0				
Max Q Clear Time (g_c+l1), s	13.5	50.0		46.0	10.5	33.4		46.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	7.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	231.8											
HCM 6th LOS	F											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	77	340	231	193	296	126	1490	121	183	1131	74
Future Volume (vph)	77	340	231	193	296	126	1490	121	183	1131	74
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	51.0	51.0	51.0	51.0	51.0	20.0	53.0	53.0	16.0	49.0	49.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	16.7%	44.2%	44.2%	13.3%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)	46.2	46.2	46.2	46.2	46.2	13.6	47.3	47.3	12.5	46.2	46.2
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.11	0.39	0.39	0.10	0.38	0.38
v/c Ratio	1.37	0.50	0.32	0.77	1.01	0.70	1.12	0.19	1.11	0.87	0.12
Control Delay	277.5	31.1	4.2	54.1	69.8	70.5	100.7	15.5	149.7	43.2	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	277.5	31.1	4.2	54.1	69.8	70.5	100.7	15.5	149.7	43.2	5.8
LOS	F	C	A	D	E	E	F	B	F	D	A
Approach Delay		50.8			66.2		92.6			55.3	
Approach LOS		D			E		F			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 70.7

Intersection LOS: E

Intersection Capacity Utilization 110.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
16 s	53 s	51 s
		
Ø5	Ø6	Ø8
20 s	49 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	340	231	193	296	367	126	1490	121	183	1131	74
Future Volume (veh/h)	77	340	231	193	296	367	126	1490	121	183	1131	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	81	358	141	203	312	373	133	1568	103	193	1191	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	720	603	264	299	357	158	1401	625	176	1437	632
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.39	0.39	0.10	0.40	0.40
Sat Flow, veh/h	717	1870	1565	852	776	928	1688	3554	1585	1688	3554	1563
Grp Volume(v), veh/h	81	358	141	203	0	685	133	1568	103	193	1191	46
Grp Sat Flow(s),veh/h/ln	717	1870	1565	852	0	1703	1688	1777	1585	1688	1777	1563
Q Serve(g_s), s	0.0	17.5	7.3	28.6	0.0	46.2	9.3	47.3	5.1	12.5	36.0	2.2
Cycle Q Clear(g_c), s	46.2	17.5	7.3	46.0	0.0	46.2	9.3	47.3	5.1	12.5	36.0	2.2
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	720	603	264	0	656	158	1401	625	176	1437	632
V/C Ratio(X)	1.35	0.50	0.23	0.77	0.00	1.04	0.84	1.12	0.16	1.10	0.83	0.07
Avail Cap(c_a), veh/h	60	720	603	264	0	656	232	1401	625	176	1437	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	28.1	24.9	45.6	0.0	36.9	53.5	36.3	23.6	53.7	32.0	21.9
Incr Delay (d2), s/veh	235.0	0.4	0.1	12.4	0.0	47.3	14.1	63.9	0.1	96.5	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	7.7	2.6	6.7	0.0	26.7	4.4	31.1	1.8	9.8	15.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	295.0	28.5	25.1	58.0	0.0	84.2	67.6	100.2	23.7	150.2	36.2	22.0
LnGrp LOS	F	C	C	E	A	F	E	F	C	F	D	C
Approach Vol, veh/h	580			888			1804			1430		
Approach Delay, s/veh	64.9			78.2			93.4			51.1		
Approach LOS	E			E			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	53.0		51.0	14.8	54.2		51.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	12.5	47.3		46.2	16.5	43.3		46.2				
Max Q Clear Time (g_c+I1), s	14.5	49.3		48.2	11.3	38.0		48.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	3.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	74.2											
HCM 6th LOS	E											

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	418	8	5	193	0	7	0	3	0	0	0
Future Vol, veh/h	0	418	8	5	193	0	7	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	454	9	5	210	0	8	0	3	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	210	0	0	463	0	0	679	679	459	680	683	210
Stage 1	-	-	-	-	-	-	459	459	-	220	220	-
Stage 2	-	-	-	-	-	-	220	220	-	460	463	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1361	-	-	1098	-	-	366	374	602	365	372	830
Stage 1	-	-	-	-	-	-	582	566	-	782	721	-
Stage 2	-	-	-	-	-	-	782	721	-	581	564	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1361	-	-	1098	-	-	365	372	602	362	370	830
Mov Cap-2 Maneuver	-	-	-	-	-	-	365	372	-	362	370	-
Stage 1	-	-	-	-	-	-	582	566	-	782	717	-
Stage 2	-	-	-	-	-	-	778	717	-	578	564	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			13.9			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	414	1361	-	-	1098	-	-	-				
HCM Lane V/C Ratio	0.026	-	-	-	0.005	-	-	-				
HCM Control Delay (s)	13.9	0	-	-	8.3	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/23/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	20	349	33	16	419	30	34	30	44
Future Volume (vph)	20	349	33	16	419	30	34	30	44
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	23.0	53.0	53.0	19.0	49.0	48.0	48.0	48.0	48.0
Total Split (%)	19.2%	44.2%	44.2%	15.8%	40.8%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	5.9	20.6	20.6	5.8	20.6		12.5		12.5
Actuated g/C Ratio	0.17	0.60	0.60	0.17	0.60		0.36		0.36
v/c Ratio	0.07	0.17	0.04	0.06	0.22		0.15		0.18
Control Delay	18.4	9.2	3.2	18.6	9.3		9.5		9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	18.4	9.2	3.2	18.6	9.3		9.5		9.4
LOS	B	A	A	B	A		A		A
Approach Delay		9.1			9.6		9.5		9.4
Approach LOS		A			A		A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 34.6

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.22

Intersection Signal Delay: 9.4

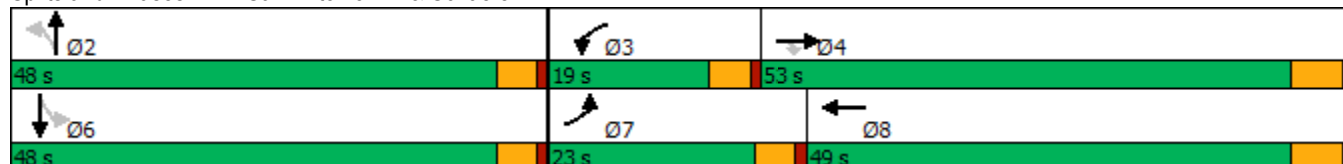
Intersection LOS: A

Intersection Capacity Utilization 34.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	349	33	16	419	27	30	34	17	30	44	29
Future Volume (veh/h)	20	349	33	16	419	27	30	34	17	30	44	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	360	29	16	432	24	31	35	9	31	45	14
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	1073	469	35	1013	56	255	236	46	222	255	62
Arrive On Green	0.03	0.30	0.30	0.02	0.30	0.30	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1688	3554	1551	1688	3419	189	447	1014	199	339	1094	264
Grp Volume(v), veh/h	21	360	29	16	224	232	75	0	0	90	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1551	1688	1777	1831	1660	0	0	1696	0	0
Q Serve(g_s), s	0.4	2.7	0.4	0.3	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	2.7	0.4	0.3	3.4	3.4	1.1	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.10	0.41		0.12	0.34		0.16
Lane Grp Cap(c), veh/h	45	1073	469	35	526	542	538	0	0	539	0	0
V/C Ratio(X)	0.47	0.34	0.06	0.46	0.43	0.43	0.14	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	920	4967	2169	720	2273	2343	2200	0	0	2241	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.2	9.2	8.4	16.3	9.6	9.6	10.4	0.0	0.0	10.4	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.2	0.1	3.5	0.5	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	0.1	0.1	0.9	0.9	0.4	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	9.3	8.4	19.8	10.1	10.1	10.5	0.0	0.0	10.6	0.0	0.0
LnGrp LOS	B	A	A	B	B	B	B	A	A	B	A	A
Approach Vol, veh/h		410			472			75			90	
Approach Delay, s/veh		9.8			10.4			10.5			10.6	
Approach LOS		A			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.5	5.3	16.0		12.5	5.5	15.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		43.4	14.4	47.2		43.4	18.4	43.2				
Max Q Clear Time (g_c+I1), s		3.1	2.3	4.7		3.3	2.4	5.4				
Green Ext Time (p_c), s		0.4	0.0	2.4		0.5	0.0	2.6				
Intersection Summary												
HCM 6th Ctrl Delay			10.2									
HCM 6th LOS			B									

Timings

Eden Mixed-Use TA (JN:14698)

2: San Antonio Av. & Edison Av.

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	34	541	31	17	676	17	18	24	10	21
Future Volume (vph)	34	541	31	17	676	17	18	24	10	21
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	25.0	55.0	55.0	22.0	52.0	52.0	43.0	43.0	43.0	43.0
Total Split (%)	20.8%	45.8%	45.8%	18.3%	43.3%	43.3%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.3	29.6	29.6	5.9	27.4	27.4		12.9		12.9
Actuated g/C Ratio	0.14	0.67	0.67	0.13	0.62	0.62		0.29		0.29
v/c Ratio	0.15	0.23	0.03	0.08	0.32	0.02		0.11		0.13
Control Delay	24.4	8.4	2.4	25.2	10.9	0.1		14.0		10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	24.4	8.4	2.4	25.2	10.9	0.1		14.0		10.3
LOS	C	A	A	C	B	A		B		B
Approach Delay		9.0			11.0			14.0		10.3
Approach LOS		A			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 43.9

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 10.2

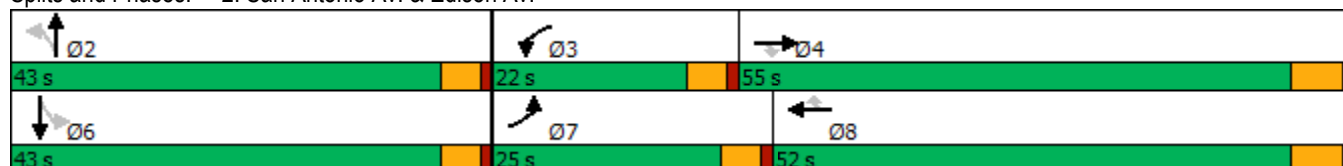
Intersection LOS: B

Intersection Capacity Utilization 45.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	541	31	17	676	17	18	24	7	10	21	31
Future Volume (veh/h)	34	541	31	17	676	17	18	24	7	10	21	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	35	558	25	18	697	15	19	25	3	10	22	-30
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	1376	600	39	1310	571	0	0	0	0	0	6667
Arrive On Green	0.04	0.39	0.39	0.02	0.37	0.37	0.13	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	1688	3554	1550	1688	3554	1550	0	0	0	49965	103825	-144178
Grp Volume(v), veh/h	35	558	25	18	697	15	47	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1550	1688	1777	1550	0	0	0	0	0	0
Q Serve(g_s), s	0.7	3.7	0.3	0.3	5.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	3.7	0.3	0.3	5.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.06	5.00		-15.00
Lane Grp Cap(c), veh/h	70	1376	600	39	1310	571	0	0	0	0	0	0
V/C Ratio(X)	0.50	0.41	0.04	0.46	0.53	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1060	5381	2347	904	5053	2204	0	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	15.2	7.2	6.2	15.7	8.1	6.5	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.2	0.0	3.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.7	0.1	0.1	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.3	7.4	6.2	18.8	8.4	6.6	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		618			730			47			0	
Approach Delay, s/veh		7.9			8.6			0.0			0.0	
Approach LOS		A			A			A				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.8	5.3	18.4		8.8	6.0	17.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		38.4	17.4	49.2		38.4	20.4	46.2				
Max Q Clear Time (g_c+I1), s		2.0	2.3	5.7		0.0	2.7	7.0				
Green Ext Time (p_c), s		0.2	0.0	3.8		0.0	0.0	4.9				
Intersection Summary												
HCM 6th Ctrl Delay			8.0									
HCM 6th LOS			A									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	149	29	206	34	107	18	112
Future Volume (vph)	19	149	29	206	34	107	18	112
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	17.0	41.0	17.0	41.0	24.0	41.0	21.0	38.0
Total Split (%)	14.2%	34.2%	14.2%	34.2%	20.0%	34.2%	17.5%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	14.6	12.6	14.7	12.6	6.3	14.5	5.9	12.3
Actuated g/C Ratio	0.35	0.30	0.35	0.30	0.15	0.34	0.14	0.29
v/c Ratio	0.04	0.17	0.06	0.21	0.14	0.13	0.08	0.12
Control Delay	11.1	13.1	11.1	13.7	23.3	9.6	24.1	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.1	13.1	11.1	13.7	23.3	9.6	24.1	14.4
LOS	B	B	B	B	C	A	C	B
Approach Delay		12.9		13.4		12.1		15.6
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 42.2

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.21

Intersection Signal Delay: 13.4

Intersection LOS: B

Intersection Capacity Utilization 43.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

			
Ø1	Ø2	Ø3	Ø4
21 s	41 s	17 s	41 s
			
Ø5	Ø6	Ø7	Ø8
24 s	38 s	17 s	41 s

HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	149	21	29	206	15	34	107	45	18	112	8
Future Volume (veh/h)	19	149	21	29	206	15	34	107	45	18	112	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	19	152	18	30	210	9	35	109	27	18	114	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	420	761	89	448	863	37	67	704	168	38	810	28
Arrive On Green	0.02	0.24	0.24	0.03	0.25	0.25	0.04	0.25	0.25	0.02	0.23	0.23
Sat Flow, veh/h	1688	3204	374	1688	3471	148	1688	2833	678	1688	3501	122
Grp Volume(v), veh/h	19	83	87	30	107	112	35	67	69	18	58	60
Grp Sat Flow(s),veh/h/ln	1688	1777	1801	1688	1777	1842	1688	1777	1734	1688	1777	1846
Q Serve(g_s), s	0.4	1.7	1.7	0.6	2.2	2.2	0.9	1.3	1.4	0.5	1.1	1.2
Cycle Q Clear(g_c), s	0.4	1.7	1.7	0.6	2.2	2.2	0.9	1.3	1.4	0.5	1.1	1.2
Prop In Lane	1.00		0.21	1.00		0.08	1.00		0.39	1.00		0.07
Lane Grp Cap(c), veh/h	420	422	428	448	442	458	67	442	431	38	411	427
V/C Ratio(X)	0.05	0.20	0.20	0.07	0.24	0.24	0.53	0.15	0.16	0.48	0.14	0.14
Avail Cap(c_a), veh/h	849	1401	1420	858	1401	1452	733	1417	1383	620	1297	1348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	13.6	13.6	12.1	13.4	13.4	21.0	13.1	13.1	21.6	13.6	13.6
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.3	0.3	2.4	0.2	0.2	3.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.5	0.6	0.2	0.7	0.7	0.3	0.4	0.4	0.2	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	13.8	13.9	12.1	13.7	13.7	23.4	13.3	13.3	25.0	13.8	13.8
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		189			249			171			136	
Approach Delay, s/veh		13.7			13.5			15.4			15.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.6	16.5	6.2	16.4	6.4	15.7	5.6	16.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	19.4	32.6	12.4	35.2				
Max Q Clear Time (g_c+I1), s	2.5	3.4	2.6	3.7	2.9	3.2	2.4	4.2				
Green Ext Time (p_c), s	0.0	0.7	0.0	0.8	0.0	0.6	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	28	340	9	359	52	110	44	101
Future Volume (vph)	28	340	9	359	52	110	44	101
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	19.0	44.0	15.0	40.0	25.0	40.0	21.0	36.0
Total Split (%)	15.8%	36.7%	12.5%	33.3%	20.8%	33.3%	17.5%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	6.7	83.4	5.5	78.2	8.4	12.6	7.8	12.1
Actuated g/C Ratio	0.06	0.70	0.05	0.65	0.07	0.10	0.06	0.10
v/c Ratio	0.31	0.16	0.12	0.19	0.47	0.34	0.42	0.38
Control Delay	62.3	8.2	58.0	10.6	66.1	47.5	64.8	39.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.3	8.2	58.0	10.6	66.1	47.5	64.8	39.3
LOS	E	A	E	B	E	D	E	D
Approach Delay		12.0		11.6		53.0		45.5
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 23.1

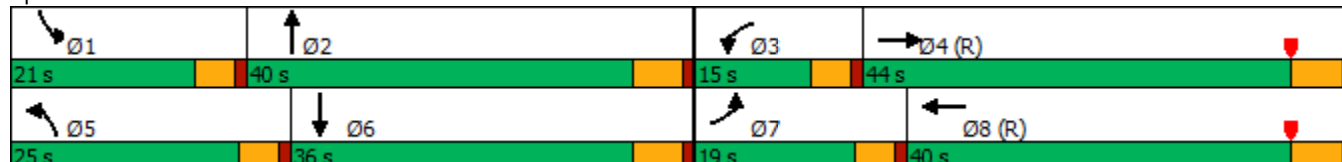
Intersection LOS: C

Intersection Capacity Utilization 50.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	340	28	9	359	52	52	110	12	44	101	35
Future Volume (veh/h)	28	340	28	9	359	52	52	110	12	44	101	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	29	358	26	9	378	42	55	116	11	46	106	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	44	2315	167	18	2173	240	70	312	29	58	278	36
Arrive On Green	0.03	0.69	0.69	0.01	0.67	0.67	0.04	0.10	0.10	0.03	0.09	0.09
Sat Flow, veh/h	1688	3357	243	1688	3222	356	1688	3277	306	1688	3155	409
Grp Volume(v), veh/h	29	189	195	9	207	213	55	62	65	46	59	61
Grp Sat Flow(s),veh/h/ln	1688	1777	1823	1688	1777	1801	1688	1777	1807	1688	1777	1786
Q Serve(g_s), s	2.0	4.4	4.5	0.6	5.2	5.2	3.9	3.9	4.0	3.2	3.7	3.9
Cycle Q Clear(g_c), s	2.0	4.4	4.5	0.6	5.2	5.2	3.9	3.9	4.0	3.2	3.7	3.9
Prop In Lane	1.00		0.13	1.00		0.20	1.00		0.17	1.00		0.23
Lane Grp Cap(c), veh/h	44	1225	1257	18	1199	1215	70	169	172	58	157	158
V/C Ratio(X)	0.67	0.15	0.16	0.49	0.17	0.18	0.79	0.37	0.38	0.79	0.37	0.39
Avail Cap(c_a), veh/h	203	1225	1257	146	1199	1215	287	512	521	231	453	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	6.5	6.5	59.0	7.2	7.2	57.0	50.9	50.9	57.5	51.6	51.6
Incr Delay (d2), s/veh	6.3	0.3	0.3	7.5	0.3	0.3	7.1	1.3	1.3	8.6	1.5	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.5	1.6	0.3	1.8	1.9	1.8	1.8	1.9	1.5	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.2	6.7	6.7	66.5	7.5	7.5	64.0	52.2	52.3	66.1	53.1	53.2
LnGrp LOS	E	A	A	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h		413			429			182			166	
Approach Delay, s/veh		10.8			8.8			55.8			56.7	
Approach LOS		B			A			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	16.8	5.9	88.5	9.6	16.0	7.7	86.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	34.6	10.4	38.2	20.4	30.6	14.4	34.2				
Max Q Clear Time (g_c+I1), s	5.2	6.0	2.6	6.5	5.9	5.9	4.0	7.2				
Green Ext Time (p_c), s	0.0	0.6	0.0	2.1	0.0	0.5	0.0	2.3				
Intersection Summary												
HCM 6th Ctrl Delay			23.3									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	68	472	16	21	634	21	18	65	15	76
Future Volume (vph)	68	472	16	21	634	21	18	65	15	76
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	25.0	48.0	48.0	17.0	40.0	40.0	17.0	41.0	14.0	38.0
Total Split (%)	20.8%	40.0%	40.0%	14.2%	33.3%	33.3%	14.2%	34.2%	11.7%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.9	27.6	27.6	6.1	21.0	21.0	6.0	12.9	5.9	12.8
Actuated g/C Ratio	0.14	0.48	0.48	0.11	0.36	0.36	0.10	0.22	0.10	0.22
v/c Ratio	0.32	0.30	0.02	0.13	0.54	0.03	0.11	0.10	0.09	0.19
Control Delay	31.6	12.5	0.1	33.0	18.7	0.1	33.2	19.4	33.3	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	12.5	0.1	33.0	18.7	0.1	33.2	19.4	33.3	14.2
LOS	C	B	A	C	B	A	C	B	C	B
Approach Delay		14.5			18.6			22.1		16.1
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 57.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 17.0

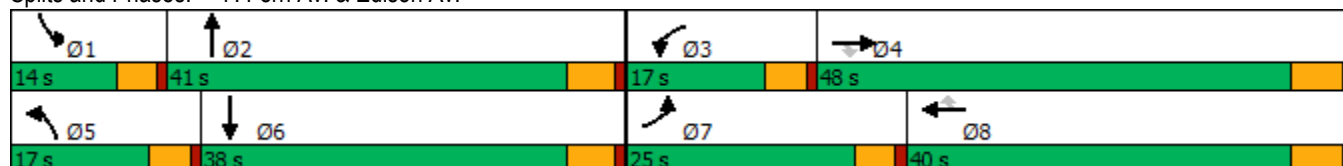
Intersection LOS: B

Intersection Capacity Utilization 50.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	472	16	21	634	21	18	65	9	15	76	59
Future Volume (veh/h)	68	472	16	21	634	21	18	65	9	15	76	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	74	513	13	23	689	15	20	71	6	16	83	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1204	537	46	1071	478	41	651	54	34	510	158
Arrive On Green	0.06	0.34	0.34	0.03	0.30	0.30	0.02	0.20	0.20	0.02	0.19	0.19
Sat Flow, veh/h	1688	3554	1584	1688	3554	1585	1688	3320	277	1688	2660	826
Grp Volume(v), veh/h	74	513	13	23	689	15	20	38	39	16	54	56
Grp Sat Flow(s),veh/h/ln	1688	1777	1584	1688	1777	1585	1688	1777	1820	1688	1777	1709
Q Serve(g_s), s	2.1	5.4	0.3	0.7	8.2	0.3	0.6	0.8	0.9	0.5	1.2	1.3
Cycle Q Clear(g_c), s	2.1	5.4	0.3	0.7	8.2	0.3	0.6	0.8	0.9	0.5	1.2	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.48
Lane Grp Cap(c), veh/h	109	1204	537	46	1071	478	41	348	357	34	341	328
V/C Ratio(X)	0.68	0.43	0.02	0.50	0.64	0.03	0.49	0.11	0.11	0.47	0.16	0.17
Avail Cap(c_a), veh/h	705	3070	1368	428	2488	1110	428	1295	1327	325	1186	1141
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	12.5	10.8	23.4	14.8	12.0	23.5	16.1	16.1	23.7	16.5	16.5
Incr Delay (d2), s/veh	2.7	0.2	0.0	3.0	0.7	0.0	3.3	0.1	0.1	3.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.7	0.1	0.3	2.6	0.1	0.2	0.3	0.3	0.2	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	12.7	10.8	26.5	15.4	12.1	26.8	16.3	16.3	27.5	16.7	16.7
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		600			727			97			126	
Approach Delay, s/veh		14.2			15.7			18.4			18.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.6	15.0	5.9	22.3	5.8	14.8	7.8	20.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	9.4	35.6	12.4	42.2	12.4	32.6	20.4	34.2				
Max Q Clear Time (g_c+I1), s	2.5	2.9	2.7	7.4	2.6	3.3	4.1	10.2				
Green Ext Time (p_c), s	0.0	0.3	0.0	3.4	0.0	0.5	0.1	4.5				
Intersection Summary												
HCM 6th Ctrl Delay			15.5									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	288	196	33	34	42
Future Vol, veh/h	31	288	196	33	34	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	310	211	35	37	45
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	246	0	-	0	450	123
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1317	-	-	-	538	905
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1317	-	-	-	525	905
Mov Cap-2 Maneuver	-	-	-	-	596	-
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	795	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		10.2		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1317	-	-	-	596	905
HCM Lane V/C Ratio	0.025	-	-	-	0.061	0.05
HCM Control Delay (s)	7.8	-	-	-	11.4	9.2
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.2

Intersection						
Int Delay, s/veh	4.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	227	167	62	264	156	117
Future Vol, veh/h	227	167	62	264	156	117
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	80	-	0	-
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	267	196	73	311	184	138
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	463	0	667	232
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	302	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1208	-	478	993
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	724	-
Platoon blocked, %	-	-	1	-	1	1
Mov Cap-1 Maneuver	-	-	1208	-	449	993
Mov Cap-2 Maneuver	-	-	-	-	537	-
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	681	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.6		15.2	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	669	-	-	1208	-	
HCM Lane V/C Ratio	0.48	-	-	0.06	-	
HCM Control Delay (s)	15.2	-	-	8.2	-	
HCM Lane LOS	C	-	-	A	-	
HCM 95th %tile Q(veh)	2.6	-	-	0.2	-	

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	360	4	410	795	881	913	471
Future Volume (vph)	360	4	410	795	881	913	471
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	31.0	31.0	31.0	42.0	89.0	47.0	47.0
Total Split (%)	25.8%	25.8%	25.8%	35.0%	74.2%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	23.2	23.2	23.2	41.5	86.3	40.3	40.3
Actuated g/C Ratio	0.19	0.19	0.19	0.35	0.72	0.34	0.34
v/c Ratio	0.87	0.78	0.57	1.35	0.36	0.80	0.59
Control Delay	72.2	50.1	16.8	203.5	7.9	42.0	7.0
Queue Delay	0.8	0.5	0.0	1.0	0.4	0.0	0.0
Total Delay	73.1	50.6	16.8	204.5	8.3	42.0	7.0
LOS	E	D	B	F	A	D	A
Approach Delay		47.7			101.3	30.1	
Approach LOS		D			F	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay: 64.8

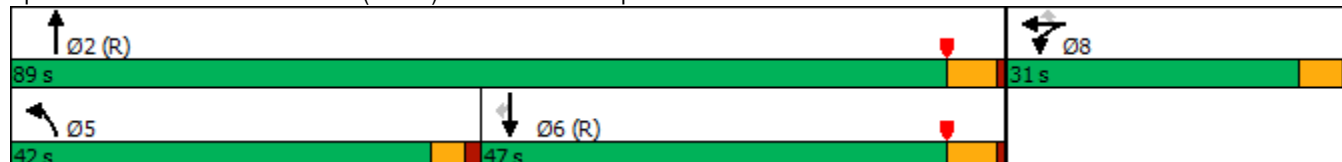
Intersection LOS: E

Intersection Capacity Utilization 100.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	4	410	795	881	0	0	913	471
Future Volume (veh/h)	0	0	0	360	4	410	795	881	0	0	913	471
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				449	0	155	828	918	0	0	951	402
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				523	0	233	557	2721	0	0	1477	659
Arrive On Green				0.15	0.00	0.15	0.63	1.00	0.00	0.00	0.42	0.42
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				449	0	155	828	918	0	0	951	402
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				14.8	0.0	11.1	37.5	0.0	0.0	0.0	25.6	23.8
Cycle Q Clear(g_c), s				14.8	0.0	11.1	37.5	0.0	0.0	0.0	25.6	23.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				523	0	233	557	2721	0	0	1477	659
V/C Ratio(X)				0.86	0.00	0.67	1.49	0.34	0.00	0.00	0.64	0.61
Avail Cap(c_a), veh/h				772	0	343	557	2721	0	0	1477	659
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.0	0.0	48.4	22.5	0.0	0.0	0.0	28.0	27.4
Incr Delay (d2), s/veh				4.5	0.0	1.2	220.2	0.0	0.0	0.0	2.2	4.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.7	0.0	4.4	42.7	0.0	0.0	0.0	10.9	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				54.5	0.0	49.6	242.7	0.0	0.0	0.0	30.1	31.6
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					604			1746			1353	
Approach Delay, s/veh					53.2			115.1			30.6	
Approach LOS					D			F			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.4			42.0	55.4		22.6				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		83.5			37.5	41.5		26.0				
Max Q Clear Time (g_c+I1), s		2.0			39.5	27.6		16.8				
Green Ext Time (p_c), s		11.8			0.0	8.5		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				74.1								
HCM 6th LOS				E								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	337	0	1337	586	365	908
Future Volume (vph)	337	0	1337	586	365	908
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	37.0	37.0	44.0	44.0	39.0	83.0
Total Split (%)	30.8%	30.8%	36.7%	36.7%	32.5%	69.2%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	32.0	32.0	43.7	43.7	29.8	77.5
Actuated g/C Ratio	0.27	0.27	0.36	0.36	0.25	0.65
v/c Ratio	0.72	1.21	1.10	0.77	0.88	0.42
Control Delay	50.4	141.4	95.3	19.5	76.2	10.0
Queue Delay	60.7	5.9	0.7	0.0	0.4	0.3
Total Delay	111.1	147.3	96.0	19.5	76.6	10.2
LOS	F	F	F	B	E	B
Approach Delay		134.9	72.7			29.3
Approach LOS		F	E			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 72.7

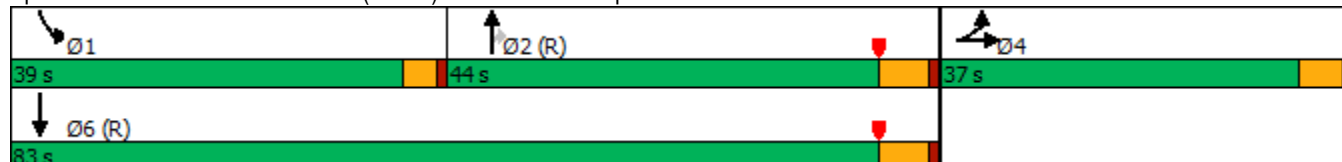
Intersection LOS: E

Intersection Capacity Utilization 100.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	0	552	0	0	0	0	1337	586	365	908	0
Future Volume (veh/h)	337	0	552	0	0	0	0	1337	586	365	908	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	359	0	478				0	1422	507	388	966	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	475	0	423				0	1363	590	408	2295	0
Arrive On Green	0.27	0.00	0.27				0.00	0.38	0.38	0.46	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1538	1781	3647	0
Grp Volume(v), veh/h	359	0	478				0	1422	507	388	966	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1538	1781	1777	0
Q Serve(g_s), s	22.2	0.0	32.0				0.0	46.0	36.4	25.1	0.0	0.0
Cycle Q Clear(g_c), s	22.2	0.0	32.0				0.0	46.0	36.4	25.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	475	0	423				0	1363	590	408	2295	0
V/C Ratio(X)	0.76	0.00	1.13				0.00	1.04	0.86	0.95	0.42	0.00
Avail Cap(c_a), veh/h	475	0	423				0	1363	590	520	2295	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.69	0.69	0.47	0.47	0.00
Uniform Delay (d), s/veh	40.4	0.0	44.0				0.0	37.0	34.0	31.9	0.0	0.0
Incr Delay (d2), s/veh	6.1	0.0	84.5				0.0	32.7	11.0	13.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.0	21.9				0.0	25.2	14.8	9.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.5	0.0	128.5				0.0	69.7	45.0	45.2	0.3	0.0
LnGrp LOS	D	A	F				A	F	D	D	A	A
Approach Vol, veh/h	837						1929			1354		
Approach Delay, s/veh	93.4						63.2			13.1		
Approach LOS	F						E			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	31.5	51.5		37.0		83.0						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	35.0	38.5		32.0		77.5						
Max Q Clear Time (g_c+I1), s	27.1	48.0		34.0		2.0						
Green Ext Time (p_c), s	0.4	0.0		0.0		12.7						
Intersection Summary												
HCM 6th Ctrl Delay	52.9											
HCM 6th LOS	D											
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	93	151	79	184	118	1545	63	163	1112	102
Future Volume (vph)	93	151	79	184	118	1545	63	163	1112	102
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	23.0	38.0	19.0	34.0	22.0	43.0	43.0	20.0	41.0	41.0
Total Split (%)	19.2%	31.7%	15.8%	28.3%	18.3%	35.8%	35.8%	16.7%	34.2%	34.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	9.9	13.9	9.1	13.2	11.2	38.9	38.9	9.5	37.2	37.2
Actuated g/C Ratio	0.11	0.15	0.10	0.15	0.12	0.43	0.43	0.11	0.41	0.41
v/c Ratio	0.54	0.48	0.50	0.59	0.60	0.68	0.09	0.52	0.51	0.15
Control Delay	51.5	20.3	51.6	22.0	52.0	24.5	1.5	46.0	23.0	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	20.3	51.6	22.0	52.0	24.5	1.5	46.0	23.0	5.7
LOS	D	C	D	C	D	C	A	D	C	A
Approach Delay		27.6		27.2		25.5			24.5	
Approach LOS		C		C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 89.7

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 25.6

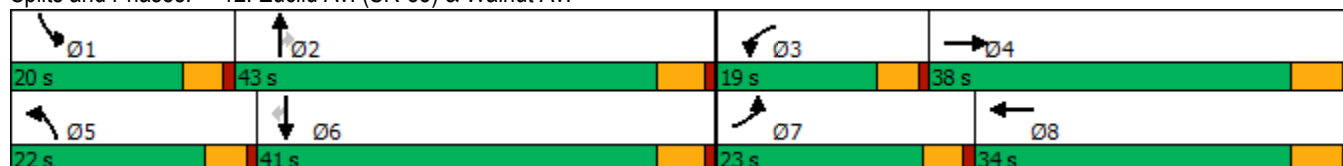
Intersection LOS: C

Intersection Capacity Utilization 68.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	151	149	79	184	183	118	1545	63	163	1112	102
Future Volume (veh/h)	93	151	149	79	184	183	118	1545	63	163	1112	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	99	161	121	84	196	160	126	1644	51	173	1183	70
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	332	233	106	296	227	157	2533	706	248	2448	683
Arrive On Green	0.07	0.16	0.16	0.06	0.15	0.15	0.09	0.45	0.45	0.08	0.44	0.44
Sat Flow, veh/h	1688	2041	1433	1688	1951	1496	1688	5611	1563	3188	5611	1565
Grp Volume(v), veh/h	99	147	135	84	187	169	126	1644	51	173	1183	70
Grp Sat Flow(s),veh/h/ln	1688	1870	1603	1688	1870	1577	1688	1870	1563	1594	1870	1565
Q Serve(g_s), s	4.8	5.9	6.4	4.1	7.9	8.5	6.1	18.9	1.5	4.4	12.5	2.2
Cycle Q Clear(g_c), s	4.8	5.9	6.4	4.1	7.9	8.5	6.1	18.9	1.5	4.4	12.5	2.2
Prop In Lane	1.00		0.89	1.00		0.95	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	304	261	106	284	239	157	2533	706	248	2448	683
V/C Ratio(X)	0.79	0.48	0.52	0.79	0.66	0.71	0.80	0.65	0.07	0.70	0.48	0.10
Avail Cap(c_a), veh/h	373	723	620	292	633	534	353	2533	706	589	2448	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	31.7	31.9	38.5	33.3	33.6	37.0	17.7	13.0	37.5	16.8	13.9
Incr Delay (d2), s/veh	4.2	1.2	1.6	4.8	2.6	3.8	3.6	1.3	0.2	1.3	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.6	2.5	1.7	3.6	3.3	2.6	7.5	0.5	1.7	5.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	32.9	33.5	43.3	35.9	37.3	40.6	19.0	13.1	38.8	17.5	14.2
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h	381			440			1821			1426		
Approach Delay, s/veh	35.5			37.9			20.4			19.9		
Approach LOS	D			D			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	43.0	9.9	19.4	12.3	41.7	10.8	18.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	15.4	37.6	14.4	32.2	17.4	35.6	18.4	28.2				
Max Q Clear Time (g_c+I1), s	6.4	20.9	6.1	8.4	8.1	14.5	6.8	10.5				
Green Ext Time (p_c), s	0.2	10.4	0.0	1.5	0.1	8.5	0.1	1.8				
Intersection Summary												
HCM 6th Ctrl Delay	23.5											
HCM 6th LOS	C											

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	140	246	163	366	169	155	1238	174	164	879	150
Future Volume (vph)	140	246	163	366	169	155	1238	174	164	879	150
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	23.0	36.2	36.2	16.0	35.6	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.3	24.3	14.3	25.3	25.3	11.6	31.5	31.5	14.9	33.6	48.8
Actuated g/C Ratio	0.13	0.23	0.14	0.24	0.24	0.11	0.30	0.30	0.14	0.32	0.46
v/c Ratio	0.69	0.83	0.74	0.45	0.34	0.87	1.21	0.31	0.72	0.81	0.19
Control Delay	63.4	55.3	66.0	36.8	7.3	89.5	138.0	10.0	62.8	40.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.4	55.3	66.0	36.8	7.3	89.5	138.0	10.0	62.8	40.6	3.5
LOS	E	E	E	D	A	F	F	B	E	D	A
Approach Delay		57.6		36.5			119.0			39.0	
Approach LOS		E		D			F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 105.8

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 72.7

Intersection LOS: E

Intersection Capacity Utilization 88.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
25.2 s	35.6 s	23 s	36.2 s
			
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	246	90	163	366	169	155	1238	174	164	879	150
Future Volume (veh/h)	140	246	90	163	366	169	155	1238	174	164	879	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	144	254	63	168	377	113	160	1276	128	169	906	106
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	297	74	200	785	346	190	1154	515	202	1178	683
Arrive On Green	0.10	0.21	0.21	0.12	0.22	0.22	0.11	0.32	0.32	0.12	0.33	0.33
Sat Flow, veh/h	1688	1441	357	1688	3554	1564	1688	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	144	0	317	168	377	113	160	1276	128	169	906	106
Grp Sat Flow(s),veh/h/ln	1688	0	1799	1688	1777	1564	1688	1777	1585	1688	1777	1564
Q Serve(g_s), s	7.8	0.0	15.8	9.1	8.6	5.6	8.6	30.2	5.5	9.1	21.3	3.8
Cycle Q Clear(g_c), s	7.8	0.0	15.8	9.1	8.6	5.6	8.6	30.2	5.5	9.1	21.3	3.8
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	0	371	200	785	346	190	1154	515	202	1178	683
V/C Ratio(X)	0.82	0.00	0.86	0.84	0.48	0.33	0.84	1.11	0.25	0.84	0.77	0.16
Avail Cap(c_a), veh/h	334	0	588	334	1161	511	207	1154	515	374	1463	808
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	35.6	40.1	31.6	30.4	40.4	31.4	23.1	40.1	27.9	15.9
Incr Delay (d2), s/veh	3.7	0.0	7.2	3.8	0.5	0.5	22.3	60.5	0.3	3.5	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	7.3	3.8	3.5	2.1	4.5	21.2	2.0	3.8	8.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	0.0	42.8	44.0	32.0	31.0	62.7	91.9	23.3	43.6	29.9	16.0
LnGrp LOS	D	A	D	D	C	C	E	F	C	D	C	B
Approach Vol, veh/h		461			658			1564			1181	
Approach Delay, s/veh		43.3			34.9			83.3			30.6	
Approach LOS		D			C			F			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.7	36.7	15.6	25.0	15.1	37.3	14.2	26.4				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+I1), s	11.1	32.2	11.1	17.8	10.6	23.3	9.8	10.6				
Green Ext Time (p_c), s	0.1	0.0	0.1	1.3	0.0	5.6	0.1	2.5				

Intersection Summary

HCM 6th Ctrl Delay	54.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	55	72	47	110	102	46	1441	112	57	1005	50
Future Volume (vph)	55	72	47	110	102	46	1441	112	57	1005	50
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	49.0	49.0	49.0	49.0	49.0	13.0	52.0	52.0	19.0	58.0	58.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	10.8%	43.3%	43.3%	15.8%	48.3%	48.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	22.6	22.6	22.6		22.6	6.9	51.5	51.5	7.9	53.5	53.5
Actuated g/C Ratio	0.24	0.24	0.24		0.24	0.07	0.54	0.54	0.08	0.56	0.56
v/c Ratio	0.27	0.17	0.11		0.78	0.40	0.79	0.13	0.42	0.53	0.06
Control Delay	33.8	30.1	0.5		47.9	55.7	24.3	4.2	54.1	16.8	2.8
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.8	30.1	0.5		47.9	55.7	24.3	4.2	54.1	16.8	2.8
LOS	C	C	A		D	E	C	A	D	B	A
Approach Delay		23.2			47.9		23.8			18.1	
Approach LOS		C			D		C			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 95.5

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 23.8

Intersection LOS: C

Intersection Capacity Utilization 78.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

 Ø1	 Ø2	 Ø4
19 s	52 s	49 s
 Ø5	 Ø6	 Ø8
13 s	58 s	49 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	72	47	110	102	61	46	1441	112	57	1005	50
Future Volume (veh/h)	55	72	47	110	102	61	46	1441	112	57	1005	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	57	75	30	115	106	54	48	1501	91	59	1047	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	415	351	176	138	63	65	1959	874	74	1980	871
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.55	0.55	0.04	0.56	0.56
Sat Flow, veh/h	1162	1870	1585	544	625	286	1688	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	57	75	30	275	0	0	48	1501	91	59	1047	41
Grp Sat Flow(s),veh/h/ln	1162	1870	1585	1454	0	0	1688	1777	1585	1688	1777	1564
Q Serve(g_s), s	0.0	3.0	1.4	14.0	0.0	0.0	2.6	30.3	2.5	3.2	17.1	1.1
Cycle Q Clear(g_c), s	5.5	3.0	1.4	17.0	0.0	0.0	2.6	30.3	2.5	3.2	17.1	1.1
Prop In Lane	1.00		1.00	0.42		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	415	351	378	0	0	65	1959	874	74	1980	871
V/C Ratio(X)	0.21	0.18	0.09	0.73	0.00	0.00	0.74	0.77	0.10	0.79	0.53	0.05
Avail Cap(c_a), veh/h	555	874	741	752	0	0	153	1959	874	263	1980	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	29.2	28.5	34.9	0.0	0.0	44.0	16.1	9.9	43.8	12.8	9.3
Incr Delay (d2), s/veh	0.4	0.2	0.1	2.7	0.0	0.0	6.1	2.9	0.2	6.9	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.3	0.5	5.9	0.0	0.0	1.1	10.6	0.8	1.4	5.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	29.4	28.6	37.6	0.0	0.0	50.1	19.0	10.1	50.6	13.9	9.4
LnGrp LOS	C	C	C	D	A	A	D	B	B	D	B	A
Approach Vol, veh/h	162				275				1640			
Approach Delay, s/veh	29.6				37.6				19.4			
Approach LOS	C				D				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	57.5		26.3	8.1	58.0		26.3				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	14.4	* 47		43.2	8.4	51.5		43.2				
Max Q Clear Time (g_c+I1), s	5.2	32.3		7.5	4.6	19.1		19.0				
Green Ext Time (p_c), s	0.0	8.5		0.7	0.0	7.7		1.5				

Intersection Summary

HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	263	84	86	19	55	148	1296	13	39	944	132
Future Volume (vph)	263	84	86	19	55	148	1296	13	39	944	132
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	42.0	42.0	10.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.0%	35.0%	8.3%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	19.6	27.3	27.3	10.3	12.1	10.8	41.9	41.9	6.1	33.0	33.0
Actuated g/C Ratio	0.21	0.29	0.29	0.11	0.13	0.12	0.45	0.45	0.07	0.36	0.36
v/c Ratio	0.77	0.16	0.16	0.11	0.39	0.79	0.85	0.02	0.37	0.78	0.21
Control Delay	52.9	24.8	2.4	45.4	30.5	72.0	33.7	0.1	57.1	35.0	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	24.8	2.4	45.4	30.5	72.0	33.7	0.1	57.1	35.0	3.9
LOS	D	C	A	D	C	E	C	A	E	D	A
Approach Delay		37.4			33.0		37.2			32.1	
Approach LOS		D			C		D			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 92.9

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 35.3

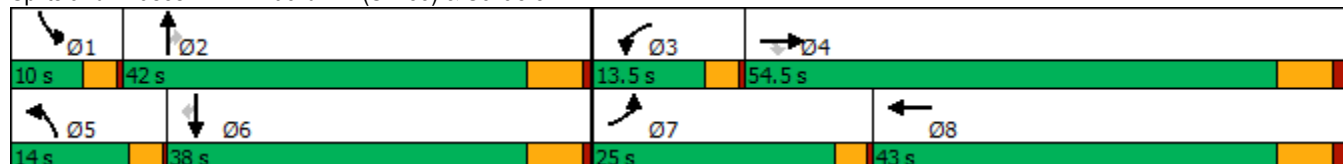
Intersection LOS: D

Intersection Capacity Utilization 76.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	84	86	19	55	40	148	1296	13	39	944	132
Future Volume (veh/h)	263	84	86	19	55	40	148	1296	13	39	944	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	274	88	38	20	57	20	154	1350	13	41	983	99
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	412	348	76	105	37	188	1543	688	64	1283	565
Arrive On Green	0.19	0.22	0.22	0.05	0.08	0.08	0.11	0.43	0.43	0.04	0.36	0.36
Sat Flow, veh/h	1688	1870	1581	1688	1323	464	1688	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	274	88	38	20	0	77	154	1350	13	41	983	99
Grp Sat Flow(s),veh/h/ln	1688	1870	1581	1688	0	1787	1688	1777	1585	1688	1777	1564
Q Serve(g_s), s	12.0	2.9	1.5	0.9	0.0	3.2	6.8	26.4	0.4	1.8	18.6	3.3
Cycle Q Clear(g_c), s	12.0	2.9	1.5	0.9	0.0	3.2	6.8	26.4	0.4	1.8	18.6	3.3
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	412	348	76	0	141	188	1543	688	64	1283	565
V/C Ratio(X)	0.87	0.21	0.11	0.26	0.00	0.54	0.82	0.87	0.02	0.64	0.77	0.18
Avail Cap(c_a), veh/h	475	1164	984	221	0	843	232	1676	748	144	1490	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	24.3	23.8	35.2	0.0	33.8	33.2	19.7	12.3	36.2	21.5	16.6
Incr Delay (d2), s/veh	7.5	0.2	0.1	0.7	0.0	2.4	14.1	5.2	0.0	3.9	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	1.2	0.5	0.4	0.0	1.4	3.2	9.8	0.1	0.8	6.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	24.5	23.9	35.9	0.0	36.2	47.2	24.9	12.3	40.1	23.6	16.8
LnGrp LOS	D	C	C	D	A	D	D	C	B	D	C	B
Approach Vol, veh/h		400			97			1517			1123	
Approach Delay, s/veh		33.5			36.1			27.0			23.6	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.4	39.1	7.0	23.8	12.0	33.5	17.7	13.0				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	36.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	3.8	28.4	2.9	4.9	8.8	20.6	14.0	5.2				
Green Ext Time (p_c), s	0.0	4.7	0.0	0.4	0.0	4.8	0.2	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			26.9									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	128	225	115	64	398	172	1116	44	139	846	105
Future Volume (vph)	128	225	115	64	398	172	1116	44	139	846	105
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	55.0	55.0	55.0	55.0	55.0	14.0	47.0	47.0	18.0	51.0	51.0
Total Split (%)	45.8%	45.8%	45.8%	45.8%	45.8%	11.7%	39.2%	39.2%	15.0%	42.5%	42.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	44.5	44.5	44.5	44.5	44.5	9.6	39.4	39.4	12.7	42.4	42.4
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.08	0.35	0.35	0.11	0.37	0.37
v/c Ratio	1.33	0.32	0.17	0.17	0.89	0.68	0.94	0.07	0.76	0.66	0.17
Control Delay	234.4	25.7	4.7	24.5	47.0	65.9	51.3	0.2	76.2	32.9	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	234.4	25.7	4.7	24.5	47.0	65.9	51.3	0.2	76.2	32.9	6.2
LOS	F	C	A	C	D	E	D	A	E	C	A
Approach Delay		77.6			44.8		51.5			35.8	
Approach LOS		E			D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 113.3

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.33

Intersection Signal Delay: 48.9

Intersection LOS: D

Intersection Capacity Utilization 100.2%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
18 s	47 s	55 s
		
Ø5	Ø6	Ø8
14 s	51 s	55 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	225	115	64	398	209	172	1116	44	139	846	105
Future Volume (veh/h)	128	225	115	64	398	209	172	1116	44	139	846	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	132	232	85	66	410	207	177	1151	31	143	872	70
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	773	654	394	484	244	228	1226	547	169	1319	581
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.07	0.35	0.35	0.10	0.37	0.37
Sat Flow, veh/h	763	1870	1584	1006	1172	592	3092	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	132	232	85	66	0	617	177	1151	31	143	872	70
Grp Sat Flow(s),veh/h/ln	763	1870	1584	1006	0	1763	1546	1777	1585	1688	1777	1564
Q Serve(g_s), s	11.3	9.7	3.9	5.5	0.0	36.7	6.5	36.5	1.5	9.7	23.8	3.4
Cycle Q Clear(g_c), s	48.0	9.7	3.9	15.1	0.0	36.7	6.5	36.5	1.5	9.7	23.8	3.4
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	773	654	394	0	728	228	1226	547	169	1319	581
V/C Ratio(X)	0.97	0.30	0.13	0.17	0.00	0.85	0.78	0.94	0.06	0.85	0.66	0.12
Avail Cap(c_a), veh/h	136	773	654	394	0	728	279	1254	559	211	1376	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	22.9	21.2	27.9	0.0	30.8	52.9	36.9	25.4	51.4	30.4	24.0
Incr Delay (d2), s/veh	67.7	0.2	0.1	0.2	0.0	9.2	8.3	13.2	0.0	19.1	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	4.1	1.4	1.3	0.0	16.5	2.7	16.8	0.5	4.8	9.6	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	122.6	23.1	21.2	28.1	0.0	40.0	61.2	50.1	25.5	70.5	31.6	24.1
LnGrp LOS	F	C	C	C	A	D	E	D	C	E	C	C
Approach Vol, veh/h	449				683				1359			
Approach Delay, s/veh	52.0				38.8				51.0			
Approach LOS	D				D				D			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	15.1	46.1	55.0		12.1	49.2	55.0					
Change Period (Y+Rc), s	3.5	6.0	7.0		3.5	6.0	7.0					
Max Green Setting (Gmax), s	14.5	41.0	48.0		10.5	45.0	48.0					
Max Q Clear Time (g_c+I1), s	11.7	38.5	50.0		8.5	25.8	38.7					
Green Ext Time (p_c), s	0.0	1.6	0.0		0.1	5.3	2.9					
Intersection Summary												
HCM 6th Ctrl Delay	44.3											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	42	56	127	16	74	122	1086	8	90	878	35	
Future Volume (vph)	42	56	127	16	74	122	1086	8	90	878	35	
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases		4			8	5	2		1	6		
Permitted Phases	4		4	8				2			6	
Detector Phase	4	4	4	8	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7	
Total Split (s)	48.0	48.0	48.0	48.0	48.0	23.0	60.0	60.0	12.0	49.0	49.0	
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	19.2%	50.0%	50.0%	10.0%	40.8%	40.8%	
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7	
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min	
Act Effct Green (s)	16.6	16.6	16.6	16.6	16.6	11.5	31.4	31.4	8.9	28.8	28.8	
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.16	0.43	0.43	0.12	0.40	0.40	
v/c Ratio	0.35	0.14	0.29	0.06	0.67	0.48	0.74	0.01	0.46	0.66	0.06	
Control Delay	33.1	24.0	6.6	23.8	21.0	39.5	21.4	0.0	45.6	22.5	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	33.1	24.0	6.6	23.8	21.0	39.5	21.4	0.0	45.6	22.5	0.2	
LOS	C	C	A	C	C	D	C	A	D	C	A	
Approach Delay		15.8			21.1		23.1			23.8		
Approach LOS		B			C		C			C		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 72.4

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 22.5

Intersection LOS: C

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
12 s	60 s	48 s
		
Ø5	Ø6	Ø8
23 s	49 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	56	127	16	74	238	122	1086	8	90	878	35
Future Volume (veh/h)	42	56	127	16	74	238	122	1086	8	90	878	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	44	59	53	17	78	239	128	1143	8	95	924	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	485	411	403	105	322	164	1565	698	120	1473	648
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.10	0.44	0.44	0.07	0.41	0.41
Sat Flow, veh/h	1007	1870	1585	1213	405	1242	1688	3554	1585	1688	3554	1563
Grp Volume(v), veh/h	44	59	53	17	0	317	128	1143	8	95	924	22
Grp Sat Flow(s),veh/h/ln	1007	1870	1585	1213	0	1647	1688	1777	1585	1688	1777	1563
Q Serve(g_s), s	2.6	1.5	1.6	0.7	0.0	10.8	4.5	16.2	0.2	3.4	12.6	0.5
Cycle Q Clear(g_c), s	13.3	1.5	1.6	2.1	0.0	10.8	4.5	16.2	0.2	3.4	12.6	0.5
Prop In Lane	1.00		1.00	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	485	411	403	0	427	164	1565	698	120	1473	648
V/C Ratio(X)	0.22	0.12	0.13	0.04	0.00	0.74	0.78	0.73	0.01	0.79	0.63	0.03
Avail Cap(c_a), veh/h	653	1324	1122	948	0	1166	539	3162	1410	235	2521	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	17.3	17.3	18.1	0.0	20.7	26.9	14.1	9.6	27.9	14.1	10.6
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.0	0.0	1.9	6.0	0.7	0.0	8.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.6	0.5	0.2	0.0	3.8	1.8	4.7	0.0	1.5	3.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	17.4	17.4	18.1	0.0	22.7	32.9	14.8	9.6	36.3	14.6	10.6
LnGrp LOS	C	B	B	B	A	C	C	B	A	D	B	B
Approach Vol, veh/h		156			334			1279			1041	
Approach Delay, s/veh		20.2			22.4			16.5			16.5	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	32.6		20.6	9.4	31.0		20.6				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	8.5	54.3		43.2	19.5	43.3		43.2				
Max Q Clear Time (g_c+I1), s	5.4	18.2		15.3	6.5	14.6		12.8				
Green Ext Time (p_c), s	0.0	8.7		0.5	0.2	6.3		1.6				
Intersection Summary												
HCM 6th Ctrl Delay				17.4								
HCM 6th LOS				B								

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	138	7	4	100	0	8	0	3	0	0	0
Future Vol, veh/h	0	138	7	4	100	0	8	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	150	8	4	109	0	9	0	3	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	109	0	0	158	0	0	271	271	154	273	275	109
Stage 1	-	-	-	-	-	-	154	154	-	117	117	-
Stage 2	-	-	-	-	-	-	117	117	-	156	158	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1481	-	-	1422	-	-	682	636	892	679	632	945
Stage 1	-	-	-	-	-	-	848	770	-	888	799	-
Stage 2	-	-	-	-	-	-	888	799	-	846	767	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1481	-	-	1422	-	-	681	634	892	675	630	945
Mov Cap-2 Maneuver	-	-	-	-	-	-	681	634	-	675	630	-
Stage 1	-	-	-	-	-	-	848	770	-	888	797	-
Stage 2	-	-	-	-	-	-	885	797	-	843	767	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			10			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	728	1481	-	-	1422	-	-	-				
HCM Lane V/C Ratio	0.016	-	-	-	0.003	-	-	-				
HCM Control Delay (s)	10	0	-	-	7.5	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-				

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APPENDIX 7.2: HORIZON YEAR (2045) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/23/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	41	464	112	39	649	91	45	14	39
Future Volume (vph)	41	464	112	39	649	91	45	14	39
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	19.0	49.0	49.0	19.0	49.0	52.0	52.0	52.0	52.0
Total Split (%)	15.8%	40.8%	40.8%	15.8%	40.8%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.7	18.0	18.0	6.6	17.9		14.8		14.8
Actuated g/C Ratio	0.13	0.36	0.36	0.13	0.36		0.30		0.30
v/c Ratio	0.20	0.40	0.21	0.19	0.57		0.49		0.23
Control Delay	27.3	14.5	5.5	27.4	16.5		20.3		12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	27.3	14.5	5.5	27.4	16.5		20.3		12.0
LOS	C	B	A	C	B		C		B
Approach Delay		13.7			17.1		20.3		12.0
Approach LOS		B			B		C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 50.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 15.9

Intersection LOS: B

Intersection Capacity Utilization 53.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

		
Ø2	Ø3	Ø4
52 s	19 s	49 s
		
Ø6	Ø7	Ø8
52 s	19 s	49 s

HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	464	112	39	649	15	91	45	61	14	39	54
Future Volume (veh/h)	41	464	112	39	649	15	91	45	61	14	39	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.95	0.98		0.99	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	45	504	104	42	705	12	99	49	48	15	42	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	1177	512	77	1174	20	296	145	102	130	256	172
Arrive On Green	0.05	0.33	0.33	0.05	0.33	0.33	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1688	3554	1547	1688	3572	61	621	529	373	117	938	629
Grp Volume(v), veh/h	45	504	104	42	351	366	196	0	0	91	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1547	1688	1777	1856	1522	0	0	1684	0	0
Q Serve(g_s), s	1.1	4.7	2.1	1.0	7.1	7.1	2.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	4.7	2.1	1.0	7.1	7.1	4.3	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.03	0.51		0.24	0.16		0.37
Lane Grp Cap(c), veh/h	82	1177	512	77	584	610	542	0	0	558	0	0
V/C Ratio(X)	0.55	0.43	0.20	0.54	0.60	0.60	0.36	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	566	3577	1557	566	1789	1868	1764	0	0	1905	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.0	11.2	10.3	20.0	12.0	12.0	12.8	0.0	0.0	12.0	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.2	0.2	2.2	1.0	1.0	0.4	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.3	0.5	0.4	2.1	2.2	1.4	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	11.4	10.5	22.2	13.0	13.0	13.2	0.0	0.0	12.1	0.0	0.0
LnGrp LOS	C	B	B	C	B	B	B	A	A	B	A	A
Approach Vol, veh/h		653			759			196			91	
Approach Delay, s/veh		12.0			13.5			13.2			12.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.3	6.6	20.0		16.3	6.7	19.9				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		47.4	14.4	43.2		47.4	14.4	43.2				
Max Q Clear Time (g_c+I1), s		6.3	3.0	6.7		3.7	3.1	9.1				
Green Ext Time (p_c), s		1.4	0.0	3.7		0.6	0.0	4.3				
Intersection Summary												
HCM 6th Ctrl Delay			12.8									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	40	780	28	12	848	27	98	115	44	122
Future Volume (vph)	40	780	28	12	848	27	98	115	44	122
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	17.0	57.0	57.0	12.0	52.0	52.0	51.0	51.0	51.0	51.0
Total Split (%)	14.2%	47.5%	47.5%	10.0%	43.3%	43.3%	42.5%	42.5%	42.5%	42.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.4	31.6	31.6	6.2	26.9	26.9		22.2		22.2
Actuated g/C Ratio	0.11	0.47	0.47	0.09	0.40	0.40		0.33		0.33
v/c Ratio	0.23	0.51	0.04	0.08	0.65	0.04		0.64		0.55
Control Delay	39.8	14.7	1.8	41.2	20.9	0.1		29.2		23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	39.8	14.7	1.8	41.2	20.9	0.1		29.2		23.1
LOS	D	B	A	D	C	A		C		C
Approach Delay		15.4			20.5			29.2		23.1
Approach LOS		B			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 67.3

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 19.9

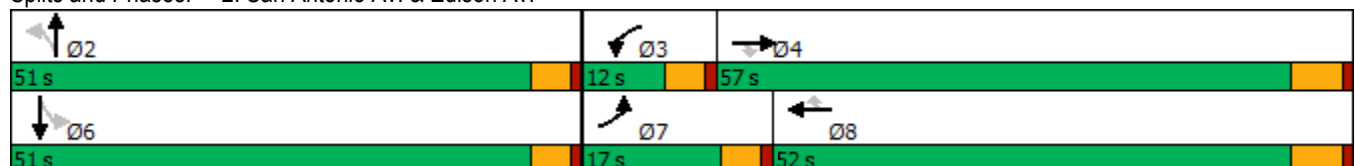
Intersection LOS: B

Intersection Capacity Utilization 68.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	780	28	12	848	27	98	115	35	44	122	114
Future Volume (veh/h)	40	780	28	12	848	27	98	115	35	44	122	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	43	848	22	13	922	26	107	125	34	48	133	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1532	668	28	1428	623	235	208	49	144	250	98
Arrive On Green	0.05	0.43	0.43	0.02	0.40	0.40	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1688	3554	1550	1688	3554	1550	550	901	213	224	1081	426
Grp Volume(v), veh/h	43	848	22	13	922	26	266	0	0	240	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1550	1688	1777	1550	1664	0	0	1731	0	0
Q Serve(g_s), s	1.2	8.3	0.4	0.4	9.8	0.5	0.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.2	8.3	0.4	0.4	9.8	0.5	6.3	0.0	0.0	5.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.13	0.20		0.25
Lane Grp Cap(c), veh/h	77	1532	668	28	1428	623	493	0	0	493	0	0
V/C Ratio(X)	0.56	0.55	0.03	0.46	0.65	0.04	0.54	0.00	0.00	0.49	0.00	0.00
Avail Cap(c_a), veh/h	448	3896	1700	267	3516	1533	1630	0	0	1728	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.8	9.9	7.7	22.8	11.3	8.5	16.2	0.0	0.0	15.9	0.0	0.0
Incr Delay (d2), s/veh	2.3	0.3	0.0	4.4	0.5	0.0	0.9	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.2	0.1	0.2	2.7	0.1	2.4	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	10.2	7.7	27.1	11.8	8.5	17.1	0.0	0.0	16.7	0.0	0.0
LnGrp LOS	C	B	A	C	B	A	B	A	A	B	A	A
Approach Vol, veh/h	913			961			266			240		
Approach Delay, s/veh	10.8			11.9			17.1			16.7		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	15.4		5.4	25.9		15.4	6.7	24.6				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	46.4		7.4	51.2		46.4	12.4	46.2				
Max Q Clear Time (g_c+I1), s	8.3		2.4	10.3		7.5	3.2	11.8				
Green Ext Time (p_c), s	2.0		0.0	6.4		1.7	0.0	7.0				
Intersection Summary												
HCM 6th Ctrl Delay	12.6											
HCM 6th LOS	B											

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	21	270	87	623	50	138	20	155
Future Volume (vph)	21	270	87	623	50	138	20	155
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	43.0	18.0	47.0	21.0	41.0	18.0	38.0
Total Split (%)	11.7%	35.8%	15.0%	39.2%	17.5%	34.2%	15.0%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	20.6	15.1	24.3	20.6	7.2	15.4	6.2	12.5
Actuated g/C Ratio	0.37	0.27	0.44	0.37	0.13	0.28	0.11	0.23
v/c Ratio	0.07	0.36	0.21	0.54	0.25	0.23	0.12	0.26
Control Delay	10.9	18.6	11.1	17.6	31.1	13.7	32.2	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.9	18.6	11.1	17.6	31.1	13.7	32.2	20.7
LOS	B	B	B	B	C	B	C	C
Approach Delay		18.1		16.8		17.0		21.8
Approach LOS		B		B		B		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 55.1

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 17.8

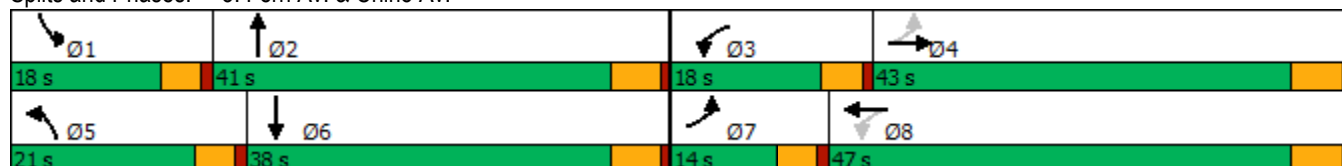
Intersection LOS: B

Intersection Capacity Utilization 53.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.



HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	270	49	87	623	33	50	138	75	20	155	37
Future Volume (veh/h)	21	270	49	87	623	33	50	138	75	20	155	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	23	293	46	95	677	32	54	150	50	22	168	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	784	122	441	1037	49	89	624	200	44	639	108
Arrive On Green	0.03	0.25	0.25	0.07	0.30	0.30	0.05	0.24	0.24	0.03	0.21	0.21
Sat Flow, veh/h	1688	3082	478	1688	3454	163	1688	2635	845	1688	3035	514
Grp Volume(v), veh/h	23	167	172	95	348	361	54	99	101	22	97	100
Grp Sat Flow(s),veh/h/ln	1688	1777	1784	1688	1777	1840	1688	1777	1704	1688	1777	1772
Q Serve(g_s), s	0.5	3.9	4.0	2.0	8.5	8.5	1.6	2.3	2.4	0.6	2.3	2.4
Cycle Q Clear(g_c), s	0.5	3.9	4.0	2.0	8.5	8.5	1.6	2.3	2.4	0.6	2.3	2.4
Prop In Lane	1.00		0.27	1.00		0.09	1.00		0.50	1.00		0.29
Lane Grp Cap(c), veh/h	281	452	454	441	534	553	89	421	404	44	374	373
V/C Ratio(X)	0.08	0.37	0.38	0.22	0.65	0.65	0.61	0.24	0.25	0.49	0.26	0.27
Avail Cap(c_a), veh/h	553	1325	1330	770	1468	1520	555	1268	1216	453	1162	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.4	15.3	15.3	12.1	15.2	15.2	23.1	15.4	15.4	24.0	16.4	16.5
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.1	1.4	1.3	2.5	0.3	0.3	3.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.3	1.3	0.6	2.8	2.9	0.6	0.8	0.8	0.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	15.8	15.9	12.2	16.5	16.5	25.6	15.7	15.8	27.1	16.8	16.9
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h	362			804				254			219	
Approach Delay, s/veh	15.7			16.0				17.8			17.9	
Approach LOS	B			B				B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	17.2	8.3	18.5	7.2	15.9	6.0	20.8				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	35.6	13.4	37.2	16.4	32.6	9.4	41.2				
Max Q Clear Time (g_c+I1), s	2.6	4.4	4.0	6.0	3.6	4.4	2.5	10.5				
Green Ext Time (p_c), s	0.0	1.1	0.1	1.8	0.0	1.0	0.0	4.2				
Intersection Summary												
HCM 6th Ctrl Delay	16.5											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	38	7	232	8	6	318
Future Vol, veh/h	38	7	232	8	6	318
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	8	252	9	7	346
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	444	131	0	0	261	0
Stage 1	257	-	-	-	-	-
Stage 2	187	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	542	894	-	-	1300	-
Stage 1	762	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	539	894	-	-	1300	-
Mov Cap-2 Maneuver	606	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.1	0	0.1			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	638	1300	-	
HCM Lane V/C Ratio	-	-	0.077	0.005	-	
HCM Control Delay (s)	-	-	11.1	7.8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	233	8	0	356
Future Vol, veh/h	0	6	233	8	0	356
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	7	253	9	0	387
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	131	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	894	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	894	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.1	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	894		-		
HCM Lane V/C Ratio	-	0.007		-		
HCM Control Delay (s)	-	9.1		-		
HCM Lane LOS	-	A		-		
HCM 95th %tile Q(veh)	-	0		-		

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	403	26	451	88	126	88	162
Future Volume (vph)	50	403	26	451	88	126	88	162
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	18.0	41.0	15.0	38.0	27.0	47.0	17.0	37.0
Total Split (%)	15.0%	34.2%	12.5%	31.7%	22.5%	39.2%	14.2%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	8.3	72.6	6.7	68.9	11.3	13.9	10.3	13.0
Actuated g/C Ratio	0.07	0.60	0.06	0.57	0.09	0.12	0.09	0.11
v/c Ratio	0.47	0.27	0.30	0.28	0.61	0.43	0.67	0.63
Control Delay	65.8	12.9	62.2	15.1	68.1	37.8	74.8	36.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.8	12.9	62.2	15.1	68.1	37.8	74.8	36.6
LOS	E	B	E	B	E	D	E	D
Approach Delay		17.6		17.4		48.0		46.1
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 28.0

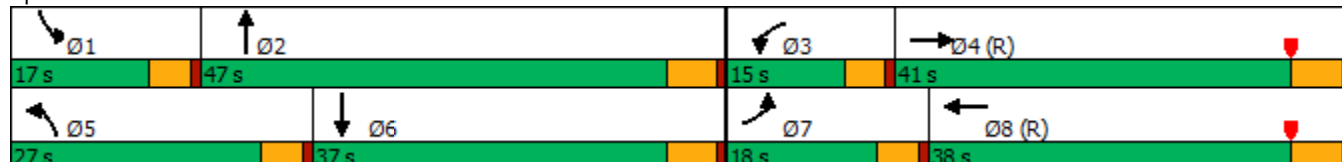
Intersection LOS: C

Intersection Capacity Utilization 54.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	403	111	26	451	70	88	126	48	88	162	106
Future Volume (veh/h)	50	403	111	26	451	70	88	126	48	88	162	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	54	438	106	28	490	68	96	137	45	96	176	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1770	425	43	1905	263	119	295	93	118	264	119
Arrive On Green	0.04	0.62	0.62	0.03	0.61	0.61	0.07	0.11	0.11	0.07	0.11	0.11
Sat Flow, veh/h	1688	2840	682	1688	3135	433	1688	2641	832	1688	2369	1066
Grp Volume(v), veh/h	54	273	271	28	277	281	96	90	92	96	130	129
Grp Sat Flow(s),veh/h/ln	1688	1777	1745	1688	1777	1791	1688	1777	1696	1688	1777	1658
Q Serve(g_s), s	3.8	8.2	8.3	2.0	8.7	8.8	6.7	5.7	6.1	6.7	8.4	9.0
Cycle Q Clear(g_c), s	3.8	8.2	8.3	2.0	8.7	8.8	6.7	5.7	6.1	6.7	8.4	9.0
Prop In Lane	1.00		0.39	1.00		0.24	1.00		0.49	1.00		0.64
Lane Grp Cap(c), veh/h	68	1107	1087	43	1080	1088	119	198	189	118	198	185
V/C Ratio(X)	0.79	0.25	0.25	0.66	0.26	0.26	0.81	0.45	0.48	0.81	0.66	0.70
Avail Cap(c_a), veh/h	188	1107	1087	146	1080	1088	315	616	588	174	468	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	10.1	10.1	58.0	10.9	11.0	55.0	49.9	50.1	55.0	51.1	51.4
Incr Delay (d2), s/veh	6.8	0.5	0.5	6.2	0.6	0.6	4.6	1.5	1.8	10.2	3.7	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.0	3.0	0.9	3.3	3.3	3.0	2.6	2.6	3.2	3.9	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.9	10.6	10.6	64.2	11.5	11.5	59.6	51.4	51.9	65.2	54.8	56.1
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	D	E
Approach Vol, veh/h		598			586			278			355	
Approach Delay, s/veh		15.4			14.0			54.4			58.1	
Approach LOS		B			B			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	18.8	7.6	80.6	13.1	18.8	9.5	78.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	12.4	41.6	10.4	35.2	22.4	31.6	13.4	32.2				
Max Q Clear Time (g_c+I1), s	8.7	8.1	4.0	10.3	8.7	11.0	5.8	10.8				
Green Ext Time (p_c), s	0.0	1.0	0.0	3.0	0.1	1.3	0.0	3.0				
Intersection Summary												
HCM 6th Ctrl Delay			29.3									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	138	701	63	15	704	21	62	127	8	133
Future Volume (vph)	138	701	63	15	704	21	62	127	8	133
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	22.0	52.0	52.0	13.0	43.0	43.0	17.0	42.0	13.0	38.0
Total Split (%)	18.3%	43.3%	43.3%	10.8%	35.8%	35.8%	14.2%	35.0%	10.8%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	11.7	38.8	38.8	6.0	23.7	23.7	8.1	21.6	5.7	13.1
Actuated g/C Ratio	0.15	0.51	0.51	0.08	0.31	0.31	0.11	0.29	0.08	0.17
v/c Ratio	0.58	0.42	0.08	0.12	0.69	0.04	0.37	0.14	0.07	0.42
Control Delay	44.1	14.4	1.5	44.3	27.9	0.1	43.9	23.1	44.4	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	14.4	1.5	44.3	27.9	0.1	43.9	23.1	44.4	18.7
LOS	D	B	A	D	C	A	D	C	D	B
Approach Delay		18.0			27.4			29.8		19.5
Approach LOS		B			C			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 75.7

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 22.6

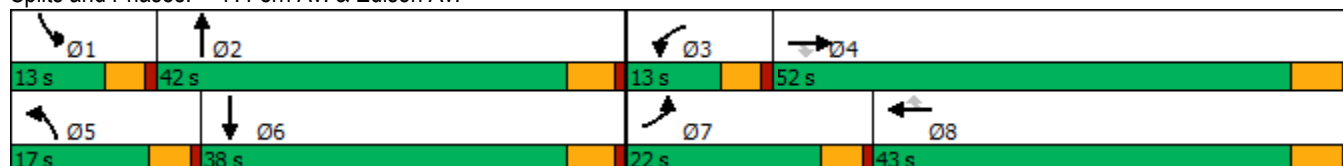
Intersection LOS: C

Intersection Capacity Utilization 58.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	701	63	15	704	21	62	127	4	8	133	128
Future Volume (veh/h)	138	701	63	15	704	21	62	127	4	8	133	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	150	762	58	16	765	18	67	138	2	9	145	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1428	628	33	1099	490	95	796	12	20	359	243
Arrive On Green	0.11	0.40	0.40	0.02	0.31	0.31	0.06	0.22	0.22	0.01	0.18	0.18
Sat Flow, veh/h	1688	3554	1564	1688	3554	1585	1688	3586	52	1688	2024	1369
Grp Volume(v), veh/h	150	762	58	16	765	18	67	68	72	9	126	124
Grp Sat Flow(s),veh/h/ln	1688	1777	1564	1688	1777	1585	1688	1777	1861	1688	1777	1616
Q Serve(g_s), s	5.1	9.7	1.4	0.6	11.2	0.5	2.3	1.8	1.8	0.3	3.7	4.0
Cycle Q Clear(g_c), s	5.1	9.7	1.4	0.6	11.2	0.5	2.3	1.8	1.8	0.3	3.7	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.85
Lane Grp Cap(c), veh/h	189	1428	628	33	1099	490	95	395	413	20	315	286
V/C Ratio(X)	0.79	0.53	0.09	0.49	0.70	0.04	0.70	0.17	0.17	0.46	0.40	0.43
Avail Cap(c_a), veh/h	497	2777	1222	240	2236	997	354	1100	1152	240	980	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	13.5	11.0	28.7	18.0	14.3	27.4	18.6	18.6	29.0	21.5	21.7
Incr Delay (d2), s/veh	2.8	0.3	0.1	4.1	0.8	0.0	3.5	0.2	0.2	6.1	0.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.1	0.4	0.2	3.9	0.1	0.9	0.7	0.7	0.1	1.5	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	13.8	11.1	32.7	18.8	14.3	30.9	18.8	18.8	35.1	22.4	22.7
LnGrp LOS	C	B	B	C	B	B	C	B	B	D	C	C
Approach Vol, veh/h		970			799			207			259	
Approach Delay, s/veh		15.9			19.0			22.7			23.0	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.3	18.5	5.8	29.6	7.9	15.9	11.2	24.1				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	36.6	8.4	46.2	12.4	32.6	17.4	37.2				
Max Q Clear Time (g_c+I1), s	2.3	3.8	2.6	11.7	4.3	6.0	7.1	13.2				
Green Ext Time (p_c), s	0.0	0.7	0.0	5.6	0.0	1.4	0.1	5.1				
Intersection Summary												
HCM 6th Ctrl Delay			18.4									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	64	500	652	74	52	91
Future Vol, veh/h	64	500	652	74	52	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	543	709	80	57	99

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	789	0	-	0	1161
Stage 1	-	-	-	-	749
Stage 2	-	-	-	-	412
Critical Hdwy	4.14	-	-	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	2.22	-	-	-	3.52
Pot Cap-1 Maneuver	827	-	-	-	188
Stage 1	-	-	-	-	428
Stage 2	-	-	-	-	637
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	827	-	-	-	172
Mov Cap-2 Maneuver	-	-	-	-	293
Stage 1	-	-	-	-	392
Stage 2	-	-	-	-	637

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	827	-	-	-	293	604
HCM Lane V/C Ratio	0.084	-	-	-	0.193	0.164
HCM Control Delay (s)	9.8	-	-	-	20.2	12.1
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.7	0.6

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	133	272	134	31	345	142	93	0	71	154	0	112
Future Vol, veh/h	133	272	134	31	345	142	93	0	71	154	0	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	85	85	85	85	92	85	92	85	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	320	158	36	406	154	109	0	84	167	0	122
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	560	0	0	478	0	0	964	1321	239	1005	1323	280
Stage 1	-	-	-	-	-	-	689	689	-	555	555	-
Stage 2	-	-	-	-	-	-	275	632	-	450	768	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1007	-	-	1233	-	-	275	181	*976	255	180	717
Stage 1	-	-	-	-	-	-	513	522	-	484	511	-
Stage 2	-	-	-	-	-	-	708	472	-	734	477	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1007	-	-	1233	-	-	198	151	*976	203	150	717
Mov Cap-2 Maneuver	-	-	-	-	-	-	288	233	-	304	260	-
Stage 1	-	-	-	-	-	-	439	447	-	414	496	-
Stage 2	-	-	-	-	-	-	571	458	-	575	408	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.1			0.5			18.1			22.2		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	288	976	1007	-	-	1233	-	-	304	717		
HCM Lane V/C Ratio	0.38	0.086	0.144	-	-	0.03	-	-	0.551	0.17		
HCM Control Delay (s)	25	9	9.2	-	-	8	-	-	30.4	11		
HCM Lane LOS	D	A	A	-	-	A	-	-	D	B		
HCM 95th %tile Q(veh)	1.7	0.3	0.5	-	-	0.1	-	-	3.1	0.6		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	586	3	405	554	1473	1335	488
Future Volume (vph)	586	3	405	554	1473	1335	488
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	34.0	34.0	34.0	38.0	86.0	48.0	48.0
Total Split (%)	28.3%	28.3%	28.3%	31.7%	71.7%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	27.7	27.7	27.7	34.8	81.8	42.5	42.5
Actuated g/C Ratio	0.23	0.23	0.23	0.29	0.68	0.35	0.35
v/c Ratio	0.92	0.93	0.81	1.11	0.63	1.10	0.64
Control Delay	74.7	75.5	51.7	112.0	12.9	93.7	13.1
Queue Delay	4.0	4.8	0.0	0.2	1.6	0.0	0.0
Total Delay	78.8	80.3	51.7	112.3	14.5	93.7	13.1
LOS	E	F	D	F	B	F	B
Approach Delay		70.8			41.2	72.2	
Approach LOS		E			D	E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 58.9

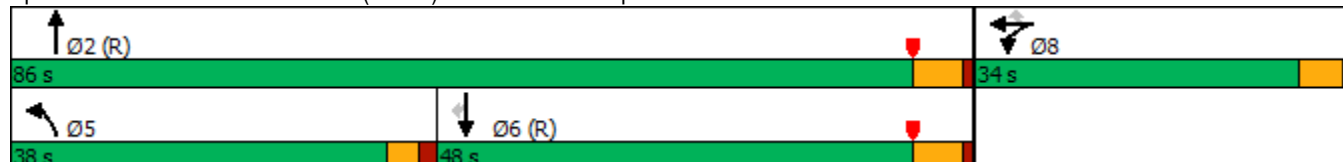
Intersection LOS: E

Intersection Capacity Utilization 116.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	586	3	405	554	1473	0	0	1335	488
Future Volume (veh/h)	0	0	0	586	3	405	554	1473	0	0	1335	488
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No				No
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				682	0	165	571	1519	0	0	1376	347
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				752	0	334	497	2493	0	0	1368	610
Arrive On Green				0.21	0.00	0.21	0.56	1.00	0.00	0.00	0.38	0.38
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				682	0	165	571	1519	0	0	1376	347
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				22.4	0.0	11.0	33.5	0.0	0.0	0.0	46.2	20.7
Cycle Q Clear(g_c), s				22.4	0.0	11.0	33.5	0.0	0.0	0.0	46.2	20.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				752	0	334	497	2493	0	0	1368	610
V/C Ratio(X)				0.91	0.00	0.49	1.15	0.61	0.00	0.00	1.01	0.57
Avail Cap(c_a), veh/h				861	0	383	497	2493	0	0	1368	610
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.2	0.0	41.7	26.5	0.0	0.0	0.0	36.9	29.1
Incr Delay (d2), s/veh				11.4	0.0	0.4	69.1	0.1	0.0	0.0	25.8	3.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.8	0.0	4.2	18.6	0.0	0.0	0.0	24.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.6	0.0	42.1	95.6	0.1	0.0	0.0	62.7	32.9
LnGrp LOS				E	A	D	F	A	A	A	F	C
Approach Vol, veh/h					847			2090			1723	
Approach Delay, s/veh					54.6			26.2			56.7	
Approach LOS					D			C			E	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	89.7			38.0			51.7			30.3		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	80.5			33.5			42.5			29.0		
Max Q Clear Time (g_c+I1), s	2.0			35.5			48.2			24.4		
Green Ext Time (p_c), s	28.9			0.0			0.0			0.9		
Intersection Summary												
HCM 6th Ctrl Delay			42.6									
HCM 6th LOS			D									
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	470	0	1239	653	401	1229
Future Volume (vph)	470	0	1239	653	401	1229
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	38.0	38.0	42.0	42.0	40.0	82.0
Total Split (%)	31.7%	31.7%	35.0%	35.0%	33.3%	68.3%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	33.0	33.0	41.1	41.1	31.4	76.5
Actuated g/C Ratio	0.28	0.28	0.34	0.34	0.26	0.64
v/c Ratio	0.94	2.09	1.05	0.80	0.89	0.56
Control Delay	73.2	522.4	80.4	19.3	61.9	14.3
Queue Delay	46.5	3.6	3.4	0.0	0.8	0.9
Total Delay	119.7	526.0	83.8	19.3	62.7	15.2
LOS	F	F	F	B	E	B
Approach Delay		401.6	61.5			26.9
Approach LOS		F	E			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.09

Intersection Signal Delay: 145.8

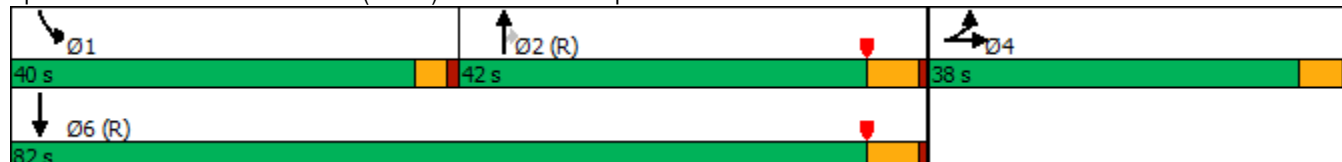
Intersection LOS: F

Intersection Capacity Utilization 116.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	0	911	0	0	0	0	1239	653	401	1229	0
Future Volume (veh/h)	470	0	911	0	0	0	0	1239	653	401	1229	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	485	0	835				0	1277	507	413	1267	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	490	0	436				0	1285	559	432	2265	0
Arrive On Green	0.28	0.00	0.28				0.00	0.36	0.36	0.49	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1546	1781	3647	0
Grp Volume(v), veh/h	485	0	835				0	1277	507	413	1267	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1546	1781	1777	0
Q Serve(g_s), s	32.6	0.0	33.0				0.0	43.0	37.4	26.7	0.0	0.0
Cycle Q Clear(g_c), s	32.6	0.0	33.0				0.0	43.0	37.4	26.7	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	490	0	436				0	1285	559	432	2265	0
V/C Ratio(X)	0.99	0.00	1.92				0.00	0.99	0.91	0.96	0.56	0.00
Avail Cap(c_a), veh/h	490	0	436				0	1285	559	534	2265	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.67	0.67	0.09	0.09	0.00
Uniform Delay (d), s/veh	43.3	0.0	43.5				0.0	38.2	36.4	30.3	0.0	0.0
Incr Delay (d2), s/veh	37.9	0.0	420.5				0.0	19.2	15.4	3.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	0.0	63.3				0.0	21.3	15.9	8.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.3	0.0	464.0				0.0	57.4	51.8	34.2	0.1	0.0
LnGrp LOS	F	A	F				A	E	D	C	A	A
Approach Vol, veh/h	1320						1784			1680		
Approach Delay, s/veh	323.4						55.8			8.5		
Approach LOS	F						E			A		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	33.1	48.9		38.0		82.0						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	36.0	36.5		33.0		76.5						
Max Q Clear Time (g_c+I1), s	28.7	45.0		35.0		2.0						
Green Ext Time (p_c), s	0.4	0.0		0.0		20.2						

Intersection Summary

HCM 6th Ctrl Delay 113.0

HCM 6th LOS F

Notes

User approved volume balancing among the lanes for turning movement.

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	121	300	98	366	133	1361	84	214	1750	73
Future Volume (vph)	121	300	98	366	133	1361	84	214	1750	73
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	41.0	17.0	34.0	22.0	41.0	41.0	21.0	40.0	40.0
Total Split (%)	20.0%	34.2%	14.2%	28.3%	18.3%	34.2%	34.2%	17.5%	33.3%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	12.0	24.3	9.8	19.6	12.3	36.3	36.3	11.5	35.6	35.6
Actuated g/C Ratio	0.12	0.24	0.10	0.20	0.12	0.36	0.36	0.11	0.36	0.36
v/c Ratio	0.62	0.53	0.62	0.74	0.67	0.69	0.13	0.61	0.91	0.11
Control Delay	57.6	26.7	62.8	40.3	60.0	31.2	0.5	51.1	40.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	26.7	62.8	40.3	60.0	31.2	0.5	51.1	40.5	0.4
LOS	E	C	E	D	E	C	A	D	D	A
Approach Delay		32.8		43.8		32.0			40.2	
Approach LOS		C		D		C			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 37.1

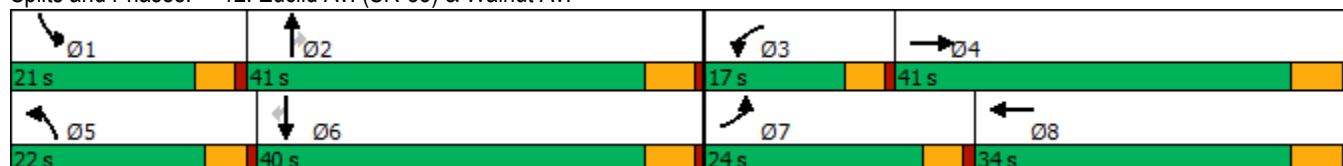
Intersection LOS: D

Intersection Capacity Utilization 81.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	300	191	98	366	166	133	1361	84	214	1750	73
Future Volume (veh/h)	121	300	191	98	366	166	133	1361	84	214	1750	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	125	309	170	101	377	153	137	1403	79	221	1804	51
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	481	257	127	493	197	168	2219	618	294	2178	615
Arrive On Green	0.09	0.21	0.21	0.08	0.19	0.19	0.10	0.40	0.40	0.09	0.39	0.39
Sat Flow, veh/h	1688	2281	1221	1688	2539	1015	1688	5611	1564	3188	5611	1585
Grp Volume(v), veh/h	125	252	227	101	276	254	137	1403	79	221	1804	51
Grp Sat Flow(s),veh/h/ln	1688	1870	1632	1688	1870	1684	1688	1870	1564	1594	1870	1585
Q Serve(g_s), s	6.5	11.1	11.5	5.3	12.6	12.9	7.2	18.1	2.9	6.1	26.1	1.8
Cycle Q Clear(g_c), s	6.5	11.1	11.5	5.3	12.6	12.9	7.2	18.1	2.9	6.1	26.1	1.8
Prop In Lane	1.00		0.75	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	394	344	127	363	327	168	2219	618	294	2178	615
V/C Ratio(X)	0.81	0.64	0.66	0.80	0.76	0.78	0.82	0.63	0.13	0.75	0.83	0.08
Avail Cap(c_a), veh/h	364	731	638	232	586	527	326	2219	618	581	2178	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	32.4	32.6	41.0	34.3	34.4	39.7	21.9	17.3	39.9	24.8	17.4
Incr Delay (d2), s/veh	3.7	1.7	2.2	4.3	3.3	4.0	3.6	1.4	0.4	1.5	3.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	4.9	4.5	2.2	5.7	5.3	3.0	7.6	1.0	2.4	11.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	34.1	34.7	45.3	37.6	38.4	43.4	23.3	17.8	41.3	28.6	17.7
LnGrp LOS	D	C	C	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		604			631			1619			2076	
Approach Delay, s/veh		36.4			39.2			24.7			29.7	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	41.0	11.4	24.8	13.6	40.3	12.9	23.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	17.4	34.6	19.4	28.2				
Max Q Clear Time (g_c+l1), s	8.1	20.1	7.3	13.5	9.2	28.1	8.5	14.9				
Green Ext Time (p_c), s	0.2	8.6	0.0	2.6	0.1	5.2	0.1	2.4				
Intersection Summary												
HCM 6th Ctrl Delay			30.1									
HCM 6th LOS			C									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	202	777	200	538	101	246	1319	346	163	1559	159
Future Volume (vph)	202	777	200	538	101	246	1319	346	163	1559	159
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.3	37.0	23.0	35.7	35.7	14.7	39.0	39.0	21.0	45.3	24.3
Total Split (%)	20.3%	30.8%	19.2%	29.8%	29.8%	12.3%	32.5%	32.5%	17.5%	37.8%	20.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	18.0	31.2	17.5	30.7	30.7	10.1	35.0	35.0	15.0	38.8	58.7
Actuated g/C Ratio	0.15	0.26	0.15	0.26	0.26	0.08	0.29	0.29	0.13	0.33	0.49
v/c Ratio	0.87	2.14	0.89	0.64	0.21	1.88	1.38	0.60	0.84	1.47	0.21
Control Delay	80.8	544.5	84.7	43.5	2.6	451.9	210.4	18.6	82.4	247.9	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.8	544.5	84.7	43.5	2.6	451.9	210.4	18.6	82.4	247.9	9.3
LOS	F	F	F	D	A	F	F	B	F	F	A
Approach Delay		462.7		48.4			206.7			213.4	
Approach LOS		F		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.14

Intersection Signal Delay: 236.7

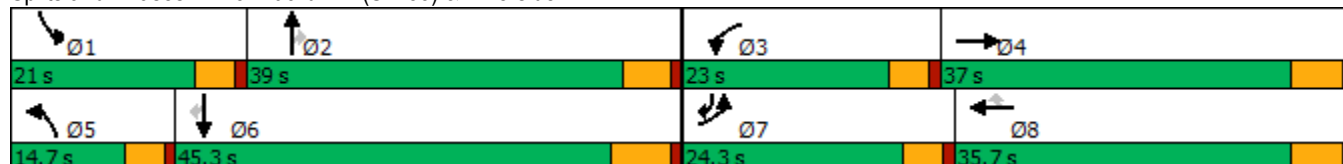
Intersection LOS: F

Intersection Capacity Utilization 138.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.



HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	777	167	200	538	101	246	1319	346	163	1559	159
Future Volume (veh/h)	202	777	167	200	538	101	246	1319	346	163	1559	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	220	845	158	217	585	52	267	1434	305	177	1695	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	402	75	242	928	413	144	1038	463	203	1162	749
Arrive On Green	0.15	0.26	0.26	0.14	0.26	0.26	0.09	0.29	0.29	0.12	0.33	0.33
Sat Flow, veh/h	1688	1529	286	1688	3554	1583	1688	3554	1585	1688	3554	1584
Grp Volume(v), veh/h	220	0	1003	217	585	52	267	1434	305	177	1695	110
Grp Sat Flow(s),veh/h/ln	1688	0	1815	1688	1777	1583	1688	1777	1585	1688	1777	1584
Q Serve(g_s), s	15.2	0.0	31.2	15.0	17.3	3.0	10.1	34.7	20.0	12.2	38.8	4.7
Cycle Q Clear(g_c), s	15.2	0.0	31.2	15.0	17.3	3.0	10.1	34.7	20.0	12.2	38.8	4.7
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	0	477	242	928	413	144	1038	463	203	1162	749
V/C Ratio(X)	0.90	0.00	2.10	0.90	0.63	0.13	1.86	1.38	0.66	0.87	1.46	0.15
Avail Cap(c_a), veh/h	280	0	477	262	928	413	144	1038	463	233	1162	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	0.0	43.7	49.9	38.8	33.5	54.3	42.0	36.8	51.3	39.9	17.7
Incr Delay (d2), s/veh	24.9	0.0	502.8	27.6	1.4	0.1	411.7	177.6	3.4	24.0	211.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	80.1	8.0	7.5	1.1	20.5	39.8	7.9	6.4	50.3	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.7	0.0	546.5	77.5	40.2	33.6	465.9	219.5	40.2	75.3	250.9	17.8
LnGrp LOS	E	A	F	E	D	C	F	F	D	E	F	B
Approach Vol, veh/h	1223				854				2006			
Approach Delay, s/veh	461.7				49.3				225.1			
Approach LOS	F				D				F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.8	41.2	21.6	37.0	14.7	45.3	21.9	36.8				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.4	* 34	18.4	31.2	10.1	38.8	19.7	29.9				
Max Q Clear Time (g_c+I1), s	14.2	36.7	17.0	33.2	12.1	40.8	17.2	19.3				
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.8				

Intersection Summary

HCM 6th Ctrl Delay 247.1

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	145	236	63	155	278	57	1785	295	75	1749	141
Future Volume (vph)	145	236	63	155	278	57	1785	295	75	1749	141
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	53.0	53.0	53.0	53.0	53.0	13.0	50.0	50.0	17.0	54.0	54.0
Total Split (%)	44.2%	44.2%	44.2%	44.2%	44.2%	10.8%	41.7%	41.7%	14.2%	45.0%	45.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	47.3	47.3	47.3		47.3	7.4	46.9	46.9	9.5	47.6	47.6
Actuated g/C Ratio	0.40	0.40	0.40		0.40	0.06	0.40	0.40	0.08	0.41	0.41
v/c Ratio	0.53	0.33	0.10		1.00	0.56	1.31	0.46	0.58	1.27	0.21
Control Delay	35.7	26.3	4.7		74.5	74.4	176.2	23.3	69.2	157.6	11.6
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	26.3	4.7		74.5	74.4	176.2	23.3	69.2	157.6	11.6
LOS	D	C	A		E	E	F	C	E	F	B
Approach Delay		26.3			74.5		152.4			143.7	
Approach LOS		C			E		F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 117.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.31

Intersection Signal Delay: 130.1

Intersection LOS: F

Intersection Capacity Utilization 111.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	50 s	53 s
		
Ø5	Ø6	Ø8
13 s	54 s	53 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	236	63	155	278	77	57	1785	295	75	1749	141
Future Volume (veh/h)	145	236	63	155	278	77	57	1785	295	75	1749	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	151	246	49	161	290	70	59	1859	277	78	1822	122
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	756	641	186	291	68	75	1397	623	98	1446	645
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.04	0.39	0.39	0.06	0.41	0.41
Sat Flow, veh/h	968	1870	1585	360	720	168	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	151	246	49	521	0	0	59	1859	277	78	1822	122
Grp Sat Flow(s),veh/h/ln	968	1870	1585	1247	0	0	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	10.5	2.2	36.7	0.0	0.0	4.0	45.9	15.0	5.3	47.5	5.8
Cycle Q Clear(g_c), s	26.2	10.5	2.2	47.2	0.0	0.0	4.0	45.9	15.0	5.3	47.5	5.8
Prop In Lane	1.00		1.00	0.31		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	756	641	544	0	0	75	1397	623	98	1446	645
V/C Ratio(X)	0.53	0.33	0.08	0.96	0.00	0.00	0.79	1.33	0.44	0.80	1.26	0.19
Avail Cap(c_a), veh/h	285	756	641	544	0	0	121	1397	623	179	1446	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	23.9	21.4	38.9	0.0	0.0	55.3	35.4	26.1	54.3	34.6	22.3
Incr Delay (d2), s/veh	1.9	0.2	0.1	28.0	0.0	0.0	6.8	154.0	2.3	5.5	122.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.5	0.8	18.6	0.0	0.0	1.8	47.9	5.7	2.3	43.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	24.1	21.4	66.9	0.0	0.0	62.1	189.4	28.4	59.8	157.5	22.9
LnGrp LOS	C	C	C	E	A	A	E	F	C	E	F	C
Approach Vol, veh/h	446			521			2195			2022		
Approach Delay, s/veh	25.9			66.9			165.7			145.6		
Approach LOS	C			E			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	52.4		53.0	9.8	54.0		53.0				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 45		47.2	8.4	47.5		47.2				
Max Q Clear Time (g_c+l1), s	7.3	47.9		28.2	6.0	49.5		49.2				
Green Ext Time (p_c), s	0.0	0.0		2.0	0.0	0.0		0.0				

Intersection Summary

HCM 6th Ctrl Delay 135.9

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	13	0	1470	1903	5
Future Vol, veh/h	0	13	0	1470	1903	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	14	0	1598	2068	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	1034	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	229	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	229	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21.8	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 229		-	-		
HCM Lane V/C Ratio	- 0.062		-	-		
HCM Control Delay (s)	- 21.8		-	-		
HCM Lane LOS	- C		-	-		
HCM 95th %tile Q(veh)	- 0.2		-	-		

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	71	0	1470	1812	105
Future Vol, veh/h	0	71	0	1470	1812	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	77	0	1598	1970	114
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	985	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	247	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	247	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	26.1	0		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 247		-	-		
HCM Lane V/C Ratio	- 0.312		-	-		
HCM Control Delay (s)	- 26.1		-	-		
HCM Lane LOS	- D		-	-		
HCM 95th %tile Q(veh)	- 1.3		-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	528	210	182	29	134	225	1552	57	103	1648	160
Future Volume (vph)	528	210	182	29	134	225	1552	57	103	1648	160
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	22.0	51.5	51.5	13.5	43.0	14.0	44.0	44.0	11.0	41.0	41.0
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	11.7%	36.7%	36.7%	9.2%	34.2%	34.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	18.6	33.5	33.5	10.1	19.2	10.6	38.2	38.2	7.5	35.2	35.2
Actuated g/C Ratio	0.18	0.32	0.32	0.10	0.19	0.10	0.37	0.37	0.07	0.34	0.34
v/c Ratio	1.85	0.37	0.30	0.19	0.71	1.39	1.25	0.09	0.89	1.44	0.27
Control Delay	422.2	30.0	5.1	49.6	45.1	244.9	150.5	0.3	106.4	233.5	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	422.2	30.0	5.1	49.6	45.1	244.9	150.5	0.3	106.4	233.5	9.3
LOS	F	C	A	D	D	F	F	A	F	F	A
Approach Delay	250.1				45.6		157.4			208.0	
Approach LOS	F				D		F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.85

Intersection Signal Delay: 188.3

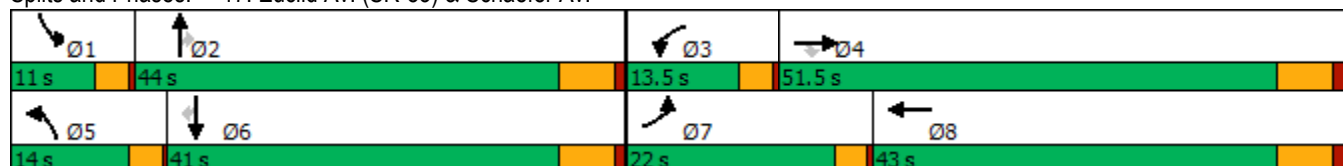
Intersection LOS: F

Intersection Capacity Utilization 120.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	528	210	182	29	134	100	225	1552	57	103	1648	160
Future Volume (veh/h)	528	210	182	29	134	100	225	1552	57	103	1648	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	556	221	167	31	141	91	237	1634	54	108	1735	145
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	535	453	97	168	108	178	1353	604	127	1246	556
Arrive On Green	0.19	0.29	0.29	0.06	0.16	0.16	0.11	0.38	0.38	0.08	0.35	0.35
Sat Flow, veh/h	1688	1870	1585	1688	1062	685	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	556	221	167	31	0	232	237	1634	54	108	1735	145
Grp Sat Flow(s),veh/h/ln	1688	1870	1585	1688	0	1747	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	18.5	9.5	8.4	1.8	0.0	12.9	10.5	38.0	2.2	6.3	35.0	6.5
Cycle Q Clear(g_c), s	18.5	9.5	8.4	1.8	0.0	12.9	10.5	38.0	2.2	6.3	35.0	6.5
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	535	453	97	0	276	178	1353	604	127	1246	556
V/C Ratio(X)	1.78	0.41	0.37	0.32	0.00	0.84	1.33	1.21	0.09	0.85	1.39	0.26
Avail Cap(c_a), veh/h	313	834	707	169	0	630	178	1353	604	127	1246	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	28.9	28.4	45.1	0.0	40.8	44.6	30.9	19.8	45.6	32.4	23.2
Incr Delay (d2), s/veh	362.4	0.4	0.4	0.7	0.0	5.1	183.8	100.6	0.1	37.8	181.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	38.8	4.1	3.1	0.7	0.0	5.7	13.2	33.3	0.8	3.8	44.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	403.1	29.2	28.8	45.8	0.0	45.9	228.4	131.5	19.9	83.4	213.8	23.4
LnGrp LOS	F	C	C	D	A	D	F	F	B	F	F	C
Approach Vol, veh/h	944			263			1925			1988		
Approach Delay, s/veh	249.4			45.9			140.3			192.8		
Approach LOS	F			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	44.0	9.3	35.5	14.0	41.0	22.0	22.8				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	7.5	38.0	10.0	44.5	10.5	35.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	8.3	40.0	3.8	11.5	12.5	37.0	20.5	14.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay	175.9											
HCM 6th LOS	F											

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	155	617	164	332	586	174	1193	213	464	1405	114
Future Volume (vph)	155	617	164	332	586	174	1193	213	464	1405	114
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	54.0	54.0	54.0	54.0	54.0	16.0	50.0	50.0	16.0	50.0	50.0
Total Split (%)	45.0%	45.0%	45.0%	45.0%	45.0%	13.3%	41.7%	41.7%	13.3%	41.7%	41.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	47.0	47.0	47.0	47.0	47.0	10.8	43.6	43.6	12.5	45.3	45.3
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.09	0.36	0.36	0.10	0.38	0.38
v/c Ratio	2.76	0.87	0.24	3.84	1.53	0.65	0.95	0.35	2.73	1.08	0.18
Control Delay	851.7	47.8	6.5	1316.1	275.9	63.7	53.5	20.6	818.9	85.2	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	851.7	47.8	6.5	1316.1	275.9	63.7	53.5	20.6	818.9	85.2	12.5
LOS	F	D	A	F	F	E	D	C	F	F	B
Approach Delay		173.8			525.2		50.2			252.6	
Approach LOS		F			F		D			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.6

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 3.84

Intersection Signal Delay: 249.8

Intersection LOS: F

Intersection Capacity Utilization 148.5%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
16 s	50 s	54 s
		
Ø5	Ø6	Ø8
16 s	50 s	54 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	617	164	332	586	467	174	1193	213	464	1405	114
Future Volume (veh/h)	155	617	164	332	586	467	174	1193	213	464	1405	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	160	636	140	342	604	472	179	1230	205	478	1448	83
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	735	615	113	383	299	230	1294	577	176	1402	625
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.07	0.36	0.36	0.10	0.39	0.39
Sat Flow, veh/h	497	1870	1564	659	973	760	3092	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	160	636	140	342	0	1076	179	1230	205	478	1448	83
Grp Sat Flow(s),veh/h/ln	497	1870	1564	659	0	1733	1546	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	37.4	7.1	9.6	0.0	47.0	6.8	40.2	11.3	12.5	47.2	4.0
Cycle Q Clear(g_c), s	47.0	37.4	7.1	47.0	0.0	47.0	6.8	40.2	11.3	12.5	47.2	4.0
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	735	615	113	0	682	230	1294	577	176	1402	625
V/C Ratio(X)	2.66	0.86	0.23	3.02	0.00	1.58	0.78	0.95	0.36	2.71	1.03	0.13
Avail Cap(c_a), veh/h	60	735	615	113	0	682	323	1308	583	176	1402	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.8	33.3	24.2	57.5	0.0	36.3	54.4	37.0	27.8	53.5	36.2	23.1
Incr Delay (d2), s/veh	790.5	10.5	0.2	931.7	0.0	267.4	4.7	14.6	0.4	784.7	32.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.0	18.1	2.6	32.7	0.0	69.3	2.7	18.7	4.1	43.5	25.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	850.3	43.9	24.4	989.2	0.0	303.7	59.1	51.6	28.1	838.2	69.1	23.2
LnGrp LOS	F	D	C	F	A	F	E	D	C	F	F	C
Approach Vol, veh/h		936			1418			1614			2009	
Approach Delay, s/veh		178.8			469.0			49.4			250.2	
Approach LOS		F			F			D			F	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	49.5		54.0	12.4	53.2		54.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	12.5	44.0		47.0	12.5	44.0		47.0				
Max Q Clear Time (g_c+I1), s	14.5	42.2		49.0	8.8	49.2		49.0				
Green Ext Time (p_c), s	0.0	1.3		0.0	0.1	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			236.7									
HCM 6th LOS			F									

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	66	225	139	137	293	134	1017	231	347	1251	34
Future Volume (vph)	66	225	139	137	293	134	1017	231	347	1251	34
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	52.0	52.0	52.0	52.0	52.0	23.0	49.0	49.0	19.0	45.0	45.0
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%	19.2%	40.8%	40.8%	15.8%	37.5%	37.5%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	34.7	34.7	34.7	34.7	34.7	13.6	39.0	39.0	15.8	41.2	41.2
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.13	0.38	0.38	0.15	0.40	0.40
v/c Ratio	0.84	0.38	0.24	0.49	0.88	0.65	0.81	0.38	1.45	0.95	0.05
Control Delay	97.7	28.1	4.8	33.6	46.9	59.2	36.2	18.2	257.0	47.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.7	28.1	4.8	33.6	46.9	59.2	36.2	18.2	257.0	47.2	0.1
LOS	F	C	A	C	D	E	D	B	F	D	A
Approach Delay		31.2			44.1		35.4			90.8	
Approach LOS		C			D		D			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.8

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.45

Intersection Signal Delay: 58.5

Intersection LOS: E

Intersection Capacity Utilization 96.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
19 s	49 s	52 s
 Ø5	 Ø6	 Ø8
23 s	45 s	52 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	225	139	137	293	208	134	1017	231	347	1251	34
Future Volume (veh/h)	66	225	139	137	293	208	134	1017	231	347	1251	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	70	239	107	146	312	201	143	1082	223	369	1331	25
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	694	588	341	394	254	172	1255	560	245	1408	628
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.10	0.35	0.35	0.14	0.40	0.40
Sat Flow, veh/h	841	1870	1585	980	1063	685	1688	3554	1585	1688	3554	1584
Grp Volume(v), veh/h	70	239	107	146	0	513	143	1082	223	369	1331	25
Grp Sat Flow(s),veh/h/ln	841	1870	1585	980	0	1747	1688	1777	1585	1688	1777	1584
Q Serve(g_s), s	8.6	9.9	4.9	13.5	0.0	28.0	8.9	30.3	11.3	15.5	38.7	1.0
Cycle Q Clear(g_c), s	36.6	9.9	4.9	23.3	0.0	28.0	8.9	30.3	11.3	15.5	38.7	1.0
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	694	588	341	0	648	172	1255	560	245	1408	628
V/C Ratio(X)	0.44	0.34	0.18	0.43	0.00	0.79	0.83	0.86	0.40	1.51	0.95	0.04
Avail Cap(c_a), veh/h	219	825	699	410	0	771	308	1439	642	245	1408	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	24.2	22.7	32.7	0.0	29.9	47.1	32.2	26.0	45.7	31.2	19.8
Incr Delay (d2), s/veh	1.4	0.2	0.1	0.6	0.0	4.4	7.6	5.1	0.5	249.0	13.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.2	1.8	3.1	0.0	11.8	3.9	12.7	4.0	23.0	17.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.6	24.5	22.8	33.3	0.0	34.3	54.7	37.3	26.5	294.8	44.3	19.8
LnGrp LOS	D	C	C	C	A	C	D	D	C	F	D	B
Approach Vol, veh/h	416			659			1448			1725		
Approach Delay, s/veh	27.9			34.1			37.3			97.6		
Approach LOS	C			C			D			F		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	19.0	43.5	44.5		14.4	48.1	44.5					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	15.5	43.3	47.2		19.5	39.3	47.2					
Max Q Clear Time (g_c+I1), s	17.5	32.3	38.6		10.9	40.7	30.0					
Green Ext Time (p_c), s	0.0	5.5	1.1		0.1	0.0	2.9					
Intersection Summary												
HCM 6th Ctrl Delay	60.4											
HCM 6th LOS	E											

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	166	7	17	49	0	2	0	1	0	0	0
Future Vol, veh/h	0	166	7	17	49	0	2	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	180	8	18	53	0	2	0	1	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	53	0	0	188	0	0	273	273	184	274	277	53
Stage 1	-	-	-	-	-	-	184	184	-	89	89	-
Stage 2	-	-	-	-	-	-	89	89	-	185	188	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1553	-	-	1386	-	-	679	634	858	678	631	1014
Stage 1	-	-	-	-	-	-	818	747	-	918	821	-
Stage 2	-	-	-	-	-	-	918	821	-	817	745	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1553	-	-	1386	-	-	672	626	858	671	623	1014
Mov Cap-2 Maneuver	-	-	-	-	-	-	672	626	-	671	623	-
Stage 1	-	-	-	-	-	-	818	747	-	918	810	-
Stage 2	-	-	-	-	-	-	906	810	-	816	745	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			2			10			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	724	1553	-	-	1386	-	-	-				
HCM Lane V/C Ratio	0.005	-	-	-	0.013	-	-	-				
HCM Control Delay (s)	10	0	-	-	7.6	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/23/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	37	857	67	23	536	31	58	24	35
Future Volume (vph)	37	857	67	23	536	31	58	24	35
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	18.0	66.0	66.0	17.0	65.0	37.0	37.0	37.0	37.0
Total Split (%)	15.0%	55.0%	55.0%	14.2%	54.2%	30.8%	30.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	6.4	27.2	27.2	6.0	24.9		12.4		12.4
Actuated g/C Ratio	0.14	0.58	0.58	0.13	0.53		0.27		0.27
v/c Ratio	0.17	0.45	0.08	0.12	0.33		0.26		0.22
Control Delay	25.4	9.9	4.5	26.0	10.9		17.7		15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	25.4	9.9	4.5	26.0	10.9		17.7		15.6
LOS	C	A	A	C	B		B		B
Approach Delay		10.1			11.5		17.7		15.6
Approach LOS		B			B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 46.7

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 11.3

Intersection LOS: B

Intersection Capacity Utilization 49.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.

		
Ø2	Ø3	Ø4
37 s	17 s	66 s
		
Ø6	Ø7	Ø8
37 s	18 s	65 s

HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	857	67	23	536	33	31	58	19	24	35	28
Future Volume (veh/h)	37	857	67	23	536	33	31	58	19	24	35	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	40	922	56	25	576	34	33	62	14	26	38	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	1487	647	51	1377	81	170	250	46	173	208	77
Arrive On Green	0.04	0.42	0.42	0.03	0.40	0.40	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1688	3554	1545	1688	3405	201	299	1195	220	309	994	367
Grp Volume(v), veh/h	40	922	56	25	300	310	109	0	0	82	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1545	1688	1777	1829	1714	0	0	1670	0	0
Q Serve(g_s), s	1.0	8.9	1.0	0.6	5.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	8.9	1.0	0.6	5.3	5.3	2.2	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.11	0.30		0.13	0.32		0.22
Lane Grp Cap(c), veh/h	74	1487	647	51	719	740	466	0	0	458	0	0
V/C Ratio(X)	0.54	0.62	0.09	0.49	0.42	0.42	0.23	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	516	4882	2123	478	2401	2471	1334	0	0	1302	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.5	10.0	7.7	20.9	9.4	9.4	14.6	0.0	0.0	14.4	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.4	0.1	2.8	0.4	0.4	0.3	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.3	0.2	0.2	1.4	1.4	0.8	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	10.4	7.7	23.7	9.7	9.7	14.8	0.0	0.0	14.5	0.0	0.0
LnGrp LOS	C	B	A	C	A	A	B	A	A	B	A	A
Approach Vol, veh/h		1018			635			109			82	
Approach Delay, s/veh		10.8			10.3			14.8			14.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.8	5.9	24.1		13.8	6.5	23.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		32.4	12.4	60.2		32.4	13.4	59.2				
Max Q Clear Time (g_c+I1), s		4.2	2.6	10.9		3.7	3.0	7.3				
Green Ext Time (p_c), s		0.6	0.0	7.4		0.4	0.0	3.6				
Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									

Timings

2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	1227	33	9	870	28	28	34	16	39
Future Volume (vph)	43	1227	33	9	870	28	28	34	16	39
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	19.0	67.0	67.0	14.0	62.0	62.0	39.0	39.0	39.0	39.0
Total Split (%)	15.8%	55.8%	55.8%	11.7%	51.7%	51.7%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	7.1	39.3	39.3	5.8	34.0	34.0		12.9		12.9
Actuated g/C Ratio	0.12	0.66	0.66	0.10	0.58	0.58		0.22		0.22
v/c Ratio	0.23	0.57	0.03	0.06	0.47	0.03		0.23		0.28
Control Delay	33.6	9.9	1.7	35.3	12.4	0.1		23.3		19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	33.6	9.9	1.7	35.3	12.4	0.1		23.3		19.6
LOS	C	A	A	D	B	A		C		B
Approach Delay		10.4			12.2			23.3		19.6
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 59.1

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 11.9

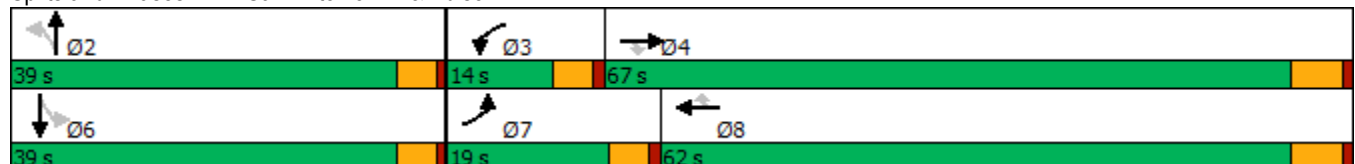
Intersection LOS: B

Intersection Capacity Utilization 55.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1227	33	9	870	28	28	34	13	16	39	45
Future Volume (veh/h)	43	1227	33	9	870	28	28	34	13	16	39	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	47	1334	34	10	946	27	30	37	7	17	42	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	1927	841	22	1807	805	170	177	27	108	168	93
Arrive On Green	0.05	0.54	0.54	0.01	0.51	0.51	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1688	3554	1551	1688	3554	1583	456	1043	157	169	989	550
Grp Volume(v), veh/h	47	1334	34	10	946	27	74	0	0	87	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1551	1688	1777	1583	1656	0	0	1707	0	0
Q Serve(g_s), s	1.5	15.0	0.6	0.3	9.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	15.0	0.6	0.3	9.7	0.5	1.9	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.41		0.09	0.20		0.32
Lane Grp Cap(c), veh/h	79	1927	841	22	1807	805	374	0	0	369	0	0
V/C Ratio(X)	0.60	0.69	0.04	0.46	0.52	0.03	0.20	0.00	0.00	0.24	0.00	0.00
Avail Cap(c_a), veh/h	446	3989	1741	291	3663	1632	1104	0	0	1131	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.5	9.1	5.8	26.7	9.0	6.7	19.6	0.0	0.0	19.8	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.5	0.0	5.5	0.2	0.0	0.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.7	0.1	0.1	2.5	0.1	0.8	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	9.6	5.9	32.2	9.2	6.7	19.8	0.0	0.0	20.1	0.0	0.0
LnGrp LOS	C	A	A	C	A	A	B	A	A	C	A	A
Approach Vol, veh/h		1415			983			74			87	
Approach Delay, s/veh		10.1			9.4			19.8			20.1	
Approach LOS		B			A			B			C	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.8	5.3	35.4		13.8	7.1	33.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.4	9.4	61.2		34.4	14.4	56.2				
Max Q Clear Time (g_c+I1), s		3.9	2.3	17.0		4.3	3.5	11.7				
Green Ext Time (p_c), s		0.4	0.0	12.6		0.5	0.0	7.5				
Intersection Summary												
HCM 6th Ctrl Delay			10.5									
HCM 6th LOS			B									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	31	649	72	306	40	173	41	136
Future Volume (vph)	31	649	72	306	40	173	41	136
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	14.0	45.0	17.0	48.0	18.0	40.0	18.0	40.0
Total Split (%)	11.7%	37.5%	14.2%	40.0%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	26.7	21.1	29.6	26.0	7.0	12.9	7.1	13.0
Actuated g/C Ratio	0.44	0.35	0.48	0.43	0.11	0.21	0.12	0.21
v/c Ratio	0.07	0.64	0.23	0.24	0.22	0.43	0.23	0.22
Control Delay	9.9	21.1	11.0	13.9	34.9	15.9	34.8	24.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.9	21.1	11.0	13.9	34.9	15.9	34.8	24.7
LOS	A	C	B	B	C	B	C	C
Approach Delay		20.6		13.4		18.0		26.9
Approach LOS		C		B		B		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 61.1

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 19.1

Intersection LOS: B

Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

			
Ø1	Ø2	Ø3	Ø4
18 s	40 s	17 s	45 s
			
Ø5	Ø6	Ø7	Ø8
18 s	40 s	14 s	48 s

HCM 6th Signalized Intersection Summary
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	649	65	72	306	21	40	173	147	41	136	13
Future Volume (veh/h)	31	649	65	72	306	21	40	173	147	41	136	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	34	705	58	78	333	20	43	188	111	45	148	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	454	1039	85	324	1156	69	74	445	250	76	719	24
Arrive On Green	0.04	0.31	0.31	0.06	0.34	0.34	0.04	0.20	0.20	0.05	0.21	0.21
Sat Flow, veh/h	1688	3320	273	1688	3405	204	1688	2185	1227	1688	3505	118
Grp Volume(v), veh/h	34	377	386	78	173	180	43	151	148	45	75	78
Grp Sat Flow(s),veh/h/ln	1688	1777	1816	1688	1777	1832	1688	1777	1635	1688	1777	1846
Q Serve(g_s), s	0.7	10.1	10.1	1.6	3.9	3.9	1.4	4.0	4.3	1.4	1.9	1.9
Cycle Q Clear(g_c), s	0.7	10.1	10.1	1.6	3.9	3.9	1.4	4.0	4.3	1.4	1.9	1.9
Prop In Lane	1.00		0.15	1.00		0.11	1.00		0.75	1.00		0.06
Lane Grp Cap(c), veh/h	454	556	568	324	603	622	74	362	333	76	364	379
V/C Ratio(X)	0.07	0.68	0.68	0.24	0.29	0.29	0.58	0.42	0.44	0.59	0.20	0.21
Avail Cap(c_a), veh/h	683	1279	1307	601	1377	1419	415	1129	1038	415	1129	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.8	16.3	16.3	12.2	13.2	13.2	25.5	18.9	19.0	25.5	18.0	18.0
Incr Delay (d2), s/veh	0.0	1.5	1.4	0.1	0.3	0.3	2.7	0.8	0.9	2.7	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.5	3.6	0.5	1.3	1.3	0.5	1.5	1.5	0.6	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.8	17.8	17.8	12.3	13.4	13.4	28.2	19.6	19.9	28.2	18.2	18.2
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		797			431			342			198	
Approach Delay, s/veh		17.5			13.2			20.8			20.5	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.1	16.5	8.1	22.8	7.0	16.6	6.6	24.3				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	13.4	34.6	12.4	39.2	13.4	34.6	9.4	42.2				
Max Q Clear Time (g_c+I1), s	3.4	6.3	3.6	12.1	3.4	3.9	2.7	5.9				
Green Ext Time (p_c), s	0.0	1.7	0.0	4.5	0.0	0.8	0.0	1.9				
Intersection Summary												
HCM 6th Ctrl Delay			17.4									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	6	335	17	13	229
Future Vol, veh/h	21	6	335	17	13	229
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	7	364	18	14	249
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	526	191	0	0	382	0
Stage 1	373	-	-	-	-	-
Stage 2	153	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	482	818	-	-	1173	-
Stage 1	666	-	-	-	-	-
Stage 2	859	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	476	818	-	-	1173	-
Mov Cap-2 Maneuver	549	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	849	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	11.4	0	0.4			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	592	1173	-	
HCM Lane V/C Ratio	-	-	0.05	0.012	-	
HCM Control Delay (s)	-	-	11.4	8.1	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	348	19	0	250
Future Vol, veh/h	0	3	348	19	0	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	378	21	0	272
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	200	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	808	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	808	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.5	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	808		-		
HCM Lane V/C Ratio	-	0.004		-		
HCM Control Delay (s)	-	9.5		-		
HCM Lane LOS	-	A		-		
HCM 95th %tile Q(veh)	-	0		-		

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

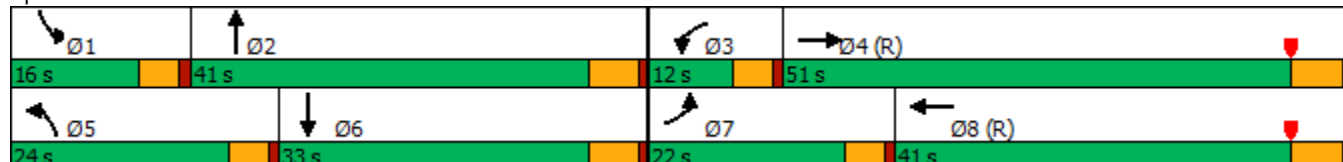
								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	90	704	28	442	103	189	66	132
Future Volume (vph)	90	704	28	442	103	189	66	132
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	22.0	51.0	12.0	41.0	24.0	41.0	16.0	33.0
Total Split (%)	18.3%	42.5%	10.0%	34.2%	20.0%	34.2%	13.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	10.9	72.6	6.7	64.5	11.9	17.3	8.8	12.3
Actuated g/C Ratio	0.09	0.60	0.06	0.54	0.10	0.14	0.07	0.10
v/c Ratio	0.61	0.38	0.31	0.30	0.64	0.45	0.54	0.50
Control Delay	68.1	14.8	62.4	16.9	68.3	45.8	69.3	40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.1	14.8	62.4	16.9	68.3	45.8	69.3	40.5
LOS	E	B	E	B	E	D	E	D
Approach Delay		20.2		19.2		52.8		47.8
Approach LOS		C		B		D		D

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow
 Natural Cycle: 75
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 28.7
 Intersection Capacity Utilization 59.1%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service B

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	704	85	28	442	97	103	189	38	66	132	59
Future Volume (veh/h)	90	704	85	28	442	97	103	189	38	66	132	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	92	718	83	29	451	92	105	193	36	67	135	42
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	2005	232	44	1719	348	129	383	70	85	273	82
Arrive On Green	0.07	0.63	0.63	0.03	0.58	0.58	0.08	0.13	0.13	0.05	0.10	0.10
Sat Flow, veh/h	1688	3204	370	1688	2943	596	1688	2987	545	1688	2675	798
Grp Volume(v), veh/h	92	398	403	29	271	272	105	113	116	67	88	89
Grp Sat Flow(s),veh/h/ln	1688	1777	1798	1688	1777	1762	1688	1777	1755	1688	1777	1696
Q Serve(g_s), s	6.5	13.0	13.0	2.0	9.0	9.1	7.4	7.1	7.4	4.7	5.6	6.0
Cycle Q Clear(g_c), s	6.5	13.0	13.0	2.0	9.0	9.1	7.4	7.1	7.4	4.7	5.6	6.0
Prop In Lane	1.00		0.21	1.00		0.34	1.00		0.31	1.00		0.47
Lane Grp Cap(c), veh/h	114	1112	1125	44	1038	1029	129	228	225	85	182	173
V/C Ratio(X)	0.81	0.36	0.36	0.67	0.26	0.26	0.82	0.50	0.51	0.79	0.48	0.52
Avail Cap(c_a), veh/h	245	1112	1125	104	1038	1029	273	527	521	160	409	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	10.8	10.8	57.9	12.3	12.3	54.6	48.7	48.8	56.4	50.9	51.1
Incr Delay (d2), s/veh	4.5	0.8	0.8	6.3	0.6	0.6	4.5	1.6	1.7	6.1	2.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.8	4.9	0.9	3.5	3.5	3.2	3.2	3.3	2.1	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.6	11.6	11.6	64.3	12.9	12.9	59.1	50.3	50.6	62.5	52.9	53.4
LnGrp LOS	E	B	B	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		893			572			334			244	
Approach Delay, s/veh		16.6			15.5			53.2			55.7	
Approach LOS		B			B			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	20.8	7.7	80.9	13.7	17.7	12.7	75.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	11.4	35.6	7.4	45.2	19.4	27.6	17.4	35.2				
Max Q Clear Time (g_c+I1), s	6.7	9.4	4.0	15.0	9.4	8.0	8.5	11.1				
Green Ext Time (p_c), s	0.0	1.2	0.0	5.0	0.1	0.8	0.1	3.0				
Intersection Summary												
HCM 6th Ctrl Delay			26.9									
HCM 6th LOS			C									

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	114	1220	22	15	772	61	47	142	44	121
Future Volume (vph)	114	1220	22	15	772	61	47	142	44	121
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	27.0	53.0	53.0	13.0	39.0	39.0	17.0	41.0	13.0	37.0
Total Split (%)	22.5%	44.2%	44.2%	10.8%	32.5%	32.5%	14.2%	34.2%	10.8%	30.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	11.0	40.0	40.0	6.0	25.6	25.6	7.5	13.4	7.0	13.0
Actuated g/C Ratio	0.15	0.54	0.54	0.08	0.35	0.35	0.10	0.18	0.10	0.18
v/c Ratio	0.50	0.69	0.03	0.12	0.68	0.10	0.30	0.27	0.30	0.37
Control Delay	41.4	17.5	0.0	43.7	25.6	0.3	42.7	29.0	44.2	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	17.5	0.0	43.7	25.6	0.3	42.7	29.0	44.2	18.8
LOS	D	B	A	D	C	A	D	C	D	B
Approach Delay		19.2			24.1			32.2		22.9
Approach LOS		B			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 73.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 22.1

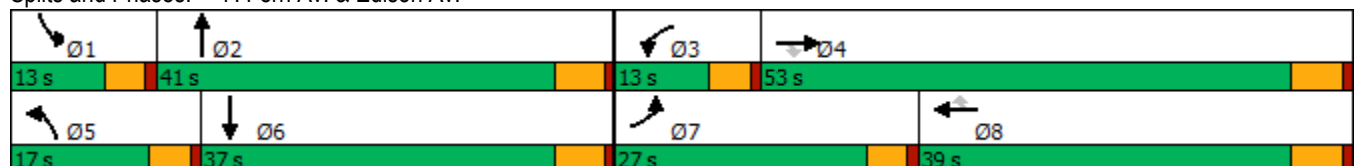
Intersection LOS: C

Intersection Capacity Utilization 67.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	1220	22	15	772	61	47	142	16	44	121	106
Future Volume (veh/h)	114	1220	22	15	772	61	47	142	16	44	121	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	124	1326	16	16	839	55	51	154	16	48	132	94
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	1727	770	32	1464	653	77	486	50	74	301	198
Arrive On Green	0.09	0.49	0.49	0.02	0.41	0.41	0.05	0.15	0.15	0.04	0.15	0.15
Sat Flow, veh/h	1688	3554	1584	1688	3554	1585	1688	3253	334	1688	2036	1343
Grp Volume(v), veh/h	124	1326	16	16	839	55	51	83	87	48	114	112
Grp Sat Flow(s),veh/h/ln	1688	1777	1584	1688	1777	1585	1688	1777	1810	1688	1777	1602
Q Serve(g_s), s	4.9	20.7	0.4	0.6	12.3	1.4	2.0	2.8	2.9	1.9	3.9	4.3
Cycle Q Clear(g_c), s	4.9	20.7	0.4	0.6	12.3	1.4	2.0	2.8	2.9	1.9	3.9	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.84
Lane Grp Cap(c), veh/h	157	1727	770	32	1464	653	77	265	270	74	263	237
V/C Ratio(X)	0.79	0.77	0.02	0.49	0.57	0.08	0.66	0.31	0.32	0.65	0.43	0.47
Avail Cap(c_a), veh/h	559	2479	1105	209	1743	778	309	935	952	209	830	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	14.3	9.0	32.9	15.3	12.1	31.8	25.7	25.7	31.8	26.3	26.4
Incr Delay (d2), s/veh	3.3	0.9	0.0	4.3	0.4	0.1	3.6	0.7	0.7	3.5	1.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.7	0.1	0.3	4.2	0.4	0.8	1.2	1.2	0.8	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	15.2	9.0	37.1	15.7	12.2	35.4	26.4	26.4	35.3	27.4	27.9
LnGrp LOS	C	B	A	D	B	B	D	C	C	D	C	C
Approach Vol, veh/h		1466			910			221			274	
Approach Delay, s/veh		16.7			15.8			28.5			29.0	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	15.5	5.9	38.7	7.7	15.4	10.9	33.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	8.4	35.6	8.4	47.2	12.4	31.6	22.4	33.2				
Max Q Clear Time (g_c+I1), s	3.9	4.9	2.6	22.7	4.0	6.3	6.9	14.3				
Green Ext Time (p_c), s	0.0	0.9	0.0	10.2	0.0	1.2	0.1	5.4				
Intersection Summary												
HCM 6th Ctrl Delay			18.5									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	146	736	471	38	57	127
Future Vol, veh/h	146	736	471	38	57	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	151	759	486	39	59	131
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	525	0	-	0	1188	263
Stage 1	-	-	-	-	506	-
Stage 2	-	-	-	-	682	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1038	-	-	-	181	735
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	464	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1038	-	-	-	155	735
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	464	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.5	0		14		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1038	-	-	-	288	735
HCM Lane V/C Ratio	0.145	-	-	-	0.204	0.178
HCM Control Delay (s)	9.1	-	-	-	20.7	11
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.7	0.6

Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	94	525	184	70	343	105	140	0	148	120	0	86
Future Vol, veh/h	94	525	184	70	343	105	140	0	148	120	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	86	86	86	86	92	86	92	86	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	102	610	214	81	399	114	163	0	172	130	0	93
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	513	0	0	824	0	0	1283	1596	412	1127	1646	257
Stage 1	-	-	-	-	-	-	921	921	-	618	618	-
Stage 2	-	-	-	-	-	-	362	675	-	509	1028	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1049	-	-	1013	-	-	198	136	*874	*273	125	742
Stage 1	-	-	-	-	-	-	467	473	-	*443	479	-
Stage 2	-	-	-	-	-	-	629	451	-	*824	412	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1049	-	-	1013	-	-	~ 150	113	*874	*191	104	742
Mov Cap-2 Maneuver	-	-	-	-	-	-	257	215	-	*290	205	-
Stage 1	-	-	-	-	-	-	422	427	-	*400	441	-
Stage 2	-	-	-	-	-	-	506	415	-	*597	372	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			1.2			24.8			20.3		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	257 874		1049	-	-	1013	-	-	290	742		
HCM Lane V/C Ratio	0.633 0.197		0.097	-	-	0.08	-	-	0.45	0.126		
HCM Control Delay (s)	40.4 10.1		8.8	-	-	8.9	-	-	27.2	10.6		
HCM Lane LOS	E B		A	-	-	A	-	-	D	B		
HCM 95th %tile Q(veh)	3.9 0.7		0.3	-	-	0.3	-	-	2.2	0.4		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	515	1	435	823	1396	1609	571
Future Volume (vph)	515	1	435	823	1396	1609	571
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	38.0	38.0	38.0	34.0	82.0	48.0	48.0
Total Split (%)	31.7%	31.7%	31.7%	28.3%	68.3%	40.0%	40.0%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	28.7	28.7	28.7	33.8	80.8	42.5	42.5
Actuated g/C Ratio	0.24	0.24	0.24	0.28	0.67	0.35	0.35
v/c Ratio	0.87	0.86	0.77	1.74	0.62	1.35	0.77
Control Delay	64.7	61.0	46.7	369.1	10.9	196.5	21.6
Queue Delay	1.0	1.0	0.0	0.0	1.0	0.0	0.0
Total Delay	65.7	62.0	46.7	369.1	11.9	196.5	21.6
LOS	E	E	D	F	B	F	C
Approach Delay		58.5			144.4	150.7	
Approach LOS		E			F	F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.74

Intersection Signal Delay: 131.7

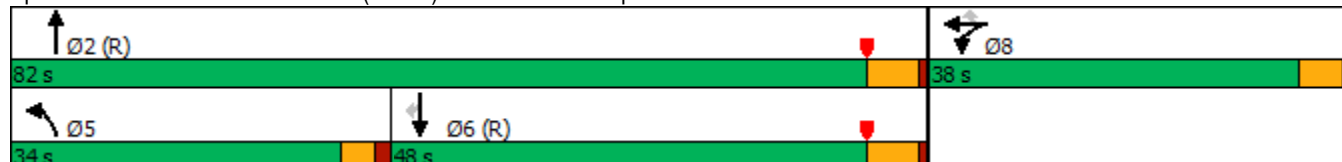
Intersection LOS: F

Intersection Capacity Utilization 121.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	515	1	435	823	1396	0	0	1609	571
Future Volume (veh/h)	0	0	0	515	1	435	823	1396	0	0	1609	571
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				642	0	214	866	1469	0	0	1694	381
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				723	0	322	438	2522	0	0	1515	676
Arrive On Green				0.20	0.00	0.20	0.49	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				642	0	214	866	1469	0	0	1694	381
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				21.0	0.0	14.9	29.5	0.0	0.0	0.0	51.2	21.8
Cycle Q Clear(g_c), s				21.0	0.0	14.9	29.5	0.0	0.0	0.0	51.2	21.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				723	0	322	438	2522	0	0	1515	676
V/C Ratio(X)				0.89	0.00	0.67	1.98	0.58	0.00	0.00	1.12	0.56
Avail Cap(c_a), veh/h				980	0	436	438	2522	0	0	1515	676
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.5	0.0	44.1	30.5	0.0	0.0	0.0	34.4	26.0
Incr Delay (d2), s/veh				6.4	0.0	0.9	440.7	0.1	0.0	0.0	62.8	3.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.7	0.0	5.8	62.4	0.0	0.0	0.0	34.0	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.9	0.0	45.0	471.2	0.1	0.0	0.0	97.2	29.4
LnGrp LOS				D	A	D	F	A	A	A	F	C
Approach Vol, veh/h					856			2335			2075	
Approach Delay, s/veh					50.9			174.8			84.7	
Approach LOS					D			F			F	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		90.7			34.0	56.7		29.3				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		76.5			29.5	42.5		33.0				
Max Q Clear Time (g_c+I1), s		2.0			31.5	53.2		23.0				
Green Ext Time (p_c), s		26.7			0.0	0.0		1.3				
Intersection Summary												
HCM 6th Ctrl Delay				119.2								
HCM 6th LOS				F								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	336	1	1539	621	374	1545
Future Volume (vph)	336	1	1539	621	374	1545
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	49.0	49.0	36.0	85.0
Total Split (%)	29.2%	29.2%	40.8%	40.8%	30.0%	70.8%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	30.0	30.0	46.0	46.0	29.5	79.5
Actuated g/C Ratio	0.25	0.25	0.38	0.38	0.25	0.66
v/c Ratio	0.76	1.40	1.21	0.79	0.91	0.70
Control Delay	55.0	229.1	134.3	21.1	61.2	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	5.6
Total Delay	55.0	229.1	134.3	21.1	61.2	21.2
LOS	D	F	F	C	E	C
Approach Delay		166.6	101.8			29.0
Approach LOS		F	F			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.40

Intersection Signal Delay: 84.4

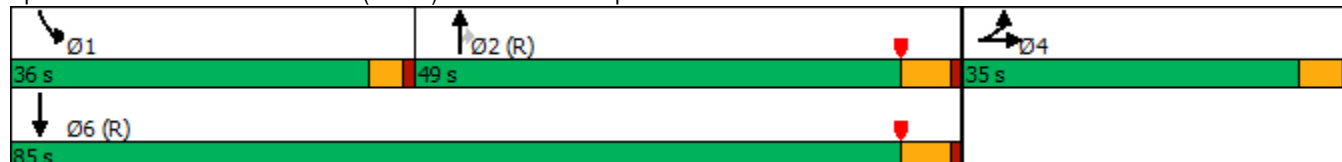
Intersection LOS: F

Intersection Capacity Utilization 121.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	1	504	0	0	0	0	1539	621	374	1545	0
Future Volume (veh/h)	336	1	504	0	0	0	0	1539	621	374	1545	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	357	1	429				0	1637	490	398	1644	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	445	1	395				0	1404	611	417	2354	0
Arrive On Green	0.25	0.25	0.25				0.00	0.40	0.40	0.47	1.00	0.00
Sat Flow, veh/h	1781	4	1582				0	3647	1546	1781	3647	0
Grp Volume(v), veh/h	357	0	430				0	1637	490	398	1644	0
Grp Sat Flow(s),veh/h/ln	1781	0	1586				0	1777	1546	1781	1777	0
Q Serve(g_s), s	22.6	0.0	30.0				0.0	47.4	33.7	25.8	0.0	0.0
Cycle Q Clear(g_c), s	22.6	0.0	30.0				0.0	47.4	33.7	25.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	445	0	396				0	1404	611	417	2354	0
V/C Ratio(X)	0.80	0.00	1.08				0.00	1.17	0.80	0.96	0.70	0.00
Avail Cap(c_a), veh/h	445	0	396				0	1404	611	475	2354	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.12	0.12	0.09	0.09	0.00
Uniform Delay (d), s/veh	42.2	0.0	45.0				0.0	36.3	32.1	31.3	0.0	0.0
Incr Delay (d2), s/veh	9.4	0.0	69.9				0.0	75.6	1.4	4.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	19.0				0.0	34.3	12.3	8.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.6	0.0	114.9				0.0	111.9	33.5	36.0	0.2	0.0
LnGrp LOS	D	A	F				A	F	C	D	A	A
Approach Vol, veh/h	787						2127			2042		
Approach Delay, s/veh	86.2						93.8			7.1		
Approach LOS	F						F			A		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	32.1	52.9	35.0		85.0							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	32.0	43.5	30.0		79.5							
Max Q Clear Time (g_c+I1), s	27.8	49.4	32.0		2.0							
Green Ext Time (p_c), s	0.3	0.0	0.0		33.7							
Intersection Summary												
HCM 6th Ctrl Delay			56.9									
HCM 6th LOS			E									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	160	479	115	486	185	1720	96	288	1329	169
Future Volume (vph)	160	479	115	486	185	1720	96	288	1329	169
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	24.0	40.0	17.0	33.0	26.0	38.0	38.0	25.0	37.0	37.0
Total Split (%)	20.0%	33.3%	14.2%	27.5%	21.7%	31.7%	31.7%	20.8%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	14.5	28.0	10.8	24.2	16.1	33.8	33.8	14.6	32.3	32.3
Actuated g/C Ratio	0.13	0.26	0.10	0.22	0.15	0.31	0.31	0.14	0.30	0.30
v/c Ratio	0.73	0.78	0.71	0.84	0.76	1.01	0.17	0.69	0.82	0.30
Control Delay	65.2	38.2	72.4	47.7	65.1	62.7	1.8	54.5	41.6	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	38.2	72.4	47.7	65.1	62.7	1.8	54.5	41.6	9.4
LOS	E	D	E	D	E	E	A	D	D	A
Approach Delay		43.0		51.2		60.0			40.7	
Approach LOS		D		D		E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 49.7

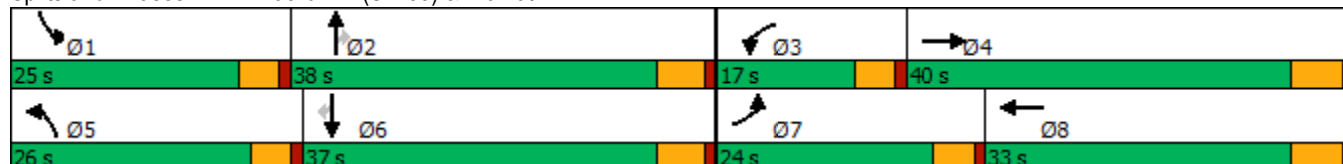
Intersection LOS: D

Intersection Capacity Utilization 88.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	479	264	115	486	197	185	1720	96	288	1329	169
Future Volume (veh/h)	160	479	264	115	486	197	185	1720	96	288	1329	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	165	494	246	119	501	185	191	1773	88	297	1370	139
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	604	299	146	594	218	223	1883	531	366	1788	497
Arrive On Green	0.12	0.26	0.26	0.09	0.23	0.23	0.13	0.34	0.34	0.11	0.32	0.32
Sat Flow, veh/h	1688	2349	1163	1688	2608	957	1688	5611	1582	3188	5611	1561
Grp Volume(v), veh/h	165	393	347	119	358	328	191	1773	88	297	1370	139
Grp Sat Flow(s),veh/h/ln	1688	1870	1642	1688	1870	1695	1688	1870	1582	1594	1870	1561
Q Serve(g_s), s	9.5	19.6	19.8	6.9	18.2	18.3	11.0	30.4	3.9	9.0	21.8	6.6
Cycle Q Clear(g_c), s	9.5	19.6	19.8	6.9	18.2	18.3	11.0	30.4	3.9	9.0	21.8	6.6
Prop In Lane	1.00		0.71	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	481	422	146	426	386	223	1883	531	366	1788	497
V/C Ratio(X)	0.84	0.82	0.82	0.82	0.84	0.85	0.86	0.94	0.17	0.81	0.77	0.28
Avail Cap(c_a), veh/h	330	645	566	211	513	465	364	1883	531	656	1788	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	34.6	34.7	44.5	36.6	36.6	42.1	32.0	23.2	42.8	30.5	25.3
Incr Delay (d2), s/veh	3.8	6.0	7.1	9.7	10.3	11.9	5.6	10.9	0.7	1.7	3.2	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	9.2	8.3	3.2	9.1	8.5	4.8	14.8	1.5	3.5	9.9	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.7	40.6	41.8	54.2	46.9	48.5	47.8	42.9	23.9	44.5	33.7	26.7
LnGrp LOS	D	D	D	D	D	D	D	D	C	D	C	C
Approach Vol, veh/h		905			805			2052			1806	
Approach Delay, s/veh		42.2			48.6			42.6			34.9	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	38.7	13.2	31.3	17.7	37.0	16.1	28.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	20.4	32.6	12.4	34.2	21.4	31.6	19.4	27.2				
Max Q Clear Time (g_c+I1), s	11.0	32.4	8.9	21.8	13.0	23.8	11.5	20.3				
Green Ext Time (p_c), s	0.4	0.1	0.0	3.5	0.2	5.2	0.1	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			40.9									
HCM 6th LOS			D									

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	139	869	190	803	67	334	1733	498	145	1207	384
Future Volume (vph)	139	869	190	803	67	334	1733	498	145	1207	384
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	22.7	43.2	20.6	41.1	41.1	15.9	40.2	40.2	16.0	40.3	22.7
Total Split (%)	18.9%	36.0%	17.2%	34.3%	34.3%	13.3%	33.5%	33.5%	13.3%	33.6%	18.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	14.1	37.4	15.5	38.8	38.8	11.3	34.8	34.8	11.4	33.8	54.4
Actuated g/C Ratio	0.12	0.31	0.13	0.32	0.32	0.09	0.29	0.29	0.10	0.28	0.46
v/c Ratio	0.74	1.82	0.91	0.73	0.12	2.20	1.75	0.81	0.94	1.26	0.53
Control Delay	71.9	401.8	93.7	40.8	1.6	588.5	370.9	30.9	112.6	160.6	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.9	401.8	93.7	40.8	1.6	588.5	370.9	30.9	112.6	160.6	21.5
LOS	E	F	F	D	A	F	F	C	F	F	C
Approach Delay		361.6		47.8			333.2			125.8	
Approach LOS		F		D			F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.5

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.20

Intersection Signal Delay: 236.3

Intersection LOS: F

Intersection Capacity Utilization 138.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
16 s	40.2 s	20.6 s	43.2 s
			
Ø5	Ø6	Ø7	Ø8
15.9 s	40.3 s	22.7 s	41.1 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	869	133	190	803	67	334	1733	498	145	1207	384
Future Volume (veh/h)	139	869	133	190	803	67	334	1733	498	145	1207	384
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	145	905	115	198	836	38	348	1805	439	151	1257	317
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	502	64	222	1208	536	158	1022	456	159	1025	617
Arrive On Green	0.10	0.31	0.31	0.13	0.34	0.34	0.09	0.29	0.29	0.09	0.29	0.29
Sat Flow, veh/h	1688	1626	207	1688	3554	1578	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	145	0	1020	198	836	38	348	1805	439	151	1257	317
Grp Sat Flow(s),veh/h/ln	1688	0	1833	1688	1777	1578	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	10.2	0.0	37.4	14.0	24.6	2.0	11.3	34.8	33.0	10.8	34.9	18.5
Cycle Q Clear(g_c), s	10.2	0.0	37.4	14.0	24.6	2.0	11.3	34.8	33.0	10.8	34.9	18.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	0	566	222	1208	536	158	1022	456	159	1025	617
V/C Ratio(X)	0.85	0.00	1.80	0.89	0.69	0.07	2.21	1.77	0.96	0.95	1.23	0.51
Avail Cap(c_a), veh/h	252	0	566	223	1208	536	158	1022	456	159	1025	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	0.0	41.8	51.7	34.5	27.0	54.9	43.1	42.5	54.5	43.1	28.2
Incr Delay (d2), s/veh	11.3	0.0	367.6	31.7	1.7	0.1	564.2	349.1	32.8	56.0	110.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	73.9	7.7	10.5	0.7	29.3	63.8	16.5	7.0	30.6	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.8	0.0	409.5	83.4	36.2	27.1	619.1	392.2	75.3	110.6	153.9	29.0
LnGrp LOS	E	A	F	F	D	C	F	F	E	F	F	C
Approach Vol, veh/h		1165			1072			2592			1725	
Approach Delay, s/veh		366.6			44.6			369.0			127.2	
Approach LOS		F			D			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	41.3	20.6	43.2	15.9	41.4	16.8	46.9				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.4	* 35	16.0	37.4	11.3	33.8	18.1	35.3				
Max Q Clear Time (g_c+I1), s	12.8	36.8	16.0	39.4	13.3	36.9	12.2	26.6				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.5				

Intersection Summary

HCM 6th Ctrl Delay	251.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	150	528	44	190	487	103	2003	375	70	1304	157
Future Volume (vph)	150	528	44	190	487	103	2003	375	70	1304	157
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	52.3	52.3	52.3	52.3	52.3	12.0	52.9	52.9	14.8	55.7	55.7
Total Split (%)	43.6%	43.6%	43.6%	43.6%	43.6%	10.0%	44.1%	44.1%	12.3%	46.4%	46.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	46.5	46.5	46.5		46.5	7.4	51.2	51.2	8.7	49.2	49.2
Actuated g/C Ratio	0.39	0.39	0.39		0.39	0.06	0.43	0.43	0.07	0.41	0.41
v/c Ratio	0.80	0.79	0.07		3.90	1.08	1.43	0.57	0.62	0.97	0.23
Control Delay	62.1	41.7	2.2		1329.2	163.9	225.4	26.1	75.4	51.9	7.5
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	41.7	2.2		1329.2	163.9	225.4	26.1	75.4	51.9	7.5
LOS	E	D	A		F	F	F	C	E	D	A
Approach Delay		43.5			1329.2		192.7			48.4	
Approach LOS		D			F		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 3.90

Intersection Signal Delay: 286.2

Intersection LOS: F

Intersection Capacity Utilization 145.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14.8 s	52.9 s	52.3 s
		
Ø5	Ø6	Ø8
12 s	55.7 s	52.3 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	528	44	190	487	62	103	2003	375	70	1304	157
Future Volume (veh/h)	150	528	44	190	487	62	103	2003	375	70	1304	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	161	568	30	204	524	59	111	2154	334	75	1402	151
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	725	614	81	120	13	104	1478	659	94	1457	650
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.06	0.42	0.42	0.06	0.41	0.41
Sat Flow, veh/h	788	1870	1585	112	311	34	1688	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	161	568	30	787	0	0	111	2154	334	75	1402	151
Grp Sat Flow(s),veh/h/ln	788	1870	1585	457	0	0	1688	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	32.1	1.4	14.4	0.0	0.0	7.4	49.9	18.7	5.3	46.1	7.5
Cycle Q Clear(g_c), s	38.4	32.1	1.4	46.5	0.0	0.0	7.4	49.9	18.7	5.3	46.1	7.5
Prop In Lane	1.00		1.00	0.26		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	725	614	215	0	0	104	1478	659	94	1457	650
V/C Ratio(X)	0.67	0.78	0.05	3.66	0.00	0.00	1.07	1.46	0.51	0.80	0.96	0.23
Avail Cap(c_a), veh/h	242	725	614	215	0	0	104	1478	659	143	1457	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	32.3	22.9	52.3	0.0	0.0	56.3	35.0	25.9	56.0	34.5	23.1
Incr Delay (d2), s/veh	6.8	5.6	0.0	1209.9	0.0	0.0	107.3	209.6	2.8	8.4	16.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	14.9	0.5	78.6	0.0	0.0	6.1	62.6	7.0	2.4	21.4	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.0	37.9	23.0	1262.1	0.0	0.0	163.6	244.6	28.7	64.4	50.6	23.9
LnGrp LOS	D	D	C	F	A	A	F	F	C	E	D	C
Approach Vol, veh/h	759			787			2599			1628		
Approach Delay, s/veh	38.0			1262.1			213.4			48.8		
Approach LOS	D			F			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	56.4		52.3	12.0	55.7		52.3				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	10.2	* 48		46.5	7.4	49.2		46.5				
Max Q Clear Time (g_c+l1), s	7.3	51.9		40.4	9.4	48.1		48.5				
Green Ext Time (p_c), s	0.0	0.0		2.3	0.0	0.9		0.0				

Intersection Summary

HCM 6th Ctrl Delay 286.9

HCM 6th LOS F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	8	0	2392	1364	10
Future Vol, veh/h	0	8	0	2392	1364	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	9	0	2600	1483	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	742	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	358	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	358	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	15.3	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 358		-	-		
HCM Lane V/C Ratio	- 0.024		-	-		
HCM Control Delay (s)	- 15.3		-	-		
HCM Lane LOS	- C		-	-		
HCM 95th %tile Q(veh)	- 0.1		-	-		

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	55	0	2392	1296	76
Future Vol, veh/h	0	55	0	2392	1296	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	60	0	2600	1409	83
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	705	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	379	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	379	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.3	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT EBLn1		SBT	SBR		
Capacity (veh/h)	- 379		-	-		
HCM Lane V/C Ratio	- 0.158		-	-		
HCM Control Delay (s)	- 16.3		-	-		
HCM Lane LOS	- C		-	-		
HCM 95th %tile Q(veh)	- 0.6		-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	474	315	147	144	262	248	1862	67	103	1205	175
Future Volume (vph)	474	315	147	144	262	248	1862	67	103	1205	175
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	43.0	43.0	9.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.8%	35.8%	7.5%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.5	46.3	46.3	10.0	34.8	10.5	37.0	37.0	5.5	32.0	32.0
Actuated g/C Ratio	0.18	0.39	0.39	0.08	0.29	0.09	0.31	0.31	0.05	0.27	0.27
v/c Ratio	1.65	0.46	0.22	1.08	0.96	1.76	1.78	0.12	1.40	1.33	0.34
Control Delay	337.3	29.4	4.4	150.5	69.0	403.9	381.4	0.4	284.9	191.7	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	337.3	29.4	4.4	150.5	69.0	403.9	381.4	0.4	284.9	191.7	8.9
LOS	F	C	A	F	E	F	F	A	F	F	A
Approach Delay		181.3			87.7		372.2			176.6	
Approach LOS		F			F		F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 118.8

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.78

Intersection Signal Delay: 248.2

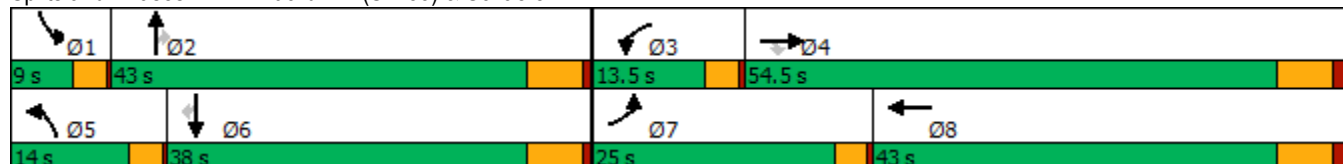
Intersection LOS: F

Intersection Capacity Utilization 130.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	315	147	144	262	224	248	1862	67	103	1205	175
Future Volume (veh/h)	474	315	147	144	262	224	248	1862	67	103	1205	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	499	332	106	152	276	225	261	1960	68	108	1268	141
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	302	740	619	141	286	233	148	1096	478	77	948	423
Arrive On Green	0.18	0.40	0.40	0.08	0.30	0.30	0.09	0.31	0.31	0.05	0.27	0.27
Sat Flow, veh/h	1688	1870	1563	1688	953	777	1688	3554	1551	1688	3554	1585
Grp Volume(v), veh/h	499	332	106	152	0	501	261	1960	68	108	1268	141
Grp Sat Flow(s),veh/h/ln	1688	1870	1563	1688	0	1730	1688	1777	1551	1688	1777	1585
Q Serve(g_s), s	21.5	15.6	5.3	10.0	0.0	34.2	10.5	37.0	3.8	5.5	32.0	8.6
Cycle Q Clear(g_c), s	21.5	15.6	5.3	10.0	0.0	34.2	10.5	37.0	3.8	5.5	32.0	8.6
Prop In Lane	1.00		1.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	302	740	619	141	0	519	148	1096	478	77	948	423
V/C Ratio(X)	1.65	0.45	0.17	1.08	0.00	0.97	1.77	1.79	0.14	1.40	1.34	0.33
Avail Cap(c_a), veh/h	302	740	619	141	0	519	148	1096	478	77	948	423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	26.6	23.5	55.0	0.0	41.4	54.8	41.5	30.0	57.3	44.0	35.4
Incr Delay (d2), s/veh	307.1	0.3	0.1	99.2	0.0	30.6	371.5	358.6	0.1	239.4	159.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.6	6.7	1.9	8.0	0.0	18.4	19.5	69.7	1.4	7.4	34.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	356.3	26.9	23.6	154.2	0.0	72.0	426.3	400.1	30.2	296.7	203.3	35.9
LnGrp LOS	F	C	C	F	A	E	F	F	C	F	F	D
Approach Vol, veh/h		937			653			2289			1517	
Approach Delay, s/veh		202.0			91.1			392.1			194.4	
Approach LOS		F			F			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	43.0	13.5	54.5	14.0	38.0	25.0	43.0				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.5	37.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	7.5	39.0	12.0	17.6	12.5	34.0	23.5	36.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			267.1									
HCM 6th LOS			F									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	189	988	178	178	728	218	1716	149	313	1097	148
Future Volume (vph)	189	988	178	178	728	218	1716	149	313	1097	148
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	51.0	51.0	51.0	51.0	51.0	12.0	54.0	54.0	15.0	57.0	57.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	10.0%	45.0%	45.0%	12.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	44.0	44.0	44.0	44.0	44.0	8.5	48.0	48.0	11.5	51.0	51.0
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.42	0.42
v/c Ratio	3.31	1.49	0.29	3.12	1.52	1.04	1.25	0.23	2.02	0.75	0.22
Control Delay	1095.5	259.4	14.2	1013.3	272.5	125.1	151.2	14.0	508.0	33.1	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	1095.5	259.4	14.2	1013.3	272.5	125.1	151.2	14.0	508.0	33.1	12.8
LOS	F	F	B	F	F	F	F	B	F	C	B
Approach Delay		343.8			386.1		138.7			126.6	
Approach LOS		F			F		F			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 3.31

Intersection Signal Delay: 227.5

Intersection LOS: F

Intersection Capacity Utilization 150.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
15 s	54 s	51 s
		
Ø5	Ø6	Ø8
12 s	57 s	51 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	988	178	178	728	257	218	1716	149	313	1097	148
Future Volume (veh/h)	189	988	178	178	728	257	218	1716	149	313	1097	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	195	1019	128	184	751	257	225	1769	142	323	1131	119
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	686	581	60	489	167	219	1421	634	162	1510	674
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.07	0.40	0.40	0.10	0.43	0.43
Sat Flow, veh/h	530	1870	1585	464	1332	456	3092	3554	1585	1688	3554	1585
Grp Volume(v), veh/h	195	1019	128	184	0	1008	225	1769	142	323	1131	119
Grp Sat Flow(s),veh/h/ln	530	1870	1585	464	0	1788	1546	1777	1585	1688	1777	1585
Q Serve(g_s), s	0.0	44.0	6.7	0.0	0.0	44.0	8.5	48.0	7.1	11.5	32.2	5.6
Cycle Q Clear(g_c), s	44.0	44.0	6.7	44.0	0.0	44.0	8.5	48.0	7.1	11.5	32.2	5.6
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	686	581	60	0	656	219	1421	634	162	1510	674
V/C Ratio(X)	3.25	1.49	0.22	3.07	0.00	1.54	1.03	1.24	0.22	2.00	0.75	0.18
Avail Cap(c_a), veh/h	60	686	581	60	0	656	219	1421	634	162	1510	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	38.0	26.2	60.0	0.0	38.0	55.7	36.0	23.7	54.3	29.1	21.4
Incr Delay (d2), s/veh	1054.1	226.4	0.2	972.6	0.0	249.4	68.1	116.1	0.2	470.0	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.4	62.1	2.5	18.0	0.0	63.6	5.2	41.9	2.5	25.8	13.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1114.1	264.4	26.4	1032.6	0.0	287.4	123.8	152.1	23.9	524.3	31.2	21.6
LnGrp LOS	F	F	C	F	A	F	F	F	C	F	C	C
Approach Vol, veh/h	1342			1192			2136			1573		
Approach Delay, s/veh	365.2			402.4			140.6			131.7		
Approach LOS	F			F			F			F		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	54.0		51.0	12.0	57.0		51.0				
Change Period (Y+Rc), s	3.5	6.0		7.0	3.5	6.0		7.0				
Max Green Setting (Gmax), s	11.5	48.0		44.0	8.5	51.0		44.0				
Max Q Clear Time (g_c+I1), s	13.5	50.0		46.0	10.5	34.2		46.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.9		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	236.6											
HCM 6th LOS	F											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	77	340	231	193	296	126	1512	121	183	1149	74
Future Volume (vph)	77	340	231	193	296	126	1512	121	183	1149	74
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	51.0	51.0	51.0	51.0	51.0	20.0	53.0	53.0	16.0	49.0	49.0
Total Split (%)	42.5%	42.5%	42.5%	42.5%	42.5%	16.7%	44.2%	44.2%	13.3%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	46.2	46.2	46.2	46.2	46.2	13.6	47.3	47.3	12.5	46.2	46.2
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.11	0.39	0.39	0.10	0.38	0.38
v/c Ratio	1.37	0.50	0.32	0.77	1.01	0.70	1.14	0.19	1.11	0.89	0.12
Control Delay	277.5	31.1	4.2	54.1	69.8	70.5	107.4	15.5	149.7	44.3	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	277.5	31.1	4.2	54.1	69.8	70.5	107.4	15.5	149.7	44.3	5.8
LOS	F	C	A	D	E	E	F	B	F	D	A
Approach Delay		50.8			66.2		98.5			56.0	
Approach LOS		D			E		F			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 73.2

Intersection LOS: E

Intersection Capacity Utilization 111.1%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
16 s	53 s	51 s
		
Ø5	Ø6	Ø8
20 s	49 s	51 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	340	231	193	296	367	126	1512	121	183	1149	74
Future Volume (veh/h)	77	340	231	193	296	367	126	1512	121	183	1149	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	81	358	141	203	312	373	133	1592	103	193	1209	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	720	603	264	299	357	158	1401	625	176	1437	632
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.09	0.39	0.39	0.10	0.40	0.40
Sat Flow, veh/h	717	1870	1565	852	776	928	1688	3554	1585	1688	3554	1563
Grp Volume(v), veh/h	81	358	141	203	0	685	133	1592	103	193	1209	46
Grp Sat Flow(s),veh/h/ln	717	1870	1565	852	0	1703	1688	1777	1585	1688	1777	1563
Q Serve(g_s), s	0.0	17.5	7.3	28.6	0.0	46.2	9.3	47.3	5.1	12.5	36.8	2.2
Cycle Q Clear(g_c), s	46.2	17.5	7.3	46.0	0.0	46.2	9.3	47.3	5.1	12.5	36.8	2.2
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	60	720	603	264	0	656	158	1401	625	176	1437	632
V/C Ratio(X)	1.35	0.50	0.23	0.77	0.00	1.04	0.84	1.14	0.16	1.10	0.84	0.07
Avail Cap(c_a), veh/h	60	720	603	264	0	656	232	1401	625	176	1437	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	28.1	24.9	45.6	0.0	36.9	53.5	36.3	23.6	53.7	32.2	21.9
Incr Delay (d2), s/veh	235.0	0.4	0.1	12.4	0.0	47.3	14.1	70.7	0.1	96.5	4.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	7.7	2.6	6.7	0.0	26.7	4.4	32.5	1.8	9.8	15.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	295.0	28.5	25.1	58.0	0.0	84.2	67.6	107.1	23.7	150.2	36.9	22.0
LnGrp LOS	F	C	C	E	A	F	E	F	C	F	D	C
Approach Vol, veh/h	580			888			1828			1448		
Approach Delay, s/veh	64.9			78.2			99.5			51.5		
Approach LOS	E			E			F			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	53.0		51.0	14.8	54.2		51.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	12.5	47.3		46.2	16.5	43.3		46.2				
Max Q Clear Time (g_c+I1), s	14.5	49.3		48.2	11.3	38.8		48.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	2.8		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	76.7											
HCM 6th LOS	E											

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	426	8	5	203	0	7	0	3	0	0	0
Future Vol, veh/h	0	426	8	5	203	0	7	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	463	9	5	221	0	8	0	3	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	221	0	0	472	0	0	699	699	468	700	703	221
Stage 1	-	-	-	-	-	-	468	468	-	231	231	-
Stage 2	-	-	-	-	-	-	231	231	-	469	472	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1348	-	-	1090	-	-	354	364	595	354	362	819
Stage 1	-	-	-	-	-	-	575	561	-	772	713	-
Stage 2	-	-	-	-	-	-	772	713	-	575	559	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1348	-	-	1090	-	-	353	362	595	351	360	819
Mov Cap-2 Maneuver	-	-	-	-	-	-	353	362	-	351	360	-
Stage 1	-	-	-	-	-	-	575	561	-	772	709	-
Stage 2	-	-	-	-	-	-	768	709	-	572	559	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			14.2			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	402	1348	-	-	1090	-	-	-				
HCM Lane V/C Ratio	0.027	-	-	-	0.005	-	-	-				
HCM Control Delay (s)	14.2	0	-	-	8.3	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-				

Timings

Eden Mixed-Use TA (JN:14698)

1: San Antonio Av. & Schaefer Av.

10/23/2023

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	20	407	33	16	476	30	34	30	44
Future Volume (vph)	20	407	33	16	476	30	34	30	44
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	24.6	24.6	25.6	25.6
Total Split (s)	23.0	53.0	53.0	19.0	49.0	48.0	48.0	48.0	48.0
Total Split (%)	19.2%	44.2%	44.2%	15.8%	40.8%	40.0%	40.0%	40.0%	40.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effect Green (s)	5.9	21.2	21.2	5.8	21.2		12.6		12.6
Actuated g/C Ratio	0.17	0.60	0.60	0.17	0.60		0.36		0.36
v/c Ratio	0.07	0.20	0.04	0.06	0.24		0.15		0.19
Control Delay	18.9	9.1	3.1	19.0	9.3		9.8		9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	18.9	9.1	3.1	19.0	9.3		9.8		9.7
LOS	B	A	A	B	A		A		A
Approach Delay		9.1			9.6		9.8		9.7
Approach LOS		A			A		A		A

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 35.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.24

Intersection Signal Delay: 9.4

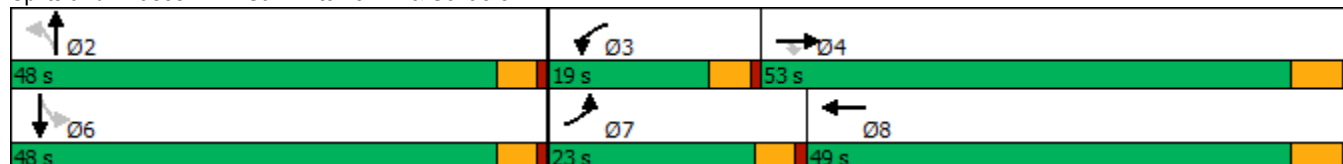
Intersection LOS: A

Intersection Capacity Utilization 34.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: San Antonio Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
1: San Antonio Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	407	33	16	476	27	30	34	17	30	44	29
Future Volume (veh/h)	20	407	33	16	476	27	30	34	17	30	44	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	420	29	16	491	24	31	35	9	31	45	14
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	1073	469	35	1020	50	255	236	46	222	255	62
Arrive On Green	0.03	0.30	0.30	0.02	0.30	0.30	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1688	3554	1551	1688	3445	168	447	1014	199	339	1094	264
Grp Volume(v), veh/h	21	420	29	16	253	262	75	0	0	90	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1551	1688	1777	1836	1660	0	0	1696	0	0
Q Serve(g_s), s	0.4	3.2	0.4	0.3	3.9	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	3.2	0.4	0.3	3.9	4.0	1.1	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.09	0.41		0.12	0.34		0.16
Lane Grp Cap(c), veh/h	45	1073	469	35	526	544	538	0	0	539	0	0
V/C Ratio(X)	0.47	0.39	0.06	0.46	0.48	0.48	0.14	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	920	4967	2169	720	2273	2349	2200	0	0	2241	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.2	9.3	8.4	16.3	9.8	9.8	10.4	0.0	0.0	10.4	0.0	0.0
Incr Delay (d2), s/veh	2.8	0.2	0.1	3.5	0.7	0.7	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.7	0.1	0.1	1.0	1.0	0.4	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	9.6	8.4	19.8	10.4	10.4	10.5	0.0	0.0	10.6	0.0	0.0
LnGrp LOS	B	A	A	B	B	B	B	A	A	B	A	A
Approach Vol, veh/h	470			531			75			90		
Approach Delay, s/veh	9.9			10.7			10.5			10.6		
Approach LOS	A			B			B			B		
Timer - Assigned Phs	2		3	4		6	7	8				
Phs Duration (G+Y+Rc), s	12.5		5.3	16.0		12.5	5.5	15.8				
Change Period (Y+Rc), s	4.6		4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s	43.4		14.4	47.2		43.4	18.4	43.2				
Max Q Clear Time (g_c+I1), s	3.1		2.3	5.2		3.3	2.4	6.0				
Green Ext Time (p_c), s	0.4		0.0	2.8		0.5	0.0	2.9				
Intersection Summary												
HCM 6th Ctrl Delay	10.4											
HCM 6th LOS	B											

Timings

Eden Mixed-Use TA (JN:14698)

2: San Antonio Av. & Edison Av.

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	34	559	31	17	693	17	18	24	10	21
Future Volume (vph)	34	559	31	17	693	17	18	24	10	21
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	7	4		3	8			2		6
Permitted Phases			4			8	2		6	
Detector Phase	7	4	4	3	8	8	2	2	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	22.8	29.6	29.6	29.6	29.6
Total Split (s)	25.0	55.0	55.0	22.0	52.0	52.0	43.0	43.0	43.0	43.0
Total Split (%)	20.8%	45.8%	45.8%	18.3%	43.3%	43.3%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	6.4	29.9	29.9	5.9	27.7	27.7		13.0		13.0
Actuated g/C Ratio	0.14	0.68	0.68	0.13	0.63	0.63		0.29		0.29
v/c Ratio	0.15	0.24	0.03	0.08	0.32	0.02		0.11		0.13
Control Delay	24.5	8.3	2.3	25.4	10.9	0.1		14.1		10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	24.5	8.3	2.3	25.4	10.9	0.1		14.1		10.4
LOS	C	A	A	C	B	A		B		B
Approach Delay		8.9			11.0			14.1		10.4
Approach LOS		A			B			B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 44.2

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 10.2

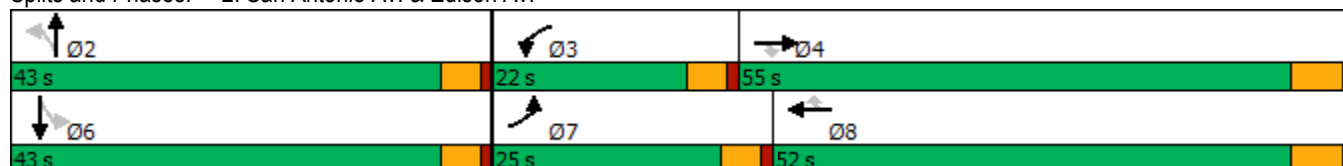
Intersection LOS: B

Intersection Capacity Utilization 45.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: San Antonio Av. & Edison Av.



HCM 6th Signalized Intersection Summary
2: San Antonio Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	559	31	17	693	17	18	24	7	10	21	31
Future Volume (veh/h)	34	559	31	17	693	17	18	24	7	10	21	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	35	576	25	18	714	15	19	25	3	10	22	-30
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	1395	609	39	1329	580	215	141	14	0	0	6667
Arrive On Green	0.04	0.39	0.39	0.02	0.37	0.37	0.13	0.13	0.13	0.13	0.13	0.00
Sat Flow, veh/h	1688	3554	1550	1688	3554	1550	480	1106	108	49401	102531	-142436
Grp Volume(v), veh/h	35	576	25	18	714	15	47	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1688	1777	1550	1688	1777	1550	1694	0	0	0	0	0
Q Serve(g_s), s	0.7	3.9	0.3	0.3	5.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	3.9	0.3	0.3	5.2	0.2	0.7	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.06	5.00		-15.00
Lane Grp Cap(c), veh/h	70	1395	609	39	1329	580	370	0	0	0	0	0
V/C Ratio(X)	0.50	0.41	0.04	0.46	0.54	0.03	0.13	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1048	5322	2321	894	4998	2180	2073	0	0	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	15.4	7.2	6.2	15.8	8.1	6.5	12.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.2	0.0	3.2	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.7	0.1	0.1	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.4	7.4	6.2	19.0	8.4	6.5	13.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		636			747			47			0	
Approach Delay, s/veh		7.9			8.6			13.0			0.0	
Approach LOS		A			A			B				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		8.8	5.4	18.7		8.8	6.0	18.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		38.4	17.4	49.2		38.4	20.4	46.2				
Max Q Clear Time (g_c+I1), s		2.7	2.3	5.9		0.0	2.7	7.2				
Green Ext Time (p_c), s		0.2	0.0	4.0		0.0	0.0	5.1				
Intersection Summary												
HCM 6th Ctrl Delay			8.5									
HCM 6th LOS			A									

Timings
3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	149	55	206	47	115	18	120
Future Volume (vph)	19	149	55	206	47	115	18	120
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	27.8	9.6	25.4	9.6	24.4
Total Split (s)	17.0	41.0	17.0	41.0	24.0	41.0	21.0	38.0
Total Split (%)	14.2%	34.2%	14.2%	34.2%	20.0%	34.2%	17.5%	31.7%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	16.8	12.7	19.2	17.0	6.7	14.6	5.9	12.3
Actuated g/C Ratio	0.36	0.27	0.41	0.36	0.14	0.31	0.13	0.26
v/c Ratio	0.04	0.20	0.11	0.18	0.20	0.17	0.09	0.14
Control Delay	10.4	15.2	10.2	12.5	26.4	10.3	27.6	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.4	15.2	10.2	12.5	26.4	10.3	27.6	17.5
LOS	B	B	B	B	C	B	C	B
Approach Delay		14.8		12.1		13.6		18.7
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 46.8

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.20

Intersection Signal Delay: 14.2

Intersection LOS: B

Intersection Capacity Utilization 44.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Fern Av. & Chino Av.

			
Ø1	Ø2	Ø3	Ø4
21 s	41 s	17 s	41 s
			
Ø5	Ø6	Ø7	Ø8
24 s	38 s	17 s	41 s

HCM 6th Signalized Intersection Summary

3: Fern Av. & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	149	35	55	206	15	47	115	70	18	120	8
Future Volume (veh/h)	19	149	35	55	206	15	47	115	70	18	120	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	19	152	33	56	210	9	48	117	52	18	122	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	671	142	461	910	39	84	609	256	38	785	26
Arrive On Green	0.02	0.23	0.23	0.06	0.26	0.26	0.05	0.25	0.25	0.02	0.22	0.22
Sat Flow, veh/h	1688	2916	618	1688	3471	148	1688	2424	1019	1688	3510	115
Grp Volume(v), veh/h	19	91	94	56	107	112	48	84	85	18	61	65
Grp Sat Flow(s),veh/h/ln	1688	1777	1756	1688	1777	1842	1688	1777	1666	1688	1777	1847
Q Serve(g_s), s	0.4	1.9	2.0	1.1	2.2	2.2	1.3	1.7	1.9	0.5	1.3	1.3
Cycle Q Clear(g_c), s	0.4	1.9	2.0	1.1	2.2	2.2	1.3	1.7	1.9	0.5	1.3	1.3
Prop In Lane	1.00		0.35	1.00		0.08	1.00		0.61	1.00		0.06
Lane Grp Cap(c), veh/h	430	409	404	461	466	483	84	446	418	38	397	413
V/C Ratio(X)	0.04	0.22	0.23	0.12	0.23	0.23	0.57	0.19	0.20	0.48	0.15	0.16
Avail Cap(c_a), veh/h	843	1352	1336	819	1352	1402	708	1367	1282	598	1252	1302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	14.5	14.5	12.3	13.4	13.4	21.5	13.6	13.7	22.3	14.4	14.4
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.2	0.2	2.3	0.2	0.2	3.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.6	0.7	0.3	0.7	0.7	0.5	0.6	0.6	0.2	0.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	14.7	14.8	12.3	13.6	13.6	23.8	13.8	13.9	25.8	14.6	14.6
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		204			275			217			144	
Approach Delay, s/veh		14.6			13.4			16.1			16.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.6	17.0	7.2	16.4	6.9	15.7	5.7	17.9				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	35.6	12.4	35.2	19.4	32.6	12.4	35.2				
Max Q Clear Time (g_c+I1), s	2.5	3.9	3.1	4.0	3.3	3.3	2.4	4.2				
Green Ext Time (p_c), s	0.0	0.9	0.0	0.9	0.0	0.6	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay			14.8									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	6	230	15	12	216
Future Vol, veh/h	26	6	230	15	12	216
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	7	250	16	13	235

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	402	133	0
Stage 1	258	-	-
Stage 2	144	-	-
Critical Hdwy	6.84	6.94	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	-
Pot Cap-1 Maneuver	576	892	-
Stage 1	761	-	-
Stage 2	868	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	570	892	-
Mov Cap-2 Maneuver	625	-	-
Stage 1	761	-	-
Stage 2	859	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	662	1295
HCM Lane V/C Ratio	-	-	0.053	0.01
HCM Control Delay (s)	-	-	10.7	7.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	4	240	15	0	242
Future Vol, veh/h	0	4	240	15	0	242
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	261	16	0	263
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	139	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	884	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	884	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.1	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	884		-		
HCM Lane V/C Ratio	-	0.005		-		
HCM Control Delay (s)	-	9.1		-		
HCM Lane LOS	-	A		-		
HCM 95th %tile Q(veh)	-	0		-		

Timings
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	36	390	24	409	52	117	93	107
Future Volume (vph)	36	390	24	409	52	117	93	107
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases								
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	27.8	9.6	26.8	9.6	26.4	9.6	24.4
Total Split (s)	19.0	44.0	15.0	40.0	25.0	40.0	21.0	36.0
Total Split (%)	15.8%	36.7%	12.5%	33.3%	20.8%	33.3%	17.5%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	Min	None	Min
Act Effect Green (s)	7.3	73.2	6.5	72.5	8.4	12.4	11.4	17.3
Actuated g/C Ratio	0.06	0.61	0.05	0.60	0.07	0.10	0.10	0.14
v/c Ratio	0.37	0.21	0.28	0.26	0.47	0.40	0.62	0.30
Control Delay	63.7	12.7	61.7	13.2	66.1	44.6	68.3	34.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.7	12.7	61.7	13.2	66.1	44.6	68.3	34.1
LOS	E	B	E	B	E	D	E	C
Approach Delay		16.8		15.4		50.3		47.2
Approach LOS		B		B		D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 114.2 (95%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 26.0

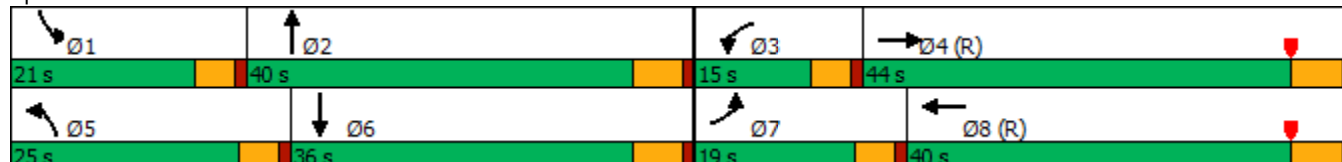
Intersection LOS: C

Intersection Capacity Utilization 53.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 6: Fern Av. & Schaefer Av.



HCM 6th Signalized Intersection Summary
6: Fern Av. & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	390	28	24	409	103	52	117	28	93	107	42
Future Volume (veh/h)	36	390	28	24	409	103	52	117	28	93	107	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	38	411	26	25	431	95	55	123	27	98	113	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	2189	138	40	1849	404	70	259	55	121	358	65
Arrive On Green	0.03	0.65	0.65	0.02	0.64	0.64	0.04	0.09	0.09	0.07	0.12	0.12
Sat Flow, veh/h	1688	3392	214	1688	2892	632	1688	2901	618	1688	2995	542
Grp Volume(v), veh/h	38	215	222	25	263	263	55	74	76	98	66	68
Grp Sat Flow(s),veh/h/ln	1688	1777	1829	1688	1777	1747	1688	1777	1742	1688	1777	1761
Q Serve(g_s), s	2.7	5.8	5.9	1.8	7.5	7.7	3.9	4.7	5.0	6.9	4.1	4.3
Cycle Q Clear(g_c), s	2.7	5.8	5.9	1.8	7.5	7.7	3.9	4.7	5.0	6.9	4.1	4.3
Prop In Lane	1.00		0.12	1.00		0.36	1.00		0.35	1.00		0.31
Lane Grp Cap(c), veh/h	51	1147	1180	40	1136	1117	70	159	156	121	212	210
V/C Ratio(X)	0.75	0.19	0.19	0.63	0.23	0.24	0.79	0.47	0.49	0.81	0.31	0.32
Avail Cap(c_a), veh/h	203	1147	1180	146	1136	1117	287	512	502	231	453	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	8.6	8.6	58.1	9.2	9.2	57.0	51.9	52.0	54.9	48.3	48.4
Incr Delay (d2), s/veh	8.0	0.4	0.4	5.9	0.5	0.5	7.0	2.1	2.3	4.9	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.1	2.2	0.8	2.8	2.8	1.8	2.2	2.3	3.0	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.8	8.9	8.9	64.0	9.6	9.7	64.0	54.0	54.4	59.8	49.1	49.3
LnGrp LOS	E	A	A	E	A	A	E	D	D	E	D	D
Approach Vol, veh/h	475			551			205			232		
Approach Delay, s/veh	13.5			12.1			56.8			53.7		
Approach LOS	B			B			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	16.1	7.4	83.3	9.6	19.7	8.2	82.5				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	16.4	34.6	10.4	38.2	20.4	30.6	14.4	34.2				
Max Q Clear Time (g_c+I1), s	8.9	7.0	3.8	7.9	5.9	6.3	4.7	9.7				
Green Ext Time (p_c), s	0.1	0.7	0.0	2.4	0.0	0.6	0.0	2.9				
Intersection Summary												
HCM 6th Ctrl Delay	25.4											
HCM 6th LOS	C											

Timings
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	86	472	16	21	634	21	18	69	15	80
Future Volume (vph)	86	472	16	21	634	21	18	69	15	80
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	26.8	26.8	9.6	26.8	26.8	9.6	31.4	9.6	30.4
Total Split (s)	25.0	48.0	48.0	17.0	40.0	40.0	17.0	41.0	14.0	38.0
Total Split (%)	20.8%	40.0%	40.0%	14.2%	33.3%	33.3%	14.2%	34.2%	11.7%	31.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	4.6	5.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None
Act Effect Green (s)	8.8	27.4	27.4	6.2	20.3	20.3	6.1	13.0	6.0	13.0
Actuated g/C Ratio	0.15	0.47	0.47	0.11	0.35	0.35	0.11	0.22	0.10	0.22
v/c Ratio	0.37	0.31	0.02	0.13	0.56	0.04	0.11	0.11	0.09	0.21
Control Delay	31.8	12.4	0.1	33.9	19.5	0.1	34.0	20.2	34.1	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	12.4	0.1	33.9	19.5	0.1	34.0	20.2	34.1	13.6
LOS	C	B	A	C	B	A	C	C	C	B
Approach Delay		14.9			19.3			22.8		15.3
Approach LOS		B			B			C		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 58

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 17.4

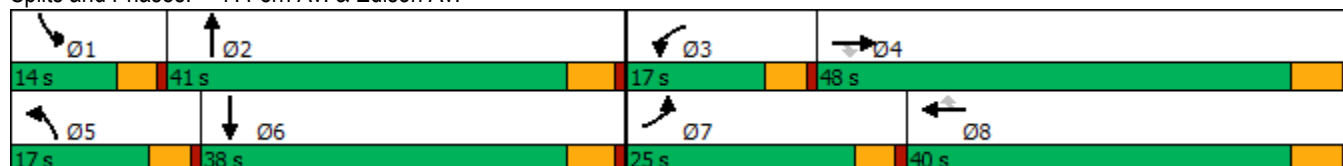
Intersection LOS: B

Intersection Capacity Utilization 51.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Fern Av. & Edison Av.



HCM 6th Signalized Intersection Summary
7: Fern Av. & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	472	16	21	634	21	18	69	9	15	80	76
Future Volume (veh/h)	86	472	16	21	634	21	18	69	9	15	80	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	93	513	13	23	689	15	20	75	6	16	87	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	1225	546	46	1064	475	41	658	52	34	443	218
Arrive On Green	0.07	0.34	0.34	0.03	0.30	0.30	0.02	0.20	0.20	0.02	0.19	0.19
Sat Flow, veh/h	1688	3554	1584	1688	3554	1585	1688	3336	264	1688	2295	1131
Grp Volume(v), veh/h	93	513	13	23	689	15	20	40	41	16	66	67
Grp Sat Flow(s),veh/h/ln	1688	1777	1584	1688	1777	1585	1688	1777	1823	1688	1777	1649
Q Serve(g_s), s	2.7	5.5	0.3	0.7	8.4	0.3	0.6	0.9	0.9	0.5	1.5	1.7
Cycle Q Clear(g_c), s	2.7	5.5	0.3	0.7	8.4	0.3	0.6	0.9	0.9	0.5	1.5	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.69
Lane Grp Cap(c), veh/h	123	1225	546	46	1064	475	41	350	359	34	343	318
V/C Ratio(X)	0.76	0.42	0.02	0.50	0.65	0.03	0.49	0.11	0.12	0.48	0.19	0.21
Avail Cap(c_a), veh/h	693	3019	1345	421	2446	1091	421	1273	1306	319	1166	1082
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	12.5	10.7	23.8	15.1	12.3	23.9	16.4	16.4	24.1	16.8	16.9
Incr Delay (d2), s/veh	3.6	0.2	0.0	3.1	0.7	0.0	3.3	0.1	0.1	3.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.7	0.1	0.3	2.7	0.1	0.2	0.3	0.3	0.2	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	12.7	10.8	26.9	15.8	12.3	27.2	16.5	16.5	27.9	17.1	17.2
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		619			727			101			149	
Approach Delay, s/veh		14.7			16.1			18.6			18.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.6	15.2	6.0	22.9	5.8	15.0	8.2	20.7				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	9.4	35.6	12.4	42.2	12.4	32.6	20.4	34.2				
Max Q Clear Time (g_c+I1), s	2.5	2.9	2.7	7.5	2.6	3.7	4.7	10.4				
Green Ext Time (p_c), s	0.0	0.4	0.0	3.4	0.0	0.7	0.1	4.5				
Intersection Summary												
HCM 6th Ctrl Delay			15.9									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	288	196	33	34	42
Future Vol, veh/h	31	288	196	33	34	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	310	211	35	37	45
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	246	0	-	0	450	123
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	221	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1317	-	-	-	538	905
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1317	-	-	-	525	905
Mov Cap-2 Maneuver	-	-	-	-	596	-
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	795	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		10.2		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1317	-	-	-	596	905
HCM Lane V/C Ratio	0.025	-	-	-	0.061	0.05
HCM Control Delay (s)	7.8	-	-	-	11.4	9.2
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.2

Intersection												
Int Delay, s/veh	14.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	192	167	62	231	174	156	0	117	203	0	148
Future Vol, veh/h	150	192	167	62	231	174	156	0	117	203	0	148
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	80	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	85	85	85	85	92	85	92	85	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	163	226	196	73	272	189	184	0	138	221	0	161
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	461	0	0	422	0	0	932	1257	211	952	1261	231
Stage 1	-	-	-	-	-	-	650	650	-	513	513	-
Stage 2	-	-	-	-	-	-	282	607	-	439	748	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1096	-	-	1212	-	-	253	184	943	245	183	771
Stage 1	-	-	-	-	-	-	480	502	-	512	534	-
Stage 2	-	-	-	-	-	-	701	485	-	650	450	-
Platoon blocked, %		-	-	1	-	-	1	1	1	1	1	
Mov Cap-1 Maneuver	1096	-	-	1212	-	-	~ 170	147	943	~ 177	146	771
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	222	-	271	236	-
Stage 1	-	-	-	-	-	-	408	427	-	436	502	-
Stage 2	-	-	-	-	-	-	521	456	-	472	383	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.5			1.1			32.9			38		
HCM LOS							D			E		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	251	943	1096	-	-	1212	-	-	271	771		
HCM Lane V/C Ratio	0.731	0.146	0.149	-	-	0.06	-	-	0.814	0.209		
HCM Control Delay (s)	50.4	9.5	8.9	-	-	8.2	-	-	57.8	10.9		
HCM Lane LOS	F	A	A	-	-	A	-	-	F	B		
HCM 95th %tile Q(veh)	5.1	0.5	0.5	-	-	0.2	-	-	6.5	0.8		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	388	4	410	820	904	937	471
Future Volume (vph)	388	4	410	820	904	937	471
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	31.0	31.0	31.0	42.0	89.0	47.0	47.0
Total Split (%)	25.8%	25.8%	25.8%	35.0%	74.2%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	23.6	23.6	23.6	40.8	85.9	40.6	40.6
Actuated g/C Ratio	0.20	0.20	0.20	0.34	0.72	0.34	0.34
v/c Ratio	0.88	0.82	0.60	1.42	0.37	0.82	0.59
Control Delay	74.0	56.6	19.4	231.5	8.1	42.6	7.1
Queue Delay	1.1	0.7	0.0	1.0	0.4	0.0	0.0
Total Delay	75.0	57.3	19.4	232.5	8.5	42.6	7.1
LOS	E	E	B	F	A	D	A
Approach Delay		51.5			115.0	30.7	
Approach LOS		D			F	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.42

Intersection Signal Delay: 71.9

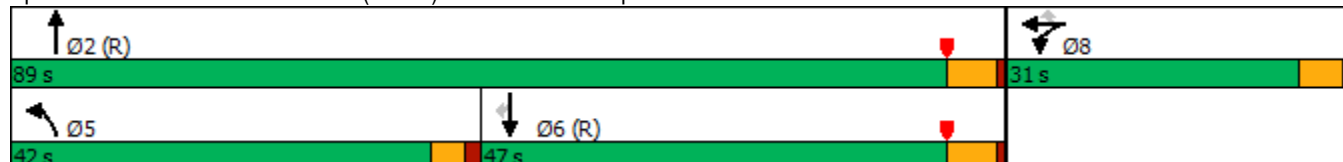
Intersection LOS: E

Intersection Capacity Utilization 102.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	388	4	410	820	904	0	0	937	471
Future Volume (veh/h)	0	0	0	388	4	410	820	904	0	0	937	471
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				478	0	155	854	942	0	0	976	402
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				552	0	245	557	2692	0	0	1449	646
Arrive On Green				0.15	0.00	0.15	0.63	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				3563	0	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				478	0	155	854	942	0	0	976	402
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				15.7	0.0	11.0	37.5	0.0	0.0	0.0	26.9	24.2
Cycle Q Clear(g_c), s				15.7	0.0	11.0	37.5	0.0	0.0	0.0	26.9	24.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				552	0	245	557	2692	0	0	1449	646
V/C Ratio(X)				0.87	0.00	0.63	1.53	0.35	0.00	0.00	0.67	0.62
Avail Cap(c_a), veh/h				772	0	343	557	2692	0	0	1449	646
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.5	0.0	47.5	22.5	0.0	0.0	0.0	29.0	28.2
Incr Delay (d2), s/veh				5.8	0.0	1.0	241.2	0.0	0.0	0.0	2.5	4.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.2	0.0	4.3	45.9	0.0	0.0	0.0	11.5	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.3	0.0	48.5	263.7	0.0	0.0	0.0	31.5	32.7
LnGrp LOS				E	A	D	F	A	A	A	C	C
Approach Vol, veh/h					633			1796			1378	
Approach Delay, s/veh					53.6			125.4			31.9	
Approach LOS					D			F			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	96.4			42.0			54.4			23.6		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	83.5			37.5			41.5			26.0		
Max Q Clear Time (g_c+I1), s	2.0			39.5			28.9			17.7		
Green Ext Time (p_c), s	12.3			0.0			8.1			0.9		
Intersection Summary												
HCM 6th Ctrl Delay			79.6									
HCM 6th LOS			E									
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

						
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	337	0	1385	613	365	960
Future Volume (vph)	337	0	1385	613	365	960
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	37.0	37.0	44.0	44.0	39.0	83.0
Total Split (%)	30.8%	30.8%	36.7%	36.7%	32.5%	69.2%
Yellow Time (s)	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	32.0	32.0	43.7	43.7	29.8	77.5
Actuated g/C Ratio	0.27	0.27	0.36	0.36	0.25	0.65
v/c Ratio	0.72	1.30	1.14	0.80	0.88	0.45
Control Delay	50.4	177.4	110.2	21.9	74.9	10.6
Queue Delay	60.7	6.1	0.7	0.0	0.4	0.3
Total Delay	111.1	183.6	111.0	21.9	75.2	10.9
LOS	F	F	F	C	E	B
Approach Delay		159.5	83.6			28.6
Approach LOS		F	F			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 82.8

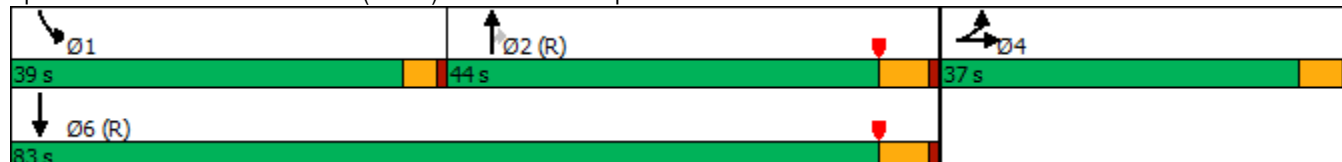
Intersection LOS: F

Intersection Capacity Utilization 102.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary

11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	0	578	0	0	0	0	1385	613	365	960	0
Future Volume (veh/h)	337	0	578	0	0	0	0	1385	613	365	960	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	359	0	506				0	1473	536	388	1021	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	475	0	423				0	1363	590	408	2295	0
Arrive On Green	0.27	0.00	0.27				0.00	0.38	0.38	0.46	1.00	0.00
Sat Flow, veh/h	1781	0	1585				0	3647	1538	1781	3647	0
Grp Volume(v), veh/h	359	0	506				0	1473	536	388	1021	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1538	1781	1777	0
Q Serve(g_s), s	22.2	0.0	32.0				0.0	46.0	39.6	25.1	0.0	0.0
Cycle Q Clear(g_c), s	22.2	0.0	32.0				0.0	46.0	39.6	25.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	475	0	423				0	1363	590	408	2295	0
V/C Ratio(X)	0.76	0.00	1.20				0.00	1.08	0.91	0.95	0.44	0.00
Avail Cap(c_a), veh/h	475	0	423				0	1363	590	520	2295	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.65	0.65	0.45	0.45	0.00
Uniform Delay (d), s/veh	40.4	0.0	44.0				0.0	37.0	35.0	31.9	0.0	0.0
Incr Delay (d2), s/veh	6.1	0.0	109.6				0.0	45.6	14.6	12.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.0	24.9				0.0	27.7	16.5	9.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.5	0.0	153.6				0.0	82.6	49.6	44.8	0.3	0.0
LnGrp LOS	D	A	F				A	F	D	D	A	A
Approach Vol, veh/h	865						2009			1409		
Approach Delay, s/veh	109.2						73.8			12.5		
Approach LOS	F						E			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	31.5	51.5		37.0		83.0						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	35.0	38.5		32.0		77.5						
Max Q Clear Time (g_c+I1), s	27.1	48.0		34.0		2.0						
Green Ext Time (p_c), s	0.4	0.0		0.0		13.9						
Intersection Summary												
HCM 6th Ctrl Delay			60.8									
HCM 6th LOS			E									
Notes												

Timings
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	93	151	79	184	118	1620	63	163	1190	102
Future Volume (vph)	93	151	79	184	118	1620	63	163	1190	102
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8	5	2		1	6	
Permitted Phases							2			6
Detector Phase	7	4	3	8	5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	9.6	27.4	27.4	9.6	29.4	29.4
Total Split (s)	23.0	38.0	19.0	34.0	22.0	43.0	43.0	20.0	41.0	41.0
Total Split (%)	19.2%	31.7%	15.8%	28.3%	18.3%	35.8%	35.8%	16.7%	34.2%	34.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	3.6	4.4	4.4	3.6	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	4.6	5.4	5.4	4.6	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	9.9	13.9	9.1	13.2	11.2	38.9	38.9	9.5	37.2	37.2
Actuated g/C Ratio	0.11	0.15	0.10	0.15	0.12	0.43	0.43	0.11	0.41	0.41
v/c Ratio	0.54	0.48	0.50	0.59	0.60	0.71	0.09	0.52	0.55	0.15
Control Delay	51.5	20.3	51.6	22.0	52.0	25.2	1.5	46.0	23.6	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	20.3	51.6	22.0	52.0	25.2	1.5	46.0	23.6	5.7
LOS	D	C	D	C	D	C	A	D	C	A
Approach Delay		27.6		27.2		26.1			24.8	
Approach LOS		C		C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 89.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 25.9

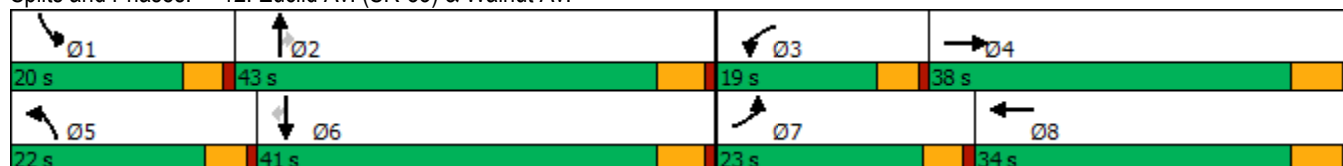
Intersection LOS: C

Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Euclid Av. (SR-83) & Walnut Av.



HCM 6th Signalized Intersection Summary
12: Euclid Av. (SR-83) & Walnut Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	151	149	79	184	183	118	1620	63	163	1190	102
Future Volume (veh/h)	93	151	149	79	184	183	118	1620	63	163	1190	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	99	161	121	84	196	160	126	1723	51	173	1266	70
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	332	233	106	296	227	157	2533	706	248	2448	683
Arrive On Green	0.07	0.16	0.16	0.06	0.15	0.15	0.09	0.45	0.45	0.08	0.44	0.44
Sat Flow, veh/h	1688	2041	1433	1688	1951	1496	1688	5611	1563	3188	5611	1565
Grp Volume(v), veh/h	99	147	135	84	187	169	126	1723	51	173	1266	70
Grp Sat Flow(s),veh/h/ln	1688	1870	1603	1688	1870	1577	1688	1870	1563	1594	1870	1565
Q Serve(g_s), s	4.8	5.9	6.4	4.1	7.9	8.5	6.1	20.2	1.5	4.4	13.7	2.2
Cycle Q Clear(g_c), s	4.8	5.9	6.4	4.1	7.9	8.5	6.1	20.2	1.5	4.4	13.7	2.2
Prop In Lane	1.00		0.89	1.00		0.95	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	304	261	106	284	239	157	2533	706	248	2448	683
V/C Ratio(X)	0.79	0.48	0.52	0.79	0.66	0.71	0.80	0.68	0.07	0.70	0.52	0.10
Avail Cap(c_a), veh/h	373	723	620	292	633	534	353	2533	706	589	2448	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	31.7	31.9	38.5	33.3	33.6	37.0	18.1	13.0	37.5	17.1	13.9
Incr Delay (d2), s/veh	4.2	1.2	1.6	4.8	2.6	3.8	3.6	1.5	0.2	1.3	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.6	2.5	1.7	3.6	3.3	2.6	8.1	0.5	1.7	5.5	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	32.9	33.5	43.3	35.9	37.3	40.6	19.6	13.1	38.8	17.9	14.2
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	B	B
Approach Vol, veh/h	381			440			1900			1509		
Approach Delay, s/veh	35.5			37.9			20.8			20.1		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	43.0	9.9	19.4	12.3	41.7	10.8	18.4				
Change Period (Y+Rc), s	4.6	5.4	4.6	5.8	4.6	5.4	4.6	5.8				
Max Green Setting (Gmax), s	15.4	37.6	14.4	32.2	17.4	35.6	18.4	28.2				
Max Q Clear Time (g_c+I1), s	6.4	22.2	6.1	8.4	8.1	15.7	6.8	10.5				
Green Ext Time (p_c), s	0.2	10.3	0.0	1.5	0.1	8.9	0.1	1.8				
Intersection Summary												
HCM 6th Ctrl Delay	23.6											
HCM 6th LOS	C											

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	140	246	164	366	169	155	1313	174	164	957	150
Future Volume (vph)	140	246	164	366	169	155	1313	174	164	957	150
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2		1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	23.0	36.2	23.0	36.2	36.2	16.0	35.6	35.6	25.2	44.8	23.0
Total Split (%)	19.2%	30.2%	19.2%	30.2%	30.2%	13.3%	29.7%	29.7%	21.0%	37.3%	19.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.4	24.7	14.6	25.8	25.8	11.6	32.7	32.7	15.0	35.0	50.3
Actuated g/C Ratio	0.12	0.23	0.14	0.24	0.24	0.11	0.30	0.30	0.14	0.32	0.47
v/c Ratio	0.69	0.83	0.75	0.44	0.34	0.89	1.26	0.31	0.73	0.86	0.19
Control Delay	64.6	56.1	67.1	37.3	7.3	93.8	158.9	9.9	64.0	43.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.6	56.1	67.1	37.3	7.3	93.8	158.9	9.9	64.0	43.8	3.5
LOS	E	E	E	D	A	F	F	A	E	D	A
Approach Delay		58.6		37.0			137.0			41.6	
Approach LOS		E		D			F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.7

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 81.1

Intersection LOS: F

Intersection Capacity Utilization 91.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
25.2 s	35.6 s	23 s	36.2 s
			
16 s	44.8 s	23 s	36.2 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	246	90	164	366	169	155	1313	174	164	957	150
Future Volume (veh/h)	140	246	90	164	366	169	155	1313	174	164	957	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	144	254	63	169	377	113	160	1354	128	169	987	106
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	296	73	201	785	346	190	1166	520	201	1190	688
Arrive On Green	0.10	0.21	0.21	0.12	0.22	0.22	0.11	0.33	0.33	0.12	0.33	0.33
Sat Flow, veh/h	1688	1441	357	1688	3554	1564	1688	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	144	0	317	169	377	113	160	1354	128	169	987	106
Grp Sat Flow(s),veh/h/ln	1688	0	1799	1688	1777	1564	1688	1777	1585	1688	1777	1564
Q Serve(g_s), s	7.9	0.0	16.0	9.2	8.7	5.7	8.8	30.9	5.6	9.2	24.1	3.8
Cycle Q Clear(g_c), s	7.9	0.0	16.0	9.2	8.7	5.7	8.8	30.9	5.6	9.2	24.1	3.8
Prop In Lane	1.00		0.20	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	0	370	201	785	346	190	1166	520	201	1190	688
V/C Ratio(X)	0.82	0.00	0.86	0.84	0.48	0.33	0.84	1.16	0.25	0.84	0.83	0.15
Avail Cap(c_a), veh/h	329	0	580	329	1146	505	204	1166	520	369	1444	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	0.0	36.1	40.6	32.0	30.8	41.0	31.7	23.1	40.6	28.9	16.0
Incr Delay (d2), s/veh	3.7	0.0	7.6	4.6	0.5	0.5	23.0	82.5	0.2	3.6	3.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	7.4	3.9	3.6	2.1	4.6	25.1	2.0	3.9	10.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.1	0.0	43.7	45.3	32.4	31.4	64.0	114.1	23.4	44.2	32.4	16.1
LnGrp LOS	D	A	D	D	C	C	E	F	C	D	C	B
Approach Vol, veh/h		461			659			1642			1262	
Approach Delay, s/veh		44.1			35.6			102.2			32.6	
Approach LOS		D			D			F			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.8	37.4	15.8	25.2	15.2	38.1	14.4	26.6				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.6	* 30	18.4	30.4	11.4	38.3	18.4	30.4				
Max Q Clear Time (g_c+I1), s	11.2	32.9	11.2	18.0	10.8	26.1	9.9	10.7				
Green Ext Time (p_c), s	0.1	0.0	0.1	1.3	0.0	5.4	0.1	2.5				

Intersection Summary

HCM 6th Ctrl Delay 62.8

HCM 6th LOS E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	80	72	47	132	102	46	1491	133	57	1058	76
Future Volume (vph)	80	72	47	132	102	46	1491	133	57	1058	76
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	49.0	49.0	49.0	49.0	49.0	13.0	52.0	52.0	19.0	58.0	58.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	10.8%	43.3%	43.3%	15.8%	48.3%	48.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8		5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	24.9	24.9	24.9		24.9	7.0	52.6	52.6	8.0	52.4	52.4
Actuated g/C Ratio	0.25	0.25	0.25		0.25	0.07	0.53	0.53	0.08	0.53	0.53
v/c Ratio	0.37	0.16	0.10		0.81	0.41	0.83	0.16	0.44	0.59	0.09
Control Delay	35.6	29.6	0.4		50.3	58.3	27.2	5.8	56.4	19.9	4.2
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.6	29.6	0.4		50.3	58.3	27.2	5.8	56.4	19.9	4.2
LOS	D	C	A		D	E	C	A	E	B	A
Approach Delay		25.1			50.3		26.3			20.6	
Approach LOS		C			D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 99

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 26.4

Intersection LOS: C

Intersection Capacity Utilization 81.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
19 s	52 s	49 s
		
Ø5	Ø6	Ø8
13 s	58 s	49 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	72	47	132	102	61	46	1491	133	57	1058	76
Future Volume (veh/h)	80	72	47	132	102	61	46	1491	133	57	1058	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	83	75	30	138	106	54	48	1553	113	59	1102	68
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	294	455	386	203	134	62	64	1900	848	75	1923	846
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.04	0.53	0.53	0.04	0.54	0.54
Sat Flow, veh/h	1162	1870	1585	606	550	256	1688	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	83	75	30	298	0	0	48	1553	113	59	1102	68
Grp Sat Flow(s),veh/h/ln	1162	1870	1585	1412	0	0	1688	1777	1585	1688	1777	1564
Q Serve(g_s), s	0.0	3.0	1.4	16.6	0.0	0.0	2.7	34.4	3.4	3.3	19.6	2.0
Cycle Q Clear(g_c), s	7.8	3.0	1.4	19.6	0.0	0.0	2.7	34.4	3.4	3.3	19.6	2.0
Prop In Lane	1.00		1.00	0.46		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	455	386	399	0	0	64	1900	848	75	1923	846
V/C Ratio(X)	0.28	0.16	0.08	0.75	0.00	0.00	0.75	0.82	0.13	0.79	0.57	0.08
Avail Cap(c_a), veh/h	539	849	720	715	0	0	149	1900	848	255	1923	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	28.4	27.8	35.2	0.0	0.0	45.3	18.3	11.1	45.0	14.5	10.5
Incr Delay (d2), s/veh	0.5	0.2	0.1	2.8	0.0	0.0	6.5	4.0	0.3	6.9	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.3	0.5	6.6	0.0	0.0	1.2	12.5	1.1	1.4	6.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	28.5	27.8	38.0	0.0	0.0	51.9	22.3	11.4	51.9	15.8	10.7
LnGrp LOS	C	C	C	D	A	A	D	C	B	D	B	B
Approach Vol, veh/h	188				298				1714			
Approach Delay, s/veh	29.4				38.0				22.4			
Approach LOS	C				D				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	57.4		29.0	8.2	58.0		29.0				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	14.4	* 47		43.2	8.4	51.5		43.2				
Max Q Clear Time (g_c+I1), s	5.3	36.4		9.8	4.7	21.6		21.6				
Green Ext Time (p_c), s	0.0	7.0		0.7	0.0	8.2		1.6				

Intersection Summary

HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	9	0	1670	1180	10
Future Vol, veh/h	0	9	0	1670	1180	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	0	1815	1283	11
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	642	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	417	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	417	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	13.8	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	417	-	-		
HCM Lane V/C Ratio	-	0.023	-	-		
HCM Control Delay (s)	-	13.8	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.1	-	-		

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↗↗	↗↗	↗
Traffic Vol, veh/h	0	93	0	1670	1065	125
Future Vol, veh/h	0	93	0	1670	1065	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	101	0	1815	1158	136
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	579	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	458	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	458	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	15.1	0	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	458	-	-		
HCM Lane V/C Ratio	-	0.221	-	-		
HCM Control Delay (s)	-	15.1	-	-		
HCM Lane LOS	-	C	-	-		
HCM 95th %tile Q(veh)	-	0.8	-	-		

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	397	96	107	19	68	264	1224	13	48	965	144
Future Volume (vph)	397	96	107	19	68	264	1224	13	48	965	144
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	25.0	54.5	54.5	13.5	43.0	14.0	42.0	42.0	10.0	38.0	38.0
Total Split (%)	20.8%	45.4%	45.4%	11.3%	35.8%	11.7%	35.0%	35.0%	8.3%	31.7%	31.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	21.7	33.4	33.4	10.1	13.1	10.6	38.7	38.7	6.2	32.4	32.4
Actuated g/C Ratio	0.22	0.34	0.34	0.10	0.13	0.11	0.39	0.39	0.06	0.33	0.33
v/c Ratio	1.12	0.16	0.18	0.12	0.44	1.52	0.91	0.02	0.48	0.86	0.24
Control Delay	119.0	24.4	4.4	46.1	34.0	292.4	41.4	0.1	62.8	40.9	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	119.0	24.4	4.4	46.1	34.0	292.4	41.4	0.1	62.8	40.9	5.0
LOS	F	C	A	D	C	F	D	A	E	D	A
Approach Delay		83.5			35.8		85.2			37.3	
Approach LOS		F			D		F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.52

Intersection Signal Delay: 66.7

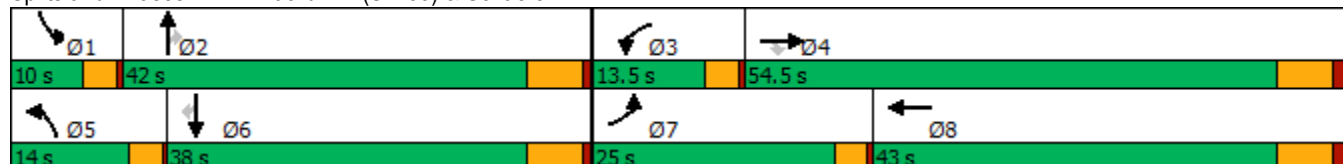
Intersection LOS: E

Intersection Capacity Utilization 86.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	397	96	107	19	68	40	264	1224	13	48	965	144
Future Volume (veh/h)	397	96	107	19	68	40	264	1224	13	48	965	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	414	100	59	20	71	20	275	1275	13	50	1005	111
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	412	530	448	74	117	33	201	1442	643	68	1161	511
Arrive On Green	0.24	0.28	0.28	0.04	0.08	0.08	0.12	0.41	0.41	0.04	0.33	0.33
Sat Flow, veh/h	1688	1870	1582	1688	1404	395	1688	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	414	100	59	20	0	91	275	1275	13	50	1005	111
Grp Sat Flow(s),veh/h/ln	1688	1870	1582	1688	0	1799	1688	1777	1585	1688	1777	1564
Q Serve(g_s), s	21.5	3.6	2.4	1.0	0.0	4.3	10.5	29.3	0.4	2.6	23.4	4.5
Cycle Q Clear(g_c), s	21.5	3.6	2.4	1.0	0.0	4.3	10.5	29.3	0.4	2.6	23.4	4.5
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	530	448	74	0	150	201	1442	643	68	1161	511
V/C Ratio(X)	1.01	0.19	0.13	0.27	0.00	0.61	1.37	0.88	0.02	0.74	0.87	0.22
Avail Cap(c_a), veh/h	412	1008	852	191	0	735	201	1451	647	124	1290	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	23.9	23.5	40.8	0.0	39.0	38.8	24.3	15.7	41.9	27.9	21.5
Incr Delay (d2), s/veh	45.8	0.1	0.1	0.7	0.0	2.9	194.0	6.8	0.0	5.8	5.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	1.5	0.9	0.4	0.0	1.9	14.8	11.8	0.1	1.1	9.7	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	24.0	23.6	41.5	0.0	41.9	232.8	31.1	15.7	47.6	33.8	21.7
LnGrp LOS	F	C	C	D	A	D	F	C	B	D	C	C
Approach Vol, veh/h		573			111			1563			1166	
Approach Delay, s/veh		63.8			41.9			66.5			33.2	
Approach LOS		E			D			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	41.8	7.4	32.0	14.0	34.8	25.0	14.3				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	6.5	36.0	10.0	47.5	10.5	32.0	21.5	36.0				
Max Q Clear Time (g_c+I1), s	4.6	31.3	3.0	5.6	12.5	25.4	23.5	6.3				
Green Ext Time (p_c), s	0.0	3.0	0.0	0.5	0.0	3.4	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			53.9									
HCM 6th LOS			D									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	128	225	115	64	398	172	1144	44	154	873	105
Future Volume (vph)	128	225	115	64	398	172	1144	44	154	873	105
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.0	46.0	46.0	49.0	49.0	8.5	29.0	29.0	8.5	40.0	40.0
Total Split (s)	55.0	55.0	55.0	55.0	55.0	14.0	47.0	47.0	18.0	51.0	51.0
Total Split (%)	45.8%	45.8%	45.8%	45.8%	45.8%	11.7%	39.2%	39.2%	15.0%	42.5%	42.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	48.0	48.0	48.0	48.0	48.0	9.8	41.0	41.0	13.5	44.7	44.7
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.08	0.34	0.34	0.11	0.38	0.38
v/c Ratio	1.36	0.31	0.17	0.16	0.89	0.71	0.97	0.07	0.84	0.68	0.17
Control Delay	246.9	25.9	4.6	24.5	47.6	68.9	57.8	0.2	85.9	34.3	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	246.9	25.9	4.6	24.5	47.6	68.9	57.8	0.2	85.9	34.3	6.6
LOS	F	C	A	C	D	E	E	A	F	C	A
Approach Delay		81.1			45.5		57.4			38.8	
Approach LOS		F			D		E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.36

Intersection Signal Delay: 52.4

Intersection LOS: D

Intersection Capacity Utilization 102.8%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

		
Ø1	Ø2	Ø4
18 s	47 s	55 s
		
Ø5	Ø6	Ø8
14 s	51 s	55 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	225	115	64	398	225	172	1144	44	154	873	105
Future Volume (veh/h)	128	225	115	64	398	225	172	1144	44	154	873	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	132	232	85	66	410	224	177	1179	31	159	900	70
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	759	643	385	461	252	227	1227	547	184	1354	596
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.07	0.35	0.35	0.11	0.38	0.38
Sat Flow, veh/h	752	1870	1584	1006	1137	621	3092	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	132	232	85	66	0	634	177	1179	31	159	900	70
Grp Sat Flow(s),veh/h/ln	752	1870	1584	1006	0	1758	1546	1777	1585	1688	1777	1564
Q Serve(g_s), s	8.4	9.9	4.0	5.6	0.0	39.6	6.7	38.4	1.5	11.0	24.8	3.4
Cycle Q Clear(g_c), s	48.0	9.9	4.0	15.6	0.0	39.6	6.7	38.4	1.5	11.0	24.8	3.4
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	759	643	385	0	714	227	1227	547	184	1354	596
V/C Ratio(X)	1.16	0.31	0.13	0.17	0.00	0.89	0.78	0.96	0.06	0.86	0.66	0.12
Avail Cap(c_a), veh/h	114	759	643	385	0	714	275	1232	550	207	1354	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.2	23.8	22.1	29.1	0.0	32.6	53.8	37.9	25.8	51.8	30.3	23.7
Incr Delay (d2), s/veh	132.5	0.2	0.1	0.2	0.0	13.1	8.9	17.0	0.0	25.0	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	4.3	1.4	1.3	0.0	18.4	2.8	18.3	0.6	5.7	10.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	189.7	24.0	22.1	29.3	0.0	45.8	62.8	55.0	25.9	76.8	31.6	23.8
LnGrp LOS	F	C	C	C	A	D	E	D	C	E	C	C
Approach Vol, veh/h	449				700				1387			
Approach Delay, s/veh	72.4				44.2				55.3			
Approach LOS	E				D				E			
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	16.4	46.8	55.0		12.2	51.1	55.0					
Change Period (Y+Rc), s	3.5	6.0	7.0		3.5	6.0	7.0					
Max Green Setting (Gmax), s	14.5	41.0	48.0		10.5	45.0	48.0					
Max Q Clear Time (g_c+I1), s	13.0	40.4	50.0		8.7	26.8	41.6					
Green Ext Time (p_c), s	0.0	0.4	0.0		0.1	5.4	2.3					
Intersection Summary												
HCM 6th Ctrl Delay	49.8											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	42	56	127	16	74	122	1114	8	90	905	35
Future Volume (vph)	42	56	127	16	74	122	1114	8	90	905	35
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	48.0	48.0	48.0	48.0	48.0	23.0	60.0	60.0	12.0	49.0	49.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	19.2%	50.0%	50.0%	10.0%	40.8%	40.8%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	16.7	16.7	16.7	16.7	16.7	11.6	32.2	32.2	8.9	29.5	29.5
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.16	0.44	0.44	0.12	0.40	0.40
v/c Ratio	0.35	0.14	0.29	0.06	0.67	0.48	0.75	0.01	0.47	0.67	0.05
Control Delay	33.9	24.3	6.6	24.1	21.2	39.9	21.6	0.0	46.3	22.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	24.3	6.6	24.1	21.2	39.9	21.6	0.0	46.3	22.8	0.1
LOS	C	C	A	C	C	D	C	A	D	C	A
Approach Delay		16.1			21.4		23.3			24.1	
Approach LOS		B			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 73.2

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 22.8

Intersection LOS: C

Intersection Capacity Utilization 74.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
12 s	60 s	48 s
		
Ø5	Ø6	Ø8
23 s	49 s	48 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	56	127	16	74	238	122	1114	8	90	905	35
Future Volume (veh/h)	42	56	127	16	74	238	122	1114	8	90	905	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	44	59	53	17	78	239	128	1173	8	95	953	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	483	409	399	105	321	163	1590	709	120	1498	659
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.10	0.45	0.45	0.07	0.42	0.42
Sat Flow, veh/h	1007	1870	1585	1213	405	1242	1688	3554	1585	1688	3554	1564
Grp Volume(v), veh/h	44	59	53	17	0	317	128	1173	8	95	953	22
Grp Sat Flow(s),veh/h/ln	1007	1870	1585	1213	0	1647	1688	1777	1585	1688	1777	1564
Q Serve(g_s), s	2.6	1.5	1.6	0.7	0.0	11.1	4.6	17.1	0.2	3.5	13.3	0.5
Cycle Q Clear(g_c), s	13.7	1.5	1.6	2.2	0.0	11.1	4.6	17.1	0.2	3.5	13.3	0.5
Prop In Lane	1.00		1.00	1.00		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	483	409	399	0	425	163	1590	709	120	1498	659
V/C Ratio(X)	0.22	0.12	0.13	0.04	0.00	0.75	0.78	0.74	0.01	0.79	0.64	0.03
Avail Cap(c_a), veh/h	630	1289	1092	922	0	1135	525	3078	1373	229	2454	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	17.8	17.8	18.6	0.0	21.4	27.7	14.3	9.6	28.7	14.3	10.6
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.0	0.0	2.0	6.0	0.7	0.0	8.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.6	0.5	0.2	0.0	3.9	1.9	5.1	0.0	1.5	4.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	17.9	17.9	18.7	0.0	23.3	33.7	15.0	9.6	37.1	14.8	10.7
LnGrp LOS	C	B	B	B	A	C	C	B	A	D	B	B
Approach Vol, veh/h		156			334			1309			1070	
Approach Delay, s/veh		20.8			23.1			16.8			16.7	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	33.7		21.0	9.6	32.1		21.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	8.5	54.3		43.2	19.5	43.3		43.2				
Max Q Clear Time (g_c+I1), s	5.5	19.1		15.7	6.6	15.3		13.1				
Green Ext Time (p_c), s	0.0	9.0		0.5	0.2	6.5		1.6				
Intersection Summary												
HCM 6th Ctrl Delay				17.7								
HCM 6th LOS				B								

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	150	7	4	113	0	8	0	3	0	0	0
Future Vol, veh/h	0	150	7	4	113	0	8	0	3	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	163	8	4	123	0	9	0	3	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	123	0	0	171	0	0	298	298	167	300	302	123
Stage 1	-	-	-	-	-	-	167	167	-	131	131	-
Stage 2	-	-	-	-	-	-	131	131	-	169	171	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1464	-	-	1406	-	-	654	614	877	652	611	928
Stage 1	-	-	-	-	-	-	835	760	-	873	788	-
Stage 2	-	-	-	-	-	-	873	788	-	833	757	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1464	-	-	1406	-	-	653	612	877	648	609	928
Mov Cap-2 Maneuver	-	-	-	-	-	-	653	612	-	648	609	-
Stage 1	-	-	-	-	-	-	835	760	-	873	786	-
Stage 2	-	-	-	-	-	-	870	786	-	830	757	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			10.2			0		
HCM LOS							B			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	702	1464	-	-	1406	-	-	-				
HCM Lane V/C Ratio	0.017	-	-	-	0.003	-	-	-				
HCM Control Delay (s)	10.2	0	-	-	7.6	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	-				

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APPENDIX 7.3: HORIZON YEAR (2045) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **HY NP Conditions - Weekday AM Peak Hour**

Major Street Name = **Eucalyptus Av.**

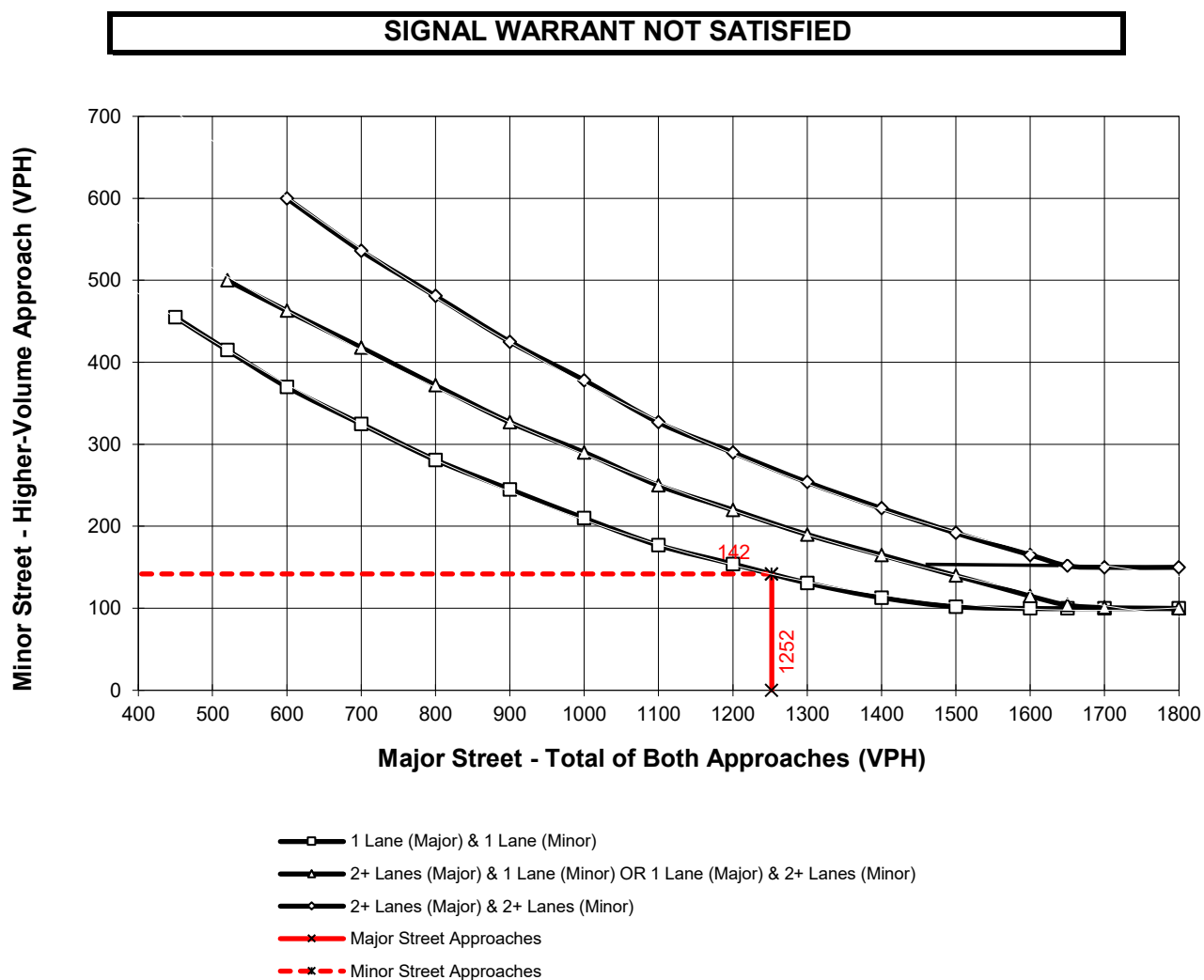
Total of Both Approaches (VPH) = **1252**

Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Fern Av.**

High Volume Approach (VPH) = **142**

Number of Approach Lanes On Minor Street = **2**



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

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	CALC	CP	HY NP	DATE	10/23/23	
Jurisdiction: <u>City of Chino</u>				CHK		DATE		10/23/23	
Major Street: <u>Schaefer Av.</u>				Critical Approach Speed (Major)				45 mph	
Minor Street: <u>Sultana Av.</u>				Critical Approach Speed (Minor)				25 mph	
Major Street Approach Lanes =				1		lane		Minor Street Approach Lanes =	
				1		lane			
Major Street Future ADT =				6,986		vpd		Minor Street Future ADT =	
				159		vpd			
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);								☒ or ☐	RURAL (R)
In built up area of isolated community of < 10,000 population								☐	

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>		<u>RURAL</u>		Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume		XX		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>						
XX							
Number of lanes for moving traffic on each approach							
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1	6,986	1	159	8,000	5,600 *	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680		
2 +	2 +	9,600	6,720	3,200	2,240		
1	2 +	8,000	5,600	3,200	2,240		
CONDITION B - Interruption of Continuous Traffic				Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>						
XX							
Number of lanes for moving traffic on each approach							
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1	6,986	1	159	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850		
2 +	2 +	14,400	10,080	1,600	1,120		
1	2 +	12,000	8,400	1,600	1,120		
Combination of CONDITIONS A + B				2 CONDITIONS 80%		2 CONDITIONS 80%	
<u>Satisfied</u>	<u>Not Satisfied</u>						
XX							
No one condition satisfied, but following conditions fulfilled 80% of more		<u>A</u>	<u>B</u>				
		9%	19%				

APPENDIX 7.4: HORIZON YEAR (2045) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

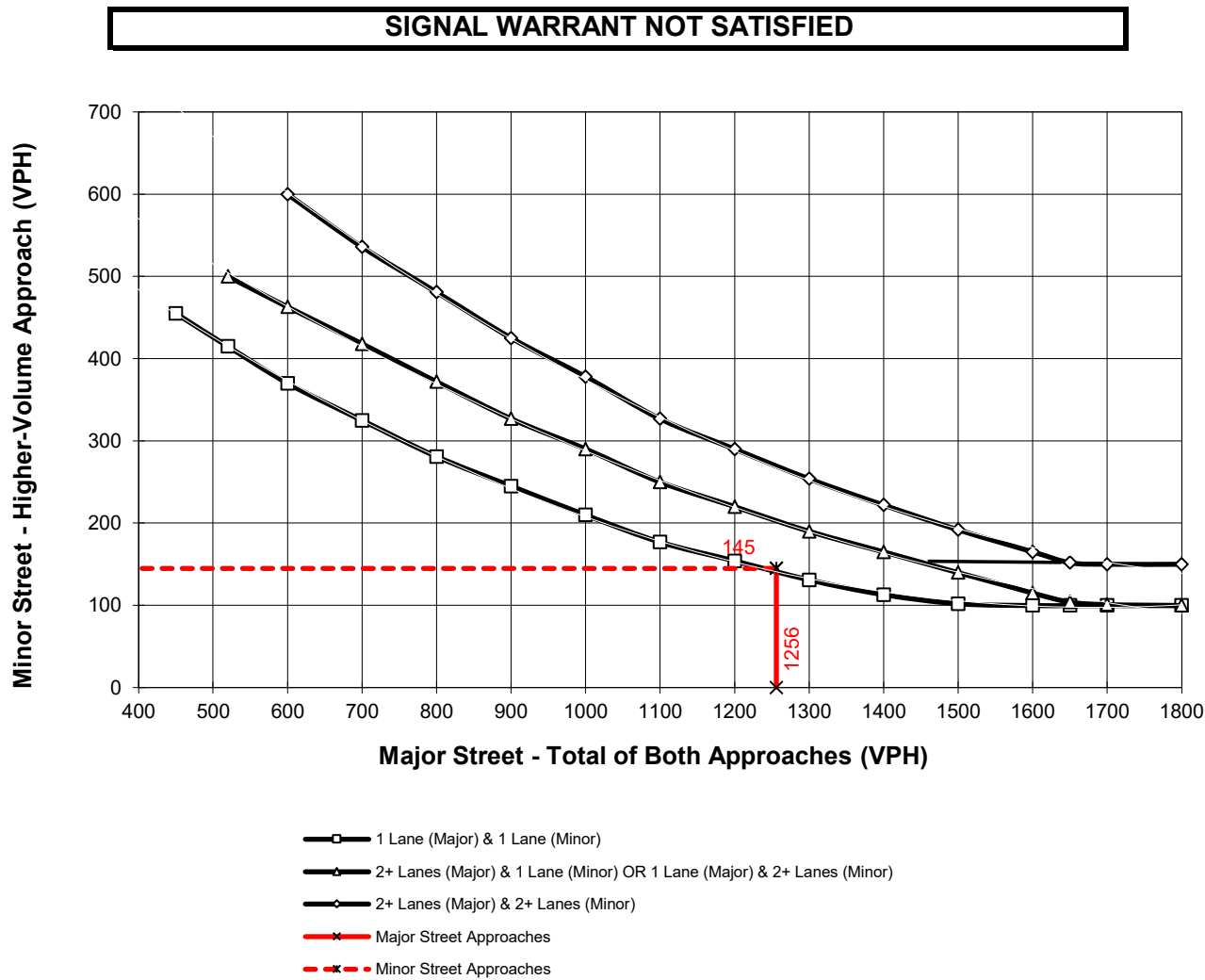
Traffic Conditions = **HY WP Conditions - Weekday AM Peak Hour**

Major Street Name = **Eucalyptus Av.**

Total of Both Approaches (VPH) = **1256**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Fern Av.**

High Volume Approach (VPH) = **145**
Number of Approach Lanes On Minor Street = **2**



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

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	CALC	CP	HY WP	DATE	10/23/23
Jurisdiction: <u>City of Chino</u>				CHK <u>CP</u>		DATE		10/23/23
Major Street: <u>Schaefer Av.</u>				Critical Approach Speed (Major)				45 mph
Minor Street: <u>Sultana Av.</u>				Critical Approach Speed (Minor)				25 mph
Major Street Approach Lanes = <u>1</u> lane				Minor Street Approach Lanes		<u>1</u> lane		
Major Street Future ADT = <u>7,210</u> vpd				Minor Street Future ADT =		<u>159</u> vpd		
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						☒		
						or		
In built up area of isolated community of < 10,000 population						☐		RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>		<u>RURAL</u>		Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume		XX		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>		<u>Not Satisfied</u>	XX				
Number of lanes for moving traffic on each approach		Number of lanes for moving traffic on each approach		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
<u>Major Street</u>		<u>Minor Street</u>					
<u>1 7,210</u>		<u>1 159</u>		8,000	5,600 *	2,400	1,680
2 +		1		9,600	6,720	2,400	1,680
2 +		2 +		9,600	6,720	3,200	2,240
1		2 +		8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		XX		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>		<u>Not Satisfied</u>					
Number of lanes for moving traffic on each approach		Number of lanes for moving traffic on each approach		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
<u>Major Street</u>		<u>Minor Street</u>					
<u>1 7,210</u>		<u>1 159</u>		12,000	8,400	1,200	850
2 +		1		14,400	10,080	1,200	850
2 +		2 +		14,400	10,080	1,600	1,120
1		2 +		12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		XX		2 CONDITIONS 80%		2 CONDITIONS 80%	
<u>Satisfied</u>		<u>Not Satisfied</u>					
No one condition satisfied, but following conditions fulfilled 80% of more							
		<u>A</u>	<u>B</u>				
		9%	19%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 7.5: OPENING YEAR CUMULATIVE (2045) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/23/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	348	340	313	548	1500	1355	503
v/c Ratio	0.91	0.92	0.80	1.06	0.62	1.08	0.63
Control Delay	73.7	73.8	50.5	94.6	12.4	87.9	12.7
Queue Delay	3.2	3.7	0.0	10.9	1.3	0.0	0.0
Total Delay	76.9	77.5	50.5	105.5	13.7	87.9	12.7
Queue Length 50th (ft)	272	265	191	~500	287	~617	82
Queue Length 95th (ft)	#442	#448	#329	m#524	m296	#756	203
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	406	391	412	519	2425	1253	793
Starvation Cap Reductn	0	0	0	14	659	0	0
Spillback Cap Reductn	20	19	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.91	0.76	1.09	0.85	1.08	0.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10/23/2023

11: Euclid Av. (SR-83) & SR-60 EB Ramps



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	436	965	1236	647	413	1222
v/c Ratio	0.94	2.02	1.02	0.77	0.89	0.54
Control Delay	73.2	491.4	70.9	17.2	62.2	13.9
Queue Delay	45.8	3.0	0.3	0.0	0.8	0.8
Total Delay	119.0	494.4	71.1	17.2	63.0	14.7
Queue Length 50th (ft)	348	~1191	~552	123	344	232
Queue Length 95th (ft)	#561	#1461	#729	311	m342	m230
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	462	477	1211	836	531	2256
Starvation Cap Reductn	0	0	0	0	19	654
Spillback Cap Reductn	131	127	1	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.32	2.76	1.02	0.77	0.81	0.76

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10: Euclid Av. (SR-83) & SR-60 WB Ramps

10/23/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	337	330	311	849	1455	1676	601
v/c Ratio	0.86	0.86	0.78	1.67	0.61	1.34	0.77
Control Delay	64.6	60.4	47.2	341.0	10.6	190.4	21.2
Queue Delay	0.8	0.9	0.0	0.0	1.0	0.0	0.0
Total Delay	65.4	61.3	47.2	341.0	11.6	190.4	21.2
Queue Length 50th (ft)	261	242	189	~1003	224	~890	179
Queue Length 95th (ft)	366	356	291	m#967	m208	#1030	339
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	462	447	460	508	2402	1253	785
Starvation Cap Reductn	0	0	0	0	624	0	0
Spillback Cap Reductn	23	22	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.78	0.68	1.67	0.82	1.34	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	321	553	1605	641	398	1602
v/c Ratio	0.76	1.35	1.18	0.77	0.91	0.68
Control Delay	55.0	206.1	124.8	19.7	61.6	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	3.9
Total Delay	55.0	206.1	124.8	19.7	61.6	18.9
Queue Length 50th (ft)	244	~566	~817	180	332	268
Queue Length 95th (ft)	#380	#801	#956	355	m291	m223
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	420	410	1356	832	472	2344
Starvation Cap Reductn	0	0	0	0	0	643
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	1.35	1.18	0.77	0.84	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	281	269	256	828	918	951	491
v/c Ratio	0.87	0.78	0.57	1.35	0.36	0.80	0.59
Control Delay	72.2	50.1	16.8	203.5	7.9	42.0	7.0
Queue Delay	0.8	0.5	0.0	1.0	0.4	0.0	0.0
Total Delay	73.1	50.6	16.8	204.5	8.3	42.0	7.0
Queue Length 50th (ft)	217	162	42	~915	138	344	19
Queue Length 95th (ft)	#351	271	129	m#857	m129	426	109
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	364	379	477	612	2546	1223	844
Starvation Cap Reductn	0	0	0	77	1002	0	0
Spillback Cap Reductn	11	12	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.73	0.54	1.55	0.59	0.78	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10/23/2023

11: Euclid Av. (SR-83) & SR-60 EB Ramps



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	323	623	1422	623	388	966
v/c Ratio	0.72	1.21	1.10	0.77	0.88	0.42
Control Delay	50.4	141.4	95.3	19.5	76.2	10.0
Queue Delay	60.7	5.9	0.7	0.0	0.4	0.3
Total Delay	111.1	147.3	96.0	19.5	76.6	10.2
Queue Length 50th (ft)	240	~526	~673	155	323	137
Queue Length 95th (ft)	353	#767	#863	#348	m417	193
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	448	515	1288	809	516	2285
Starvation Cap Reductn	0	0	0	0	12	614
Spillback Cap Reductn	224	228	195	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.44	2.17	1.30	0.77	0.77	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 7.6: HORIZON YEAR (2045) WITH PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Queues
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	356	347	322	571	1519	1376	503
v/c Ratio	0.92	0.93	0.81	1.11	0.63	1.10	0.64
Control Delay	74.7	75.5	51.7	112.0	12.9	93.7	13.1
Queue Delay	4.0	4.8	0.0	0.2	1.6	0.0	0.0
Total Delay	78.8	80.3	51.7	112.3	14.5	93.7	13.1
Queue Length 50th (ft)	281	275	200	~538	287	~635	86
Queue Length 95th (ft)	#457	#468	#348	m#543	m291	#773	207
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	406	390	412	514	2413	1253	789
Starvation Cap Reductn	0	0	0	14	665	0	0
Spillback Cap Reductn	20	19	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.94	0.78	1.14	0.87	1.10	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

11: Euclid Av. (SR-83) & SR-60 EB Ramps



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	436	988	1277	673	413	1267
v/c Ratio	0.94	2.09	1.05	0.80	0.89	0.56
Control Delay	73.2	522.4	80.4	19.3	61.9	14.3
Queue Delay	46.5	3.6	3.4	0.0	0.8	0.9
Total Delay	119.7	526.0	83.8	19.3	62.7	15.2
Queue Length 50th (ft)	348	~1242	~586	147	344	244
Queue Length 95th (ft)	#561	#1510	#764	#397	m337	m238
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	462	472	1211	838	531	2256
Starvation Cap Reductn	0	0	0	0	19	647
Spillback Cap Reductn	151	144	10	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.40	3.01	1.06	0.80	0.81	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10/23/2023

10: Euclid Av. (SR-83) & SR-60 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	347	338	316	866	1469	1694	601
v/c Ratio	0.87	0.86	0.77	1.74	0.62	1.35	0.77
Control Delay	64.7	61.0	46.7	369.1	10.9	196.5	21.6
Queue Delay	1.0	1.0	0.0	0.0	1.0	0.0	0.0
Total Delay	65.7	62.0	46.7	369.1	11.9	196.5	21.6
Queue Length 50th (ft)	266	248	190	~1050	226	~905	183
Queue Length 95th (ft)	#381	#389	297	m#970	m206	#1045	343
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	462	446	460	498	2383	1253	782
Starvation Cap Reductn	0	0	0	0	598	0	0
Spillback Cap Reductn	23	21	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.80	0.69	1.74	0.82	1.35	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

10/23/2023

11: Euclid Av. (SR-83) & SR-60 EB Ramps



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	321	573	1637	661	398	1644
v/c Ratio	0.76	1.40	1.21	0.79	0.91	0.70
Control Delay	55.0	229.1	134.3	21.1	61.2	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	5.6
Total Delay	55.0	229.1	134.3	21.1	61.2	21.2
Queue Length 50th (ft)	244	~605	~844	198	332	279
Queue Length 95th (ft)	#380	#841	#984	384	m291	m231
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	420	408	1356	834	472	2344
Starvation Cap Reductn	0	0	0	0	0	638
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	1.40	1.21	0.79	0.84	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	291	279	265	854	942	976	491
v/c Ratio	0.88	0.82	0.60	1.42	0.37	0.82	0.59
Control Delay	74.0	56.6	19.4	231.5	8.1	42.6	7.1
Queue Delay	1.1	0.7	0.0	1.0	0.4	0.0	0.0
Total Delay	75.0	57.3	19.4	232.5	8.5	42.6	7.1
Queue Length 50th (ft)	226	183	54	~964	141	356	20
Queue Length 95th (ft)	#371	#318	148	m#857	m127	440	110
Internal Link Dist (ft)		1414			410	1540	
Turn Bay Length (ft)	360		360	285			
Base Capacity (vph)	364	370	470	602	2534	1223	843
Starvation Cap Reductn	0	0	0	73	995	0	0
Spillback Cap Reductn	11	11	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.78	0.56	1.61	0.61	0.80	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

11: Euclid Av. (SR-83) & SR-60 EB Ramps



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	323	651	1473	652	388	1021
v/c Ratio	0.72	1.30	1.14	0.80	0.88	0.45
Control Delay	50.4	177.4	110.2	21.9	74.9	10.6
Queue Delay	60.7	6.1	0.7	0.0	0.4	0.3
Total Delay	111.1	183.6	111.0	21.9	75.2	10.9
Queue Length 50th (ft)	240	~595	~716	182	322	150
Queue Length 95th (ft)	353	#840	#907	#434	m406	214
Internal Link Dist (ft)		1308	1081			410
Turn Bay Length (ft)	900					
Base Capacity (vph)	448	502	1288	811	516	2285
Starvation Cap Reductn	0	0	0	0	12	603
Spillback Cap Reductn	224	225	210	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.44	2.35	1.37	0.80	0.77	0.61

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 7.7: HORIZON YEAR(2045) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

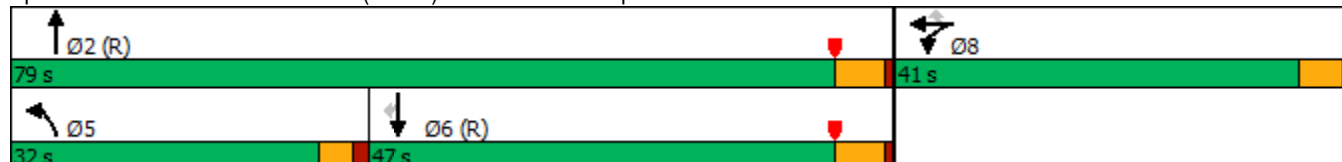
10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	563	3	405	532	1455	1314	488
Future Volume (vph)	563	3	405	532	1455	1314	488
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	41.0	41.0	41.0	32.0	79.0	47.0	47.0
Total Split (%)	34.2%	34.2%	34.2%	26.7%	65.8%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	29.6	29.6	29.6	23.1	79.9	52.3	52.3
Actuated g/C Ratio	0.25	0.25	0.25	0.19	0.67	0.44	0.44
v/c Ratio	0.84	0.85	0.75	0.83	0.64	0.61	0.52
Control Delay	60.5	59.9	43.7	63.6	10.3	29.2	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	60.5	59.9	43.7	63.6	10.6	29.2	4.5
LOS	E	E	D	E	B	C	A
Approach Delay		55.0			24.8	22.5	
Approach LOS		E			C	C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 30.1
Intersection Capacity Utilization 84.7%
Analysis Period (min) 15
Intersection LOS: C
ICU Level of Service E

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	563	3	405	532	1455	0	0	1314	488
Future Volume (veh/h)	0	0	0	563	3	405	532	1455	0	0	1314	488
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				658	0	165	548	1500	0	0	1355	347
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				739	0	329	602	2505	0	0	2519	782
Arrive On Green				0.21	0.00	0.21	0.35	1.00	0.00	0.00	0.49	0.49
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				658	0	165	548	1500	0	0	1355	347
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1702	1585
Q Serve(g_s), s				21.5	0.0	11.0	18.2	0.0	0.0	0.0	22.0	17.0
Cycle Q Clear(g_c), s				21.5	0.0	11.0	18.2	0.0	0.0	0.0	22.0	17.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				739	0	329	602	2505	0	0	2519	782
V/C Ratio(X)				0.89	0.00	0.50	0.91	0.60	0.00	0.00	0.54	0.44
Avail Cap(c_a), veh/h				1069	0	476	792	2505	0	0	2519	782
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.47	0.47	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.2	0.0	42.1	38.2	0.0	0.0	0.0	21.0	19.7
Incr Delay (d2), s/veh				5.2	0.0	0.4	5.5	0.5	0.0	0.0	0.8	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.8	0.0	4.2	6.5	0.2	0.0	0.0	8.5	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.4	0.0	42.5	43.7	0.5	0.0	0.0	21.8	21.5
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					823			2048			1702	
Approach Delay, s/veh					49.6			12.1			21.7	
Approach LOS					D			B			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	90.1			25.4			64.7			29.9		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	73.5			27.5			41.5			36.0		
Max Q Clear Time (g_c+I1), s	2.0			20.2			24.0			23.5		
Green Ext Time (p_c), s	27.5			0.7			12.4			1.4		
Intersection Summary												
HCM 6th Ctrl Delay	22.4											
HCM 6th LOS	C											

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	470	0	889	1199	628	401	1185
Future Volume (vph)	470	0	889	1199	628	401	1185
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	46.0	46.0	46.0	55.0	55.0	19.0	74.0
Total Split (%)	38.3%	38.3%	38.3%	45.8%	45.8%	15.8%	61.7%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	39.1	39.1	39.1	51.0	51.0	15.5	70.4
Actuated g/C Ratio	0.33	0.33	0.33	0.42	0.42	0.13	0.59
v/c Ratio	0.80	0.95	0.90	0.82	0.66	0.93	0.59
Control Delay	48.6	63.1	54.2	36.6	7.8	89.0	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	48.6	63.1	54.2	36.6	7.8	89.0	13.3
LOS	D	E	D	D	A	F	B
Approach Delay		55.6		26.7			32.4
Approach LOS		E		C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 36.8

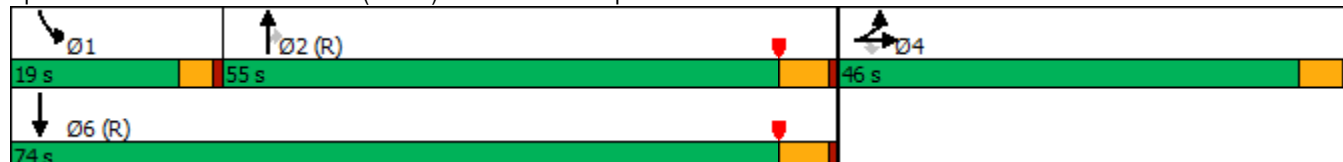
Intersection LOS: D

Intersection Capacity Utilization 84.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	0	889	0	0	0	0	1199	628	401	1185	0
Future Volume (veh/h)	470	0	889	0	0	0	0	1199	628	401	1185	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	323	0	985				0	1236	481	413	1222	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	585	0	1041				0	1513	665	432	2076	0
Arrive On Green	0.33	0.00	0.33				0.00	0.43	0.43	0.25	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	3647	1562	3456	3647	0
Grp Volume(v), veh/h	323	0	985				0	1236	481	413	1222	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1562	1728	1777	0
Q Serve(g_s), s	17.9	0.0	36.3				0.0	36.7	30.6	14.1	0.0	0.0
Cycle Q Clear(g_c), s	17.9	0.0	36.3				0.0	36.7	30.6	14.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	585	0	1041				0	1513	665	432	2076	0
V/C Ratio(X)	0.55	0.00	0.95				0.00	0.82	0.72	0.96	0.59	0.00
Avail Cap(c_a), veh/h	609	0	1083				0	1513	665	432	2076	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.71	0.71	0.70	0.70	0.00
Uniform Delay (d), s/veh	33.1	0.0	39.3				0.0	30.3	28.6	44.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	15.5				0.0	3.6	4.8	25.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	15.7				0.0	15.7	11.9	6.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.6	0.0	54.8				0.0	33.9	33.4	70.2	0.9	0.0
LnGrp LOS	C	A	D				A	C	C	E	A	A
Approach Vol, veh/h	1308						1717			1635		
Approach Delay, s/veh	49.6						33.8			18.4		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	19.0	56.6	44.4		75.6							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	15.0	49.5	41.0		68.5							
Max Q Clear Time (g_c+I1), s	16.1	38.7	38.3		2.0							
Green Ext Time (p_c), s	0.0	8.4	1.1		18.6							
Intersection Summary												
HCM 6th Ctrl Delay			32.8									
HCM 6th LOS			C									
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (vph)	202	777	167	200	538	101	246	1254	346	163	1493	159
Future Volume (vph)	202	777	167	200	538	101	246	1254	346	163	1493	159
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.7	35.5	35.5	21.1	31.9	31.9	15.5	49.7	49.7	13.7	47.9	24.7
Total Split (%)	20.6%	29.6%	29.6%	17.6%	26.6%	26.6%	12.9%	41.4%	41.4%	11.4%	39.9%	20.6%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (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
Lost Time Adjust (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
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	18.3	29.7	29.7	16.5	27.9	27.9	10.9	44.6	44.6	8.8	41.4	61.6
Actuated g/C Ratio	0.15	0.25	0.25	0.14	0.23	0.23	0.09	0.37	0.37	0.07	0.34	0.51
v/c Ratio	0.86	0.97	0.38	0.94	0.71	0.24	0.91	0.72	0.54	0.74	0.92	0.21
Control Delay	79.7	68.0	17.1	98.5	48.4	7.8	87.2	35.1	18.1	73.4	47.9	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.7	68.0	17.1	98.5	48.4	7.8	87.2	35.1	18.1	73.4	47.9	8.4
LOS	E	E	B	F	D	A	F	D	B	E	D	A
Approach Delay		62.6			55.4			38.8			46.7	
Approach LOS		E			E			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 48.7

Intersection LOS: D

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
13.7 s	49.7 s	21.1 s	35.5 s
			
15.5 s	47.9 s	24.7 s	31.9 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (veh/h)	202	777	167	200	538	101	246	1254	346	163	1493	159
Future Volume (veh/h)	202	777	167	200	538	101	246	1254	346	163	1493	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	220	845	158	217	585	52	267	1363	305	177	1623	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	883	389	233	857	382	299	1857	576	229	1748	773
Arrive On Green	0.15	0.25	0.25	0.14	0.24	0.24	0.09	0.36	0.36	0.07	0.34	0.34
Sat Flow, veh/h	1688	3554	1565	1688	3554	1583	3274	5106	1585	3274	5106	1584
Grp Volume(v), veh/h	220	845	158	217	585	52	267	1363	305	177	1623	110
Grp Sat Flow(s),veh/h/ln	1688	1777	1565	1688	1777	1583	1637	1702	1585	1637	1702	1584
Q Serve(g_s), s	15.3	28.0	10.1	15.2	17.9	3.1	9.6	27.7	18.1	6.4	36.6	4.6
Cycle Q Clear(g_c), s	15.3	28.0	10.1	15.2	17.9	3.1	9.6	27.7	18.1	6.4	36.6	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	883	389	233	857	382	299	1857	576	229	1748	773
V/C Ratio(X)	0.90	0.96	0.41	0.93	0.68	0.14	0.89	0.73	0.53	0.77	0.93	0.14
Avail Cap(c_a), veh/h	284	883	389	233	857	382	299	1893	588	249	1769	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	44.3	37.5	50.9	41.2	35.6	53.7	33.0	30.0	54.7	37.9	16.8
Incr Delay (d2), s/veh	24.4	20.5	0.7	40.0	2.2	0.2	26.4	1.5	0.9	11.3	9.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	14.4	3.8	8.8	7.8	1.2	4.9	10.9	6.8	2.9	16.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.6	64.8	38.2	90.9	43.4	35.7	80.1	34.5	30.8	65.9	47.0	16.9
LnGrp LOS	E	E	D	F	D	D	F	C	C	E	D	B
Approach Vol, veh/h	1223				854				1935			
Approach Delay, s/veh	63.1				55.0				40.2			
Approach LOS	E				E				D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	50.0	21.1	35.5	15.5	47.4	22.0	34.6				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	9.1	* 44	16.5	29.7	10.9	41.4	20.1	26.1				
Max Q Clear Time (g_c+I1), s	8.4	29.7	17.2	30.0	11.6	38.6	17.3	19.9				
Green Ext Time (p_c), s	0.0	8.2	0.0	0.0	0.0	2.3	0.1	2.0				

Intersection Summary

HCM 6th Ctrl Delay	49.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	123	236	63	135	278	57	1742	280	75	1704	119
Future Volume (vph)	123	236	63	135	278	57	1742	280	75	1704	119
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	48.0	48.0	48.0	48.0	48.0	12.0	58.0	58.0	14.0	60.0	60.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	10.0%	48.3%	48.3%	11.7%	50.0%	50.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	26.9	26.9	26.9	26.9	26.9	6.8	54.5	54.5	8.2	54.4	54.4
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26	0.07	0.53	0.53	0.08	0.53	0.53
v/c Ratio	1.08	0.51	0.14	0.66	0.77	0.54	0.61	0.33	0.59	0.60	0.14
Control Delay	143.7	35.8	6.0	49.4	45.2	68.7	20.4	13.4	67.5	20.0	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	143.7	35.8	6.0	49.4	45.2	68.7	20.4	13.4	67.5	20.0	3.7
LOS	F	D	A	D	D	E	C	B	E	B	A
Approach Delay		62.7			46.4		20.8			20.8	
Approach LOS		E			D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 102.9

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 27.0

Intersection LOS: C

Intersection Capacity Utilization 84.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14 s	58 s	48 s
		
Ø5	Ø6	Ø8
12 s	60 s	48 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	236	63	135	278	77	57	1742	280	75	1704	119
Future Volume (veh/h)	123	236	63	135	278	77	57	1742	280	75	1704	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	128	246	49	141	290	70	59	1815	262	78	1775	99
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	607	514	292	472	114	75	2624	741	98	2702	763
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.47	0.47	0.06	0.48	0.48
Sat Flow, veh/h	967	1870	1585	1027	1455	351	1688	5611	1585	1688	5611	1585
Grp Volume(v), veh/h	128	246	49	141	0	360	59	1815	262	78	1775	99
Grp Sat Flow(s),veh/h/ln	967	1870	1585	1027	0	1806	1688	1870	1585	1688	1870	1585
Q Serve(g_s), s	14.5	11.5	2.4	14.0	0.0	19.0	3.9	28.7	11.9	5.2	27.1	3.9
Cycle Q Clear(g_c), s	33.5	11.5	2.4	25.5	0.0	19.0	3.9	28.7	11.9	5.2	27.1	3.9
Prop In Lane	1.00		1.00	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	607	514	292	0	586	75	2624	741	98	2702	763
V/C Ratio(X)	0.59	0.41	0.10	0.48	0.00	0.61	0.79	0.69	0.35	0.80	0.66	0.13
Avail Cap(c_a), veh/h	263	699	593	343	0	675	111	2624	741	141	2702	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	29.6	26.6	39.6	0.0	32.2	53.4	23.6	19.2	52.5	22.2	16.2
Incr Delay (d2), s/veh	2.6	0.4	0.1	1.2	0.0	1.3	11.6	1.5	1.3	11.6	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.1	0.9	3.5	0.0	8.1	1.8	11.7	4.3	2.4	10.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.9	30.1	26.6	40.8	0.0	33.5	65.0	25.2	20.5	64.2	23.5	16.5
LnGrp LOS	D	C	C	D	A	C	E	C	C	E	C	B
Approach Vol, veh/h	423			501			2136			1952		
Approach Delay, s/veh	35.4			35.5			25.7			24.7		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	59.3		42.4	9.6	60.9		42.4				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	9.4	* 53		42.2	7.4	53.5		42.2				
Max Q Clear Time (g_c+I1), s	7.2	30.7		35.5	5.9	29.1		27.5				
Green Ext Time (p_c), s	0.0	13.7		1.1	0.0	13.6		2.3				

Intersection Summary

HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	422	199	162	29	123	133	1608	57	94	1629	149
Future Volume (vph)	422	199	162	29	123	133	1608	57	94	1629	149
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	22.0	51.5	51.5	13.5	43.0	12.0	46.5	46.5	8.5	43.0	43.0
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	10.0%	38.8%	38.8%	7.1%	35.8%	35.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	17.2	31.4	31.4	10.1	18.3	7.8	40.2	40.2	5.1	37.4	37.4
Actuated g/C Ratio	0.17	0.31	0.31	0.10	0.18	0.08	0.40	0.40	0.05	0.37	0.37
v/c Ratio	0.80	0.36	0.28	0.19	0.68	0.56	0.76	0.08	0.61	0.83	0.23
Control Delay	53.6	30.1	5.3	49.0	42.7	56.2	30.4	0.2	66.3	34.6	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	30.1	5.3	49.0	42.7	56.2	30.4	0.2	66.3	34.6	7.9
LOS	D	C	A	D	D	E	C	A	E	C	A
Approach Delay		37.6			43.4		31.4			34.1	
Approach LOS		D			D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.9

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 34.1

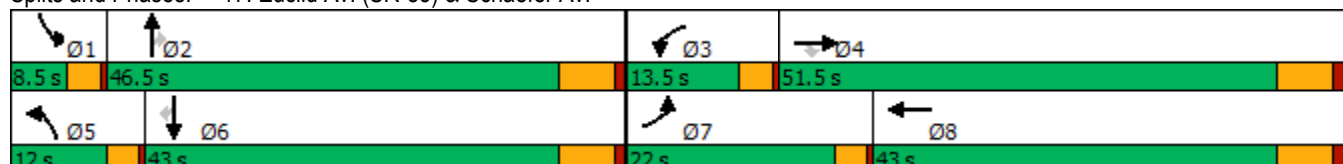
Intersection LOS: C

Intersection Capacity Utilization 78.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 				 		 	  		 	  	
Traffic Volume (veh/h)	422	199	162	29	123	100	133	1608	57	94	1629	149
Future Volume (veh/h)	422	199	162	29	123	100	133	1608	57	94	1629	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	444	209	146	31	129	91	140	1693	54	99	1715	134
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	525	478	405	103	159	112	208	2234	631	173	2174	614
Arrive On Green	0.16	0.26	0.26	0.06	0.16	0.16	0.06	0.40	0.40	0.05	0.39	0.39
Sat Flow, veh/h	3274	1870	1585	1688	1021	720	3274	5611	1585	3274	5611	1585
Grp Volume(v), veh/h	444	209	146	31	0	220	140	1693	54	99	1715	134
Grp Sat Flow(s),veh/h/ln	1637	1870	1585	1688	0	1741	1637	1870	1585	1637	1870	1585
Q Serve(g_s), s	11.3	8.0	6.5	1.5	0.0	10.5	3.6	22.3	1.8	2.5	23.2	4.9
Cycle Q Clear(g_c), s	11.3	8.0	6.5	1.5	0.0	10.5	3.6	22.3	1.8	2.5	23.2	4.9
Prop In Lane	1.00		1.00	1.00		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	525	478	405	103	0	271	208	2234	631	173	2174	614
V/C Ratio(X)	0.85	0.44	0.36	0.30	0.00	0.81	0.67	0.76	0.09	0.57	0.79	0.22
Avail Cap(c_a), veh/h	705	969	821	197	0	730	324	2646	748	191	2418	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	26.8	26.2	38.6	0.0	35.0	39.3	22.3	16.1	39.7	23.2	17.6
Incr Delay (d2), s/veh	5.6	0.5	0.4	0.6	0.0	4.3	1.4	1.1	0.1	1.6	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	3.4	2.3	0.6	0.0	4.5	1.4	8.6	0.6	1.0	9.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	27.3	26.6	39.2	0.0	39.3	40.8	23.4	16.2	41.3	24.9	17.8
LnGrp LOS	D	C	C	D	A	D	D	C	B	D	C	B
Approach Vol, veh/h		799			251			1887			1948	
Approach Delay, s/veh		34.6			39.3			24.4			25.2	
Approach LOS		C			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	40.2	8.7	28.9	8.9	39.3	17.3	20.4				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	40.5	10.0	44.5	8.5	37.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	4.5	24.3	3.5	10.0	5.6	25.2	13.3	12.5				
Green Ext Time (p_c), s	0.0	9.8	0.0	1.2	0.1	8.1	0.5	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			27.2									
HCM 6th LOS			C									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	617	164	332	586	454	174	1170	213	450	1380	114
Future Volume (vph)	155	617	164	332	586	454	174	1170	213	450	1380	114
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	46.0	46.0	9.5	49.0	8.5	8.5	29.0	29.0	8.5	40.0	9.5
Total Split (s)	13.6	46.0	46.0	17.5	49.9	21.4	11.5	35.1	35.1	21.4	45.0	13.6
Total Split (%)	11.3%	38.3%	38.3%	14.6%	41.6%	17.8%	9.6%	29.3%	29.3%	17.8%	37.5%	11.3%
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.0	3.0	5.0	5.0	3.0	5.0	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0	3.5	3.5	6.0	6.0	3.5	6.0	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	8.8	21.4	21.4	13.1	25.7	50.3	8.1	29.1	29.1	17.6	38.7	53.5
Actuated g/C Ratio	0.09	0.21	0.21	0.13	0.25	0.49	0.08	0.28	0.28	0.17	0.38	0.52
v/c Ratio	0.57	0.60	0.37	0.82	0.47	0.58	0.74	0.83	0.40	0.83	0.74	0.13
Control Delay	55.4	38.5	7.1	62.0	33.5	18.4	66.9	41.5	14.8	55.9	31.5	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.4	38.5	7.1	62.0	33.5	18.4	66.9	41.5	14.8	55.9	31.5	4.7
LOS	E	D	A	E	C	B	E	D	B	E	C	A
Approach Delay		35.8			35.4			40.6			35.6	
Approach LOS		D			D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 102.4

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 36.9

Intersection LOS: D

Intersection Capacity Utilization 76.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

			
21.4 s	35.1 s	17.5 s	46 s
			
11.5 s	45 s	13.6 s	49.9 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	617	164	332	586	454	174	1170	213	450	1380	114
Future Volume (veh/h)	155	617	164	332	586	454	174	1170	213	450	1380	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	160	636	140	342	604	459	179	1206	205	464	1423	83
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	1219	373	402	1500	720	235	1389	431	525	1819	672
Arrive On Green	0.07	0.24	0.24	0.12	0.29	0.29	0.08	0.27	0.27	0.16	0.36	0.36
Sat Flow, veh/h	3274	5106	1563	3274	5106	1585	3092	5106	1585	3274	5106	1585
Grp Volume(v), veh/h	160	636	140	342	604	459	179	1206	205	464	1423	83
Grp Sat Flow(s),veh/h/ln	1637	1702	1563	1637	1702	1585	1546	1702	1585	1637	1702	1585
Q Serve(g_s), s	4.9	11.0	7.6	10.4	9.6	22.7	5.8	22.9	11.0	14.1	25.3	3.2
Cycle Q Clear(g_c), s	4.9	11.0	7.6	10.4	9.6	22.7	5.8	22.9	11.0	14.1	25.3	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	1219	373	402	1500	720	235	1389	431	525	1819	672
V/C Ratio(X)	0.72	0.52	0.38	0.85	0.40	0.64	0.76	0.87	0.48	0.88	0.78	0.12
Avail Cap(c_a), veh/h	293	1956	599	418	2151	922	243	1459	453	576	1956	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	33.7	32.4	43.8	28.8	21.4	46.1	35.3	31.0	41.8	29.2	17.8
Incr Delay (d2), s/veh	5.8	0.3	0.6	15.0	0.2	0.9	11.4	5.7	0.8	13.4	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.4	2.8	4.9	3.8	7.9	2.5	9.5	4.1	6.3	9.7	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	34.1	33.0	58.7	29.0	22.3	57.6	41.0	31.8	55.2	31.2	17.9
LnGrp LOS	D	C	C	E	C	C	E	D	C	E	C	B
Approach Vol, veh/h	936			1405			1590			1970		
Approach Delay, s/veh	37.0			34.0			41.7			36.3		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.8	33.7	17.0	31.3	11.2	42.3	11.4	36.9				
Change Period (Y+Rc), s	3.5	6.0	4.5	7.0	3.5	6.0	4.5	7.0				
Max Green Setting (Gmax), s	17.9	29.1	13.0	39.0	8.0	39.0	9.1	42.9				
Max Q Clear Time (g_c+I1), s	16.1	24.9	12.4	13.0	7.8	27.3	6.9	24.7				
Green Ext Time (p_c), s	0.2	2.8	0.1	4.6	0.0	6.8	0.1	5.2				
Intersection Summary												
HCM 6th Ctrl Delay	37.3											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	225	139	137	293	208	134	994	231	347	1226	34
Future Volume (vph)	66	225	139	137	293	208	134	994	231	347	1226	34
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	22.3	36.2	36.2	37.0	50.9	50.9
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	18.6%	30.2%	30.2%	30.8%	42.4%	42.4%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	22.6	22.6	22.6	22.6	22.6	22.6	12.8	26.5	26.5	24.8	38.4	38.4
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.25	0.14	0.30	0.30	0.28	0.43	0.43
v/c Ratio	0.45	0.50	0.29	0.36	0.66	0.39	0.59	0.70	0.45	0.79	0.59	0.05
Control Delay	40.0	33.3	6.3	31.1	37.7	6.0	50.5	32.5	19.6	45.2	22.0	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	33.3	6.3	31.1	37.7	6.0	50.5	32.5	19.6	45.2	22.0	4.6
LOS	D	C	A	C	D	A	D	C	B	D	C	A
Approach Delay		25.6			26.0			32.1			26.6	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 88.7

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 28.3

Intersection LOS: C

Intersection Capacity Utilization 75.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
37 s	36.2 s	46.8 s
		
Ø5	Ø6	Ø8
22.3 s	50.9 s	46.8 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	225	139	137	293	208	134	994	231	347	1226	34
Future Volume (veh/h)	66	225	139	137	293	208	134	994	231	347	1226	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	70	239	107	146	312	201	143	1057	223	369	1304	25
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	510	432	508	510	432	179	1504	467	416	2220	689
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.11	0.29	0.29	0.25	0.43	0.43
Sat Flow, veh/h	841	1870	1585	1902	1870	1585	1688	5106	1585	1688	5106	1584
Grp Volume(v), veh/h	70	239	107	146	312	201	143	1057	223	369	1304	25
Grp Sat Flow(s),veh/h/ln	841	1870	1585	951	1870	1585	1688	1702	1585	1688	1702	1584
Q Serve(g_s), s	6.0	8.0	4.0	5.2	10.9	7.9	6.2	13.8	8.7	15.8	14.6	0.7
Cycle Q Clear(g_c), s	16.9	8.0	4.0	13.2	10.9	7.9	6.2	13.8	8.7	15.8	14.6	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	510	432	508	510	432	179	1504	467	416	2220	689
V/C Ratio(X)	0.35	0.47	0.25	0.29	0.61	0.46	0.80	0.70	0.48	0.89	0.59	0.04
Avail Cap(c_a), veh/h	444	1046	887	1053	1046	887	422	2074	644	753	3073	953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	22.8	21.3	28.3	23.8	22.7	32.8	23.6	21.7	27.3	16.1	12.2
Incr Delay (d2), s/veh	0.7	0.5	0.2	0.2	0.9	0.6	6.0	0.7	0.8	5.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.3	1.4	1.1	4.5	2.7	2.6	4.8	2.9	6.1	4.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	23.3	21.5	28.5	24.7	23.3	38.8	24.2	22.5	32.3	16.4	12.2
LnGrp LOS	C	C	C	C	C	C	D	C	C	C	B	B
Approach Vol, veh/h	416			659			1423			1698		
Approach Delay, s/veh	24.3			25.1			25.4			19.8		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	22.0	27.8	25.3		11.5	38.4	25.3					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	33.5	30.5	42.0		18.8	45.2	42.0					
Max Q Clear Time (g_c+I1), s	17.8	15.8	18.9		8.2	16.6	15.2					
Green Ext Time (p_c), s	0.7	6.3	1.6		0.2	9.6	2.5					
Intersection Summary												
HCM 6th Ctrl Delay	23.0											
HCM 6th LOS	C											

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

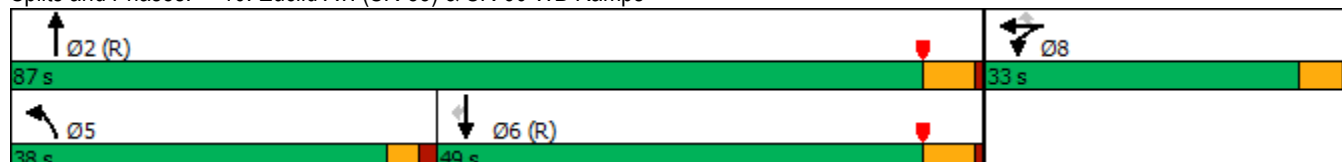
10/23/2023

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	493	1	435	807	1382	1592	571
Future Volume (vph)	493	1	435	807	1382	1592	571
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	38.0	87.0	49.0	49.0
Total Split (%)	27.5%	27.5%	27.5%	31.7%	72.5%	40.8%	40.8%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	26.4	26.4	26.4	32.0	83.1	46.6	46.6
Actuated g/C Ratio	0.22	0.22	0.22	0.27	0.69	0.39	0.39
v/c Ratio	0.91	0.91	0.82	0.93	0.59	0.85	0.65
Control Delay	75.1	71.1	52.8	70.3	7.5	39.3	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	75.1	71.1	52.8	70.3	7.8	39.3	9.1
LOS	E	E	D	E	A	D	A
Approach Delay		66.7			30.9	31.4	
Approach LOS		E			C	C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 37.4
Intersection Capacity Utilization 89.0%
Analysis Period (min) 15
Intersection LOS: D
ICU Level of Service E

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	493	1	435	807	1382	0	0	1592	571
Future Volume (veh/h)	0	0	0	493	1	435	807	1382	0	0	1592	571
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				619	0	214	849	1455	0	0	1676	381
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				692	0	308	890	2552	0	0	2161	671
Arrive On Green				0.19	0.00	0.19	0.51	1.00	0.00	0.00	0.42	0.42
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				619	0	214	849	1455	0	0	1676	381
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1702	1585
Q Serve(g_s), s				20.3	0.0	15.1	28.1	0.0	0.0	0.0	33.8	21.9
Cycle Q Clear(g_c), s				20.3	0.0	15.1	28.1	0.0	0.0	0.0	33.8	21.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				692	0	308	890	2552	0	0	2161	671
V/C Ratio(X)				0.89	0.00	0.69	0.95	0.57	0.00	0.00	0.78	0.57
Avail Cap(c_a), veh/h				831	0	370	965	2552	0	0	2161	671
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.41	0.41	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.1	0.0	45.0	28.4	0.0	0.0	0.0	29.7	26.3
Incr Delay (d2), s/veh				9.7	0.0	2.9	9.3	0.4	0.0	0.0	2.8	3.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.7	0.0	6.0	9.1	0.1	0.0	0.0	13.8	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				56.8	0.0	47.9	37.7	0.4	0.0	0.0	32.5	29.7
LnGrp LOS				E	A	D	D	A	A	A	C	C
Approach Vol, veh/h					833			2304			2057	
Approach Delay, s/veh					54.5			14.1			32.0	
Approach LOS					D			B			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.7			35.4	56.3		28.3				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		81.5			33.5	43.5		28.0				
Max Q Clear Time (g_c+I1), s		2.0			30.1	35.8		22.3				
Green Ext Time (p_c), s		26.7			0.8	6.8		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				27.7								
HCM 6th LOS				C								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	336	1	485	1509	603	374	1506
Future Volume (vph)	336	1	485	1509	603	374	1506
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	32.0	32.0	32.0	67.0	67.0	21.0	88.0
Total Split (%)	26.7%	26.7%	26.7%	55.8%	55.8%	17.5%	73.3%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	24.6	24.6	24.6	64.6	64.6	16.3	84.9
Actuated g/C Ratio	0.20	0.20	0.20	0.54	0.54	0.14	0.71
v/c Ratio	0.88	0.84	0.80	0.84	0.60	0.86	0.64
Control Delay	72.0	59.7	52.7	29.5	6.3	60.0	11.8
Queue Delay	0.0	0.2	0.0	0.5	0.0	0.0	0.5
Total Delay	72.0	59.9	52.7	30.0	6.3	60.0	12.3
LOS	E	E	D	C	A	E	B
Approach Delay		61.7		23.2			21.8
Approach LOS		E		C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 29.2

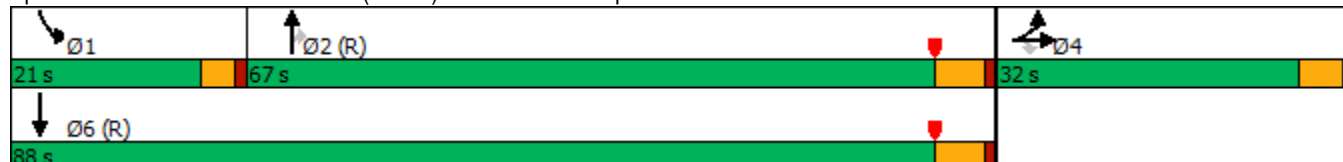
Intersection LOS: C

Intersection Capacity Utilization 89.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	1	485	0	0	0	0	1509	603	374	1506	0
Future Volume (veh/h)	336	1	485	0	0	0	0	1509	603	374	1506	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	493	0	264				0	1605	470	398	1602	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	664	0	296				0	2003	881	446	2580	0
Arrive On Green	0.19	0.00	0.19				0.00	0.56	0.56	0.26	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1563	3456	3647	0
Grp Volume(v), veh/h	493	0	264				0	1605	470	398	1602	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1563	1728	1777	0
Q Serve(g_s), s	15.7	0.0	19.5				0.0	43.1	22.5	13.3	0.0	0.0
Cycle Q Clear(g_c), s	15.7	0.0	19.5				0.0	43.1	22.5	13.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	664	0	296				0	2003	881	446	2580	0
V/C Ratio(X)	0.74	0.00	0.89				0.00	0.80	0.53	0.89	0.62	0.00
Avail Cap(c_a), veh/h	802	0	357				0	2003	881	490	2580	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.18	0.18	0.39	0.39	0.00
Uniform Delay (d), s/veh	46.1	0.0	47.6				0.0	20.8	16.3	43.7	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.0	19.1				0.0	0.6	0.4	7.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	9.0				0.0	16.6	7.6	5.3	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	0.0	66.7				0.0	21.5	16.8	51.1	0.4	0.0
LnGrp LOS	D	A	E				A	C	B	D	A	A
Approach Vol, veh/h	757						2075			2000		
Approach Delay, s/veh	54.7						20.4			10.5		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.5	73.1		27.4		92.6						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	17.0	61.5		27.0		82.5						
Max Q Clear Time (g_c+I1), s	15.3	45.1		21.5		2.0						
Green Ext Time (p_c), s	0.2	13.7		0.9		32.4						
Intersection Summary												
HCM 6th Ctrl Delay			21.7									
HCM 6th LOS			C									
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (vph)	139	869	133	189	803	67	334	1685	497	145	1149	384
Future Volume (vph)	139	869	133	189	803	67	334	1685	497	145	1149	384
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	19.0	38.0	38.0	20.0	39.0	39.0	18.4	50.8	50.8	11.2	43.6	19.0
Total Split (%)	15.8%	31.7%	31.7%	16.7%	32.5%	32.5%	15.3%	42.3%	42.3%	9.3%	36.3%	15.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (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
Lost Time Adjust (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
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.0	32.1	32.1	15.2	34.3	34.3	13.8	45.4	45.4	6.6	37.1	56.6
Actuated g/C Ratio	0.11	0.27	0.27	0.13	0.29	0.29	0.12	0.38	0.38	0.06	0.31	0.47
v/c Ratio	0.80	0.95	0.26	0.93	0.83	0.13	0.93	0.91	0.72	0.84	0.76	0.50
Control Delay	81.6	63.4	5.1	97.6	48.3	0.5	84.6	43.5	25.8	92.7	41.1	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.6	63.4	5.1	97.6	48.3	0.5	84.6	43.5	25.8	92.7	41.1	17.5
LOS	F	E	A	F	D	A	F	D	C	F	D	B
Approach Delay		58.8			54.1			45.5			40.1	
Approach LOS		E			D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 47.9

Intersection LOS: D

Intersection Capacity Utilization 89.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
11.2 s	50.8 s	20 s	38 s
			
Ø5	Ø6	Ø7	Ø8
18.4 s	43.6 s	19 s	39 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (veh/h)	139	869	133	189	803	67	334	1685	497	145	1149	384
Future Volume (veh/h)	139	869	133	189	803	67	334	1685	497	145	1149	384
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	145	905	115	197	836	38	348	1755	438	151	1197	317
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	949	422	216	1045	464	375	1900	590	179	1595	655
Arrive On Green	0.10	0.27	0.27	0.13	0.29	0.29	0.11	0.37	0.37	0.05	0.31	0.31
Sat Flow, veh/h	1688	3554	1581	1688	3554	1577	3274	5106	1585	3274	5106	1585
Grp Volume(v), veh/h	145	905	115	197	836	38	348	1755	438	151	1197	317
Grp Sat Flow(s),veh/h/ln	1688	1777	1581	1688	1777	1577	1637	1702	1585	1637	1702	1585
Q Serve(g_s), s	10.2	30.2	6.9	13.9	26.2	2.1	12.7	39.6	28.9	5.5	25.4	17.7
Cycle Q Clear(g_c), s	10.2	30.2	6.9	13.9	26.2	2.1	12.7	39.6	28.9	5.5	25.4	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	949	422	216	1045	464	375	1900	590	179	1595	655
V/C Ratio(X)	0.85	0.95	0.27	0.91	0.80	0.08	0.93	0.92	0.74	0.84	0.75	0.48
Avail Cap(c_a), veh/h	202	949	422	216	1045	464	375	1923	597	179	1595	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	43.4	34.9	51.9	39.3	30.8	52.9	36.2	32.8	56.5	37.2	26.0
Incr Delay (d2), s/veh	22.3	18.9	0.3	37.8	4.5	0.1	28.7	8.0	4.9	27.5	2.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	15.2	2.6	8.0	11.6	0.8	6.5	16.6	11.4	2.9	10.6	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.7	62.4	35.3	89.7	43.8	30.8	81.6	44.2	37.8	84.0	39.3	26.5
LnGrp LOS	E	E	D	F	D	C	F	D	D	F	D	C
Approach Vol, veh/h		1165			1071			2541			1665	
Approach Delay, s/veh		61.4			51.8			48.2			40.9	
Approach LOS		E			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	51.4	20.0	38.0	18.4	44.2	16.7	41.3				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	6.6	* 45	15.4	32.2	13.8	37.1	14.4	33.2				
Max Q Clear Time (g_c+I1), s	7.5	41.6	15.9	32.2	14.7	27.4	12.2	28.2				
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	5.9	0.0	2.3				

Intersection Summary

HCM 6th Ctrl Delay	49.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	134	528	44	176	487	103	1971	362	70	1265	138
Future Volume (vph)	134	528	44	176	487	103	1971	362	70	1265	138
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	59.0	59.0	59.0	59.0	59.0	16.0	50.5	50.5	10.5	45.0	45.0
Total Split (%)	49.2%	49.2%	49.2%	49.2%	49.2%	13.3%	42.1%	42.1%	8.8%	37.5%	37.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	53.2	53.2	53.2	53.2	53.2	10.5	45.3	45.3	5.9	39.4	39.4
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.44	0.09	0.38	0.38	0.05	0.33	0.33
v/c Ratio	0.84	0.69	0.06	1.01	0.73	0.76	1.00	0.60	0.91	0.74	0.24
Control Delay	69.9	32.1	0.2	104.0	33.3	84.4	58.2	27.5	135.1	38.9	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.9	32.1	0.2	104.0	33.3	84.4	58.2	27.5	135.1	38.9	5.6
LOS	E	C	A	F	C	F	E	C	F	D	A
Approach Delay		37.3			50.5		54.7			40.4	
Approach LOS		D			D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 47.9

Intersection LOS: D

Intersection Capacity Utilization 98.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
10.5 s	50.5 s	59 s
		
16 s	45 s	59 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	528	44	176	487	62	103	1971	362	70	1265	138
Future Volume (veh/h)	134	528	44	176	487	62	103	1971	362	70	1265	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	144	568	30	189	524	59	111	2119	320	75	1360	130
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	820	695	210	724	82	134	2095	592	82	1922	543
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.08	0.37	0.37	0.05	0.34	0.34
Sat Flow, veh/h	788	1870	1585	777	1651	186	1688	5611	1585	1688	5611	1585
Grp Volume(v), veh/h	144	568	30	189	0	583	111	2119	320	75	1360	130
Grp Sat Flow(s),veh/h/ln	788	1870	1585	777	0	1837	1688	1870	1585	1688	1870	1585
Q Serve(g_s), s	21.5	29.7	1.3	23.5	0.0	31.7	7.9	45.3	19.2	5.4	25.5	7.1
Cycle Q Clear(g_c), s	53.2	29.7	1.3	53.2	0.0	31.7	7.9	45.3	19.2	5.4	25.5	7.1
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	820	695	210	0	806	134	2095	592	82	1922	543
V/C Ratio(X)	0.72	0.69	0.04	0.90	0.00	0.72	0.83	1.01	0.54	0.91	0.71	0.24
Avail Cap(c_a), veh/h	199	820	695	210	0	806	159	2095	592	82	1922	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	27.5	19.5	51.3	0.0	28.0	55.0	38.0	29.8	57.4	34.6	28.6
Incr Delay (d2), s/veh	12.1	2.5	0.0	36.2	0.0	3.2	22.4	22.5	1.0	69.8	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	13.1	0.5	7.8	0.0	13.9	4.0	23.4	7.0	3.8	11.1	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.3	30.0	19.5	87.5	0.0	31.2	77.4	60.5	30.8	127.3	35.8	28.8
LnGrp LOS	E	C	B	F	A	C	E	F	C	F	D	C
Approach Vol, veh/h	742			772			2550			1565		
Approach Delay, s/veh	35.8			45.0			57.5			39.6		
Approach LOS	D			D			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	51.8		59.0	14.2	48.1		59.0				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	5.9	* 45		53.2	11.4	38.5		53.2				
Max Q Clear Time (g_c+I1), s	7.4	47.3		55.2	9.9	27.5		55.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.3		0.0				

Intersection Summary

HCM 6th Ctrl Delay 47.9

HCM 6th LOS D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 				 	 	  		 	  	
Traffic Volume (vph)	393	307	133	144	252	171	1904	67	97	1191	166
Future Volume (vph)	393	307	133	144	252	171	1904	67	97	1191	166
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	20.0	44.8	44.8	18.2	43.0	14.2	48.5	48.5	8.5	42.8	42.8
Total Split (%)	16.7%	37.3%	37.3%	15.2%	35.8%	11.8%	40.4%	40.4%	7.1%	35.7%	35.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	16.3	37.1	37.1	13.4	34.2	9.8	42.5	42.5	5.0	37.8	37.8
Actuated g/C Ratio	0.14	0.31	0.31	0.11	0.29	0.08	0.36	0.36	0.04	0.32	0.32
v/c Ratio	0.92	0.55	0.24	0.80	0.95	0.67	1.00	0.11	0.74	0.70	0.28
Control Delay	78.2	38.1	5.9	80.2	66.7	65.7	57.2	2.6	87.1	38.3	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.2	38.1	5.9	80.2	66.7	65.7	57.2	2.6	87.1	38.3	5.7
LOS	E	D	A	F	E	E	E	A	F	D	A
Approach Delay		51.9			69.9		56.2			37.8	
Approach LOS		D			E		E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 118.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 51.9

Intersection LOS: D

Intersection Capacity Utilization 97.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.

 Ø1	 Ø2	 Ø3	 Ø4
8.5 s	48.5 s	18.2 s	44.8 s
 Ø5	 Ø6	 Ø7	 Ø8
14.2 s	42.8 s	20 s	43 s

HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	393	307	133	144	252	224	171	1904	67	97	1191	166
Future Volume (veh/h)	393	307	133	144	252	224	171	1904	67	97	1191	166
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	414	323	91	152	265	173	180	2004	50	102	1254	112
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	464	576	481	178	287	187	235	2071	573	142	1912	540
Arrive On Green	0.14	0.31	0.31	0.11	0.27	0.27	0.07	0.37	0.37	0.04	0.34	0.34
Sat Flow, veh/h	3274	1870	1562	1688	1056	690	3274	5611	1552	3274	5611	1585
Grp Volume(v), veh/h	414	323	91	152	0	438	180	2004	50	102	1254	112
Grp Sat Flow(s),veh/h/ln	1637	1870	1562	1688	0	1746	1637	1870	1552	1637	1870	1585
Q Serve(g_s), s	14.3	16.6	4.9	10.2	0.0	28.1	6.2	40.3	2.4	3.5	21.8	5.8
Cycle Q Clear(g_c), s	14.3	16.6	4.9	10.2	0.0	28.1	6.2	40.3	2.4	3.5	21.8	5.8
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	464	576	481	178	0	475	235	2071	573	142	1912	540
V/C Ratio(X)	0.89	0.56	0.19	0.85	0.00	0.92	0.77	0.97	0.09	0.72	0.66	0.21
Avail Cap(c_a), veh/h	469	614	513	216	0	546	304	2072	573	142	1912	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	33.3	29.2	50.6	0.0	40.7	52.5	35.6	23.7	54.4	32.2	26.9
Incr Delay (d2), s/veh	18.2	0.8	0.1	20.6	0.0	19.4	5.9	13.0	0.1	13.9	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.4	1.8	5.2	0.0	14.1	2.6	19.3	0.9	1.7	9.3	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	34.1	29.4	71.2	0.0	60.1	58.4	48.6	23.7	68.2	33.0	27.1
LnGrp LOS	E	C	C	E	A	E	E	D	C	E	C	C
Approach Vol, veh/h	828			590			2234			1468		
Approach Delay, s/veh	49.9			63.0			48.9			35.0		
Approach LOS	D			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	48.5	15.6	42.5	11.8	45.2	19.8	38.3				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	42.5	14.7	37.8	10.7	36.8	16.5	36.0				
Max Q Clear Time (g_c+l1), s	5.5	42.3	12.2	18.6	8.2	23.8	16.3	30.1				
Green Ext Time (p_c), s	0.0	0.1	0.0	1.5	0.1	6.5	0.0	1.1				
Intersection Summary												
HCM 6th Ctrl Delay	46.7											
HCM 6th LOS	D											

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	988	178	178	728	244	218	1694	149	303	1079	148
Future Volume (vph)	189	988	178	178	728	244	218	1694	149	303	1079	148
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	46.0	46.0	9.5	49.0	8.5	8.5	29.0	29.0	8.5	40.0	9.5
Total Split (s)	11.5	46.6	46.6	13.9	49.0	15.1	15.8	44.4	44.4	15.1	43.7	11.5
Total Split (%)	9.6%	38.8%	38.8%	11.6%	40.8%	12.6%	13.2%	37.0%	37.0%	12.6%	36.4%	9.6%
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.0	3.0	5.0	5.0	3.0	5.0	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0	3.5	3.5	6.0	6.0	3.5	6.0	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	7.0	31.0	31.0	9.2	33.2	51.8	11.2	38.5	38.5	11.6	38.9	52.0
Actuated g/C Ratio	0.06	0.28	0.28	0.08	0.30	0.46	0.10	0.35	0.35	0.10	0.35	0.47
v/c Ratio	0.96	0.72	0.32	0.69	0.50	0.33	0.73	0.99	0.25	0.92	0.63	0.20
Control Delay	105.8	39.3	5.8	64.6	33.1	14.3	63.7	57.1	10.8	82.8	33.1	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.8	39.3	5.8	64.6	33.1	14.3	63.7	57.1	10.8	82.8	33.1	11.7
LOS	F	D	A	E	C	B	E	E	B	F	C	B
Approach Delay		44.2			34.0			54.5			40.9	
Approach LOS		D			C			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 111.4

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 44.9

Intersection LOS: D

Intersection Capacity Utilization 84.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

			
Ø1	Ø2	Ø3	Ø4
15.1 s	44.4 s	13.9 s	46.6 s
			
Ø5	Ø6	Ø7	Ø8
15.8 s	43.7 s	11.5 s	49 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	988	178	178	728	244	218	1694	149	303	1079	148
Future Volume (veh/h)	189	988	178	178	728	244	218	1694	149	303	1079	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	195	1019	128	184	751	244	225	1746	142	312	1112	119
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	1350	419	243	1396	605	281	1825	566	354	1913	697
Arrive On Green	0.07	0.26	0.26	0.07	0.27	0.27	0.09	0.36	0.36	0.11	0.37	0.37
Sat Flow, veh/h	3274	5106	1585	3274	5106	1585	3092	5106	1585	3274	5106	1585
Grp Volume(v), veh/h	195	1019	128	184	751	244	225	1746	142	312	1112	119
Grp Sat Flow(s),veh/h/ln	1637	1702	1585	1637	1702	1585	1546	1702	1585	1637	1702	1585
Q Serve(g_s), s	6.3	19.7	6.9	5.9	13.4	12.1	7.7	35.8	6.8	10.1	18.7	4.9
Cycle Q Clear(g_c), s	6.3	19.7	6.9	5.9	13.4	12.1	7.7	35.8	6.8	10.1	18.7	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	214	1350	419	243	1396	605	281	1825	566	354	1913	697
V/C Ratio(X)	0.91	0.75	0.31	0.76	0.54	0.40	0.80	0.96	0.25	0.88	0.58	0.17
Avail Cap(c_a), veh/h	214	1885	585	287	2000	792	355	1828	568	354	1913	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	36.2	31.6	48.7	33.2	24.2	47.8	33.7	24.3	47.1	26.8	18.2
Incr Delay (d2), s/veh	38.4	1.1	0.4	9.3	0.3	0.4	7.8	12.4	0.2	21.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	7.9	2.6	2.7	5.3	4.4	3.1	15.5	2.5	4.9	7.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.2	37.4	32.0	58.0	33.5	24.7	55.6	46.1	24.6	68.3	27.3	18.3
LnGrp LOS	F	D	C	E	C	C	E	D	C	E	C	B
Approach Vol, veh/h	1342			1179			2113			1543		
Approach Delay, s/veh	44.3			35.5			45.6			34.9		
Approach LOS	D			D			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	44.3	12.5	35.4	13.2	46.2	11.5	36.3				
Change Period (Y+Rc), s	3.5	6.0	4.5	7.0	3.5	6.0	4.5	7.0				
Max Green Setting (Gmax), s	11.6	38.4	9.4	39.6	12.3	37.7	7.0	42.0				
Max Q Clear Time (g_c+I1), s	12.1	37.8	7.9	21.7	9.7	20.7	8.3	15.4				
Green Ext Time (p_c), s	0.0	0.5	0.1	6.7	0.1	6.7	0.0	6.0				
Intersection Summary												
HCM 6th Ctrl Delay	40.7											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	340	231	193	296	367	126	1490	121	183	1131	74
Future Volume (vph)	77	340	231	193	296	367	126	1490	121	183	1131	74
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	20.9	50.2	50.2	23.0	52.3	52.3
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	17.4%	41.8%	41.8%	19.2%	43.6%	43.6%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	25.1	25.1	25.1	25.1	25.1	25.1	12.4	38.0	38.0	15.6	41.2	41.2
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.13	0.41	0.41	0.17	0.44	0.44
v/c Ratio	0.48	0.72	0.41	0.77	0.62	0.59	0.60	0.76	0.19	0.69	0.53	0.11
Control Delay	41.2	40.6	5.8	53.4	36.9	11.1	54.2	28.0	14.4	54.1	21.5	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	40.6	5.8	53.4	36.9	11.1	54.2	28.0	14.4	54.1	21.5	5.4
LOS	D	D	A	D	D	B	D	C	B	D	C	A
Approach Delay		28.3			29.6			28.9			24.9	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 93.4

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 27.7

Intersection LOS: C

Intersection Capacity Utilization 79.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

 Ø1	 Ø2	 Ø4
23 s	50.2 s	46.8 s
 Ø5	 Ø6	 Ø8
20.9 s	52.3 s	46.8 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	340	231	193	296	367	126	1490	121	183	1131	74
Future Volume (veh/h)	77	340	231	193	296	367	126	1490	121	183	1131	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	81	358	141	203	312	373	133	1568	103	193	1191	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	614	514	431	614	521	163	1994	619	226	2185	669
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.10	0.39	0.39	0.13	0.43	0.43
Sat Flow, veh/h	717	1870	1565	1652	1870	1585	1688	5106	1585	1688	5106	1564
Grp Volume(v), veh/h	81	358	141	203	312	373	133	1568	103	193	1191	46
Grp Sat Flow(s),veh/h/ln	717	1870	1565	826	1870	1585	1688	1702	1585	1688	1702	1564
Q Serve(g_s), s	9.8	15.1	6.3	11.1	12.8	19.7	7.4	25.7	4.0	10.7	16.6	1.7
Cycle Q Clear(g_c), s	22.6	15.1	6.3	26.2	12.8	19.7	7.4	25.7	4.0	10.7	16.6	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	614	514	431	614	521	163	1994	619	226	2185	669
V/C Ratio(X)	0.38	0.58	0.27	0.47	0.51	0.72	0.82	0.79	0.17	0.85	0.55	0.07
Avail Cap(c_a), veh/h	295	825	690	617	825	699	308	2386	741	345	2498	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	26.6	23.6	37.5	25.8	28.1	42.2	25.5	18.9	40.3	20.3	16.1
Incr Delay (d2), s/veh	0.8	0.7	0.2	0.6	0.5	1.9	7.2	1.5	0.1	10.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.5	2.2	2.2	5.4	7.2	3.2	9.4	1.4	4.8	5.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	27.2	23.8	38.0	26.3	30.0	49.4	27.0	19.0	50.7	20.5	16.1
LnGrp LOS	D	C	C	D	C	C	D	C	B	D	C	B
Approach Vol, veh/h	580			888			1804			1430		
Approach Delay, s/veh	27.6			30.5			28.2			24.5		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.3	42.9		36.1	12.7	46.5		36.1				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	19.5	44.5		42.0	17.4	46.6		42.0				
Max Q Clear Time (g_c+I1), s	12.7	27.7		24.6	9.4	18.6		28.2				
Green Ext Time (p_c), s	0.2	9.5		2.3	0.1	8.6		3.1				
Intersection Summary												
HCM 6th Ctrl Delay	27.4											
HCM 6th LOS	C											

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	360	4	410	795	881	913	471
Future Volume (vph)	360	4	410	795	881	913	471
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	44.2	83.0	38.8	38.8
Total Split (%)	30.8%	30.8%	30.8%	36.8%	69.2%	32.3%	32.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	24.6	24.6	24.6	33.4	84.9	47.0	47.0
Actuated g/C Ratio	0.20	0.20	0.20	0.28	0.71	0.39	0.39
v/c Ratio	0.82	0.74	0.58	0.87	0.37	0.48	0.53
Control Delay	63.6	44.1	19.4	65.9	5.5	30.3	5.3
Queue Delay	0.0	0.0	0.0	0.2	0.2	0.0	0.0
Total Delay	63.6	44.1	19.4	66.0	5.6	30.3	5.3
LOS	E	D	B	E	A	C	A
Approach Delay		43.1			34.3	21.8	
Approach LOS		D			C	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 31.5

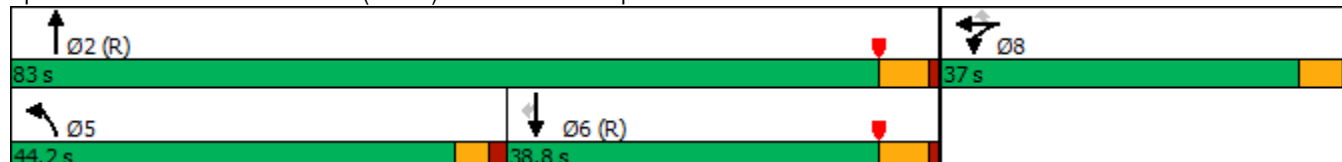
Intersection LOS: C

Intersection Capacity Utilization 78.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	4	410	795	881	0	0	913	471
Future Volume (veh/h)	0	0	0	360	4	410	795	881	0	0	913	471
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				449	0	155	828	918	0	0	951	402
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				527	0	234	879	2718	0	0	2414	749
Arrive On Green				0.15	0.00	0.15	0.51	1.00	0.00	0.00	0.47	0.47
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				449	0	155	828	918	0	0	951	402
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1702	1585
Q Serve(g_s), s				14.7	0.0	11.1	27.1	0.0	0.0	0.0	14.5	21.5
Cycle Q Clear(g_c), s				14.7	0.0	11.1	27.1	0.0	0.0	0.0	14.5	21.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				527	0	234	879	2718	0	0	2414	749
V/C Ratio(X)				0.85	0.00	0.66	0.94	0.34	0.00	0.00	0.39	0.54
Avail Cap(c_a), veh/h				950	0	423	1143	2718	0	0	2414	749
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.53	0.53	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.9	0.0	48.3	28.6	0.0	0.0	0.0	20.5	22.3
Incr Delay (d2), s/veh				1.6	0.0	1.2	6.9	0.2	0.0	0.0	0.5	2.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.5	0.0	4.3	8.5	0.1	0.0	0.0	5.6	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.4	0.0	49.5	35.5	0.2	0.0	0.0	21.0	25.1
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					604			1746			1353	
Approach Delay, s/veh					50.9			16.9			22.2	
Approach LOS					D			B			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		97.3			35.0	62.2		22.7				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		77.5			39.7	33.3		32.0				
Max Q Clear Time (g_c+I1), s		2.0			29.1	23.5		16.7				
Green Ext Time (p_c), s		11.7			1.4	6.5		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				24.4								
HCM 6th LOS				C								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	337	0	552	1337	586	365	908
Future Volume (vph)	337	0	552	1337	586	365	908
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	35.0	65.0	65.0	20.0	85.0
Total Split (%)	29.2%	29.2%	29.2%	54.2%	54.2%	16.7%	70.8%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	26.5	26.5	26.5	63.1	63.1	15.9	83.0
Actuated g/C Ratio	0.22	0.22	0.22	0.53	0.53	0.13	0.69
v/c Ratio	0.87	0.70	0.68	0.76	0.58	0.85	0.39
Control Delay	68.2	29.0	28.0	26.9	5.3	70.8	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	68.2	29.0	28.0	26.9	5.3	70.8	8.3
LOS	E	C	C	C	A	E	A
Approach Delay		42.1		20.3			26.2
Approach LOS		D		C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 26.9

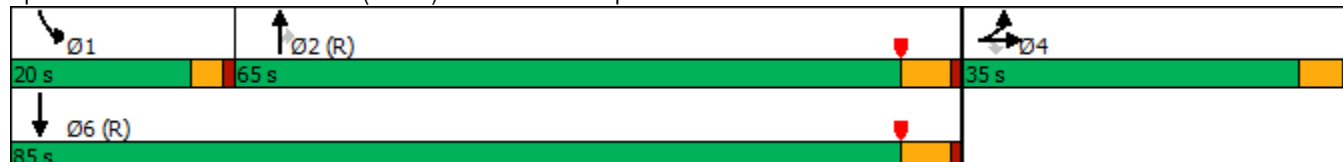
Intersection LOS: C

Intersection Capacity Utilization 78.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	0	552	0	0	0	0	1337	586	365	908	0
Future Volume (veh/h)	337	0	552	0	0	0	0	1337	586	365	908	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	526	0	299				0	1422	507	388	966	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	744	0	331				0	1935	849	435	2500	0
Arrive On Green	0.21	0.00	0.21				0.00	0.54	0.54	0.25	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1560	3456	3647	0
Grp Volume(v), veh/h	526	0	299				0	1422	507	388	966	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1560	1728	1777	0
Q Serve(g_s), s	16.4	0.0	22.1				0.0	36.5	26.3	13.0	0.0	0.0
Cycle Q Clear(g_c), s	16.4	0.0	22.1				0.0	36.5	26.3	13.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	744	0	331				0	1935	849	435	2500	0
V/C Ratio(X)	0.71	0.00	0.90				0.00	0.73	0.60	0.89	0.39	0.00
Avail Cap(c_a), veh/h	891	0	396				0	1935	849	461	2500	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.69	0.69	0.81	0.81	0.00
Uniform Delay (d), s/veh	44.1	0.0	46.3				0.0	20.8	18.5	44.1	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	19.3				0.0	1.8	2.1	15.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	0.0	10.2				0.0	14.5	9.4	5.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	0.0	65.5				0.0	22.5	20.6	59.1	0.4	0.0
LnGrp LOS	D	A	E				A	C	C	E	A	A
Approach Vol, veh/h	825						1929			1354		
Approach Delay, s/veh	52.8						22.0			17.2		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.1	70.8		30.1		89.9						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	16.0	59.5		30.0		79.5						
Max Q Clear Time (g_c+I1), s	15.0	38.5		24.1		2.0						
Green Ext Time (p_c), s	0.1	15.9		1.0		12.7						
Intersection Summary												
HCM 6th Ctrl Delay	26.6											
HCM 6th LOS	C											
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (vph)	140	246	90	163	366	169	155	1238	174	164	879	150
Future Volume (vph)	140	246	90	163	366	169	155	1238	174	164	879	150
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.0	30.0	30.0	26.0	32.0	32.0	15.4	47.9	47.9	16.1	48.6	24.0
Total Split (%)	20.0%	25.0%	25.0%	21.7%	26.7%	26.7%	12.8%	39.9%	39.9%	13.4%	40.5%	20.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (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
Lost Time Adjust (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
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	12.7	15.4	15.4	14.1	16.7	16.7	8.9	32.6	32.6	9.3	31.8	46.5
Actuated g/C Ratio	0.14	0.17	0.17	0.15	0.18	0.18	0.10	0.35	0.35	0.10	0.34	0.50
v/c Ratio	0.63	0.43	0.26	0.66	0.59	0.41	0.51	0.71	0.29	0.52	0.52	0.18
Control Delay	53.5	39.2	6.6	53.0	40.6	9.8	49.9	29.4	11.6	49.4	26.2	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	39.2	6.6	53.0	40.6	9.8	49.9	29.4	11.6	49.4	26.2	4.5
LOS	D	D	A	D	D	A	D	C	B	D	C	A
Approach Delay		37.2			36.1			29.4			26.7	
Approach LOS		D			D			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 92.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 30.7

Intersection LOS: C

Intersection Capacity Utilization 64.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
16.1 s	47.9 s	26 s	30 s
			
Ø5	Ø6	Ø7	Ø8
15.4 s	48.6 s	24 s	32 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	246	90	163	366	169	155	1238	174	164	879	150
Future Volume (veh/h)	140	246	90	163	366	169	155	1238	174	164	879	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	144	254	63	168	377	113	160	1276	128	169	906	106
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	525	230	206	582	256	240	1858	577	251	1876	743
Arrive On Green	0.11	0.15	0.15	0.12	0.16	0.16	0.07	0.36	0.36	0.08	0.37	0.37
Sat Flow, veh/h	1688	3554	1554	1688	3554	1564	3274	5106	1585	3274	5106	1564
Grp Volume(v), veh/h	144	254	63	168	377	113	160	1276	128	169	906	106
Grp Sat Flow(s),veh/h/ln	1688	1777	1554	1688	1777	1564	1637	1702	1585	1637	1702	1564
Q Serve(g_s), s	6.2	4.9	2.7	7.2	7.4	4.8	3.5	15.7	4.1	3.7	10.1	2.8
Cycle Q Clear(g_c), s	6.2	4.9	2.7	7.2	7.4	4.8	3.5	15.7	4.1	3.7	10.1	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	525	230	206	582	256	240	1858	577	251	1876	743
V/C Ratio(X)	0.80	0.48	0.27	0.81	0.65	0.44	0.67	0.69	0.22	0.67	0.48	0.14
Avail Cap(c_a), veh/h	441	1158	507	486	1254	552	476	2923	907	507	2896	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	29.0	28.1	31.8	29.0	28.0	33.5	20.0	16.3	33.4	18.1	11.0
Incr Delay (d2), s/veh	3.2	0.7	0.6	3.0	1.2	1.2	1.2	0.5	0.2	1.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	2.0	1.0	2.9	3.0	1.7	1.3	5.2	1.4	1.4	3.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	29.7	28.7	34.7	30.3	29.2	34.7	20.5	16.5	34.6	18.3	11.1
LnGrp LOS	D	C	C	C	C	C	C	C	B	C	B	B
Approach Vol, veh/h	461			658			1564			1181		
Approach Delay, s/veh	31.4			31.2			21.6			19.9		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	33.5	13.7	16.8	10.0	33.8	12.5	17.9				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.5	* 43	21.4	24.2	10.8	42.1	19.4	26.2				
Max Q Clear Time (g_c+I1), s	5.7	17.7	9.2	6.9	5.5	12.1	8.2	9.4				
Green Ext Time (p_c), s	0.1	9.3	0.2	1.5	0.1	7.2	0.1	2.3				

Intersection Summary

HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	55	72	47	110	102	46	1441	112	57	1005	50
Future Volume (vph)	55	72	47	110	102	46	1441	112	57	1005	50
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	16.0	64.0	64.0	17.0	65.0	65.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	13.3%	53.3%	53.3%	14.2%	54.2%	54.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	15.7	15.7	15.7	15.7	15.7	7.4	60.6	60.6	7.9	62.1	62.1
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.16	0.08	0.62	0.62	0.08	0.63	0.63
v/c Ratio	0.39	0.25	0.16	0.57	0.56	0.38	0.43	0.12	0.44	0.30	0.05
Control Delay	44.8	38.1	4.4	50.1	39.8	54.2	11.8	5.7	55.1	10.1	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	38.1	4.4	50.1	39.8	54.2	11.8	5.7	55.1	10.1	2.4
LOS	D	D	A	D	D	D	B	A	E	B	A
Approach Delay		31.1			44.0		12.6			12.1	
Approach LOS		C			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 97.8

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 16.1

Intersection LOS: B

Intersection Capacity Utilization 67.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	64 s	39 s
		
Ø5	Ø6	Ø8
16 s	65 s	39 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	72	47	110	102	61	46	1441	112	57	1005	50
Future Volume (veh/h)	55	72	47	110	102	61	46	1441	112	57	1005	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	57	75	30	115	106	54	48	1501	91	59	1047	41
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	297	252	227	185	94	64	3473	981	74	3509	978
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.62	0.62	0.04	0.63	0.63
Sat Flow, veh/h	1162	1870	1585	1221	1162	592	1688	5611	1585	1688	5611	1564
Grp Volume(v), veh/h	57	75	30	115	0	160	48	1501	91	59	1047	41
Grp Sat Flow(s),veh/h/ln	1162	1870	1585	1221	0	1754	1688	1870	1585	1688	1870	1564
Q Serve(g_s), s	4.5	3.3	1.5	8.7	0.0	8.0	2.7	13.2	2.2	3.3	8.2	1.0
Cycle Q Clear(g_c), s	12.6	3.3	1.5	12.0	0.0	8.0	2.7	13.2	2.2	3.3	8.2	1.0
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	297	252	227	0	279	64	3473	981	74	3509	978
V/C Ratio(X)	0.35	0.25	0.12	0.51	0.00	0.57	0.75	0.43	0.09	0.79	0.30	0.04
Avail Cap(c_a), veh/h	384	654	554	460	0	613	203	3473	981	220	3509	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	35.0	34.2	40.3	0.0	37.0	45.3	9.4	7.3	45.0	8.2	6.8
Incr Delay (d2), s/veh	1.3	0.4	0.2	1.7	0.0	1.9	6.5	0.4	0.2	6.9	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.5	0.6	2.6	0.0	3.4	1.2	4.3	0.6	1.4	2.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	35.4	34.5	42.0	0.0	38.8	51.8	9.8	7.5	51.9	8.4	6.9
LnGrp LOS	D	D	C	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h	162				275				1640			
Approach Delay, s/veh	38.3				40.2				10.9			
Approach LOS	D				D				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	65.3		20.9	8.2	65.9		20.9				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 59		33.2	11.4	58.5		33.2				
Max Q Clear Time (g_c+l1), s	5.3	15.2		14.6	4.7	10.2		14.0				
Green Ext Time (p_c), s	0.0	13.6		0.5	0.0	7.9		1.1				

Intersection Summary

HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 		 	  		 	  	
Traffic Volume (vph)	263	84	86	19	55	148	1296	13	39	944	132
Future Volume (vph)	263	84	86	19	55	148	1296	13	39	944	132
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	24.0	53.5	53.5	13.5	43.0	18.0	44.5	44.5	8.5	35.0	35.0
Total Split (%)	20.0%	44.6%	44.6%	11.3%	35.8%	15.0%	37.1%	37.1%	7.1%	29.2%	29.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	12.6	19.4	19.4	11.3	11.5	8.8	30.7	30.7	5.7	22.4	22.4
Actuated g/C Ratio	0.17	0.26	0.26	0.15	0.16	0.12	0.42	0.42	0.08	0.30	0.30
v/c Ratio	0.49	0.18	0.18	0.08	0.33	0.39	0.58	0.02	0.16	0.58	0.23
Control Delay	35.9	24.1	2.7	39.7	24.8	39.4	21.3	0.1	43.4	25.5	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.9	24.1	2.7	39.7	24.8	39.4	21.3	0.1	43.4	25.5	4.4
LOS	D	C	A	D	C	D	C	A	D	C	A
Approach Delay		27.0			27.3		22.9			23.7	
Approach LOS		C			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 73.5

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 23.9

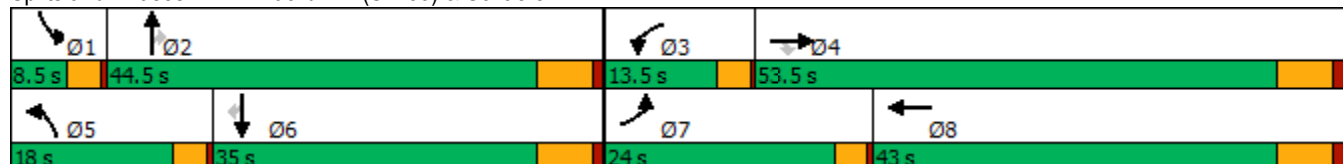
Intersection LOS: C

Intersection Capacity Utilization 58.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	263	84	86	19	55	40	148	1296	13	39	944	132
Future Volume (veh/h)	263	84	86	19	55	40	148	1296	13	39	944	132
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	274	88	38	20	57	20	154	1350	13	41	983	99
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	395	312	263	80	124	43	261	2212	625	137	1999	557
Arrive On Green	0.12	0.17	0.17	0.05	0.09	0.09	0.08	0.39	0.39	0.04	0.36	0.36
Sat Flow, veh/h	3274	1870	1579	1688	1323	464	3274	5611	1585	3274	5611	1564
Grp Volume(v), veh/h	274	88	38	20	0	77	154	1350	13	41	983	99
Grp Sat Flow(s),veh/h/ln	1637	1870	1579	1688	0	1787	1637	1870	1585	1637	1870	1564
Q Serve(g_s), s	4.6	2.4	1.2	0.7	0.0	2.3	2.6	11.0	0.3	0.7	7.8	2.5
Cycle Q Clear(g_c), s	4.6	2.4	1.2	0.7	0.0	2.3	2.6	11.0	0.3	0.7	7.8	2.5
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	395	312	263	80	0	167	261	2212	625	137	1999	557
V/C Ratio(X)	0.69	0.28	0.14	0.25	0.00	0.46	0.59	0.61	0.02	0.30	0.49	0.18
Avail Cap(c_a), veh/h	1173	1520	1284	295	0	1124	830	3776	1067	286	2845	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	20.8	20.3	26.3	0.0	24.6	25.4	13.8	10.6	26.6	14.4	12.7
Incr Delay (d2), s/veh	0.8	0.4	0.2	0.6	0.0	1.5	0.8	0.3	0.0	0.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.9	0.4	0.2	0.0	0.9	0.9	3.4	0.1	0.2	2.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	21.2	20.5	26.9	0.0	26.0	26.2	14.1	10.6	27.0	14.6	12.8
LnGrp LOS	C	C	C	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		400			97			1517			1123	
Approach Delay, s/veh		23.7			26.2			15.3			14.9	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	28.6	6.2	16.5	8.1	26.4	10.4	12.4				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	38.5	10.0	46.5	14.5	29.0	20.5	36.0				
Max Q Clear Time (g_c+I1), s	2.7	13.0	2.7	4.4	4.6	9.8	6.6	4.3				
Green Ext Time (p_c), s	0.0	9.6	0.0	0.4	0.2	6.2	0.4	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			16.6									
HCM 6th LOS			B									

Timings

18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	225	115	64	398	209	172	1116	44	139	846	105
Future Volume (vph)	128	225	115	64	398	209	172	1116	44	139	846	105
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	46.0	46.0	9.5	49.0	8.5	8.5	29.0	29.0	8.5	40.0	9.5
Total Split (s)	13.8	52.4	52.4	10.4	49.0	14.6	16.0	42.6	42.6	14.6	41.2	13.8
Total Split (%)	11.5%	43.7%	43.7%	8.7%	40.8%	12.2%	13.3%	35.5%	35.5%	12.2%	34.3%	11.5%
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.0	3.0	5.0	5.0	3.0	5.0	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0	3.5	3.5	6.0	6.0	3.5	6.0	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	8.6	21.2	21.2	6.1	16.0	28.0	9.3	26.3	26.3	8.3	25.2	35.4
Actuated g/C Ratio	0.11	0.26	0.26	0.08	0.20	0.34	0.11	0.32	0.32	0.10	0.31	0.44
v/c Ratio	0.38	0.18	0.24	0.27	0.41	0.37	0.50	0.70	0.08	0.43	0.55	0.15
Control Delay	42.4	24.9	6.3	45.2	29.5	13.7	42.9	28.0	0.2	43.0	26.2	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	24.9	6.3	45.2	29.5	13.7	42.9	28.0	0.2	43.0	26.2	4.2
LOS	D	C	A	D	C	B	D	C	A	D	C	A
Approach Delay		25.1			26.1			29.0			26.2	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 81.3

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 27.1

Intersection LOS: C

Intersection Capacity Utilization 56.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

			
Ø1	Ø2	Ø3	Ø4
14.6 s	42.6 s	10.4 s	52.4 s
			
Ø5	Ø6	Ø7	Ø8
16 s	41.2 s	13.8 s	49 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	225	115	64	398	209	172	1116	44	139	846	105
Future Volume (veh/h)	128	225	115	64	398	209	172	1116	44	139	846	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	132	232	85	66	410	207	177	1151	31	143	872	70
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	1104	342	175	1021	429	263	1726	536	232	1654	617
Arrive On Green	0.07	0.22	0.22	0.05	0.20	0.20	0.08	0.34	0.34	0.07	0.32	0.32
Sat Flow, veh/h	3274	5106	1583	3274	5106	1583	3092	5106	1585	3274	5106	1564
Grp Volume(v), veh/h	132	232	85	66	410	207	177	1151	31	143	872	70
Grp Sat Flow(s),veh/h/ln	1637	1702	1583	1637	1702	1583	1546	1702	1585	1637	1702	1564
Q Serve(g_s), s	2.6	2.4	2.9	1.3	4.6	7.2	3.6	12.6	0.9	2.8	9.1	1.9
Cycle Q Clear(g_c), s	2.6	2.4	2.9	1.3	4.6	7.2	3.6	12.6	0.9	2.8	9.1	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	1104	342	175	1021	429	263	1726	536	232	1654	617
V/C Ratio(X)	0.58	0.21	0.25	0.38	0.40	0.48	0.67	0.67	0.06	0.62	0.53	0.11
Avail Cap(c_a), veh/h	466	3549	1100	296	3283	1130	592	2861	888	556	2752	953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	21.0	21.2	29.9	22.7	20.0	29.0	18.5	14.6	29.5	18.0	12.6
Incr Delay (d2), s/veh	2.3	0.1	0.4	1.3	0.3	0.8	1.1	0.4	0.0	1.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.9	1.0	0.5	1.6	2.4	1.2	4.0	0.3	1.0	2.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	21.1	21.6	31.2	23.0	20.8	30.1	18.9	14.6	30.5	18.3	12.7
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h	449			683			1359			1085		
Approach Delay, s/veh	24.3			23.1			20.3			19.5		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	28.1	8.0	21.1	9.0	27.2	9.0	20.1				
Change Period (Y+Rc), s	3.5	6.0	4.5	7.0	3.5	6.0	4.5	7.0				
Max Green Setting (Gmax), s	11.1	36.6	5.9	45.4	12.5	35.2	9.3	42.0				
Max Q Clear Time (g_c+I1), s	4.8	14.6	3.3	4.9	5.6	11.1	4.6	9.2				
Green Ext Time (p_c), s	0.1	7.5	0.0	1.7	0.2	5.7	0.1	3.4				
Intersection Summary												
HCM 6th Ctrl Delay	21.1											
HCM 6th LOS	C											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	56	127	16	74	238	122	1086	8	90	878	35
Future Volume (vph)	42	56	127	16	74	238	122	1086	8	90	878	35
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	23.0	50.0	50.0	20.0	47.0	47.0
Total Split (%)	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	19.2%	41.7%	41.7%	16.7%	39.2%	39.2%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	11.8	11.8	11.8	11.8	11.8	11.8	11.0	23.2	23.2	9.7	22.1	22.1
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.20	0.19	0.40	0.40	0.17	0.38	0.38
v/c Ratio	0.17	0.16	0.31	0.03	0.21	0.48	0.40	0.56	0.01	0.34	0.48	0.06
Control Delay	22.4	21.5	6.6	20.5	22.0	6.7	31.1	17.1	0.0	31.9	17.2	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.4	21.5	6.6	20.5	22.0	6.7	31.1	17.1	0.0	31.9	17.2	5.5
LOS	C	C	A	C	C	A	C	B	A	C	B	A
Approach Delay		13.3			10.8			18.4			18.1	
Approach LOS		B			B			B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 57.9

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 16.9

Intersection LOS: B

Intersection Capacity Utilization 52.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
20 s	50 s	50 s
		
Ø5	Ø6	Ø8
23 s	47 s	50 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	56	127	16	74	238	122	1086	8	90	878	35
Future Volume (veh/h)	42	56	127	16	74	238	122	1086	8	90	878	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	44	59	53	17	78	239	128	1143	8	95	924	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	333	385	327	746	385	327	165	2062	640	131	1959	600
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.10	0.40	0.40	0.08	0.38	0.38
Sat Flow, veh/h	1007	1870	1585	2354	1870	1585	1688	5106	1585	1688	5106	1563
Grp Volume(v), veh/h	44	59	53	17	78	239	128	1143	8	95	924	22
Grp Sat Flow(s),veh/h/ln	1007	1870	1585	1177	1870	1585	1688	1702	1585	1688	1702	1563
Q Serve(g_s), s	1.7	1.2	1.2	0.3	1.5	6.3	3.3	7.7	0.1	2.5	6.1	0.4
Cycle Q Clear(g_c), s	3.2	1.2	1.2	1.4	1.5	6.3	3.3	7.7	0.1	2.5	6.1	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	333	385	327	746	385	327	165	2062	640	131	1959	600
V/C Ratio(X)	0.13	0.15	0.16	0.02	0.20	0.73	0.78	0.55	0.01	0.73	0.47	0.04
Avail Cap(c_a), veh/h	1143	1889	1600	2638	1889	1600	735	5053	1569	622	4711	1442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	14.6	14.6	15.2	14.7	16.6	19.7	10.2	8.0	20.2	10.4	8.6
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.0	0.2	2.4	5.8	0.2	0.0	5.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.4	0.1	0.5	2.0	1.3	1.7	0.0	1.0	1.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	14.7	14.8	15.2	14.9	19.0	25.5	10.5	8.0	25.8	10.6	8.6
LnGrp LOS	B	B	B	B	B	B	C	B	A	C	B	A
Approach Vol, veh/h	156			334			1279			1041		
Approach Delay, s/veh	15.1			17.8			12.0			11.9		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	23.8		14.0	7.9	22.9		14.0				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	16.5	44.3		45.2	19.5	41.3		45.2				
Max Q Clear Time (g_c+I1), s	4.5	9.7		5.2	5.3	8.1		8.3				
Green Ext Time (p_c), s	0.1	8.4		0.5	0.2	6.4		0.9				
Intersection Summary												
HCM 6th Ctrl Delay	12.8											
HCM 6th LOS	B											

APPENDIX 7.8: HORIZON YEAR (2045) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Timings
9: Driveway 2 & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	133	272	31	345	93	0	154	0
Future Volume (vph)	133	272	31	345	93	0	154	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	9.6	22.8	27.8	27.8	27.8	27.8
Total Split (s)	30.0	58.0	15.0	43.0	47.0	47.0	47.0	47.0
Total Split (%)	25.0%	48.3%	12.5%	35.8%	39.2%	39.2%	39.2%	39.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	5.8	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	9.9	26.0	6.3	15.3	14.2	14.2	14.2	14.2
Actuated g/C Ratio	0.18	0.46	0.11	0.27	0.25	0.25	0.25	0.25
v/c Ratio	0.47	0.30	0.19	0.58	0.34	0.10	0.51	0.16
Control Delay	28.5	10.0	29.7	19.7	22.5	0.3	25.8	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.5	10.0	29.7	19.7	22.5	0.3	25.8	0.4
LOS	C	A	C	B	C	A	C	A
Approach Delay		14.3		20.3		12.8		15.1
Approach LOS		B		C		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 56.3

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 16.4

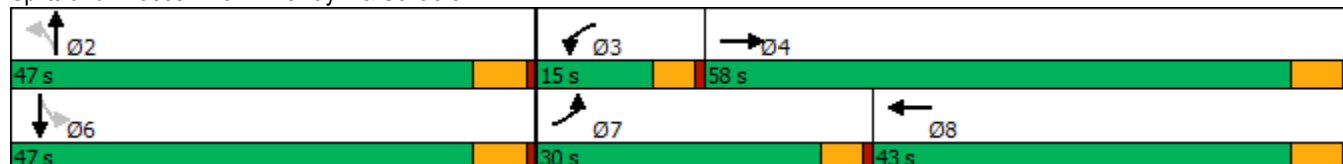
Intersection LOS: B

Intersection Capacity Utilization 50.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 9: Driveway 2 & Schaefer Av.



HCM 6th Signalized Intersection Summary
9: Driveway 2 & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (veh/h)	133	272	134	31	345	142	93	0	71	154	0	112
Future Volume (veh/h)	133	272	134	31	345	142	93	0	71	154	0	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1772	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	145	320	104	36	406	121	109	0	60	167	0	79
Peak Hour Factor	0.92	0.85	0.85	0.85	0.85	0.92	0.85	0.92	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	851	272	69	692	204	443	0	384	461	0	384
Arrive On Green	0.11	0.32	0.32	0.04	0.26	0.26	0.24	0.00	0.24	0.24	0.00	0.24
Sat Flow, veh/h	1781	2649	846	1688	2706	798	1320	0	1585	1343	0	1585
Grp Volume(v), veh/h	145	213	211	36	265	262	109	0	60	167	0	79
Grp Sat Flow(s),veh/h/ln	1781	1777	1718	1688	1777	1727	1320	0	1585	1343	0	1585
Q Serve(g_s), s	3.2	3.8	3.9	0.9	5.3	5.4	2.9	0.0	1.2	4.6	0.0	1.6
Cycle Q Clear(g_c), s	3.2	3.8	3.9	0.9	5.3	5.4	4.6	0.0	1.2	5.8	0.0	1.6
Prop In Lane	1.00		0.49	1.00		0.46	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	571	552	69	454	442	443	0	384	461	0	384
V/C Ratio(X)	0.76	0.37	0.38	0.52	0.58	0.59	0.25	0.00	0.16	0.36	0.00	0.21
Avail Cap(c_a), veh/h	1105	2265	2190	429	1614	1569	1451	0	1595	1487	0	1595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.8	10.7	10.8	19.2	13.3	13.4	14.2	0.0	12.2	14.5	0.0	12.4
Incr Delay (d2), s/veh	2.4	0.4	0.4	2.2	1.2	1.3	0.3	0.0	0.2	0.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.1	1.1	0.3	1.7	1.7	0.7	0.0	0.3	1.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.2	11.1	11.2	21.5	14.5	14.6	14.5	0.0	12.4	15.0	0.0	12.6
LnGrp LOS	C	B	B	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h	569			563			169			246		
Approach Delay, s/veh	13.5			15.0			13.7			14.2		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	2		3	4		6		7	8			
Phs Duration (G+Y+Rc), s	15.7		6.3	19.0		15.7		9.0	16.3			
Change Period (Y+Rc), s	5.8		4.6	5.8		5.8		4.6	5.8			
Max Green Setting (Gmax), s	41.2		10.4	52.2		41.2		25.4	37.2			
Max Q Clear Time (g_c+I1), s	6.6		2.9	5.9		7.8		5.2	7.4			
Green Ext Time (p_c), s	0.6		0.0	2.5		0.9		0.2	3.0			
Intersection Summary												
HCM 6th Ctrl Delay	14.2											
HCM 6th LOS	B											

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	586	3	405	554	1473	1335	488
Future Volume (vph)	586	3	405	554	1473	1335	488
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	41.0	41.0	41.0	32.0	79.0	47.0	47.0
Total Split (%)	34.2%	34.2%	34.2%	26.7%	65.8%	39.2%	39.2%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	30.1	30.1	30.1	23.7	79.4	51.2	51.2
Actuated g/C Ratio	0.25	0.25	0.25	0.20	0.66	0.43	0.43
v/c Ratio	0.85	0.86	0.76	0.84	0.65	0.63	0.52
Control Delay	60.8	60.7	44.4	64.2	10.6	30.3	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	60.8	60.7	44.4	64.2	10.9	30.3	4.6
LOS	E	E	D	E	B	C	A
Approach Delay		55.6			25.5	23.4	
Approach LOS		E			C	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 30.9

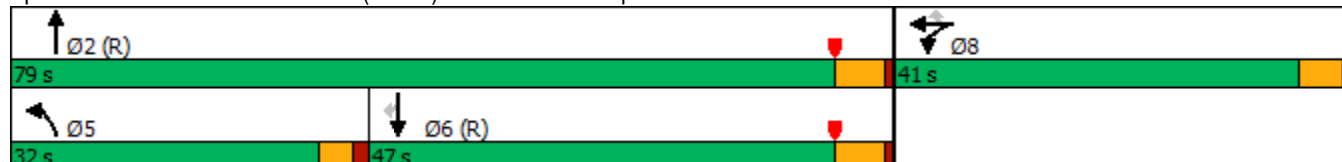
Intersection LOS: C

Intersection Capacity Utilization 86.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	586	3	405	554	1473	0	0	1335	488
Future Volume (veh/h)	0	0	0	586	3	405	554	1473	0	0	1335	488
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				682	0	165	571	1519	0	0	1376	347
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				763	0	340	624	2481	0	0	2453	761
Arrive On Green				0.21	0.00	0.21	0.36	1.00	0.00	0.00	0.48	0.48
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				682	0	165	571	1519	0	0	1376	347
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1702	1585
Q Serve(g_s), s				22.3	0.0	11.0	18.9	0.0	0.0	0.0	23.0	17.5
Cycle Q Clear(g_c), s				22.3	0.0	11.0	18.9	0.0	0.0	0.0	23.0	17.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				763	0	340	624	2481	0	0	2453	761
V/C Ratio(X)				0.89	0.00	0.49	0.92	0.61	0.00	0.00	0.56	0.46
Avail Cap(c_a), veh/h				1069	0	476	792	2481	0	0	2453	761
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.43	0.43	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				45.8	0.0	41.4	37.5	0.0	0.0	0.0	22.2	20.7
Incr Delay (d2), s/veh				5.9	0.0	0.4	5.7	0.5	0.0	0.0	0.9	2.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.2	0.0	4.2	6.7	0.2	0.0	0.0	9.0	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.7	0.0	41.8	43.2	0.5	0.0	0.0	23.1	22.7
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					847			2090			1723	
Approach Delay, s/veh					49.8			12.2			23.0	
Approach LOS					D			B			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	89.3			26.2			63.1			30.7		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	73.5			27.5			41.5			36.0		
Max Q Clear Time (g_c+I1), s	2.0			20.9			25.0			24.3		
Green Ext Time (p_c), s	28.1			0.7			12.0			1.4		
Intersection Summary												
HCM 6th Ctrl Delay			23.0									
HCM 6th LOS			C									
Notes												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	470	0	911	1239	653	401	1229
Future Volume (vph)	470	0	911	1239	653	401	1229
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	46.0	46.0	46.0	55.0	55.0	19.0	74.0
Total Split (%)	38.3%	38.3%	38.3%	45.8%	45.8%	15.8%	61.7%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	39.7	39.7	39.7	50.5	50.5	15.3	69.8
Actuated g/C Ratio	0.33	0.33	0.33	0.42	0.42	0.13	0.58
v/c Ratio	0.79	0.96	0.91	0.86	0.69	0.94	0.62
Control Delay	47.4	65.4	56.1	38.8	8.8	89.0	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	47.4	65.4	56.1	38.8	8.8	89.0	13.9
LOS	D	E	E	D	A	F	B
Approach Delay		56.7		28.5			32.4
Approach LOS		E		C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 37.7

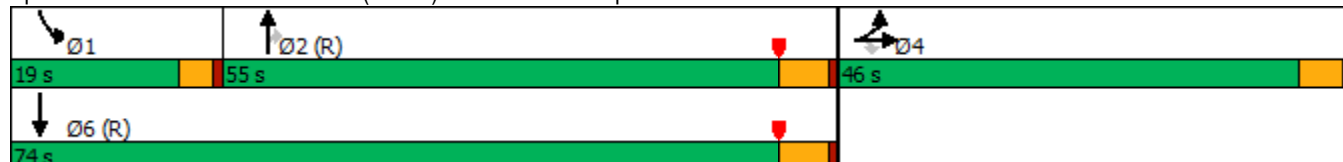
Intersection LOS: D

Intersection Capacity Utilization 86.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	0	911	0	0	0	0	1239	653	401	1229	0
Future Volume (veh/h)	470	0	911	0	0	0	0	1239	653	401	1229	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	323	0	1008				0	1277	507	413	1267	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	594	0	1058				0	1495	657	432	2057	0
Arrive On Green	0.33	0.00	0.33				0.00	0.42	0.42	0.25	1.00	0.00
Sat Flow, veh/h	1781	0	3170				0	3647	1562	3456	3647	0
Grp Volume(v), veh/h	323	0	1008				0	1277	507	413	1267	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1562	1728	1777	0
Q Serve(g_s), s	17.7	0.0	37.3				0.0	39.0	33.4	14.1	0.0	0.0
Cycle Q Clear(g_c), s	17.7	0.0	37.3				0.0	39.0	33.4	14.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	594	0	1058				0	1495	657	432	2057	0
V/C Ratio(X)	0.54	0.00	0.95				0.00	0.85	0.77	0.96	0.62	0.00
Avail Cap(c_a), veh/h	609	0	1083				0	1495	657	432	2057	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.67	0.67	0.68	0.68	0.00
Uniform Delay (d), s/veh	32.5	0.0	39.1				0.0	31.4	29.8	44.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	16.8				0.0	4.4	5.9	25.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	16.2				0.0	16.9	13.1	6.6	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	0.0	55.9				0.0	35.9	35.7	69.7	0.9	0.0
LnGrp LOS	C	A	E				A	D	D	E	A	A
Approach Vol, veh/h	1331						1784			1680		
Approach Delay, s/veh	50.3						35.8			17.9		
Approach LOS	D						D			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.0	56.0		45.0		75.0						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	15.0	49.5		41.0		68.5						
Max Q Clear Time (g_c+I1), s	16.1	41.0		39.3		2.0						
Green Ext Time (p_c), s	0.0	7.0		0.7		19.8						
Intersection Summary												
HCM 6th Ctrl Delay				33.6								
HCM 6th LOS				C								
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	777	167	200	538	101	246	1319	346	163	1559	159
Future Volume (vph)	202	777	167	200	538	101	246	1319	346	163	1559	159
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.7	35.5	35.5	21.1	31.9	31.9	15.5	49.7	49.7	13.7	47.9	24.7
Total Split (%)	20.6%	29.6%	29.6%	17.6%	26.6%	26.6%	12.9%	41.4%	41.4%	11.4%	39.9%	20.6%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (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
Lost Time Adjust (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
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	18.3	29.7	29.7	16.5	27.9	27.9	10.9	44.6	44.6	8.8	41.4	61.6
Actuated g/C Ratio	0.15	0.25	0.25	0.14	0.23	0.23	0.09	0.37	0.37	0.07	0.34	0.51
v/c Ratio	0.86	0.97	0.38	0.94	0.71	0.24	0.91	0.76	0.54	0.74	0.97	0.21
Control Delay	79.7	68.0	17.1	98.5	48.4	7.8	87.2	36.2	18.9	73.4	53.7	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.7	68.0	17.1	98.5	48.4	7.8	87.2	36.2	18.9	73.4	53.7	8.4
LOS	E	E	B	F	D	A	F	D	B	E	D	A
Approach Delay		62.6			55.4			39.7			51.5	
Approach LOS		E			E			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 50.4

Intersection LOS: D

Intersection Capacity Utilization 88.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
13.7 s	49.7 s	21.1 s	35.5 s
			
15.5 s	47.9 s	24.7 s	31.9 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (veh/h)	202	777	167	200	538	101	246	1319	346	163	1559	159
Future Volume (veh/h)	202	777	167	200	538	101	246	1319	346	163	1559	159
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	220	845	158	217	585	52	267	1434	305	177	1695	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	880	387	232	852	380	297	1868	580	229	1760	776
Arrive On Green	0.15	0.25	0.25	0.14	0.24	0.24	0.09	0.37	0.37	0.07	0.34	0.34
Sat Flow, veh/h	1688	3554	1565	1688	3554	1583	3274	5106	1585	3274	5106	1584
Grp Volume(v), veh/h	220	845	158	217	585	52	267	1434	305	177	1695	110
Grp Sat Flow(s),veh/h/ln	1688	1777	1565	1688	1777	1583	1637	1702	1585	1637	1702	1584
Q Serve(g_s), s	15.4	28.2	10.1	15.3	18.0	3.1	9.7	29.7	18.1	6.4	39.1	4.6
Cycle Q Clear(g_c), s	15.4	28.2	10.1	15.3	18.0	3.1	9.7	29.7	18.1	6.4	39.1	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	880	387	232	852	380	297	1868	580	229	1760	776
V/C Ratio(X)	0.90	0.96	0.41	0.93	0.69	0.14	0.90	0.77	0.53	0.77	0.96	0.14
Avail Cap(c_a), veh/h	283	880	387	232	852	380	297	1886	585	248	1762	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	44.5	37.8	51.2	41.5	35.8	54.0	33.5	29.9	54.9	38.5	16.8
Incr Delay (d2), s/veh	24.6	21.2	0.7	40.9	2.3	0.2	27.1	2.0	0.9	11.4	13.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	14.5	3.8	8.9	7.9	1.2	4.9	11.7	6.8	2.9	17.9	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.0	65.8	38.5	92.1	43.8	36.0	81.1	35.5	30.7	66.3	52.2	16.8
LnGrp LOS	E	E	D	F	D	D	F	D	C	E	D	B
Approach Vol, veh/h		1223			854			2006			1982	
Approach Delay, s/veh		63.9			55.6			40.8			51.5	
Approach LOS		E			E			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	50.4	21.1	35.5	15.5	47.9	22.0	34.6				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	9.1	* 44	16.5	29.7	10.9	41.4	20.1	26.1				
Max Q Clear Time (g_c+I1), s	8.4	31.7	17.3	30.2	11.7	41.1	17.4	20.0				
Green Ext Time (p_c), s	0.0	7.7	0.0	0.0	0.0	0.3	0.1	1.9				

Intersection Summary

HCM 6th Ctrl Delay	51.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	145	236	63	155	278	57	1785	295	75	1749	141
Future Volume (vph)	145	236	63	155	278	57	1785	295	75	1749	141
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	48.0	48.0	48.0	48.0	48.0	12.0	58.0	58.0	14.0	60.0	60.0
Total Split (%)	40.0%	40.0%	40.0%	40.0%	40.0%	10.0%	48.3%	48.3%	11.7%	50.0%	50.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	30.1	30.1	30.1	30.1	30.1	6.8	54.7	54.7	8.2	54.6	54.6
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.06	0.51	0.51	0.08	0.51	0.51
v/c Ratio	1.06	0.47	0.13	0.67	0.71	0.55	0.65	0.36	0.60	0.63	0.17
Control Delay	129.9	34.0	5.8	48.3	40.8	72.2	22.9	15.0	71.1	22.4	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.9	34.0	5.8	48.3	40.8	72.2	22.9	15.0	71.1	22.4	3.9
LOS	F	C	A	D	D	E	C	B	E	C	A
Approach Delay		61.3			43.1		23.1			22.9	
Approach LOS		E			D		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.3

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 28.4

Intersection LOS: C

Intersection Capacity Utilization 85.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
14 s	58 s	48 s
		
Ø5	Ø6	Ø8
12 s	60 s	48 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	236	63	155	278	77	57	1785	295	75	1749	141
Future Volume (veh/h)	145	236	63	155	278	77	57	1785	295	75	1749	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	151	246	49	161	290	70	59	1859	277	78	1822	122
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	637	539	309	495	120	75	2558	723	98	2635	744
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.04	0.46	0.46	0.06	0.47	0.47
Sat Flow, veh/h	967	1870	1585	1027	1455	351	1688	5611	1585	1688	5611	1585
Grp Volume(v), veh/h	151	246	49	161	0	360	59	1859	277	78	1822	122
Grp Sat Flow(s),veh/h/ln	967	1870	1585	1027	0	1806	1688	1870	1585	1688	1870	1585
Q Serve(g_s), s	17.7	11.6	2.4	16.4	0.0	19.0	4.0	31.2	13.3	5.3	29.5	5.1
Cycle Q Clear(g_c), s	36.7	11.6	2.4	27.9	0.0	19.0	4.0	31.2	13.3	5.3	29.5	5.1
Prop In Lane	1.00		1.00	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	637	539	309	0	615	75	2558	723	98	2635	744
V/C Ratio(X)	0.65	0.39	0.09	0.52	0.00	0.59	0.79	0.73	0.38	0.80	0.69	0.16
Avail Cap(c_a), veh/h	256	681	577	334	0	658	108	2558	723	137	2635	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	29.0	26.0	39.6	0.0	31.5	54.8	25.6	20.8	53.9	24.1	17.7
Incr Delay (d2), s/veh	5.0	0.4	0.1	1.4	0.0	1.2	13.4	1.8	1.5	13.2	1.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	5.1	0.9	4.1	0.0	8.1	1.9	13.0	4.8	2.5	12.1	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.5	29.4	26.1	41.0	0.0	32.7	68.3	27.5	22.3	67.1	25.6	18.1
LnGrp LOS	D	C	C	D	A	C	E	C	C	E	C	B
Approach Vol, veh/h		446			521			2195			2022	
Approach Delay, s/veh		36.5			35.2			27.9			26.8	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	59.3		45.2	9.7	60.9		45.2				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	9.4	* 53		42.2	7.4	53.5		42.2				
Max Q Clear Time (g_c+I1), s	7.3	33.2		38.7	6.0	31.5		29.9				
Green Ext Time (p_c), s	0.0	13.0		0.8	0.0	13.2		2.2				
Intersection Summary												
HCM 6th Ctrl Delay			29.0									
HCM 6th LOS			C									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 				 	 	  		 	  	
Traffic Volume (vph)	528	210	182	29	134	225	1552	57	103	1648	160
Future Volume (vph)	528	210	182	29	134	225	1552	57	103	1648	160
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	22.0	51.5	51.5	13.5	43.0	12.0	46.5	46.5	8.5	43.0	43.0
Total Split (%)	18.3%	42.9%	42.9%	11.3%	35.8%	10.0%	38.8%	38.8%	7.1%	35.8%	35.8%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	18.6	33.5	33.5	10.1	19.2	8.6	40.8	40.8	5.0	37.2	37.2
Actuated g/C Ratio	0.18	0.32	0.32	0.10	0.19	0.08	0.39	0.39	0.05	0.36	0.36
v/c Ratio	0.95	0.37	0.30	0.19	0.71	0.88	0.74	0.09	0.69	0.86	0.26
Control Delay	70.9	30.0	5.1	49.6	45.1	81.1	30.7	0.2	72.7	37.4	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.9	30.0	5.1	49.6	45.1	81.1	30.7	0.2	72.7	37.4	8.1
LOS	E	C	A	D	D	F	C	A	E	D	A
Approach Delay		48.6			45.6		35.9			36.9	
Approach LOS		D			D		D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 39.2

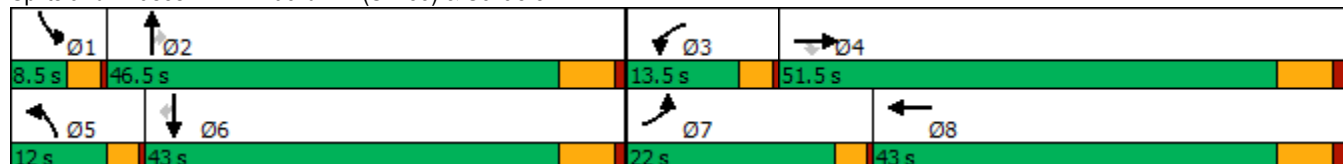
Intersection LOS: D

Intersection Capacity Utilization 85.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 				 		 	  		  	  	
Traffic Volume (veh/h)	528	210	182	29	134	100	225	1552	57	103	1648	160
Future Volume (veh/h)	528	210	182	29	134	100	225	1552	57	103	1648	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	556	221	167	31	141	91	237	1634	54	108	1735	145
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	613	538	456	98	169	109	285	2238	632	164	2030	573
Arrive On Green	0.19	0.29	0.29	0.06	0.16	0.16	0.09	0.40	0.40	0.05	0.36	0.36
Sat Flow, veh/h	3274	1870	1585	1688	1062	685	3274	5611	1585	3274	5611	1585
Grp Volume(v), veh/h	556	221	167	31	0	232	237	1634	54	108	1735	145
Grp Sat Flow(s),veh/h/ln	1637	1870	1585	1688	0	1747	1637	1870	1585	1637	1870	1585
Q Serve(g_s), s	16.2	9.3	8.2	1.7	0.0	12.6	7.0	24.1	2.1	3.2	27.9	6.3
Cycle Q Clear(g_c), s	16.2	9.3	8.2	1.7	0.0	12.6	7.0	24.1	2.1	3.2	27.9	6.3
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	613	538	456	98	0	278	285	2238	632	164	2030	573
V/C Ratio(X)	0.91	0.41	0.37	0.32	0.00	0.84	0.83	0.73	0.09	0.66	0.85	0.25
Avail Cap(c_a), veh/h	621	853	723	173	0	645	285	2329	658	168	2128	601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	28.1	27.7	44.1	0.0	39.8	43.8	24.9	18.3	45.5	28.8	21.9
Incr Delay (d2), s/veh	16.6	0.4	0.4	0.7	0.0	5.0	17.4	1.1	0.1	7.0	3.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	4.0	3.0	0.7	0.0	5.5	3.3	9.7	0.7	1.4	11.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.4	28.4	28.0	44.8	0.0	44.8	61.2	26.0	18.3	52.5	32.3	22.1
LnGrp LOS	E	C	C	D	A	D	E	C	B	D	C	C
Approach Vol, veh/h	944			263			1925			1988		
Approach Delay, s/veh	44.2			44.8			30.1			32.6		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	44.9	9.2	35.1	12.0	41.3	21.8	22.5				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	40.5	10.0	44.5	8.5	37.0	18.5	36.0				
Max Q Clear Time (g_c+I1), s	5.2	26.1	3.7	11.3	9.0	29.9	18.2	14.6				
Green Ext Time (p_c), s	0.0	8.8	0.0	1.3	0.0	5.4	0.0	0.9				
Intersection Summary												
HCM 6th Ctrl Delay	34.5											
HCM 6th LOS	C											

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	  		 	  	
Traffic Volume (vph)	155	617	164	332	586	467	174	1193	213	464	1405	114
Future Volume (vph)	155	617	164	332	586	467	174	1193	213	464	1405	114
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	46.0	46.0	9.5	49.0	8.5	8.5	29.0	29.0	8.5	40.0	9.5
Total Split (s)	13.6	46.0	46.0	17.5	49.9	21.4	11.5	35.1	35.1	21.4	45.0	13.6
Total Split (%)	11.3%	38.3%	38.3%	14.6%	41.6%	17.8%	9.6%	29.3%	29.3%	17.8%	37.5%	11.3%
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.0	3.0	5.0	5.0	3.0	5.0	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0	3.5	3.5	6.0	6.0	3.5	6.0	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	8.8	21.4	21.4	13.1	25.7	50.8	8.1	29.3	29.3	18.0	39.3	54.1
Actuated g/C Ratio	0.09	0.21	0.21	0.13	0.25	0.49	0.08	0.28	0.28	0.17	0.38	0.53
v/c Ratio	0.58	0.60	0.37	0.83	0.48	0.59	0.75	0.85	0.40	0.84	0.75	0.13
Control Delay	55.7	38.8	7.1	62.6	33.7	18.8	67.5	42.5	14.8	56.6	31.6	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.7	38.8	7.1	62.6	33.7	18.8	67.5	42.5	14.8	56.6	31.6	4.7
LOS	E	D	A	E	C	B	E	D	B	E	C	A
Approach Delay		36.0			35.6			41.5			35.9	
Approach LOS		D			D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 37.4

Intersection LOS: D

Intersection Capacity Utilization 76.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

 Ø1	 Ø2	 Ø3	 Ø4
21.4 s	35.1 s	17.5 s	46 s
 Ø5	 Ø6	 Ø7	 Ø8
11.5 s	45 s	13.6 s	49.9 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	617	164	332	586	467	174	1193	213	464	1405	114
Future Volume (veh/h)	155	617	164	332	586	467	174	1193	213	464	1405	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	160	636	140	342	604	472	179	1230	205	478	1448	83
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	1239	379	399	1519	730	234	1381	429	535	1830	675
Arrive On Green	0.07	0.24	0.24	0.12	0.30	0.30	0.08	0.27	0.27	0.16	0.36	0.36
Sat Flow, veh/h	3274	5106	1563	3274	5106	1585	3092	5106	1585	3274	5106	1585
Grp Volume(v), veh/h	160	636	140	342	604	472	179	1230	205	478	1448	83
Grp Sat Flow(s),veh/h/ln	1637	1702	1563	1637	1702	1585	1546	1702	1585	1637	1702	1585
Q Serve(g_s), s	5.0	11.2	7.8	10.7	9.8	23.8	5.9	24.1	11.3	14.9	26.5	3.3
Cycle Q Clear(g_c), s	5.0	11.2	7.8	10.7	9.8	23.8	5.9	24.1	11.3	14.9	26.5	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	1239	379	399	1519	730	234	1381	429	535	1830	675
V/C Ratio(X)	0.73	0.51	0.37	0.86	0.40	0.65	0.77	0.89	0.48	0.89	0.79	0.12
Avail Cap(c_a), veh/h	286	1909	585	408	2100	911	237	1425	442	562	1909	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	34.2	32.8	44.9	29.2	21.6	47.3	36.6	31.9	42.7	30.0	18.2
Incr Delay (d2), s/veh	6.4	0.3	0.6	16.0	0.2	1.1	12.4	7.3	0.8	15.5	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.5	2.9	5.1	3.9	8.3	2.6	10.2	4.2	6.8	10.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.1	34.5	33.4	60.9	29.4	22.7	59.7	43.8	32.7	58.2	32.2	18.2
LnGrp LOS	D	C	C	E	C	C	E	D	C	E	C	B
Approach Vol, veh/h	936			1418			1614			2009		
Approach Delay, s/veh	37.7			34.8			44.2			37.8		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.5	34.2	17.2	32.3	11.4	43.4	11.5	38.0				
Change Period (Y+Rc), s	3.5	6.0	4.5	7.0	3.5	6.0	4.5	7.0				
Max Green Setting (Gmax), s	17.9	29.1	13.0	39.0	8.0	39.0	9.1	42.9				
Max Q Clear Time (g_c+I1), s	16.9	26.1	12.7	13.2	7.9	28.5	7.0	25.8				
Green Ext Time (p_c), s	0.1	2.1	0.0	4.6	0.0	6.4	0.1	5.2				
Intersection Summary												
HCM 6th Ctrl Delay	38.8											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	225	139	137	293	208	134	1017	231	347	1251	34
Future Volume (vph)	66	225	139	137	293	208	134	1017	231	347	1251	34
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	22.3	36.2	36.2	37.0	50.9	50.9
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	18.6%	30.2%	30.2%	30.8%	42.4%	42.4%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	22.6	22.6	22.6	22.6	22.6	22.6	12.8	26.9	26.9	24.8	38.8	38.8
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.25	0.14	0.30	0.30	0.28	0.44	0.44
v/c Ratio	0.45	0.51	0.29	0.36	0.66	0.39	0.60	0.71	0.45	0.79	0.60	0.05
Control Delay	40.3	33.5	6.3	31.2	38.0	6.0	50.8	32.6	19.8	45.7	22.1	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	33.5	6.3	31.2	38.0	6.0	50.8	32.6	19.8	45.7	22.1	4.6
LOS	D	C	A	C	D	A	D	C	B	D	C	A
Approach Delay		25.7			26.1			32.3			26.8	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 89.1

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 28.4

Intersection LOS: C

Intersection Capacity Utilization 75.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
37 s	36.2 s	46.8 s
		
Ø5	Ø6	Ø8
22.3 s	50.9 s	46.8 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

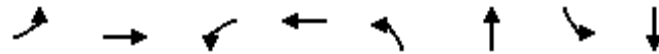
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	225	139	137	293	208	134	1017	231	347	1251	34
Future Volume (veh/h)	66	225	139	137	293	208	134	1017	231	347	1251	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	70	239	107	146	312	201	143	1082	223	369	1331	25
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	509	432	504	509	432	179	1521	472	415	2236	694
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.11	0.30	0.30	0.25	0.44	0.44
Sat Flow, veh/h	841	1870	1585	1902	1870	1585	1688	5106	1585	1688	5106	1584
Grp Volume(v), veh/h	70	239	107	146	312	201	143	1082	223	369	1331	25
Grp Sat Flow(s),veh/h/ln	841	1870	1585	951	1870	1585	1688	1702	1585	1688	1702	1584
Q Serve(g_s), s	6.0	8.1	4.0	5.3	11.1	8.0	6.3	14.4	8.7	16.1	15.1	0.7
Cycle Q Clear(g_c), s	17.1	8.1	4.0	13.4	11.1	8.0	6.3	14.4	8.7	16.1	15.1	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	509	432	504	509	432	179	1521	472	415	2236	694
V/C Ratio(X)	0.35	0.47	0.25	0.29	0.61	0.47	0.80	0.71	0.47	0.89	0.60	0.04
Avail Cap(c_a), veh/h	436	1033	875	1036	1033	875	417	2047	635	743	3034	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	23.1	21.6	28.7	24.2	23.1	33.2	23.8	21.8	27.7	16.3	12.2
Incr Delay (d2), s/veh	0.8	0.5	0.2	0.2	0.9	0.6	6.1	0.8	0.7	5.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.4	1.4	1.1	4.6	2.8	2.6	5.1	2.9	6.2	4.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	23.6	21.8	28.9	25.1	23.7	39.3	24.6	22.6	32.8	16.5	12.2
LnGrp LOS	C	C	C	C	C	C	D	C	C	C	B	B
Approach Vol, veh/h	416			659			1448			1725		
Approach Delay, s/veh	24.6			25.5			25.7			19.9		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	22.2	28.4	25.5		11.6	39.0	25.5					
Change Period (Y+Rc), s	3.5	5.7	4.8		3.5	5.7	4.8					
Max Green Setting (Gmax), s	33.5	30.5	42.0		18.8	45.2	42.0					
Max Q Clear Time (g_c+I1), s	18.1	16.4	19.1		8.3	17.1	15.4					
Green Ext Time (p_c), s	0.7	6.3	1.6		0.2	9.8	2.5					
Intersection Summary												
HCM 6th Ctrl Delay				23.2								
HCM 6th LOS				C								

Timings

Eden Mixed-Use TA (JN:14698)

9: Driveway 2 & Schaefer Av.

10/23/2023



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	←	↑↑	←	↑↑	←	↑	←	↑
Traffic Volume (vph)	94	525	70	343	140	0	120	0
Future Volume (vph)	94	525	70	343	140	0	120	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	9.6	22.8	27.8	27.8	27.8	27.8
Total Split (s)	23.0	55.0	22.0	54.0	43.0	43.0	43.0	43.0
Total Split (%)	19.2%	45.8%	18.3%	45.0%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	5.8	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	8.8	21.3	8.2	20.8	15.0	15.0	15.0	15.0
Actuated g/C Ratio	0.15	0.36	0.14	0.35	0.25	0.25	0.25	0.25
v/c Ratio	0.39	0.65	0.35	0.42	0.49	0.24	0.42	0.12
Control Delay	31.9	18.5	32.2	15.7	28.3	0.8	27.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.9	18.5	32.2	15.7	28.3	0.8	27.0	0.3
LOS	C	B	C	B	C	A	C	A
Approach Delay		20.0		17.9		14.2		15.9
Approach LOS		C		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 59

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 18.0

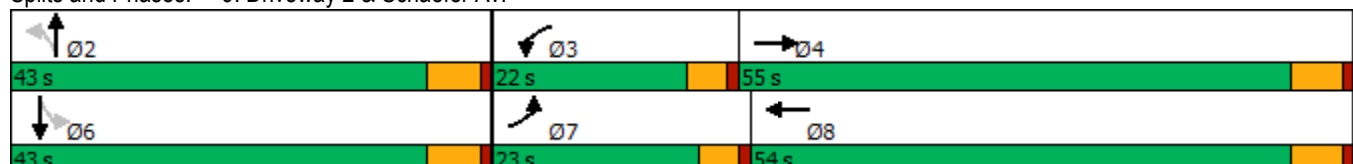
Intersection LOS: B

Intersection Capacity Utilization 60.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 9: Driveway 2 & Schaefer Av.



HCM 6th Signalized Intersection Summary
9: Driveway 2 & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	525	184	70	343	105	140	0	148	120	0	86
Future Volume (veh/h)	94	525	184	70	343	105	140	0	148	120	0	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1772	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	102	610	162	81	399	87	163	0	125	130	0	71
Peak Hour Factor	0.92	0.86	0.86	0.86	0.86	0.92	0.86	0.92	0.86	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	949	251	120	965	208	411	0	356	361	0	356
Arrive On Green	0.08	0.34	0.34	0.07	0.33	0.33	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	1781	2778	736	1688	2906	628	1329	0	1585	1266	0	1585
Grp Volume(v), veh/h	102	390	382	81	242	244	163	0	125	130	0	71
Grp Sat Flow(s),veh/h/ln	1781	1777	1738	1688	1777	1757	1329	0	1585	1266	0	1585
Q Serve(g_s), s	2.5	8.3	8.3	2.1	4.7	4.8	5.1	0.0	3.0	4.3	0.0	1.6
Cycle Q Clear(g_c), s	2.5	8.3	8.3	2.1	4.7	4.8	6.7	0.0	3.0	7.3	0.0	1.6
Prop In Lane	1.00		0.42	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	607	593	120	590	583	411	0	356	361	0	356
V/C Ratio(X)	0.71	0.64	0.64	0.68	0.41	0.42	0.40	0.00	0.35	0.36	0.00	0.20
Avail Cap(c_a), veh/h	735	1960	1917	658	1920	1899	1222	0	1322	1133	0	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.0	12.4	12.4	20.2	11.5	11.6	16.8	0.0	14.6	17.6	0.0	14.0
Incr Delay (d2), s/veh	2.4	1.1	1.2	2.5	0.5	0.5	0.6	0.0	0.6	0.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.5	2.4	0.8	1.4	1.4	1.3	0.0	0.9	1.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	13.5	13.6	22.7	12.0	12.0	17.4	0.0	15.2	18.2	0.0	14.3
LnGrp LOS	C	B	B	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h	874			567			288			201		
Approach Delay, s/veh	14.6			13.5			16.4			16.8		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	2		3	4		6		7	8			
Phs Duration (G+Y+Rc), s	15.8		7.8	21.0		15.8		8.2	20.6			
Change Period (Y+Rc), s	5.8		4.6	5.8		5.8		4.6	5.8			
Max Green Setting (Gmax), s	37.2		17.4	49.2		37.2		18.4	48.2			
Max Q Clear Time (g_c+I1), s	8.7		4.1	10.3		9.3		4.5	6.8			
Green Ext Time (p_c), s	1.2		0.1	4.9		0.8		0.1	2.8			
Intersection Summary												
HCM 6th Ctrl Delay	14.8											
HCM 6th LOS	B											

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

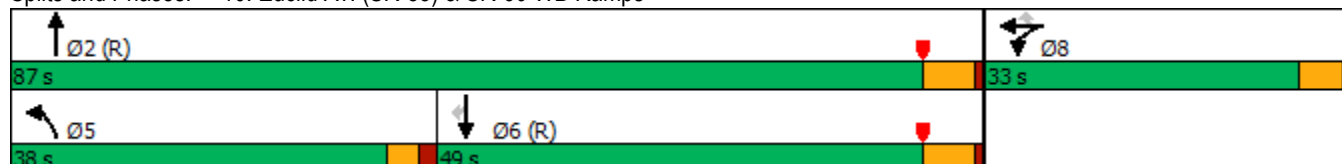
10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	515	1	435	823	1396	1609	571
Future Volume (vph)	515	1	435	823	1396	1609	571
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	33.0	33.0	33.0	38.0	87.0	49.0	49.0
Total Split (%)	27.5%	27.5%	27.5%	31.7%	72.5%	40.8%	40.8%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	26.8	26.8	26.8	32.3	82.7	45.9	45.9
Actuated g/C Ratio	0.22	0.22	0.22	0.27	0.69	0.38	0.38
v/c Ratio	0.93	0.92	0.82	0.94	0.60	0.87	0.66
Control Delay	76.7	73.3	52.9	70.7	7.6	41.0	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	76.7	73.3	52.9	70.7	8.0	41.0	9.4
LOS	E	E	D	E	A	D	A
Approach Delay		68.1			31.3	32.7	
Approach LOS		E			C	C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 38.4
Intersection Capacity Utilization 90.1%
Analysis Period (min) 15
Intersection LOS: D
ICU Level of Service E

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	515	1	435	823	1396	0	0	1609	571
Future Volume (veh/h)	0	0	0	515	1	435	823	1396	0	0	1609	571
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				642	0	214	866	1469	0	0	1694	381
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				714	0	318	905	2531	0	0	2108	655
Arrive On Green				0.20	0.00	0.20	0.52	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				642	0	214	866	1469	0	0	1694	381
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1702	1585
Q Serve(g_s), s				21.1	0.0	15.0	28.7	0.0	0.0	0.0	35.0	22.3
Cycle Q Clear(g_c), s				21.1	0.0	15.0	28.7	0.0	0.0	0.0	35.0	22.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				714	0	318	905	2531	0	0	2108	655
V/C Ratio(X)				0.90	0.00	0.67	0.96	0.58	0.00	0.00	0.80	0.58
Avail Cap(c_a), veh/h				831	0	370	965	2531	0	0	2108	655
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.38	0.38	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.8	0.0	44.4	27.9	0.0	0.0	0.0	30.9	27.2
Incr Delay (d2), s/veh				10.6	0.0	2.6	9.3	0.4	0.0	0.0	3.4	3.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				10.1	0.0	5.9	9.1	0.1	0.0	0.0	14.4	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.4	0.0	46.9	37.2	0.4	0.0	0.0	34.3	31.0
LnGrp LOS				E	A	D	D	A	A	A	C	C
Approach Vol, veh/h					856			2335			2075	
Approach Delay, s/veh					54.8			14.0			33.7	
Approach LOS					D			B			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.0			35.9	55.1		29.0				
Change Period (Y+Rc), s		5.5			4.5	5.5		5.0				
Max Green Setting (Gmax), s		81.5			33.5	43.5		28.0				
Max Q Clear Time (g_c+I1), s		2.0			30.7	37.0		23.1				
Green Ext Time (p_c), s		27.2			0.7	5.9		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				28.4								
HCM 6th LOS				C								
Notes												
User approved volume balancing among the lanes for turning movement.												

Timings
11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	336	1	504	1539	621	374	1545
Future Volume (vph)	336	1	504	1539	621	374	1545
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	32.0	32.0	32.0	67.0	67.0	21.0	88.0
Total Split (%)	26.7%	26.7%	26.7%	55.8%	55.8%	17.5%	73.3%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	24.9	24.9	24.9	64.3	64.3	16.3	84.6
Actuated g/C Ratio	0.21	0.21	0.21	0.54	0.54	0.14	0.70
v/c Ratio	0.89	0.87	0.81	0.86	0.62	0.86	0.66
Control Delay	73.8	63.6	53.3	30.8	6.8	58.8	12.6
Queue Delay	0.6	0.9	0.0	0.7	0.0	0.0	0.6
Total Delay	74.4	64.5	53.3	31.5	6.8	58.8	13.2
LOS	E	E	D	C	A	E	B
Approach Delay		64.3		24.4			22.1
Approach LOS		E		C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 30.3

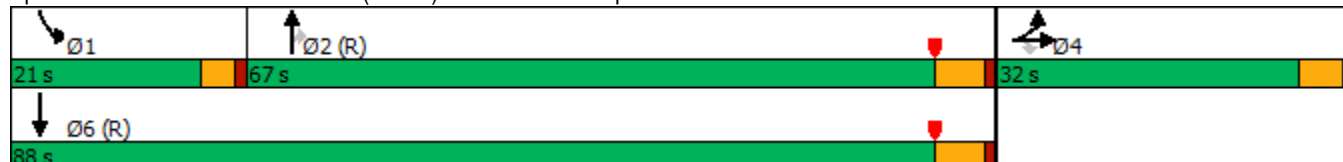
Intersection LOS: C

Intersection Capacity Utilization 90.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	1	504	0	0	0	0	1539	621	374	1545	0
Future Volume (veh/h)	336	1	504	0	0	0	0	1539	621	374	1545	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	502	0	274				0	1637	490	398	1644	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	685	0	305				0	1982	872	446	2559	0
Arrive On Green	0.19	0.00	0.19				0.00	0.56	0.56	0.26	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1563	3456	3647	0
Grp Volume(v), veh/h	502	0	274				0	1637	490	398	1644	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1563	1728	1777	0
Q Serve(g_s), s	15.9	0.0	20.3				0.0	45.3	24.2	13.3	0.0	0.0
Cycle Q Clear(g_c), s	15.9	0.0	20.3				0.0	45.3	24.2	13.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	685	0	305				0	1982	872	446	2559	0
V/C Ratio(X)	0.73	0.00	0.90				0.00	0.83	0.56	0.89	0.64	0.00
Avail Cap(c_a), veh/h	802	0	357				0	1982	872	490	2559	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.12	0.12	0.35	0.35	0.00
Uniform Delay (d), s/veh	45.6	0.0	47.3				0.0	21.7	17.1	43.7	0.0	0.0
Incr Delay (d2), s/veh	2.2	0.0	20.7				0.0	0.5	0.3	6.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	9.5				0.0	17.4	8.2	5.2	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	68.1				0.0	22.3	17.4	50.5	0.4	0.0
LnGrp LOS	D	A	E				A	C	B	D	A	A
Approach Vol, veh/h	776						2127			2042		
Approach Delay, s/veh	54.9						21.1			10.2		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2	4		6							
Phs Duration (G+Y+Rc), s	19.5	72.4	28.1		91.9							
Change Period (Y+Rc), s	4.0	5.5	5.0		5.5							
Max Green Setting (Gmax), s	17.0	61.5	27.0		82.5							
Max Q Clear Time (g_c+I1), s	15.3	47.3	22.3		2.0							
Green Ext Time (p_c), s	0.2	12.2	0.8		34.1							
Intersection Summary												
HCM 6th Ctrl Delay			21.9									
HCM 6th LOS			C									
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (vph)	139	869	133	190	803	67	334	1733	498	145	1207	384
Future Volume (vph)	139	869	133	190	803	67	334	1733	498	145	1207	384
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	19.0	38.0	38.0	20.0	39.0	39.0	18.4	50.8	50.8	11.2	43.6	19.0
Total Split (%)	15.8%	31.7%	31.7%	16.7%	32.5%	32.5%	15.3%	42.3%	42.3%	9.3%	36.3%	15.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (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
Lost Time Adjust (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
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	13.0	32.1	32.1	15.2	34.3	34.3	13.8	45.4	45.4	6.6	37.1	56.6
Actuated g/C Ratio	0.11	0.27	0.27	0.13	0.29	0.29	0.12	0.38	0.38	0.06	0.31	0.47
v/c Ratio	0.80	0.95	0.26	0.93	0.82	0.13	0.93	0.94	0.72	0.85	0.80	0.50
Control Delay	81.7	63.4	5.1	98.2	48.2	0.5	84.7	46.3	26.4	92.9	42.5	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.7	63.4	5.1	98.2	48.2	0.5	84.7	46.3	26.4	92.9	42.5	17.5
LOS	F	E	A	F	D	A	F	D	C	F	D	B
Approach Delay		58.8			54.1			47.4			41.2	
Approach LOS		E			D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 48.9

Intersection LOS: D

Intersection Capacity Utilization 90.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
Ø1	Ø2	Ø3	Ø4
11.2 s	50.8 s	20 s	38 s
			
Ø5	Ø6	Ø7	Ø8
18.4 s	43.6 s	19 s	39 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	869	133	190	803	67	334	1733	498	145	1207	384
Future Volume (veh/h)	139	869	133	190	803	67	334	1733	498	145	1207	384
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	145	905	115	198	836	38	348	1805	439	151	1257	317
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	947	421	215	1042	462	374	1909	592	179	1604	658
Arrive On Green	0.10	0.27	0.27	0.13	0.29	0.29	0.11	0.37	0.37	0.05	0.31	0.31
Sat Flow, veh/h	1688	3554	1581	1688	3554	1577	3274	5106	1585	3274	5106	1585
Grp Volume(v), veh/h	145	905	115	198	836	38	348	1805	439	151	1257	317
Grp Sat Flow(s),veh/h/ln	1688	1777	1581	1688	1777	1577	1637	1702	1585	1637	1702	1585
Q Serve(g_s), s	10.2	30.3	7.0	14.0	26.3	2.1	12.7	41.4	29.0	5.5	27.1	17.7
Cycle Q Clear(g_c), s	10.2	30.3	7.0	14.0	26.3	2.1	12.7	41.4	29.0	5.5	27.1	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	947	421	215	1042	462	374	1909	592	179	1604	658
V/C Ratio(X)	0.85	0.96	0.27	0.92	0.80	0.08	0.93	0.95	0.74	0.84	0.78	0.48
Avail Cap(c_a), veh/h	201	947	421	215	1042	462	374	1918	595	179	1604	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	43.6	35.1	52.1	39.5	30.9	53.1	36.7	32.8	56.6	37.7	25.9
Incr Delay (d2), s/veh	22.5	19.4	0.3	39.5	4.6	0.1	29.3	10.5	4.9	28.0	2.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	15.3	2.7	8.1	11.7	0.8	6.5	17.7	11.4	2.9	11.3	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	63.1	35.4	91.6	44.1	31.0	82.3	47.1	37.7	84.6	40.3	26.4
LnGrp LOS	E	E	D	F	D	C	F	D	D	F	D	C
Approach Vol, veh/h		1165			1072			2592			1725	
Approach Delay, s/veh		62.0			52.4			50.2			41.6	
Approach LOS		E			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	51.7	20.0	38.0	18.4	44.5	16.8	41.2				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	6.6	* 45	15.4	32.2	13.8	37.1	14.4	33.2				
Max Q Clear Time (g_c+I1), s	7.5	43.4	16.0	32.3	14.7	29.1	12.2	28.3				
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	0.0	5.3	0.0	2.3				
Intersection Summary												
HCM 6th Ctrl Delay			50.4									
HCM 6th LOS			D									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	150	528	44	190	487	103	2003	375	70	1304	157
Future Volume (vph)	150	528	44	190	487	103	2003	375	70	1304	157
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	59.0	59.0	59.0	59.0	59.0	16.0	50.5	50.5	10.5	45.0	45.0
Total Split (%)	49.2%	49.2%	49.2%	49.2%	49.2%	13.3%	42.1%	42.1%	8.8%	37.5%	37.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	53.2	53.2	53.2	53.2	53.2	10.5	45.3	45.3	5.9	39.4	39.4
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.44	0.09	0.38	0.38	0.05	0.33	0.33
v/c Ratio	0.94	0.69	0.06	1.09	0.73	0.76	1.02	0.62	0.91	0.76	0.27
Control Delay	89.6	32.1	0.2	126.1	33.3	84.4	62.3	28.2	135.1	39.6	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.6	32.1	0.2	126.1	33.3	84.4	62.3	28.2	135.1	39.6	5.5
LOS	F	C	A	F	C	F	E	C	F	D	A
Approach Delay		42.1			57.1		58.1			40.5	
Approach LOS		D			E		E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 50.9

Intersection LOS: D

Intersection Capacity Utilization 99.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
10.5 s	50.5 s	59 s
		
16 s	45 s	59 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	528	44	190	487	62	103	2003	375	70	1304	157
Future Volume (veh/h)	150	528	44	190	487	62	103	2003	375	70	1304	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	161	568	30	204	524	59	111	2154	334	75	1402	151
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	820	695	210	724	82	134	2095	592	82	1922	543
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.08	0.37	0.37	0.05	0.34	0.34
Sat Flow, veh/h	788	1870	1585	777	1651	186	1688	5611	1585	1688	5611	1585
Grp Volume(v), veh/h	161	568	30	204	0	583	111	2154	334	75	1402	151
Grp Sat Flow(s),veh/h/ln	788	1870	1585	777	0	1837	1688	1870	1585	1688	1870	1585
Q Serve(g_s), s	21.5	29.7	1.3	23.5	0.0	31.7	7.9	45.3	20.3	5.4	26.6	8.4
Cycle Q Clear(g_c), s	53.2	29.7	1.3	53.2	0.0	31.7	7.9	45.3	20.3	5.4	26.6	8.4
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	820	695	210	0	806	134	2095	592	82	1922	543
V/C Ratio(X)	0.81	0.69	0.04	0.97	0.00	0.72	0.83	1.03	0.56	0.91	0.73	0.28
Avail Cap(c_a), veh/h	199	820	695	210	0	806	159	2095	592	82	1922	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	27.5	19.5	52.0	0.0	28.0	55.0	38.0	30.2	57.4	34.9	29.0
Incr Delay (d2), s/veh	21.3	2.5	0.0	53.9	0.0	3.2	22.4	27.2	1.2	69.8	1.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	13.1	0.5	9.3	0.0	13.9	4.0	24.4	7.4	3.8	11.5	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.6	30.0	19.5	105.9	0.0	31.2	77.4	65.2	31.4	127.3	36.4	29.2
LnGrp LOS	E	C	B	F	A	C	E	F	C	F	D	C
Approach Vol, veh/h	759			787			2599			1628		
Approach Delay, s/veh	38.6			50.6			61.4			39.9		
Approach LOS	D			D			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	51.8		59.0	14.2	48.1		59.0				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	5.9	* 45		53.2	11.4	38.5		53.2				
Max Q Clear Time (g_c+I1), s	7.4	47.3		55.2	9.9	28.6		55.2				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	50.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	474	315	147	144	262	248	1862	67	103	1205	175
Future Volume (vph)	474	315	147	144	262	248	1862	67	103	1205	175
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	20.0	44.8	44.8	18.2	43.0	14.2	48.5	48.5	8.5	42.8	42.8
Total Split (%)	16.7%	37.3%	37.3%	15.2%	35.8%	11.8%	40.4%	40.4%	7.1%	35.7%	35.7%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	16.5	37.8	37.8	13.4	34.8	10.7	42.5	42.5	5.0	36.8	36.8
Actuated g/C Ratio	0.14	0.32	0.32	0.11	0.29	0.09	0.36	0.36	0.04	0.31	0.31
v/c Ratio	1.10	0.56	0.26	0.80	0.96	0.89	0.98	0.11	0.79	0.73	0.30
Control Delay	121.3	38.2	5.8	81.0	69.0	85.3	54.0	2.6	93.3	39.8	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	121.3	38.2	5.8	81.0	69.0	85.3	54.0	2.6	93.3	39.8	5.7
LOS	F	D	A	F	E	F	D	A	F	D	A
Approach Delay		75.2			71.8		56.0			39.5	
Approach LOS		E			E		E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 118.8

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 56.7

Intersection LOS: E

Intersection Capacity Utilization 99.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.

			
8.5 s	48.5 s	18.2 s	44.8 s
			
14.2 s	42.8 s	20 s	43 s

HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	315	147	144	262	224	248	1862	67	103	1205	175
Future Volume (veh/h)	474	315	147	144	262	224	248	1862	67	103	1205	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	499	332	106	152	276	173	261	1960	50	108	1268	121
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	586	490	178	297	186	302	2051	567	141	1775	501
Arrive On Green	0.14	0.31	0.31	0.11	0.28	0.28	0.09	0.37	0.37	0.04	0.32	0.32
Sat Flow, veh/h	3274	1870	1562	1688	1075	674	3274	5611	1552	3274	5611	1585
Grp Volume(v), veh/h	499	332	106	152	0	449	261	1960	50	108	1268	121
Grp Sat Flow(s),veh/h/ln	1637	1870	1562	1688	0	1749	1637	1870	1552	1637	1870	1585
Q Serve(g_s), s	16.5	17.2	5.8	10.3	0.0	29.0	9.1	39.5	2.4	3.8	23.1	6.6
Cycle Q Clear(g_c), s	16.5	17.2	5.8	10.3	0.0	29.0	9.1	39.5	2.4	3.8	23.1	6.6
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	586	490	178	0	484	302	2051	567	141	1775	501
V/C Ratio(X)	1.07	0.57	0.22	0.85	0.00	0.93	0.86	0.96	0.09	0.77	0.71	0.24
Avail Cap(c_a), veh/h	466	610	509	214	0	543	302	2056	569	141	1780	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	33.2	29.3	51.0	0.0	40.8	51.9	35.9	24.1	54.9	35.0	29.3
Incr Delay (d2), s/veh	62.1	0.9	0.2	21.1	0.0	20.7	21.1	11.2	0.1	19.9	1.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	7.6	2.1	5.3	0.0	14.7	4.5	18.6	0.9	1.9	10.1	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	111.9	34.2	29.5	72.1	0.0	61.6	73.1	47.1	24.2	74.8	36.4	29.6
LnGrp LOS	F	C	C	E	A	E	E	D	C	E	D	C
Approach Vol, veh/h	937			601			2271			1497		
Approach Delay, s/veh	75.0			64.2			49.6			38.6		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	48.4	15.7	43.4	14.2	42.7	20.0	39.1				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	42.5	14.7	37.8	10.7	36.8	16.5	36.0				
Max Q Clear Time (g_c+l1), s	5.8	41.5	12.3	19.2	11.1	25.1	18.5	31.0				
Green Ext Time (p_c), s	0.0	0.9	0.0	1.6	0.0	6.2	0.0	1.0				
Intersection Summary												
HCM 6th Ctrl Delay	52.6											
HCM 6th LOS	D											

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 	  		 	  	
Traffic Volume (vph)	189	988	178	178	728	257	218	1716	149	313	1097	148
Future Volume (vph)	189	988	178	178	728	257	218	1716	149	313	1097	148
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	46.0	46.0	9.5	49.0	8.5	8.5	29.0	29.0	8.5	40.0	9.5
Total Split (s)	11.5	46.6	46.6	13.9	49.0	15.1	15.8	44.4	44.4	15.1	43.7	11.5
Total Split (%)	9.6%	38.8%	38.8%	11.6%	40.8%	12.6%	13.2%	37.0%	37.0%	12.6%	36.4%	9.6%
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.0	3.0	5.0	5.0	3.0	5.0	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0	3.5	3.5	6.0	6.0	3.5	6.0	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	7.0	31.0	31.0	9.2	33.2	51.8	11.2	38.5	38.5	11.6	38.9	52.0
Actuated g/C Ratio	0.06	0.28	0.28	0.08	0.30	0.46	0.10	0.35	0.35	0.10	0.35	0.47
v/c Ratio	0.96	0.72	0.32	0.69	0.50	0.34	0.73	1.01	0.25	0.95	0.64	0.20
Control Delay	105.8	39.3	5.8	64.6	33.1	14.8	63.7	60.2	10.8	88.9	33.3	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.8	39.3	5.8	64.6	33.1	14.8	63.7	60.2	10.8	88.9	33.3	11.7
LOS	F	D	A	E	C	B	E	E	B	F	C	B
Approach Delay		44.2			33.9			57.0			42.5	
Approach LOS		D			C			E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 111.4

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 46.1

Intersection LOS: D

Intersection Capacity Utilization 84.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

			
15.1 s	44.4 s	13.9 s	46.6 s
			
15.8 s	43.7 s	11.5 s	49 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	988	178	178	728	257	218	1716	149	313	1097	148
Future Volume (veh/h)	189	988	178	178	728	257	218	1716	149	313	1097	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	195	1019	128	184	751	257	225	1769	142	323	1131	119
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	1350	419	243	1396	605	281	1827	567	354	1915	698
Arrive On Green	0.07	0.26	0.26	0.07	0.27	0.27	0.09	0.36	0.36	0.11	0.37	0.37
Sat Flow, veh/h	3274	5106	1585	3274	5106	1585	3092	5106	1585	3274	5106	1585
Grp Volume(v), veh/h	195	1019	128	184	751	257	225	1769	142	323	1131	119
Grp Sat Flow(s),veh/h/ln	1637	1702	1585	1637	1702	1585	1546	1702	1585	1637	1702	1585
Q Serve(g_s), s	6.4	19.7	6.9	5.9	13.5	12.8	7.7	36.5	6.8	10.5	19.1	4.9
Cycle Q Clear(g_c), s	6.4	19.7	6.9	5.9	13.5	12.8	7.7	36.5	6.8	10.5	19.1	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	1350	419	243	1396	605	281	1827	567	354	1915	698
V/C Ratio(X)	0.91	0.75	0.31	0.76	0.54	0.43	0.80	0.97	0.25	0.91	0.59	0.17
Avail Cap(c_a), veh/h	213	1884	585	287	1998	791	354	1827	567	354	1915	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	36.3	31.6	48.7	33.2	24.5	47.8	33.9	24.3	47.4	26.9	18.2
Incr Delay (d2), s/veh	38.6	1.1	0.4	9.3	0.3	0.5	7.8	14.3	0.2	26.7	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	7.9	2.6	2.7	5.3	4.6	3.1	16.1	2.5	5.4	7.2	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.5	37.4	32.0	58.1	33.6	25.0	55.7	48.2	24.5	74.0	27.4	18.3
LnGrp LOS	F	D	C	E	C	C	E	D	C	E	C	B
Approach Vol, veh/h	1342			1192			2136			1573		
Approach Delay, s/veh	44.3			35.5			47.4			36.3		
Approach LOS	D			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	44.4	12.5	35.4	13.2	46.3	11.5	36.3				
Change Period (Y+Rc), s	3.5	6.0	4.5	7.0	3.5	6.0	4.5	7.0				
Max Green Setting (Gmax), s	11.6	38.4	9.4	39.6	12.3	37.7	7.0	42.0				
Max Q Clear Time (g_c+I1), s	12.5	38.5	7.9	21.7	9.7	21.1	8.4	15.5				
Green Ext Time (p_c), s	0.0	0.0	0.1	6.7	0.1	6.8	0.0	6.1				
Intersection Summary												
HCM 6th Ctrl Delay	41.7											
HCM 6th LOS	D											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	340	231	193	296	367	126	1512	121	183	1149	74
Future Volume (vph)	77	340	231	193	296	367	126	1512	121	183	1149	74
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	20.9	50.2	50.2	23.0	52.3	52.3
Total Split (%)	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	17.4%	41.8%	41.8%	19.2%	43.6%	43.6%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	25.2	25.2	25.2	25.2	25.2	25.2	12.4	38.3	38.3	15.6	41.5	41.5
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.13	0.41	0.41	0.17	0.44	0.44
v/c Ratio	0.48	0.72	0.41	0.78	0.63	0.59	0.60	0.77	0.19	0.69	0.54	0.11
Control Delay	41.4	40.8	5.9	54.0	37.1	11.1	54.3	28.2	14.4	54.3	21.5	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	40.8	5.9	54.0	37.1	11.1	54.3	28.2	14.4	54.3	21.5	5.4
LOS	D	D	A	D	D	B	D	C	B	D	C	A
Approach Delay		28.4			29.8			29.1			25.0	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 93.8

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 27.9

Intersection LOS: C

Intersection Capacity Utilization 79.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
23 s	50.2 s	46.8 s
		
Ø5	Ø6	Ø8
20.9 s	52.3 s	46.8 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	340	231	193	296	367	126	1512	121	183	1149	74
Future Volume (veh/h)	77	340	231	193	296	367	126	1512	121	183	1149	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	81	358	141	203	312	373	133	1592	103	193	1209	46
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	613	513	428	613	520	163	2006	623	226	2196	673
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.10	0.39	0.39	0.13	0.43	0.43
Sat Flow, veh/h	717	1870	1565	1652	1870	1585	1688	5106	1585	1688	5106	1564
Grp Volume(v), veh/h	81	358	141	203	312	373	133	1592	103	193	1209	46
Grp Sat Flow(s),veh/h/ln	717	1870	1565	826	1870	1585	1688	1702	1585	1688	1702	1564
Q Serve(g_s), s	9.9	15.3	6.4	11.2	13.0	19.9	7.4	26.5	4.1	10.8	17.0	1.7
Cycle Q Clear(g_c), s	22.8	15.3	6.4	26.5	13.0	19.9	7.4	26.5	4.1	10.8	17.0	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	613	513	428	613	520	163	2006	623	226	2196	673
V/C Ratio(X)	0.38	0.58	0.27	0.47	0.51	0.72	0.82	0.79	0.17	0.85	0.55	0.07
Avail Cap(c_a), veh/h	291	816	683	608	816	692	305	2361	733	342	2472	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	26.9	23.9	37.9	26.1	28.4	42.6	25.8	19.0	40.8	20.5	16.1
Incr Delay (d2), s/veh	0.8	0.7	0.2	0.6	0.5	2.0	7.2	1.7	0.1	10.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	6.6	2.3	2.2	5.5	7.3	3.2	9.7	1.4	4.8	6.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	27.5	24.1	38.5	26.6	30.4	49.9	27.4	19.1	51.6	20.7	16.1
LnGrp LOS	D	C	C	D	C	C	D	C	B	D	C	B
Approach Vol, veh/h	580			888			1828			1448		
Approach Delay, s/veh	27.9			30.9			28.6			24.7		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.4	43.5		36.4	12.8	47.1		36.4				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	19.5	44.5		42.0	17.4	46.6		42.0				
Max Q Clear Time (g_c+I1), s	12.8	28.5		24.8	9.4	19.0		28.5				
Green Ext Time (p_c), s	0.2	9.3		2.3	0.1	8.7		3.0				
Intersection Summary												
HCM 6th Ctrl Delay				27.7								
HCM 6th LOS				C								

Timings
9: Driveway 2 & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	150	192	62	231	156	0	203	0
Future Volume (vph)	150	192	62	231	156	0	203	0
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	9.6	22.8	27.8	27.8	27.8	27.8
Total Split (s)	31.0	46.0	20.0	35.0	54.0	54.0	54.0	54.0
Total Split (%)	25.8%	38.3%	16.7%	29.2%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	5.8	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	10.5	18.4	7.6	12.8	16.9	16.9	16.9	16.9
Actuated g/C Ratio	0.18	0.32	0.13	0.22	0.29	0.29	0.29	0.29
v/c Ratio	0.50	0.36	0.33	0.54	0.51	0.15	0.60	0.18
Control Delay	29.1	10.6	30.4	17.4	23.4	0.3	25.9	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.1	10.6	30.4	17.4	23.4	0.3	25.9	0.4
LOS	C	B	C	B	C	A	C	A
Approach Delay		15.7		19.2		13.5		15.2
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 57.3

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 16.2

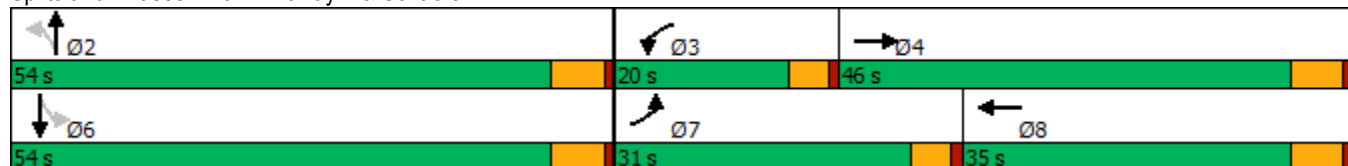
Intersection LOS: B

Intersection Capacity Utilization 58.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 9: Driveway 2 & Schaefer Av.



HCM 6th Signalized Intersection Summary
9: Driveway 2 & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	192	167	62	231	174	156	0	117	203	0	148
Future Volume (veh/h)	150	192	167	62	231	174	156	0	117	203	0	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1772	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	226	143	73	272	146	184	0	103	221	0	112
Peak Hour Factor	0.92	0.85	0.85	0.85	0.85	0.92	0.85	0.92	0.85	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	595	361	113	514	268	458	0	450	467	0	450
Arrive On Green	0.12	0.28	0.28	0.07	0.23	0.23	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	1781	2124	1290	1688	2258	1177	1281	0	1585	1291	0	1585
Grp Volume(v), veh/h	163	187	182	73	212	206	184	0	103	221	0	112
Grp Sat Flow(s),veh/h/ln	1781	1777	1638	1688	1777	1658	1281	0	1585	1291	0	1585
Q Serve(g_s), s	3.9	3.7	3.9	1.9	4.6	4.8	5.7	0.0	2.2	6.9	0.0	2.4
Cycle Q Clear(g_c), s	3.9	3.7	3.9	1.9	4.6	4.8	8.1	0.0	2.2	9.1	0.0	2.4
Prop In Lane	1.00		0.79	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	498	459	113	404	378	458	0	450	467	0	450
V/C Ratio(X)	0.77	0.38	0.40	0.64	0.52	0.54	0.40	0.00	0.23	0.47	0.00	0.25
Avail Cap(c_a), veh/h	1071	1626	1499	592	1181	1102	1500	0	1739	1517	0	1739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.7	12.7	12.8	20.0	14.9	15.0	15.2	0.0	12.0	15.5	0.0	12.1
Incr Delay (d2), s/veh	2.2	0.5	0.6	2.3	1.1	1.2	0.6	0.0	0.3	0.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.2	1.1	0.7	1.5	1.5	1.3	0.0	0.6	1.6	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	13.2	13.4	22.3	15.9	16.2	15.8	0.0	12.3	16.3	0.0	12.4
LnGrp LOS	C	B	B	C	B	B	B	A	B	B	A	B
Approach Vol, veh/h	532			491			287			333		
Approach Delay, s/veh	15.6			17.0			14.5			15.0		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	2		3	4		6		7	8			
Phs Duration (G+Y+Rc), s	18.3		7.5	18.1		18.3		9.8	15.8			
Change Period (Y+Rc), s	5.8		4.6	5.8		5.8		4.6	5.8			
Max Green Setting (Gmax), s	48.2		15.4	40.2		48.2		26.4	29.2			
Max Q Clear Time (g_c+I1), s	10.1		3.9	5.9		11.1		5.9	6.8			
Green Ext Time (p_c), s	1.2		0.0	2.1		1.4		0.2	2.2			
Intersection Summary												
HCM 6th Ctrl Delay	15.7											
HCM 6th LOS	B											

Timings
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	388	4	410	820	904	937	471
Future Volume (vph)	388	4	410	820	904	937	471
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	5.0	10.0	10.0	10.0
Minimum Split (s)	11.0	11.0	11.0	9.5	22.5	22.5	22.5
Total Split (s)	37.0	37.0	37.0	44.2	83.0	38.8	38.8
Total Split (%)	30.8%	30.8%	30.8%	36.8%	69.2%	32.3%	32.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.5	4.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.5	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	4.5	5.5	5.5	5.5
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effect Green (s)	25.1	25.1	25.1	34.1	84.4	45.8	45.8
Actuated g/C Ratio	0.21	0.21	0.21	0.28	0.70	0.38	0.38
v/c Ratio	0.83	0.77	0.60	0.88	0.38	0.50	0.54
Control Delay	64.2	49.1	21.7	65.5	5.8	31.4	5.4
Queue Delay	0.0	0.0	0.0	0.3	0.2	0.0	0.0
Total Delay	64.2	49.1	21.7	65.7	6.0	31.4	5.4
LOS	E	D	C	E	A	C	A
Approach Delay		45.7			34.4	22.7	
Approach LOS		D			C	C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 32.5

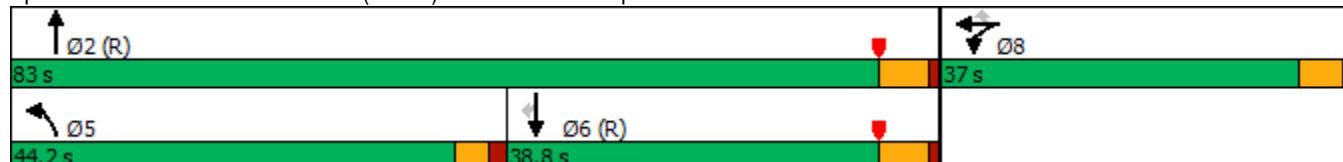
Intersection LOS: C

Intersection Capacity Utilization 80.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Euclid Av. (SR-83) & SR-60 WB Ramps



HCM 6th Signalized Intersection Summary
10: Euclid Av. (SR-83) & SR-60 WB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	388	4	410	820	904	0	0	937	471
Future Volume (veh/h)	0	0	0	388	4	410	820	904	0	0	937	471
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				478	0	155	854	942	0	0	976	402
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				556	0	247	904	2688	0	0	2336	725
Arrive On Green				0.16	0.00	0.16	0.52	1.00	0.00	0.00	0.46	0.46
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				478	0	155	854	942	0	0	976	402
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1702	1585
Q Serve(g_s), s				15.7	0.0	11.0	28.0	0.0	0.0	0.0	15.4	22.1
Cycle Q Clear(g_c), s				15.7	0.0	11.0	28.0	0.0	0.0	0.0	15.4	22.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				556	0	247	904	2688	0	0	2336	725
V/C Ratio(X)				0.86	0.00	0.63	0.94	0.35	0.00	0.00	0.42	0.55
Avail Cap(c_a), veh/h				950	0	423	1143	2688	0	0	2336	725
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.49	0.49	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.4	0.0	47.4	27.8	0.0	0.0	0.0	21.8	23.7
Incr Delay (d2), s/veh				1.7	0.0	1.0	7.0	0.2	0.0	0.0	0.6	3.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.9	0.0	4.3	8.7	0.1	0.0	0.0	6.0	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.0	0.0	48.3	34.8	0.2	0.0	0.0	22.4	26.7
LnGrp LOS				D	A	D	C	A	A	A	C	C
Approach Vol, veh/h					633			1796			1378	
Approach Delay, s/veh					50.4			16.6			23.6	
Approach LOS					D			B			C	
Timer - Assigned Phs	2			5			6			8		
Phs Duration (G+Y+Rc), s	96.3			35.9			60.4			23.7		
Change Period (Y+Rc), s	5.5			4.5			5.5			5.0		
Max Green Setting (Gmax), s	77.5			39.7			33.3			32.0		
Max Q Clear Time (g_c+I1), s	2.0			30.0			24.1			17.7		
Green Ext Time (p_c), s	12.2			1.4			6.3			1.0		
Intersection Summary												
HCM 6th Ctrl Delay			24.8									
HCM 6th LOS			C									
Notes												

Timings 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

							
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	337	0	578	1385	613	365	960
Future Volume (vph)	337	0	578	1385	613	365	960
Turn Type	Split	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4	4		2		1	6
Permitted Phases			4		2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	5.0	10.0
Minimum Split (s)	11.0	11.0	11.0	22.5	22.5	9.0	22.5
Total Split (s)	35.0	35.0	35.0	65.0	65.0	20.0	85.0
Total Split (%)	29.2%	29.2%	29.2%	54.2%	54.2%	16.7%	70.8%
Yellow Time (s)	4.0	4.0	4.0	4.5	4.5	3.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.5	5.5	4.0	5.5
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	C-Min	None	C-Min
Act Effect Green (s)	26.5	26.5	26.5	63.1	63.1	15.9	83.0
Actuated g/C Ratio	0.22	0.22	0.22	0.53	0.53	0.13	0.69
v/c Ratio	0.87	0.75	0.74	0.79	0.61	0.85	0.42
Control Delay	68.2	35.2	34.2	28.0	6.0	69.3	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	68.2	35.2	34.2	28.1	6.0	69.3	9.0
LOS	E	D	C	C	A	E	A
Approach Delay		45.8		21.3			25.6
Approach LOS		D		C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 28.0

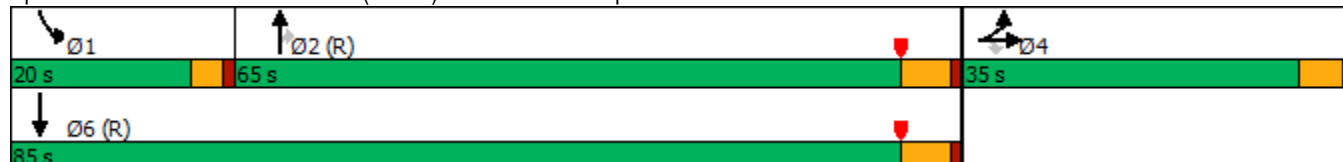
Intersection LOS: C

Intersection Capacity Utilization 80.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 11: Euclid Av. (SR-83) & SR-60 EB Ramps



HCM 6th Signalized Intersection Summary 11: Euclid Av. (SR-83) & SR-60 EB Ramps

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	337	0	578	0	0	0	0	1385	613	365	960	0
Future Volume (veh/h)	337	0	578	0	0	0	0	1385	613	365	960	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No						No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	540	0	313				0	1473	536	388	1021	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	773	0	344				0	1906	836	435	2471	0
Arrive On Green	0.22	0.00	0.22				0.00	0.54	0.54	0.25	1.00	0.00
Sat Flow, veh/h	3563	0	1585				0	3647	1560	3456	3647	0
Grp Volume(v), veh/h	540	0	313				0	1473	536	388	1021	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1777	1560	1728	1777	0
Q Serve(g_s), s	16.8	0.0	23.1				0.0	39.4	29.1	13.0	0.0	0.0
Cycle Q Clear(g_c), s	16.8	0.0	23.1				0.0	39.4	29.1	13.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	773	0	344				0	1906	836	435	2471	0
V/C Ratio(X)	0.70	0.00	0.91				0.00	0.77	0.64	0.89	0.41	0.00
Avail Cap(c_a), veh/h	891	0	396				0	1906	836	461	2471	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.65	0.65	0.79	0.79	0.00
Uniform Delay (d), s/veh	43.4	0.0	45.8				0.0	22.0	19.7	44.1	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	21.3				0.0	2.0	2.5	14.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	10.8				0.0	15.8	10.5	5.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.8	0.0	67.1				0.0	24.1	22.1	58.8	0.4	0.0
LnGrp LOS	D	A	E				A	C	C	E	A	A
Approach Vol, veh/h	853						2009			1409		
Approach Delay, s/veh	53.0						23.6			16.5		
Approach LOS	D						C			B		
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.1	69.9		31.0		89.0						
Change Period (Y+Rc), s	4.0	5.5		5.0		5.5						
Max Green Setting (Gmax), s	16.0	59.5		30.0		79.5						
Max Q Clear Time (g_c+I1), s	15.0	41.4		25.1		2.0						
Green Ext Time (p_c), s	0.1	14.5		0.9		13.9						
Intersection Summary												
HCM 6th Ctrl Delay	27.1											
HCM 6th LOS	C											
Notes												

Timings
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	246	90	164	366	169	155	1313	174	164	957	150
Future Volume (vph)	140	246	90	164	366	169	155	1313	174	164	957	150
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	31.8	31.8	9.6	30.4	30.4	9.6	34.5	9.6
Total Split (s)	24.0	30.0	30.0	26.0	32.0	32.0	15.4	47.9	47.9	16.1	48.6	24.0
Total Split (%)	20.0%	25.0%	25.0%	21.7%	26.7%	26.7%	12.8%	39.9%	39.9%	13.4%	40.5%	20.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.4	4.4	3.6	5.5	3.6
All-Red Time (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
Lost Time Adjust (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
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.4	5.4	4.6	6.5	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	12.8	15.4	15.4	14.3	16.8	16.8	9.0	34.5	34.5	9.4	33.8	48.6
Actuated g/C Ratio	0.14	0.16	0.16	0.15	0.18	0.18	0.09	0.36	0.36	0.10	0.36	0.51
v/c Ratio	0.63	0.44	0.27	0.67	0.60	0.42	0.52	0.73	0.28	0.53	0.55	0.18
Control Delay	55.0	40.4	6.6	54.5	41.8	10.0	51.2	29.7	11.3	50.6	26.5	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	40.4	6.6	54.5	41.8	10.0	51.2	29.7	11.3	50.6	26.5	4.5
LOS	E	D	A	D	D	A	D	C	B	D	C	A
Approach Delay		38.3			37.1			29.8			27.0	
Approach LOS		D			D			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 94.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 31.2

Intersection LOS: C

Intersection Capacity Utilization 66.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 13: Euclid Av. (SR-83) & Riverside Dr.

			
16.1 s	47.9 s	26 s	30 s
			
15.4 s	48.6 s	24 s	32 s

HCM 6th Signalized Intersection Summary
13: Euclid Av. (SR-83) & Riverside Dr.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 		 	  		 	  	
Traffic Volume (veh/h)	140	246	90	164	366	169	155	1313	174	164	957	150
Future Volume (veh/h)	140	246	90	164	366	169	155	1313	174	164	957	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	144	254	63	169	377	113	160	1354	128	169	987	106
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	516	226	206	574	253	238	1925	598	248	1942	763
Arrive On Green	0.11	0.15	0.15	0.12	0.16	0.16	0.07	0.38	0.38	0.08	0.38	0.38
Sat Flow, veh/h	1688	3554	1554	1688	3554	1564	3274	5106	1585	3274	5106	1564
Grp Volume(v), veh/h	144	254	63	169	377	113	160	1354	128	169	987	106
Grp Sat Flow(s),veh/h/ln	1688	1777	1554	1688	1777	1564	1637	1702	1585	1637	1702	1564
Q Serve(g_s), s	6.4	5.1	2.8	7.5	7.7	5.0	3.7	17.3	4.2	3.9	11.4	2.9
Cycle Q Clear(g_c), s	6.4	5.1	2.8	7.5	7.7	5.0	3.7	17.3	4.2	3.9	11.4	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	516	226	206	574	253	238	1925	598	248	1942	763
V/C Ratio(X)	0.81	0.49	0.28	0.82	0.66	0.45	0.67	0.70	0.21	0.68	0.51	0.14
Avail Cap(c_a), veh/h	426	1119	489	470	1211	533	460	2822	876	490	2796	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	30.3	29.3	32.9	30.2	29.1	34.8	20.3	16.2	34.6	18.3	10.9
Incr Delay (d2), s/veh	3.2	0.7	0.7	3.0	1.3	1.2	1.2	0.5	0.2	1.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.1	1.0	3.0	3.1	1.8	1.4	5.8	1.4	1.5	4.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	31.0	29.9	36.0	31.5	30.4	36.0	20.8	16.4	35.8	18.5	11.0
LnGrp LOS	D	C	C	D	C	C	D	C	B	D	B	B
Approach Vol, veh/h		461			659			1642			1262	
Approach Delay, s/veh		32.7			32.5			21.9			20.2	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.4	35.5	14.0	17.0	10.2	35.7	12.7	18.2				
Change Period (Y+Rc), s	4.6	* 6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	11.5	* 43	21.4	24.2	10.8	42.1	19.4	26.2				
Max Q Clear Time (g_c+I1), s	5.9	19.3	9.5	7.1	5.7	13.4	8.4	9.7				
Green Ext Time (p_c), s	0.1	9.7	0.2	1.5	0.1	7.9	0.1	2.3				
Intersection Summary												
HCM 6th Ctrl Delay			24.3									
HCM 6th LOS			C									
Notes												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

Eden Mixed-Use TA (JN:14698)

14: Euclid Av. (SR-83) & Chino Av.

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	80	72	47	132	102	46	1491	133	57	1058	76
Future Volume (vph)	80	72	47	132	102	46	1491	133	57	1058	76
Turn Type	Perm	NA	Perm	Perm	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8	5	2		1	6	
Permitted Phases	4		4	8				2			6
Detector Phase	4	4	4	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	28.8	28.8	28.8	33.8	33.8	9.6	24.2	24.2	9.6	31.5	31.5
Total Split (s)	39.0	39.0	39.0	39.0	39.0	16.0	64.0	64.0	17.0	65.0	65.0
Total Split (%)	32.5%	32.5%	32.5%	32.5%	32.5%	13.3%	53.3%	53.3%	14.2%	54.2%	54.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	4.2	4.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	5.2	5.2	4.6	6.5	6.5
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	Max	Max
Act Effect Green (s)	16.9	16.9	16.9	16.9	16.9	7.4	60.2	60.2	8.0	59.4	59.4
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.17	0.08	0.61	0.61	0.08	0.60	0.60
v/c Ratio	0.51	0.24	0.15	0.65	0.53	0.38	0.46	0.14	0.43	0.33	0.08
Control Delay	49.1	37.4	4.3	53.0	38.1	54.9	12.6	6.6	55.7	11.5	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	37.4	4.3	53.0	38.1	54.9	12.6	6.6	55.7	11.5	3.3
LOS	D	D	A	D	D	D	B	A	E	B	A
Approach Delay		34.3			44.8		13.3			13.1	
Approach LOS		C			D		B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.5

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 17.2

Intersection LOS: B

Intersection Capacity Utilization 68.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 14: Euclid Av. (SR-83) & Chino Av.

		
Ø1	Ø2	Ø4
17 s	64 s	39 s
		
Ø5	Ø6	Ø8
16 s	65 s	39 s

HCM 6th Signalized Intersection Summary
14: Euclid Av. (SR-83) & Chino Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	72	47	132	102	61	46	1491	133	57	1058	76
Future Volume (veh/h)	80	72	47	132	102	61	46	1491	133	57	1058	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	83	75	30	138	106	54	48	1553	113	59	1102	68
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	186	334	283	250	208	106	63	3387	957	75	3426	955
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.04	0.60	0.60	0.04	0.61	0.61
Sat Flow, veh/h	1162	1870	1585	1221	1162	592	1688	5611	1585	1688	5611	1564
Grp Volume(v), veh/h	83	75	30	138	0	160	48	1553	113	59	1102	68
Grp Sat Flow(s),veh/h/ln	1162	1870	1585	1221	0	1754	1688	1870	1585	1688	1870	1564
Q Serve(g_s), s	6.8	3.3	1.5	10.6	0.0	8.0	2.7	14.8	3.0	3.4	9.3	1.7
Cycle Q Clear(g_c), s	14.8	3.3	1.5	14.0	0.0	8.0	2.7	14.8	3.0	3.4	9.3	1.7
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	334	283	250	0	313	63	3387	957	75	3426	955
V/C Ratio(X)	0.45	0.22	0.11	0.55	0.00	0.51	0.76	0.46	0.12	0.79	0.32	0.07
Avail Cap(c_a), veh/h	374	637	540	448	0	598	197	3387	957	215	3426	955
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	34.2	33.5	40.2	0.0	36.2	46.5	10.6	8.2	46.1	9.2	7.7
Incr Delay (d2), s/veh	1.7	0.3	0.2	1.9	0.0	1.3	6.9	0.4	0.3	6.9	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.5	0.6	3.2	0.0	3.4	1.2	4.9	0.9	1.5	3.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	34.6	33.6	42.1	0.0	37.4	53.4	11.0	8.5	53.0	9.4	7.9
LnGrp LOS	D	C	C	D	A	D	D	B	A	D	A	A
Approach Vol, veh/h	188				298				1714			
Approach Delay, s/veh	38.8				39.6				12.0			
Approach LOS	D				D				B			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	65.3		23.2	8.2	66.0		23.2				
Change Period (Y+Rc), s	4.6	* 6.5		5.8	4.6	6.5		5.8				
Max Green Setting (Gmax), s	12.4	* 59		33.2	11.4	58.5		33.2				
Max Q Clear Time (g_c+l1), s	5.4	16.8		16.8	4.7	11.3		16.0				
Green Ext Time (p_c), s	0.0	14.3		0.6	0.0	8.6		1.1				

Intersection Summary

HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 				 	 	  		 	  	
Traffic Volume (vph)	397	96	107	19	68	264	1224	13	48	965	144
Future Volume (vph)	397	96	107	19	68	264	1224	13	48	965	144
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	42.0	42.0	13.5	43.0	8.5	33.0	33.0	8.5	28.0	28.0
Total Split (s)	24.0	53.5	53.5	13.5	43.0	18.0	44.5	44.5	8.5	35.0	35.0
Total Split (%)	20.0%	44.6%	44.6%	11.3%	35.8%	15.0%	37.1%	37.1%	7.1%	29.2%	29.2%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	0.5	2.0	2.0	0.5	2.0	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	7.0	7.0	3.5	7.0	3.5	6.0	6.0	3.5	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	15.3	27.1	27.1	10.6	12.5	11.7	34.1	34.1	5.3	23.3	23.3
Actuated g/C Ratio	0.18	0.32	0.32	0.13	0.15	0.14	0.41	0.41	0.06	0.28	0.28
v/c Ratio	0.70	0.17	0.19	0.09	0.40	0.61	0.56	0.02	0.25	0.65	0.27
Control Delay	41.5	24.0	4.7	43.1	30.8	43.6	23.0	0.1	48.0	30.7	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.5	24.0	4.7	43.1	30.8	43.6	23.0	0.1	48.0	30.7	5.8
LOS	D	C	A	D	C	D	C	A	D	C	A
Approach Delay		32.2			32.6		26.4			28.4	
Approach LOS		C			C		C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 83.9

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 28.3

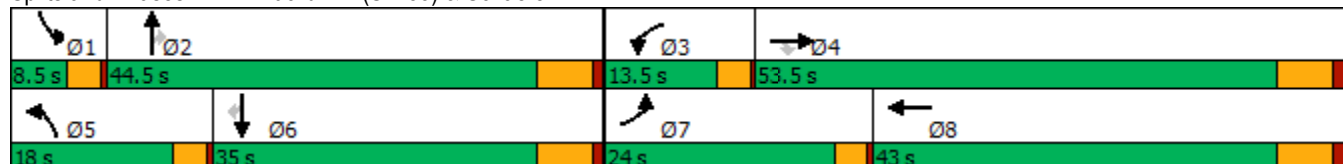
Intersection LOS: C

Intersection Capacity Utilization 61.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 17: Euclid Av. (SR-83) & Schaefer Av.



HCM 6th Signalized Intersection Summary
17: Euclid Av. (SR-83) & Schaefer Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	397	96	107	19	68	40	264	1224	13	48	965	144
Future Volume (veh/h)	397	96	107	19	68	40	264	1224	13	48	965	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	414	100	59	20	71	20	275	1275	13	50	1005	111
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	536	395	334	80	132	37	385	2051	579	154	1654	461
Arrive On Green	0.16	0.21	0.21	0.05	0.09	0.09	0.12	0.37	0.37	0.05	0.29	0.29
Sat Flow, veh/h	3274	1870	1581	1688	1404	395	3274	5611	1585	3274	5611	1564
Grp Volume(v), veh/h	414	100	59	20	0	91	275	1275	13	50	1005	111
Grp Sat Flow(s),veh/h/ln	1637	1870	1581	1688	0	1799	1637	1870	1585	1637	1870	1564
Q Serve(g_s), s	7.3	2.7	1.9	0.7	0.0	2.9	4.9	11.3	0.3	0.9	9.3	3.3
Cycle Q Clear(g_c), s	7.3	2.7	1.9	0.7	0.0	2.9	4.9	11.3	0.3	0.9	9.3	3.3
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	536	395	334	80	0	170	385	2051	579	154	1654	461
V/C Ratio(X)	0.77	0.25	0.18	0.25	0.00	0.54	0.71	0.62	0.02	0.33	0.61	0.24
Avail Cap(c_a), veh/h	1105	1433	1211	278	0	1067	782	3558	1005	270	2680	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	20.0	19.6	27.9	0.0	26.2	25.8	15.8	12.3	28.0	18.4	16.2
Incr Delay (d2), s/veh	0.9	0.2	0.2	0.6	0.0	1.9	0.9	0.3	0.0	0.5	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.1	0.6	0.3	0.0	1.2	1.7	3.7	0.1	0.3	3.3	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	20.2	19.8	28.5	0.0	28.2	26.7	16.1	12.3	28.5	18.8	16.5
LnGrp LOS	C	C	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		573			111			1563			1166	
Approach Delay, s/veh		23.8			28.2			18.0			19.0	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.3	28.2	6.4	19.8	10.6	23.9	13.4	12.7				
Change Period (Y+Rc), s	3.5	6.0	3.5	7.0	3.5	6.0	3.5	7.0				
Max Green Setting (Gmax), s	5.0	38.5	10.0	46.5	14.5	29.0	20.5	36.0				
Max Q Clear Time (g_c+I1), s	2.9	13.3	2.7	4.7	6.9	11.3	9.3	4.9				
Green Ext Time (p_c), s	0.0	8.9	0.0	0.5	0.3	6.1	0.6	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			19.6									
HCM 6th LOS			B									

Timings
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	225	115	64	398	225	172	1144	44	154	873	105
Future Volume (vph)	128	225	115	64	398	225	172	1144	44	154	873	105
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2		1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	2	1	6	7
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	46.0	46.0	9.5	49.0	8.5	8.5	29.0	29.0	8.5	40.0	9.5
Total Split (s)	13.8	52.4	52.4	10.4	49.0	14.6	16.0	42.6	42.6	14.6	41.2	13.8
Total Split (%)	11.5%	43.7%	43.7%	8.7%	40.8%	12.2%	13.3%	35.5%	35.5%	12.2%	34.3%	11.5%
Yellow Time (s)	3.5	5.0	5.0	3.5	5.0	3.0	3.0	5.0	5.0	3.0	5.0	3.5
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.5	7.0	7.0	4.5	7.0	3.5	3.5	6.0	6.0	3.5	6.0	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	None
Act Effect Green (s)	8.6	21.3	21.3	6.1	16.1	28.4	9.4	26.8	26.8	8.6	26.0	36.2
Actuated g/C Ratio	0.10	0.26	0.26	0.07	0.20	0.35	0.11	0.33	0.33	0.10	0.32	0.44
v/c Ratio	0.39	0.18	0.24	0.27	0.41	0.40	0.51	0.71	0.08	0.47	0.56	0.14
Control Delay	42.9	25.2	6.4	45.7	29.9	14.6	43.3	28.3	0.2	43.5	26.2	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	25.2	6.4	45.7	29.9	14.6	43.3	28.3	0.2	43.5	26.2	4.1
LOS	D	C	A	D	C	B	D	C	A	D	C	A
Approach Delay		25.4			26.4			29.3			26.5	
Approach LOS		C			C			C			C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 82.2

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 27.4

Intersection LOS: C

Intersection Capacity Utilization 57.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 18: Euclid Av. (SR-83) & Edison Av.

			
Ø1	Ø2	Ø3	Ø4
14.6 s	42.6 s	10.4 s	52.4 s
			
Ø5	Ø6	Ø7	Ø8
16 s	41.2 s	13.8 s	49 s

HCM 6th Signalized Intersection Summary
18: Euclid Av. (SR-83) & Edison Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	225	115	64	398	225	172	1144	44	154	873	105
Future Volume (veh/h)	128	225	115	64	398	225	172	1144	44	154	873	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1673	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	132	232	85	66	410	224	177	1179	31	159	900	70
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	1133	351	172	1055	445	261	1737	539	244	1688	624
Arrive On Green	0.07	0.22	0.22	0.05	0.21	0.21	0.08	0.34	0.34	0.07	0.33	0.33
Sat Flow, veh/h	3274	5106	1583	3274	5106	1583	3092	5106	1585	3274	5106	1564
Grp Volume(v), veh/h	132	232	85	66	410	224	177	1179	31	159	900	70
Grp Sat Flow(s),veh/h/ln	1637	1702	1583	1637	1702	1583	1546	1702	1585	1637	1702	1564
Q Serve(g_s), s	2.6	2.5	3.0	1.3	4.7	8.0	3.8	13.4	0.9	3.2	9.7	1.9
Cycle Q Clear(g_c), s	2.6	2.5	3.0	1.3	4.7	8.0	3.8	13.4	0.9	3.2	9.7	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	1133	351	172	1055	445	261	1737	539	244	1688	624
V/C Ratio(X)	0.59	0.20	0.24	0.38	0.39	0.50	0.68	0.68	0.06	0.65	0.53	0.11
Avail Cap(c_a), veh/h	451	3430	1063	286	3174	1102	572	2766	858	538	2660	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	21.4	21.6	31.0	23.1	20.3	30.1	19.1	15.0	30.4	18.4	12.8
Incr Delay (d2), s/veh	2.5	0.1	0.4	1.4	0.2	0.9	1.2	0.5	0.0	1.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.9	1.0	0.5	1.7	2.7	1.3	4.3	0.3	1.2	3.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	21.5	22.0	32.4	23.4	21.2	31.2	19.6	15.0	31.5	18.6	12.9
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h	449			700			1387			1129		
Approach Delay, s/veh	25.0			23.5			21.0			20.1		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	29.0	8.1	22.0	9.2	28.3	9.1	21.0				
Change Period (Y+Rc), s	3.5	6.0	4.5	7.0	3.5	6.0	4.5	7.0				
Max Green Setting (Gmax), s	11.1	36.6	5.9	45.4	12.5	35.2	9.3	42.0				
Max Q Clear Time (g_c+I1), s	5.2	15.4	3.3	5.0	5.8	11.7	4.6	10.0				
Green Ext Time (p_c), s	0.1	7.6	0.0	1.7	0.1	5.9	0.1	3.4				
Intersection Summary												
HCM 6th Ctrl Delay	21.7											
HCM 6th LOS	C											

Timings
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	56	127	16	74	238	122	1114	8	90	905	35
Future Volume (vph)	42	56	127	16	74	238	122	1114	8	90	905	35
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	46.8	46.8	46.8	46.8	46.8	46.8	8.5	30.7	30.7	8.5	37.7	37.7
Total Split (s)	50.0	50.0	50.0	50.0	50.0	50.0	23.0	50.0	50.0	20.0	47.0	47.0
Total Split (%)	41.7%	41.7%	41.7%	41.7%	41.7%	41.7%	19.2%	41.7%	41.7%	16.7%	39.2%	39.2%
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3	4.3	3.0	4.7	4.7	3.0	4.7	4.7
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (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
Total Lost Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.5	5.7	5.7	3.5	5.7	5.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effect Green (s)	11.9	11.9	11.9	11.9	11.9	11.9	11.1	23.9	23.9	9.8	22.8	22.8
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.20	0.19	0.41	0.41	0.17	0.39	0.39
v/c Ratio	0.18	0.16	0.31	0.03	0.21	0.48	0.41	0.57	0.01	0.34	0.48	0.06
Control Delay	23.0	22.0	6.7	21.0	22.5	6.8	31.6	17.0	0.0	32.4	17.2	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.0	22.0	6.7	21.0	22.5	6.8	31.6	17.0	0.0	32.4	17.2	5.4
LOS	C	C	A	C	C	A	C	B	A	C	B	A
Approach Delay		13.5			11.0			18.4			18.1	
Approach LOS		B			B			B			B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 58.7

Natural Cycle: 95

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 17.0

Intersection LOS: B

Intersection Capacity Utilization 53.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Euclid Av. (SR-83) & Eucalyptus Av.

		
Ø1	Ø2	Ø4
20 s	50 s	50 s
		
Ø5	Ø6	Ø8
23 s	47 s	50 s

HCM 6th Signalized Intersection Summary
19: Euclid Av. (SR-83) & Eucalyptus Av.

Eden Mixed-Use TA (JN:14698)

10/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	56	127	16	74	238	122	1114	8	90	905	35
Future Volume (veh/h)	42	56	127	16	74	238	122	1114	8	90	905	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	44	59	53	17	78	239	128	1173	8	95	953	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	384	325	739	384	325	165	2095	650	130	1989	609
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.10	0.41	0.41	0.08	0.39	0.39
Sat Flow, veh/h	1007	1870	1585	2354	1870	1585	1688	5106	1585	1688	5106	1563
Grp Volume(v), veh/h	44	59	53	17	78	239	128	1173	8	95	953	22
Grp Sat Flow(s),veh/h/ln	1007	1870	1585	1177	1870	1585	1688	1702	1585	1688	1702	1563
Q Serve(g_s), s	1.7	1.2	1.3	0.3	1.6	6.4	3.4	8.0	0.1	2.5	6.4	0.4
Cycle Q Clear(g_c), s	3.3	1.2	1.3	1.4	1.6	6.4	3.4	8.0	0.1	2.5	6.4	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	384	325	739	384	325	165	2095	650	130	1989	609
V/C Ratio(X)	0.13	0.15	0.16	0.02	0.20	0.73	0.78	0.56	0.01	0.73	0.48	0.04
Avail Cap(c_a), veh/h	1124	1858	1575	2595	1858	1575	723	4972	1544	612	4636	1419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	14.8	14.9	15.4	15.0	16.9	20.0	10.3	8.0	20.5	10.4	8.6
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.0	0.2	2.4	5.8	0.2	0.0	5.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.4	0.1	0.5	2.0	1.3	1.8	0.0	1.0	1.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	15.0	15.0	15.4	15.2	19.3	25.8	10.5	8.0	26.4	10.6	8.6
LnGrp LOS	B	B	B	B	B	B	C	B	A	C	B	A
Approach Vol, veh/h		156			334			1309			1070	
Approach Delay, s/veh		15.4			18.2			12.0			12.0	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	24.4		14.1	7.9	23.4		14.1				
Change Period (Y+Rc), s	3.5	5.7		4.8	3.5	5.7		4.8				
Max Green Setting (Gmax), s	16.5	44.3		45.2	19.5	41.3		45.2				
Max Q Clear Time (g_c+I1), s	4.5	10.0		5.3	5.4	8.4		8.4				
Green Ext Time (p_c), s	0.1	8.7		0.5	0.2	6.6		0.9				
Intersection Summary												
HCM 6th Ctrl Delay				12.9								
HCM 6th LOS				B								

APPENDIX 7.9: HORIZON YEAR (2045) WITH PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/23/2023



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	436	500	488	1277	673	413	1267
v/c Ratio	0.79	0.96	0.91	0.86	0.69	0.94	0.62
Control Delay	47.4	65.4	56.1	38.8	8.8	89.0	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	47.4	65.4	56.1	38.8	8.8	89.0	13.9
Queue Length 50th (ft)	313	370	334	471	53	177	195
Queue Length 95th (ft)	450	#608	#547	572	189	#275	252
Internal Link Dist (ft)		1308		1081			410
Turn Bay Length (ft)	900						
Base Capacity (vph)	574	537	552	1489	980	438	2059
Starvation Cap Reductn	0	0	0	0	0	0	106
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.93	0.88	0.86	0.69	0.94	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/23/2023



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	311	294	289	1637	661	398	1644
v/c Ratio	0.89	0.87	0.81	0.86	0.62	0.86	0.66
Control Delay	73.8	63.6	53.3	30.8	6.8	58.8	12.6
Queue Delay	0.6	0.9	0.0	0.7	0.0	0.0	0.6
Total Delay	74.4	64.5	53.3	31.5	6.8	58.8	13.2
Queue Length 50th (ft)	243	205	177	584	57	171	266
Queue Length 95th (ft)	#396	#360	#309	704	171	m195	338
Internal Link Dist (ft)		1308		1081			410
Turn Bay Length (ft)	900						
Base Capacity (vph)	378	364	384	1897	1074	486	2495
Starvation Cap Reductn	0	0	0	0	0	0	435
Spillback Cap Reductn	6	9	0	69	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.83	0.75	0.90	0.62	0.82	0.80

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

Eden Mixed-Use TA (JN:14698)

11: Euclid Av. (SR-83) & SR-60 EB Ramps

10/23/2023



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	323	325	326	1473	652	388	1021
v/c Ratio	0.87	0.75	0.74	0.79	0.61	0.85	0.42
Control Delay	68.2	35.2	34.2	28.0	6.0	69.3	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	68.2	35.2	34.2	28.1	6.0	69.3	9.0
Queue Length 50th (ft)	249	145	138	503	41	165	148
Queue Length 95th (ft)	#385	261	249	606	143	#240	190
Internal Link Dist (ft)		1308		1081			410
Turn Bay Length (ft)	900						
Base Capacity (vph)	420	471	482	1859	1072	469	2447
Starvation Cap Reductn	0	0	0	0	0	0	453
Spillback Cap Reductn	0	0	0	6	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.69	0.68	0.79	0.61	0.83	0.51

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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