

TRAFFIC IMPACT ANALYSIS

CAROLINA CLUB MARGATE, FL

March 5, 2025
Kimley-Horn Project #241158000

Kimley»Horn

CAROLINA CLUB MARGATE, FL

Traffic Impact Analysis

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EXECUTIVE SUMMARY

Kimley-Horn and Associates has prepared a traffic study to evaluate the impact of redevelopment of portions of the Carolina Club golf course, bounded to the north by Sample Road, the east by Rock Island Road, and the west and south by Holiday Springs Boulevard. The site is currently a 148.552 acre golf course. The currently proposed plan would redevelop portions of the golf course with 57,500 square feet of commercial use, 507 multi-family mid-rise residential units, and 377 single-family attached residential units.

A site-specific traffic analysis has been undertaken to evaluate impacts on the surrounding transportation network. For this analysis, the trip generation potential has been calculated for the proposed plan of development, and these project trips have been distributed on the surrounding transportation network in the vicinity of the site. An analysis was also conducted to review the signalized and unsignalized intersection operations at the following intersections in the vicinity of the site using Synchro 12 software. The study intersections are listed below:

1. Sample Road & Riverside Drive
2. Sample Road & Holiday Springs Boulevard/Woodside Drive
3. Sample Road & Belmonte Boulevard
4. Sample Road & Rock Island Road
5. Pinewalk Drive North & Rock Island Road
6. Pinewalk Drive North & Proposed New Access #1
7. Proposed New Access #2 & Holiday Springs Boulevard
8. Proposed New Access #3 & Pinewalk Drive North
9. NW 30th Street & Rock Island Road
10. Pinewalk Drive South & Pinewalk Drive North
11. Pinewalk Drive South & Rock Island Road
12. Holiday Springs Boulevard & Pinewalk Drive South
13. Holiday Springs Boulevard & Rock Island Road
14. Royal Palm Boulevard & Rock Island Road
15. Royal Palm Boulevard & Riverside Drive

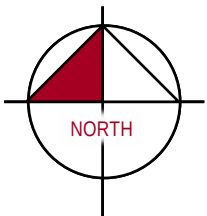
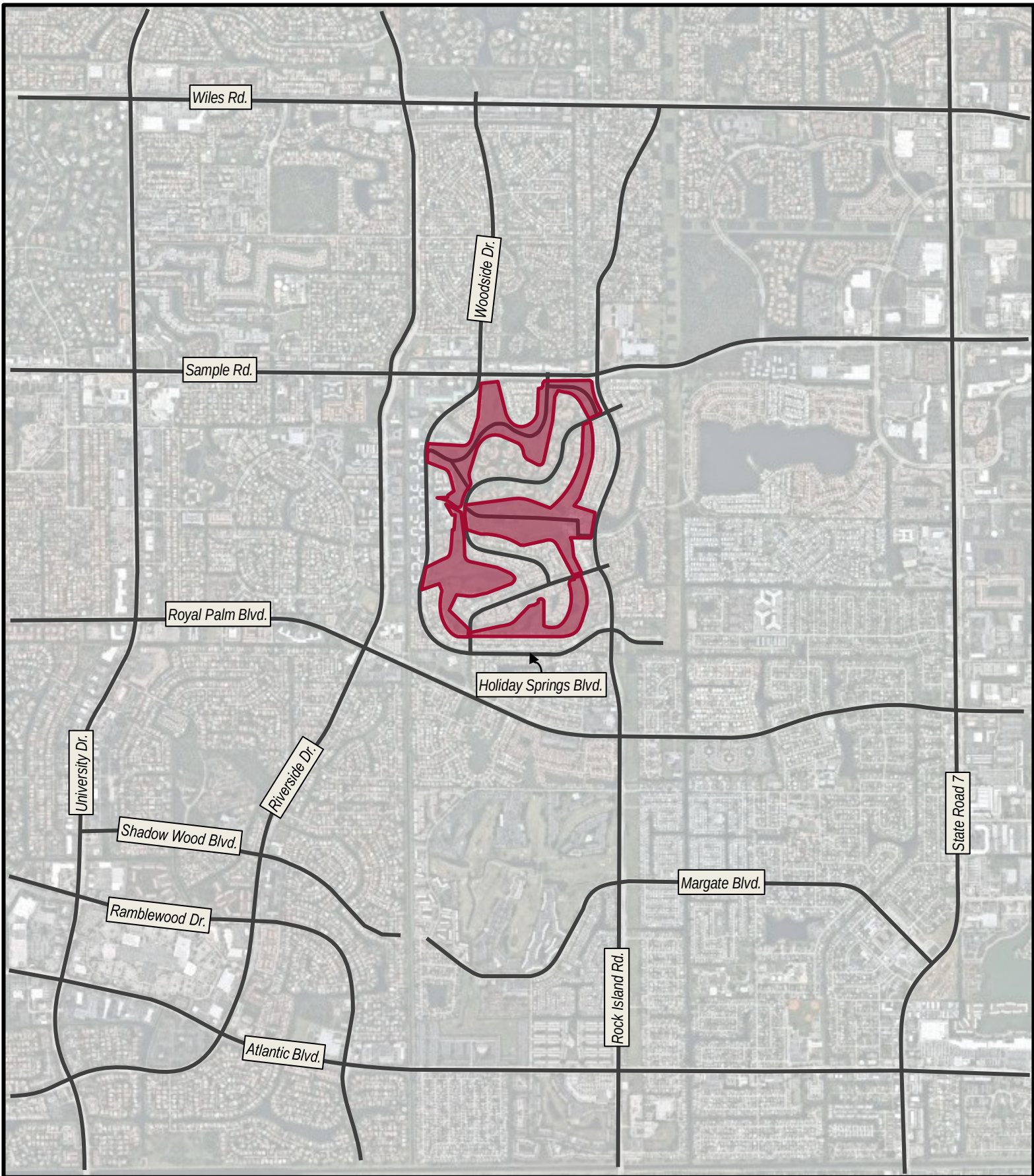
In addition, Level of Service (LOS) has been evaluated for each of the study intersections. The analysis identifies existing LOS and delay, future background LOS and delay, and total future LOS and delay upon buildout of the project. The results of the evaluation are used to determine conditions of approval that will be implemented to mitigate traffic impacts generated by the project on the surrounding transportation network.

INTRODUCTION

The Carolina Club site is within the area bounded on the north by Sample Road, on the east by Rock Island Road, and on the west and south by Holiday Springs Boulevard. Figure 1 illustrates the location of the project site. The site is currently a 148.552 acre golf course that is proposed to be redeveloped with 57,500 square feet of commercial use, 507 multi-family mid-rise residential units, 377 single family attached residential units, and open space.

Kimley-Horn and Associates, Inc. was retained to prepare a traffic impact analysis to evaluate the impacts resulting from the proposed program of development. This document presents the methodology used and the findings of the traffic impact analysis. For the purposes of this traffic analysis, a buildout date of 2030 was assumed.

A conceptual site plan and study methodology can be found in Appendix A.



LEGEND

Site Location

FIGURE 1
Carolina Club
KH #241158000
Site Location

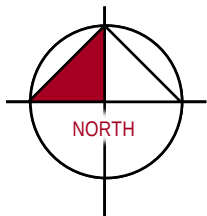
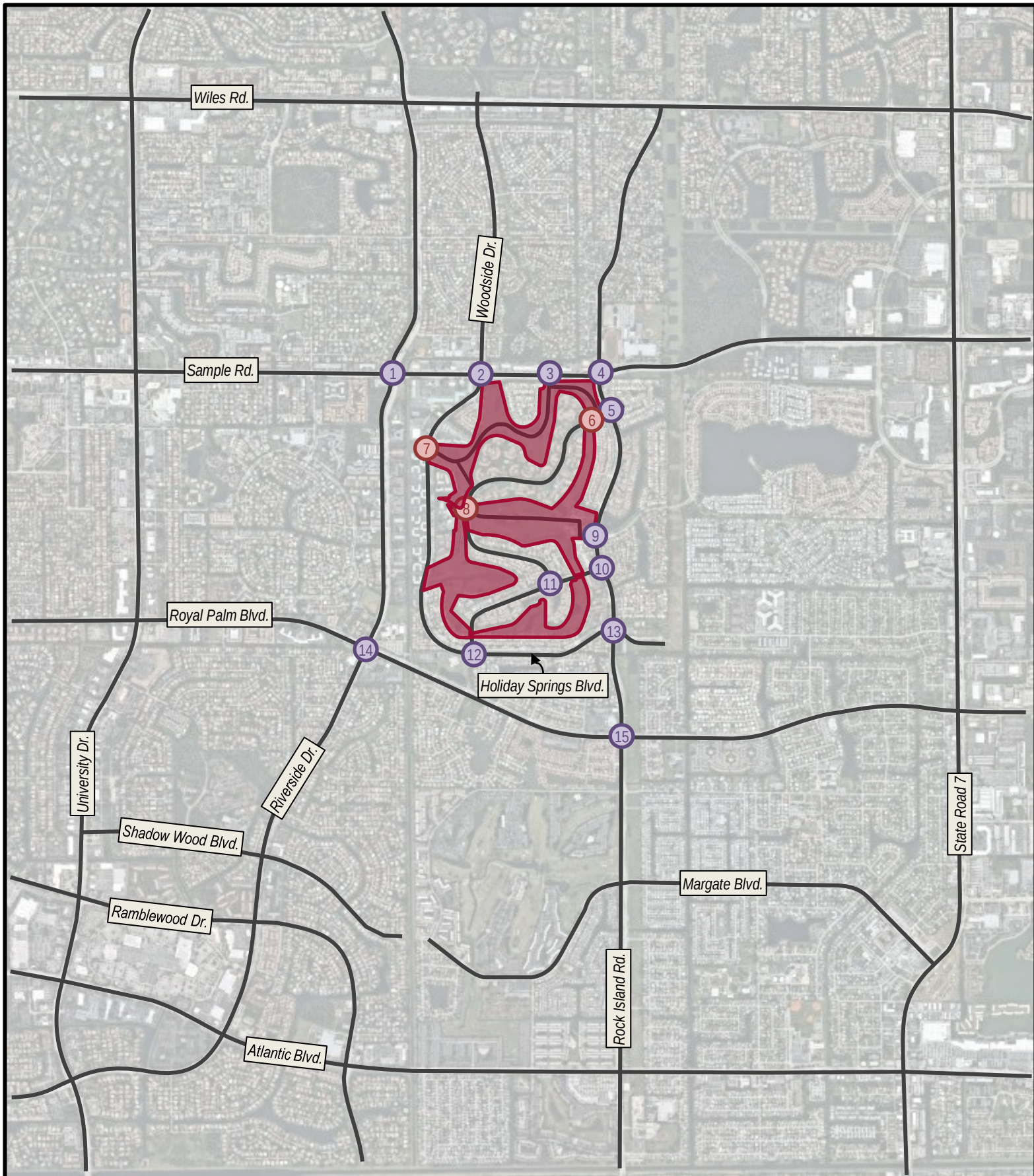
INVENTORY AND PLANNING DATA

To evaluate the traffic conditions on the surrounding network, intersection turning movement counts were performed during the AM peak (7:00 a.m. to 9:00 p.m.) and PM peak (4:00 p.m. to 6:00 p.m.) periods on Wednesday December 13, 2024 and Thursday February 29, 2024 at the intersections listed below:

- Sample Road & Riverside Drive
- Sample Road & Holiday Springs Boulevard/Woodside Drive
- Sample Road & Belmonte Boulevard
- Sample Road & Rock Island Road
- Pinewalk Drive North & Rock Island Road
- NW 30th Street & Rock Island Road
- Pinewalk Drive South & Pinewalk Drive North
- Pinewalk Drive South & Rock Island Road
- Holiday Springs Boulevard & Pinewalk Drive South
- Holiday Springs Boulevard & Rock Island Road
- Royal Palm Boulevard & Rock Island Road
- Royal Palm Boulevard & Riverside Drive

Figure 2 illustrates the intersections where data was collected in addition to the new access connections proposed as part of the redevelopment program.

The volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. The turning movement counts are provided in Appendix B. Signal timing summaries are provided in Appendix C.



LEGEND

Site Location

Proposed New Access

Intersection Count Location

FIGURE 2

Carolina Club

KH #241158000

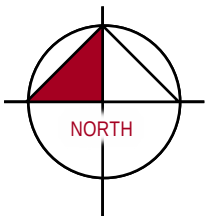
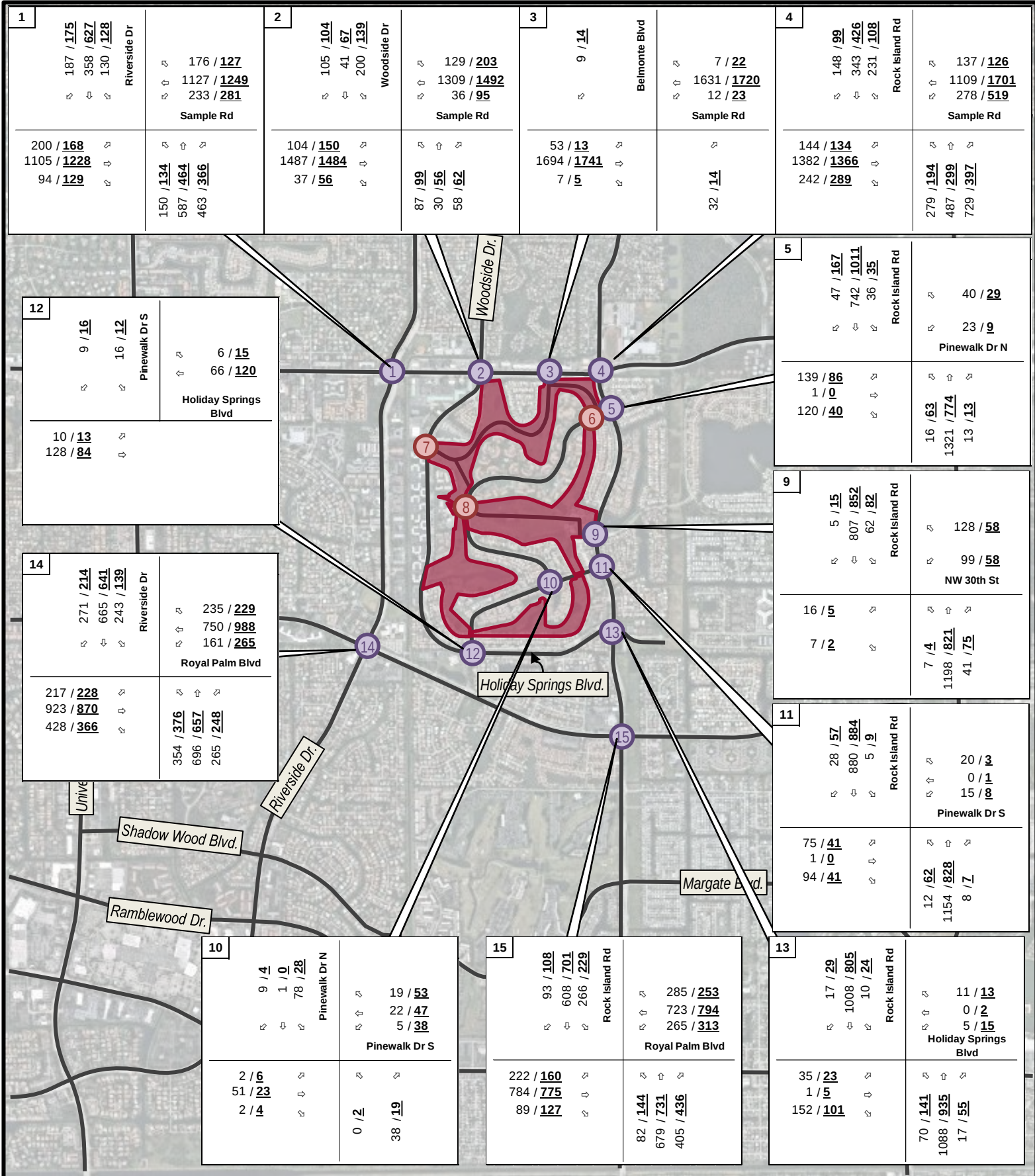
Project Intersections

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EXISTING (2024) TRAFFIC

Because some of the turning movement counts were collected outside the period that is the “peak season” in South Florida (generally January through March), a peak season adjustment factor was applied to the existing turning movement volume counts, where applicable. The peak season factor was taken from the Peak Season Conversion Factor report published by the Florida Department of Transportation for the area of Broward County west of US 441. A copy of the Peak Season Conversion Factor report is included in Appendix D.

The application of this factor to calculate Existing Peak Season traffic volumes is included in the volume development worksheets provided in Appendix F. Figure 3 provides a summary of the existing peak season traffic volumes at the study intersections.



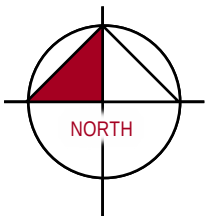
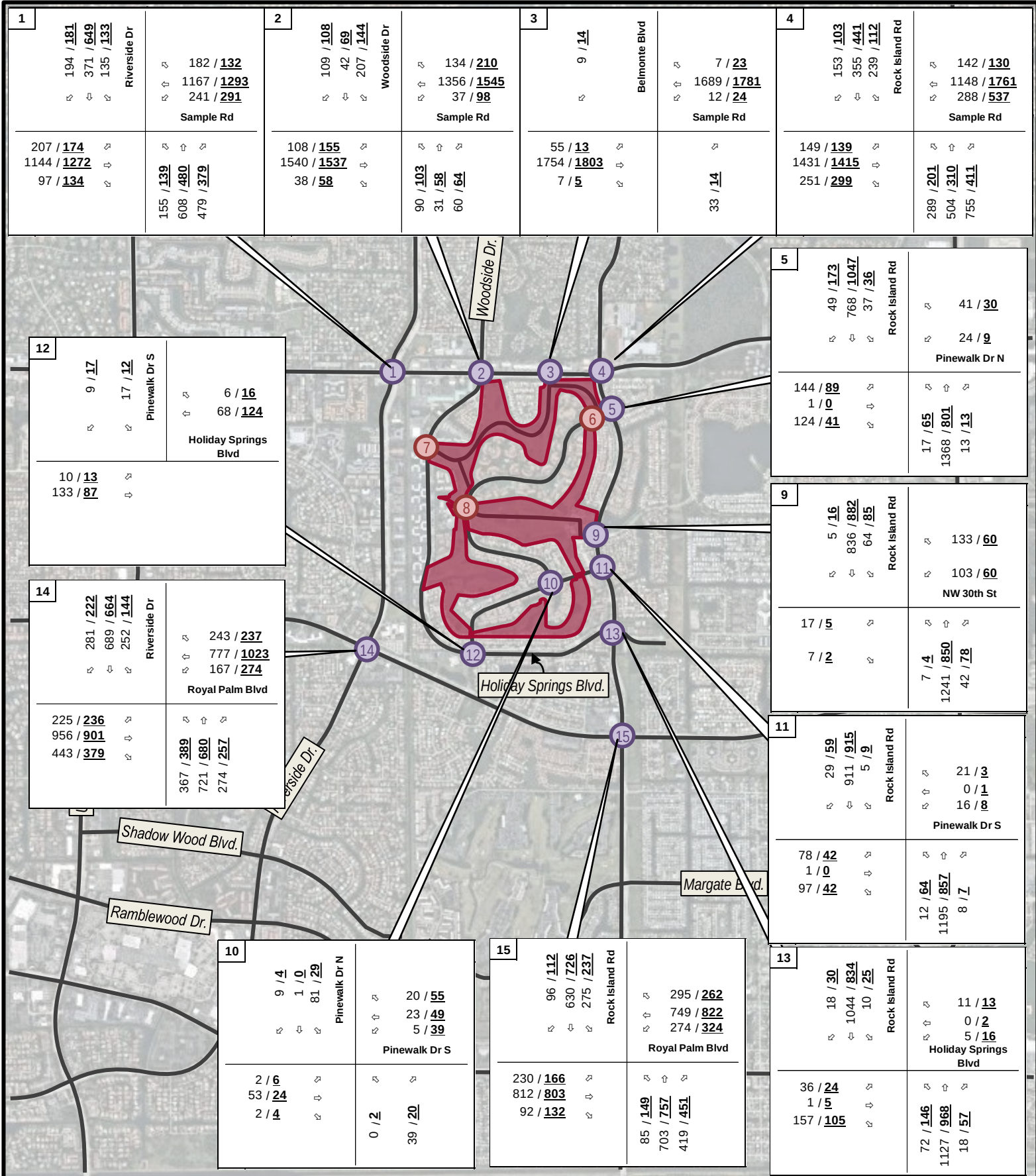
LEGEND
 Site Location
 AM / **PM** Peak Hour Volumes

FIGURE 3
 Carolina Club
 KH #241158000
 Existing Peak Season Volumes

BACKGROUND TRAFFIC

Background traffic is defined as the traffic expected to be on the roadways during the buildout year (2030) without traffic generated by the project. It includes traffic volumes based on existing counts, adjusted over a six-year period using an annually-compounding growth rate. This yearly growth rate was determined by analyzing AADT data collected at several FDOT portable traffic monitoring sites on the roadways that surround the site and taking a weighted average of the growth on roadway links outside of the residential community. The AADT data worksheets and growth rate calculation can be found in Appendix D. As shown in those calculations, the three-year weighted average growth rate is negative; therefore, an annual growth rate of 0.5% was applied in these calculations.

The application of the growth rates to calculate Background Year 2030 traffic volumes is included in the volume development worksheets provided in Appendix F. Figure 4 provides a summary of the future background traffic volumes at the study intersections.



LEGEND

Site Location

AM / **PM** Peak Hour Volumes

FIGURE 4

Carolina Club

KH #241158000

Background Year (2030) Volumes

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PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project, and the distribution and assignment of that traffic over the study roadway network.

Trip Generation

The trip generation potential of the development was calculated based upon the trip generation rates and equations published by the Institute of Transportation Engineers (ITE) in Trip Generation Manual, 11th Edition. The relevant excerpts from the ITE manual are included in Appendix D for reference. The trip generation potential for the proposed uses is calculated using rates and equations published for the following land uses:

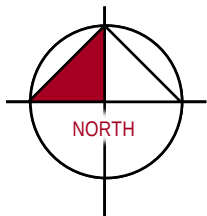
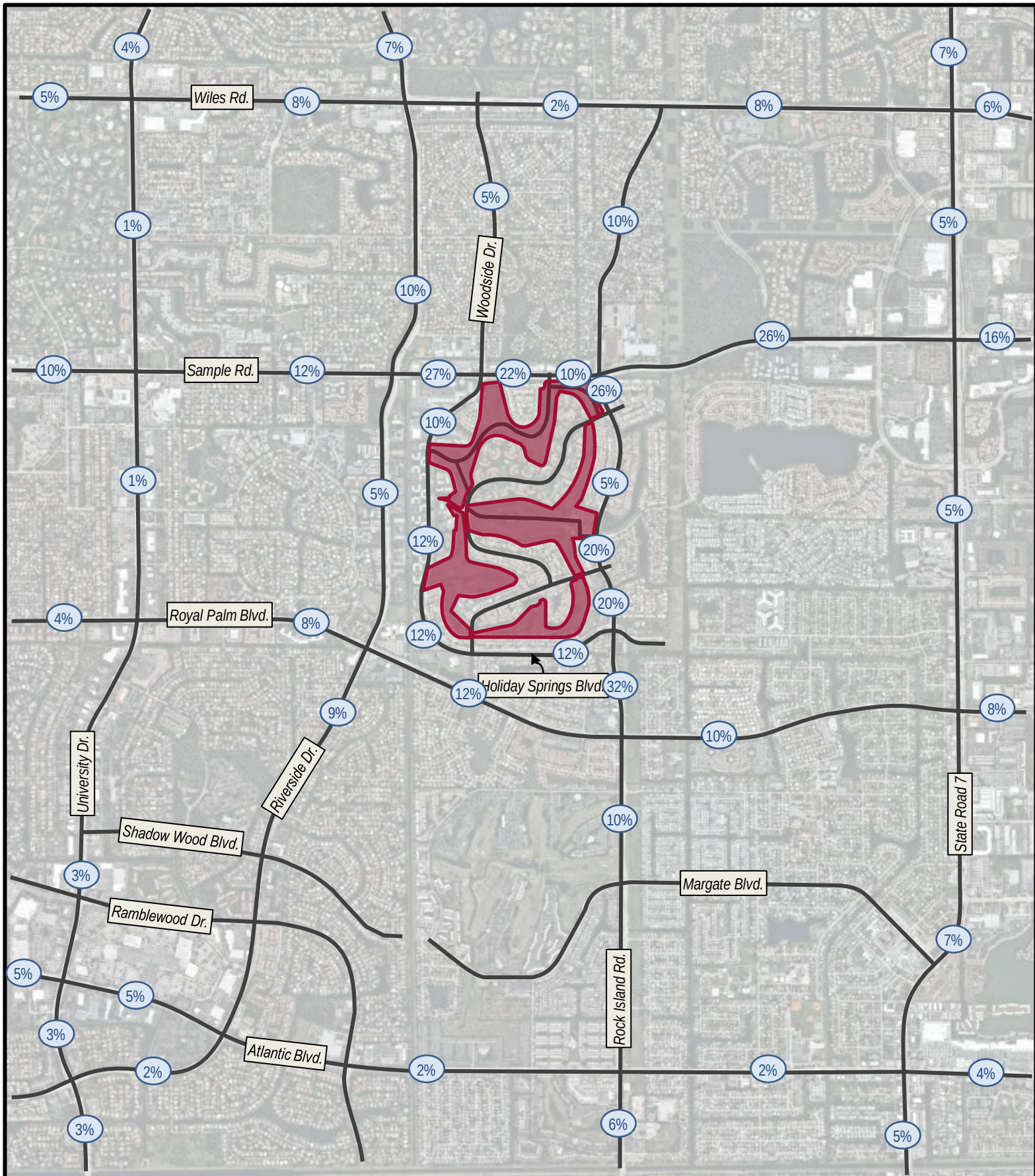
- Single Family Attached Housing (Land Use 220)
- Multi-family Mid-Rise (Land Use 221)
- Shopping Plaza w/ Supermarket (Land Use 821)

As indicated in Table 1, the net new trip generation potential of the proposed site is 7,168 net external daily trips, 498 net new external AM peak hour trips (+176 in, +322 out) and 615 net new external PM peak hour trips (+339 in, +276 out).

The site traffic was assigned to the surrounding roadway network based upon travel patterns for this area and proximity to complimentary land uses. Figure 5 illustrates the overall project distribution on the surrounding roadways. Figure 6 illustrates the project distribution at each of the study intersections. This distribution was then applied to the net new traffic generation of the site to determine net new project traffic volumes at each of the study intersections. The resulting AM and PM project traffic volumes are illustrated in Figure 7.

Table 1: Trip Generation

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour				
			Total	In	Out	Total	In	Out		
Existing Scenario >5 Years										
Golf Course	148.552 acres	556	28	21	7	42	14	28		
	Subtotal	556	28	21	7	42	14	28		
Pass-By Capture	0.0%									
Golf Course		0	0	0	0	0	0	0		
	Subtotal	0	0	0	0	0	0	0		
Driveway Volumes		556	28	21	7	42	14	28		
Net New External Trips		556	28	21	7	42	14	28		
Proposed Scenario										
Shop Plaza (40-150k) w/ Sup Market	57.5 ksf	5,433	203	126	77	519	249	270		
Multifamily Mid-Rise	507 DU	2,302	188	43	145	198	121	77		
Single Family Attached	377 DU	2,714	181	56	125	215	123	92		
	Subtotal	10,449	572	225	347	932	493	439		
Internal Capture	% Daily	% AM	% PM							
Shop Plaza (40-150k) w/ Sup Market	16.7%	1.5%	18.3%	910	3	1	2	95	25	70
Multifamily Mid-Rise	18.2%	1.1%	23.2%	418	2	1	1	46	34	12
Single Family Attached	18.1%	0.6%	22.8%	492	1	1	0	49	36	13
	Subtotal	1,820	6	3	3	190	95	95		
Pass-By Capture	% Daily	% AM	% PM							
Shop Plaza (40-150k) w/ Sup Market	20.0%	0.0%	40.0%	905	40	25	15	85	45	40
Multifamily Mid-Rise	0.0%	0.0%	0.0%	0	0	0	0	0	0	0
Single Family Attached	0.0%	0.0%	0.0%	0	0	0	0	0	0	0
	Subtotal	905	40	25	15	85	45	40		
Driveway Volumes		8,629	566	222	344	742	398	344		
Net New External Trips		7,724	526	197	329	657	353	304		
Proposed Net External Trips-Existing Net New External Trips		7,168	498	176	322	615	339	276		
Land Use	Daily	AM Peak Hour			PM Peak Hour		Pass By			
Golf Course	3.74 trips/acres	0.19 trips/acres (74% in, 26% out)			0.28 trips/acres (34% in, 66% out)		0.0%			
Shop Plaza (40-150k) w/ Sup Market	94.49 trips/ksf	3.53 trips/ksf (62% in, 38% out)			9.03 trips/ksf (48% in, 52% out)		0.0%			
Multifamily Mid-Rise	4.54 trips/DU	0.37 trips/DU (23% in, 77% out)			0.39 trips/DU (61% in, 39% out)		0.0%			
Single Family Attached	7.2 trips/DU	0.48 trips/DU (31% in, 69% out)			0.57 trips/DU (57% in, 43% out)		0.0%			



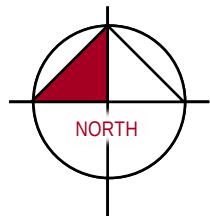
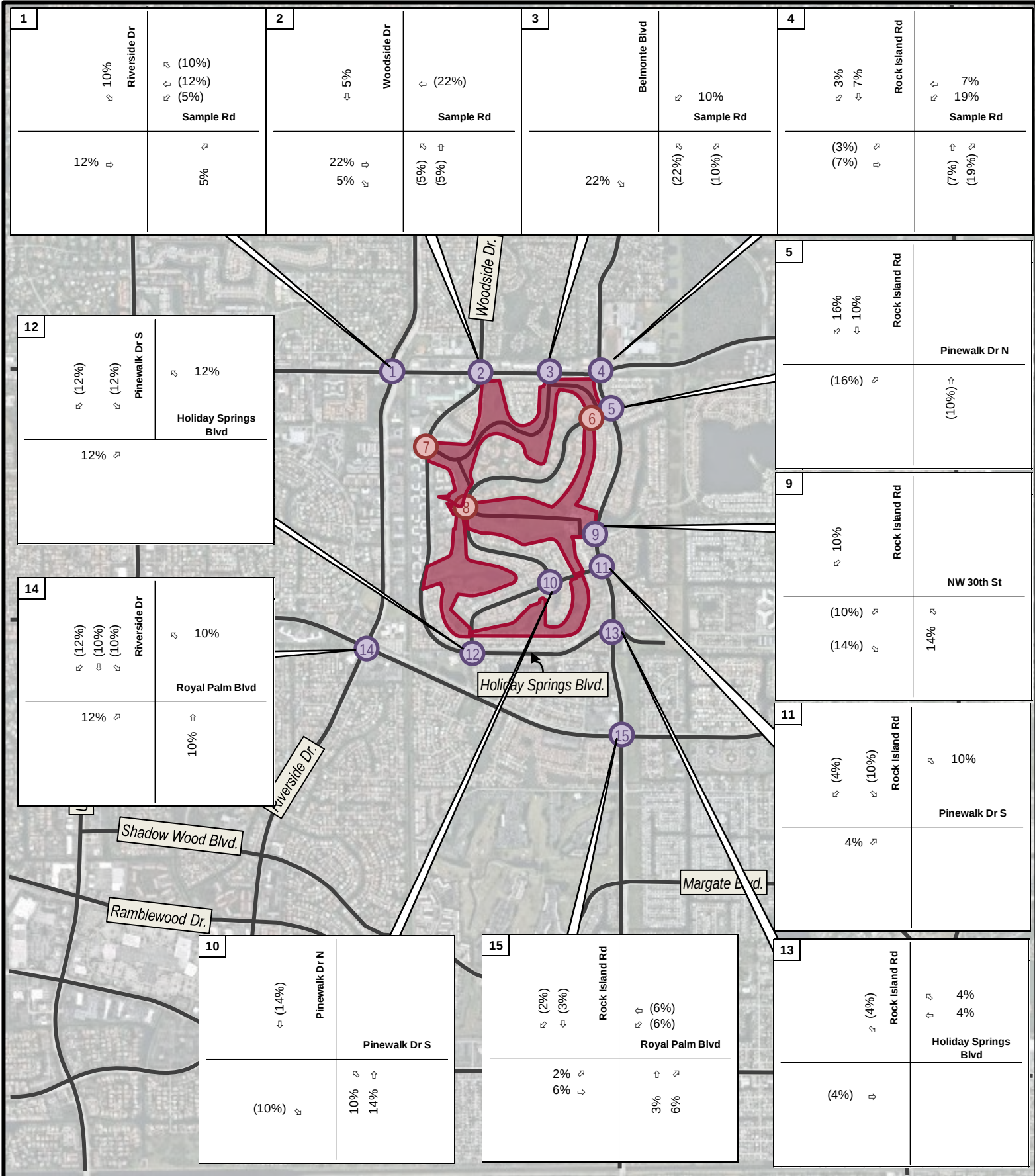
LEGEND

Site Location

Traffic Assignment

FIGURE 5

Carolina Club
KH #241158000
Trip Distribution



XX%
(XX%)

LEGEND

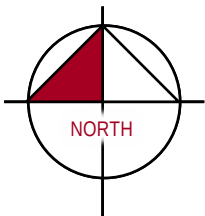
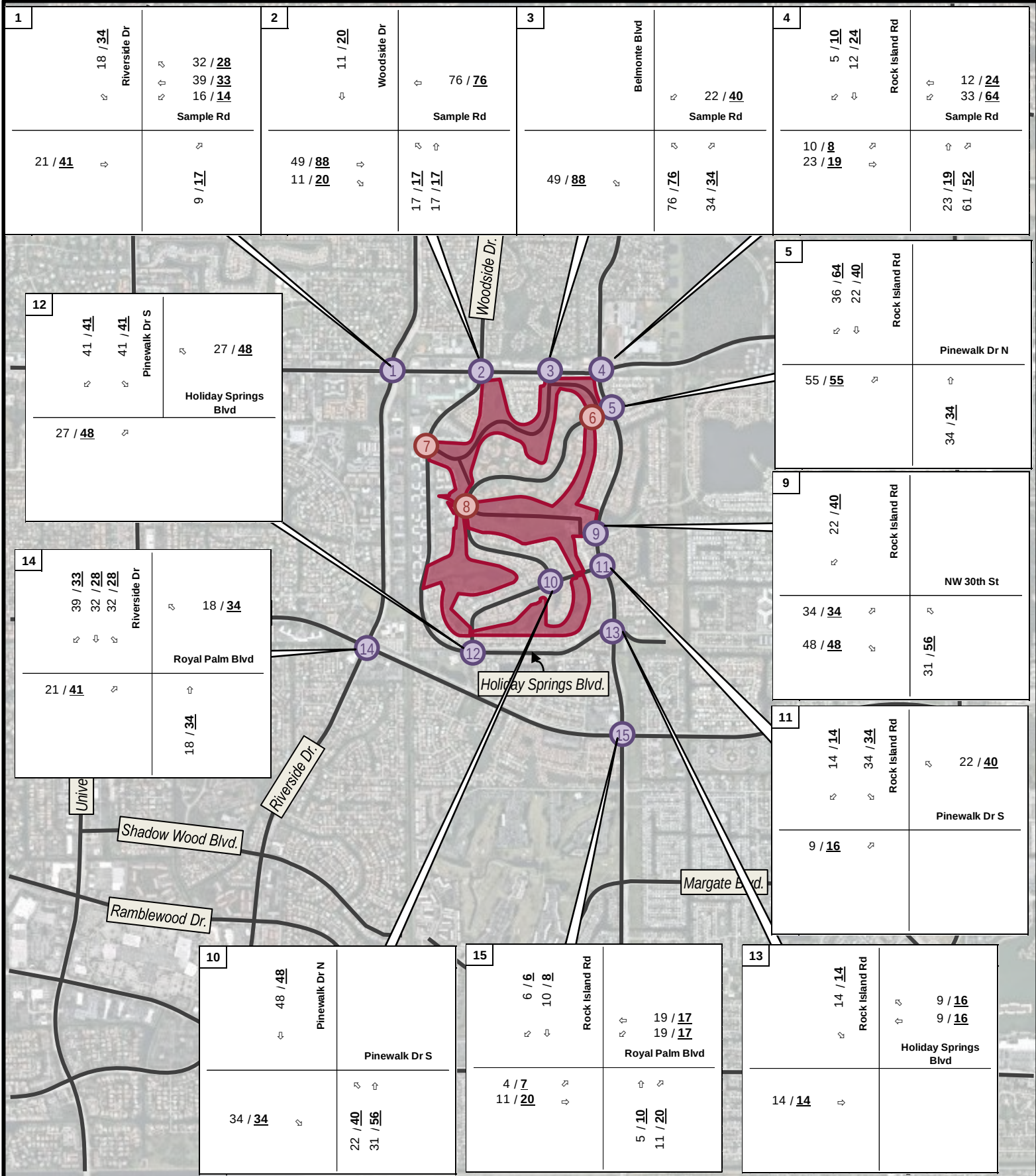
Site Location
Inbound Percentage
Outbound Percentage

FIGURE 6

Carolina Club
KH #241158000

Project Intersection Distribution

Kimley»Horn



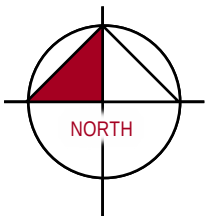
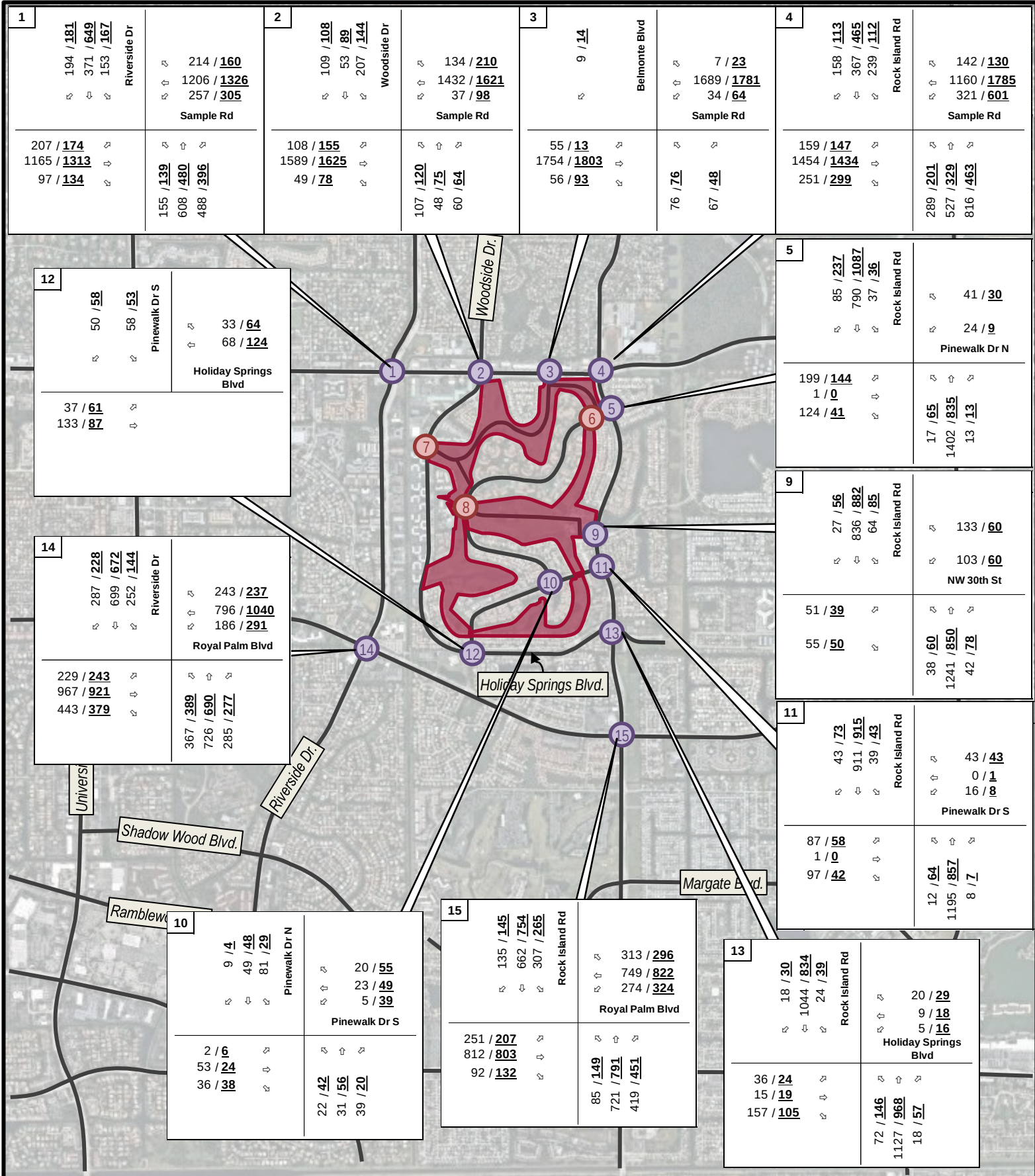
LEGEND
 Site Location
 AM / **PM** Peak Hour Volumes

FIGURE 7
 Carolina Club
 KH #241158000
 Project Traffic Volumes

TOTAL FUTURE TRAFFIC

Total future traffic is defined as the traffic expected to be on the roadways during the buildout year (2030) including the project traffic generated by development of this site. It includes the future background traffic volumes as the baseline, with project traffic assigned at each of the study intersections.

The determination of the Future Year 2030 traffic volumes at each of the study intersections are included in the volume development worksheets provided in Appendix F. Figure 8 provides a summary of the future total traffic volumes at the study intersections.



LEGEND

Site Location

AM / **PM** Peak Hour Volumes

FIGURE 8
Carolina Club
KH #241158000
Future Total (2030) Volumes

INTERSECTION ANALYSIS

Operational analyses were conducted to determine total future level of service and delay at all the study intersections. The analyses were conducted for three conditions (Existing 2024, Background Year (2030), and Future Total (2030) during the weekday AM and PM peak hours at the following intersections:

1. Sample Road & Riverside Drive
2. Sample Road & Holiday Springs Boulevard/Woodside Drive
3. Sample Road & Belmonte Boulevard
4. Sample Road & Rock Island Road
5. Pinewalk Drive North & Rock Island Road
6. Pinewalk Drive North & Proposed New Access #1
7. Proposed New Access #2 & Holiday Springs Boulevard
8. Proposed New Access #3 & Pinewalk Drive North
9. NW 30th Street & Rock Island Road
10. Pinewalk Drive South & Pinewalk Drive North
11. Pinewalk Drive South & Rock Island Road
12. Holiday Springs Boulevard & Pinewalk Drive South
13. Holiday Springs Boulevard & Rock Island Road
14. Royal Palm Boulevard & Rock Island Road
15. Royal Palm Boulevard & Riverside Drive

The intersection analyses use the methodologies outlined in the Highway Capacity Manual, 7th Edition to determine the overall intersection level of service (LOS) and delay during the three analysis conditions during AM and PM peak hours. Using Trafficware's Synchro 12, software models were developed to determine the LOS and delay at the major signalized and unsignalized intersections. The Synchro output worksheets are included in Appendix G.

Summary tables have been prepared to document the level of service and delay at the intersections for the Existing, Background Year, and Future Total conditions. Table 2 summarizes the results for the Existing (2024) AM and PM peak hour analyses, Table 3 summarizes the results for the Background Year (2030) AM and PM peak hour analyses, and Table 4 summarizes the results for the Future Total (2030) AM and PM peak hour analyses.

Existing (2024)

As illustrated in Table 2, the following signalized intersection currently operates at LOS F conditions:

- Riverside Drive & Royal Palm Boulevard (AM and PM Peak Hour)

Table 2: Existing (2021) Peak Hour Intersection LOS and Delay

#	Intersection	Control Type	Movement	AM Peak Hour		PM Peak Hour	
				Delay (s)	LOS	Delay (s)	LOS
1	Riverside Dr & Sample Rd	Signalized	EB	54.3	D	55.7	E
			WB	56.6	E	60.0	E
			NB	95.5	F	61.6	E
			SB	49.2	D	52.9	D
			Overall	64.6	E	57.7	E
2	Woodside Dr & Sample Rd	Signalized	EB	21.0	C	50.6	D
			WB	22.7	C	28.3	C
			NB	41.0	D	73.6	E
			SB	34.0	C	67.2	E
			Overall	23.9	C	43.2	D
3	Belmonte Blvd & Sample Rd	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	22.1	C	21.4	C
			SB	19.6	C	21.3	C
			Overall	-	-	-	-
4	Rock Island Rd & Sample Rd	Signalized	EB	46.1	D	23.2	C
			WB	42.6	D	71.4	E
			NB	55.7	E	58.2	E
			SB	58.9	E	71.2	E
			Overall	49.4	D	54.1	D
5	Rock Island Rd & Pinewalk Dr N	TWSC	EB	37.3	E	28.8	D
			WB	26.1	D	14.7	B
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
6	Pinewalk Dr N & Project Access	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	9.2	A	8.8	A
			SB	10.7	B	11.1	B
			Overall	-	-	-	-
9	Rock Island Rd & NW 30th St	TWSC	EB	24.4	C	17.1	C
			WB	44.3	E	14.5	B
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
10	Pinewalk Dr N & Pinewalk Dr S	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	8.7	A	8.6	A
			SB	9.7	A	10.0	B
			Overall	-	-	-	-
11	Rock Island Rd & Pinewalk Dr S	TWSC	EB	24.8	C	19.5	C
			WB	23.0	C	19.6	C
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
12	Pinewalk Dr S & Holiday Springs Blvd	Signalized	EB	-	-	-	-
			WB	-	-	-	-
			NB	-	-	-	-
			SB	9.2	A	9.3	A
			Overall	-	-	-	-
13	Rock Island Rd & Holiday Springs Blvd	TWSC	EB	25.0	C	40.4	D
			WB	19.5	B	33.7	C
			NB	6.1	A	0.9	A
			SB	12.8	B	8.6	A
			Overall	10.6	B	6.8	A
14	Riverside Dr & Royal Palm Blvd	Signalized	EB	41.0	D	74.0	E
			WB	44.8	D	142.6	F
			NB	111.4	F	67.8	E
			SB	192.7	F	113.6	F
			Overall	94.0	F	99.5	F
15	Rock Island Rd & Royal Palm Blvd	Signalized	EB	71.8	E	71.0	E
			WB	66.4	E	64.9	E
			NB	34.2	C	35.0	D
			SB	26.9	C	9.5	A
			Overall	50.9	D	46.0	D

Background Year (2030)

As summarized in Table 3 the following signalized intersection is expected to operate at LOS F during future background (non-project) conditions:

- Riverside Drive & Royal Palm Boulevard (PM Peak Hour)

This intersection is expected to operate at LOS F if no improvements are made due to the addition of ambient traffic growth in the area.

Table 3: Background Year (2030) Peak Hour Intersection LOS and Delay

#	Intersection	Control Type	Movement	AM Peak Hour		PM Peak Hour	
				Delay (s)	LOS	Delay (s)	LOS
1	Riverside Dr & Sample Rd	Signalized	EB	55.5	E	58.9	E
			WB	59.7	E	64.8	E
			NB	102.3	F	62.0	E
			SB	49.5	D	52.4	D
			Overall	67.7	E	60.2	E
2	Woodside Dr & Sample Rd	Signalized	EB	21.6	C	52.3	D
			WB	23.6	C	29.5	C
			NB	42.9	D	73.2	E
			SB	35.5	D	67.1	E
			Overall	24.8	C	44.4	D
3	Belmonte Blvd & Sample Rd	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	23.2	C	22.3	C
			SB	20.3	C	22.2	C
			Overall	-	-	-	-
4	Rock Island Rd & Sample Rd	Signalized	EB	48.5	D	24.2	C
			WB	43.9	D	77.0	E
			NB	55.7	E	57.8	E
			SB	58.8	E	71.2	E
			Overall	50.5	D	56.6	E
5	Rock Island Rd & Pinewalk Dr N	TWSC	EB	44.4	E	31.5	D
			WB	28.1	D	15.0	B
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
6	Pinewalk Dr N & Project Access	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	9.2	A	8.8	A
			SB	10.8	B	11.2	B
			Overall	-	-	-	-
9	Rock Island Rd & NW 30th St	TWSC	EB	27.1	D	17.8	C
			WB	53.0	F	15.0	B
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
10	Pinewalk Dr N & Pinewalk Dr S	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	8.7	A	8.6	A
			SB	9.8	A	10.1	B
			Overall	-	-	-	-
11	Rock Island Rd & Pinewalk Dr S	TWSC	EB	26.9	C	20.4	C
			WB	24.4	C	20.0	C
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
12	Pinewalk Dr S & Holiday Springs Blvd	Signalized	EB	-	-	-	-
			WB	-	-	-	-
			NB	-	-	-	-
			SB	9.3	A	9.3	A
			Overall	-	-	-	-
13	Rock Island Rd & Holiday Springs Blvd	TWSC	EB	25.5	C	40.2	D
			WB	19.9	B	33.4	C
			NB	6.3	A	1.0	A
			SB	13.2	B	8.9	A
			Overall	10.8	B	7.0	A
14	Riverside Dr & Royal Palm Blvd	Signalized	EB	43.0	D	86.1	F
			WB	46.8	D	157.8	F
			NB	126.2	F	71.9	E
			SB	210.8	F	125.0	F
			Overall	102.8	F	110.4	F
15	Rock Island Rd & Royal Palm Blvd	Signalized	EB	74.6	E	74.8	E
			WB	67.5	E	66.1	E
			NB	35.7	D	36.4	D
			SB	27.7	C	10.2	B
			Overall	52.4	D	47.7	D

Future Total (2030)

As summarized in Table 4, the following signalized intersection is expected to operate at LOS F in the future 2030 conditions:

- Riverside Drive & Royal Palm Boulevard (PM Peak Hour)

The intersection of Riverside Drive & Royal Palm Boulevard is expected to operate at LOS F without the addition of project traffic and therefore this is not a deficiency caused by the addition of project traffic.

Table 4: Future Total (2030) Peak Hour Intersection LOS and Delay

#	Intersection	Control Type	Movement	AM Peak Hour		PM Peak Hour	
				Delay (s)	LOS	Delay (s)	LOS
1	Riverside Dr & Sample Rd	Signalized	EB	57.1	E	62.9	E
			WB	65.7	E	71.6	E
			NB	106.6	F	62.9	E
			SB	49.0	D	51.0	D
			Overall	70.9	E	63.6	E
2	Woodside Dr & Sample Rd	Signalized	EB	22.6	C	53.9	D
			WB	24.9	C	43.5	D
			NB	44.7	D	71.7	E
			SB	37.9	D	66.9	E
			Overall	26.2	C	51.4	D
3	Belmonte Blvd & Sample Rd	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	28.4	D	27.8	D
			SB	20.3	C	22.2	C
			Overall	-	-	-	-
4	Rock Island Rd & Sample Rd	Signalized	EB	52.0	D	25.3	C
			WB	46.0	D	99.3	F
			NB	55.2	E	57.1	E
			SB	58.1	E	71.1	E
			Overall	52.0	D	66.3	E
5	Rock Island Rd & Pinewalk Dr N	TWSC	EB	108.1	F	67.6	F
			WB	29.5	D	15.5	C
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
6	Pinewalk Dr N & Project Access	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	9.4	A	9.0	A
			SB	11.7	B	12.5	B
			Overall	-	-	-	-
7	Holiday Springs Blvd & Project Access	TWSC	EB	-	-	-	-
			WB	9.3	A	9.6	A
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
8	Pinewalk Dr N & Project Access	TWSC	EB	-	-	-	-
			WB	9.2	A	9.6	A
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
9	Rock Island Rd & NW 30th St	TWSC	EB	31.6	D	16.5	C
			WB	69.4	F	17.8	C
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
10	Pinewalk Dr N & Pinewalk Dr S	TWSC	EB	-	-	-	-
			WB	-	-	-	-
			NB	9.9	A	11.4	B
			SB	10.7	B	11.4	B
			Overall	-	-	-	-
11	Rock Island Rd & Pinewalk Dr S	TWSC	EB	38.2	E	26.7	D
			WB	21.6	C	12.4	B
			NB	-	-	-	-
			SB	-	-	-	-
			Overall	-	-	-	-
12	Pinewalk Dr S & Holiday Springs Blvd	Signalized	EB	-	-	-	-
			WB	-	-	-	-
			NB	-	-	-	-
			SB	10.1	B	9.3	A
			Overall	-	-	-	-
13	Rock Island Rd & Holiday Springs Blvd	TWSC	EB	24.9	C	39.2	D
			WB	20.3	C	34.4	C
			NB	6.4	A	1.0	A
			SB	13.3	B	9.0	A
			Overall	11.0	B	7.4	A
14	Riverside Dr & Royal Palm Blvd	Signalized	EB	44.7	D	100.7	F
			WB	48.1	D	163.0	F
			NB	128.3	F	71.6	E
			SB	219.2	F	130.4	F
			Overall	105.9	F	116.9	F
15	Rock Island Rd & Royal Palm Blvd	Signalized	EB	74.2	E	73.7	E
			WB	70.6	E	70.2	E
			NB	36.6	D	37.5	D
			SB	28.0	C	10.6	B
			Overall	53.1	D	48.6	D

LOCAL ROADWAY LOS ANALYSIS

In addition to the analyses undertaken on the surrounding intersection network, an evaluation has been undertaken to review potential traffic impacts generated by the proposed development on the surrounding local road network. Year 2030 conditions have been analyzed in this evaluation. Section 33-69.52 of the City of Margate Code of Ordinances establishes that local roads must maintain a minimum Level of Service (LOS) of C, which correspond to low-to-moderate delays and minimal congestion on the subject transportation facilities. Existing intersection turning movement data and projected project traffic movements were used to forecast future link volumes along local roadway links within the project boundaries. To determine the LOS C service volume, the Generalized Service Volume tables published for the "C3R" context (Suburban Residential) in FDOT's 2023 *Multimodal Quality/Level of Service (QLOS) Handbook* were used. The relevant tables are included in Appendix G. As noted in the footnote in the FDOT table, the baseline LOS C service volume (1,760 vehicles per hour (vph)) was adjusted by a factor of 0.8 to account for a two-lane undivided roadway with no exclusive left turn lanes to arrive at an LOS C service volume of 1,408 vph.

Table 5 below summarizes the results of this LOS analysis, identifying the projected volumes and the corresponding LOS and delay on local roadways in 2030 with full buildout of the proposed project. Note that the FDOT QLOS table does not publish values for LOS A or LOS B thresholds; therefore, the best LOS value achievable using the generalized service tables is LOS C.

Table 5: Local Roadway LOS Analysis

Roadway	From	To	Laneage	Peak Hour Two-Way Capacity	AM Peak Hour			PM Peak Hour		
					Two-Way 2030 Volume	v/c	LOS	Two-Way 2030 Volume	v/c	LOS
Pinewalk Dr. N	Rock Island Rd.	Pinewalk Dr. S	2L	1,408	161	0.11	C	142	0.10	C
Pinewalk Dr. S	Rock Island Rd.	Holiday Springs Blvd.	2L	1,408	240	0.17	C	237	0.17	C
Belmonte Blvd. Extension	Holiday Springs Blvd.	Sample Rd.	2L	1,408	242	0.17	C	295	0.21	C
Pod C Rd.	Pinewalk Dr. N	Rock Island Rd.	2L	1,408	171	0.12	C	205	0.15	C
Pod F Rd.	Pod B Rd.	Pinewalk Dr. N	2L	1,408	84	0.06	C	108	0.08	C

As summarized in the table above, all of the local roads that were evaluated are anticipated to operate within the City's LOS C standard, with volume-to-capacity ratios that demonstrate that the peak hour volumes on all roadways will be less than 25% of the LOS C "capacity" of the roadways.

SUMMARY

Kimley-Horn and Associates has prepared a study to evaluate the impact of development of the proposed Carolina Club project in Margate, Florida.

The overall site is bounded to the north by Sample Road, the east by Rock Island Road, and the west and south by Holiday Springs Boulevard. The site is currently a 148.552-acre golf course. The currently proposed plan of development is for 57,500 square feet of commercial use, 507 multi-family mid-rise residential units, 377 single family attached residential units, and open space. The proposed redevelopment is expected to generate 7,168 net external daily trips, 498 net new external AM peak hour trips (+176 in, +322 out) and 615 net new external PM peak hour trips (+339 in, +276 out).

A site-specific traffic analysis has been undertaken to evaluate impacts on the surrounding transportation network. Level of service has been evaluated on fifteen intersections adjacent to the site. The analysis identifies existing LOS and delay, future background LOS and delay, and total future LOS and delay upon buildout of the project. The results of the evaluation indicate that the proposed project will not create any new deficiencies on the surrounding road network.

APPENDIX A: PROJECT INFORMATION

Conceptual Site Plan

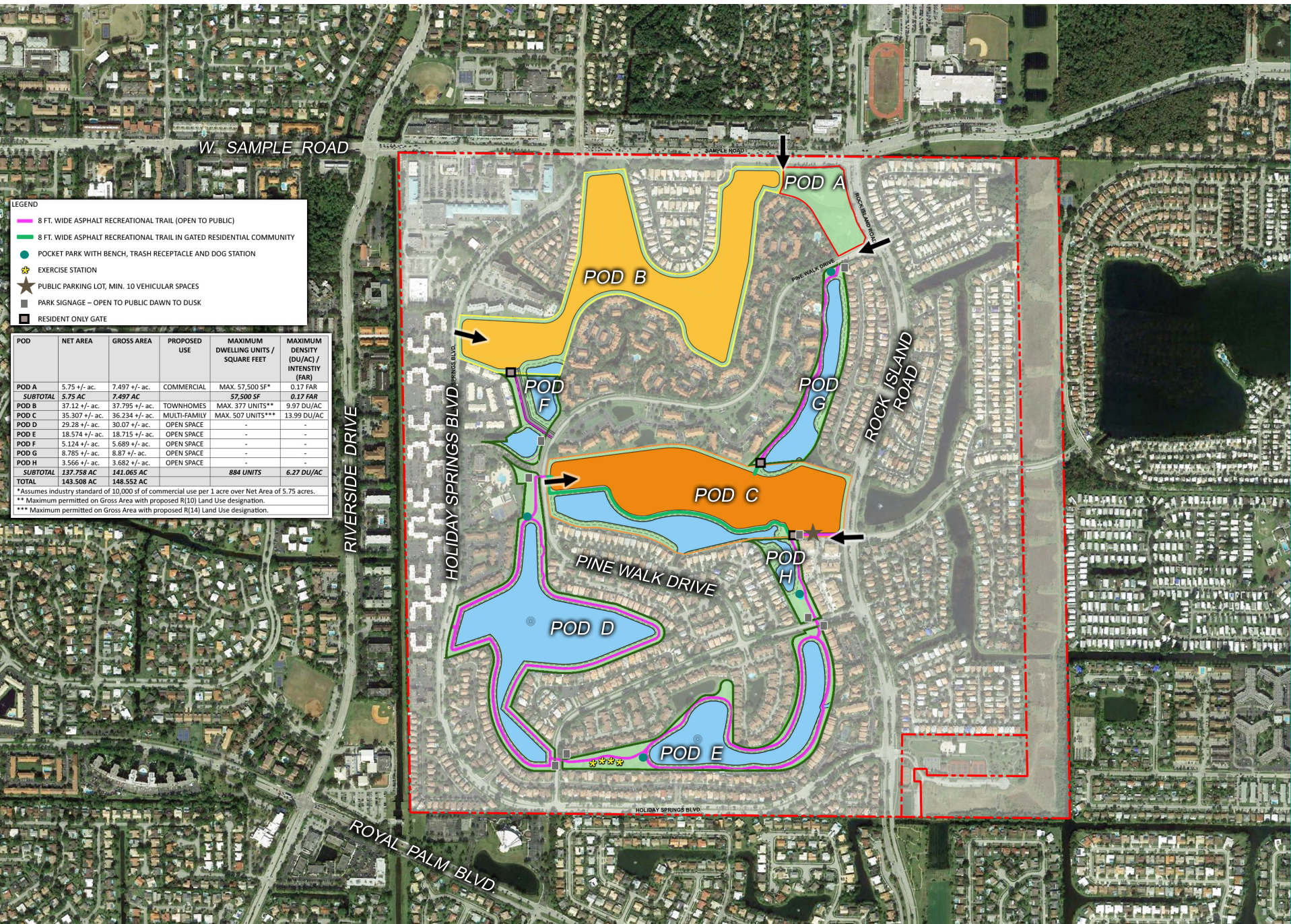
Traffic Study Methodology

CAROLINA CLUB

CONCEPTUAL MASTER PLAN



NORTH



- LEGEND
- 8 FT. WIDE ASPHALT RECREATIONAL TRAIL (OPEN TO PUBLIC)
 - 8 FT. WIDE ASPHALT RECREATIONAL TRAIL IN GATED RESIDENTIAL COMMUNITY
 - POCKET PARK WITH BENCH, TRASH RECEPTACLE AND DOG STATION
 - EXERCISE STATION
 - PUBLIC PARKING LOT, MIN. 10 VEHICULAR SPACES
 - PARK SIGNAGE – OPEN TO PUBLIC DAWN TO DUSK
 - RESIDENT ONLY GATE

POD	NET AREA	GROSS AREA	PROPOSED USE	MAXIMUM DWELLING UNITS / SQUARE FEET	MAXIMUM DENSITY (DU/AC) / INTENSITY (FAR)
POD A	5.75 +/- ac.	7,497 +/- ac.	COMMERCIAL	MAX. 57,500 SF*	0.17 FAR
SUBTOTAL	5.75 AC	7,497 AC		57,500 SF	0.17 FAR
POD B	37.12 +/- ac.	37,795 +/- ac.	TOWNHOMES	MAX. 377 UNITS**	9.97 DU/AC
POD C	35.307 +/- ac.	36,234 +/- ac.	MULTI-FAMILY	MAX. 507 UNITS***	13.99 DU/AC
POD D	29.28 +/- ac.	30.07 +/- ac.	OPEN SPACE	-	-
POD E	18.574 +/- ac.	18,715 +/- ac.	OPEN SPACE	-	-
POD F	5.124 +/- ac.	5,899 +/- ac.	OPEN SPACE	-	-
POD G	8.785 +/- ac.	8.87 +/- ac.	OPEN SPACE	-	-
POD H	3.566 +/- ac.	3,682 +/- ac.	OPEN SPACE	-	-
SUBTOTAL	137.758 AC	141.065 AC		884 UNITS	6.27 DU/AC
TOTAL	143.508 AC	148.552 AC			

* Assumes industry standard of 10,000 sf of commercial use per 1 acre over Net Area of 5.75 acres.
 ** Maximum permitted on Gross Area with proposed R(10) Land Use designation.
 *** Maximum permitted on Gross Area with proposed R(14) Land Use designation.

MEMORANDUM

To: Elizabeth Taschereau
City of Margate

From: Christopher W. Heggen, P.E.
Kimley-Horn and Associates, Inc.

Date: Revised January 31, 2024
January 19, 2024

**Subject: Carolina Club Residential
Study Methodology – Traffic Impact Analysis**

The above-referenced project is located within an area bounded by Sample Road on the north, Rock Island Road on the east, and Holiday Springs Boulevard on the west in the City of Margate, Florida. The proposed plan of development includes redevelopment of certain portions of the site that currently contain golf course uses to include a mix of multifamily, townhome and commercial uses.

Kimley-Horn and Associates has been retained to undertake a traffic analysis for the currently-proposed program of development. Following is a summary of the methodology that will be used to undertake this traffic analysis.

- 1. Trip generation:** The trip generation potential for the existing and proposed uses will be calculated using rates and equations published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual, Eleventh Edition*. The calculations will include calculation of internal capture between uses and pass-by capture based upon methodologies and data published in ITE's *Trip Generation Handbook, Third Edition*. Below is a preliminary trip generation calculation for the proposed uses on site:

Table 1: Trip Generation Calculation

Land Use	Intensity		Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Proposed Scenario									
Strip Retail Plaza (<40k)	40.000 ksf		2,178	94	56	38	264	132	132
Multifamily Mid-Rise	425 DU		1,930	157	36	121	166	101	65
Single-Family Attached	300 DU		2,160	144	45	99	171	97	74
		Subtotal	6,268	395	137	258	601	330	271
Pass-By Capture	Daily	AM	PM						
Strip Retail Plaza (<40k)	20.0%	0.0%	40.0%	436	0	0	106	53	53
Multifamily Mid-Rise	0.0%	0.0%	0.0%	0	0	0	0	0	0
Single-Family Attached	0.0%	0.0%	0.0%	0	0	0	0	0	0
		Subtotal	436	0	0	0	106	53	53
Driveway Volumes			6,268	395	137	258	601	330	271
Net New External Trips			5,832	395	137	258	495	277	218
Land Use	Daily		AM Peak Hour			PM Peak Hour			Pass By
Strip Retail Plaza (<40k)	54.45 trips/ksf		2.36 trips/ksf (60% in, 40% out)			6.59 trips/ksf (50% in, 50% out)			40.0%
Multifamily Mid-Rise	4.54 trips/DU		0.37 trips/DU (23% in, 77% out)			0.39 trips/DU (61% in, 39% out)			0.0%
Single-Family Attached	7.2 trips/DU		0.48 trips/DU (31% in, 69% out)			0.57 trips/DU (57% in, 43% out)			0.0%

2. **Trip distribution/assignment:** Overall trip distribution percentages will be determined based on a review of the complementary land uses and roadway network proposed to be in place at the time of buildout. This assignment will be carried out through one mile from the site boundary. Figure 1, attached, depicts the preliminary traffic assignment on the surrounding transportation system.
3. **Buildout Year:** A buildout year of 2030 will be used for the purposes of this analysis.
4. **Data collection:** AM (7:00 AM – 9:00 AM) and PM (4:00 PM – 6:00 PM) peak period turning movement counts will be collected on one (1) weekday at the study intersections. Following is the list of the sixteen (16) intersections that will be evaluated in this analysis:
 1. Riverside Drive & Sample Road
 2. Holiday Springs Boulevard & Sample Road
 3. Belmonte Boulevard & Sample Road
 4. Rock Island Road & Sample Road
 5. Rock Island Road & Pinewalk Drive North/NW 33rd Street
 6. Pinewalk Drive North & Project Access
 7. Holiday Springs Boulevard & Potential Future E-W Connection
 8. Potential Future E-W Connection & Parcel 1 Driveway
 9. Potential Future E-W Connection + Pinewalk Drive North
 10. NW 30th Street & Rock Island Road
 11. Pinewalk Drive North & Pinewalk Drive South
 12. Rock Island Road & Pinewalk Drive South
 13. Pinewalk Drive South & Holiday Springs Boulevard
 14. Rock Island Road & Holiday Springs Boulevard
 15. Riverside Drive & Royal Palm Boulevard
 16. Royal Palm Boulevard & Rock Island Road

From count data that is collected at the existing intersections, peak hour traffic volumes will be determined. Count data used in the analysis will be no more than 12 months old. For any counts conducted outside of the peak season (January – March), the Peak Season Conversion Factor (PSCF) published by FDOT will be applied. Figure 1 shows the locations of the study intersections.

The City of Margate has a standard that includes analysis of all intersections within a one-mile radius of the site. It would be unrealistic to perform analyses of all intersections within that distance, and may of those intersections, especially further from the site boundary, have a 10% or less assignment of project traffic traveling through the intersection. The above list of intersections identifies those in which the project traffic may have an impact on Level of Service and operations. All other intersections have been excluded because it is anticipated that the project would have a *de minimis* impact on intersection operations.

5. **Future Background (Non-Project) Volumes:** Future background volumes will be determined by adding compounded annual growth rate determined using historical AADT data for roadway links within the vicinity of the project site. At a minimum, the growth rate applied will be no less than 0.5%. Additionally, project traffic generated by relevant approved projects as identified by the City and/or its consultant, if applicable, will be assigned to the project study intersections.

6. **Total Future Volumes:** Total future volumes will be determined by adding future background volumes and project traffic volumes at each of the study intersections.
7. **Intersection LOS Analysis:** Intersection LOS analyses will be conducted for Existing Peak Season, Future Background Peak Season and Future Total Peak Season Conditions using Synchro or HCS software. Summary tables will be prepared to report the Highway Capacity Manual (HCM)-based LOS and delay for each approach and the overall intersection (if available; no overall intersection LOS will be reported for two-way stop-controlled unsignalized intersections).
8. **Transit/Multi-Modal Options:** The location and frequency of transit service on nearby corridors will be quantified, and any modifications to that service identified in Broward County's 5-Year Improvement Program will be reported.
9. **Queuing Evaluation:** If gated access is proposed at any locations within the site plan, or if any uses within the commercial portion of the project contain drive-through lanes, a queuing analysis will be conducted to determine whether or not sufficient vehicle storage is provided.
10. **Mitigation:** Following a determination of project impacts, the Applicant will review potential mitigation measures with City staff and the City consultant, if needed, to evaluate feasibility and appropriateness of these measures. Included in this evaluation will be a determination of the need for turn lanes at adjacent and surrounding intersections.

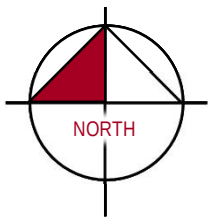
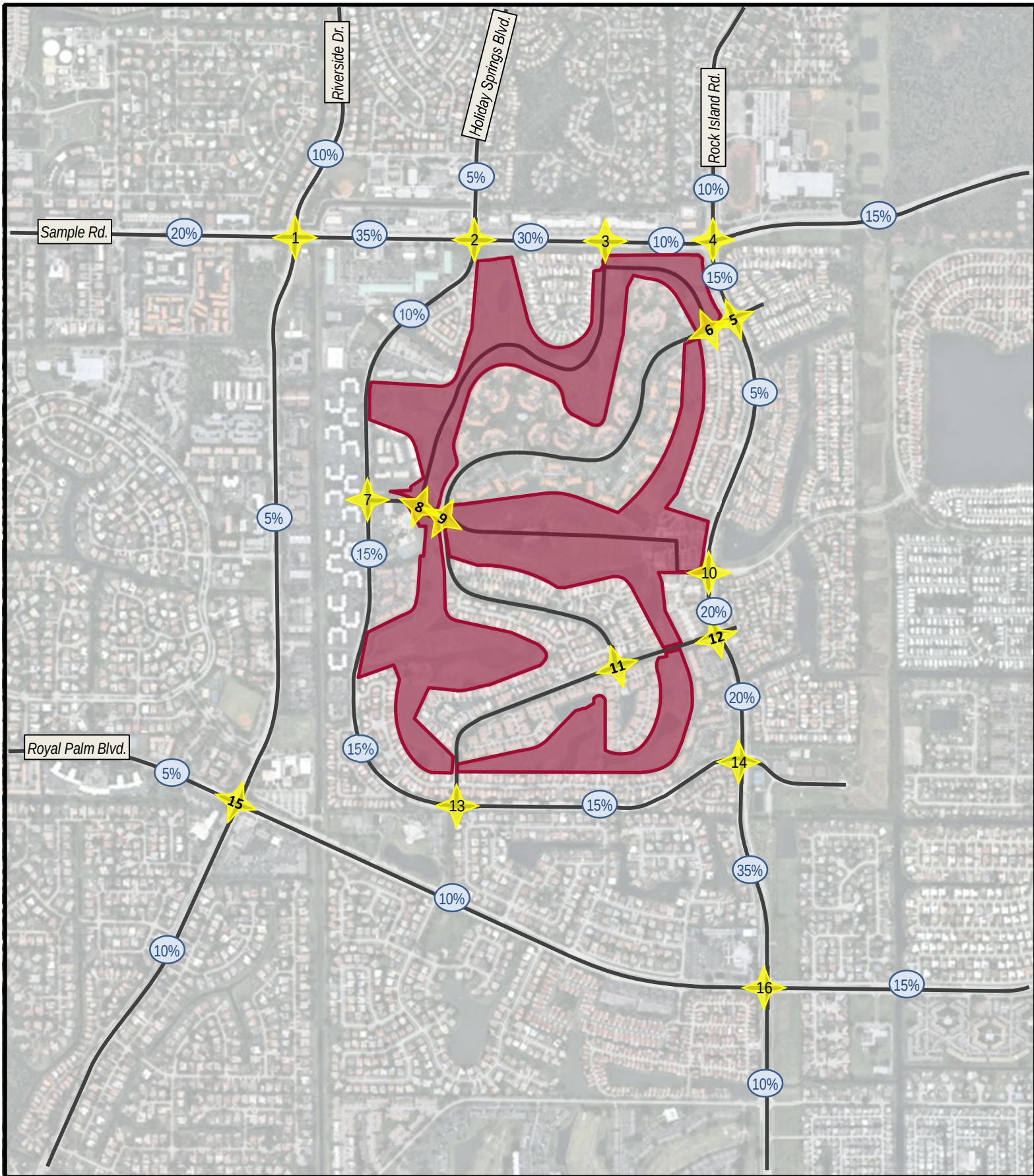
The data collection, calculations, analyses and results will be summarized in a written report for City review. Relevant tables, charts, figures, worksheets, and a current copy of the site plan will be included in the summary report.

Please review the methodology for this analysis as outlined above and indicate your concurrence by signing in the space below. Should you have questions or comments regarding the proposed methodology, please call me via phone at (561) 840-0248 or via e-mail at chris.heggen@kimley-horn.com.

Concur by: _____ Date: _____

Attachment

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LEGEND

Site Location

Traffic Assignment

FIGURE 1

Carolina Club

KH #---

Driveway Volumes

APPENDIX B: TRAFFIC VOLUME DATA

Intersection Turning Movement Count Data



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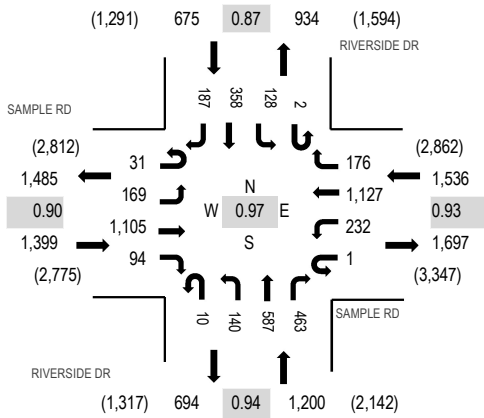
Location: 1 RIVERSIDE DR & SAMPLE RD AM

Date: Thursday, February 29, 2024

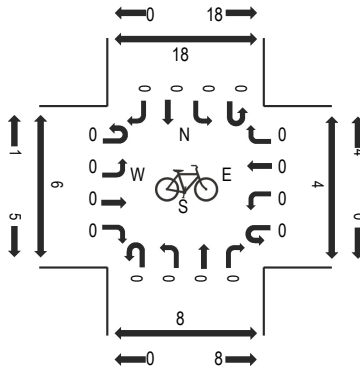
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

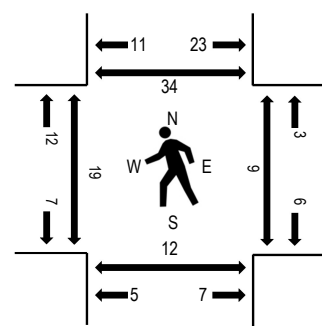
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SAMPLE RD Eastbound				SAMPLE RD Westbound				RIVERSIDE DR Northbound				RIVERSIDE DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	9	46	224	23	1	43	173	21	0	26	127	99	1	38	66	49	946	4,583	3	2	3	6
7:15 AM	7	42	310	30	0	49	215	44	2	23	157	137	1	42	81	35	1,175	4,810	2	0	5	6
7:30 AM	10	40	293	29	0	69	274	55	3	32	154	112	0	24	101	43	1,239	4,765	3	7	3	15
7:45 AM	9	44	242	19	0	58	302	40	2	48	152	112	0	35	101	59	1,223	4,599	12	1	3	10
8:00 AM	5	43	260	16	1	56	336	37	3	37	124	102	1	27	75	50	1,173	4,487	2	1	1	3
8:15 AM	9	33	278	26	1	58	291	14	3	29	127	96	0	33	85	47	1,130		9	1	2	0
8:30 AM	6	21	324	21	0	40	256	30	4	22	92	103	0	30	96	28	1,073		2	1	3	0
8:45 AM	6	23	299	28	1	58	312	27	1	28	98	87	0	36	71	36	1,111		0	3	2	1
Count Total	61	292	2,230	192	4	431	2,159	268	18	245	1,031	848	3	265	676	347	9,070		33	16	22	41
Peak Hour	31	169	1,105	94	1	232	1,127	176	10	140	587	463	2	128	358	187	4,810		19	9	12	34



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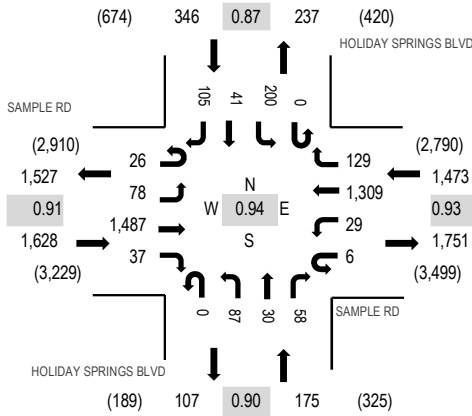
Location: 2 HOLIDAY SPRINGS BLVD & SAMPLE RD AM

Date: Thursday, February 29, 2024

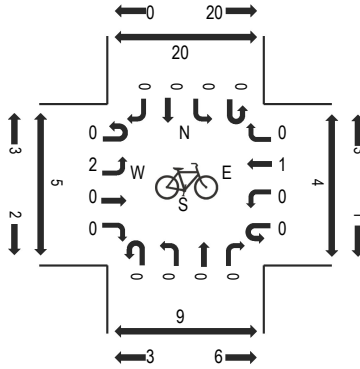
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

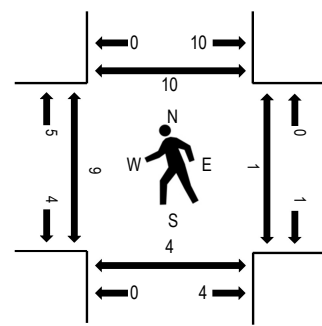
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SAMPLE RD Eastbound				SAMPLE RD Westbound				HOLIDAY SPRINGS BLVD Northbound				HOLIDAY SPRINGS BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	7	7	333	4	1	9	215	19	0	16	8	13	0	63	4	30	729	3,493	5	0	0	2
7:15 AM	6	16	419	7	2	0	278	26	0	25	8	16	0	61	3	15	882	3,622	7	0	3	7
7:30 AM	7	24	386	9	3	8	370	28	0	20	8	14	0	44	21	23	965	3,598	0	0	0	1
7:45 AM	4	23	342	9	1	8	338	37	0	24	11	14	0	56	7	43	917	3,511	2	1	1	0
8:00 AM	9	15	340	12	0	13	323	38	0	18	3	14	0	39	10	24	858	3,525	0	0	0	2
8:15 AM	8	18	354	10	0	6	315	26	0	17	6	13	0	46	8	31	858		6	0	1	1
8:30 AM	6	11	391	9	0	9	300	20	0	15	8	20	0	56	6	27	878		2	0	3	1
8:45 AM	5	24	407	7	0	8	357	32	0	13	4	17	0	34	2	21	931		3	0	0	0
Count Total	52	138	2,972	67	7	61	2,496	226	0	148	56	121	0	399	61	214	7,018		25	1	8	14
Peak Hour	26	78	1,487	37	6	29	1,309	129	0	87	30	58	0	200	41	105	3,622		9	1	4	10



ALL TRAFFIC DATA SERVICES

(303) 216-2439

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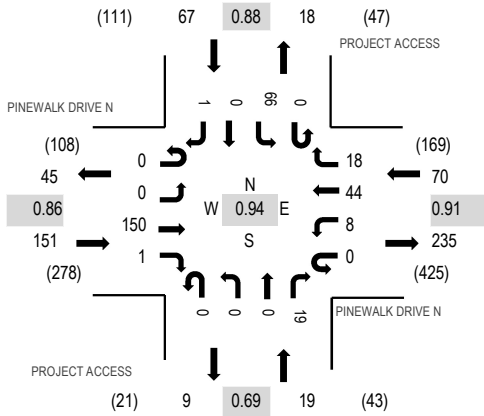
Location: 6 PROJECT ACCESS & PINEWALK DRIVE N AM

Date: Thursday, February 29, 2024

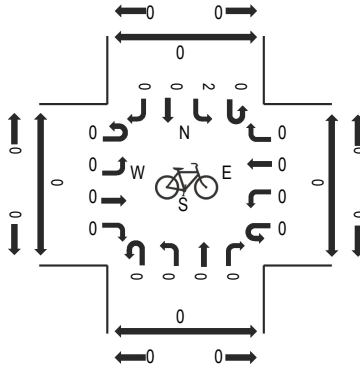
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

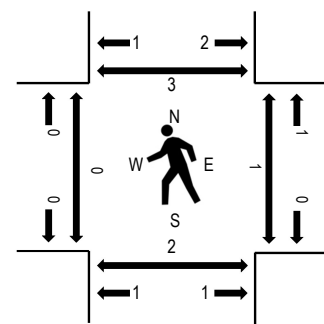
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PINEWALK DRIVE N Eastbound				PINEWALK DRIVE N Westbound				PROJECT ACCESS Northbound				PROJECT ACCESS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	25	0	0	2	8	3	0	0	0	3	0	15	1	0	57	294	1	0	0	2
7:15 AM	0	0	44	0	0	3	6	5	0	0	0	5	0	18	0	1	82	307	0	0	1	1
7:30 AM	0	0	41	0	0	0	12	5	0	0	0	2	0	17	0	0	77	307	0	1	0	0
7:45 AM	0	0	38	1	0	3	10	3	0	0	0	9	0	14	0	0	78	305	0	0	1	0
8:00 AM	0	0	27	0	0	2	16	5	0	0	0	3	0	17	0	0	70	307	0	0	0	2
8:15 AM	0	0	37	0	0	2	22	3	0	0	0	6	0	12	0	0	82		0	1	0	1
8:30 AM	0	0	31	1	0	1	19	9	0	0	0	7	0	7	0	0	75		0	4	1	1
8:45 AM	0	0	32	1	0	4	12	14	0	2	0	6	0	9	0	0	80		2	0	0	2
Count Total	0	0	275	3	0	17	105	47	0	2	0	41	0	109	1	1	601		3	6	3	9
Peak Hour	0	0	150	1	0	8	44	18	0	0	0	19	0	66	0	1	307		0	1	2	3



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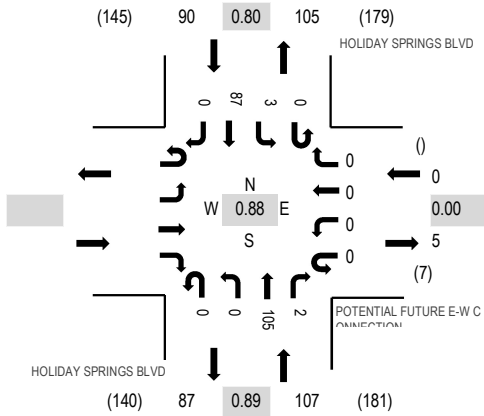
Location: 7 HOLIDAY SPRINGS BLVD & POTENTIAL FUTURE E-W CONNECTION AM

Date: Thursday, February 29, 2024

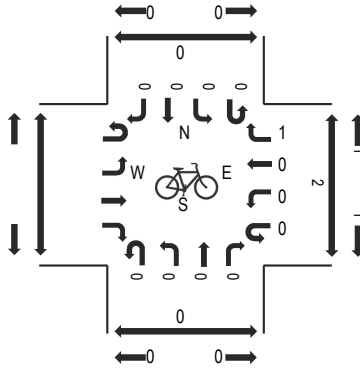
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 08:00 AM - 08:15 AM

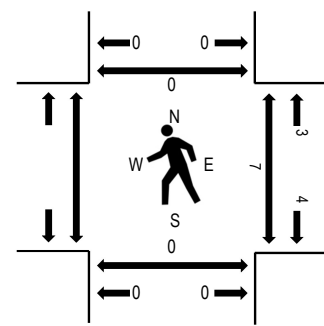
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	POTENTIAL FUTURE E-W CONNECTION								HOLIDAY SPRINGS BLVD				HOLIDAY SPRINGS BLVD				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
7:00 AM					0	0	0	0	0	0	19	1	0	0	10	0	30	165		0	1	1
7:15 AM					0	0	0	0	0	0	21	0	1	0	12	0	34	191		0	0	0
7:30 AM					0	0	0	0	0	0	24	1	0	0	28	0	53	197		2	0	0
7:45 AM					0	0	0	0	0	0	28	0	0	1	19	0	48	180		1	0	0
8:00 AM					0	0	0	0	0	0	29	1	0	2	24	0	56	161		2	0	0
8:15 AM					0	0	0	0	0	0	24	0	0	0	16	0	40			2	0	0
8:30 AM					0	0	0	0	0	0	16	0	0	0	20	0	36			2	0	0
8:45 AM					0	0	0	0	0	0	17	0	0	1	11	0	29			7	0	0
Count Total					0	0	0	0	0	0	178	3	1	4	140	0	326			16	1	1
Peak Hour					0	0	0	0	0	0	105	2	0	3	87	0	197			7	0	0



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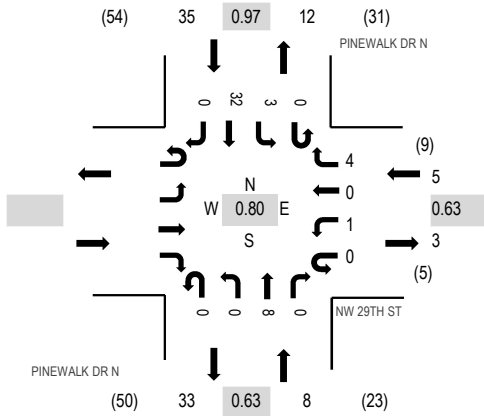
Location: 8 PINEWALK DR N & NW 29TH ST AM

Date: Thursday, February 29, 2024

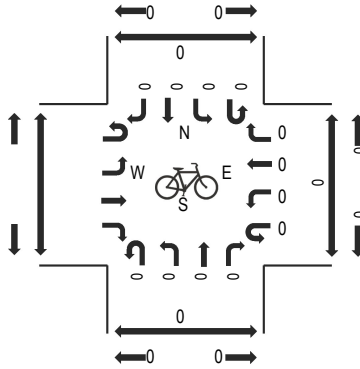
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

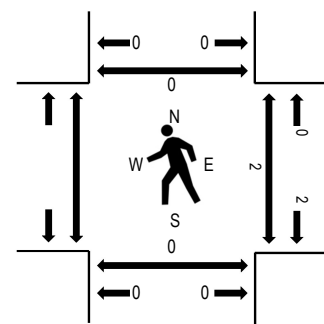
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				NW 29TH ST Westbound				PINEWALK DR N Northbound				PINEWALK DR N Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM					0	0	0	0	0	0	1	0	0	0	8	0	9	48	0	0	0	0
7:15 AM					0	0	0	1	0	0	2	0	0	0	9	0	12	47	0	0	0	0
7:30 AM					0	0	0	2	0	0	4	0	0	2	7	0	15	43	2	0	0	0
7:45 AM					0	1	0	1	0	0	1	0	0	1	8	0	12	37	0	0	0	0
8:00 AM					0	0	0	0	0	0	3	0	0	1	4	0	8	38	0	0	0	0
8:15 AM					0	0	0	0	0	0	4	0	0	1	3	0	8		1	0	0	0
8:30 AM					0	0	0	2	0	0	2	0	0	0	5	0	9		0	1	0	0
8:45 AM					0	0	0	2	0	0	6	0	0	0	5	0	13		0	0	0	0
Count Total					0	1	0	8	0	0	23	0	0	5	49	0	86		3	1	0	0
Peak Hour					0	1	0	4	0	0	8	0	0	3	32	0	48		2	0	0	0



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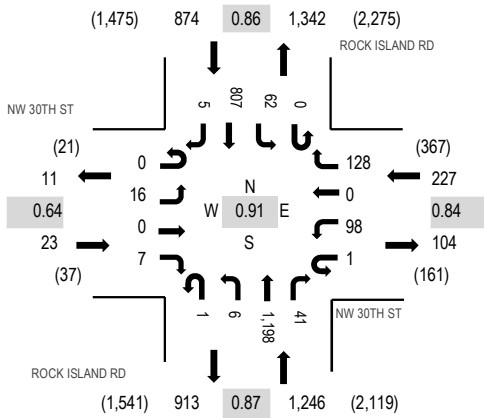
Location: 10 ROCK ISLAND RD & NW 30TH ST AM

Date: Thursday, February 29, 2024

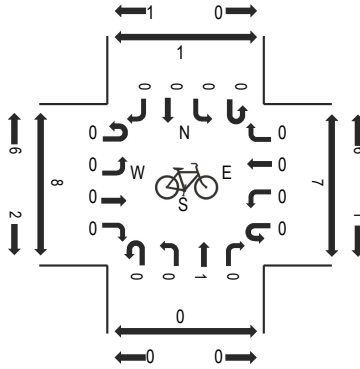
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

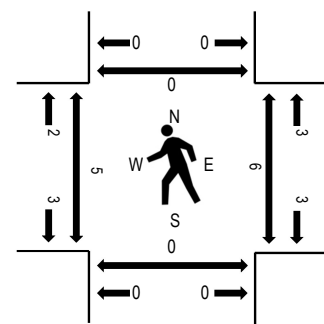
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NW 30TH ST Eastbound				NW 30TH ST Westbound				ROCK ISLAND RD Northbound				ROCK ISLAND RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	3	0	1	0	21	0	27	0	2	215	3	0	9	130	1	412	2,297	1	5	0	0
7:15 AM	0	2	0	1	0	31	0	37	1	1	354	4	0	9	185	1	626	2,370	1	2	0	0
7:30 AM	0	5	0	2	1	25	0	43	0	1	311	9	0	22	229	2	650	2,155	0	2	0	0
7:45 AM	0	6	0	3	0	17	0	30	0	1	300	16	0	20	214	2	609	1,923	2	1	0	0
8:00 AM	0	3	0	1	0	25	0	18	0	3	233	12	0	11	179	0	485	1,701	2	1	0	0
8:15 AM	0	3	0	0	0	11	0	23	0	2	194	13	0	11	152	2	411		0	1	0	0
8:30 AM	0	4	0	0	0	20	0	10	0	1	212	6	0	8	156	1	418		0	1	0	1
8:45 AM	0	2	0	1	0	8	0	20	0	0	220	5	0	2	128	1	387		1	0	0	0
Count Total	0	28	0	9	1	158	0	208	1	11	2,039	68	0	92	1,373	10	3,998		7	13	0	1
Peak Hour	0	16	0	7	1	98	0	128	1	6	1,198	41	0	62	807	5	2,370		5	6	0	0



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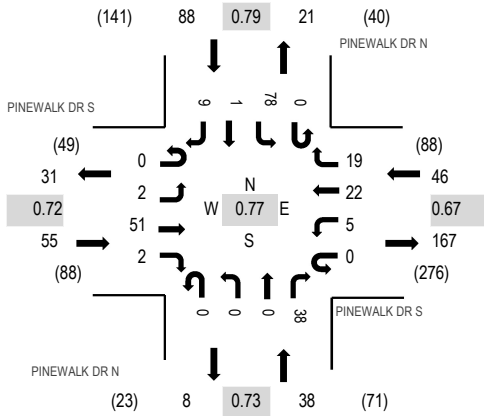
Location: 11 PINEWALK DR N & PINEWALK DR S AM

Date: Thursday, February 29, 2024

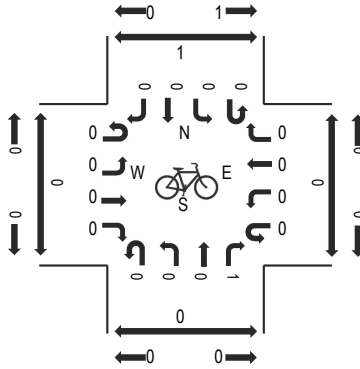
Peak Hour: 07:00 AM - 08:00 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

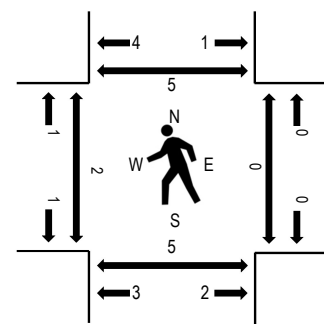
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PINEWALK DR S Eastbound				PINEWALK DR S Westbound				PINEWALK DR N Northbound				PINEWALK DR N Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	6	1	0	1	1	3	0	0	0	9	0	16	0	3	40	227	0	0	1	2
7:15 AM	0	0	19	0	0	0	7	7	0	0	0	13	0	26	1	1	74	223	0	0	1	1
7:30 AM	0	2	15	0	0	1	7	1	0	0	0	6	0	20	0	4	56	185	0	0	0	1
7:45 AM	0	0	11	1	0	3	7	8	0	0	0	10	0	16	0	1	57	170	2	0	3	1
8:00 AM	0	1	6	0	0	5	0	2	1	1	0	7	0	12	0	1	36	161	0	0	1	0
8:15 AM	0	1	8	0	0	2	5	2	0	0	0	6	0	12	0	0	36		1	2	4	0
8:30 AM	0	1	8	0	0	4	4	3	0	1	0	8	0	10	0	2	41		1	0	1	1
8:45 AM	0	0	8	0	0	3	3	9	0	1	0	8	0	16	0	0	48		1	0	1	0
Count Total	0	5	81	2	0	19	34	35	1	3	0	67	0	128	1	12	388		5	2	12	6
Peak Hour	0	2	51	2	0	5	22	19	0	0	0	38	0	78	1	9	227		2	0	5	5



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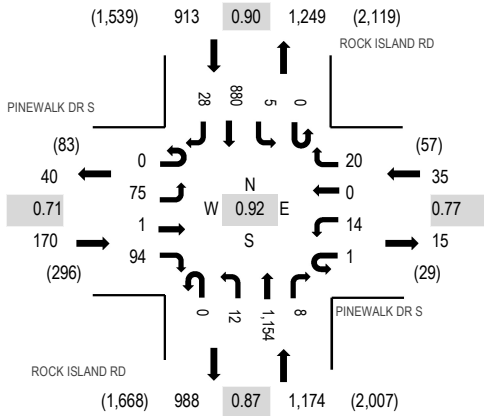
Location: 12 ROCK ISLAND RD & PINEWALK DR S AM

Date: Thursday, February 29, 2024

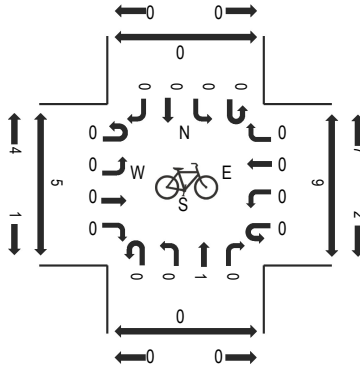
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:15 AM - 07:30 AM

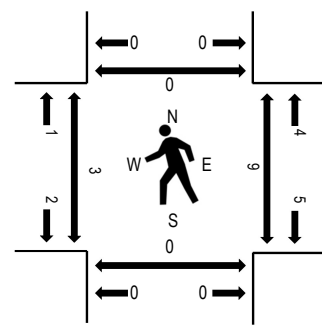
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PINEWALK DR S Eastbound				PINEWALK DR S Westbound				ROCK ISLAND RD Northbound				ROCK ISLAND RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	11	0	21	0	6	0	1	0	4	206	1	0	1	149	2	402	2,217	0	5	0	0
7:15 AM	0	26	1	34	1	3	0	6	0	3	331	2	0	0	212	5	624	2,292	0	5	0	0
7:30 AM	0	19	0	22	0	5	0	7	0	1	294	5	0	0	247	8	608	2,057	1	0	0	0
7:45 AM	0	17	0	22	0	5	0	3	0	6	294	0	0	3	223	10	583	1,874	1	2	0	0
8:00 AM	0	13	0	16	0	1	0	4	0	2	235	1	0	2	198	5	477	1,682	1	2	0	0
8:15 AM	0	16	0	16	0	0	0	4	0	3	185	2	0	2	155	6	389		0	3	0	0
8:30 AM	0	13	0	15	0	5	0	1	0	5	206	4	0	1	167	8	425		0	1	0	0
8:45 AM	0	16	0	18	0	2	0	3	0	7	207	3	1	0	126	8	391		1	0	0	0
Count Total	0	131	1	164	1	27	0	29	0	31	1,958	18	1	9	1,477	52	3,899		4	18	0	0
Peak Hour	0	75	1	94	1	14	0	20	0	12	1,154	8	0	5	880	28	2,292		3	9	0	0



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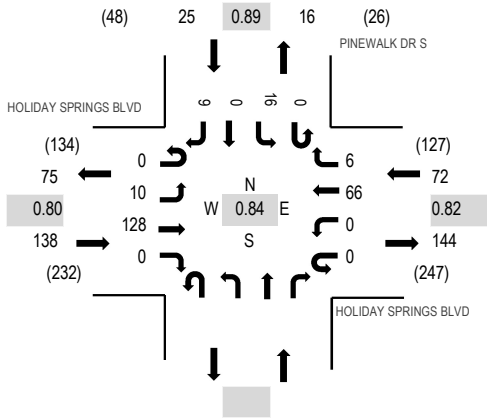
Location: 13 PINEWALK DR S & HOLIDAY SPRINGS BLVD AM

Date: Thursday, February 29, 2024

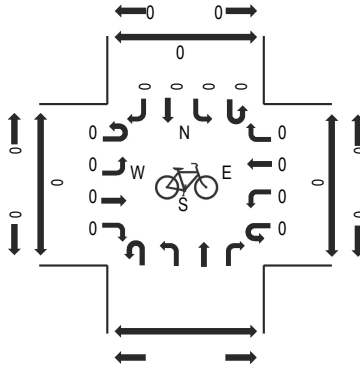
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 08:00 AM - 08:15 AM

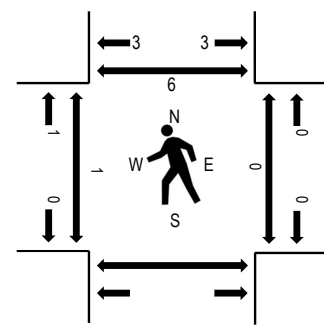
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HOLIDAY SPRINGS BLVD				HOLIDAY SPRINGS BLVD				PINEWALK DR S								Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
7:00 AM	0	0	16	0	0	0	8	1					0	2	0	4	31	196	1	0		0
7:15 AM	0	1	29	0	0	0	12	0					0	5	0	2	49	235	0	0		0
7:30 AM	0	5	32	0	0	0	14	2					0	2	0	3	58	228	1	0		0
7:45 AM	0	1	27	0	0	0	20	3					0	3	0	4	58	223	0	0		1
8:00 AM	0	3	40	0	0	0	20	1					0	6	0	0	70	211	0	0		5
8:15 AM	0	1	23	0	0	0	13	0					0	2	0	3	42		0	0		0
8:30 AM	0	3	28	0	0	0	17	1					0	4	0	0	53		0	0		0
8:45 AM	0	1	22	0	0	0	12	3					0	6	0	2	46		0	0		0
Count Total	0	15	217	0	0	0	116	11					0	30	0	18	407		2	0		6
Peak Hour	0	10	128	0	0	0	66	6					0	16	0	9	235		1	0		6



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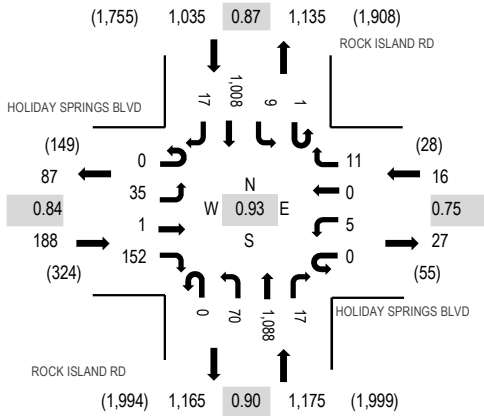
Location: 14 ROCK ISLAND RD & HOLIDAY SPRINGS BLVD AM

Date: Thursday, February 29, 2024

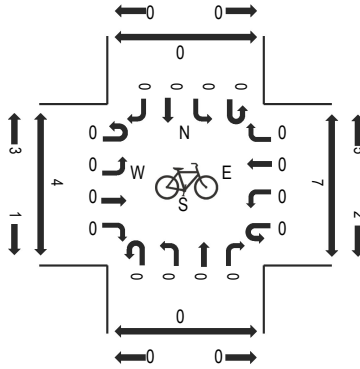
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

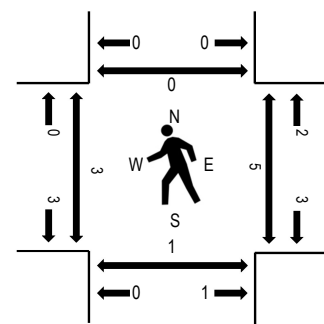
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HOLIDAY SPRINGS BLVD				HOLIDAY SPRINGS BLVD				ROCK ISLAND RD				ROCK ISLAND RD				Total	Rolling Hour	Pedestrian Crossings				
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North	
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right							
7:00 AM	1	2	0	24	0	0	0	0	0	5	183	3	0	4	188	1	411	2,290	1	4	0	1	
7:15 AM	0	15	0	33	0	1	0	1	0	10	312	3	0	2	252	3	632	2,414	0	3	1	0	
7:30 AM	0	7	0	38	0	0	0	2	0	14	288	2	0	1	293	4	649	2,172	0	0	0	0	
7:45 AM	0	7	1	31	0	3	0	3	0	22	267	5	1	3	253	2	598	1,989	0	1	0	0	
8:00 AM	0	6	0	50	0	1	0	5	0	24	221	7	0	3	210	8	535	1,816	3	1	0	0	
8:15 AM	0	8	0	25	0	1	0	0	0	16	164	3	1	3	167	2	390		1	4	1	3	
8:30 AM	1	5	0	38	0	3	0	2	0	17	198	10	0	2	187	3	466		0	2	0	2	
8:45 AM	0	3	0	29	0	5	0	1	0	16	206	3	0	0	162	0	425		1	1	0	0	
Count Total	2	53	1	268	0	14	0	14	0	124	1,839	36	2	18	1,712	23	4,106		6	16	2	6	
Peak Hour	0	35	1	152	0	5	0	11	0	70	1,088	17	1	9	1,008	17	2,414		3	5	1	0	



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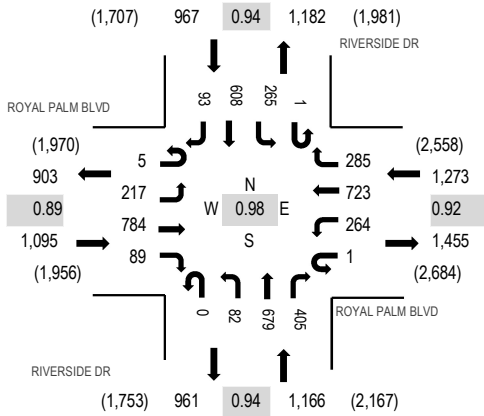
Location: 15 RIVERSIDE DR & ROYAL PALM BLVD AM

Date: Thursday, February 29, 2024

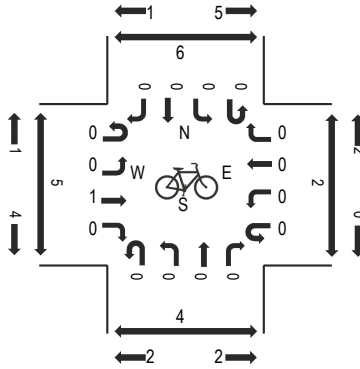
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:30 AM - 07:45 AM

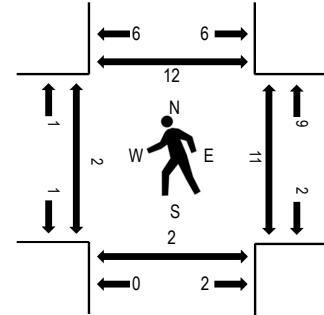
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ROYAL PALM BLVD Eastbound				ROYAL PALM BLVD Westbound				RIVERSIDE DR Northbound				RIVERSIDE DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	39	159	21	0	57	179	42	0	37	146	77	2	57	89	16	921	4,300	0	0	0	0
7:15 AM	1	53	160	24	0	63	174	69	0	23	189	99	1	64	148	22	1,090	4,501	0	0	0	1
7:30 AM	2	55	226	21	0	67	194	71	0	28	148	114	0	69	127	28	1,150	4,349	1	2	0	1
7:45 AM	0	59	226	23	1	61	176	67	0	10	175	85	0	67	166	23	1,139	4,209	1	5	2	4
8:00 AM	2	50	172	21	0	73	179	78	0	21	167	107	0	65	167	20	1,122	4,088	0	4	0	6
8:15 AM	2	22	164	25	0	64	232	36	0	19	118	82	0	53	95	26	938		0	1	0	1
8:30 AM	2	25	166	24	0	60	219	32	1	23	147	100	0	63	129	19	1,010		0	0	1	0
8:45 AM	1	25	161	25	1	83	243	37	0	26	127	98	1	48	119	23	1,018		0	0	0	0
Count Total	10	328	1,434	184	2	528	1,596	432	1	187	1,217	762	4	486	1,040	177	8,388		2	12	3	13
Peak Hour	5	217	784	89	1	264	723	285	0	82	679	405	1	265	608	93	4,501		2	11	2	12



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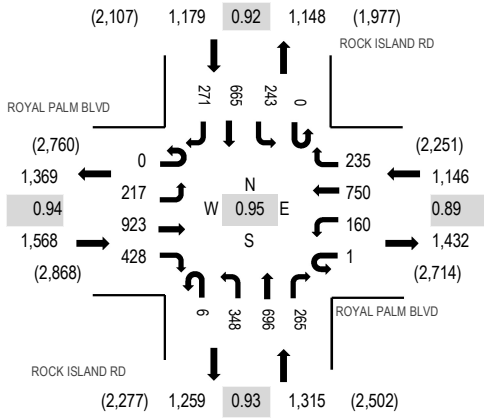
Location: 16 ROCK ISLAND RD & ROYAL PALM BLVD AM

Date: Thursday, February 29, 2024

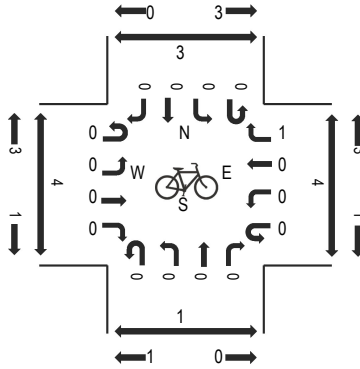
Peak Hour: 07:15 AM - 08:15 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

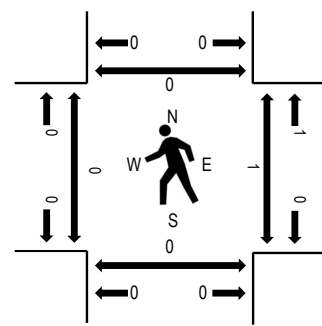
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ROYAL PALM BLVD Eastbound				ROYAL PALM BLVD Westbound				ROCK ISLAND RD Northbound				ROCK ISLAND RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	20	228	77	0	25	151	48	0	76	143	65	0	52	115	39	1,039	4,975	0	0	0	0
7:15 AM	0	60	260	77	0	31	195	70	0	67	186	59	0	58	158	55	1,276	5,208	0	0	0	0
7:30 AM	0	60	197	109	1	34	166	49	2	89	204	61	0	79	181	59	1,291	5,095	0	0	0	0
7:45 AM	0	52	251	116	0	48	204	71	2	112	150	75	0	64	147	77	1,369	4,989	0	1	0	0
8:00 AM	0	45	215	126	0	47	185	45	2	80	156	70	0	42	179	80	1,272	4,753	0	0	0	0
8:15 AM	0	34	203	86	0	34	209	22	2	106	152	61	0	40	157	57	1,163		0	0	0	0
8:30 AM	0	34	230	91	0	44	252	43	3	80	106	63	0	45	140	54	1,185		0	1	0	0
8:45 AM	0	39	187	71	0	35	201	41	1	113	147	69	0	39	137	53	1,133		1	0	1	0
Count Total	0	344	1,771	753	1	298	1,563	389	12	723	1,244	523	0	419	1,214	474	9,728		1	2	1	0
Peak Hour	0	217	923	428	1	160	750	235	6	348	696	265	0	243	665	271	5,208		0	1	0	0



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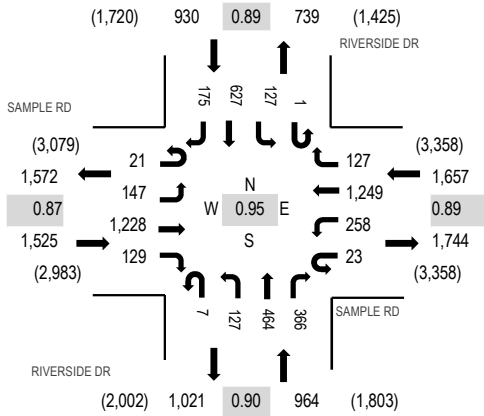
Location: 1 RIVERSIDE DR & SAMPLE RD PM

Date: Thursday, February 29, 2024

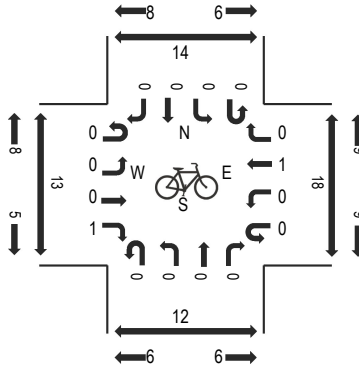
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

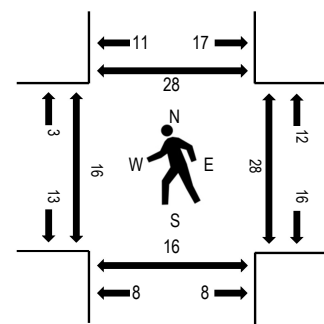
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SAMPLE RD Eastbound				SAMPLE RD Westbound				RIVERSIDE DR Northbound				RIVERSIDE DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	3	32	324	32	1	78	299	30	0	26	89	62	0	33	95	41	1,145	4,788	2	1	6	0
4:15 PM	3	31	270	36	1	86	330	34	2	23	136	93	0	37	144	35	1,261	4,827	1	5	4	4
4:30 PM	4	26	274	45	0	78	261	29	1	28	113	81	0	28	160	33	1,161	4,897	4	0	2	2
4:45 PM	3	36	309	30	0	81	355	38	1	21	92	71	0	30	112	42	1,221	5,022	8	3	4	2
5:00 PM	7	41	275	29	9	73	255	35	1	30	125	89	0	31	148	36	1,184	5,076	2	3	6	4
5:15 PM	4	34	362	45	12	47	307	16	2	33	132	101	0	24	169	43	1,331		2	8	2	2
5:30 PM	5	37	304	33	1	77	365	34	1	26	100	85	0	30	146	42	1,286		6	11	8	7
5:45 PM	5	35	287	22	1	61	322	42	3	38	107	91	1	42	164	54	1,275		6	6	0	15
Count Total	34	272	2,405	272	25	581	2,494	258	11	225	894	673	1	255	1,138	326	9,864		31	37	32	36
Peak Hour	21	147	1,228	129	23	258	1,249	127	7	127	464	366	1	127	627	175	5,076		16	28	16	28



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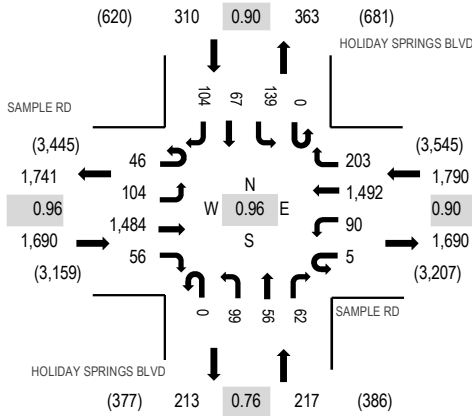
Location: 2 HOLIDAY SPRINGS BLVD & SAMPLE RD PM

Date: Thursday, February 29, 2024

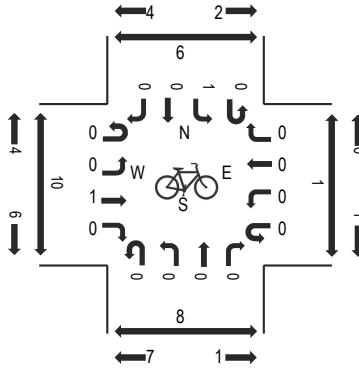
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:30 PM - 05:45 PM

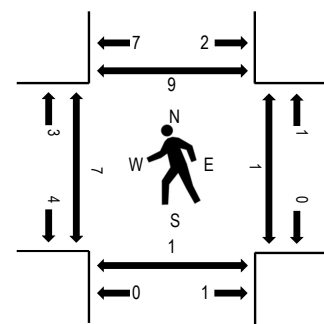
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SAMPLE RD Eastbound				SAMPLE RD Westbound				HOLIDAY SPRINGS BLVD Northbound				HOLIDAY SPRINGS BLVD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	15	20	317	4	1	20	362	53	0	21	15	13	0	49	11	28	929	3,703	0	3	2	0
4:15 PM	11	14	353	10	0	10	378	61	0	17	10	8	0	36	16	21	945	3,774	2	0	0	1
4:30 PM	8	15	327	11	3	16	337	46	0	26	8	7	0	36	13	24	877	3,790	4	2	1	1
4:45 PM	14	19	315	16	0	23	399	46	1	18	11	14	0	38	13	25	952	3,954	0	0	0	0
5:00 PM	14	31	377	12	3	21	399	42	0	19	7	10	0	27	17	21	1,000	4,007	1	0	0	3
5:15 PM	7	27	388	19	2	25	299	43	0	29	13	21	0	38	17	33	961		0	1	0	1
5:30 PM	12	19	334	13	0	21	426	57	0	33	20	18	0	45	13	30	1,041		4	0	1	4
5:45 PM	13	27	385	12	0	23	368	61	0	18	16	13	0	29	20	20	1,005		2	0	0	1
Count Total	94	172	2,796	97	9	159	2,968	409	1	181	100	104	0	298	120	202	7,710		13	6	4	11
Peak Hour	46	104	1,484	56	5	90	1,492	203	0	99	56	62	0	139	67	104	4,007		7	1	1	9



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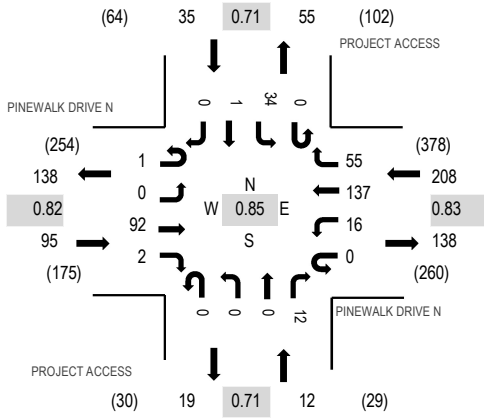
Location: 6 PROJECT ACCESS & PINEWALK DRIVE N PM

Date: Thursday, February 29, 2024

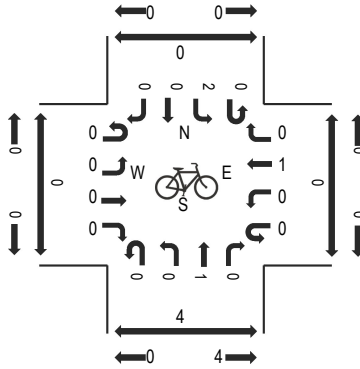
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:45 PM - 06:00 PM

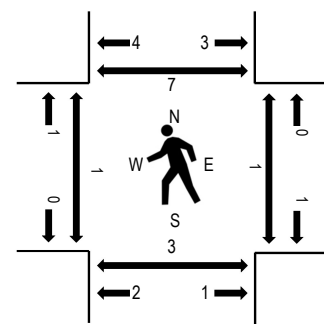
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PINEWALK DRIVE N				PINEWALK DRIVE N				PROJECT ACCESS				PROJECT ACCESS				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
4:00 PM	0	0	17	0	0	4	27	12	0	1	0	2	0	7	0	0	70	296	0	0	1	1
4:15 PM	0	0	22	1	0	0	33	12	0	1	0	5	0	3	0	0	77	310	2	0	0	2
4:30 PM	0	0	17	0	0	5	24	12	1	0	0	2	0	10	0	0	71	311	0	0	0	0
4:45 PM	0	1	22	0	1	0	30	10	0	0	0	5	0	9	0	0	78	325	0	0	2	1
5:00 PM	1	0	20	0	0	3	30	13	0	0	0	3	0	14	0	0	84	350	0	0	1	1
5:15 PM	0	0	18	0	0	4	32	14	0	0	0	3	0	6	1	0	78		0	0	0	0
5:30 PM	0	0	26	1	0	7	28	14	0	0	0	3	0	6	0	0	85		1	0	1	2
5:45 PM	0	0	28	1	0	2	47	14	0	0	0	3	0	8	0	0	103		0	1	1	4
Count Total	1	1	170	3	1	25	251	101	1	2	0	26	0	63	1	0	646		3	1	6	11
Peak Hour	1	0	92	2	0	16	137	55	0	0	0	12	0	34	1	0	350		1	1	3	7



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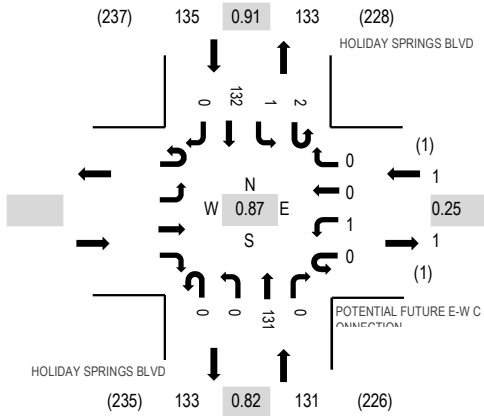
Location: 7 HOLIDAY SPRINGS BLVD & POTENTIAL FUTURE E-W CONNECTION PM

Date: Thursday, February 29, 2024

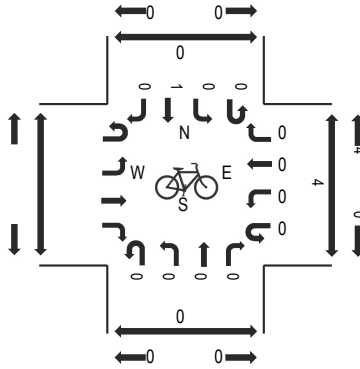
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:30 PM - 05:45 PM

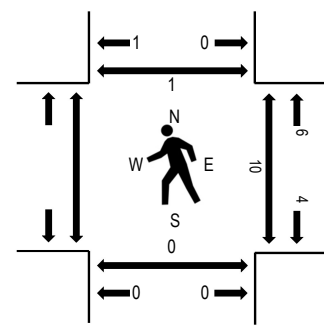
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	POTENTIAL FUTURE E-W CONNECTION								HOLIDAY SPRINGS BLVD				HOLIDAY SPRINGS BLVD				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
4:00 PM					0	0	0	0	0	0	24	0	0	0	19	0	43	197		0	0	0
4:15 PM					0	0	0	0	0	0	22	0	0	0	30	0	52	207		0	0	0
4:30 PM					0	0	0	0	0	0	20	0	0	0	27	0	47	222		2	0	0
4:45 PM					0	0	0	0	0	0	29	0	0	0	26	0	55	252		4	0	0
5:00 PM					0	0	0	0	0	0	28	0	1	0	24	0	53	267		1	0	0
5:15 PM					0	1	0	0	0	0	30	0	0	1	35	0	67			1	0	0
5:30 PM					0	0	0	0	0	0	40	0	0	0	37	0	77			6	0	1
5:45 PM					0	0	0	0	0	0	33	0	1	0	36	0	70			2	0	0
Count Total					0	1	0	0	0	0	226	0	2	1	234	0	464			16	0	1
Peak Hour					0	1	0	0	0	0	131	0	2	1	132	0	267			10	0	1



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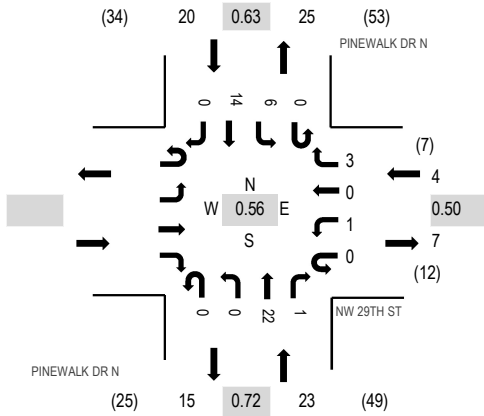
Location: 8 PINEWALK DR N & NW 29TH ST PM

Date: Thursday, February 29, 2024

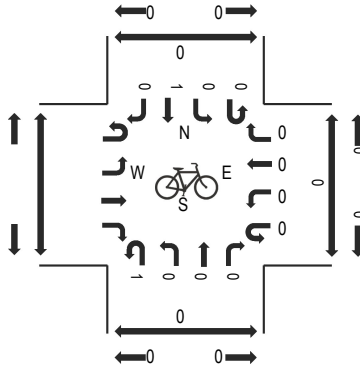
Peak Hour: 04:00 PM - 05:00 PM

Peak 15-Minutes: 04:15 PM - 04:30 PM

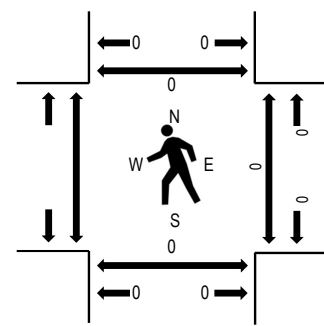
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				NW 29TH ST Westbound				PINEWALK DR N Northbound				PINEWALK DR N Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM					0	0	0	1	0	0	5	0	0	0	4	0	10	47	0	0	0	0
4:15 PM					0	1	0	1	0	0	11	0	0	1	7	0	21	46	0	0	0	0
4:30 PM					0	0	0	1	0	0	5	1	0	1	2	0	10	31	0	0	0	0
4:45 PM					0	0	0	0	0	0	1	0	0	4	1	0	6	33	0	0	0	0
5:00 PM					0	0	0	0	0	0	6	0	0	1	2	0	9	43	1	0	0	0
5:15 PM					0	0	0	1	0	0	3	0	0	0	2	0	6		1	0	0	0
5:30 PM					0	0	0	0	0	0	7	1	0	1	3	0	12		1	0	0	0
5:45 PM					0	0	0	2	0	0	9	0	0	2	3	0	16		0	0	0	0
Count Total					0	1	0	6	0	0	47	2	0	10	24	0	90		3	0	0	0
Peak Hour					0	1	0	3	0	0	22	1	0	6	14	0	47		0	0	0	0



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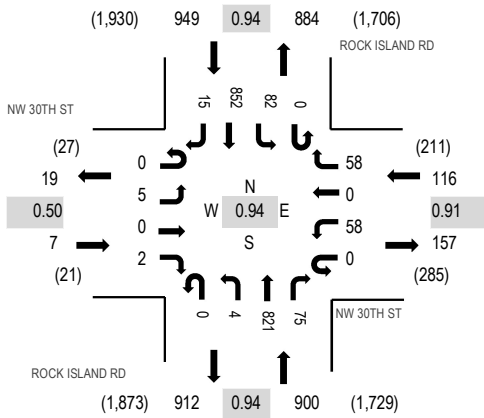
Location: 10 ROCK ISLAND RD & NW 30TH ST PM

Date: Thursday, February 29, 2024

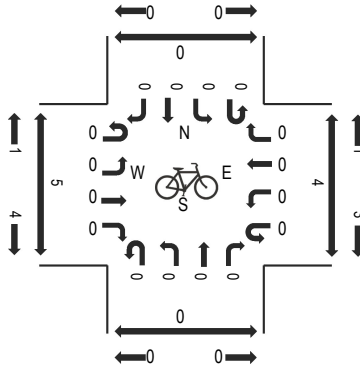
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:30 PM - 05:45 PM

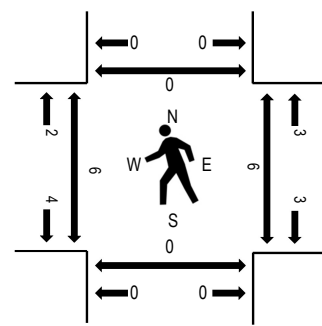
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	NW 30TH ST Eastbound				NW 30TH ST Westbound				ROCK ISLAND RD Northbound				ROCK ISLAND RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	1	0	0	0	8	0	12	0	1	182	15	0	10	214	1	444	1,919	3	2	0	0
4:15 PM	0	1	0	1	0	11	0	15	0	2	211	15	0	16	225	2	499	1,954	3	4	0	0
4:30 PM	0	3	0	4	0	11	0	12	0	0	178	15	0	24	228	1	476	1,925	0	6	0	0
4:45 PM	0	2	0	2	0	14	0	12	0	1	193	16	0	17	243	0	500	1,971	1	0	0	0
5:00 PM	0	0	0	0	0	10	0	16	0	0	226	13	0	14	199	1	479	1,972	1	1	0	0
5:15 PM	0	0	0	1	0	9	0	20	0	0	189	18	0	20	211	2	470		3	2	0	0
5:30 PM	0	3	0	0	0	18	0	14	0	2	203	25	0	24	226	7	522		2	1	0	0
5:45 PM	0	2	0	1	0	21	0	8	0	2	203	19	0	24	216	5	501		0	2	0	0
Count Total	0	12	0	9	0	102	0	109	0	8	1,585	136	0	149	1,762	19	3,891		13	18	0	0
Peak Hour	0	5	0	2	0	58	0	58	0	4	821	75	0	82	852	15	1,972		6	6	0	0



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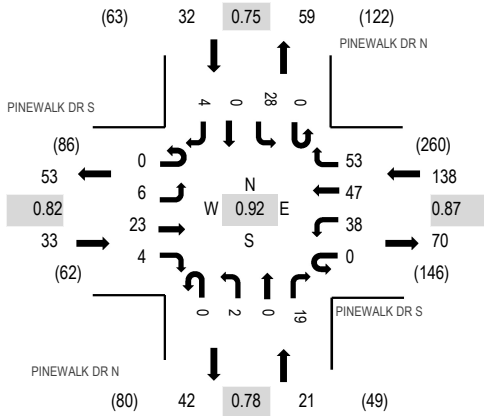
Location: 11 PINEWALK DR N & PINEWALK DR S PM

Date: Thursday, February 29, 2024

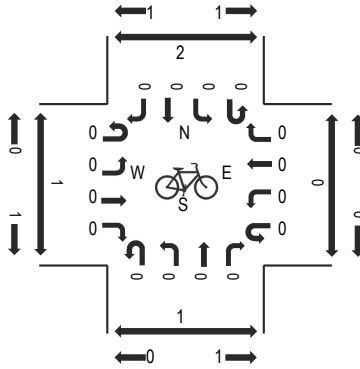
Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

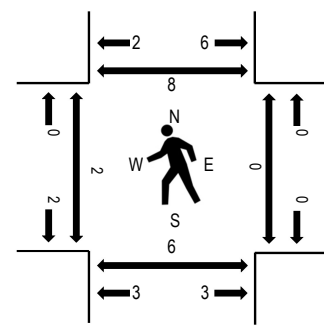
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PINEWALK DR S Eastbound				PINEWALK DR S Westbound				PINEWALK DR N Northbound				PINEWALK DR N Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	5	0	0	13	6	9	0	0	1	8	0	5	0	1	48	211	0	0	0	2
4:15 PM	0	0	8	2	0	8	8	11	0	0	1	7	0	9	0	2	56	210	0	0	0	0
4:30 PM	0	1	8	0	0	5	9	19	0	0	0	5	0	3	0	1	51	215	0	0	0	0
4:45 PM	0	1	9	1	0	9	12	9	0	1	0	5	0	7	0	2	56	224	0	0	0	3
5:00 PM	0	0	5	1	0	10	4	13	0	0	0	5	0	9	0	0	47	223	1	0	3	3
5:15 PM	0	4	3	1	0	10	18	12	0	1	0	3	0	7	0	2	61		0	0	0	1
5:30 PM	0	1	6	1	0	9	13	19	0	0	0	6	0	5	0	0	60		1	0	3	1
5:45 PM	0	2	3	0	0	10	5	19	0	0	0	6	0	9	0	1	55		0	0	3	1
Count Total	0	9	47	6	0	74	75	111	0	2	2	45	0	54	0	9	434		2	0	9	11
Peak Hour	0	6	23	4	0	38	47	53	0	2	0	19	0	28	0	4	224		2	0	6	8



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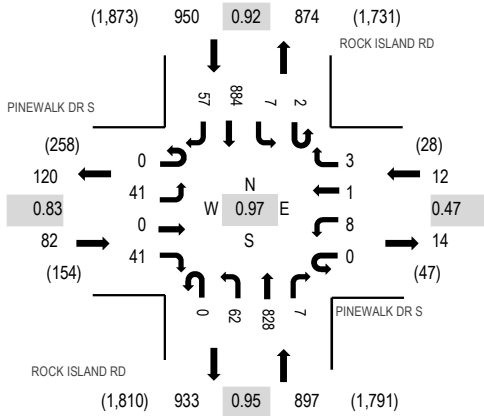
Location: 12 ROCK ISLAND RD & PINEWALK DR S PM

Date: Thursday, February 29, 2024

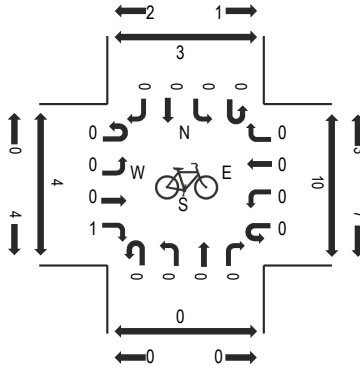
Peak Hour: 04:15 PM - 05:15 PM

Peak 15-Minutes: 04:15 PM - 04:30 PM

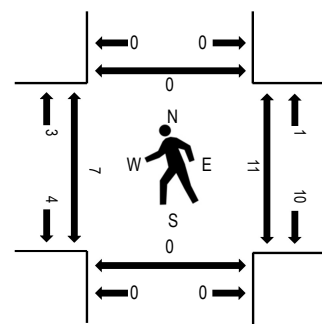
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	PINEWALK DR S Eastbound				PINEWALK DR S Westbound				ROCK ISLAND RD Northbound				ROCK ISLAND RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	11	0	8	0	7	0	2	0	13	184	5	0	5	202	13	450	1,910	2	4	0	0
4:15 PM	0	13	0	12	0	1	0	0	0	15	217	1	0	2	222	15	498	1,941	3	3	0	0
4:30 PM	0	7	0	9	0	2	0	1	0	17	189	0	0	1	225	13	464	1,896	1	6	0	0
4:45 PM	0	11	0	12	0	3	1	0	0	12	195	4	2	2	240	16	498	1,939	1	0	0	0
5:00 PM	0	10	0	8	0	2	0	2	0	18	227	2	0	2	197	13	481	1,936	2	2	0	0
5:15 PM	0	9	0	7	0	1	1	1	0	12	197	5	0	1	194	25	453		2	1	0	1
5:30 PM	0	9	1	6	0	2	0	1	1	19	218	7	0	3	220	20	507		2	2	0	0
5:45 PM	0	11	1	9	0	0	0	1	0	15	213	5	0	0	220	20	495		0	2	0	0
Count Total	0	81	2	71	0	18	2	8	1	121	1,640	29	2	16	1,720	135	3,846		13	20	0	1
Peak Hour	0	41	0	41	0	8	1	3	0	62	828	7	2	7	884	57	1,941		7	11	0	0



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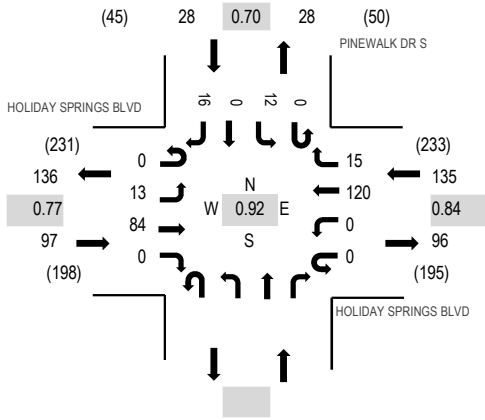
Location: 13 PINEWALK DR S & HOLIDAY SPRINGS BLVD PM

Date: Thursday, February 29, 2024

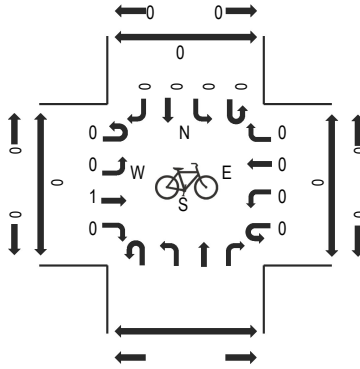
Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

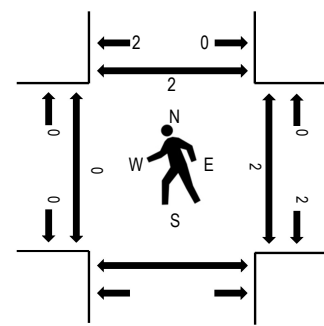
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HOLIDAY SPRINGS BLVD				HOLIDAY SPRINGS BLVD				PINEWALK DR S								Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
4:00 PM	0	2	19	0	0	0	19	2					0	1	0	2	45	226	0	0		0
4:15 PM	0	1	30	0	0	0	22	4					0	1	0	3	61	239	0	0		0
4:30 PM	0	3	19	0	0	0	21	3					0	4	0	3	53	249	0	0		0
4:45 PM	0	3	16	0	0	0	38	2					0	2	0	6	67	260	0	0		0
5:00 PM	0	3	18	0	0	0	28	7					0	2	0	0	58	250	0	0		0
5:15 PM	0	4	30	0	0	0	25	2					0	4	0	6	71		0	0		1
5:30 PM	0	3	20	0	0	0	29	4					0	4	0	4	64		0	2		1
5:45 PM	0	4	23	0	0	0	24	3					0	2	0	1	57		0	0		2
Count Total	0	23	175	0	0	0	206	27					0	20	0	25	476		0	2		4
Peak Hour	0	13	84	0	0	0	120	15					0	12	0	16	260		0	2		2



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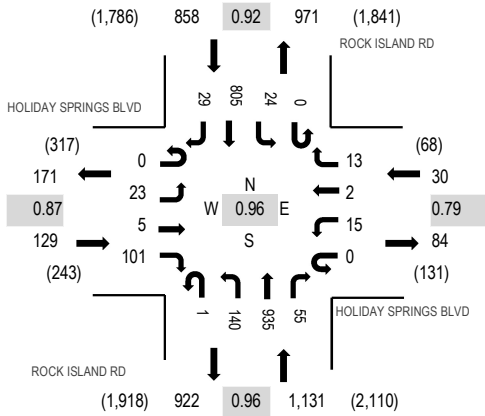
Location: 14 ROCK ISLAND RD & HOLIDAY SPRINGS BLVD PM

Date: Thursday, February 29, 2024

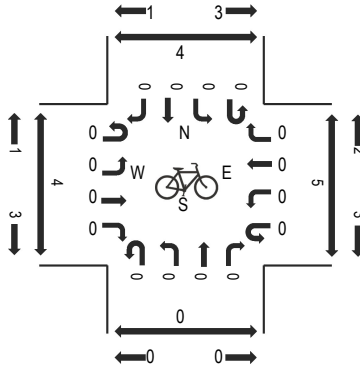
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:30 PM - 05:45 PM

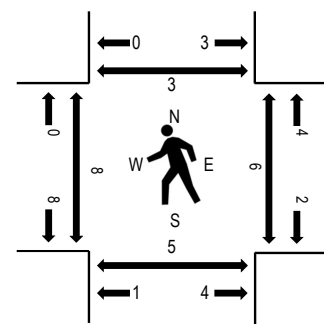
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HOLIDAY SPRINGS BLVD				HOLIDAY SPRINGS BLVD				ROCK ISLAND RD				ROCK ISLAND RD				Total	Rolling Hour	Pedestrian Crossings			
	Eastbound				Westbound				Northbound				Southbound						West	East	South	North
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right						
4:00 PM	0	2	0	25	0	6	0	6	0	26	202	4	1	1	208	7	488	2,059	3	2	0	0
4:15 PM	0	3	0	28	0	5	0	3	0	29	229	9	0	5	228	4	543	2,108	2	1	0	0
4:30 PM	0	3	0	24	0	5	0	5	0	30	203	5	1	8	209	5	498	2,073	1	1	0	0
4:45 PM	0	5	2	22	0	3	0	5	1	35	199	7	3	6	232	10	530	2,136	0	0	1	0
5:00 PM	0	4	0	20	0	2	0	2	0	38	251	5	0	9	199	7	537	2,148	1	1	0	2
5:15 PM	0	7	2	28	0	6	0	2	0	36	220	12	0	5	183	7	508		1	1	0	0
5:30 PM	0	4	2	26	0	2	1	7	0	37	236	14	0	4	226	2	561		3	1	0	1
5:45 PM	0	8	1	27	0	5	1	2	1	29	228	24	0	6	197	13	542		3	3	5	0
Count Total	0	36	7	200	0	34	2	32	2	260	1,768	80	5	44	1,682	55	4,207		14	10	6	3
Peak Hour	0	23	5	101	0	15	2	13	1	140	935	55	0	24	805	29	2,148		8	6	5	3



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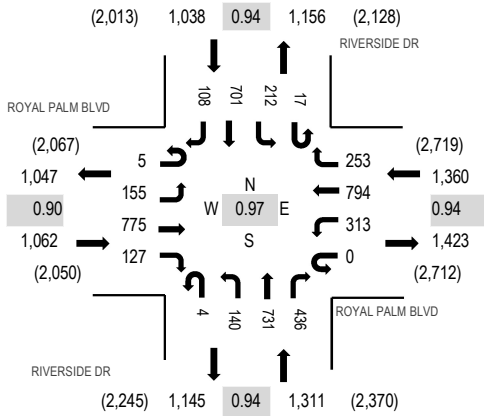
Location: 15 RIVERSIDE DR & ROYAL PALM BLVD PM

Date: Thursday, February 29, 2024

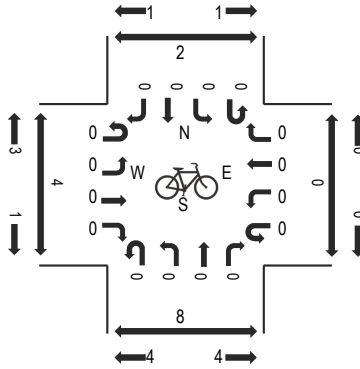
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

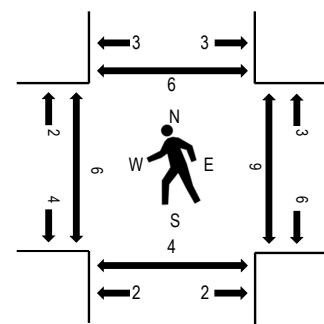
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ROYAL PALM BLVD Eastbound				ROYAL PALM BLVD Westbound				RIVERSIDE DR Northbound				RIVERSIDE DR Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	1	30	192	32	0	81	218	68	0	35	132	91	6	47	127	22	1,082	4,381	0	0	0	3
4:15 PM	0	40	172	29	0	76	192	52	2	28	140	106	5	56	177	17	1,092	4,455	1	2	1	0
4:30 PM	1	31	197	20	0	69	185	65	0	29	159	78	0	51	189	25	1,099	4,594	0	0	1	0
4:45 PM	1	44	163	35	0	95	210	48	0	30	146	83	6	53	168	26	1,108	4,693	0	2	0	1
5:00 PM	2	45	185	34	0	78	179	57	1	33	192	108	1	52	162	27	1,156	4,771	2	0	1	0
5:15 PM	2	37	221	34	0	68	209	66	1	40	194	112	6	54	165	22	1,231		3	0	1	4
5:30 PM	1	34	189	24	0	88	215	61	0	34	175	103	2	55	192	25	1,198		1	7	2	2
5:45 PM	0	39	180	35	0	79	191	69	2	33	170	113	8	51	182	34	1,186		0	2	0	0
Count Total	8	300	1,499	243	0	634	1,599	486	6	262	1,308	794	34	419	1,362	198	9,152		7	13	6	10
Peak Hour	5	155	775	127	0	313	794	253	4	140	731	436	17	212	701	108	4,771		6	9	4	6



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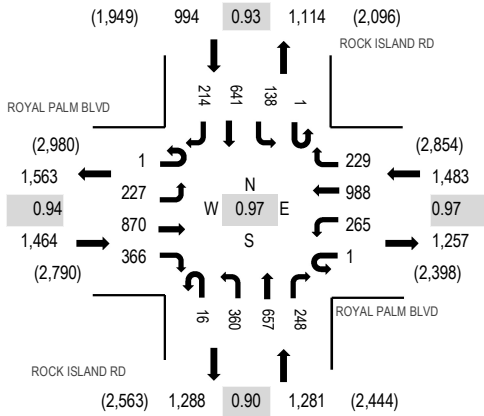
Location: 16 ROCK ISLAND RD & ROYAL PALM BLVD PM

Date: Thursday, February 29, 2024

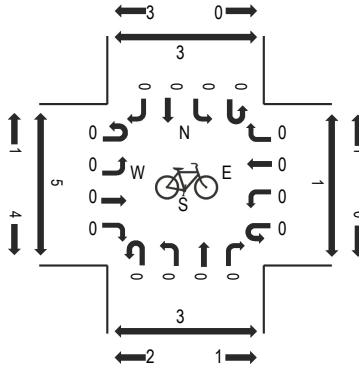
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:30 PM - 05:45 PM

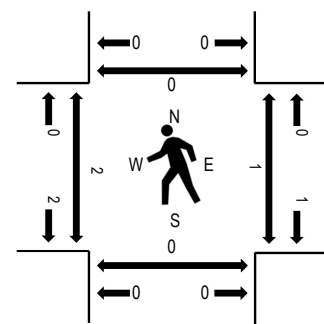
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ROYAL PALM BLVD Eastbound				ROYAL PALM BLVD Westbound				ROCK ISLAND RD Northbound				ROCK ISLAND RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	1	42	176	82	0	61	221	48	0	95	165	55	0	45	162	36	1,189	4,815	1	0	0	0
4:15 PM	1	62	225	88	0	82	257	50	2	66	131	48	0	23	145	41	1,221	4,907	0	1	0	1
4:30 PM	1	44	193	86	0	48	211	38	1	89	151	60	0	40	184	40	1,186	5,025	1	1	0	0
4:45 PM	0	42	177	106	0	64	241	50	4	77	159	60	0	39	160	40	1,219	5,181	0	1	0	0
5:00 PM	0	54	229	88	0	71	248	59	4	79	167	53	0	24	166	39	1,281	5,222	0	1	0	0
5:15 PM	1	56	194	96	0	68	241	55	5	99	173	80	0	38	170	63	1,339		0	0	0	0
5:30 PM	0	55	236	100	0	69	252	61	2	111	146	60	1	45	148	56	1,342		1	0	0	0
5:45 PM	0	62	211	82	1	57	247	54	5	71	171	55	0	31	157	56	1,260		1	0	0	0
Count Total	4	417	1,641	728	1	520	1,918	415	23	687	1,263	471	1	285	1,292	371	10,037		4	4	0	1
Peak Hour	1	227	870	366	1	265	988	229	16	360	657	248	1	138	641	214	5,222		2	1	0	0

1111 SW 21st Avenue, Unit B22, Fort Lauderdale, Florida 33312
Phone 561-272-3255

File Name : sample road & belmonte blvd
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

	DESIGN ROW SHOPPING CENTER From North				SAMPLE ROAD From East				BELMONTE BOULEVARD From South				SAMPLE ROAD From West				
Start Time	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Int. Total
07:00 AM	0	0	0	1	6	0	269	0	0	0	0	8	0	21	378	1	684
07:15 AM	0	0	0	3	5	1	297	2	0	1	0	14	0	29	424	1	777
07:30 AM	0	0	0	1	1	3	385	2	0	1	0	8	1	19	396	2	819
07:45 AM	0	0	0	7	4	2	408	2	0	0	0	8	0	10	420	2	863
Total	0	0	0	12	16	6	1359	6	0	2	0	38	1	79	1618	6	3143
08:00 AM	0	0	0	1	2	4	361	2	0	0	0	8	1	9	395	1	784
08:15 AM	0	0	0	0	4	2	399	1	0	0	0	6	0	12	402	2	828
08:30 AM	0	1	0	1	3	1	365	3	0	0	0	7	0	6	397	0	784
08:45 AM	0	0	0	0	5	3	406	3	0	0	0	8	0	7	421	2	855
Total	0	1	0	2	14	10	1531	9	0	0	0	29	1	34	1615	5	3251
04:00 PM	0	0	0	2	9	8	409	2	0	1	0	7	0	2	377	2	819
04:15 PM	0	0	0	3	5	2	485	3	0	1	0	3	0	4	425	6	937
04:30 PM	0	0	0	3	4	6	404	4	0	0	0	9	0	5	386	2	823
04:45 PM	0	0	0	3	7	3	434	3	0	0	0	3	0	4	377	4	838
Total	0	0	0	11	25	19	1732	12	0	2	0	22	0	15	1565	14	3417
05:00 PM	0	0	0	3	9	7	458	1	0	0	0	1	1	5	409	1	895
05:15 PM	0	0	0	5	5	6	493	4	0	1	0	4	0	3	439	1	961
05:30 PM	0	0	0	4	12	4	454	10	0	0	0	3	0	2	410	1	900
05:45 PM	0	0	0	1	3	5	433	6	0	0	0	5	1	2	400	2	858
Total	0	0	0	13	29	22	1838	21	0	1	0	13	2	12	1658	5	3614
Grand Total	0	1	0	38	84	57	6460	48	0	5	0	102	4	140	6456	30	13425
Apprch %	0	2.6	0	97.4	1.3	0.9	97.2	0.7	0	4.7	0	95.3	0.1	2.1	97.4	0.5	
Total %	0	0	0	0.3	0.6	0.4	48.1	0.4	0	0	0	0.8	0	1	48.1	0.2	
LIGHT VEHICLES	0	1	0	35	82	56	6342	46	0	5	0	102	4	138	6348	30	13189
% LIGHT VEHICLES	0	100	0	92.1	97.6	98.2	98.2	95.8	0	100	0	100	100	98.6	98.3	100	98.2
MEDIUM VEHICLES	0	0	0	3	1	0	110	2	0	0	0	0	0	2	101	0	219
% MEDIUM VEHICLES	0	0	0	7.9	1.2	0	1.7	4.2	0	0	0	0	0	1.4	1.6	0	1.6
HEAVY VEHICLES	0	0	0	0	1	1	8	0	0	0	0	0	0	0	7	0	17
% HEAVY VEHICLES	0	0	0	0	1.2	1.8	0.1	0	0	0	0	0	0	0	0.1	0	0.1

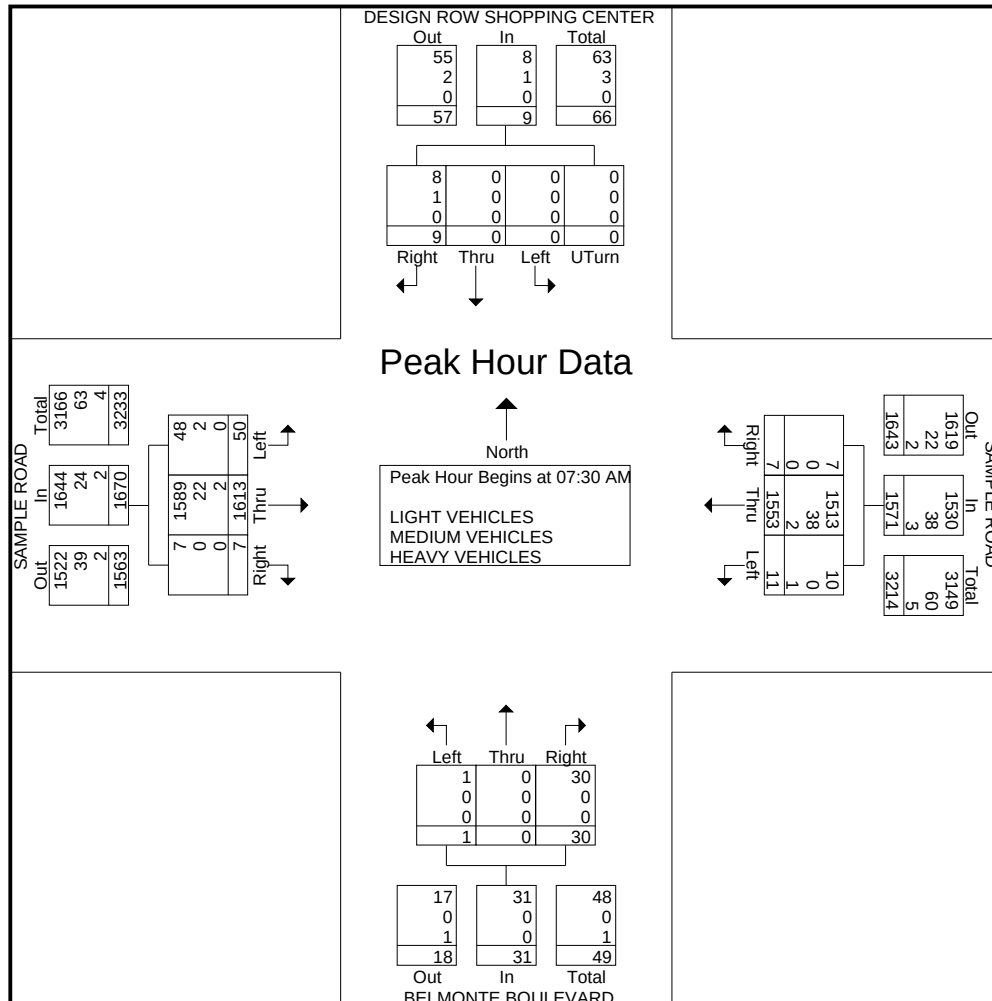
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Phone 561-272-3255

SAMPLE ROAD & BELMONTE BOULEVARD
CORAL SPRINGS, FLORIDA
VIDEO COUNT
NOT SIGNALIZED

File Name : sample road & belmonte blvd
Site Code : 30700
Start Date : 12/13/2023
Page No : 2

	DESIGN ROW SHOPPING CENTER From North					SAMPLE ROAD From East					BELMONTE BOULEVARD From South					SAMPLE ROAD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	1	1	1	3	385	2	391	0	1	0	8	9	1	19	396	2	418	819
07:45 AM	0	0	0	7	7	4	2	408	2	416	0	0	0	8	8	0	10	420	2	432	863
08:00 AM	0	0	0	1	1	2	4	361	2	369	0	0	0	8	8	1	9	395	1	406	784
08:15 AM	0	0	0	0	0	4	2	399	1	406	0	0	0	6	6	0	12	402	2	416	828
Total Volume	0	0	0	9	9	11	11	1553	7	1582	0	1	0	30	31	2	50	1613	7	1672	3294
% App. Total	0	0	0	100		0.7	0.7	98.2	0.4		0	3.2	0	96.8		0.1	3	96.5	0.4		
PHF	.000	.000	.000	.321	.321	.688	.688	.952	.875	.951	.000	.250	.000	.938	.861	.500	.658	.960	.875	.968	.954
LIGHT VEHICLES								1513										1589			
% LIGHT VEHICLES	0	0	0	88.9	88.9	100	90.9	97.4	100	97.4	0	100	0	100	100	100	96.0	98.5	100	98.4	97.9
MEDIUM VEHICLES																					
% MEDIUM VEHICLES	0	0	0	11.1	11.1	0	0	2.4	0	2.4	0	0	0	0	0	0	4.0	1.4	0	1.4	1.9
HEAVY VEHICLES																					
% HEAVY VEHICLES	0	0	0	0	0	0	9.1	0.1	0	0.2	0	0	0	0	0	0	0	0.1	0	0.1	0.2



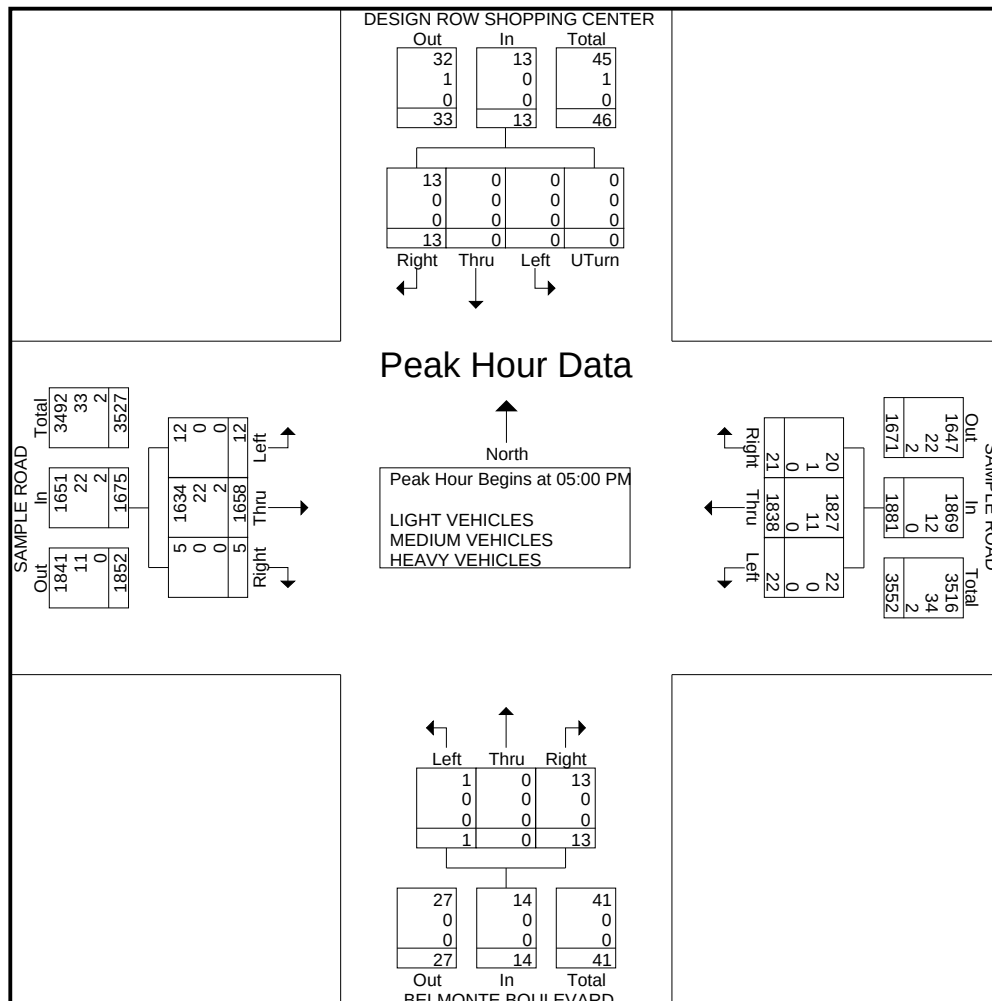
All Traffic Data Services, Inc.

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Phone 561-272-3255

SAMPLE ROAD & BELMONTE BOULEVARD
CORAL SPRINGS, FLORIDA
VIDEO COUNT
NOT SIGNALIZED

File Name : sample road & belmonte blvd
Site Code : 30700
Start Date : 12/13/2023
Page No : 3

	DESIGN ROW SHOPPING CENTER From North					SAMPLE ROAD From East					BELMONTE BOULEVARD From South					SAMPLE ROAD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	3	3	9	7	458	1	475	0	0	0	1	1	1	5	409	1	416	895
05:15 PM	0	0	0	5	5	5	6	493	4	508	0	1	0	4	5	0	3	439	1	443	961
05:30 PM	0	0	0	4	4	12	4	454	10	480	0	0	0	3	3	0	2	410	1	413	900
05:45 PM	0	0	0	1	1	3	5	433	6	447	0	0	0	5	5	1	2	400	2	405	858
Total Volume	0	0	0	13	13	29	22	1838	21	1910	0	1	0	13	14	2	12	1658	5	1677	3614
% App. Total	0	0	0	100		1.5	1.2	96.2	1.1		0	7.1	0	92.9		0.1	0.7	98.9	0.3		
PHF	.000	.000	.000	.650	.650	.604	.786	.932	.525	.940	.000	.250	.000	.650	.700	.500	.600	.944	.625	.946	.940
LIGHT VEHICLES						1827										1634					
% LIGHT VEHICLES	0	0	0	100	100	96.6	100	99.4	95.2	99.3	0	100	0	100	100	100	100	98.6	100	98.6	99.0
MEDIUM VEHICLES																					
% MEDIUM VEHICLES	0	0	0	0	0	0	0	0.6	4.8	0.6	0	0	0	0	0	0	0	1.3	0	1.3	0.9
HEAVY VEHICLES	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	2	3
% HEAVY VEHICLES	0	0	0	0	0	3.4	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0	0.1	0.1



1111 SW 21st Avenue, Unit B22, Fort Lauderdale, Florida 33312
Phone 561-272-3255

File Name : sample road & belmonte blvd
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

[illegible]

All Traffic Data Services, Inc.

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SAMPLE ROAD & BELMONTE BOULEVARD
CORAL SPRINGS, FLORIDA
VIDEO COUNT
NOT SIGNALIZED

File Name : sample road & belmonte blvd
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

Groups Printed- PEDESTRIANS & BIKES

	DESIGN ROW SHOPPING CENTER From North				SAMPLE ROAD From East				BELMONTE BOULEVARD From South				SAMPLE ROAD From West				
Start Time	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Int. Total
07:00 AM	19	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	24
07:15 AM	27	0	7	0	0	0	0	0	3	0	3	0	0	0	0	0	40
07:30 AM	13	0	10	0	0	0	0	0	2	0	2	0	0	0	0	0	27
07:45 AM	11	0	3	0	0	0	0	0	1	0	3	0	0	0	0	0	18
Total	70	0	24	0	0	0	0	0	6	0	9	0	0	0	0	0	109
08:00 AM	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
08:15 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2
08:30 AM	2	0	2	0	0	0	0	0	2	0	1	0	0	0	0	0	7
08:45 AM	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	3
Total	10	0	5	0	0	0	0	0	3	0	2	0	0	0	0	0	20
04:00 PM	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
04:30 PM	3	0	3	0	0	0	0	0	1	0	1	0	0	0	1	0	9
04:45 PM	6	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total	20	0	8	0	0	0	0	0	1	0	1	0	0	0	1	0	31
05:00 PM	3	0	3	0	0	0	0	0	0	0	1	0	0	0	1	0	8
05:15 PM	1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	4
05:30 PM	6	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	7
05:45 PM	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	14	0	5	0	0	0	0	0	0	0	4	0	0	0	1	0	24
Grand Total	114	0	42	0	0	0	0	0	10	0	16	0	0	0	2	0	184
Apprch %	73.1	0	26.9	0	0	0	0	0	38.5	0	61.5	0	0	0	100	0	
Total %	62	0	22.8	0	0	0	0	0	5.4	0	8.7	0	0	0	1.1	0	

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SAMPLE ROAD & ROCK ISLAND ROAD
CORAL SPRINGS, FLORIDA
VIDEO COUNT
SIGNALIZED

File Name : sample road & rock island
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

Groups Printed- LIGHT VEHICLES - MEDIUM VEHICLES - HEAVY VEHICLES

	ROCK ISLAND ROAD From North				SAMPLE ROAD From East				ROCK ISLAND ROAD From South				SAMPLE ROAD From West				
Start Time	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Int. Total
07:00 AM	0	41	47	27	0	37	175	22	0	71	98	105	0	32	295	65	1015
07:15 AM	0	71	100	38	0	41	188	32	0	84	155	173	1	59	316	47	1305
07:30 AM	0	78	132	47	0	67	266	43	1	71	134	209	0	31	335	59	1473
07:45 AM	2	33	54	28	1	73	333	33	0	66	83	177	1	21	349	56	1310
Total	2	223	333	140	1	218	962	130	1	292	470	664	2	143	1295	227	5103
08:00 AM	1	35	41	28	1	84	269	22	0	65	92	135	0	26	316	68	1183
08:15 AM	0	37	47	19	0	58	312	15	0	70	97	150	0	21	326	55	1207
08:30 AM	1	20	49	25	0	53	301	30	0	53	62	137	0	22	346	50	1149
08:45 AM	3	38	48	29	0	46	281	16	0	80	58	140	0	12	354	61	1166
Total	5	130	185	101	1	241	1163	83	0	268	309	562	0	81	1342	234	4705
04:00 PM	2	33	92	23	1	91	353	33	0	43	66	90	1	15	291	58	1192
04:15 PM	2	23	105	20	1	127	430	37	0	52	62	113	0	24	344	63	1403
04:30 PM	2	19	79	16	0	102	377	28	0	53	86	90	1	30	341	57	1281
04:45 PM	1	21	92	26	0	120	355	44	0	49	69	92	1	23	288	69	1250
Total	7	96	368	85	2	440	1515	142	0	197	283	385	3	92	1264	247	5126
05:00 PM	0	37	88	25	0	98	391	31	0	49	54	94	0	30	314	63	1274
05:15 PM	0	22	109	19	0	144	460	35	0	36	76	104	0	38	347	80	1470
05:30 PM	0	24	111	23	0	120	393	23	0	57	79	90	1	31	315	69	1336
05:45 PM	1	19	98	27	0	132	376	31	0	43	76	90	0	29	325	63	1310
Total	1	102	406	94	0	494	1620	120	0	185	285	378	1	128	1301	275	5390
Grand Total	15	551	1292	420	4	1393	5260	475	1	942	1347	1989	6	444	5202	983	20324
Apprch %	0.7	24.2	56.7	18.4	0.1	19.5	73.8	6.7	0	22	31.5	46.5	0.1	6.7	78.4	14.8	
Total %	0.1	2.7	6.4	2.1	0	6.9	25.9	2.3	0	4.6	6.6	9.8	0	2.2	25.6	4.8	
LIGHT VEHICLES	15	542	1286	415	4	1386	5158	467	1	926	1340	1972	6	438	5112	969	20037
% LIGHT VEHICLES	100	98.4	99.5	98.8	100	99.5	98.1	98.3	100	98.3	99.5	99.1	100	98.6	98.3	98.6	98.6
MEDIUM VEHICLES	0	9	6	5	0	7	92	8	0	16	5	17	0	6	83	13	267
% MEDIUM VEHICLES	0	1.6	0.5	1.2	0	0.5	1.7	1.7	0	1.7	0.4	0.9	0	1.4	1.6	1.3	1.3
HEAVY VEHICLES	0	0	0	0	0	0	10	0	0	0	2	0	0	0	7	1	20
% HEAVY VEHICLES	0	0	0	0	0	0	0.2	0	0	0	0.1	0	0	0	0.1	0.1	0.1

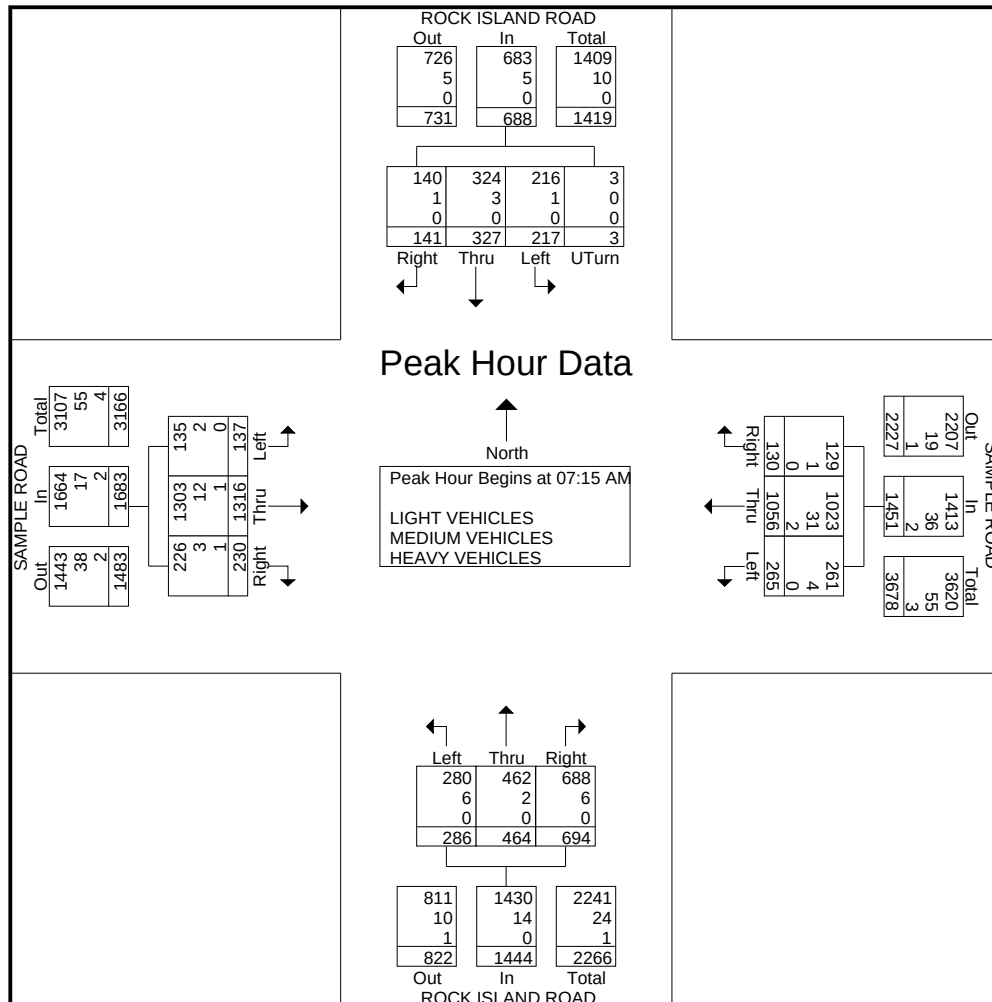
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Phone 561-272-3255

SAMPLE ROAD & ROCK ISLAND ROAD
CORAL SPRINGS, FLORIDA
VIDEO COUNT
SIGNALIZED

File Name : sample road & rock island
Site Code : 30700
Start Date : 12/13/2023
Page No : 2

	ROCK ISLAND ROAD From North					SAMPLE ROAD From East					ROCK ISLAND ROAD From South					SAMPLE ROAD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	71	100	38	209	0	41	188	32	261	0	84	155	173	412	1	59	316	47	423	1305
07:30 AM	0	78	132	47	257	0	67	266	43	376	1	71	134	209	415	0	31	335	59	425	1473
07:45 AM	2	33	54	28	117	1	73	333	33	440	0	66	83	177	326	1	21	349	56	427	1310
08:00 AM	1	35	41	28	105	1	84	269	22	376	0	65	92	135	292	0	26	316	68	410	1183
Total Volume	3	217	327	141	688	2	265	1056	130	1453	1	286	464	694	1445	2	137	1316	230	1685	5271
% App. Total	0.4	31.5	47.5	20.5		0.1	18.2	72.7	8.9		0.1	19.8	32.1	48		0.1	8.1	78.1	13.6		
PHF	.375	.696	.619	.750	.669	.500	.789	.793	.756	.826	.250	.851	.748	.830	.870	.500	.581	.943	.846	.987	.895
LIGHT VEHICLES								1023										1303			
% LIGHT VEHICLES	100	99.5	99.1	99.3	99.3	100	98.5	96.9	99.2	97.4	100	97.9	99.6	99.1	99.0	100	98.5	99.0	98.3	98.9	98.6
MEDIUM VEHICLES																					
% MEDIUM VEHICLES	0	0.5	0.9	0.7	0.7	0	1.5	2.9	0.8	2.5	0	2.1	0.4	0.9	1.0	0	1.5	0.9	1.3	1.0	1.4
HEAVY VEHICLES	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	1	1	2	4
% HEAVY VEHICLES	0	0	0	0	0	0	0	0.2	0	0.1	0	0	0	0	0	0	0	0.1	0.4	0.1	0.1



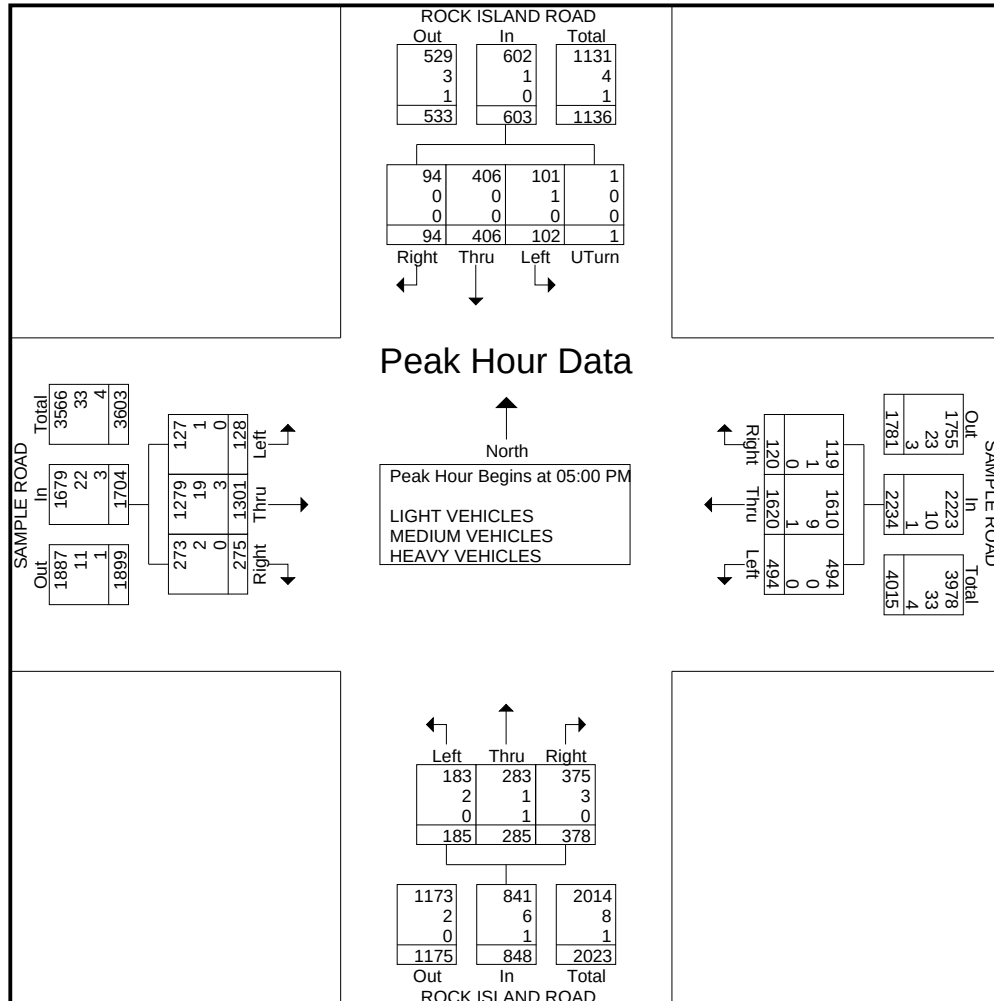
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Phone 561-272-3255

SAMPLE ROAD & ROCK ISLAND ROAD
CORAL SPRINGS, FLORIDA
VIDEO COUNT
SIGNALIZED

File Name : sample road & rock island
Site Code : 30700
Start Date : 12/13/2023
Page No : 3

	ROCK ISLAND ROAD From North					SAMPLE ROAD From East					ROCK ISLAND ROAD From South					SAMPLE ROAD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	37	88	25	150	0	98	391	31	520	0	49	54	94	197	0	30	314	63	407	1274
05:15 PM	0	22	109	19	150	0	144	460	35	639	0	36	76	104	216	0	38	347	80	465	1470
05:30 PM	0	24	111	23	158	0	120	393	23	536	0	57	79	90	226	1	31	315	69	416	1336
05:45 PM	1	19	98	27	145	0	132	376	31	539	0	43	76	90	209	0	29	325	63	417	1310
Total Volume	1	102	406	94	603	0	494	1620	120	2234	0	185	285	378	848	1	128	1301	275	1705	5390
% App. Total	0.2	16.9	67.3	15.6		0	22.1	72.5	5.4		0	21.8	33.6	44.6		0.1	7.5	76.3	16.1		
PHF	.250	.689	.914	.870	.954	.000	.858	.880	.857	.874	.000	.811	.902	.909	.938	.250	.842	.937	.859	.917	.917
LIGHT VEHICLES								1610										1279			
% LIGHT VEHICLES	100	99.0	100	100	99.8	0	100	99.4	99.2	99.5	0	98.9	99.3	99.2	99.2	100	99.2	98.3	99.3	98.5	99.2
MEDIUM VEHICLES																					
% MEDIUM VEHICLES	0	1.0	0	0	0.2	0	0	0.6	0.8	0.4	0	1.1	0.4	0.8	0.7	0	0.8	1.5	0.7	1.3	0.7
HEAVY VEHICLES	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	3	0	3	5
% HEAVY VEHICLES	0	0	0	0	0	0	0	0.1	0	0.0	0	0	0.4	0	0.1	0	0	0.2	0	0.2	0.1



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File Name : sample road & rock island
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

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SAMPLE ROAD & ROCK ISLAND ROAD
CORAL SPRINGS, FLORIDA
VIDEO COUNT
SIGNALIZED

File Name : sample road & rock island
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

Groups Printed- PEDESTRIANS & BIKES

	ROCK ISLAND ROAD From North				SAMPLE ROAD From East				ROCK ISLAND ROAD From South				SAMPLE ROAD From West				
Start Time	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Int. Total
07:00 AM	54	0	11	0	4	0	3	0	2	0	0	0	3	0	0	0	77
07:15 AM	120	0	18	0	54	0	7	0	6	0	2	0	18	0	5	0	230
07:30 AM	148	0	13	0	31	0	3	0	7	0	2	0	7	0	1	0	212
07:45 AM	39	0	13	0	4	0	2	0	0	0	2	0	1	0	1	0	62
Total	361	0	55	0	93	0	15	0	15	0	6	0	29	0	7	0	581
08:00 AM	4	0	1	0	3	0	0	0	2	0	0	0	0	0	0	0	10
08:15 AM	3	0	0	0	2	0	0	0	3	0	1	0	0	0	0	0	9
08:30 AM	9	0	2	0	1	0	2	0	3	0	0	0	0	0	0	0	17
08:45 AM	2	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	4
Total	18	0	4	0	6	0	2	0	8	0	1	0	1	0	0	0	40
04:00 PM	17	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	22
04:15 PM	19	0	1	0	3	0	0	0	0	0	1	0	0	0	0	0	24
04:30 PM	5	0	2	0	0	0	1	0	0	0	2	0	0	0	1	0	11
04:45 PM	4	0	2	0	1	0	0	0	2	0	1	0	2	0	0	0	12
Total	45	0	7	0	7	0	1	0	2	0	4	0	2	0	1	0	69
05:00 PM	14	0	3	0	2	0	0	0	1	0	0	0	1	0	0	0	21
05:15 PM	3	0	1	0	0	0	0	0	0	0	1	0	2	0	0	0	7
05:30 PM	6	0	1	0	0	0	1	0	0	0	0	0	2	0	0	0	10
05:45 PM	17	0	3	0	1	0	0	0	0	0	0	0	1	0	0	0	22
Total	40	0	8	0	3	0	1	0	1	0	1	0	6	0	0	0	60
Grand Total	464	0	74	0	109	0	19	0	26	0	12	0	38	0	8	0	750
Apprch %	86.2	0	13.8	0	85.2	0	14.8	0	68.4	0	31.6	0	82.6	0	17.4	0	
Total %	61.9	0	9.9	0	14.5	0	2.5	0	3.5	0	1.6	0	5.1	0	1.1	0	

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PINEWALK DRIVE & ROCK ISLAND ROAD
MARGATE. FLORIDA
VIDEO COUNT
NOT SIGNALIZED

File Name : pinewalk drive & rock island rd
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

Groups Printed- LIGHT VEHICLES - MEDIUM VEHICLES - HEAVY VEHICLES

	ROCK ISLAND ROAD From North				NW 33RD STREET From East				ROCK ISLAND ROAD From South				PINEWALK DRIVE From West				
Start Time	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Int. Total
07:00 AM	2	2	150	8	0	5	0	10	1	5	276	1	0	22	1	19	502
07:15 AM	4	3	173	7	0	6	0	12	0	4	353	5	1	40	0	34	642
07:30 AM	10	4	224	14	0	6	0	10	0	5	329	4	0	33	0	35	674
07:45 AM	4	5	160	16	0	5	0	6	0	1	300	2	0	37	0	26	562
Total	20	14	707	45	0	22	0	38	1	15	1258	12	1	132	1	114	2380
08:00 AM	3	4	167	7	1	4	0	10	1	7	223	4	0	35	1	6	473
08:15 AM	2	1	148	16	0	8	0	9	0	4	278	0	0	34	0	18	518
08:30 AM	1	2	139	16	0	0	0	10	0	2	227	1	0	33	0	13	444
08:45 AM	3	3	126	18	0	2	0	10	1	2	209	0	0	31	0	11	416
Total	9	10	580	57	1	14	0	39	2	15	937	5	0	133	1	48	1851
04:00 PM	2	7	201	28	0	1	0	6	0	10	169	1	0	14	0	8	447
04:15 PM	2	7	239	37	0	0	0	5	0	9	209	2	0	17	0	7	534
04:30 PM	1	10	215	25	1	1	0	9	0	11	207	7	1	15	0	14	517
04:45 PM	2	7	227	43	0	2	0	5	0	8	184	3	0	11	1	6	499
Total	7	31	882	133	1	4	0	25	0	38	769	13	1	57	1	35	1997
05:00 PM	2	7	211	31	0	4	0	8	0	16	160	5	0	27	0	8	479
05:15 PM	4	5	275	46	0	2	0	7	0	10	204	1	0	16	0	9	579
05:30 PM	3	5	257	38	0	3	0	4	0	13	187	3	0	17	0	12	542
05:45 PM	1	6	240	44	0	0	0	9	0	21	186	3	0	22	0	9	541
Total	10	23	983	159	0	9	0	28	0	60	737	12	0	82	0	38	2141
Grand Total	46	78	3152	394	2	49	0	130	3	128	3701	42	2	404	3	235	8369
Apprch %	1.3	2.1	85.9	10.7	1.1	27.1	0	71.8	0.1	3.3	95.5	1.1	0.3	62.7	0.5	36.5	
Total %	0.5	0.9	37.7	4.7	0	0.6	0	1.6	0	1.5	44.2	0.5	0	4.8	0	2.8	
LIGHT VEHICLES	45	78	3131	389	2	49	0	128	3	125	3667	41	2	401	3	232	8296
% LIGHT VEHICLES	97.8	100	99.3	98.7	100	100	0	98.5	100	97.7	99.1	97.6	100	99.3	100	98.7	99.1
MEDIUM VEHICLES	1	0	20	5	0	0	0	2	0	3	32	1	0	3	0	3	70
% MEDIUM VEHICLES	2.2	0	0.6	1.3	0	0	0	1.5	0	2.3	0.9	2.4	0	0.7	0	1.3	0.8
HEAVY VEHICLES	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
% HEAVY VEHICLES	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0

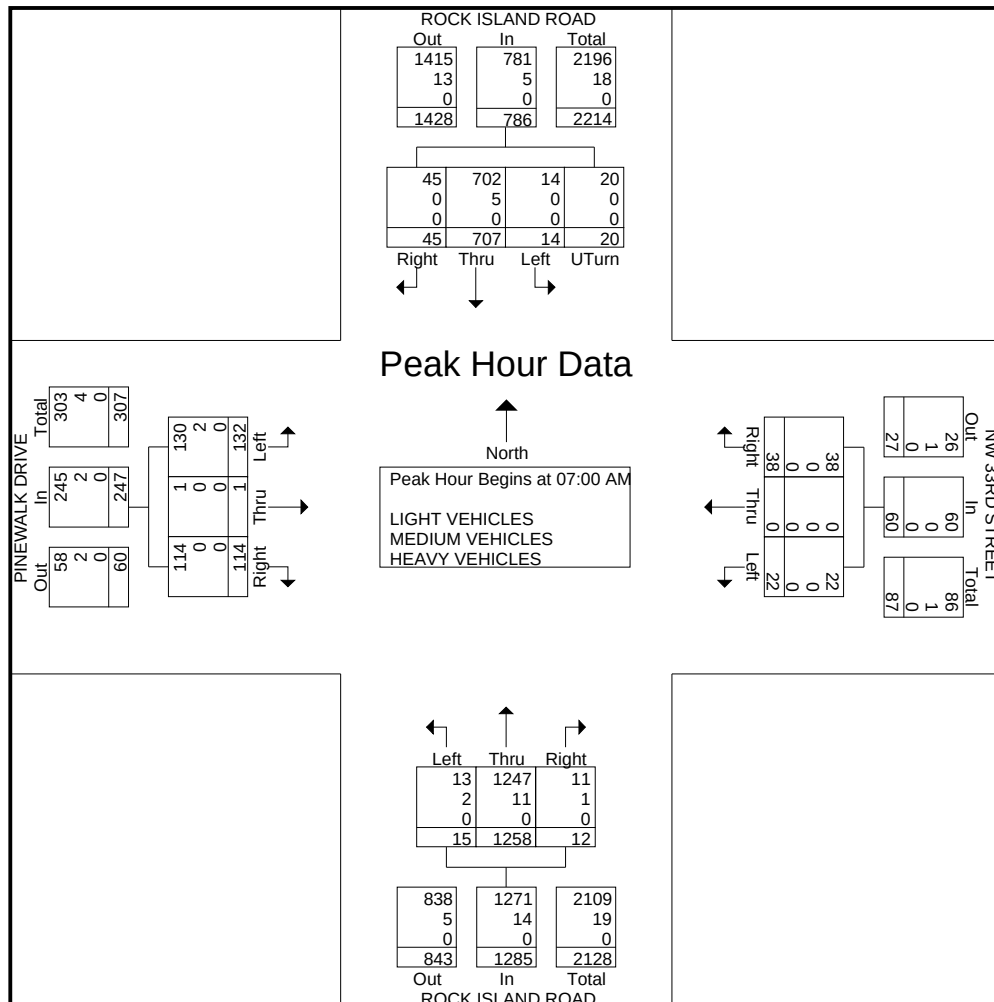
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Phone 561-272-3255

PINEWALK DRIVE & ROCK ISLAND ROAD
MARGATE, FLORIDA
VIDEO COUNT
NOT SIGNALIZED

File Name : pinewalk drive & rock island rd
Site Code : 30700
Start Date : 12/13/2023
Page No : 2

	ROCK ISLAND ROAD From North					NW 33RD STREET From East					ROCK ISLAND ROAD From South					PINEWALK DRIVE From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	2	2	150	8	162	0	5	0	10	15	1	5	276	1	283	0	22	1	19	42	502
07:15 AM	4	3	173	7	187	0	6	0	12	18	0	4	353	5	362	1	40	0	34	75	642
07:30 AM	10	4	224	14	252	0	6	0	10	16	0	5	329	4	338	0	33	0	35	68	674
07:45 AM	4	5	160	16	185	0	5	0	6	11	0	1	300	2	303	0	37	0	26	63	562
Total Volume	20	14	707	45	786	0	22	0	38	60	1	15	1258	12	1286	1	132	1	114	248	2380
% App. Total	2.5	1.8	89.9	5.7		0	36.7	0	63.3		0.1	1.2	97.8	0.9		0.4	53.2	0.4	46		
PHF	.500	.700	.789	.703	.780	.000	.917	.000	.792	.833	.250	.750	.891	.600	.888	.250	.825	.250	.814	.827	.883
LIGHT VEHICLES													1247								
% LIGHT VEHICLES	100	100	99.3	100	99.4	0	100	0	100	100	100	86.7	99.1	91.7	98.9	100	98.5	100	100	99.2	99.1
MEDIUM VEHICLES																					
% MEDIUM VEHICLES	0	0	0.7	0	0.6	0	0	0	0	0	0	13.3	0.9	8.3	1.1	0	1.5	0	0	0.8	0.9
HEAVY VEHICLES																					
% HEAVY VEHICLES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



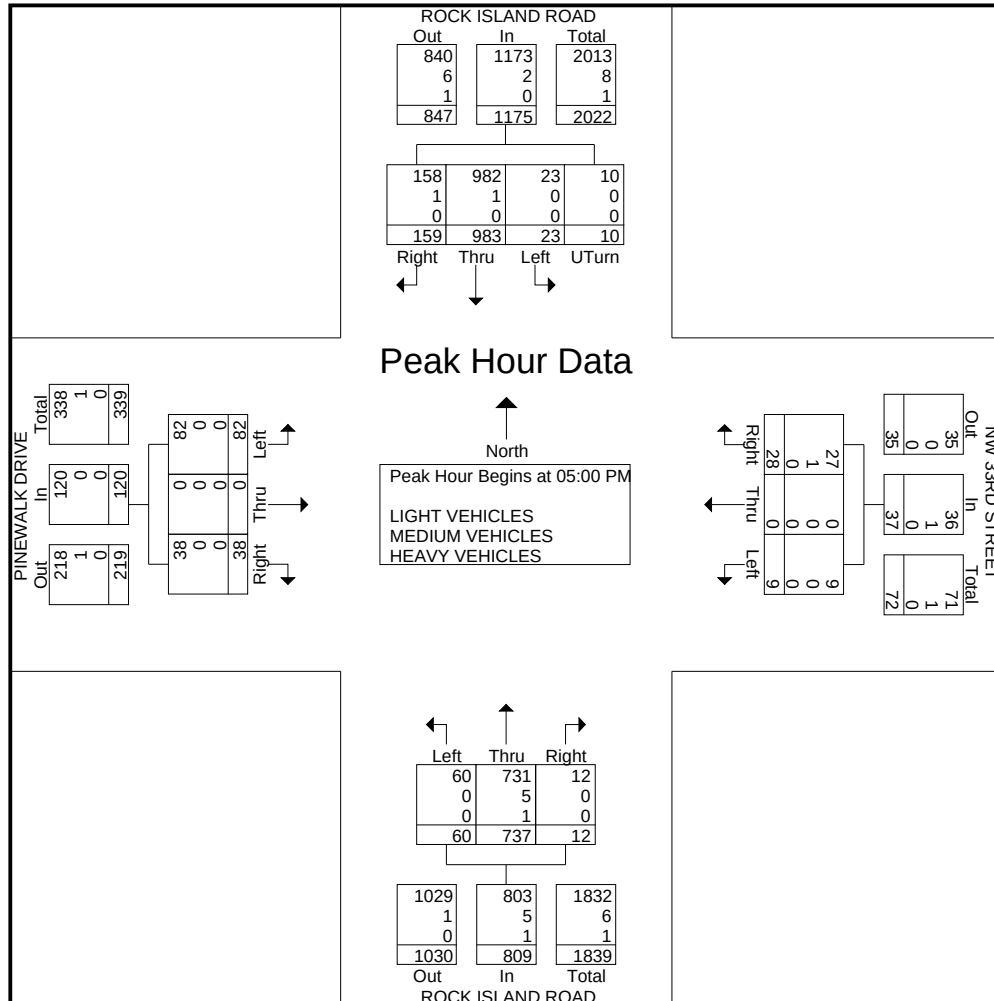
All Traffic Data Services, Inc.

1111 SW 21st Avenue, Unit B22, Fort Lauderdale, Florida 33312
Phone 561-272-3255

PINEWALK DRIVE & ROCK ISLAND ROAD
MARGATE, FLORIDA
VIDEO COUNT
NOT SIGNALIZED

File Name : pinewalk drive & rock island rd
Site Code : 30700
Start Date : 12/13/2023
Page No : 3

	ROCK ISLAND ROAD From North					NW 33RD STREET From East					ROCK ISLAND ROAD From South					PINEWALK DRIVE From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	2	7	211	31	251	0	4	0	8	12	0	16	160	5	181	0	27	0	8	35	479
05:15 PM	4	5	275	46	330	0	2	0	7	9	0	10	204	1	215	0	16	0	9	25	579
05:30 PM	3	5	257	38	303	0	3	0	4	7	0	13	187	3	203	0	17	0	12	29	542
05:45 PM	1	6	240	44	291	0	0	0	9	9	0	21	186	3	210	0	22	0	9	31	541
Total Volume	10	23	983	159	1175	0	9	0	28	37	0	60	737	12	809	0	82	0	38	120	2141
% App. Total	0.9	2	83.7	13.5		0	24.3	0	75.7		0	7.4	91.1	1.5		0	68.3	0	31.7		
PHF	.625	.821	.894	.864	.890	.000	.563	.000	.778	.771	.000	.714	.903	.600	.941	.000	.759	.000	.792	.857	.924
LIGHT VEHICLES																					
% LIGHT VEHICLES	100	100	99.9	99.4	99.8	0	100	0	96.4	97.3	0	100	99.2	100	99.3	0	100	0	100	100	99.6
MEDIUM VEHICLES																					
% MEDIUM VEHICLES	0	0	0.1	0.6	0.2	0	0	0	3.6	2.7	0	0	0.7	0	0.6	0	0	0	0	0	0.4
HEAVY VEHICLES	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
% HEAVY VEHICLES	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0.0



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Phone 561-272-3255

File Name : pinewalk drive & rock island rd
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

[illegible]

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Phone 561-272-3255

PINEWALK DRIVE & ROCK ISLAND ROAD
MARGATE. FLORIDA
VIDEO COUNT
NOT SIGNALIZED

File Name : pinewalk drive & rock island rd
Site Code : 30700
Start Date : 12/13/2023
Page No : 1

Groups Printed- PEDESTRIANS & BIKES

	ROCK ISLAND ROAD From North				NW 33RD STREET From East				ROCK ISLAND ROAD From South				PINEWALK DRIVE From West				
Start Time	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Int. Total
07:00 AM	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	4
07:15 AM	0	0	0	0	4	0	6	0	0	0	0	0	1	0	0	0	11
07:30 AM	0	0	0	0	3	0	2	0	0	0	0	0	4	0	1	0	10
07:45 AM	0	0	1	0	2	0	1	0	0	0	0	0	1	0	1	0	6
Total	0	0	1	0	10	0	12	0	0	0	0	0	6	0	2	0	31
08:00 AM	1	0	0	0	1	0	0	0	1	0	0	0	3	0	1	0	7
08:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
08:30 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	3
08:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	0	0	0	4	0	1	0	1	0	0	0	3	0	2	0	13
04:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2
04:30 PM	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3
Total	0	0	0	0	4	0	2	0	0	0	0	0	1	0	3	0	10
05:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	3
05:15 PM	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	3
05:30 PM	0	0	0	0	4	0	1	0	0	0	0	0	0	0	2	0	7
Total	0	0	0	0	6	0	2	0	0	0	0	0	3	0	2	0	13
Grand Total	2	0	1	0	24	0	17	0	1	0	0	0	13	0	9	0	67
Apprch %	66.7	0	33.3	0	58.5	0	41.5	0	100	0	0	0	59.1	0	40.9	0	
Total %	3	0	1.5	0	35.8	0	25.4	0	1.5	0	0	0	19.4	0	13.4	0	

APPENDIX C: SIGNAL TIMING DATA



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1042	Initial Operation Date	5/26/76
Controller Type	2070 LN	System Number	
Modification Number	7	Modification Date	10/05/2021
Drawing/Project No	GRP 4	FPL Grid Number	87090190604
Intersection	ROYAL PALM BOULEVARD and RIVERSIDE DRIVE		
Municipality	CORAL SPRINGS		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	4	12	4	6	4	12	4	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	3.0	1.5	3.0	1.5	3.0
Maximum Green I	20	45	12	35	20	45	12	35
Maximum Green II								
Yellow Clearance	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay								
Walk		7		7		7		7
Pedestrian Clearance		23		24		23		24
Permissive	YES		YES		YES		YES	
Flash Operation		YELLOW		RED		YELLOW		RED

Attachment

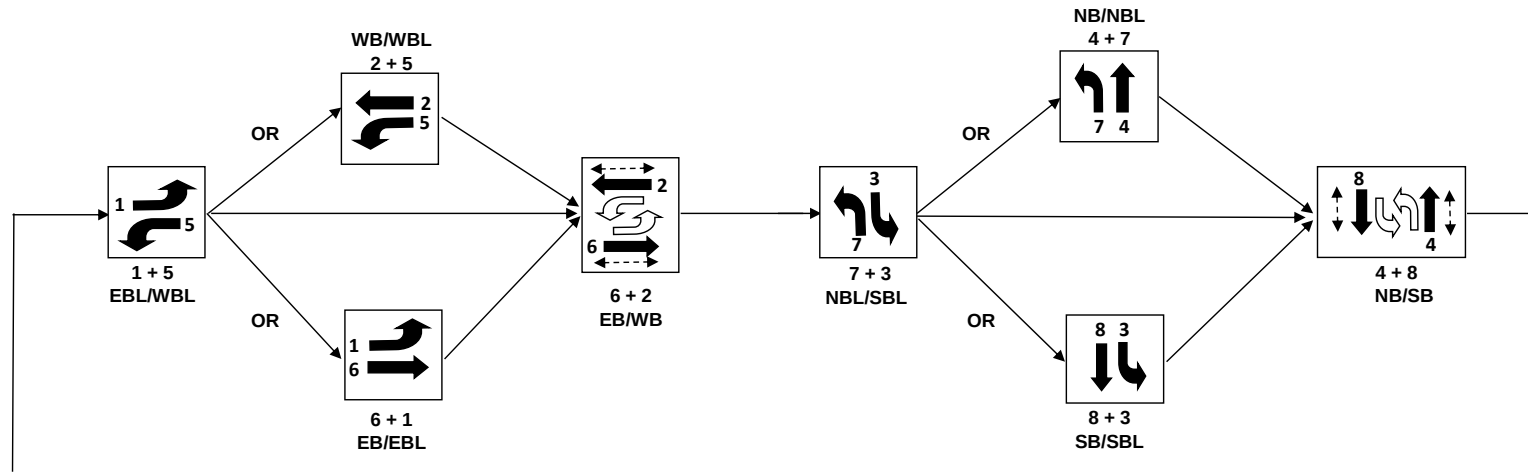
NOTES:

1. ANTI-BACKDOWN EAST/WEST: PHASES 2+6 ON--->OMIT PHASES 1+5.
2. DUAL ENTRY HARDWIRED NORTH/SOUTH.
3. MOD. 7 UPDATES YELLOW CLEARANCE VALUES ON ALL PHASES.

Submitted By _____

Approved By _____

Sequence of Operation for (1042) Royal Palm Blvd and Riverside Drive



Station : 1042 - Royal Palm Blvd & Riverside Dr (Standard File)

Phase	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		23		24		23		24								
Min Green	4	12	4	6	4	12	4	6								
Gap Ext	1.5	3	1.5	3	1.5	3	1.5	3								
Max1	20	45	12	35	20	45	12	35								
Max2																
Yellow Clr	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2	8	2	4	1
Dwell Cyc Veh 2	8	6	3	5	7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1045	Initial Operation Date	2/12/76
Controller Type	2070 LN	System Number	1045
Modification Number	9	Modification Date	07/14/2016
Drawing/Project No	DSN. GRP. 3	FPL Grid Number	87091640808
Intersection	SAMPLE ROAD (SR 834) and WOODSIDE DR/HOLIDAY SPRINGS BLVD		
Municipality	CORAL SPRINGS		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	5	7	4	6	5	7	4	6
Vehicle Ext.(GAP)	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Maximum Green I	18	50	15	25	18	50	15	25
Maximum Green II								
Yellow Clearance	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay								
Walk		7		7		7		7
Pedestrian Clearance		20		29		20		27
Permissive	NO		5 SECT		NO		5 SECT	
Flash Operation	RED	YELLOW		RED	RED	YELLOW		RED

Attachment

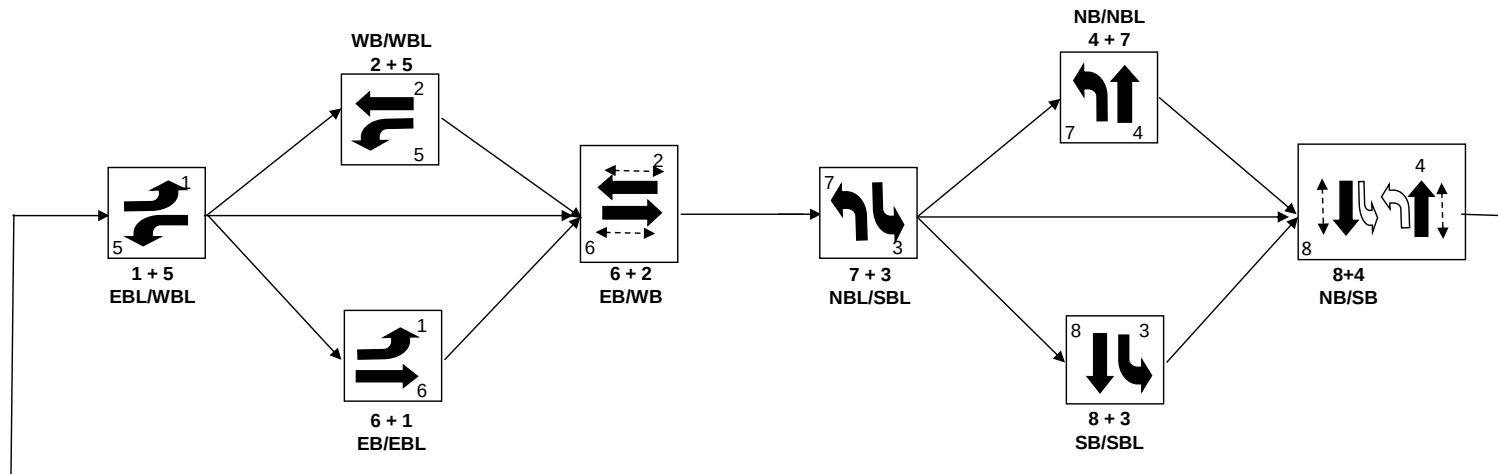
NOTES:

1. DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. MOD. 9 CHANGE WBL TO PROTECTED ONLY PER FDOT REQUEST.

Submitted By _____

Approved By _____

Sequence of Operation for (1045), Sample Rd (SR 834) And Woodside DR/Holiday Springs Coral Springs



Station : 1045 - Sample Rd & Woodside Dr/Holiday Springs Blvd (Standard File)

Phase	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		20		29		20		27								
Min Green	5	7	4	6	5	7	4	6								
Gap Ext	2	3	2	2	2	3	2	2								
Max1	18	50	15	25	18	50	15	25								
Max2																
Yellow Clr	5	5	4	4	5	5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call	ON				ON											
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable																
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green				1		
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1				9		
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2	3	2	4	1
Dwell Cyc Veh 2	8	6	8	5	7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1049	Initial Operation Date	2/3/76
Controller Type	2070 LN	System Number	1049
Modification Number	15	Modification Date	03/26/2015
Drawing/Project No	B83-128 DG 3	FPL Grid Number	87091290807
Intersection	SAMPLE ROAD (SR 834) and RIVERSIDE DRIVE		
Municipality	CORAL SPRINGS		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	5	12	4	6	5	12	4	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	18	50	12	30	18	50	12	30
Maximum Green II								
Yellow Clearance	5.0	5.0	4.5	4.5	5.0	5.0	4.5	4.5
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay				20-RT				20-RT
Walk		7		7		7		7
Pedestrian Clearance		31		31		31		31
Permissive	NO		5-SECT		NO		5-SECT	
Flash Operation	RED	RED		RED	RED	RED		RED

Attachment

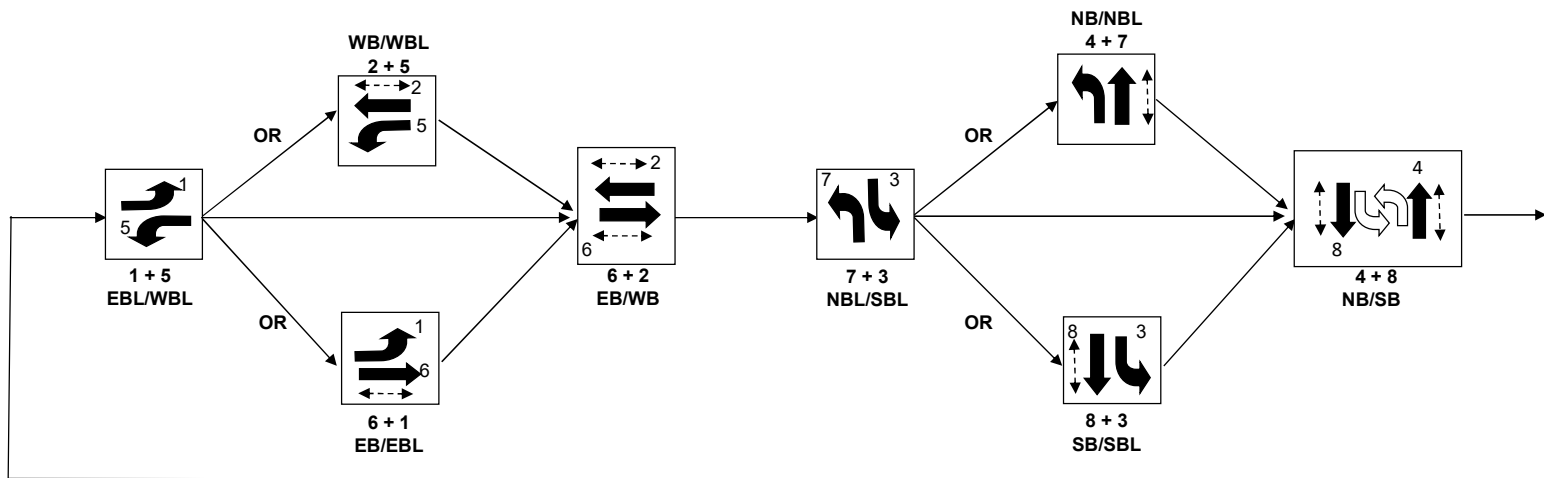
NOTES:

1. DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. PHOTO ENFORCEMENT, CITY OF CORAL SPRINGS.
3. MOD. 15 UPDATES YELLOW CLEARANCE VALUES ON PHASES 1,3,4,5,7 & 8 PER FDOT STANDARDS.

Submitted By _____

Approved By _____

Sequence of Operation for Sample Road (SR 834) and Riverside Drive (1049) Coral Springs



←-----→ Denotes pedestrian crosswalk

 Denotes permissive left turns

Station : 1049 - Sample Rd & Riverside Dr (Standard File)

Phase	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		31		31		31		31								
Min Green	5	12	4	6	5	12	4	6								
Gap Ext	1.5	3	1.5	2	1.5	3	1.5	2								
Max1	18	50	12	30	18	50	12	30								
Max2																
Yellow Clr	5	5	4.5	4.5	5	5	4.5	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call	ON								ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable				ON				ON		ON		ON		ON		ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2	3	2	4	1
Dwell Cyc Veh 2	8	6	8	5	7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1200	Initial Operation Date	8/24/79
Controller Type	2070	System Number	1200
Modification Number	19	Modification Date	03/26/2015
Drawing/Project No	413838-1-52-01	FPL Grid Number	87191100704
Intersection	SAMPLE ROAD (SR 834) and ROCK ISLAND ROAD		
Municipality	CORAL SPRINGS		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1,8R	2	3,2R	4,**4R	5,4R	6	7,6R	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	5	10	5	6	5	10	5	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	12	50	18	30	20	50	18	30
Maximum Green II								
Yellow Clearance	5.0	5.0	4.5	4.5	5.0	5.0	4.5	4.5
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay								
Walk		7		7		7		7
Pedestrian Clearance		33		35		33		35
Permissive	DUAL		DUAL		DUAL		DUAL	
Flash Operation	RED	RED	RED	RED	RED	RED	RED	RED

Attachment **A-200.pdf**

NOTES:

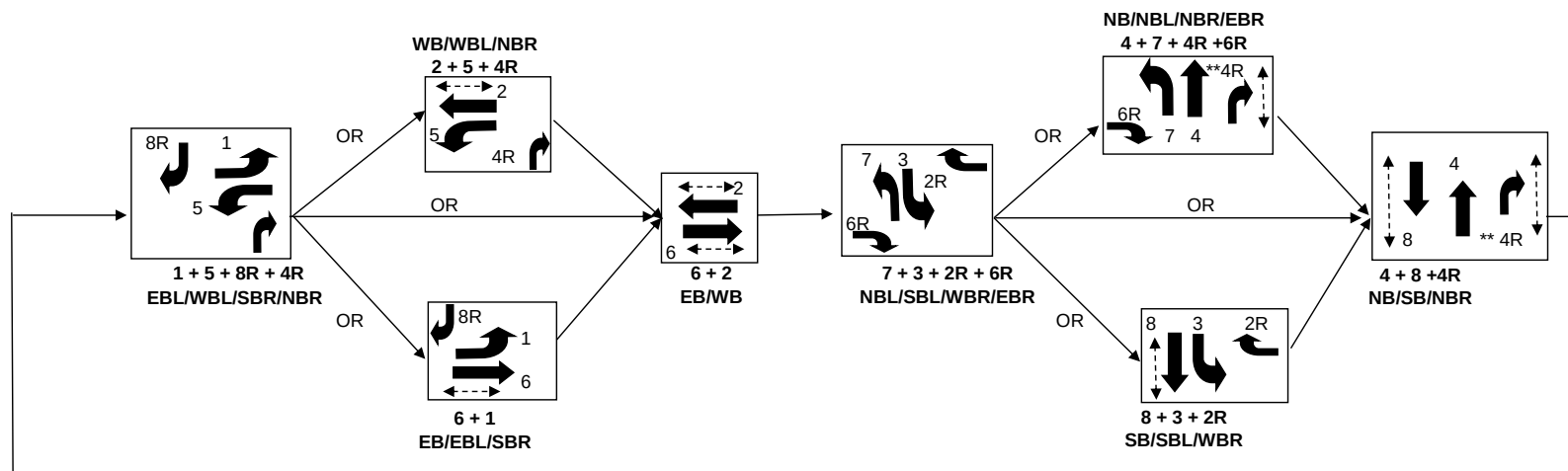
1. DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. 8R (SBR) HARDWIRED TO PH.1 (EBL).
4R (NBR) OVERLAPPED WITH PH'S 4 (NB) & 5 (WBL).
2R (WBR) HARDWIRED TO PH.3 (SBL).
6R (EBR) HARDWIRED TO PH.7 (NBL).
3. **NBRT OVERLAP OMIT DURING PHASE 4 PED.
4. MOD 19 UPDATES YELLOW CLEARANCE ON PHASES 1,2,4,5,6 & 7
AND ALL RED CLEARANCE VALUES ON PHASES 1,2,3,5,6 & 7
PER FDOT STANDARDS.

Submitted By _____

Approved By _____

Sequence of Operation for (1200), Sample Road (SR 834) and Rock Island Road

MOD #19



Station : 1200 - Sample Rd & Rock Island Rd (Standard File)

Phase	1 (EL)	2 (WT)	3 (WR)	4 (NT)	5 (WL)	6 (ET)	7 (ER)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		33		35		33		35								
Min Green	5	10	5	6	5	10	5	6								
Gap Ext	1.5	3	1.5	2	1.5	3	1.5	2								
Max1	12	50	18	30	20	50	18	30								
Max2																
Yellow Clr	5	5	4.5	4.5	5	5	4.5	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call	ON		ON		ON		ON		ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2	3	2	4	1
Dwell Cyc Veh 2	8	6	8	5	7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1297	Initial Operation Date	9/15/84
Controller Type	2070 LN	System Number	
Modification Number	21	Modification Date	01/24/23
Drawing/Project No	GRP 4	FPL Grid Number	87189166701
Intersection	ROYAL PALM BOULEVARD and ROCK ISLAND ROAD		
Municipality	MARGATE		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	5	10	4	6	5	10	4	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	25	50	20	30	25	50	20	30
Maximum Green II								
Yellow Clearance	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay				20-RT				20-RT
Walk		7		7		7		7
Pedestrian Clearance		30		30		30		30
Permissive	NO		DUAL		NO		DUAL	
Flash Operation	RED	YELLOW		RED	RED	YELLOW		RED

Attachment

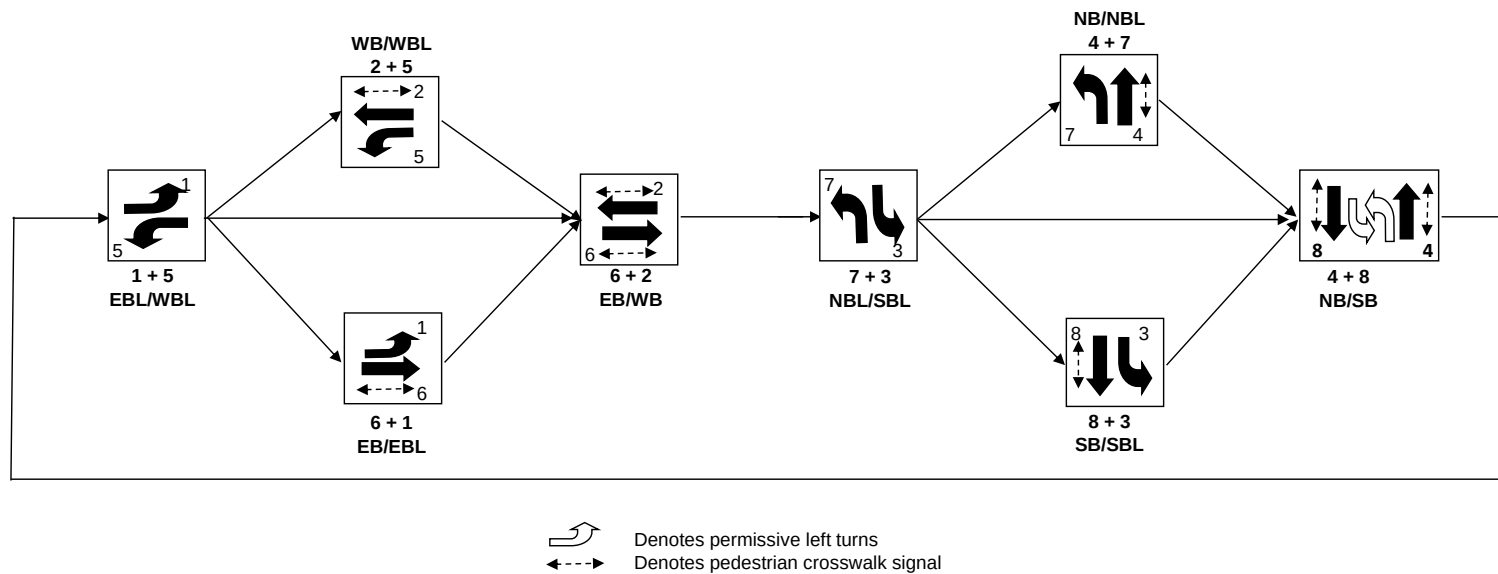
NOTES:

1. DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. MOD. 21 UPDATES NBL AND SBL FROM PROTECTED PERMISSIVE LEFT TURN TO DUAL LEFT TURN PROTECTED ONLY VIA BC PROJECT #1297.

Submitted By _____

Approved By _____

Sequence of Operation for (1297), ROYAL PALM BOULEVARD AND ROCK ISLAND ROAD



Station : 1297 - Royal Palm Blvd & Rock Island Rd (Standard File)

Phase	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		30		30		30		30								
Min Green	5	10	4	6	5	10	4	6								
Gap Ext	1.5	3	1.5	2	1.5	3	1.5	2								
Max1	25	50	20	30	25	50	20	30								
Max2																
Yellow Clr	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1			9	9		9
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2	3	5	4	1
Dwell Cyc Veh 2	8	6	8	2	7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

[illegible]



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1548	Initial Operation Date	2/15/99
Controller Type	2070 LN	System Number	
Modification Number	7	Modification Date	03/09/2020
Drawing/Project No	98-03-03-01	FPL Grid Number	87190141008
Intersection	ROCK ISLAND ROAD and HOLIDAY SPRINGS BOULEVARD		
Municipality	MARGATE		

Controller Phase	1	2	3	4	5	6	7	8
Face Number		2		4	5	6		8
Direction		NB		EB	NBL	SB		WB
Initial Green(MIN)		12		6	4	12		6
Vehicle Ext.(GAP)		3.0		2.0	1.5	3.0		2.0
Maximum Green I		50		25	12	50		25
Maximum Green II								
Yellow Clearance		4.5		4.0	4.5	4.5		4.0
All Red Clearance		2.0		2.5	2.0	2.0		2.5
Phase Recall		MIN		OFF	OFF	MIN		OFF
Detector Delay				20-RT				20-RT
Walk		7		7		7		7
Pedestrian Clearance		19		26		19		29
Permissive					5 SECT			
Flash Operation		YELLOW		RED		YELLOW		RED

Attachment

NOTES:

1. ANTI-BACKDOWN NORTHBOUND: PHASES 2+6 ON--->OMIT PHASES 1+5.
2. DUAL ENTRY HARDWIRED EAST/WEST.
3. FLASH OPERATION: 2200-0600, 7 DAYS.
4. MOD. 7 UPDATES MIN GREENS, YELLOW CLEARANCE AND WALK VALUES.

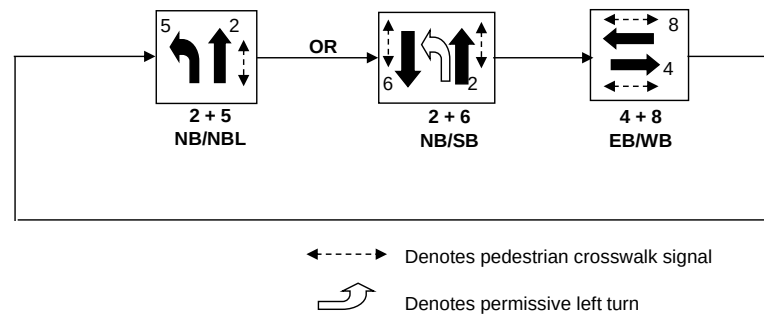
Submitted By _____

Approved By _____

Sequence of Operation for Rock Island Road and Holiday Springs Blvd (1548)

Margate

Modification #0



Station : 1548 - Rock Island Rd & Holiday Springs Blvd (Standard File)

Phase	1	2 (NT)	3	4 (ET)	5 (NL)	6 (ST)	7	8 (WT)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		19		26		19		29								
Min Green		12		6	4	12		6								
Gap Ext		3		2	1.5	3		2								
Max1		50		25	12	50		25								
Max2																
Yellow Clr	4	4.5	4	4	4.5	4.5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr		2		2.5	2	2		2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable		ON		ON	ON	ON		ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash			ON	ON		ON
Override Higher Preempt			ON	ON		ON
Flash in Dwell			ON	ON		ON
Link to Preempt						
Delay						
Min Duration						
Min Green		6			6	
Min Walk						
Ped Clear						
Track Green					1	
Min Dwell		8			8	
Max Presence	180	180			180	
Track Veh 1					9	
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	2				2	
Dwell Cyc Veh 2	6				5	
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

APPENDIX D: VOLUME CALCULATION DATA

Peak Season Conversion Factor Data

Growth Rate Calculation

Internal Capture Calculations

ITE Trip Generation Excerpts

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8630 WEST-W OF US441

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2022 - 01/01/2022	0.99	1.02
2	01/02/2022 - 01/08/2022	1.01	1.04
3	01/09/2022 - 01/15/2022	1.02	1.05
4	01/16/2022 - 01/22/2022	1.01	1.04
5	01/23/2022 - 01/29/2022	1.00	1.03
6	01/30/2022 - 02/05/2022	0.98	1.01
* 7	02/06/2022 - 02/12/2022	0.97	1.00
* 8	02/13/2022 - 02/19/2022	0.96	0.99
* 9	02/20/2022 - 02/26/2022	0.96	0.99
* 10	02/27/2022 - 03/05/2022	0.96	0.99
* 11	03/06/2022 - 03/12/2022	0.96	0.99
* 12	03/13/2022 - 03/19/2022	0.96	0.99
* 13	03/20/2022 - 03/26/2022	0.96	0.99
* 14	03/27/2022 - 04/02/2022	0.97	1.00
* 15	04/03/2022 - 04/09/2022	0.97	1.00
* 16	04/10/2022 - 04/16/2022	0.97	1.00
* 17	04/17/2022 - 04/23/2022	0.97	1.00
* 18	04/24/2022 - 04/30/2022	0.98	1.01
* 19	05/01/2022 - 05/07/2022	0.98	1.01
20	05/08/2022 - 05/14/2022	0.99	1.02
21	05/15/2022 - 05/21/2022	1.00	1.03
22	05/22/2022 - 05/28/2022	1.01	1.04
23	05/29/2022 - 06/04/2022	1.02	1.05
24	06/05/2022 - 06/11/2022	1.03	1.06
25	06/12/2022 - 06/18/2022	1.04	1.07
26	06/19/2022 - 06/25/2022	1.04	1.07
27	06/26/2022 - 07/02/2022	1.05	1.08
28	07/03/2022 - 07/09/2022	1.05	1.08
29	07/10/2022 - 07/16/2022	1.06	1.09
30	07/17/2022 - 07/23/2022	1.05	1.08
31	07/24/2022 - 07/30/2022	1.04	1.07
32	07/31/2022 - 08/06/2022	1.03	1.06
33	08/07/2022 - 08/13/2022	1.02	1.05
34	08/14/2022 - 08/20/2022	1.01	1.04
35	08/21/2022 - 08/27/2022	1.02	1.05
36	08/28/2022 - 09/03/2022	1.02	1.05
37	09/04/2022 - 09/10/2022	1.03	1.06
38	09/11/2022 - 09/17/2022	1.03	1.06
39	09/18/2022 - 09/24/2022	1.02	1.05
40	09/25/2022 - 10/01/2022	1.01	1.04
41	10/02/2022 - 10/08/2022	0.99	1.02
42	10/09/2022 - 10/15/2022	0.98	1.01
43	10/16/2022 - 10/22/2022	0.99	1.02
44	10/23/2022 - 10/29/2022	1.00	1.03
45	10/30/2022 - 11/05/2022	1.00	1.03
46	11/06/2022 - 11/12/2022	1.01	1.04
47	11/13/2022 - 11/19/2022	1.02	1.05
48	11/20/2022 - 11/26/2022	1.01	1.04
49	11/27/2022 - 12/03/2022	1.01	1.04
50	12/04/2022 - 12/10/2022	1.00	1.03
51	12/11/2022 - 12/17/2022	0.99	1.02
52	12/18/2022 - 12/24/2022	1.01	1.04
53	12/25/2022 - 12/31/2022	1.02	1.05

* PEAK SEASON

23-FEB-2023 09:11:21

830UPD

4_8630_PKSEASON.TXT

Year	Site Location & Number						Total
	Riverside Dr. #7662	Woodside Dr. #9597	Sample Rd. #7466	Rock Island Rd. #9166	Royal Palm Blvd. #7164	Rock Island Rd. #7593	
2022	17,500	6,900	44,500	23,500	27,500	25,000	144,900
2021	17,700	6,900	41,000	22,000	27,500	25,000	140,100
2020	17,900	6,900	48,000	22,000	27,500	25,000	147,300
2019	23,000	9,000	45,000	23,000	36,500	31,500	168,000
2018	23,000	9,000	44,500	23,000	36,500	31,500	167,500
2017	23,000	8,800	50,000	23,000	35,500	31,500	171,800
3-Year Growth Rate	-8.4%	-8.5%	-2.7%	-1.5%	-9.0%	-7.4%	-4.8%

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 7164 - ROYAL PALM BLVD, E OF RIVERSIDE DR

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	27500	S	E 13500		W 14000	9.00	53.80	5.40
2021	27500	F	E 13500		W 14000	9.00	54.00	14.30
2020	27500	C	E 13500		W 14000	9.00	55.10	8.80
2019	36500	R	E 18500		W 18000	9.00	56.00	5.50
2018	36500	T	E 18500		W 18000	9.00	56.30	6.00
2017	35500	S	E 18000		W 17500	9.00	57.10	6.20
2016	34500	F	E 17500		W 17000	9.00	56.10	2.90
2015	33500	C	E 17000		W 16500	9.00	56.20	3.40
2014	36000	X				9.00	56.80	7.40
2013	35000	X		0	0	9.00	56.20	7.60
2012	34500	T		0	0	9.00	57.00	5.90
2011	34000	S		0	0	9.00	59.10	6.30
2010	33000	F	E 16500		W 16500	9.60	57.92	9.30
2009	32000	C	E 16000		W 16000	9.71	58.42	5.30
2008	30500	C	E 15000		W 15500	9.67	56.67	6.50
2007	34500	C	E 17000		W 17500	10.19	60.63	4.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 7466 - SAMPLE RD, E OF RIVERSIDE DR

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	44500	C	E 22000		W 22500	9.00	53.80	5.70
2021	41000	C	E 20500		W 20500	9.00	54.00	5.70
2020	48000	C	E 23500		W 24500	9.00	55.10	5.70
2019	45000	C	E 22500		W 22500	9.00	56.00	4.50
2018	44500	C	E 21500		W 23000	9.00	56.30	4.50
2017	50000	C	E 23000		W 27000	9.00	57.10	4.50
2016	47500	C	E 25000		W 22500	9.00	56.10	3.60
2015	55000	C	E 27500		W 27500	9.00	56.20	3.60
2014	47000	C	E 23500		W 23500	9.00	56.80	3.30
2013	45500	C	E 22000		W 23500	9.00	56.20	5.00
2012	43500	C	E 22000		W 21500	9.00	57.00	5.00
2011	43000	C	E 21500		W 21500	9.00	59.10	4.00
2010	47500	C	E 23500		W 24000	9.60	57.92	4.00
2009	46000	C	E 23000		W 23000	9.71	58.42	4.00
2008	54000	S	E 26500		W 27500	9.67	56.67	4.60
2007	53000	F	E 26000		W 27000	10.19	60.63	4.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 7593 - ROCK ISLAND RD, S OF ROYAL PALM BLVD

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	25000	S	N 12500		S 12500	9.00	53.80	5.40
2021	25000	F	N 12500		S 12500	9.00	54.00	14.30
2020	25000	C	N 12500		S 12500	9.00	55.10	8.80
2019	31500	R	N 16000		S 15500	9.00	56.00	5.50
2018	31500	T	N 16000		S 15500	9.00	56.30	6.00
2017	31500	S	N 16000		S 15500	9.00	57.10	6.20
2016	30500	F	N 15500		S 15000	9.00	56.10	2.90
2015	29500	C	N 15000		S 14500	9.00	56.20	3.40
2014	28500	X				9.00	56.80	7.40
2013	28000	X		0		9.00	56.20	7.60
2012	27500	T		0		9.00	57.00	5.90
2011	27000	S		0		9.00	59.10	6.30
2010	26000	F	N 13000		S 13000	9.60	57.92	9.30
2009	25000	C	N 12500		S 12500	9.71	58.42	5.30
2008	27000	F	N 13500		S 13500	9.67	56.67	6.50
2007	27000	C	N 13500		S 13500	10.19	60.63	4.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 7662 - RIVERSIDE DR, S OF SAMPLE RD

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	17500 S		N 9000		S 8500	9.00	53.80	5.40
2021	17700 F		N 9100		S 8600	9.00	54.00	14.30
2020	17900 C		N 9200		S 8700	9.00	55.10	8.80
2019	23000 T		N 11500		S 11500	9.00	56.00	5.50
2018	23000 S		N 11500		S 11500	9.00	56.30	1.90
2017	23000 F		N 11500		S 11500	9.00	57.10	1.90
2016	22000 C		N 11000		S 11000	9.00	56.10	1.90
2015	20000 S		N 10000		S 10000	9.00	56.20	3.30
2014	19900 F		N 9900		S 10000	9.00	56.80	3.30
2013	19700 C		N 9700		S 10000	9.00	56.20	3.30
2012	17500 S		0		0	9.00	57.00	5.90
2011	17500 F		0		0	9.00	59.10	6.30
2010	17100 C	N	8400		S 8700	9.60	57.92	9.30
2009	20000 F	N	10000		S 10000	9.71	58.42	5.30
2008	19900 C	N	10000		S 9900	9.67	56.67	6.50
2007	21000 C	N	10500		S 10500	10.19	60.63	4.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 9166 - ROCK ISLAND RD., S OF SAMPLE RD.

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	23500	C	N 12000		S 11500	9.00	53.80	5.40
2021	22000	V	N 11000		S 11000	9.00	54.00	14.30
2020	22000	R	N 11000		S 11000	9.00	55.10	8.80
2019	23000	T	N 11500		S 11500	9.00	56.00	5.50
2018	23000	S	N 11500		S 11500	9.00	56.30	6.00
2017	23000	F	N 11500		S 11500	9.00	57.10	6.20
2016	22000	C	N 11000		S 11000	9.00	56.10	2.90
2015	22500	V	0		0	9.00	56.20	3.40
2014	22000	R				9.00	56.80	7.40
2013	21500	T	0		0	9.00	56.20	7.60
2012	21500	S	0		0	9.00	57.00	5.90
2011	21000	F	0		0	9.00	59.10	6.30
2010	21000	C	N 10500		S 10500	9.60	57.92	9.30
2009	19800	F	N 9900		S 9900	9.71	58.42	5.30
2008	19600	C	N 9800		S 9800	9.67	56.67	6.50
2007	20500	C	N 10000		S 10500	10.19	60.63	4.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 9597 - WOODSIDE DR, N OF SAMPLE RD

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	6900 S	N	3500	S	3400	9.00	53.80	5.40
2021	6900 F	N	3500	S	3400	9.00	54.00	14.30
2020	6900 C	N	3500	S	3400	9.00	55.10	8.80
2019	9000 R	N	4700	S	4300	9.00	56.00	5.50
2018	9000 T	N	4700	S	4300	9.00	56.30	6.00
2017	8800 S	N	4600	S	4200	9.00	57.10	6.20
2016	8600 F	N	4500	S	4100	9.00	56.10	2.90
2015	8400 C	N	4400	S	4000	9.00	56.20	3.40
2014	8400 X					9.00	56.80	7.40
2013	8200 X		0		0	9.00	56.20	7.60
2012	8100 T		0		0	9.00	57.00	5.90
2011	8000 S		0		0	9.00	59.10	6.30
2010	7800 F		0		0	9.60	57.92	9.30
2009	7600 C	N	0	S	0	9.71	58.42	5.30
2008	8200 C	N	4000	S	4200	9.67	56.67	6.50
2007	6500 C	N	0	S	0	10.19	60.63	4.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook*, 3rd Edition, published by the Institute of Transportation Engineers

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

NOTES:

- Methodology for the A.M. Peak Hour and P.M. Peak Hour is provided within the Institute of Transportation Engineers (ITE) *Trip Generation Handbook*, 3rd Edition: An ITE Proposed Recommended Practice, August 2014.
- Methodology for Daily is not provided by ITE. This worksheet assumes that Origin and Destination percentages are the average of A.M. Peak Hour and P.M. Peak Hour. However, as stated in Section 6.5.1 (page 48), "Internal capture rates for weekend peak periods, for weekday midday peak periods, or for a daily period should not be assumed to be the same as or even a simple, direct function of the weekday AM and PM peak period rates."
- Unconstrained Rates in Table 6.1 and Table 6.2 represent 'Person Trips' as opposed to 'Vehicle Trips'. However, this spreadsheet can also be used for 'Vehicle Trips'. As stated in Section 6.5.2 (page 52), "If no vehicle occupancy data are entered, a vehicle occupancy of 1.0 persons per vehicle is assumed in the spreadsheet."
- This spreadsheet does not incorporate the calculation of a Proximity Adjustment. The intent of this Proximity Adjustment appears to be distinguishing between vehicle and non-vehicle trips, within a mixed-use development. However, the Proximity Adjustment should not impact the distinction between internal trips and external trips.
- As referenced in Section 6.5 (page 46) of the 3rd Edition, a spreadsheet tool has already been developed and is provided on the ITE website. The intent of this spreadsheet is to provide the same calculations, but within 1 tab (instead of 6 separate tabs). The ITE website link is below.
<http://www.ite.org/tripgeneration/otherresources.asp>
- To expand the detailed calculations for Daily, A.M. Peak Hour, and P.M. Peak Hour, click the "+" on the far left.
- The default Print Area and Page Setup will only print the Summary information. If the supporting Daily, A.M. Peak Hour, and P.M. Peak Hour calculations need to be printed, the Print Area and Page Setup will need to be modified.

SUMMARY

GROSS TRIP GENERATION

INPUT	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
	Office						
	Retail	1,941	1,941	61	38	146	152
	Restaurant						
	Cinema/Entertainment						
	Residential	2,348	2,348	93	93	228	159
	Hotel						
		4,289	4,289	154	131	374	311

INTERNAL TRIPS

OUTPUT	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
	Office	0	0	0	0	0	0
	Retail	262	388	1	2	15	40
	Restaurant	0	0	0	0	0	0
	Cinema/Entertainment	0	0	0	0	0	0
	Residential	388	262	2	1	40	15
	Hotel	0	0	0	0	0	0
		650	650	3	3	55	55
	% Reduction	15.2%		2.1%		16.1%	

EXTERNAL TRIPS

OUTPUT	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
	Office	0	0	0	0	0	0
	Retail	1,679	1,553	60	36	131	112
	Restaurant	0	0	0	0	0	0
	Cinema/Entertainment	0	0	0	0	0	0
	Residential	1,960	2,086	91	92	188	144
	Hotel	0	0	0	0	0	0
		3,639	3,639	151	128	319	256

DAILY

A.M. PEAK HOUR

P.M. PEAK HOUR

Land Use: 215

Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 22

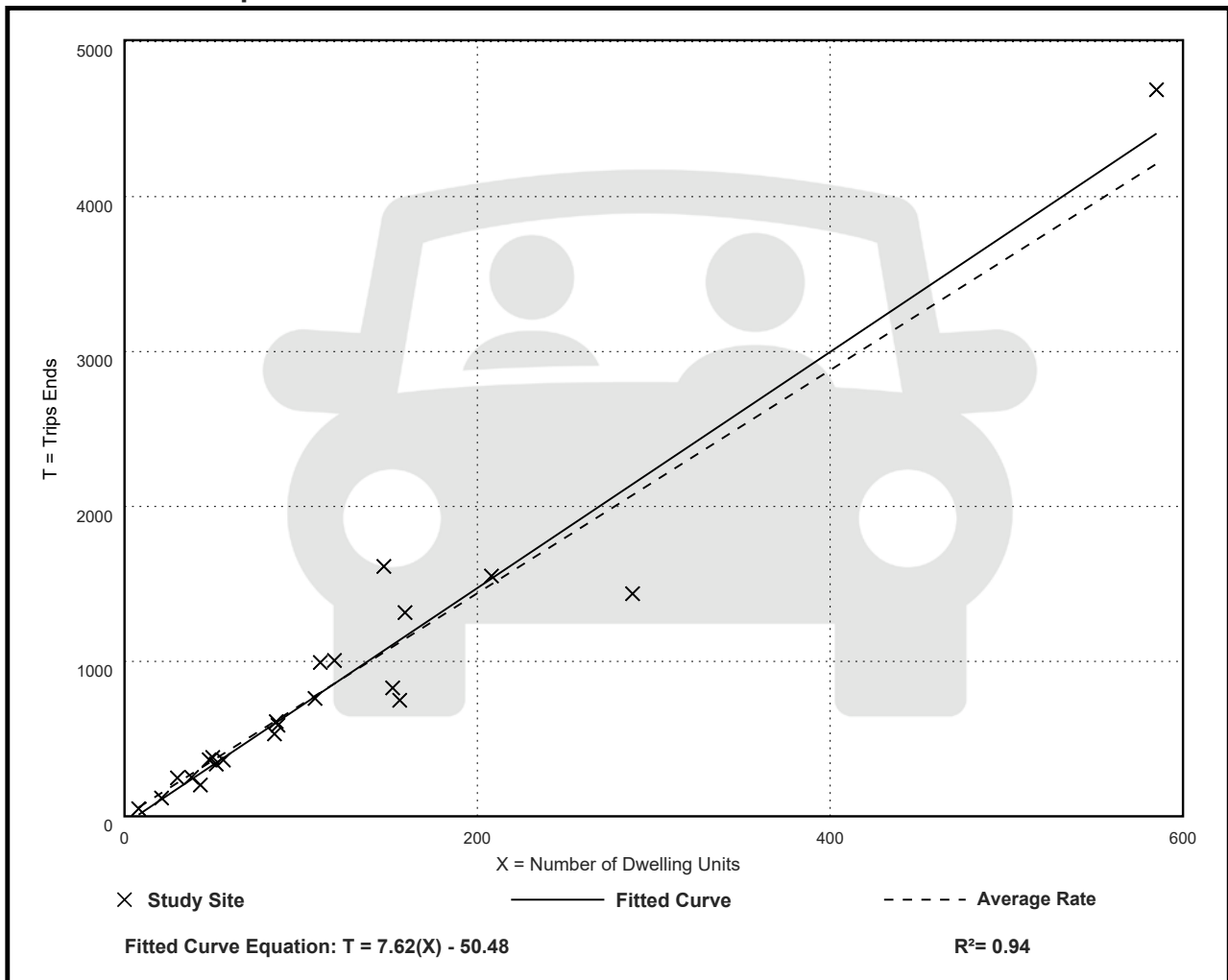
Avg. Num. of Dwelling Units: 120

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 46

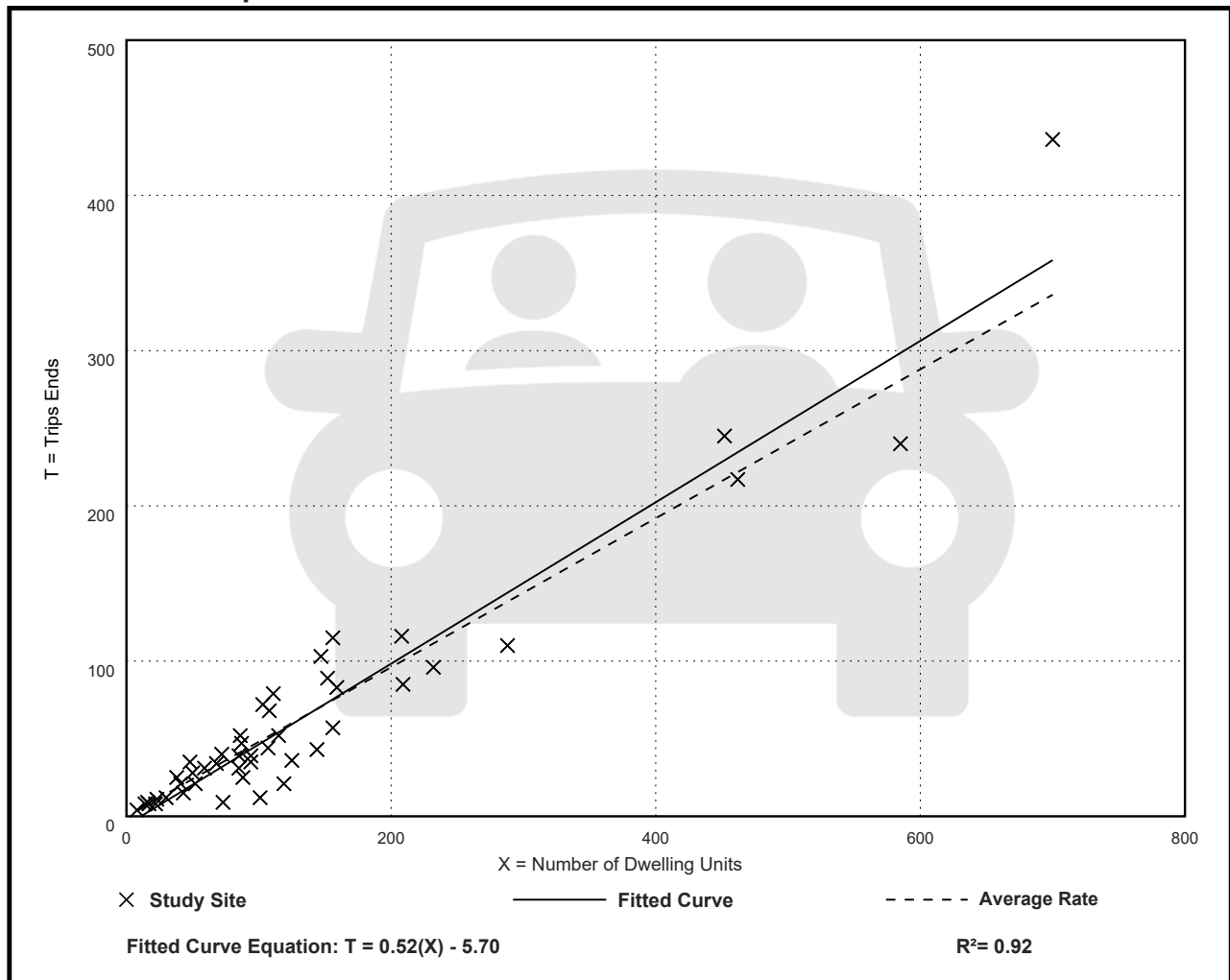
Avg. Num. of Dwelling Units: 135

Directional Distribution: 31% entering, 69% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Single-Family Attached Housing (215)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 51

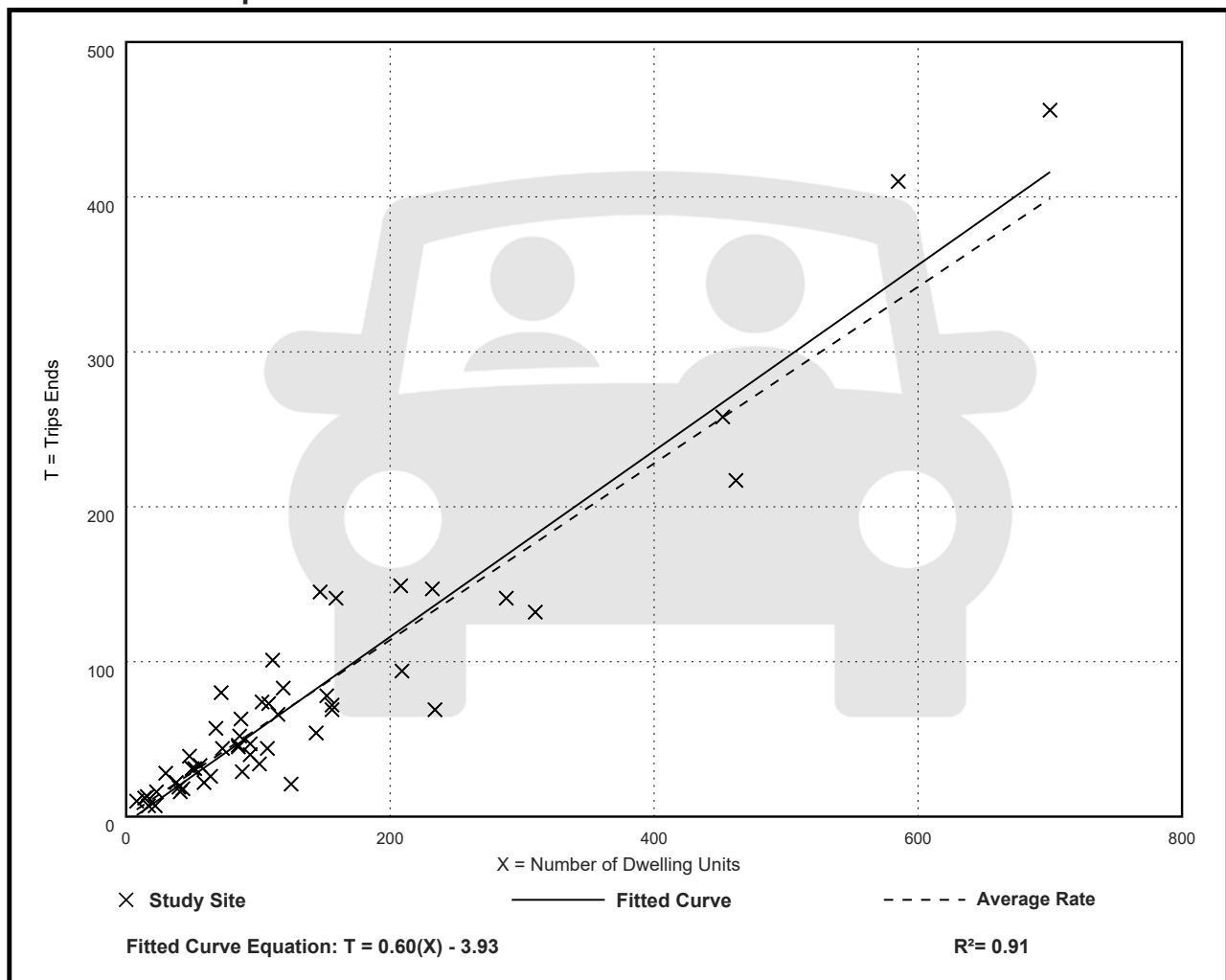
Avg. Num. of Dwelling Units: 136

Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Land Use: 221

Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 11

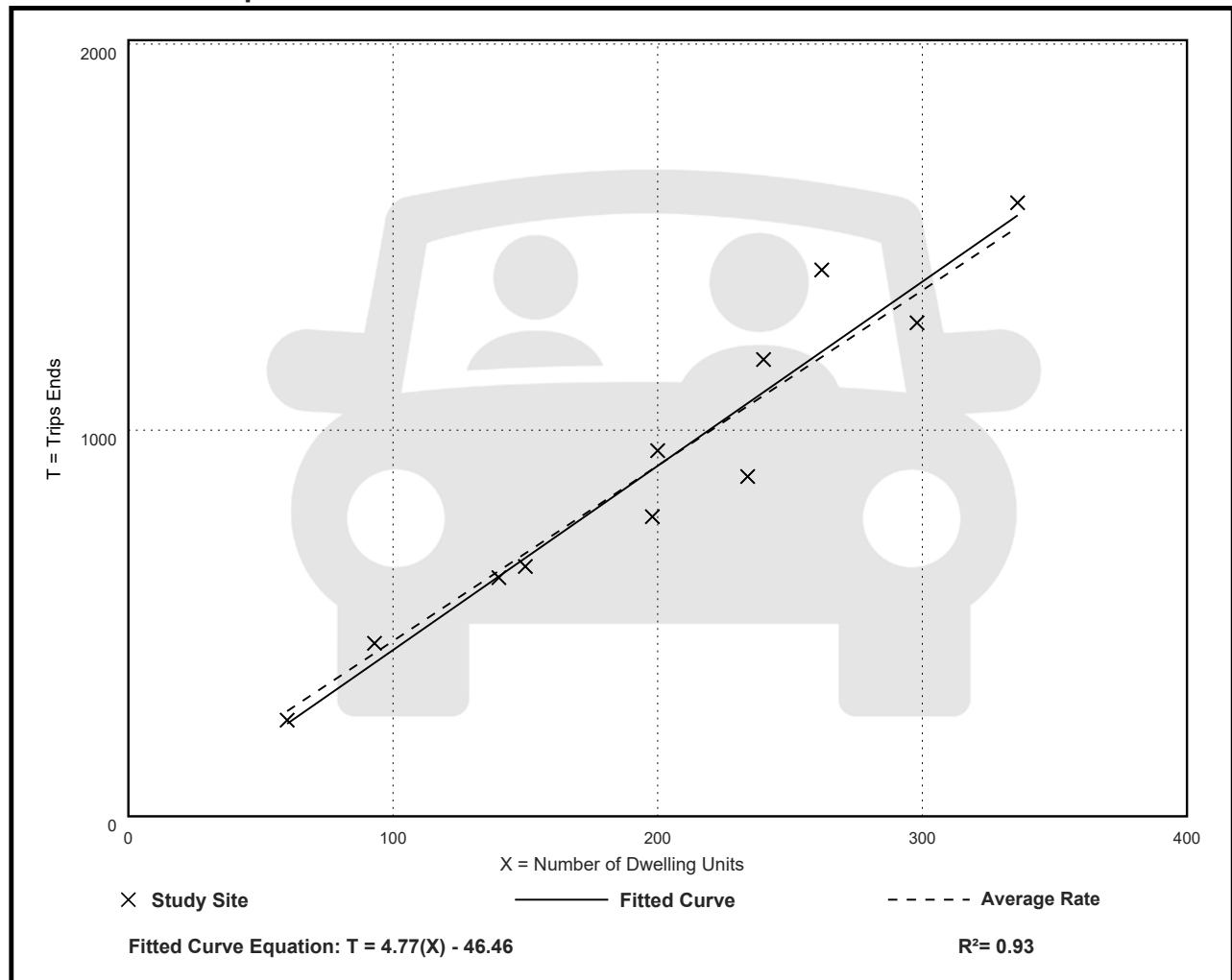
Avg. Num. of Dwelling Units: 201

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 30

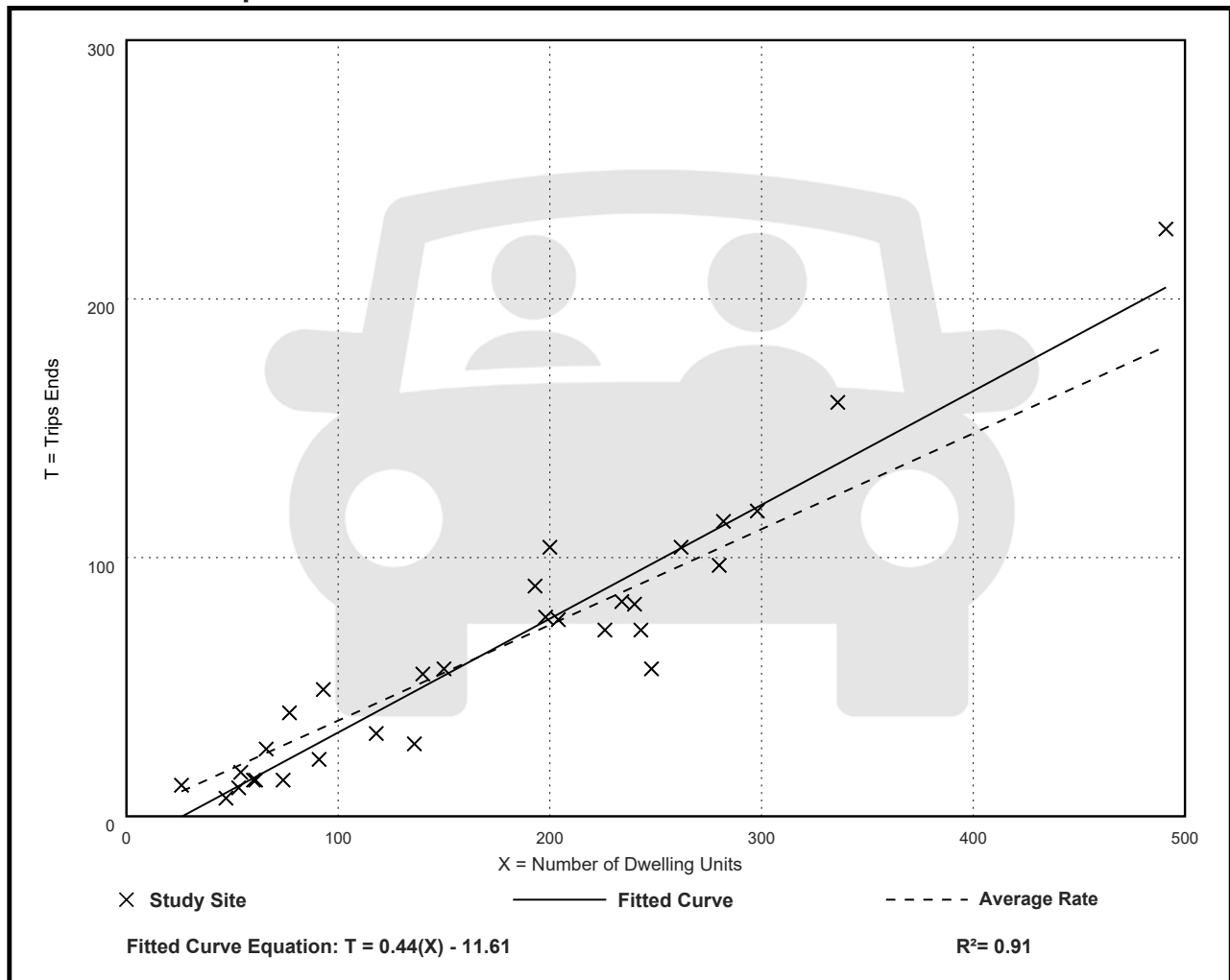
Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

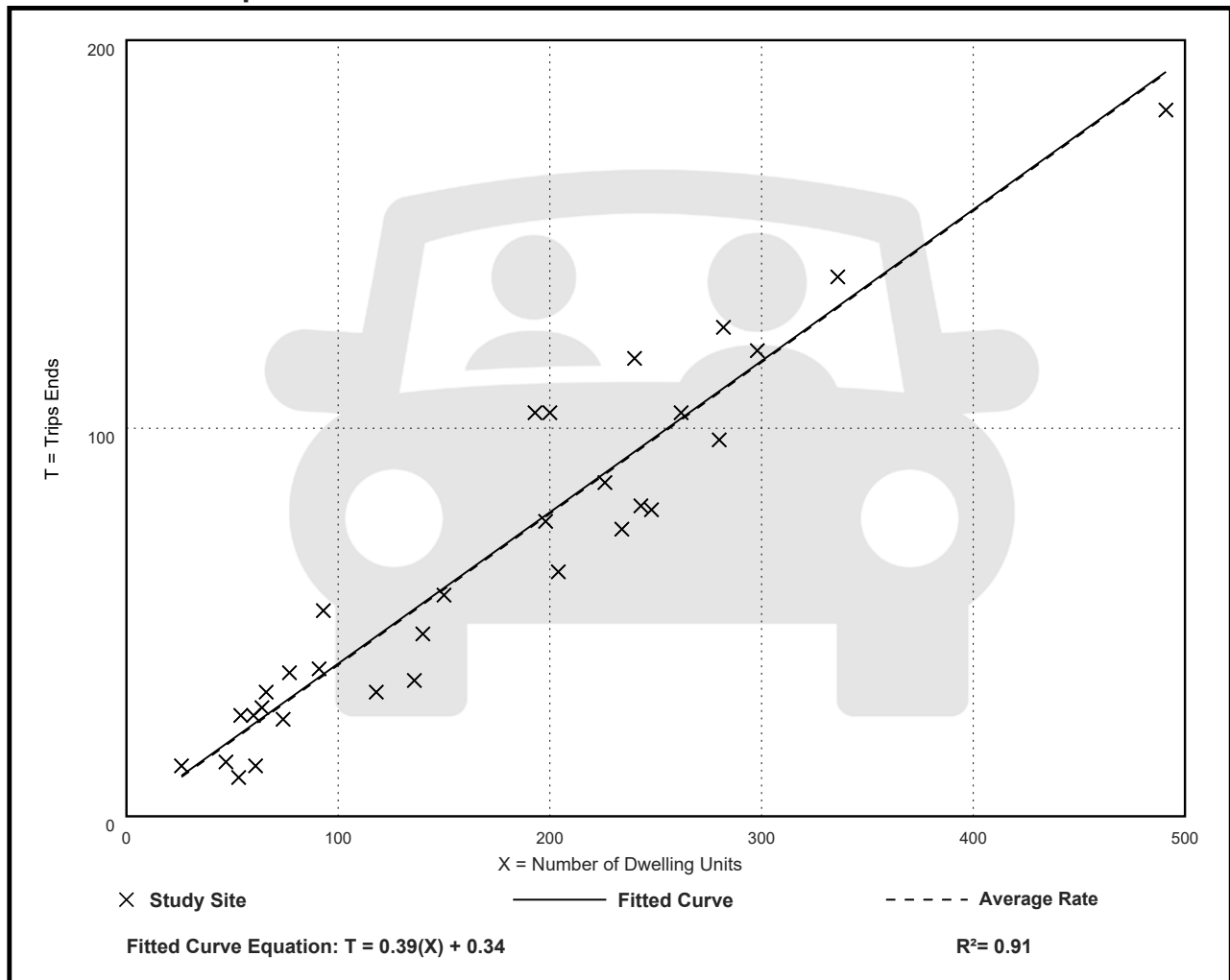
Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Land Use: 821

Shopping Plaza (40-150k)

Description

A shopping plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has between 40,000 and 150,000 square feet of gross leasable area (GLA). The term “plaza” in the land use name rather than “center” is simply a means of distinction between the different shopping center size ranges. Various other names are commonly used to categorize a shopping plaza within this size range, depending on its specific size and tenants, such as neighborhood center, community center, and fashion center.

Its major tenant is often a supermarket but many sites are anchored by home improvement, discount, or other stores. A shopping plaza typically contains more than retail merchandising facilities. Office space, a movie theater, restaurants, a post office, banks, a health club, and recreational facilities are common tenants. A shopping plaza is almost always open-air and the GLA is the same as the gross floor area of the building.

The 150,000 square feet GLA threshold value between shopping plaza and shopping center (Land Use 820) is based on an examination of trip generation data. For a shopping plaza that is smaller than the threshold value, the presence or absence of a supermarket within the plaza has a measurable effect on site trip generation. For a shopping center that is larger than the threshold value, the trips generated by its other major tenants mask any effects of the presence or absence of an on-site supermarket.

The 40,000 square feet GFA threshold between shopping plaza and strip retail plaza (Land Use 822) was selected based on an examination of the overall shopping center/plaza database. No shopping plaza with a supermarket as its anchor is smaller than 40,000 square feet GLA.

Shopping center (>150k) (Land Use 820), strip retail plaza (<40k) (Land Use 822), and factory outlet center (Land Use 823) are related uses.

Land Use Subcategory

The presence or absence of a supermarket in a shopping plaza has been determined to have a measurable effect on site trip generation. Therefore, data are presented for two subcategories for this land use: sites with a supermarket anchor and sites without a supermarket.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Connecticut, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

105, 110, 156, 159, 186, 198, 204, 211, 213, 239, 259, 260, 295, 301, 304, 305, 307, 317, 319, 358, 376, 390, 400, 404, 437, 444, 446, 507, 580, 598, 658, 728, 908, 926, 944, 946, 960, 973, 974, 1004, 1009, 1025, 1069

Shopping Plaza (40-150k) - Supermarket - Yes (821)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 17

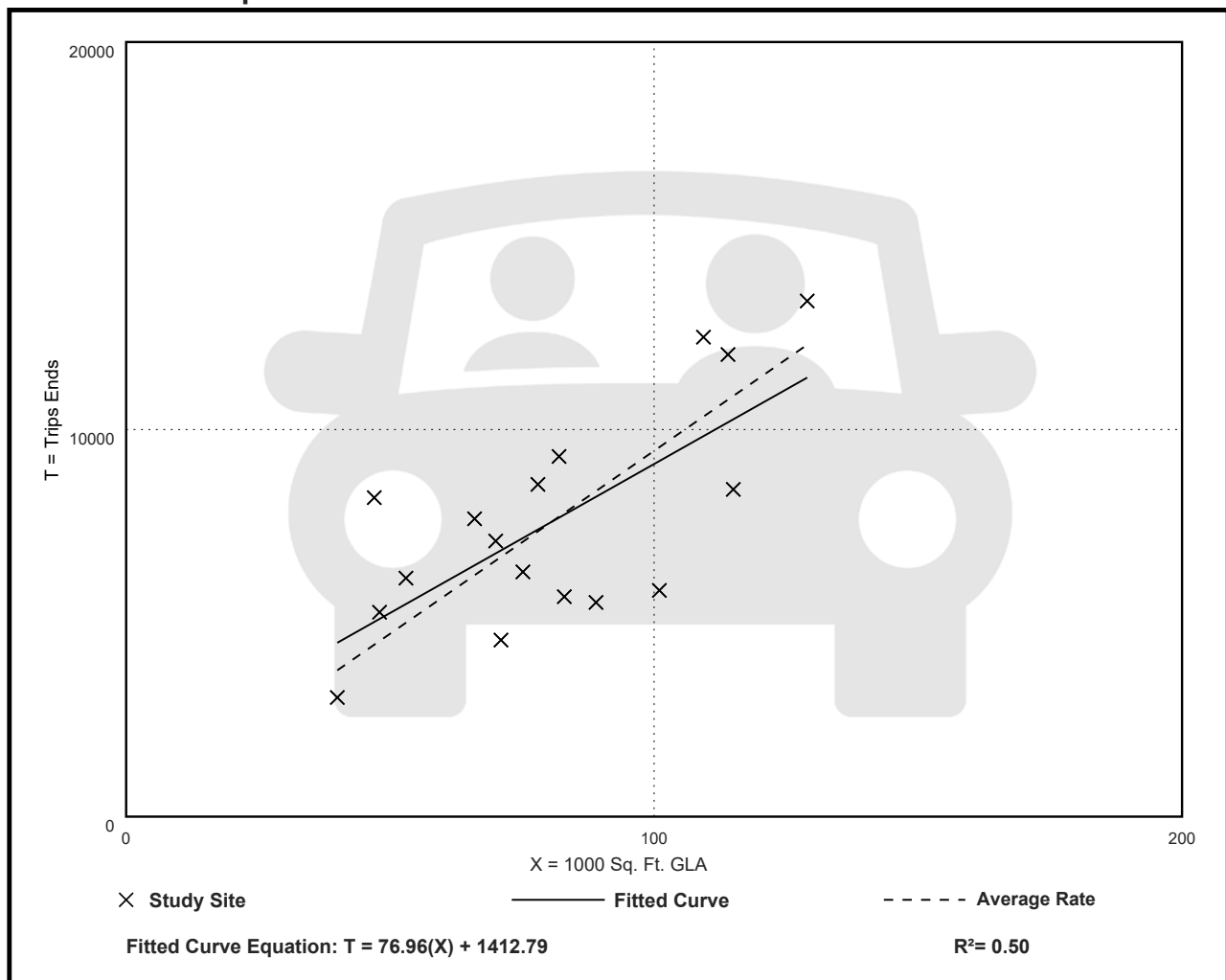
Avg. 1000 Sq. Ft. GLA: 81

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
94.49	57.86 - 175.32	26.55

Data Plot and Equation



Shopping Plaza (40-150k) - Supermarket - Yes (821)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 16

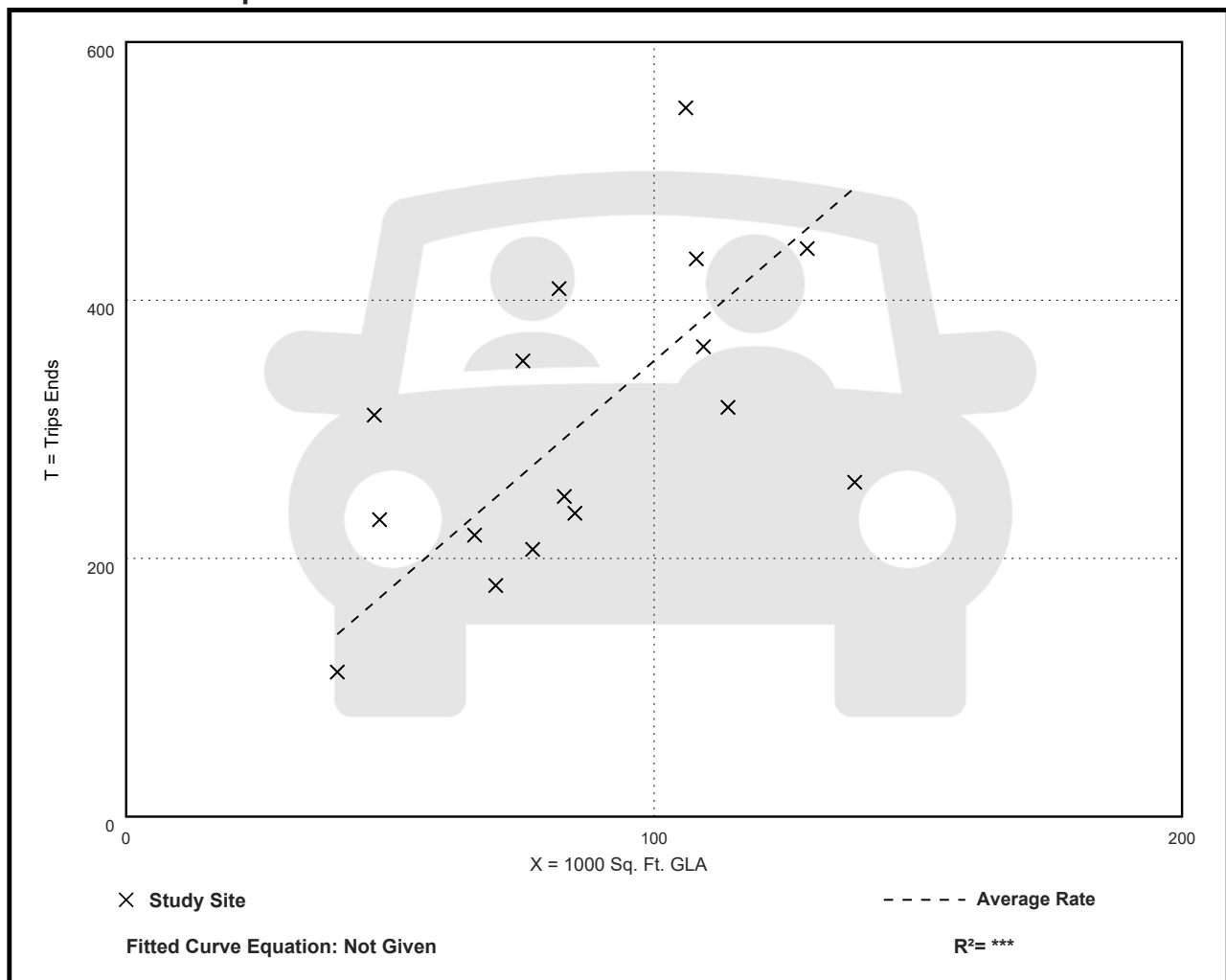
Avg. 1000 Sq. Ft. GLA: 86

Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.53	1.88 - 6.62	1.17

Data Plot and Equation



Shopping Plaza (40-150k) - Supermarket - Yes (821)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 51

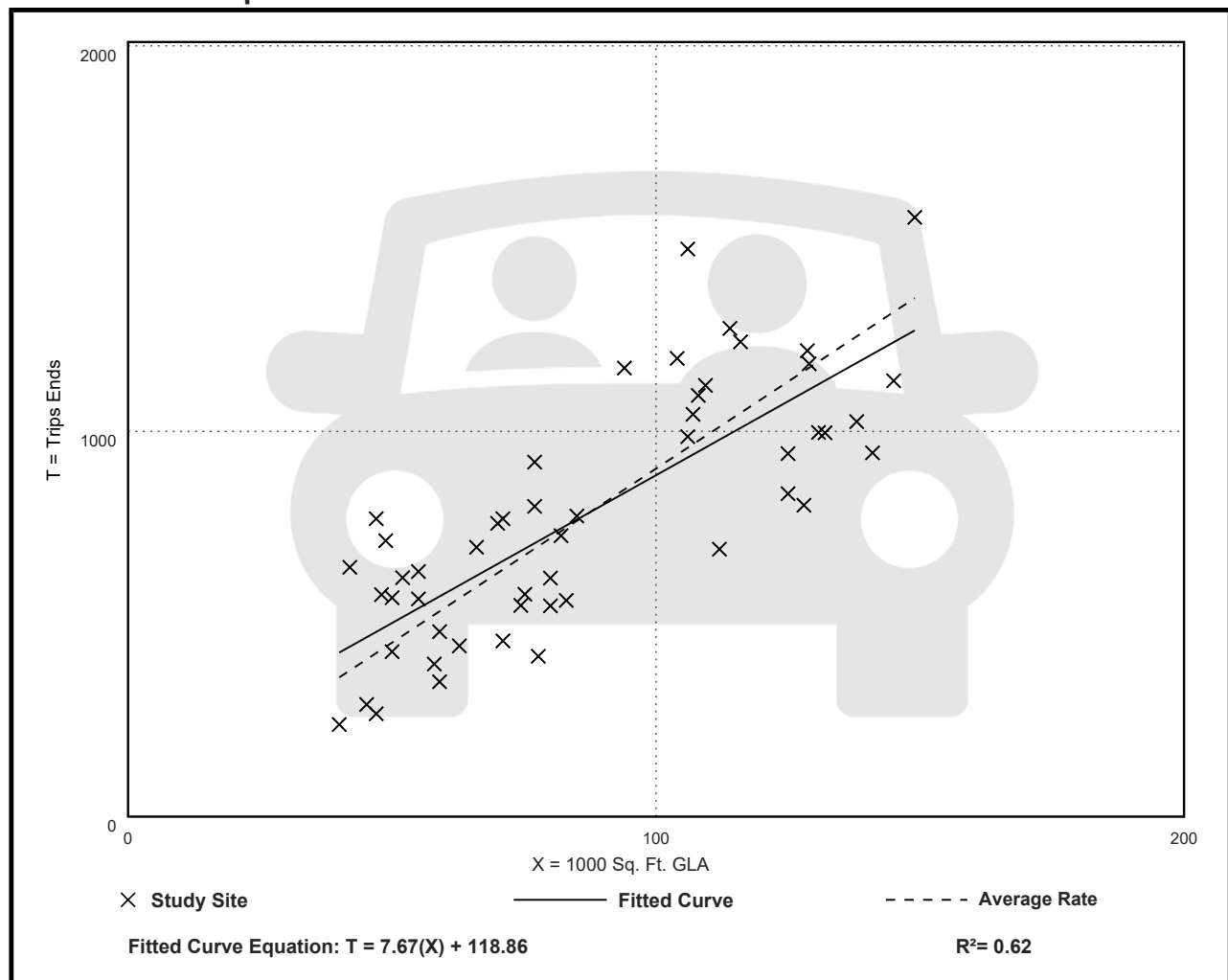
Avg. 1000 Sq. Ft. GLA: 87

Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
9.03	5.35 - 16.45	2.37

Data Plot and Equation



APPENDIX E: VOLUME DEVELOPMENT WORKSHEETS

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Riverside Dr & Sample Rd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	150	587	463	130	358	187	200	1,105	94	233	1,127	176
Peak Season Volume	150	587	463	130	358	187	200	1,105	94	233	1,127	176
Traffic Volume Growth	5	21	16	5	13	7	7	39	3	8	40	6
Background Traffic Volumes	155	608	479	135	371	194	207	1,144	97	241	1,167	182
Project Traffic												
Inbound Traffic Assignment			5.0%	10.0%				12.0%				
Inbound Traffic Volumes			9	18				21				
Outbound Traffic Assignment									5.0%	12.0%	10.0%	
Outbound Traffic Volumes									16	39	32	
Project Traffic	0	0	9	18	0	0	0	21	0	16	39	32
TOTAL TRAFFIC	155	608	488	153	371	194	207	1,165	97	257	1,206	214

Inbound
176
Outbound
322

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	134	464	366	128	627	175	168	1,228	129	281	1,249	127
Peak Season Volume	134	464	366	128	627	175	168	1,228	129	281	1,249	127
Traffic Volume Growth	5	16	13	5	22	6	6	44	5	10	44	5
Background Traffic Volumes	139	480	379	133	649	181	174	1,272	134	291	1,293	132
Project Traffic												
Inbound Traffic Assignment			5.0%	10.0%				12.0%				
Inbound Traffic Volumes			17	34				41				
Outbound Traffic Assignment									5.0%	12.0%	10.0%	
Outbound Traffic Volumes									14	33	28	
Project Traffic	0	0	17	34	0	0	0	41	0	14	33	28
TOTAL TRAFFIC	139	480	396	167	649	181	174	1,313	134	305	1,326	160

Inbound
339
Outbound
276

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Woodside Dr & Sample Rd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	87	30	58	200	41	105	104	1,487	37	36	1,309	129
Peak Season Volume	87	30	58	200	41	105	104	1,487	37	36	1,309	129
Traffic Volume Growth	3	1	2	7	1	4	4	53	1	1	47	5
Background Traffic Volumes	90	31	60	207	42	109	108	1,540	38	37	1,356	134
Project Traffic												
Inbound Traffic Assignment					5.0%			22.0%	5.0%			
Inbound Traffic Volumes					11			49	11			
Outbound Traffic Assignment	5.0%	5.0%									22.0%	
Outbound Traffic Volumes	17	17									76	
Project Traffic	17	17	0	0	11	0	0	49	11	0	76	0
TOTAL TRAFFIC	107	48	60	207	53	109	108	1,589	49	37	1,432	134

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	99	56	62	139	67	104	150	1,484	56	95	1,492	203
Peak Season Volume	99	56	62	139	67	104	150	1,484	56	95	1,492	203
Traffic Volume Growth	4	2	2	5	2	4	5	53	2	3	53	7
Background Traffic Volumes	103	58	64	144	69	108	155	1,537	58	98	1,545	210
Project Traffic												
Inbound Traffic Assignment					5.0%			22.0%	5.0%			
Inbound Traffic Volumes					20			88	20			
Outbound Traffic Assignment	5.0%	5.0%									22.0%	
Outbound Traffic Volumes	17	17									76	
Project Traffic	17	17	0	0	20	0	0	88	20	0	76	0
TOTAL TRAFFIC	120	75	64	144	89	108	155	1,625	78	98	1,621	210

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Belmonte Blvd & Sample Rd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.05
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 12/13/2023	0	0	30	0	0	9	50	1,613	7	11	1,553	7
Peak Season Volume	0	0	32	0	0	9	53	1,694	7	12	1,631	7
Traffic Volume Growth	0	0	1	0	0	0	2	60	0	0	58	0
Background Traffic Volumes	0	0	33	0	0	9	55	1,754	7	12	1,689	7
Project Traffic												
Inbound Traffic Assignment									22.0%	10.0%		
Inbound Traffic Volumes									49	22		
Outbound Traffic Assignment	22.0%		10.0%									
Outbound Traffic Volumes	76		34									
Project Traffic	76	0	34	0	0	0	0	0	49	22	0	0
TOTAL TRAFFIC	76	0	67	0	0	9	55	1,754	56	34	1,689	7

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 12/13/2023	0	0	13	0	0	13	12	1,658	5	22	1,638	21
Peak Season Volume	0	0	14	0	0	14	13	1,741	5	23	1,720	22
Traffic Volume Growth	0	0	0	0	0	0	0	62	0	1	61	1
Background Traffic Volumes	0	0	14	0	0	14	13	1,803	5	24	1,781	23
Project Traffic												
Inbound Traffic Assignment									22.0%	10.0%		
Inbound Traffic Volumes									88	40		
Outbound Traffic Assignment	22.0%		10.0%									
Outbound Traffic Volumes	76		34									
Project Traffic	76	0	34	0	0	0	0	0	88	40	0	0
TOTAL TRAFFIC	76	0	48	0	0	14	13	1,803	93	64	1,781	23

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Rock Island Rd & Sample Rd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.05
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 12/13/2023	266	464	694	220	327	141	137	1,316	230	265	1,056	130
Peak Season Volume	279	487	729	231	343	148	144	1,382	242	278	1,109	137
Traffic Volume Growth	10	17	26	8	12	5	5	49	9	10	39	5
Background Traffic Volumes	289	504	755	239	355	153	149	1,431	251	288	1,148	142
Project Traffic												
Inbound Traffic Assignment					7.0%	3.0%				19.0%	7.0%	Inbound
Inbound Traffic Volumes					12	5				33	12	176
Outbound Traffic Assignment		7.0%	19.0%				3.0%	7.0%				Outbound
Outbound Traffic Volumes		23	61				10	23				322
Project Traffic	0	23	61	0	12	5	10	23	0	33	12	0
TOTAL TRAFFIC	289	527	816	239	367	158	159	1,454	251	321	1,160	142

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 12/13/2023	185	285	378	103	406	94	128	1,301	275	494	1,620	120
Peak Season Volume	194	299	397	108	426	99	134	1,366	289	519	1,701	126
Traffic Volume Growth	7	11	14	4	15	4	5	49	10	18	60	4
Background Traffic Volumes	201	310	411	112	441	103	139	1,415	299	537	1,761	130
Project Traffic												
Inbound Traffic Assignment					7.0%	3.0%				19.0%	7.0%	Inbound
Inbound Traffic Volumes					24	10				64	24	339
Outbound Traffic Assignment		7.0%	19.0%				3.0%	7.0%				Outbound
Outbound Traffic Volumes		19	52				8	19				276
Project Traffic	0	19	52	0	24	10	8	19	0	64	24	0
TOTAL TRAFFIC	201	329	463	112	465	113	147	1,434	299	601	1,785	130

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Rock Island Rd & Pinewalk Dr N
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.05
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 12/13/2023	15	1,258	12	34	707	45	132	1	114	22	0	38
Peak Season Volume	16	1,321	13	36	742	47	139	1	120	23	0	40
Traffic Volume Growth	1	47	0	1	26	2	5	0	4	1	0	1
Background Traffic Volumes	17	1,368	13	37	768	49	144	1	124	24	0	41
Project Traffic												
Inbound Traffic Assignment					10.0%	16.0%						
Inbound Traffic Volumes					22	36						
Outbound Traffic Assignment		10.0%					16.0%					
Outbound Traffic Volumes		34					55					
Project Traffic	0	34	0	0	22	36	55	0	0	0	0	0
TOTAL TRAFFIC	17	1,402	13	37	790	85	199	1	124	24	0	41

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 12/13/2023	60	737	12	33	963	159	82	0	38	9	0	28
Peak Season Volume	63	774	13	35	1,011	167	86	0	40	9	0	29
Traffic Volume Growth	2	27	0	1	36	6	3	0	1	0	0	1
Background Traffic Volumes	65	801	13	36	1,047	173	89	0	41	9	0	30
Project Traffic												
Inbound Traffic Assignment					10.0%	16.0%						
Inbound Traffic Volumes					40	64						
Outbound Traffic Assignment		10.0%					16.0%					
Outbound Traffic Volumes		34					55					
Project Traffic	0	34	0	0	40	64	55	0	0	0	0	0
TOTAL TRAFFIC	65	835	13	36	1,087	237	144	0	41	9	0	30

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Project Access & Pinewalk Dr N
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	0	19	66	0	1	0	150	1	8	44	18
Peak Season Volume	0	0	19	66	0	1	0	150	1	8	44	18
Traffic Volume Growth	0	0	1	2	0	0	0	5	0	0	2	1
Background Traffic Volumes	0	0	20	68	0	1	0	155	1	8	46	19
Project Traffic												
Inbound Traffic Assignment											10.0%	6.0%
Inbound Traffic Volumes											22	13
Outbound Traffic Assignment				6.0%				10.0%				
Outbound Traffic Volumes				21				34				
Project Traffic	0	0	0	21	0	0	0	34	0	0	22	13
TOTAL TRAFFIC	0	0	20	89	0	1	0	189	1	8	68	32

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	0	12	34	1	0	1	92	2	16	137	55
Peak Season Volume	0	0	12	34	1	0	1	92	2	16	137	55
Traffic Volume Growth	0	0	0	1	0	0	0	3	0	1	5	2
Background Traffic Volumes	0	0	12	35	1	0	1	95	2	17	142	57
Project Traffic												
Inbound Traffic Assignment											10.0%	6.0%
Inbound Traffic Volumes											40	24
Outbound Traffic Assignment				6.0%				10.0%				
Outbound Traffic Volumes				21				34				
Project Traffic	0	0	0	21	0	0	0	34	0	0	40	24
TOTAL TRAFFIC	0	0	12	56	1	0	1	129	2	17	182	81

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Holiday Springs Blvd & Project Access
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	105	2	3	87	0	0	0	0	0	0	0
Peak Season Volume	0	105	2	3	87	0	0	0	0	0	0	0
Traffic Volume Growth	0	4	0	0	3	0	0	0	0	0	0	0
Background Traffic Volumes	0	109	2	3	90	0	0	0	0	0	0	0
Project Traffic												
Inbound Traffic Assignment			4.0%	10.0%								
Inbound Traffic Volumes			9	22								
Outbound Traffic Assignment										4.0%		10.0%
Outbound Traffic Volumes										14		34
Project Traffic	0	0	9	22	0	0	0	0	0	14	0	34
TOTAL TRAFFIC	0	109	11	25	90	0	0	0	0	14	0	34

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	131	0	3	132	0	0	0	0	1	0	0
Peak Season Volume	0	131	0	3	132	0	0	0	0	1	0	0
Traffic Volume Growth	0	5	0	0	5	0	0	0	0	0	0	0
Background Traffic Volumes	0	136	0	3	137	0	0	0	0	1	0	0
Project Traffic												
Inbound Traffic Assignment			4.0%	10.0%								
Inbound Traffic Volumes			16	40								
Outbound Traffic Assignment										4.0%		10.0%
Outbound Traffic Volumes										14		34
Project Traffic	0	0	16	40	0	0	0	0	0	14	0	34
TOTAL TRAFFIC	0	136	16	43	137	0	0	0	0	15	0	34

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Pinewalk Dr N & Project Access
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	8	0	3	32	0	0	0	0	1	0	4
Peak Season Volume	0	8	0	3	32	0	0	0	0	1	0	4
Traffic Volume Growth	0	0	0	0	1	0	0	0	0	0	0	0
Background Traffic Volumes	0	8	0	3	33	0	0	0	0	1	0	4
Project Traffic												
Inbound Traffic Assignment			14.0%	10.0%								
Inbound Traffic Volumes			31	22								
Outbound Traffic Assignment										14.0%		10.0%
Outbound Traffic Volumes										48		34
Project Traffic	0	0	31	22	0	0	0	0	0	48	0	34
TOTAL TRAFFIC	0	8	31	25	33	0	0	0	0	49	0	38

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	22	1	6	14	0	0	0	0	1	0	3
Peak Season Volume	0	22	1	6	14	0	0	0	0	1	0	3
Traffic Volume Growth	0	1	0	0	0	0	0	0	0	0	0	0
Background Traffic Volumes	0	23	1	6	14	0	0	0	0	1	0	3
Project Traffic												
Inbound Traffic Assignment			14.0%	10.0%								
Inbound Traffic Volumes			56	40								
Outbound Traffic Assignment										14.0%		10.0%
Outbound Traffic Volumes										48		34
Project Traffic	0	0	56	40	0	0	0	0	0	48	0	34
TOTAL TRAFFIC	0	23	57	46	14	0	0	0	0	49	0	37

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Rock Island Rd & NW 30th St
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	7	1,198	41	62	807	5	16	0	7	99	0	128
Peak Season Volume	7	1,198	41	62	807	5	16	0	7	99	0	128
Traffic Volume Growth	0	43	1	2	29	0	1	0	0	4	0	5
Background Traffic Volumes	7	1,241	42	64	836	5	17	0	7	103	0	133
Project Traffic												
Inbound Traffic Assignment	14.0%					10.0%						
Inbound Traffic Volumes	31					22						
Outbound Traffic Assignment							10.0%		14.0%			
Outbound Traffic Volumes							34		48			
Project Traffic	31	0	0	0	0	22	34	0	48	0	0	0
TOTAL TRAFFIC	38	1,241	42	64	836	27	51	0	55	103	0	133

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	4	821	75	82	852	15	5	0	2	58	0	58
Peak Season Volume	4	821	75	82	852	15	5	0	2	58	0	58
Traffic Volume Growth	0	29	3	3	30	1	0	0	0	2	0	2
Background Traffic Volumes	4	850	78	85	882	16	5	0	2	60	0	60
Project Traffic												
Inbound Traffic Assignment	14.0%					10.0%						
Inbound Traffic Volumes	56					40						
Outbound Traffic Assignment							10.0%		14.0%			
Outbound Traffic Volumes							34		48			
Project Traffic	56	0	0	0	0	40	34	0	48	0	0	0
TOTAL TRAFFIC	60	850	78	85	882	56	39	0	50	60	0	60

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Pinewalk Dr N & Pinewalk Dr S
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	0	38	78	1	9	2	51	2	5	22	19
Peak Season Volume	0	0	38	78	1	9	2	51	2	5	22	19
Traffic Volume Growth	0	0	1	3	0	0	0	2	0	0	1	1
Background Traffic Volumes	0	0	39	81	1	9	2	53	2	5	23	20
Project Traffic												
Inbound Traffic Assignment	10.0%	14.0%										
Inbound Traffic Volumes	22	31										
Outbound Traffic Assignment					14.0%				10.0%			
Outbound Traffic Volumes					48				34			
Project Traffic	22	31	0	0	48	0	0	0	34	0	0	0
TOTAL TRAFFIC	22	31	39	81	49	9	2	53	36	5	23	20

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	2	0	19	28	0	4	6	23	4	38	47	53
Peak Season Volume	2	0	19	28	0	4	6	23	4	38	47	53
Traffic Volume Growth	0	0	1	1	0	0	0	1	0	1	2	2
Background Traffic Volumes	2	0	20	29	0	4	6	24	4	39	49	55
Project Traffic												
Inbound Traffic Assignment	10.0%	14.0%										
Inbound Traffic Volumes	40	56										
Outbound Traffic Assignment					14.0%				10.0%			
Outbound Traffic Volumes					48				34			
Project Traffic	40	56	0	0	48	0	0	0	34	0	0	0
TOTAL TRAFFIC	42	56	20	29	48	4	6	24	38	39	49	55

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Rock Island Rd & Pinewalk Dr S
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	12	1,154	8	5	880	28	75	1	94	15	0	20
Peak Season Volume	12	1,154	8	5	880	28	75	1	94	15	0	20
Traffic Volume Growth	0	41	0	0	31	1	3	0	3	1	0	1
Background Traffic Volumes	12	1,195	8	5	911	29	78	1	97	16	0	21
Project Traffic												
Inbound Traffic Assignment							4.0%					10.0%
Inbound Traffic Volumes							9					22
Outbound Traffic Assignment				10.0%		4.0%						
Outbound Traffic Volumes				34		14						
Project Traffic	0	0	0	34	0	14	9	0	0	0	0	22
TOTAL TRAFFIC	12	1,195	8	39	911	43	87	1	97	16	0	43

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	62	828	7	9	884	57	41	0	41	8	1	3
Peak Season Volume	62	828	7	9	884	57	41	0	41	8	1	3
Traffic Volume Growth	2	29	0	0	31	2	1	0	1	0	0	0
Background Traffic Volumes	64	857	7	9	915	59	42	0	42	8	1	3
Project Traffic												
Inbound Traffic Assignment							4.0%					10.0%
Inbound Traffic Volumes							16					40
Outbound Traffic Assignment				10.0%		4.0%						
Outbound Traffic Volumes				34		14						
Project Traffic	0	0	0	34	0	14	16	0	0	0	0	40
TOTAL TRAFFIC	64	857	7	43	915	73	58	0	42	8	1	43

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Pinewalk Dr S & Holiday Springs Blvd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	0	0	16	0	9	10	128	0	0	66	6
Peak Season Volume	0	0	0	16	0	9	10	128	0	0	66	6
Traffic Volume Growth	0	0	0	1	0	0	0	5	0	0	2	0
Background Traffic Volumes	0	0	0	17	0	9	10	133	0	0	68	6
Project Traffic												
Inbound Traffic Assignment							12.0%					12.0%
Inbound Traffic Volumes							27					27
Outbound Traffic Assignment				12.0%		12.0%						
Outbound Traffic Volumes				41		41						
Project Traffic	0	0	0	41	0	41	27	0	0	0	0	27
TOTAL TRAFFIC	0	0	0	58	0	50	37	133	0	0	68	33

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	0	0	0	12	0	16	13	84	0	0	120	15
Peak Season Volume	0	0	0	12	0	16	13	84	0	0	120	15
Traffic Volume Growth	0	0	0	0	0	1	0	3	0	0	4	1
Background Traffic Volumes	0	0	0	12	0	17	13	87	0	0	124	16
Project Traffic												
Inbound Traffic Assignment							12.0%					12.0%
Inbound Traffic Volumes							48					48
Outbound Traffic Assignment				12.0%		12.0%						
Outbound Traffic Volumes				41		41						
Project Traffic	0	0	0	41	0	41	48	0	0	0	0	48
TOTAL TRAFFIC	0	0	0	53	0	58	61	87	0	0	124	64

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Rock Island Rd & Holiday Springs Blvd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	70	1,088	17	10	1,008	17	35	1	152	5	0	11
Peak Season Volume	70	1,088	17	10	1,008	17	35	1	152	5	0	11
Traffic Volume Growth	2	39	1	0	36	1	1	0	5	0	0	0
Background Traffic Volumes	72	1,127	18	10	1,044	18	36	1	157	5	0	11
Project Traffic												
Inbound Traffic Assignment											4.0%	4.0%
Inbound Traffic Volumes											9	9
Outbound Traffic Assignment				4.0%				4.0%				
Outbound Traffic Volumes				14				14				
Project Traffic	0	0	0	14	0	0	0	14	0	0	9	9
TOTAL TRAFFIC	72	1,127	18	24	1,044	18	36	15	157	5	9	20

Inbound
222
Outbound
344

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	141	935	55	24	805	29	23	5	101	15	2	13
Peak Season Volume	141	935	55	24	805	29	23	5	101	15	2	13
Traffic Volume Growth	5	33	2	1	29	1	1	0	4	1	0	0
Background Traffic Volumes	146	968	57	25	834	30	24	5	105	16	2	13
Project Traffic												
Inbound Traffic Assignment											4.0%	4.0%
Inbound Traffic Volumes											16	16
Outbound Traffic Assignment				4.0%				4.0%				
Outbound Traffic Volumes				14				14				
Project Traffic	0	0	0	14	0	0	0	14	0	0	16	16
TOTAL TRAFFIC	146	968	57	39	834	30	24	19	105	16	18	29

Inbound
398
Outbound
344

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Rock Island Rd & Royal Palm Blvd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	354	696	265	243	665	271	217	923	428	161	750	235
Peak Season Volume	354	696	265	243	665	271	217	923	428	161	750	235
Traffic Volume Growth	13	25	9	9	24	10	8	33	15	6	27	8
Background Traffic Volumes	367	721	274	252	689	281	225	956	443	167	777	243
Project Traffic												
Inbound Traffic Assignment		3.0%	6.0%				2.0%	6.0%				
Inbound Traffic Volumes		5	11				4	11				
Outbound Traffic Assignment					3.0%	2.0%				6.0%	6.0%	
Outbound Traffic Volumes					10	6				19	19	
Project Traffic	0	5	11	0	10	6	4	11	0	19	19	0
TOTAL TRAFFIC	367	726	285	252	699	287	229	967	443	186	796	243

Inbound
176
Outbound
322

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	376	657	248	139	641	214	228	870	366	265	988	229
Peak Season Volume	376	657	248	139	641	214	228	870	366	265	988	229
Traffic Volume Growth	13	23	9	5	23	8	8	31	13	9	35	8
Background Traffic Volumes	389	680	257	144	664	222	236	901	379	274	1,023	237
Project Traffic												
Inbound Traffic Assignment		3.0%	6.0%				2.0%	6.0%				
Inbound Traffic Volumes		10	20				7	20				
Outbound Traffic Assignment					3.0%	2.0%				6.0%	6.0%	
Outbound Traffic Volumes					8	6				17	17	
Project Traffic	0	10	20	0	8	6	7	20	0	17	17	0
TOTAL TRAFFIC	389	690	277	144	672	228	243	921	379	291	1,040	237

Inbound
339
Outbound
276

VOLUME DEVELOPMENT SHEET
CAROLINA CLUB
Riverside Dr & Royal Palm Blvd
EXISTING GEOMETRY

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2030
Years = 7

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	82	679	405	266	608	93	222	784	89	265	723	285
Peak Season Volume	82	679	405	266	608	93	222	784	89	265	723	285
Traffic Volume Growth	3	24	14	9	22	3	8	28	3	9	26	10
Background Traffic Volumes	85	703	419	275	630	96	230	812	92	274	749	295
Project Traffic												
Inbound Traffic Assignment		10.0%					12.0%					10.0%
Inbound Traffic Volumes		18					21					18
Outbound Traffic Assignment				10.0%	10.0%	12.0%						
Outbound Traffic Volumes				32	32	39						
Project Traffic	0	18	0	32	32	39	21	0	0	0	0	18
TOTAL TRAFFIC	85	721	419	307	662	135	251	812	92	274	749	313

Inbound
176
Outbound
322

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 2/29/2024	144	731	436	229	701	108	160	775	127	313	794	253
Peak Season Volume	144	731	436	229	701	108	160	775	127	313	794	253
Traffic Volume Growth	5	26	15	8	25	4	6	28	5	11	28	9
Background Traffic Volumes	149	757	451	237	726	112	166	803	132	324	822	262
Project Traffic												
Inbound Traffic Assignment		10.0%					12.0%					10.0%
Inbound Traffic Volumes		34					41					34
Outbound Traffic Assignment				10.0%	10.0%	12.0%						
Outbound Traffic Volumes				28	28	33						
Project Traffic	0	34	0	28	28	33	41	0	0	0	0	34
TOTAL TRAFFIC	149	791	451	265	754	145	207	803	132	324	822	296

Inbound
339
Outbound
276

APPENDIX F: SYNCHRO OUTPUT WORKSHEETS

Existing Conditions – AM Peak Hour

Existing Conditions – PM Peak Hour

Future Background Conditions – AM Peak Hour

Future Background Conditions – PM Peak Hour

Total Future Conditions – AM Peak Hour

Total Future Conditions – PM Peak Hour

Timings

1: Riverside Dr & Sample Rd

EX AM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	200	1105	233	1127	150	587	463	130	358	187
Future Volume (vph)	200	1105	233	1127	150	587	463	130	358	187
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4		3	8	
Permitted Phases					4		4	8		8
Detector Phase	1	6	5	2	7	4	4	3	8	8
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
Minimum Split (s)	12.0	45.0	12.0	45.0	11.5	44.5	44.5	11.5	44.5	44.5
Total Split (s)	29.0	61.0	29.0	61.0	18.0	48.0	48.0	22.0	52.0	52.0
Total Split (%)	18.1%	38.1%	18.1%	38.1%	11.3%	30.0%	30.0%	13.8%	32.5%	32.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5	6.5
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	C-Min	None	C-Min	None	None	None	None	None	None
Act Effect Green (s)	22.2	57.0	25.8	60.6	48.6	36.7	36.7	51.7	38.3	38.3
Actuated g/C Ratio	0.14	0.36	0.16	0.38	0.30	0.23	0.23	0.32	0.24	0.24
v/c Ratio	0.86	0.70	0.85	0.72	0.50	0.76	0.79	0.60	0.44	0.37
Control Delay (s/veh)	96.9	47.0	91.4	45.7	42.2	63.7	28.6	46.4	52.5	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	96.9	47.0	91.4	45.7	42.2	63.7	28.6	46.4	52.5	7.2
LOS	F	D	F	D	D	E	C	D	D	A
Approach Delay (s/veh)		54.2		52.7		47.6			38.9	
Approach LOS		D		D		D			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 13 (8%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 49.9

Intersection LOS: D

Intersection Capacity Utilization 82.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Riverside Dr & Sample Rd



1: Riverside Dr & Sample Rd

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	211	1262	245	1371	158	618	487	137	377	197
v/c Ratio	0.86	0.70	0.85	0.72	0.50	0.76	0.79	0.60	0.44	0.37
Control Delay (s/veh)	96.9	47.0	91.4	45.7	42.2	63.7	28.6	46.4	52.5	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	96.9	47.0	91.4	45.7	42.2	63.7	28.6	46.4	52.5	7.2
Queue Length 50th (ft)	213	425	251	469	115	317	170	98	174	0
Queue Length 95th (ft)	#369	482	#452	535	166	378	314	146	217	63
Internal Link Dist (ft)		903		1640		1956			490	
Turn Bay Length (ft)	370		420		275		430	300		200
Base Capacity (vph)	254	1796	285	1900	314	917	650	249	1006	591
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.70	0.86	0.72	0.50	0.67	0.75	0.55	0.37	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Riverside Dr & Sample Rd

EX AM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	200	1105	94	233	1127	176	150	587	463	130	358	187
Future Volume (veh/h)	200	1105	94	233	1127	176	150	587	463	130	358	187
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	211	1163	99	245	1186	185	158	618	487	137	377	197
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	231	1750	149	245	1660	259	314	922	411	221	913	407
Arrive On Green	0.13	0.37	0.37	0.14	0.37	0.37	0.07	0.26	0.26	0.07	0.26	0.26
Sat Flow, veh/h	1781	4793	408	1781	4455	695	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	211	826	436	245	906	465	158	618	487	137	377	197
Grp Sat Flow(s),veh/h/ln	1781	1702	1797	1781	1702	1745	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	18.7	32.5	32.6	22.0	36.4	36.4	10.5	24.9	41.5	9.0	14.1	16.9
Cycle Q Clear(g_c), s	18.7	32.5	32.6	22.0	36.4	36.4	10.5	24.9	41.5	9.0	14.1	16.9
Prop In Lane	1.00		0.23	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	1243	656	245	1269	650	314	922	411	221	913	407
V/C Ratio(X)	0.91	0.66	0.66	1.00	0.71	0.71	0.50	0.67	1.18	0.62	0.41	0.48
Avail Cap(c_a), veh/h	245	1243	656	245	1269	650	314	922	411	270	1011	451
HCM Platoon Ratio	1.00	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	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.7	42.6	42.6	69.0	42.9	42.9	40.3	53.1	59.2	41.9	49.4	50.5
Incr Delay (d2), s/veh	34.0	2.8	5.3	47.1	2.3	4.5	1.3	1.9	105.2	3.0	0.3	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	10.8	14.3	15.5	13.3	15.8	16.6	4.8	11.5	28.7	4.2	6.4	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	102.7	45.4	47.8	116.1	45.2	47.4	41.6	55.0	164.5	44.9	49.7	51.4
LnGrp LOS	F	D	D	F	D	D	D	E	F	D	D	D
Approach Vol, veh/h	1473		1616			1263			711			
Approach Delay, s/veh	54.3		56.6			95.5			49.2			
Approach LOS	D		E			F			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.8	66.6	17.6	48.0	29.0	65.4	18.0	47.6				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	22.0	54.0	15.5	41.5	22.0	54.0	11.5	45.5				
Max Q Clear Time (g_c+I1), s	20.7	38.4	11.0	43.5	24.0	34.6	12.5	18.9				
Green Ext Time (p_c), s	0.1	8.5	0.1	0.0	0.0	8.7	0.0	3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	64.6											
HCM 7th LOS	E											

Timings 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

EX AM
07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	104	1487	36	1309	87	30	200	41
Future Volume (vph)	104	1487	36	1309	87	30	200	41
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	34.0	12.0	34.0	11.5	42.0	11.5	40.0
Total Split (s)	20.0	70.0	20.0	70.0	28.0	42.0	28.0	42.0
Total Split (%)	12.5%	43.8%	12.5%	43.8%	17.5%	26.3%	17.5%	26.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	11.9	57.1	8.1	46.8	19.1	8.6	29.5	14.0
Actuated g/C Ratio	0.11	0.52	0.07	0.43	0.17	0.08	0.27	0.13
v/c Ratio	0.57	0.61	0.29	0.70	0.34	0.51	0.59	0.30
Control Delay (s/veh)	63.9	21.9	60.3	28.0	37.0	36.3	41.7	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.9	21.9	60.3	28.0	37.0	36.3	41.7	17.7
LOS	E	C	E	C	D	D	D	B
Approach Delay (s/veh)		24.7		28.8		36.7		31.6
Approach LOS		C		C		D		C

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 110.1

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay (s/veh): 27.6

Intersection LOS: C

Intersection Capacity Utilization 71.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

	ø1		ø2		ø3		ø4
20 s		70 s		28 s		42 s	
	ø5		ø6		ø7		ø8
20 s		70 s		28 s		42 s	



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	109	1604	38	1514	92	93	211	154
v/c Ratio	0.57	0.61	0.29	0.70	0.34	0.51	0.59	0.30
Control Delay (s/veh)	63.9	21.9	60.3	28.0	37.0	36.3	41.7	17.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.9	21.9	60.3	28.0	37.0	36.3	41.7	17.7
Queue Length 50th (ft)	73	313	26	314	50	26	122	14
Queue Length 95th (ft)	#173	451	71	428	107	90	226	50
Internal Link Dist (ft)		1640		1203		306		335
Turn Bay Length (ft)	260		260				160	
Base Capacity (vph)	215	3008	215	2971	437	603	423	1139
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.53	0.18	0.51	0.21	0.15	0.50	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

EX AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	1487	37	36	1309	129	87	30	58	200	41	105
Future Volume (veh/h)	104	1487	37	36	1309	129	87	30	58	200	41	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	1565	39	38	1378	136	92	32	61	211	43	111
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	139	2401	60	60	2006	198	293	47	90	345	262	233
Arrive On Green	0.08	0.47	0.47	0.03	0.42	0.42	0.06	0.08	0.08	0.13	0.15	0.15
Sat Flow, veh/h	1781	5124	128	1781	4724	466	1781	576	1097	1781	1777	1585
Grp Volume(v), veh/h	109	1040	564	38	993	521	92	0	93	211	43	111
Grp Sat Flow(s),veh/h/ln	1781	1702	1847	1781	1702	1786	1781	0	1673	1781	1777	1585
Q Serve(g_s), s	5.5	21.2	21.2	1.9	21.5	21.5	4.2	0.0	4.9	9.4	1.9	5.8
Cycle Q Clear(g_c), s	5.5	21.2	21.2	1.9	21.5	21.5	4.2	0.0	4.9	9.4	1.9	5.8
Prop In Lane	1.00		0.07	1.00		0.26	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	139	1595	866	60	1446	759	293	0	137	345	262	233
V/C Ratio(X)	0.78	0.65	0.65	0.63	0.69	0.69	0.31	0.00	0.68	0.61	0.16	0.48
Avail Cap(c_a), veh/h	255	2363	1283	255	2363	1240	612	0	664	547	705	629
HCM Platoon Ratio	1.00	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	1.00	1.00
Uniform Delay (d), s/veh	41.1	18.4	18.4	43.3	21.2	21.2	35.0	0.0	40.5	30.6	33.8	35.5
Incr Delay (d2), s/veh	9.3	0.5	0.8	10.2	0.6	1.1	0.6	0.0	5.8	1.7	0.3	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	2.7	8.0	8.7	1.0	8.3	8.8	1.9	0.0	2.2	4.1	0.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.4	18.9	19.3	53.5	21.8	22.3	35.6	0.0	46.4	32.4	34.1	37.0
LnGrp LOS	D	B	B	D	C	C	D		D	C	C	D
Approach Vol, veh/h	1713				1552		185				365	
Approach Delay, s/veh	21.0				22.7		41.0				34.0	
Approach LOS	C				C		D				C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.1	45.5	17.7	13.4	10.1	49.5	11.8	19.4				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	63.0	22.0	36.0	13.0	63.0	22.0	36.0				
Max Q Clear Time (g_c+I1), s	7.5	23.5	11.4	6.9	3.9	23.2	6.2	7.8				
Green Ext Time (p_c), s	0.1	15.0	0.4	0.5	0.0	16.3	0.2	0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh			23.9									
HCM 7th LOS			C									

HCM 7th TWSC
3: Belmonte Blvd & Sample Rd

EX AM
07/02/2024

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱ ↑↑↑			↱ ↑↑↑			↱			↱		
Traffic Vol, veh/h	53	1694	7	12	1631	7	0	0	32	0	0	9
Future Vol, veh/h	53	1694	7	12	1631	7	0	0	32	0	0	9
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	300	-	-	300	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	56	1783	7	13	1717	7	0	0	34	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1724	0	0	1791	0	0	-	-	895	-	-	862
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	172	-	-	160	-	-	0	0	244	0	0	256
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	172	-	-	160	-	-	-	-	244	-	-	256
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.08			0.21			22.14			19.59		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	244	172	-	-	160	-	-	256
HCM Lane V/C Ratio	0.138	0.324	-	-	0.079	-	-	0.037
HCM Control Delay (s/veh)	22.1	35.6	-	-	29.5	-	-	19.6
HCM Lane LOS	C	E	-	-	D	-	-	C
HCM 95th %tile Q(veh)	0.5	1.3	-	-	0.3	-	-	0.1

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	144	1382	242	278	1109	137	279	487	729	231	343	148
Future Volume (vph)	144	1382	242	278	1109	137	279	487	729	231	343	148
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
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)	12.0	47.0	11.5	12.0	47.0	11.5	11.5	48.5	12.0	11.5	48.5	12.0
Total Split (s)	30.0	54.0	25.0	30.0	54.0	25.0	25.0	51.0	30.0	25.0	51.0	30.0
Total Split (%)	18.8%	33.8%	15.6%	18.8%	33.8%	15.6%	15.6%	31.9%	18.8%	15.6%	31.9%	18.8%
Yellow Time (s)	5.0	5.0	4.5	5.0	5.0	4.5	4.5	4.5	5.0	4.5	4.5	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	6.5	7.0	7.0	6.5	6.5	6.5	7.0	6.5	6.5	7.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effct Green (s)	12.4	67.2	91.5	20.5	75.2	98.3	17.3	29.3	56.2	16.1	28.0	47.0
Actuated g/C Ratio	0.08	0.42	0.57	0.13	0.47	0.61	0.11	0.18	0.35	0.10	0.18	0.29
v/c Ratio	0.56	0.68	0.26	0.66	0.48	0.14	0.79	0.79	0.74	0.70	0.58	0.30
Control Delay (s/veh)	79.3	41.5	8.3	73.8	31.4	2.6	85.3	71.5	45.2	80.8	63.7	22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.3	41.5	8.3	73.8	31.4	2.6	85.3	71.5	45.2	80.8	63.7	22.8
LOS	E	D	A	E	C	A	F	E	D	F	E	C
Approach Delay (s/veh)		40.1			36.6			61.3			60.8	
Approach LOS		D			D			E			E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 68 (43%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 47.6

Intersection LOS: D

Intersection Capacity Utilization 77.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Rock Island Rd & Sample Rd

	Ø1		Ø2 (R)		Ø3		Ø4
30 s		54 s		25 s		51 s	
	Ø5		Ø6 (R)		Ø7		Ø8
30 s		54 s		25 s		51 s	

Queues

4: Rock Island Rd & Sample Rd

EX AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	152	1455	255	293	1167	144	294	513	767	243	361	156
v/c Ratio	0.56	0.68	0.26	0.66	0.48	0.14	0.79	0.79	0.74	0.70	0.58	0.30
Control Delay (s/veh)	79.3	41.5	8.3	73.8	31.4	2.6	85.3	71.5	45.2	80.8	63.7	22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.3	41.5	8.3	73.8	31.4	2.6	85.3	71.5	45.2	80.8	63.7	22.8
Queue Length 50th (ft)	80	454	46	153	306	0	156	273	365	128	185	66
Queue Length 95th (ft)	118	594	118	197	404	34	210	323	396	176	226	117
Internal Link Dist (ft)		985			2330			779			1017	
Turn Bay Length (ft)	280		250	360		300	300		320	180		220
Base Capacity (vph)	493	2134	982	507	2389	1049	396	984	1080	396	984	615
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.68	0.26	0.58	0.49	0.14	0.74	0.52	0.71	0.61	0.37	0.25
Intersection Summary												

HCM 7th Signalized Intersection Summary

4: Rock Island Rd & Sample Rd

EX AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	1382	242	278	1109	137	279	487	729	231	343	148
Future Volume (veh/h)	144	1382	242	278	1109	137	279	487	729	231	343	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	152	1455	255	293	1167	144	294	513	767	243	361	156
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	1938	757	345	2150	801	340	952	1026	291	902	494
Arrive On Green	0.06	0.38	0.38	0.10	0.42	0.42	0.10	0.27	0.27	0.08	0.25	0.25
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	2790	3456	3554	1585
Grp Volume(v), veh/h	152	1455	255	293	1167	144	294	513	767	243	361	156
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1395	1728	1777	1585
Q Serve(g_s), s	6.9	39.6	16.0	13.3	27.4	7.9	13.4	19.8	38.4	11.1	13.5	12.0
Cycle Q Clear(g_c), s	6.9	39.6	16.0	13.3	27.4	7.9	13.4	19.8	38.4	11.1	13.5	12.0
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	1938	757	345	2150	801	340	952	1026	291	902	494
V/C Ratio(X)	0.76	0.75	0.34	0.85	0.54	0.18	0.87	0.54	0.75	0.84	0.40	0.32
Avail Cap(c_a), veh/h	497	1938	757	497	2150	801	400	988	1054	400	988	533
HCM Platoon Ratio	1.00	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	74.2	43.1	26.0	70.8	34.8	21.5	71.1	50.1	44.1	72.2	49.6	42.0
Incr Delay (d2), s/veh	5.7	2.7	1.2	9.3	1.0	0.5	15.8	0.5	2.9	10.6	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	3.3	17.2	6.4	6.4	11.7	3.1	6.7	9.0	13.7	5.4	6.1	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	80.0	45.8	27.2	80.1	35.7	22.0	86.9	50.7	47.0	82.8	49.9	42.4
LnGrp LOS	E	D	C	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h	1862			1604			1574			760		
Approach Delay, s/veh	46.1			42.6			55.7			58.9		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.3	74.4	20.0	49.4	23.0	67.7	22.2	47.1				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	23.0	47.0	18.5	44.5	23.0	47.0	18.5	44.5				
Max Q Clear Time (g_c+I1), s	8.9	29.4	13.1	40.4	15.3	41.6	15.4	15.5				
Green Ext Time (p_c), s	0.4	8.4	0.4	2.5	0.6	4.2	0.3	3.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	49.4											
HCM 7th LOS	D											

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	1	120	23	0	40	16	1321	13	36	742	47
Future Vol, veh/h	139	1	120	23	0	40	16	1321	13	36	742	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	0	-	-	220	-	170	180	-	150
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	146	1	126	24	0	42	17	1391	14	38	781	49
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1586	2295	391	1891	2331	695	831	0	0	1404	0	0
Stage 1	857	857	-	1424	1424	-	-	-	-	-	-	-
Stage 2	729	1438	-	467	906	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 103	40	*880	*54	37	384	997	-	-	482	-	-
Stage 1	512	507	-	*143	200	-	-	-	-	-	-	-
Stage 2	380	197	-	*830	477	-	-	-	-	-	-	-
Platoon blocked, %	0	0	0	0	0	0	0	-	-	-	-	-
Mov Cap-1 Maneuver	~ 83	36	*880	*42	34	384	997	-	-	482	-	-
Mov Cap-2 Maneuver	201	118	-	*115	135	-	-	-	-	-	-	-
Stage 1	472	467	-	*140	196	-	-	-	-	-	-	-
Stage 2	333	193	-	*654	439	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v37.34			26.05		0.1		0.57					
HCM LOS	E		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	997	-	-	200	880	115	384	482	-	-		
HCM Lane V/C Ratio	0.017	-	-	0.736	0.143	0.21	0.11	0.079	-	-		
HCM Control Delay (s/veh)	8.7	-	-	61	9.8	44.4	15.5	13.1	-	-		
HCM Lane LOS	A	-	-	F	A	E	C	B	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	4.8	0.5	0.7	0.4	0.3	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	150	1	8	44	18	0	0	19	66	0	1
Future Vol, veh/h	0	150	1	8	44	18	0	0	19	66	0	1
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	158	1	8	46	19	0	0	20	69	0	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	65	0	0	159	0	0	222	241	158	231	232	56
Stage 1	-	-	-	-	-	-	158	158	-	73	73	-
Stage 2	-	-	-	-	-	-	63	82	-	158	159	-
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	1537	-	-	1420	-	-	734	661	887	724	668	1011
Stage 1	-	-	-	-	-	-	844	767	-	937	834	-
Stage 2	-	-	-	-	-	-	948	827	-	844	766	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1537	-	-	1420	-	-	729	657	887	704	664	1011
Mov Cap-2 Maneuver	-	-	-	-	-	-	729	657	-	704	664	-
Stage 1	-	-	-	-	-	-	844	767	-	931	829	-
Stage 2	-	-	-	-	-	-	941	822	-	825	766	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.86			9.15			10.66		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	887	1537	-	-	194	-	-	707				
HCM Lane V/C Ratio	0.023	-	-	-	0.006	-	-	0.1				
HCM Control Delay (s/veh)	9.2	0	-	-	7.5	0	-	10.7				
HCM Lane LOS	A	A	-	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3				

HCM 7th TWSC
7: New Connection #3 & Holiday Springs Dr

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Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	0	0	105	2	3	87
Future Vol, veh/h	0	0	105	2	3	87
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	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	111	2	3	92

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	164	56	0
Stage 1	112	-	-
Stage 2	52	-	-
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	811	998	-
Stage 1	901	-	-
Stage 2	964	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	809	998	-
Mov Cap-2 Maneuver	809	-	-
Stage 1	901	-	-
Stage 2	962	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0.25
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1475	-
HCM Lane V/C Ratio	-	-	0.002	-
HCM Control Delay (s/veh)	-	-	0	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	-

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	0	7	99	0	128	7	1198	41	62	807	5
Future Vol, veh/h	16	0	7	99	0	128	7	1198	41	62	807	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	200	210	-	140
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	0	7	104	0	135	7	1261	43	65	849	5
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1625	2299	425	1831	2261	631	855	0	0	1304	0	0
Stage 1	980	980	-	1276	1276	-	-	-	-	-	-	-
Stage 2	645	1319	-	555	985	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	101	40	*854	*~ 65	43	424	1012	-	-	527	-	-
Stage 1	449	456	-	*176	236	-	-	-	-	-	-	-
Stage 2	427	225	-	*805	453	-	-	-	-	-	-	-
Platoon blocked, %	0	0	0	0	0	0	-	-	-	-	-	-
Mov Cap-1 Maneuver	60	35	*854	*~ 56	37	424	1012	-	-	527	-	-
Mov Cap-2 Maneuver	155	116	-	*143	149	-	-	-	-	-	-	-
Stage 1	393	400	-	*175	234	-	-	-	-	-	-	-
Stage 2	289	223	-	*699	397	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	24.4		44.32		0.05		0.91					
HCM LOS	C		E									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	1012	-	-	155	854	143	424	527	-	-		
HCM Lane V/C Ratio	0.007	-	-	0.109	0.009	0.731	0.318	0.124	-	-		
HCM Control Delay (s/veh)	8.6	-	-	31	9.3	79.1	17.4	12.8	-	-		
HCM Lane LOS	A	-	-	D	A	F	C	B	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.4	0	4.3	1.3	0.4	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⬇			⬆			⬆			⬆	
Traffic Vol, veh/h	2	51	2	5	22	19	0	0	38	78	1	9
Future Vol, veh/h	2	51	2	5	22	19	0	0	38	78	1	9
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	54	2	5	23	20	0	0	40	82	1	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	56	0	0	93	113	55	102	104	33
Stage 1	-	-	-	-	-	-	59	59	-	44	44	-
Stage 2	-	-	-	-	-	-	34	54	-	58	60	-
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	1565	-	-	1549	-	-	890	778	1012	879	786	1040
Stage 1	-	-	-	-	-	-	953	846	-	970	859	-
Stage 2	-	-	-	-	-	-	982	850	-	954	845	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1549	-	-	877	774	1012	840	783	1040
Mov Cap-2 Maneuver	-	-	-	-	-	-	877	774	-	840	783	-
Stage 1	-	-	-	-	-	-	951	845	-	967	856	-
Stage 2	-	-	-	-	-	-	968	847	-	915	844	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.27			0.8			8.7			9.71		
HCM LOS							A			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	1012	65	-	-	179	-	-	857				
HCM Lane V/C Ratio	0.04	0.001	-	-	0.003	-	-	0.108				
HCM Control Delay (s/veh)	8.7	7.3	0	-	7.3	0	-	9.7				
HCM Lane LOS	A	A	A	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4				

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	75	1	94	15	0	20	12	1154	8	5	880	28
Future Vol, veh/h	75	1	94	15	0	20	12	1154	8	5	880	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	230	-	230	250	-	250
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	79	1	99	16	0	21	13	1215	8	5	926	29
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1569	2185	463	1714	2206	607	956	0	0	1223	0	0
Stage 1	937	937	-	1240	1240	-	-	-	-	-	-	-
Stage 2	633	1248	-	474	966	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 75	45	546	58	44	439	715	-	-	566	-	-
Stage 1	285	342	-	186	245	-	-	-	-	-	-	-
Stage 2	435	243	-	540	331	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 69	44	546	46	43	439	715	-	-	566	-	-
Mov Cap-2 Maneuver	182	145	-	133	144	-	-	-	-	-	-	-
Stage 1	282	338	-	182	241	-	-	-	-	-	-	-
Stage 2	406	239	-	437	328	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v24.79			23.02		0.1		0.06					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	715	-	-	182	530	133	439	566	-	-		
HCM Lane V/C Ratio	0.018	-	-	0.435	0.189	0.118	0.048	0.009	-	-		
HCM Control Delay (s/veh)	10.1	-	-	39.3	13.4	35.6	13.6	11.4	-	-		
HCM Lane LOS	B	-	-	E	B	E	B	B	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	2	0.7	0.4	0.2	0	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon						

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	128	66	6	16	9
Future Vol, veh/h	10	128	66	6	16	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	170	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	135	69	6	17	9
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	76	0	-	0	161	38
Stage 1	-	-	-	-	73	-
Stage 2	-	-	-	-	88	-
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	1521	-	-	-	814	1026
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	925	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1521	-	-	-	808	1026
Mov Cap-2 Maneuver	-	-	-	-	808	-
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	925	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.53	0		9.24		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1521	-	-	-	875	
HCM Lane V/C Ratio	0.007	-	-	-	0.03	
HCM Control Delay (s/veh)	7.4	-	-	-	9.2	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings

13: Rock Island Rd & Holiday Springs Blvd

EX AM

07/02/2024

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	35	1	152	5	0	70	1088	17	10	1008	17
Future Volume (vph)	35	1	152	5	0	70	1088	17	10	1008	17
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8	5	2			6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	4	4	4	8	8	5	2	2	6	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)	39.5	39.5	39.5	42.5	42.5	11.5	32.5	32.5	32.5	32.5	32.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	12.0	50.0	50.0	38.0	38.0	38.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	15.0%	62.5%	62.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?						Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	Min	Min	Min
Act Effect Green (s)	7.3	7.3	7.3	7.3	7.3	35.6	35.6	35.6	29.2	29.2	29.2
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13	0.63	0.63	0.63	0.52	0.52	0.52
v/c Ratio	0.20	0.00	0.46	0.02	0.03	0.21	0.51	0.01	0.04	0.57	0.02
Control Delay (s/veh)	27.1	24.0	10.0	24.4	0.1	5.4	6.5	0.4	10.1	12.3	0.0
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 (s/veh)	27.1	24.0	10.0	24.4	0.1	5.4	6.5	0.4	10.1	12.3	0.0
LOS	C	C	B	C	A	A	A	A	B	B	A
Approach Delay (s/veh)		13.3			7.3		6.4			12.1	
Approach LOS		B			A		A			B	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 56.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay (s/veh): 9.4

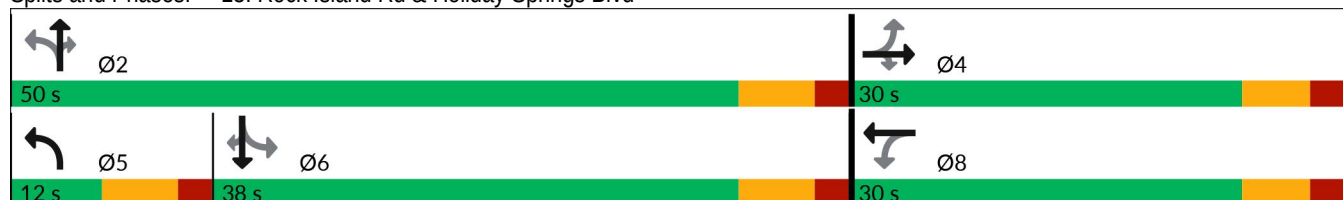
Intersection LOS: A

Intersection Capacity Utilization 59.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 13: Rock Island Rd & Holiday Springs Blvd



13: Rock Island Rd & Holiday Springs Blvd

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Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	37	1	160	5	12	74	1145	18	11	1061	18
v/c Ratio	0.20	0.00	0.46	0.02	0.03	0.21	0.51	0.01	0.04	0.57	0.02
Control Delay (s/veh)	27.1	24.0	10.0	24.4	0.1	5.4	6.5	0.4	10.1	12.3	0.0
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 (s/veh)	27.1	24.0	10.0	24.4	0.1	5.4	6.5	0.4	10.1	12.3	0.0
Queue Length 50th (ft)	12	0	0	2	0	8	87	0	2	144	0
Queue Length 95th (ft)	37	4	46	10	0	21	146	2	10	222	0
Internal Link Dist (ft)	2605				671	840				1231	
Turn Bay Length (ft)	175					230	170		250	220	
Base Capacity (vph)	597	796	768	602	754	343	2799	1262	264	2027	964
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.00	0.21	0.01	0.02	0.22	0.41	0.01	0.04	0.52	0.02

Intersection Summary

HCM 7th Signalized Intersection Summary

13: Rock Island Rd & Holiday Springs Blvd

EX AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1	152	5	0	11	70	1088	17	10	1008	17
Future Volume (veh/h)	35	1	152	5	0	11	70	1088	17	10	1008	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	1	160	5	0	12	74	1145	18	11	1061	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	323	260	220	308	0	220	344	2174	970	343	1507	672
Arrive On Green	0.14	0.14	0.14	0.14	0.00	0.14	0.06	0.61	0.61	0.42	0.42	0.42
Sat Flow, veh/h	1402	1870	1585	1225	0	1585	1781	3554	1585	483	3554	1585
Grp Volume(v), veh/h	37	1	160	5	0	12	74	1145	18	11	1061	18
Grp Sat Flow(s),veh/h/ln	1402	1870	1585	1225	0	1585	1781	1777	1585	483	1777	1585
Q Serve(g_s), s	1.2	0.0	5.0	0.2	0.0	0.3	1.1	9.6	0.2	0.7	12.8	0.3
Cycle Q Clear(g_c), s	1.6	0.0	5.0	0.2	0.0	0.3	1.1	9.6	0.2	0.7	12.8	0.3
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	323	260	220	308	0	220	344	2174	970	343	1507	672
V/C Ratio(X)	0.11	0.00	0.73	0.02	0.00	0.05	0.22	0.53	0.02	0.03	0.70	0.03
Avail Cap(c_a), veh/h	761	843	714	690	0	714	420	2965	1323	430	2147	958
HCM Platoon Ratio	1.00	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	19.3	21.5	19.4	0.0	19.5	8.6	5.8	4.0	8.8	12.3	8.7
Incr Delay (d2), s/veh	0.2	0.0	4.6	0.0	0.0	0.1	0.3	0.2	0.0	0.0	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	0.4	0.0	2.0	0.0	0.0	0.1	0.3	2.4	0.1	0.1	4.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.3	19.4	26.1	19.5	0.0	19.6	8.9	6.0	4.0	8.9	12.9	8.8
LnGrp LOS	C	B	C	B		B	A	A	A	A	B	A
Approach Vol, veh/h	198			17			1237			1090		
Approach Delay, s/veh	25.0			19.5			6.1			12.8		
Approach LOS	C			B			A			B		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	38.4			13.7		9.8	28.6	13.7				
Change Period (Y+Rc), s	6.5			6.5		6.5	6.5	6.5				
Max Green Setting (Gmax), s	43.5			23.5		5.5	31.5	23.5				
Max Q Clear Time (g_c+I1), s	11.6			7.0		3.1	14.8	2.3				
Green Ext Time (p_c), s	10.5			0.5		0.0	7.3	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	10.6											
HCM 7th LOS	B											
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings 14: Royal Palm Blvd & Riverside Dr

EX AM
07/02/2024

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	217	923	428	161	750	354	696	265	243	665
Future Volume (vph)	217	923	428	161	750	354	696	265	243	665
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
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
Minimum Split (s)	11.5	36.5	36.5	11.5	36.5	11.5	37.5	37.5	11.5	37.5
Total Split (s)	30.0	61.0	61.0	30.0	61.0	28.0	41.0	41.0	28.0	41.0
Total Split (%)	18.8%	38.1%	38.1%	18.8%	38.1%	17.5%	25.6%	25.6%	17.5%	25.6%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)	79.9	59.7	59.7	69.7	54.6	61.0	38.1	38.1	55.5	34.5
Actuated g/C Ratio	0.50	0.37	0.37	0.44	0.34	0.38	0.24	0.24	0.35	0.22
v/c Ratio	0.83	0.73	0.55	0.65	0.87	1.18	0.87	0.47	0.90	1.30
Control Delay (s/veh)	67.0	47.4	10.1	29.2	62.2	150.9	70.8	8.1	78.8	191.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.0	47.4	10.1	29.2	62.2	150.9	70.8	8.1	78.8	191.1
LOS	E	D	B	C	E	F	E	A	E	F
Approach Delay (s/veh)		40.0			57.6		79.8			168.0
Approach LOS		D			E		E			F

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 112 (70%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay (s/veh): 82.9

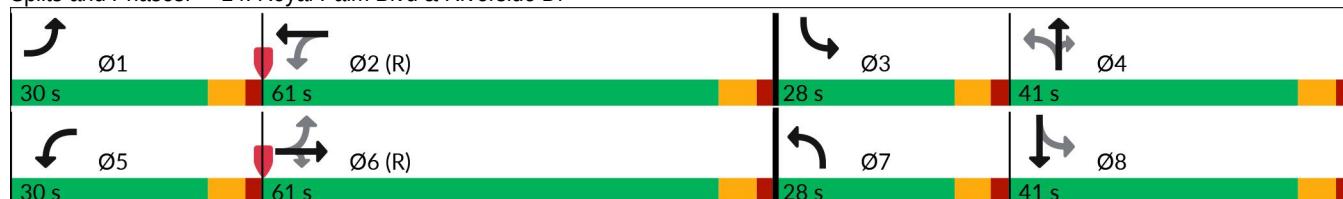
Intersection LOS: F

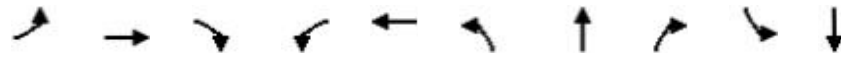
Intersection Capacity Utilization 108.6%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 14: Royal Palm Blvd & Riverside Dr





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	228	972	451	169	1036	373	733	279	256	985
v/c Ratio	0.83	0.73	0.55	0.65	0.87	1.18	0.87	0.47	0.90	1.30
Control Delay (s/veh)	67.0	47.4	10.1	29.2	62.2	150.9	70.8	8.1	78.8	191.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.0	47.4	10.1	29.2	62.2	150.9	70.8	8.1	78.8	191.1
Queue Length 50th (ft)	174	442	56	138	573	~460	403	0	211	~678
Queue Length 95th (ft)	#290	564	173	m92	654	#678	#534	81	#379	#819
Internal Link Dist (ft)		1554			4475		1024			1484
Turn Bay Length (ft)	260		280	370		190		325	200	
Base Capacity (vph)	306	1321	820	349	1190	316	842	589	290	757
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.74	0.55	0.48	0.87	1.18	0.87	0.47	0.88	1.30

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.

HCM 7th Signalized Intersection Summary

14: Royal Palm Blvd & Riverside Dr

EX AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	923	428	161	750	235	354	696	265	243	665	271
Future Volume (veh/h)	217	923	428	161	750	235	354	696	265	243	665	271
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	228	972	451	169	789	247	373	733	279	256	700	285
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	284	1482	661	245	1057	331	284	802	358	280	531	216
Arrive On Green	0.09	0.42	0.42	0.07	0.40	0.40	0.13	0.23	0.23	0.12	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	2664	834	1781	3554	1585	1781	2464	1003
Grp Volume(v), veh/h	228	972	451	169	526	510	373	733	279	256	505	480
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1720	1781	1777	1585	1781	1777	1690
Q Serve(g_s), s	12.0	35.1	37.1	8.9	40.6	40.6	21.5	32.2	26.5	17.7	34.5	34.5
Cycle Q Clear(g_c), s	12.0	35.1	37.1	8.9	40.6	40.6	21.5	32.2	26.5	17.7	34.5	34.5
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	284	1482	661	245	705	683	284	802	358	280	383	364
V/C Ratio(X)	0.80	0.66	0.68	0.69	0.75	0.75	1.31	0.91	0.78	0.91	1.32	1.32
Avail Cap(c_a), veh/h	385	1482	661	381	705	683	284	802	358	298	383	364
HCM Platoon Ratio	1.00	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	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	37.4	38.0	30.8	41.3	41.3	51.1	60.4	58.2	44.3	62.7	62.8
Incr Delay (d2), s/veh	8.5	2.3	5.6	2.5	5.2	5.4	163.2	14.8	10.5	30.1	160.3	161.2
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	15.9	15.5	4.0	18.9	18.3	21.7	16.2	11.7	10.2	32.7	31.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.3	39.7	43.6	33.4	46.6	46.7	214.3	75.2	68.7	74.4	223.1	223.9
LnGrp LOS	D	D	D	C	D	D	F	E	E	E	F	F
Approach Vol, veh/h	1651			1205			1385			1241		
Approach Delay, s/veh	41.0			44.8			111.4			192.7		
Approach LOS	D			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.0	70.0	26.4	42.6	17.8	73.2	28.0	41.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	23.5	54.5	21.5	34.5	23.5	54.5	21.5	34.5				
Max Q Clear Time (g_c+I1), s	14.0	42.6	19.7	34.2	10.9	39.1	23.5	36.5				
Green Ext Time (p_c), s	0.4	5.4	0.1	0.2	0.3	7.8	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	94.0											
HCM 7th LOS	F											

Timings

15: Royal Palm Blvd & Rock Island Rd

EX AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	222	784	89	265	723	285	82	679	405	266	608	93
Future Volume (vph)	222	784	89	265	723	285	82	679	405	266	608	93
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	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)	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5
Total Split (s)	32.0	46.0	46.0	28.0	42.0	42.0	26.0	60.0	60.0	26.0	60.0	60.0
Total Split (%)	20.0%	28.8%	28.8%	17.5%	26.3%	26.3%	16.3%	37.5%	37.5%	16.3%	37.5%	37.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effect Green (s)	16.2	43.5	43.5	18.2	45.5	45.5	67.1	59.5	59.5	77.4	64.7	64.7
Actuated g/C Ratio	0.10	0.27	0.27	0.11	0.28	0.28	0.42	0.37	0.37	0.48	0.40	0.40
v/c Ratio	0.67	0.85	0.18	0.71	0.75	0.53	0.13	0.54	0.53	0.45	0.44	0.13
Control Delay (s/veh)	58.5	58.6	16.6	78.6	57.7	26.8	23.3	42.6	12.2	25.7	36.8	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.5	58.6	16.6	78.6	57.7	26.8	23.3	42.6	12.2	25.7	36.8	4.0
LOS	E	E	B	E	E	C	C	D	B	C	D	A
Approach Delay (s/veh)		55.2			55.2			30.8			30.6	
Approach LOS		E			E			C			C	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 43.6

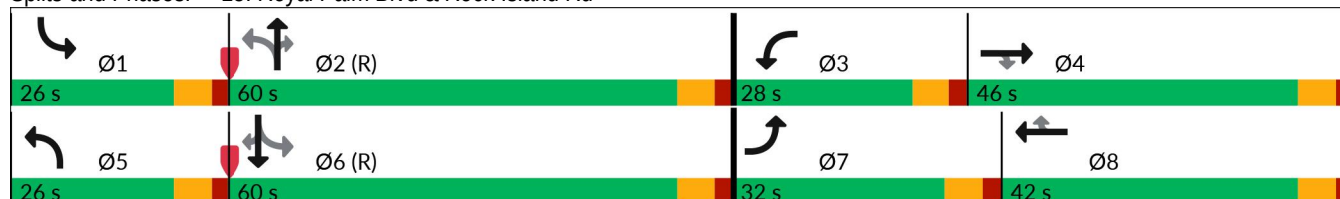
Intersection LOS: D

Intersection Capacity Utilization 77.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 15: Royal Palm Blvd & Rock Island Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	234	825	94	279	761	300	86	715	426	280	640	98
v/c Ratio	0.67	0.85	0.18	0.71	0.75	0.53	0.13	0.54	0.53	0.45	0.44	0.13
Control Delay (s/veh)	58.5	58.6	16.6	78.6	57.7	26.8	23.3	42.6	12.2	25.7	36.8	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.5	58.6	16.6	78.6	57.7	26.8	23.3	42.6	12.2	25.7	36.8	4.0
Queue Length 50th (ft)	125	467	29	147	373	127	24	320	72	85	264	0
Queue Length 95th (ft)	m169	m#580	m54	193	476	240	40	393	184	113	321	30
Internal Link Dist (ft)		4475			2131			1468			840	
Turn Bay Length (ft)	340		170	210		150	220		190	220		250
Base Capacity (vph)	547	966	514	467	1006	558	864	1330	800	729	1431	706
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.85	0.18	0.60	0.76	0.54	0.10	0.54	0.53	0.38	0.45	0.14

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.

HCM 7th Signalized Intersection Summary 15: Royal Palm Blvd & Rock Island Rd

EX AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	784	89	265	723	285	82	679	405	266	608	93
Future Volume (veh/h)	222	784	89	265	723	285	82	679	405	266	608	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	825	94	279	761	300	86	715	426	280	640	98
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	287	869	388	329	913	407	685	1552	692	583	1660	740
Arrive On Green	0.08	0.24	0.24	0.10	0.26	0.26	0.03	0.44	0.44	0.06	0.47	0.47
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	234	825	94	279	761	300	86	715	426	280	640	98
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	10.7	36.5	7.6	12.7	32.4	27.8	2.2	22.7	33.1	7.1	18.7	5.6
Cycle Q Clear(g_c), s	10.7	36.5	7.6	12.7	32.4	27.8	2.2	22.7	33.1	7.1	18.7	5.6
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	287	869	388	329	913	407	685	1552	692	583	1660	740
V/C Ratio(X)	0.82	0.95	0.24	0.85	0.83	0.74	0.13	0.46	0.62	0.48	0.39	0.13
Avail Cap(c_a), veh/h	551	877	391	464	913	407	1000	1552	692	793	1660	740
HCM Platoon Ratio	1.00	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)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	72.2	59.5	48.5	71.2	56.2	54.5	23.9	31.8	34.7	24.1	27.7	24.2
Incr Delay (d2), s/veh	3.6	13.8	0.2	9.9	6.7	6.9	0.1	1.0	4.1	0.5	0.5	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	4.9	18.2	3.1	6.1	15.4	11.9	0.9	10.1	13.7	3.0	8.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	75.8	73.3	48.7	81.1	62.9	61.4	24.0	32.8	38.8	24.6	28.3	24.5
LnGrp LOS	E	E	D	F	E	E	C	C	D	C	C	C
Approach Vol, veh/h	1153		1340				1227		1018			
Approach Delay, s/veh	71.8		66.4				34.2		26.9			
Approach LOS	E		E				C		C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.3	76.4	21.7	45.6	11.4	81.2	19.8	47.6				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	19.5	53.5	21.5	39.5	19.5	53.5	25.5	35.5				
Max Q Clear Time (g_c+I1), s	9.1	35.1	14.7	38.5	4.2	20.7	12.7	34.4				
Green Ext Time (p_c), s	0.7	6.4	0.5	0.6	0.2	5.3	0.6	0.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	50.9											
HCM 7th LOS	D											
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

1: Riverside Dr & Sample Rd

EX PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	168	1228	281	1249	134	464	366	128	627	175
Future Volume (vph)	168	1228	281	1249	134	464	366	128	627	175
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4		3	8	
Permitted Phases					4		4	8		8
Detector Phase	1	6	5	2	7	4	4	3	8	8
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
Minimum Split (s)	12.0	45.0	12.0	45.0	11.5	44.5	44.5	11.5	44.5	44.5
Total Split (s)	29.0	61.0	29.0	61.0	18.0	52.0	52.0	18.0	52.0	52.0
Total Split (%)	18.1%	38.1%	18.1%	38.1%	11.3%	32.5%	32.5%	11.3%	32.5%	32.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5	6.5
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	C-Min	None	C-Min	None	None	None	None	None	None
Act Effect Green (s)	20.2	52.8	31.4	64.0	48.9	37.6	37.6	48.8	37.5	37.5
Actuated g/C Ratio	0.13	0.33	0.20	0.40	0.31	0.24	0.24	0.31	0.23	0.23
v/c Ratio	0.79	0.85	0.85	0.72	0.72	0.58	0.62	0.52	0.79	0.37
Control Delay (s/veh)	92.2	55.8	75.5	28.9	58.4	56.7	13.5	43.9	64.9	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.2	55.8	75.5	28.9	58.4	56.7	13.5	43.9	64.9	13.0
LOS	F	E	E	C	E	E	B	D	E	B
Approach Delay (s/veh)		59.9		36.8		40.6			52.3	
Approach LOS		E		D		D			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 47.3

Intersection LOS: D

Intersection Capacity Utilization 89.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Riverside Dr & Sample Rd



Queues

1: Riverside Dr & Sample Rd

EX PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	177	1429	296	1449	141	488	385	135	660	184
v/c Ratio	0.79	0.85	0.85	0.72	0.72	0.58	0.62	0.52	0.79	0.37
Control Delay (s/veh)	92.2	55.8	75.5	28.9	58.4	56.7	13.5	43.9	64.9	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.2	55.8	75.5	28.9	58.4	56.7	13.5	43.9	64.9	13.0
Queue Length 50th (ft)	181	504	249	447	105	241	50	100	345	28
Queue Length 95th (ft)	#285	567	#569	620	#151	283	152	144	392	93
Internal Link Dist (ft)		903		1640		1956			490	
Turn Bay Length (ft)	370		420		275		430	300		200
Base Capacity (vph)	248	1700	346	2011	196	1006	683	259	1006	557
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.84	0.86	0.72	0.72	0.49	0.56	0.52	0.66	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Riverside Dr & Sample Rd

EX PM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	1228	129	281	1249	127	134	464	366	128	627	175
Future Volume (veh/h)	168	1228	129	281	1249	127	134	464	366	128	627	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	177	1293	136	296	1315	134	141	488	385	135	660	184
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	199	1702	179	245	1830	186	230	936	418	258	928	414
Arrive On Green	0.11	0.36	0.36	0.18	0.52	0.52	0.07	0.26	0.26	0.07	0.26	0.26
Sat Flow, veh/h	1781	4692	494	1781	4708	480	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	177	938	491	296	951	498	141	488	385	135	660	184
Grp Sat Flow(s),veh/h/ln	1781	1702	1782	1781	1702	1784	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	15.7	38.8	38.8	22.0	34.3	34.3	9.2	18.8	37.8	8.8	27.0	15.5
Cycle Q Clear(g_c), s	15.7	38.8	38.8	22.0	34.3	34.3	9.2	18.8	37.8	8.8	27.0	15.5
Prop In Lane	1.00		0.28	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	1235	646	245	1323	693	230	936	418	258	928	414
V/C Ratio(X)	0.89	0.76	0.76	1.21	0.72	0.72	0.61	0.52	0.92	0.52	0.71	0.44
Avail Cap(c_a), veh/h	245	1235	646	245	1323	693	233	1011	451	266	1011	451
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.1	44.8	44.8	65.4	31.9	31.9	41.8	50.3	57.3	40.4	53.7	49.4
Incr Delay (d2), s/veh	26.9	4.4	8.2	117.1	2.3	4.4	4.6	0.5	23.5	1.7	2.1	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	8.7	17.2	18.7	17.7	13.8	14.8	4.4	8.5	17.9	4.1	12.4	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	97.0	49.3	53.0	182.4	34.2	36.3	46.4	50.8	80.9	42.1	55.8	50.2
LnGrp LOS	F	D	D	F	C	D	D	D	F	D	E	D
Approach Vol, veh/h	1606			1745			1014			979		
Approach Delay, s/veh	55.7			60.0			61.6			52.9		
Approach LOS	E			E			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.9	69.2	17.3	48.6	29.0	65.0	17.7	48.3				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	22.0	54.0	11.5	45.5	22.0	54.0	11.5	45.5				
Max Q Clear Time (g_c+I1), s	17.7	36.3	10.8	39.8	24.0	40.8	11.2	29.0				
Green Ext Time (p_c), s	0.2	9.6	0.0	2.3	0.0	7.9	0.0	4.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	57.7											
HCM 7th LOS	E											

Timings 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

EX PM
07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	150	1484	95	1492	99	56	139	67
Future Volume (vph)	150	1484	95	1492	99	56	139	67
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	34.0	12.0	34.0	11.5	42.0	11.5	40.0
Total Split (s)	22.0	71.0	22.0	71.0	25.0	42.0	25.0	42.0
Total Split (%)	13.8%	44.4%	13.8%	44.4%	15.6%	26.3%	15.6%	26.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0
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-Min	None	C-Min	None	None	None	None
Act Effect Green (s)	21.9	89.6	14.3	82.0	27.2	14.1	33.0	17.0
Actuated g/C Ratio	0.14	0.56	0.09	0.51	0.17	0.09	0.21	0.11
v/c Ratio	0.65	0.57	0.63	0.69	0.41	0.68	0.58	0.41
Control Delay (s/veh)	62.1	26.6	65.0	57.1	54.4	70.7	60.4	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.1	26.6	65.0	57.1	54.4	70.7	60.4	28.5
LOS	E	C	E	E	D	E	E	C
Approach Delay (s/veh)		29.8		57.6		63.3		42.9
Approach LOS		C		E		E		D

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 84 (53%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay (s/veh): 45.0

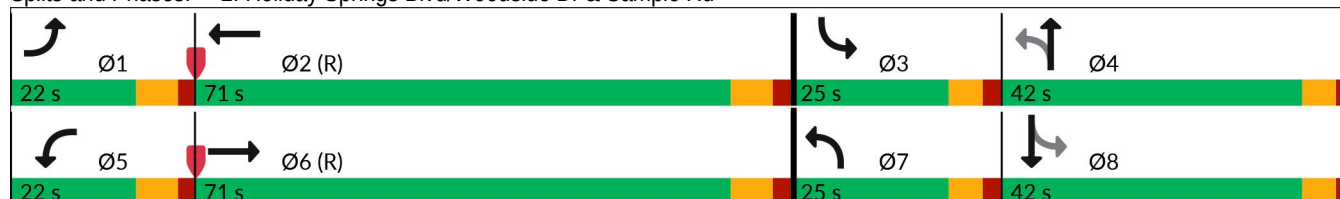
Intersection LOS: D

Intersection Capacity Utilization 77.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Holiday Springs Blvd/Woodside Dr & Sample Rd



2: Holiday Springs Blvd/Woodside Dr & Sample Rd

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	158	1621	100	1785	104	124	146	180
v/c Ratio	0.65	0.57	0.63	0.69	0.41	0.68	0.58	0.41
Control Delay (s/veh)	62.1	26.6	65.0	57.1	54.4	70.7	60.4	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	62.1	26.6	65.0	57.1	54.4	70.7	60.4	28.5
Queue Length 50th (ft)	121	587	104	555	90	95	129	36
Queue Length 95th (ft)	m163	661	m155	759	138	163	186	74
Internal Link Dist (ft)		1640		1203		306		335
Turn Bay Length (ft)	260		260				160	
Base Capacity (vph)	242	2836	179	2568	311	410	278	808
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.57	0.56	0.70	0.33	0.30	0.53	0.22

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

EX PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1484	56	95	1492	203	99	56	62	139	67	104
Future Volume (veh/h)	150	1484	56	95	1492	203	99	56	62	139	67	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	1562	59	100	1571	214	104	59	65	146	71	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	167	3005	113	120	2586	351	214	71	79	221	195	174
Arrive On Green	0.03	0.20	0.20	0.07	0.57	0.57	0.07	0.09	0.09	0.09	0.11	0.11
Sat Flow, veh/h	1781	5049	191	1781	4545	618	1781	813	896	1781	1777	1585
Grp Volume(v), veh/h	158	1053	568	100	1176	609	104	0	124	146	71	109
Grp Sat Flow(s),veh/h/ln	1781	1702	1836	1781	1702	1759	1781	0	1709	1781	1777	1585
Q Serve(g_s), s	14.2	44.3	44.3	8.9	36.4	36.6	8.4	0.0	11.4	11.8	5.9	10.5
Cycle Q Clear(g_c), s	14.2	44.3	44.3	8.9	36.4	36.6	8.4	0.0	11.4	11.8	5.9	10.5
Prop In Lane	1.00		0.10	1.00		0.35	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	167	2026	1093	120	1937	1001	214	0	150	221	195	174
V/C Ratio(X)	0.95	0.52	0.52	0.83	0.61	0.61	0.49	0.00	0.83	0.66	0.36	0.63
Avail Cap(c_a), veh/h	167	2026	1093	167	1937	1001	309	0	385	277	400	357
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.52	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.1	43.8	43.8	73.7	22.7	22.7	61.1	0.0	71.8	59.8	66.1	68.1
Incr Delay (d2), s/veh	36.2	0.5	0.9	21.2	1.4	2.8	1.7	0.0	10.8	4.0	1.1	3.7
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	8.5	20.5	22.3	4.8	15.0	15.9	3.9	0.0	5.5	5.6	2.8	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	113.3	44.3	44.8	94.9	24.1	25.5	62.8	0.0	82.6	63.8	67.2	71.8
LnGrp LOS	F	D	D	F	C	C	E		F	E	E	E
Approach Vol, veh/h	1779		1885			228			326			
Approach Delay, s/veh	50.6		28.3			73.6			67.2			
Approach LOS	D		C			E			E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	98.0	19.9	20.1	17.8	102.2	16.4	23.5				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	15.0	64.0	19.0	36.0	15.0	64.0	19.0	36.0				
Max Q Clear Time (g_c+I1), s	16.2	38.6	13.8	13.4	10.9	46.3	10.4	12.5				
Green Ext Time (p_c), s	0.0	15.2	0.2	0.6	0.1	10.8	0.1	1.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			43.2									
HCM 7th LOS			D									

HCM 7th TWSC
3: Belmonte Blvd & Sample Rd

EX PM
07/02/2024

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	13	1741	5	23	1720	22	0	0	14	0	0	14
Future Vol, veh/h	13	1741	5	23	1720	22	0	0	14	0	0	14
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	300	-	-	300	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1833	5	24	1811	23	0	0	15	0	0	15
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	1834	0	0	1838	0	0	-	-	919	-	-	917
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	152	-	-	151	-	-	0	0	235	0	0	236
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	152	-	-	151	-	-	-	-	235	-	-	236
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	0.23		0.43		21.35		21.3					
HCM LOS					C		C					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	235	152	-	-	151	-	-	236				
HCM Lane V/C Ratio	0.063	0.09	-	-	0.16	-	-	0.063				
HCM Control Delay (s/veh)	21.4	31.1	-	-	33.3	-	-	21.3				
HCM Lane LOS	C	D	-	-	D	-	-	C				
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0.6	-	-	0.2				

Timings

4: Rock Island Rd & Sample Rd

EX PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	1366	289	519	1701	126	194	299	397	108	426	99
Future Volume (vph)	134	1366	289	519	1701	126	194	299	397	108	426	99
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
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)	12.0	47.0	11.5	12.0	47.0	11.5	11.5	48.5	12.0	11.5	48.5	12.0
Total Split (s)	26.0	64.0	31.0	26.0	64.0	25.0	31.0	45.0	26.0	25.0	39.0	26.0
Total Split (%)	16.3%	40.0%	19.4%	16.3%	40.0%	15.6%	19.4%	28.1%	16.3%	15.6%	24.4%	16.3%
Yellow Time (s)	5.0	5.0	4.5	5.0	5.0	4.5	4.5	4.5	5.0	4.5	4.5	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	6.5	7.0	7.0	6.5	6.5	6.5	7.0	6.5	6.5	7.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	11.9	56.6	78.5	35.8	80.5	98.2	14.8	29.9	72.2	10.7	25.8	44.2
Actuated g/C Ratio	0.07	0.35	0.49	0.22	0.50	0.61	0.09	0.19	0.45	0.07	0.16	0.28
v/c Ratio	0.55	0.79	0.37	0.71	0.70	0.13	0.64	0.47	0.31	0.49	0.78	0.21
Control Delay (s/veh)	86.8	31.3	5.5	63.6	33.8	3.4	78.4	77.7	18.8	79.2	74.5	15.4
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 (s/veh)	86.8	31.3	5.5	63.6	33.8	3.4	78.4	77.7	18.8	79.2	74.5	15.4
LOS	F	C	A	E	C	A	E	E	B	E	E	B
Approach Delay (s/veh)		31.4			38.8			51.6			66.1	
Approach LOS		C			D			D			E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 104 (65%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 41.5

Intersection LOS: D

Intersection Capacity Utilization 81.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Rock Island Rd & Sample Rd

	Ø1		Ø2 (R)		Ø3		Ø4
26 s		64 s		25 s		45 s	
	Ø5		Ø6 (R)		Ø7		Ø8
26 s		64 s		31 s		39 s	

Queues

4: Rock Island Rd & Sample Rd

EX PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	141	1438	304	546	1791	133	204	315	418	114	448	104
v/c Ratio	0.55	0.79	0.37	0.71	0.70	0.13	0.64	0.47	0.31	0.49	0.78	0.21
Control Delay (s/veh)	86.8	31.3	5.5	63.6	33.8	3.4	78.4	77.7	18.8	79.2	74.5	15.4
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 (s/veh)	86.8	31.3	5.5	63.6	33.8	3.4	78.4	77.7	18.8	79.2	74.5	15.4
Queue Length 50th (ft)	79	129	10	275	515	4	113	172	71	60	241	25
Queue Length 95th (ft)	115	320	36	#428	675	38	151	221	151	93	291	70
Internal Link Dist (ft)		985			2330			779			1017	
Turn Bay Length (ft)	280		250	360		300	300		320	180		220
Base Capacity (vph)	407	1811	904	767	2558	1090	525	851	1331	396	718	555
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.79	0.34	0.71	0.70	0.12	0.39	0.37	0.31	0.29	0.62	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

4: Rock Island Rd & Sample Rd

EX PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	1366	289	519	1701	126	194	299	397	108	426	99
Future Volume (veh/h)	134	1366	289	519	1701	126	194	299	397	108	426	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	1438	304	546	1791	133	204	315	418	114	448	104
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	187	2492	891	410	2821	949	255	634	829	159	535	325
Arrive On Green	0.07	0.65	0.65	0.12	0.55	0.55	0.07	0.18	0.18	0.05	0.15	0.15
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	2790	3456	3554	1585
Grp Volume(v), veh/h	141	1438	304	546	1791	133	204	315	418	114	448	104
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1395	1728	1777	1585
Q Serve(g_s), s	6.4	25.3	12.4	19.0	38.7	5.9	9.3	12.8	19.8	5.2	19.6	8.9
Cycle Q Clear(g_c), s	6.4	25.3	12.4	19.0	38.7	5.9	9.3	12.8	19.8	5.2	19.6	8.9
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	187	2492	891	410	2821	949	255	634	829	159	535	325
V/C Ratio(X)	0.75	0.58	0.34	1.33	0.63	0.14	0.80	0.50	0.50	0.71	0.84	0.32
Avail Cap(c_a), veh/h	410	2492	891	410	2821	949	529	855	1003	400	722	408
HCM Platoon Ratio	1.33	1.33	1.33	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	73.2	18.8	12.4	70.5	24.7	14.1	72.9	59.3	46.5	75.3	66.1	54.1
Incr Delay (d2), s/veh	6.0	1.0	1.0	164.7	1.1	0.3	5.7	0.6	0.5	5.8	6.5	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	3.0	9.2	4.2	17.8	15.9	2.3	4.3	5.9	7.0	2.5	9.4	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.2	19.8	13.4	235.2	25.8	14.4	78.6	59.9	47.0	81.1	72.5	54.7
LnGrp LOS	E	B	B	F	C	B	E	E	D	F	E	D
Approach Vol, veh/h	1883			2470			937			666		
Approach Delay, s/veh	23.2			71.4			58.2			71.2		
Approach LOS	C			E			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.7	95.4	13.9	35.0	26.0	85.1	18.3	30.6				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	19.0	57.0	18.5	38.5	19.0	57.0	24.5	32.5				
Max Q Clear Time (g_c+I1), s	8.4	40.7	7.2	21.8	21.0	27.3	11.3	21.6				
Green Ext Time (p_c), s	0.3	11.8	0.2	3.5	0.0	14.8	0.5	2.5				
Intersection Summary												
HCM 7th Control Delay, s/veh				54.1								
HCM 7th LOS				D								
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	0	40	9	0	29	63	774	13	35	1011	167
Future Vol, veh/h	86	0	40	9	0	29	63	774	13	35	1011	167
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	0	-	-	220	-	170	180	-	150
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	0	42	9	0	31	66	815	14	37	1064	176
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1678	2099	532	1553	2261	407	1240	0	0	828	0	0
Stage 1	1138	1138	-	947	947	-	-	-	-	-	-	-
Stage 2	540	961	-	606	1314	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 62	51	*800	*77	40	593	709	-	-	799	-	-
Stage 1	397	409	-	*281	338	-	-	-	-	-	-	-
Stage 2	494	333	-	*755	319	-	-	-	-	-	-	-
Platoon blocked, %			0				0	-	-	-	-	-
Mov Cap-1 Maneuver	~ 51	44	*800	*63	35	593	709	-	-	799	-	-
Mov Cap-2 Maneuver	198	163	-	*187	138	-	-	-	-	-	-	-
Stage 1	379	390	-	*254	306	-	-	-	-	-	-	-
Stage 2	424	302	-	*682	304	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v28.79			14.68		0.79		0.28					
HCM LOS	D		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	709	-	-	198	800	187	593	799	-	-		
HCM Lane V/C Ratio	0.094	-	-	0.457	0.053	0.051	0.051	0.046	-	-		
HCM Control Delay (s/veh)	10.6	-	-	37.6	9.7	25.2	11.4	9.7	-	-		
HCM Lane LOS	B	-	-	E	A	D	B	A	-	-		
HCM 95th %tile Q(veh)	0.3	-	-	2.2	0.2	0.2	0.2	0.1	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⬇			⬆			⬆			⬆	
Traffic Vol, veh/h	1	92	2	16	137	55	0	0	12	34	1	0
Future Vol, veh/h	1	92	2	16	137	55	0	0	12	34	1	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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	97	2	17	144	58	0	0	13	36	1	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	202	0	0	99	0	0	278	336	98	306	308	173
Stage 1	-	-	-	-	-	-	100	100	-	207	207	-
Stage 2	-	-	-	-	-	-	178	236	-	99	101	-
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	1370	-	-	1494	-	-	674	585	958	647	606	870
Stage 1	-	-	-	-	-	-	906	812	-	795	731	-
Stage 2	-	-	-	-	-	-	823	710	-	907	811	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1370	-	-	1494	-	-	664	577	958	629	598	870
Mov Cap-2 Maneuver	-	-	-	-	-	-	664	577	-	629	598	-
Stage 1	-	-	-	-	-	-	905	812	-	785	721	-
Stage 2	-	-	-	-	-	-	812	701	-	895	811	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.08			0.57			8.81			11.08		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	958	19	-	-	131	-	-	628				
HCM Lane V/C Ratio	0.013	0.001	-	-	0.011	-	-	0.059				
HCM Control Delay (s/veh)	8.8	7.6	0	-	7.4	0	-	11.1				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2				

HCM 7th TWSC
7: New Connection #3 & Holiday Springs Dr

EX PM
07/02/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵		↕		↵	↕
Traffic Vol, veh/h	1	0	131	0	3	132
Future Vol, veh/h	1	0	131	0	3	132
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	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	138	0	3	139

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	214	69	0	0	138
Stage 1	138	-	-	-	-
Stage 2	76	-	-	-	-
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	755	980	-	-	1443
Stage 1	874	-	-	-	-
Stage 2	938	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	753	980	-	-	1443
Mov Cap-2 Maneuver	753	-	-	-	-
Stage 1	874	-	-	-	-
Stage 2	936	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.78	0	0.17
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	753	1443
HCM Lane V/C Ratio	-	-	0.001	0.002
HCM Control Delay (s/veh)	-	-	9.8	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 7th TWSC
8: New Connection #3 & Pinewalk Dr N

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Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			A
Traffic Vol, veh/h	1	3	22	1	6	14
Future Vol, veh/h	1	3	22	1	6	14
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	23	1	6	15

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	51	24	0
Stage 1	24	-	-
Stage 2	27	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	958	1053	-
Stage 1	999	-	-
Stage 2	995	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	954	1053	-
Mov Cap-2 Maneuver	954	-	-
Stage 1	999	-	-
Stage 2	991	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.52	0	2.18
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1026	540
HCM Lane V/C Ratio	-	-	0.004	0.004
HCM Control Delay (s/veh)	-	-	8.5	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	2	58	0	58	4	821	75	82	852	15
Future Vol, veh/h	5	0	2	58	0	58	4	821	75	82	852	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	200	210	-	140
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	2	61	0	61	4	864	79	86	897	16
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1510	2021	448	1494	1958	432	913	0	0	943	0	0
Stage 1	1069	1069	-	873	873	-	-	-	-	-	-	-
Stage 2	441	952	-	621	1085	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*83	57	*840	*85	63	*863	969	-	-	907	-	-
Stage 1	*399	416	-	*525	514	-	-	-	-	-	-	-
Stage 2	*814	465	-	*793	407	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	*69	52	*840	*77	57	*863	969	-	-	907	-	-
Mov Cap-2 Maneuver	*242	195	-	*309	219	-	-	-	-	-	-	-
Stage 1	*361	376	-	*522	512	-	-	-	-	-	-	-
Stage 2	*753	463	-	*715	368	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v17.08			14.49		0.04		0.81					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	969	-	-	242	840	309	863	907	-	-		
HCM Lane V/C Ratio	0.004	-	-	0.022	0.003	0.198	0.071	0.095	-	-		
HCM Control Delay (s/veh)	8.7	-	-	20.2	9.3	19.5	9.5	9.4	-	-		
HCM Lane LOS	A	-	-	C	A	C	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.7	0.2	0.3	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⬆⬇⬆			⬆⬇⬆			⬆⬇⬆			⬆⬇⬆	
Traffic Vol, veh/h	6	23	4	38	47	53	2	0	19	28	0	4
Future Vol, veh/h	6	23	4	38	47	53	2	0	19	28	0	4
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	24	4	40	49	56	2	0	20	29	0	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	28	0	0	168	224	26	194	198	77
Stage 1	-	-	-	-	-	-	39	39	-	157	157	-
Stage 2	-	-	-	-	-	-	129	185	-	37	41	-
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	1486	-	-	1585	-	-	795	675	1049	765	697	983
Stage 1	-	-	-	-	-	-	976	863	-	845	768	-
Stage 2	-	-	-	-	-	-	874	747	-	979	861	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1486	-	-	1585	-	-	767	654	1049	727	676	983
Mov Cap-2 Maneuver	-	-	-	-	-	-	767	654	-	727	676	-
Stage 1	-	-	-	-	-	-	972	859	-	822	747	-
Stage 2	-	-	-	-	-	-	847	726	-	956	857	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.35			2.02			8.63			10.01		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	1014	318	-	-	448	-	-	752				
HCM Lane V/C Ratio	0.022	0.004	-	-	0.025	-	-	0.045				
HCM Control Delay (s/veh)	8.6	7.4	0	-	7.3	0	-	10				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.1				

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	41	0	41	8	1	3	62	828	7	9	884	57
Future Vol, veh/h	41	0	41	8	1	3	62	828	7	9	884	57
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	230	-	230	250	-	250
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	43	8	1	3	65	872	7	9	931	60
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1516	1959	465	1486	2012	436	991	0	0	879	0	0
Stage 1	949	949	-	1002	1002	-	-	-	-	-	-	-
Stage 2	567	1009	-	484	1009	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*82	63	544	86	58	*863	694	-	-	972	-	-
Stage 1	*280	337	-	421	435	-	-	-	-	-	-	-
Stage 2	*814	431	-	533	316	-	-	-	-	-	-	-
Platoon blocked, %						0		-	-	0	-	-
Mov Cap-1 Maneuver	*73	56	544	71	52	*863	694	-	-	972	-	-
Mov Cap-2 Maneuver	*208	188	-	215	161	-	-	-	-	-	-	-
Stage 1	*277	334	-	381	394	-	-	-	-	-	-	-
Stage 2	*733	391	-	486	313	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v19.46			19.56		0.74		0.08					
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	694	-	-	208	544	215	413	972	-	-		
HCM Lane V/C Ratio	0.094	-	-	0.207	0.079	0.039	0.01	0.01	-	-		
HCM Control Delay (s/veh)	10.7	-	-	26.7	12.2	22.4	13.8	8.7	-	-		
HCM Lane LOS	B	-	-	D	B	C	B	A	-	-		
HCM 95th %tile Q(veh)	0.3	-	-	0.8	0.3	0.1	0	0	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	84	120	15	12	16
Future Vol, veh/h	13	84	120	15	12	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	170	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	88	126	16	13	17
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	142	0	-	0	206	71
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	72	-
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	1438	-	-	-	764	977
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	943	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1438	-	-	-	756	977
Mov Cap-2 Maneuver	-	-	-	-	756	-
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	943	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	1.01	0		9.29		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1438	-	-	-	868	
HCM Lane V/C Ratio	0.01	-	-	-	0.034	
HCM Control Delay (s/veh)	7.5	-	-	-	9.3	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings

13: Rock Island Rd & Holiday Springs Blvd

EX PM

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Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	23	5	101	15	2	141	935	55	24	805	29
Future Volume (vph)	23	5	101	15	2	141	935	55	24	805	29
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8	5	2			6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	4	4	4	8	8	5	2	2	6	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)	39.5	39.5	39.5	42.5	42.5	11.5	32.5	32.5	32.5	32.5	32.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	12.0	50.0	50.0	38.0	38.0	38.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	15.0%	62.5%	62.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?						Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effect Green (s)	7.0	7.0	7.0	7.0	7.0	62.4	63.7	63.7	48.6	48.6	48.6
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.09	0.78	0.80	0.80	0.61	0.61	0.61
v/c Ratio	0.19	0.03	0.40	0.13	0.10	0.29	0.34	0.04	0.07	0.39	0.03
Control Delay (s/veh)	37.0	32.8	8.6	35.2	19.2	2.7	1.4	0.1	10.2	12.9	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 (s/veh)	37.0	32.8	8.6	35.2	19.2	2.7	1.4	0.1	10.2	12.9	0.1
LOS	D	C	A	D	B	A	A	A	B	B	A
Approach Delay (s/veh)		14.6			27.3		1.6			12.5	
Approach LOS		B			C		A			B	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 52 (65%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay (s/veh): 7.1

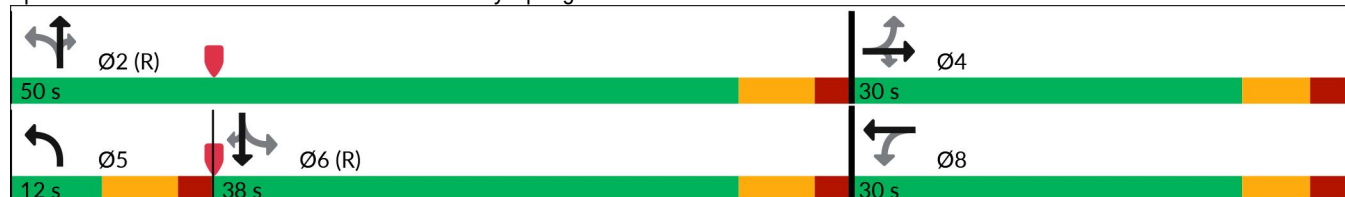
Intersection LOS: A

Intersection Capacity Utilization 54.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 13: Rock Island Rd & Holiday Springs Blvd



13: Rock Island Rd & Holiday Springs Blvd

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	24	5	106	16	16	148	984	58	25	847	31
v/c Ratio	0.19	0.03	0.40	0.13	0.10	0.29	0.34	0.04	0.07	0.39	0.03
Control Delay (s/veh)	37.0	32.8	8.6	35.2	19.2	2.7	1.4	0.1	10.2	12.9	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 (s/veh)	37.0	32.8	8.6	35.2	19.2	2.7	1.4	0.1	10.2	12.9	0.1
Queue Length 50th (ft)	11	2	0	8	1	11	43	0	8	271	0
Queue Length 95th (ft)	33	12	29	25	18	18	48	m1	m17	300	m0
Internal Link Dist (ft)	2605				671	840				1231	
Turn Bay Length (ft)	175					230	170		250	220	
Base Capacity (vph)	408	547	561	412	485	504	2819	1272	329	2150	1015
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.01	0.19	0.04	0.03	0.29	0.35	0.05	0.08	0.39	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

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EX PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	5	101	15	2	13	141	935	55	24	805	29
Future Volume (veh/h)	23	5	101	15	2	13	141	935	55	24	805	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	24	5	106	16	2	14	148	984	58	25	847	31
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	206	172	146	205	19	130	501	2650	1182	417	2147	958
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.12	1.00	1.00	0.60	0.60	0.60
Sat Flow, veh/h	1397	1870	1585	1282	202	1414	1781	3554	1585	541	3554	1585
Grp Volume(v), veh/h	24	5	106	16	0	16	148	984	58	25	847	31
Grp Sat Flow(s),veh/h/ln	1397	1870	1585	1282	0	1616	1781	1777	1585	541	1777	1585
Q Serve(g_s), s	1.3	0.2	5.2	0.9	0.0	0.7	2.3	0.0	0.0	1.5	9.9	0.6
Cycle Q Clear(g_c), s	2.0	0.2	5.2	1.1	0.0	0.7	2.3	0.0	0.0	1.5	9.9	0.6
Prop In Lane	1.00		1.00	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	172	146	205	0	149	501	2650	1182	417	2147	958
V/C Ratio(X)	0.12	0.03	0.73	0.08	0.00	0.11	0.30	0.37	0.05	0.06	0.39	0.03
Avail Cap(c_a), veh/h	488	549	466	463	0	475	516	2650	1182	417	2147	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.79	0.79	0.79	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	33.1	35.3	33.6	0.0	33.3	5.0	0.0	0.0	6.6	8.2	6.4
Incr Delay (d2), s/veh	0.2	0.1	6.8	0.2	0.0	0.3	0.3	0.3	0.1	0.3	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	0.4	0.1	2.2	0.3	0.0	0.3	0.6	0.1	0.0	0.2	3.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.5	33.1	42.1	33.7	0.0	33.6	5.3	0.3	0.1	6.8	8.8	6.5
LnGrp LOS	C	C	D	C		C	A	A	A	A	A	A
Approach Vol, veh/h	135			32			1190			903		
Approach Delay, s/veh	40.4			33.7			0.9			8.6		
Approach LOS	D			C			A			A		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	66.1			13.9		11.3	54.8	13.9				
Change Period (Y+Rc), s	6.5			6.5		6.5	6.5	6.5				
Max Green Setting (Gmax), s	43.5			23.5		5.5	31.5	23.5				
Max Q Clear Time (g_c+I1), s	2.0			7.2		4.3	11.9	3.1				
Green Ext Time (p_c), s	9.2			0.3		0.0	6.4	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				6.8								
HCM 7th LOS				A								
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

14: Royal Palm Blvd & Riverside Dr

EX PM

07/02/2024

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	228	870	366	265	988	376	657	248	139	641
Future Volume (vph)	228	870	366	265	988	376	657	248	139	641
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
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
Minimum Split (s)	11.5	36.5	36.5	11.5	36.5	11.5	37.5	37.5	11.5	37.5
Total Split (s)	25.0	48.0	48.0	32.0	55.0	35.0	45.0	45.0	35.0	45.0
Total Split (%)	15.6%	30.0%	30.0%	20.0%	34.4%	21.9%	28.1%	28.1%	21.9%	28.1%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)	61.8	43.3	43.3	71.9	48.5	73.5	53.3	53.3	52.2	38.5
Actuated g/C Ratio	0.39	0.27	0.27	0.45	0.30	0.46	0.33	0.33	0.33	0.24
v/c Ratio	0.95	0.95	0.59	0.90	1.21	1.09	0.58	0.37	0.48	1.07
Control Delay (s/veh)	93.4	77.4	16.3	82.7	138.3	121.4	47.3	5.8	33.0	106.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	93.4	77.4	16.3	82.7	138.3	121.4	47.3	5.8	33.0	106.8
LOS	F	E	B	F	F	F	D	A	C	F
Approach Delay (s/veh)		64.7			128.4		61.1			96.6
Approach LOS		E			F		E			F

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 143 (89%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay (s/veh): 87.9

Intersection LOS: F

Intersection Capacity Utilization 114.3%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Royal Palm Blvd & Riverside Dr

	Ø1		Ø2 (R)		Ø3		Ø4
25 s		55 s		35 s		45 s	
	Ø5		Ø6 (R)		Ø7		Ø8
32 s		48 s		35 s		45 s	



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	240	916	385	279	1281	396	692	261	146	900
v/c Ratio	0.95	0.95	0.59	0.90	1.21	1.09	0.58	0.37	0.48	1.07
Control Delay (s/veh)	93.4	77.4	16.3	82.7	138.3	121.4	47.3	5.8	33.0	106.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	93.4	77.4	16.3	82.7	138.3	121.4	47.3	5.8	33.0	106.8
Queue Length 50th (ft)	204	507	76	170	~854	~415	315	0	89	~536
Queue Length 95th (ft)	#387	#659	194	#378	#988	#635	406	68	138	#676
Internal Link Dist (ft)		1554			4475		1024			1484
Turn Bay Length (ft)	260		280	370		190		325	200	
Base Capacity (vph)	251	956	643	327	1055	361	1178	701	463	839
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.96	0.60	0.85	1.21	1.10	0.59	0.37	0.32	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

14: Royal Palm Blvd & Riverside Dr

EX PM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	870	366	265	988	229	376	657	248	139	641	214
Future Volume (veh/h)	228	870	366	265	988	229	376	657	248	139	641	214
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	240	916	385	279	1040	241	396	692	261	146	675	225
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	251	1007	449	301	869	201	362	1220	544	288	630	210
Arrive On Green	0.12	0.28	0.28	0.14	0.30	0.30	0.18	0.34	0.34	0.08	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	2866	662	1781	3554	1585	1781	2618	872
Grp Volume(v), veh/h	240	916	385	279	643	638	396	692	261	146	458	442
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1751	1781	1777	1585	1781	1777	1713
Q Serve(g_s), s	17.4	39.8	36.8	19.3	48.5	48.5	28.5	25.4	20.7	9.8	38.5	38.5
Cycle Q Clear(g_c), s	17.4	39.8	36.8	19.3	48.5	48.5	28.5	25.4	20.7	9.8	38.5	38.5
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	251	1007	449	301	539	531	362	1220	544	288	428	412
V/C Ratio(X)	0.96	0.91	0.86	0.93	1.19	1.20	1.09	0.57	0.48	0.51	1.07	1.07
Avail Cap(c_a), veh/h	251	1007	449	343	539	531	362	1220	544	471	428	412
HCM Platoon Ratio	1.00	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	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	55.4	54.3	46.1	55.8	55.8	52.7	42.8	41.3	41.1	60.7	60.8
Incr Delay (d2), s/veh	44.7	13.5	18.7	23.9	101.0	104.3	74.6	0.6	0.7	1.4	63.9	64.8
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	12.9	19.8	17.1	13.3	36.8	36.8	17.8	11.4	8.3	4.5	25.0	24.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	95.3	68.9	73.0	70.0	156.7	160.0	127.3	43.5	42.0	42.5	124.6	125.6
LnGrp LOS	F	E	E	E	F	F	F	D	D	D	F	F
Approach Vol, veh/h	1541			1560			1349			1046		
Approach Delay, s/veh	74.0			142.6			67.8			113.6		
Approach LOS	E			F			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	55.0	18.6	61.4	28.2	51.8	35.0	45.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	18.5	48.5	28.5	38.5	25.5	41.5	28.5	38.5				
Max Q Clear Time (g_c+I1), s	19.4	50.5	11.8	27.4	21.3	41.8	30.5	40.5				
Green Ext Time (p_c), s	0.0	0.0	0.3	4.3	0.3	0.0	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	99.5											
HCM 7th LOS	F											

Timings

15: Royal Palm Blvd & Rock Island Rd

EX PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	775	127	313	794	253	144	731	436	229	701	108
Future Volume (vph)	160	775	127	313	794	253	144	731	436	229	701	108
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	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)	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5
Total Split (s)	31.0	45.0	45.0	25.0	39.0	39.0	26.0	64.0	64.0	26.0	64.0	64.0
Total Split (%)	19.4%	28.1%	28.1%	15.6%	24.4%	24.4%	16.3%	40.0%	40.0%	16.3%	40.0%	40.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effect Green (s)	13.2	46.7	46.7	20.0	53.6	53.6	64.8	55.4	55.4	69.8	57.9	57.9
Actuated g/C Ratio	0.08	0.29	0.29	0.13	0.34	0.34	0.41	0.35	0.35	0.44	0.36	0.36
v/c Ratio	0.59	0.79	0.24	0.76	0.70	0.43	0.30	0.62	0.59	0.47	0.57	0.17
Control Delay (s/veh)	62.9	84.0	41.9	79.9	51.2	26.0	25.5	46.1	13.4	26.7	45.2	11.4
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 (s/veh)	62.9	84.0	41.9	79.9	51.2	26.0	25.5	46.1	13.4	26.7	45.2	11.4
LOS	E	F	D	E	D	C	C	D	B	C	D	B
Approach Delay (s/veh)		75.8			53.2			33.0			37.7	
Approach LOS		E			D			C			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 104 (65%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 49.3

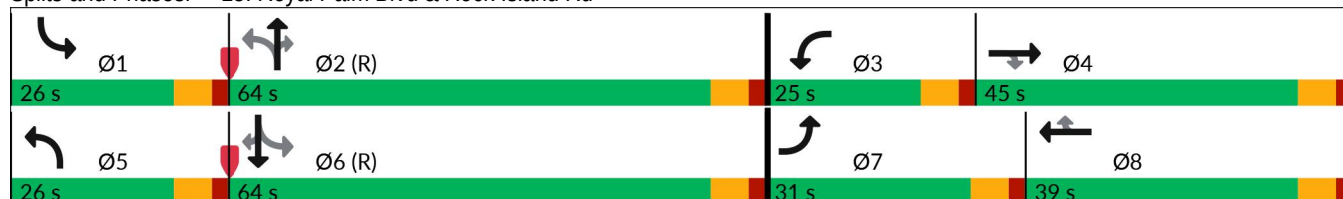
Intersection LOS: D

Intersection Capacity Utilization 78.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 15: Royal Palm Blvd & Rock Island Rd



Queues

15: Royal Palm Blvd & Rock Island Rd

EX PM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	168	816	134	329	836	266	152	769	459	241	738	114
v/c Ratio	0.59	0.79	0.24	0.76	0.70	0.43	0.30	0.62	0.59	0.47	0.57	0.17
Control Delay (s/veh)	62.9	84.0	41.9	79.9	51.2	26.0	25.5	46.1	13.4	26.7	45.2	11.4
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 (s/veh)	62.9	84.0	41.9	79.9	51.2	26.0	25.5	46.1	13.4	26.7	45.2	11.4
Queue Length 50th (ft)	94	468	80	173	400	117	45	355	94	97	344	38
Queue Length 95th (ft)	m108	m#527	m98	229	#535	227	62	405	201	106	395	0
Internal Link Dist (ft)		4475			2131			1468			840	
Turn Bay Length (ft)	340		170	210		150	220		190	220		250
Base Capacity (vph)	525	1032	541	440	1184	609	715	1283	791	658	1304	655
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.79	0.25	0.75	0.71	0.44	0.21	0.60	0.58	0.37	0.57	0.17

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.

HCM 7th Signalized Intersection Summary

15: Royal Palm Blvd & Rock Island Rd

EX PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	775	127	313	794	253	144	731	436	229	701	108
Future Volume (veh/h)	160	775	127	313	794	253	144	731	436	229	701	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	816	134	329	836	266	152	769	459	241	738	114
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	218	853	380	372	1011	451	747	1545	689	526	1602	715
Arrive On Green	0.06	0.24	0.24	0.11	0.28	0.28	0.04	0.43	0.43	0.11	0.90	0.90
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	168	816	134	329	836	266	152	769	459	241	738	114
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	7.7	36.2	11.2	15.0	35.2	23.1	3.9	25.0	36.9	6.2	5.6	1.3
Cycle Q Clear(g_c), s	7.7	36.2	11.2	15.0	35.2	23.1	3.9	25.0	36.9	6.2	5.6	1.3
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	218	853	380	372	1011	451	747	1545	689	526	1602	715
V/C Ratio(X)	0.77	0.96	0.35	0.88	0.83	0.59	0.20	0.50	0.67	0.46	0.46	0.16
Avail Cap(c_a), veh/h	529	855	381	400	1011	451	1034	1545	689	756	1602	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.51	0.51	0.51	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	73.8	60.0	50.5	70.4	53.5	49.2	23.2	32.6	36.0	23.6	4.6	4.4
Incr Delay (d2), s/veh	3.0	13.2	0.3	19.5	5.8	2.0	0.1	1.1	5.0	0.6	0.9	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	17.9	4.5	7.7	16.6	9.5	1.6	11.2	15.3	2.4	1.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.8	73.1	50.8	89.9	59.3	51.2	23.3	33.8	41.0	24.1	5.5	4.8
LnGrp LOS	E	E	D	F	E	D	C	C	D	C	A	A
Approach Vol, veh/h	1118			1431			1380			1093		
Approach Delay, s/veh	71.0			64.9			35.0			9.5		
Approach LOS	E			E			D			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.3	76.0	23.7	44.9	12.7	78.6	16.6	52.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	19.5	57.5	18.5	38.5	19.5	57.5	24.5	32.5				
Max Q Clear Time (g_c+I1), s	8.2	38.9	17.0	38.2	5.9	7.6	9.7	37.2				
Green Ext Time (p_c), s	0.6	7.1	0.2	0.2	0.4	6.6	0.4	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh				46.0								
HCM 7th LOS				D								
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

1: Riverside Dr & Sample Rd

BY AM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	207	1144	241	1167	155	608	479	135	371	194
Future Volume (vph)	207	1144	241	1167	155	608	479	135	371	194
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4		3	8	
Permitted Phases					4		4	8		8
Detector Phase	1	6	5	2	7	4	4	3	8	8
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
Minimum Split (s)	12.0	45.0	12.0	45.0	11.5	44.5	44.5	11.5	44.5	44.5
Total Split (s)	29.0	61.0	29.0	61.0	18.0	48.0	48.0	22.0	52.0	52.0
Total Split (%)	18.1%	38.1%	18.1%	38.1%	11.3%	30.0%	30.0%	13.8%	32.5%	32.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5	6.5
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	C-Min	None	C-Min	None	None	None	None	None	None
Act Effect Green (s)	22.6	55.2	26.7	59.4	49.4	37.5	37.5	52.7	39.1	39.1
Actuated g/C Ratio	0.14	0.35	0.17	0.37	0.31	0.23	0.23	0.33	0.24	0.24
v/c Ratio	0.87	0.75	0.86	0.76	0.51	0.77	0.81	0.63	0.45	0.37
Control Delay (s/veh)	98.5	49.5	90.1	47.8	42.4	63.9	31.9	47.5	52.2	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.5	49.5	90.1	47.8	42.4	63.9	31.9	47.5	52.2	7.2
LOS	F	D	F	D	D	E	C	D	D	A
Approach Delay (s/veh)		56.5		54.2		48.9			38.9	
Approach LOS		E		D		D			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 13 (8%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 51.4

Intersection LOS: D

Intersection Capacity Utilization 84.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Riverside Dr & Sample Rd



Queues

1: Riverside Dr & Sample Rd

BY AM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	218	1306	254	1420	163	640	504	142	391	204
v/c Ratio	0.87	0.75	0.86	0.76	0.51	0.77	0.81	0.63	0.45	0.37
Control Delay (s/veh)	98.5	49.5	90.1	47.8	42.4	63.9	31.9	47.5	52.2	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.5	49.5	90.1	47.8	42.4	63.9	31.9	47.5	52.2	7.2
Queue Length 50th (ft)	221	445	264	497	118	328	196	101	180	0
Queue Length 95th (ft)	#387	504	#473	561	172	393	349	151	225	64
Internal Link Dist (ft)		903		1640		1956			490	
Turn Bay Length (ft)	370		420		275		430	300		200
Base Capacity (vph)	255	1746	295	1863	314	917	647	246	1006	596
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.75	0.86	0.76	0.52	0.70	0.78	0.58	0.39	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Riverside Dr & Sample Rd

BY AM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1144	97	241	1167	182	155	608	479	135	371	194
Future Volume (veh/h)	207	1144	97	241	1167	182	155	608	479	135	371	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	218	1204	102	254	1228	192	163	640	504	142	391	204
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	1742	147	245	1635	256	310	922	411	219	919	410
Arrive On Green	0.13	0.36	0.36	0.14	0.37	0.37	0.07	0.26	0.26	0.07	0.26	0.26
Sat Flow, veh/h	1781	4795	406	1781	4453	696	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	218	855	451	254	939	481	163	640	504	142	391	204
Grp Sat Flow(s),veh/h/ln	1781	1702	1797	1781	1702	1745	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	19.3	34.2	34.2	22.0	38.6	38.6	10.8	26.0	41.5	9.3	14.7	17.5
Cycle Q Clear(g_c), s	19.3	34.2	34.2	22.0	38.6	38.6	10.8	26.0	41.5	9.3	14.7	17.5
Prop In Lane	1.00		0.23	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	1236	653	245	1250	641	310	922	411	219	919	410
V/C Ratio(X)	0.92	0.69	0.69	1.04	0.75	0.75	0.53	0.69	1.23	0.65	0.43	0.50
Avail Cap(c_a), veh/h	245	1236	653	245	1250	641	310	922	411	265	1011	451
HCM Platoon Ratio	1.00	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	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.4	43.3	43.3	69.0	44.2	44.2	40.3	53.5	59.2	42.0	49.4	50.5
Incr Delay (d2), s/veh	35.3	3.2	5.9	56.6	2.8	5.3	1.6	2.3	121.5	4.0	0.3	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	11.2	15.0	16.4	13.9	16.8	17.7	5.0	12.0	30.5	4.4	6.6	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	103.7	46.5	49.3	125.6	47.0	49.6	41.9	55.8	180.8	46.0	49.7	51.4
LnGrp LOS	F	D	D	F	D	D	D	E	F	D	D	D
Approach Vol, veh/h	1524		1674			1307			737			
Approach Delay, s/veh	55.5		59.7			102.3			49.5			
Approach LOS	E		E			F			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.4	65.7	17.9	48.0	29.0	65.1	18.0	47.9				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	22.0	54.0	15.5	41.5	22.0	54.0	11.5	45.5				
Max Q Clear Time (g_c+I1), s	21.3	40.6	11.3	43.5	24.0	36.2	12.8	19.5				
Green Ext Time (p_c), s	0.0	7.9	0.1	0.0	0.0	8.7	0.0	3.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	67.7											
HCM 7th LOS	E											

Timings 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

BY AM
07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	108	1540	37	1356	90	31	207	42
Future Volume (vph)	108	1540	37	1356	90	31	207	42
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	34.0	12.0	34.0	11.5	42.0	11.5	40.0
Total Split (s)	20.0	70.0	20.0	70.0	28.0	42.0	28.0	42.0
Total Split (%)	12.5%	43.8%	12.5%	43.8%	17.5%	26.3%	17.5%	26.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	12.2	56.9	8.2	49.6	19.6	8.8	30.6	14.7
Actuated g/C Ratio	0.11	0.50	0.07	0.44	0.17	0.08	0.27	0.13
v/c Ratio	0.60	0.65	0.30	0.71	0.36	0.53	0.61	0.31
Control Delay (s/veh)	67.1	24.4	62.4	28.5	38.3	38.3	43.5	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.1	24.4	62.4	28.5	38.3	38.3	43.5	17.8
LOS	E	C	E	C	D	D	D	B
Approach Delay (s/veh)		27.2		29.4		38.3		32.7
Approach LOS		C		C		D		C

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 114

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay (s/veh): 29.1

Intersection LOS: C

Intersection Capacity Utilization 73.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

	ø1		ø2		ø3		ø4
20 s		70 s		28 s		42 s	
	ø5		ø6		ø7		ø8
20 s		70 s		28 s		42 s	

Queues

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

BY AM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	114	1661	39	1568	95	96	218	159
v/c Ratio	0.60	0.65	0.30	0.71	0.36	0.53	0.61	0.31
Control Delay (s/veh)	67.1	24.4	62.4	28.5	38.3	38.3	43.5	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.1	24.4	62.4	28.5	38.3	38.3	43.5	17.8
Queue Length 50th (ft)	82	339	28	338	54	29	134	15
Queue Length 95th (ft)	#187	477	73	450	109	93	233	52
Internal Link Dist (ft)		1640		1203		306		335
Turn Bay Length (ft)	260		260				160	
Base Capacity (vph)	207	2896	207	2861	425	583	413	1104
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.57	0.19	0.55	0.22	0.16	0.53	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

BY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	1540	38	37	1356	134	90	31	60	207	42	109
Future Volume (veh/h)	108	1540	38	37	1356	134	90	31	60	207	42	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	1621	40	39	1427	141	95	33	63	218	44	115
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	144	2451	60	60	2037	201	293	47	90	345	265	236
Arrive On Green	0.08	0.48	0.48	0.03	0.43	0.43	0.07	0.08	0.08	0.13	0.15	0.15
Sat Flow, veh/h	1781	5125	126	1781	4724	467	1781	575	1098	1781	1777	1585
Grp Volume(v), veh/h	114	1077	584	39	1028	540	95	0	96	218	44	115
Grp Sat Flow(s),veh/h/ln	1781	1702	1848	1781	1702	1786	1781	0	1673	1781	1777	1585
Q Serve(g_s), s	6.0	22.9	22.9	2.1	23.4	23.4	4.6	0.0	5.3	10.1	2.1	6.3
Cycle Q Clear(g_c), s	6.0	22.9	22.9	2.1	23.4	23.4	4.6	0.0	5.3	10.1	2.1	6.3
Prop In Lane	1.00		0.07	1.00		0.26	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	144	1628	884	60	1468	770	293	0	138	345	265	236
V/C Ratio(X)	0.79	0.66	0.66	0.65	0.70	0.70	0.32	0.00	0.70	0.63	0.17	0.49
Avail Cap(c_a), veh/h	244	2259	1226	244	2259	1185	590	0	634	523	674	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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	18.9	18.9	45.3	22.0	22.0	36.4	0.0	42.4	32.0	35.3	37.1
Incr Delay (d2), s/veh	9.4	0.5	0.9	11.1	0.6	1.2	0.6	0.0	6.2	1.9	0.3	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	3.0	8.7	9.5	1.1	9.1	9.6	2.0	0.0	2.4	4.5	0.9	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.2	19.4	19.8	56.4	22.6	23.2	37.1	0.0	48.6	33.9	35.5	38.6
LnGrp LOS	D	B	B	E	C	C	D		D	C	D	D
Approach Vol, veh/h	1775			1607			191			377		
Approach Delay, s/veh	21.6			23.6			42.9			35.5		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	47.9	18.5	13.8	10.2	52.4	12.2	20.1				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	63.0	22.0	36.0	13.0	63.0	22.0	36.0				
Max Q Clear Time (g_c+I1), s	8.0	25.4	12.1	7.3	4.1	24.9	6.6	8.3				
Green Ext Time (p_c), s	0.1	15.6	0.4	0.5	0.0	16.9	0.2	0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	24.8											
HCM 7th LOS	C											

HCM 7th TWSC
3: Belmonte Blvd & Sample Rd

BY AM
07/02/2024

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱ ↑↑↑			↱ ↑↑↑					↱			↱
Traffic Vol, veh/h	55	1754	7	12	1689	7	0	0	33	0	0	9
Future Vol, veh/h	55	1754	7	12	1689	7	0	0	33	0	0	9
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	300	-	-	300	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	1846	7	13	1778	7	0	0	35	0	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1785	0	0	1854	0	0	-	-	927	-	-	893
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	161	-	-	148	-	-	0	0	232	0	0	244
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	161	-	-	148	-	-	-	-	232	-	-	244
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.2	0.22	23.23	20.32
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	232	161	-	-	148	-	-	244
HCM Lane V/C Ratio	0.15	0.361	-	-	0.085	-	-	0.039
HCM Control Delay (s/veh)	23.2	39.6	-	-	31.5	-	-	20.3
HCM Lane LOS	C	E	-	-	D	-	-	C
HCM 95th %tile Q(veh)	0.5	1.5	-	-	0.3	-	-	0.1

Timings

4: Rock Island Rd & Sample Rd

BY AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	149	1431	251	288	1148	142	289	504	755	239	355	153
Future Volume (vph)	149	1431	251	288	1148	142	289	504	755	239	355	153
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
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)	12.0	47.0	11.5	12.0	47.0	11.5	11.5	48.5	12.0	11.5	48.5	12.0
Total Split (s)	30.0	54.0	25.0	30.0	54.0	25.0	25.0	51.0	30.0	25.0	51.0	30.0
Total Split (%)	18.8%	33.8%	15.6%	18.8%	33.8%	15.6%	15.6%	31.9%	18.8%	15.6%	31.9%	18.8%
Yellow Time (s)	5.0	5.0	4.5	5.0	5.0	4.5	4.5	4.5	5.0	4.5	4.5	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	6.5	7.0	7.0	6.5	6.5	6.5	7.0	6.5	6.5	7.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	12.7	65.2	89.8	21.1	73.7	97.1	17.6	30.3	57.9	16.4	29.1	48.2
Actuated g/C Ratio	0.08	0.41	0.56	0.13	0.46	0.61	0.11	0.19	0.36	0.10	0.18	0.30
v/c Ratio	0.57	0.72	0.27	0.67	0.51	0.14	0.80	0.79	0.75	0.72	0.58	0.30
Control Delay (s/veh)	79.4	43.8	9.8	73.2	32.8	2.8	86.3	70.7	44.7	81.4	62.9	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.4	43.8	9.8	73.2	32.8	2.8	86.3	70.7	44.7	81.4	62.9	22.9
LOS	E	D	A	E	C	A	F	E	D	F	E	C
Approach Delay (s/veh)		42.1			37.6			61.0			60.7	
Approach LOS		D			D			E			E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 68 (43%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 48.4

Intersection LOS: D

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Rock Island Rd & Sample Rd

	Ø1		Ø2 (R)		Ø3		Ø4
30 s		54 s		25 s		51 s	
	Ø5		Ø6 (R)		Ø7		Ø8
30 s		54 s		25 s		51 s	

Queues

4: Rock Island Rd & Sample Rd

BY AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	157	1506	264	303	1208	149	304	531	795	252	374	161
v/c Ratio	0.57	0.72	0.27	0.67	0.51	0.14	0.80	0.79	0.75	0.72	0.58	0.30
Control Delay (s/veh)	79.4	43.8	9.8	73.2	32.8	2.8	86.3	70.7	44.7	81.4	62.9	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.4	43.8	9.8	73.2	32.8	2.8	86.3	70.7	44.7	81.4	62.9	22.9
Queue Length 50th (ft)	82	486	57	158	326	1	161	282	381	133	191	70
Queue Length 95th (ft)	121	#655	136	203	426	36	217	333	410	181	233	121
Internal Link Dist (ft)		985			2330			779			1017	
Turn Bay Length (ft)	280		250	360		300	300		320	180		220
Base Capacity (vph)	493	2073	960	509	2342	1036	396	984	1099	396	984	625
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.73	0.28	0.60	0.52	0.14	0.77	0.54	0.72	0.64	0.38	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

4: Rock Island Rd & Sample Rd

BY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1431	251	288	1148	142	289	504	755	239	355	153
Future Volume (veh/h)	149	1431	251	288	1148	142	289	504	755	239	355	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	1506	264	303	1208	149	304	531	795	252	374	161
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	206	1887	746	355	2106	791	349	968	1046	300	917	504
Arrive On Green	0.06	0.37	0.37	0.10	0.41	0.41	0.10	0.27	0.27	0.09	0.26	0.26
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	2790	3456	3554	1585
Grp Volume(v), veh/h	157	1506	264	303	1208	149	304	531	795	252	374	161
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1395	1728	1777	1585
Q Serve(g_s), s	7.2	42.2	16.9	13.8	29.1	8.3	13.9	20.5	39.9	11.5	14.0	12.3
Cycle Q Clear(g_c), s	7.2	42.2	16.9	13.8	29.1	8.3	13.9	20.5	39.9	11.5	14.0	12.3
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	206	1887	746	355	2106	791	349	968	1046	300	917	504
V/C Ratio(X)	0.76	0.80	0.35	0.85	0.57	0.19	0.87	0.55	0.76	0.84	0.41	0.32
Avail Cap(c_a), veh/h	497	1887	746	497	2106	791	400	988	1062	400	988	535
HCM Platoon Ratio	1.00	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	74.1	45.1	26.9	70.6	36.2	22.1	70.9	49.8	43.7	72.0	49.2	41.4
Incr Delay (d2), s/veh	5.7	3.6	1.3	10.0	1.1	0.5	16.9	0.6	3.2	11.5	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	3.4	18.5	6.8	6.6	12.5	3.3	7.0	9.3	14.3	5.6	6.3	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.8	48.7	28.2	80.6	37.3	22.7	87.7	50.4	46.9	83.5	49.5	41.8
LnGrp LOS	E	D	C	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h	1927		1660				1630		787			
Approach Delay, s/veh	48.5		43.9				55.7		58.8			
Approach LOS	D		D				E		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.5	73.0	20.4	50.1	23.4	66.1	22.7	47.8				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	23.0	47.0	18.5	44.5	23.0	47.0	18.5	44.5				
Max Q Clear Time (g_c+I1), s	9.2	31.1	13.5	41.9	15.8	44.2	15.9	16.0				
Green Ext Time (p_c), s	0.4	8.2	0.4	1.7	0.6	2.3	0.3	3.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	50.5											
HCM 7th LOS	D											

HCM 7th TWSC
5: Pinewalk Dr N & Rock Island Rd

BY AM
07/02/2024

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	144	1	124	24	0	41	17	1368	13	37	768	49
Future Vol, veh/h	144	1	124	24	0	41	17	1368	13	37	768	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	0	-	-	220	-	170	180	-	150
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	152	1	131	25	0	43	18	1440	14	39	808	52
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1642	2376	404	1958	2414	720	860	0	0	1454	0	0
Stage 1	886	886	-	1476	1476	-	-	-	-	-	-	-
Stage 2	756	1489	-	483	938	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 95	34	*867	*48	32	370	986	-	-	461	-	-
Stage 1	507	501	-	*132	189	-	-	-	-	-	-	-
Stage 2	367	186	-	*818	469	-	-	-	-	-	-	-
Platoon blocked, %	0	0	0	0	0	0	0	-	-	-	-	-
Mov Cap-1 Maneuver	~ 75	31	*867	*36	29	370	986	-	-	461	-	-
Mov Cap-2 Maneuver	191	110	-	*107	128	-	-	-	-	-	-	-
Stage 1	464	459	-	*130	185	-	-	-	-	-	-	-
Stage 2	318	182	-	*635	430	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	44.37		28.14		0.11		0.59					
HCM LOS	E		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	986	-	-	190	867	107	370	461	-	-		
HCM Lane V/C Ratio	0.018	-	-	0.805	0.151	0.237	0.117	0.084	-	-		
HCM Control Delay (s/veh)	8.7	-	-	73.9	9.9	48.9	16	13.5	-	-		
HCM Lane LOS	A	-	-	F	A	E	C	B	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	5.6	0.5	0.9	0.4	0.3	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	155	1	8	46	19	0	0	20	68	0	1
Future Vol, veh/h	0	155	1	8	46	19	0	0	20	68	0	1
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	163	1	8	48	20	0	0	21	72	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	68	0	0	164	0	0	229	249	164	238	239	58
Stage 1	-	-	-	-	-	-	164	164	-	75	75	-
Stage 2	-	-	-	-	-	-	65	85	-	163	164	-
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	1533	-	-	1414	-	-	726	654	881	716	662	1007
Stage 1	-	-	-	-	-	-	838	763	-	934	832	-
Stage 2	-	-	-	-	-	-	945	824	-	839	762	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1533	-	-	1414	-	-	721	650	881	694	658	1007
Mov Cap-2 Maneuver	-	-	-	-	-	-	721	650	-	694	658	-
Stage 1	-	-	-	-	-	-	838	763	-	928	827	-
Stage 2	-	-	-	-	-	-	939	819	-	819	762	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.83	9.19	10.76
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	881	1533	-	-	186	-	-	698
HCM Lane V/C Ratio	0.024	-	-	-	0.006	-	-	0.104
HCM Control Delay (s/veh)	9.2	0	-	-	7.6	0	-	10.8
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.3

HCM 7th TWSC
7: New Connection #3 & Holiday Springs Dr

BY AM
07/02/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑		W	↑↑
Traffic Vol, veh/h	0	0	109	2	3	90
Future Vol, veh/h	0	0	109	2	3	90
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	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	115	2	3	95

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	169	58	0
Stage 1	116	-	-
Stage 2	54	-	-
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	804	995	-
Stage 1	896	-	-
Stage 2	962	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	803	995	-
Mov Cap-2 Maneuver	803	-	-
Stage 1	896	-	-
Stage 2	960	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0.24
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1469
HCM Lane V/C Ratio	-	-	-	0.002
HCM Control Delay (s/veh)	-	-	0	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0

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	17	0	7	103	0	133	7	1241	42	64	836	5
Future Vol, veh/h	17	0	7	103	0	133	7	1241	42	64	836	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	200	210	-	140
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	0	7	108	0	140	7	1306	44	67	880	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1683	2380	440	1896	2341	653	885	0	0	1351	0	0
Stage 1	1015	1015	-	1321	1321	-	-	-	-	-	-	-
Stage 2	668	1365	-	575	1020	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	89	34	*854	*~ 56	37	410	979	-	-	506	-	-
Stage 1	423	436	-	*165	224	-	-	-	-	-	-	-
Stage 2	414	214	-	*805	433	-	-	-	-	-	-	-
Platoon blocked, %	0	0	0	0	0	0	-	-	-	-	-	-
Mov Cap-1 Maneuver	51	29	*854	*~ 48	32	410	979	-	-	506	-	-
Mov Cap-2 Maneuver	140	106	-	*133	140	-	-	-	-	-	-	-
Stage 1	366	378	-	*164	223	-	-	-	-	-	-	-
Stage 2	270	212	-	*692	375	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v27.09		53.01	0.05	0.93
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	979	-	-	140	854	133	410	506	-	-
HCM Lane V/C Ratio	0.008	-	-	0.128	0.009	0.813	0.342	0.133	-	-
HCM Control Delay (s/veh)	8.7	-	-	34.4	9.3	97.9	18.3	13.2	-	-
HCM Lane LOS	A	-	-	D	A	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0	5	1.5	0.5	-	-

Notes												
~: Volume exceeds capacity			\$: Delay exceeds 300s			+: Computation Not Defined			*: All major volume in platoon			

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	2	53	2	5	23	20	0	0	39	81	1	9
Future Vol, veh/h	2	53	2	5	23	20	0	0	39	81	1	9
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	56	2	5	24	21	0	0	41	85	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	58	0	0	96	117	57	105	107	35
Stage 1	-	-	-	-	-	-	61	61	-	45	45	-
Stage 2	-	-	-	-	-	-	35	56	-	60	62	-
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	1563	-	-	1546	-	-	886	773	1009	874	783	1038
Stage 1	-	-	-	-	-	-	950	844	-	969	857	-
Stage 2	-	-	-	-	-	-	980	848	-	951	843	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1563	-	-	1546	-	-	873	770	1009	835	779	1038
Mov Cap-2 Maneuver	-	-	-	-	-	-	873	770	-	835	779	-
Stage 1	-	-	-	-	-	-	949	843	-	965	854	-
Stage 2	-	-	-	-	-	-	967	845	-	911	842	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.26	0.76	8.72	9.77
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1009	63	-	-	172	-	-	851
HCM Lane V/C Ratio	0.041	0.001	-	-	0.003	-	-	0.113
HCM Control Delay (s/veh)	8.7	7.3	0	-	7.3	0	-	9.8
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

HCM 7th TWSC
11: Pinewalk Dr S & Rock Island Rd

BY AM
07/02/2024

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	1	97	16	0	21	12	1195	8	5	911	29
Future Vol, veh/h	78	1	97	16	0	21	12	1195	8	5	911	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	230	-	230	250	-	250
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	82	1	102	17	0	22	13	1258	8	5	959	31
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1624	2261	479	1774	2283	629	989	0	0	1266	0	0
Stage 1	969	969	-	1283	1283	-	-	-	-	-	-	-
Stage 2	654	1292	-	491	1000	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 68	40	532	52	39	425	694	-	-	545	-	-
Stage 1	272	330	-	174	234	-	-	-	-	-	-	-
Stage 2	422	232	-	528	319	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 63	39	532	41	38	425	694	-	-	545	-	-
Mov Cap-2 Maneuver	173	138	-	125	136	-	-	-	-	-	-	-
Stage 1	269	327	-	171	230	-	-	-	-	-	-	-
Stage 2	393	228	-	421	316	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	26.9		24.41		0.1		0.06					
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	694	-	-	173	517	125	425	545	-	-		
HCM Lane V/C Ratio	0.018	-	-	0.476	0.199	0.135	0.052	0.01	-	-		
HCM Control Delay (s/veh)	10.3	-	-	43.5	13.7	38.2	13.9	11.7	-	-		
HCM Lane LOS	B	-	-	E	B	E	B	B	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	2.3	0.7	0.5	0.2	0	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 7th TWSC
12: Holiday Springs Blvd & Pinewalk Dr S

BY AM
07/02/2024

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	133	68	6	17	9
Future Vol, veh/h	10	133	68	6	17	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	170	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	140	72	6	18	9
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	78	0	-	0	166	39
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	91	-
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	1519	-	-	-	809	1024
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	922	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1519	-	-	-	803	1024
Mov Cap-2 Maneuver	-	-	-	-	803	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	922	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.52	0		9.28		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1519	-	-	-	868	
HCM Lane V/C Ratio	0.007	-	-	-	0.032	
HCM Control Delay (s/veh)	7.4	-	-	-	9.3	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings

13: Rock Island Rd & Holiday Springs Blvd

BY AM

07/02/2024

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	36	1	157	5	0	72	1127	18	10	1044	18
Future Volume (vph)	36	1	157	5	0	72	1127	18	10	1044	18
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8	5	2			6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	4	4	4	8	8	5	2	2	6	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)	39.5	39.5	39.5	42.5	42.5	11.5	32.5	32.5	32.5	32.5	32.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	12.0	50.0	50.0	38.0	38.0	38.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	15.0%	62.5%	62.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?						Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	Min	Min	Min
Act Effect Green (s)	7.4	7.4	7.4	7.4	7.4	36.2	36.2	36.2	29.7	29.7	29.7
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13	0.64	0.64	0.64	0.52	0.52	0.52
v/c Ratio	0.20	0.00	0.47	0.02	0.03	0.22	0.52	0.01	0.04	0.59	0.02
Control Delay (s/veh)	27.5	24.0	10.1	24.6	0.1	5.6	6.6	0.4	10.1	12.5	0.0
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 (s/veh)	27.5	24.0	10.1	24.6	0.1	5.6	6.6	0.4	10.1	12.5	0.0
LOS	C	C	B	C	A	A	A	A	B	B	A
Approach Delay (s/veh)		13.4			7.4		6.5			12.3	
Approach LOS		B			A		A			B	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 56.9

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay (s/veh): 9.5

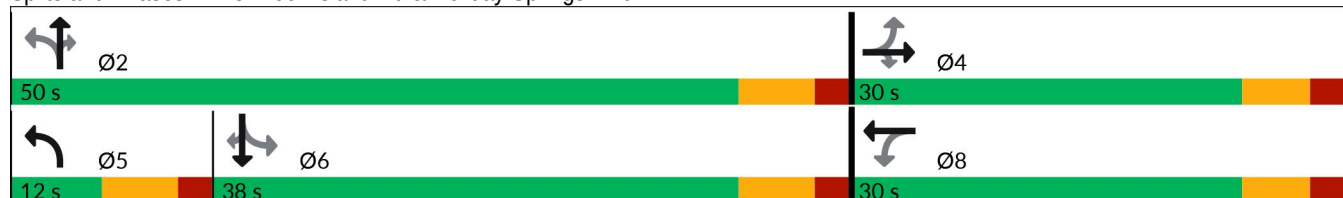
Intersection LOS: A

Intersection Capacity Utilization 60.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 13: Rock Island Rd & Holiday Springs Blvd



Queues

13: Rock Island Rd & Holiday Springs Blvd

BY AM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	1	165	5	12	76	1186	19	11	1099	19
v/c Ratio	0.20	0.00	0.47	0.02	0.03	0.22	0.52	0.01	0.04	0.59	0.02
Control Delay (s/veh)	27.5	24.0	10.1	24.6	0.1	5.6	6.6	0.4	10.1	12.5	0.0
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 (s/veh)	27.5	24.0	10.1	24.6	0.1	5.6	6.6	0.4	10.1	12.5	0.0
Queue Length 50th (ft)	12	0	0	2	0	8	92	0	2	152	0
Queue Length 95th (ft)	38	4	47	10	0	22	154	2	11	234	0
Internal Link Dist (ft)	2605				671			840		1231	
Turn Bay Length (ft)	175							170		250	
Base Capacity (vph)	591	788	765	596	748	333	2773	1250	251	2008	957
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.00	0.22	0.01	0.02	0.23	0.43	0.02	0.04	0.55	0.02
Intersection Summary											

HCM 7th Signalized Intersection Summary

13: Rock Island Rd & Holiday Springs Blvd

BY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	1	157	5	0	11	72	1127	18	10	1044	18
Future Volume (veh/h)	36	1	157	5	0	11	72	1127	18	10	1044	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	1	165	5	0	12	76	1186	19	11	1099	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	324	265	225	307	0	225	336	2187	975	331	1530	682
Arrive On Green	0.14	0.14	0.14	0.14	0.00	0.14	0.06	0.62	0.62	0.43	0.43	0.43
Sat Flow, veh/h	1402	1870	1585	1220	0	1585	1781	3554	1585	464	3554	1585
Grp Volume(v), veh/h	38	1	165	5	0	12	76	1186	19	11	1099	19
Grp Sat Flow(s),veh/h/ln	1402	1870	1585	1220	0	1585	1781	1777	1585	464	1777	1585
Q Serve(g_s), s	1.3	0.0	5.3	0.2	0.0	0.4	1.1	10.3	0.2	0.8	13.6	0.4
Cycle Q Clear(g_c), s	1.6	0.0	5.3	0.2	0.0	0.4	1.1	10.3	0.2	1.2	13.6	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	324	265	225	307	0	225	336	2187	975	331	1530	682
V/C Ratio(X)	0.12	0.00	0.73	0.02	0.00	0.05	0.23	0.54	0.02	0.03	0.72	0.03
Avail Cap(c_a), veh/h	741	821	696	670	0	696	406	2889	1289	404	2092	933
HCM Platoon Ratio	1.00	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	19.7	22.0	19.8	0.0	19.9	8.8	5.9	4.0	9.1	12.6	8.8
Incr Delay (d2), s/veh	0.2	0.0	4.6	0.0	0.0	0.1	0.3	0.2	0.0	0.0	0.8	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	0.4	0.0	2.1	0.1	0.0	0.1	0.4	2.6	0.1	0.1	4.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.7	19.7	26.6	19.8	0.0	20.0	9.2	6.2	4.0	9.2	13.3	8.8
LnGrp LOS	C	B	C	B		B	A	A	A	A	B	A
Approach Vol, veh/h	204					17	1281			1129		
Approach Delay, s/veh	25.5					19.9	6.3			13.2		
Approach LOS	C					B	A			B		
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	39.4		14.1		9.9	29.5	14.1					
Change Period (Y+Rc), s	6.5		6.5		6.5	6.5	6.5					
Max Green Setting (Gmax), s	43.5		23.5		5.5	31.5	23.5					
Max Q Clear Time (g_c+I1), s	12.3		7.3		3.1	15.6	2.4					
Green Ext Time (p_c), s	10.9		0.5		0.0	7.4	0.0					
Intersection Summary												
HCM 7th Control Delay, s/veh	10.8											
HCM 7th LOS	B											
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings 14: Royal Palm Blvd & Riverside Dr

BY AM
07/02/2024

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	225	956	443	167	777	367	721	274	252	689
Future Volume (vph)	225	956	443	167	777	367	721	274	252	689
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
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
Minimum Split (s)	11.5	36.5	36.5	11.5	36.5	11.5	37.5	37.5	11.5	37.5
Total Split (s)	30.0	61.0	61.0	30.0	61.0	28.0	41.0	41.0	28.0	41.0
Total Split (%)	18.8%	38.1%	38.1%	18.8%	38.1%	17.5%	25.6%	25.6%	17.5%	25.6%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)	80.4	59.5	59.5	71.0	54.8	59.5	36.7	36.7	56.1	34.5
Actuated g/C Ratio	0.50	0.37	0.37	0.44	0.34	0.37	0.23	0.23	0.35	0.22
v/c Ratio	0.85	0.76	0.56	0.67	0.90	1.25	0.93	0.49	0.92	1.34
Control Delay (s/veh)	71.1	49.0	11.4	28.7	63.5	179.5	79.6	8.2	84.0	210.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.1	49.0	11.4	28.7	63.5	179.5	79.6	8.2	84.0	210.0
LOS	E	D	B	C	E	F	E	A	F	F
Approach Delay (s/veh)		41.9			58.7		92.2			184.1
Approach LOS		D			E		F			F

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 112 (70%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.35

Intersection Signal Delay (s/veh): 90.5

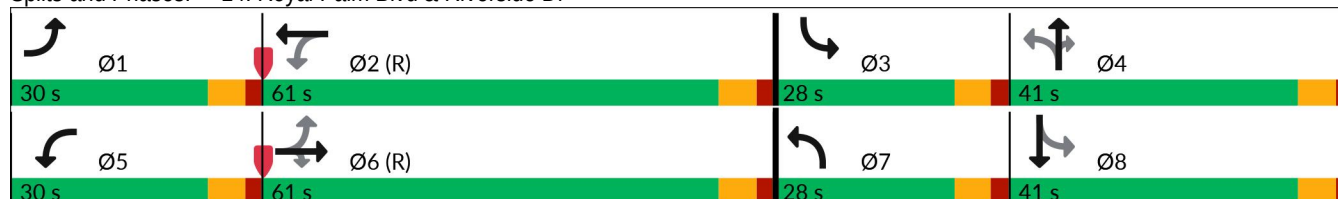
Intersection LOS: F

Intersection Capacity Utilization 111.7%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Royal Palm Blvd & Riverside Dr





Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	237	1006	466	176	1074	386	759	288	265	1021
v/c Ratio	0.85	0.76	0.56	0.67	0.90	1.25	0.93	0.49	0.92	1.34
Control Delay (s/veh)	71.1	49.0	11.4	28.7	63.5	179.5	79.6	8.2	84.0	210.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	71.1	49.0	11.4	28.7	63.5	179.5	79.6	8.2	84.0	210.0
Queue Length 50th (ft)	187	472	68	138	599	~486	422	0	226	~720
Queue Length 95th (ft)	#320	599	196	m90	#693	#703	#565	82	#407	#861
Internal Link Dist (ft)		1554			4475		1024			1484
Turn Bay Length (ft)	260		280	370		190		325	200	
Base Capacity (vph)	304	1317	819	340	1190	307	811	584	289	757
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.76	0.57	0.52	0.90	1.26	0.94	0.49	0.92	1.35

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.

HCM 7th Signalized Intersection Summary

14: Royal Palm Blvd & Riverside Dr

BY AM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	956	443	167	777	243	367	721	274	252	689	281
Future Volume (veh/h)	225	956	443	167	777	243	367	721	274	252	689	281
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	237	1006	466	176	818	256	386	759	288	265	725	296
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	278	1472	657	241	1048	328	284	771	344	284	531	217
Arrive On Green	0.09	0.41	0.41	0.07	0.39	0.39	0.13	0.22	0.22	0.13	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	2664	833	1781	3554	1585	1781	2462	1005
Grp Volume(v), veh/h	237	1006	466	176	545	529	386	759	288	265	523	498
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1720	1781	1777	1585	1781	1777	1689
Q Serve(g_s), s	12.6	37.0	39.0	9.4	43.0	43.0	21.5	34.0	27.8	19.2	34.5	34.5
Cycle Q Clear(g_c), s	12.6	37.0	39.0	9.4	43.0	43.0	21.5	34.0	27.8	19.2	34.5	34.5
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	278	1472	657	241	699	677	284	771	344	284	383	364
V/C Ratio(X)	0.85	0.68	0.71	0.73	0.78	0.78	1.36	0.98	0.84	0.93	1.37	1.37
Avail Cap(c_a), veh/h	372	1472	657	372	699	677	284	771	344	287	383	364
HCM Platoon Ratio	1.00	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	0.72	0.72	0.72	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	38.3	38.9	32.2	42.5	42.5	51.1	62.4	59.9	48.1	62.7	62.8
Incr Delay (d2), s/veh	13.5	2.6	6.4	3.1	6.2	6.4	182.1	28.3	16.4	35.5	180.6	181.5
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	6.5	16.8	16.4	4.3	20.2	19.6	23.2	18.4	12.8	10.9	34.8	33.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.3	40.9	45.3	35.2	48.6	48.9	233.2	90.7	76.3	83.7	243.4	244.3
LnGrp LOS	D	D	D	D	D	D	F	F	E	F	F	F
Approach Vol, veh/h	1709			1250			1433			1286		
Approach Delay, s/veh	43.0			46.8			126.2			210.8		
Approach LOS	D			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.5	69.5	27.8	41.2	18.2	72.8	28.0	41.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	23.5	54.5	21.5	34.5	23.5	54.5	21.5	34.5				
Max Q Clear Time (g_c+I1), s	14.6	45.0	21.2	36.0	11.4	41.0	23.5	36.5				
Green Ext Time (p_c), s	0.4	4.8	0.0	0.0	0.4	7.4	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	102.8											
HCM 7th LOS	F											

Timings

15: Royal Palm Blvd & Rock Island Rd

BY AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	812	92	274	749	295	85	703	419	275	630	96
Future Volume (vph)	230	812	92	274	749	295	85	703	419	275	630	96
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	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)	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5
Total Split (s)	32.0	46.0	46.0	28.0	42.0	42.0	26.0	60.0	60.0	26.0	60.0	60.0
Total Split (%)	20.0%	28.8%	28.8%	17.5%	26.3%	26.3%	16.3%	37.5%	37.5%	16.3%	37.5%	37.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effect Green (s)	16.6	44.7	44.7	18.4	46.5	46.5	65.5	57.8	57.8	76.2	63.2	63.2
Actuated g/C Ratio	0.10	0.28	0.28	0.12	0.29	0.29	0.41	0.36	0.36	0.48	0.40	0.40
v/c Ratio	0.68	0.86	0.18	0.72	0.76	0.54	0.15	0.57	0.56	0.49	0.47	0.14
Control Delay (s/veh)	57.7	58.7	16.7	79.2	57.4	27.7	23.7	44.3	13.4	26.8	38.0	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.7	58.7	16.7	79.2	57.4	27.7	23.7	44.3	13.4	26.8	38.0	4.3
LOS	E	E	B	E	E	C	C	D	B	C	D	A
Approach Delay (s/veh)		55.2			55.3			32.2			31.7	
Approach LOS		E			E			C			C	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 44.2

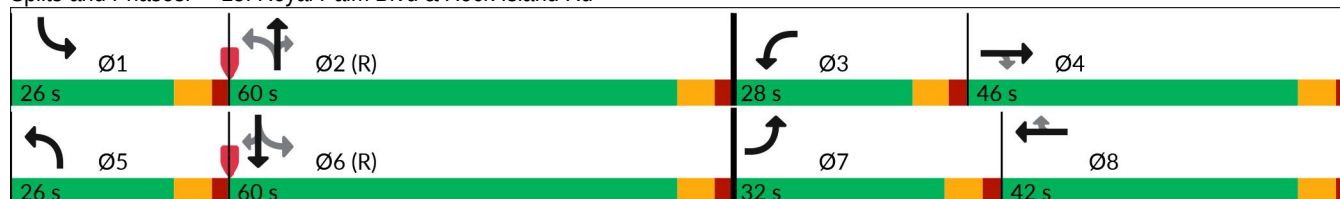
Intersection LOS: D

Intersection Capacity Utilization 79.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 15: Royal Palm Blvd & Rock Island Rd



Queues

15: Royal Palm Blvd & Rock Island Rd

BY AM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	242	855	97	288	788	311	89	740	441	289	663	101
v/c Ratio	0.68	0.86	0.18	0.72	0.76	0.54	0.15	0.57	0.56	0.49	0.47	0.14
Control Delay (s/veh)	57.7	58.7	16.7	79.2	57.4	27.7	23.7	44.3	13.4	26.8	38.0	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.7	58.7	16.7	79.2	57.4	27.7	23.7	44.3	13.4	26.8	38.0	4.3
Queue Length 50th (ft)	130	483	31	152	383	134	26	343	88	91	283	0
Queue Length 95th (ft)	m165	m#617	m56	200	503	257	41	404	202	115	331	32
Internal Link Dist (ft)	4475				2131			1468			840	
Turn Bay Length (ft)	340		170	210		150	220		190	220		250
Base Capacity (vph)	547	988	522	465	1029	568	830	1288	786	695	1397	692
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.87	0.19	0.62	0.77	0.55	0.11	0.57	0.56	0.42	0.47	0.15

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.

HCM 7th Signalized Intersection Summary

15: Royal Palm Blvd & Rock Island Rd

BY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	812	92	274	749	295	85	703	419	275	630	96
Future Volume (veh/h)	230	812	92	274	749	295	85	703	419	275	630	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	242	855	97	288	788	311	89	740	441	289	663	101
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	295	877	391	338	922	411	658	1528	681	565	1642	732
Arrive On Green	0.09	0.25	0.25	0.10	0.26	0.26	0.03	0.43	0.43	0.06	0.46	0.46
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	242	855	97	288	788	311	89	740	441	289	663	101
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	11.0	38.2	7.9	13.1	33.8	28.9	2.3	24.0	35.2	7.3	19.7	5.9
Cycle Q Clear(g_c), s	11.0	38.2	7.9	13.1	33.8	28.9	2.3	24.0	35.2	7.3	19.7	5.9
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	295	877	391	338	922	411	658	1528	681	565	1642	732
V/C Ratio(X)	0.82	0.97	0.25	0.85	0.85	0.76	0.14	0.48	0.65	0.51	0.40	0.14
Avail Cap(c_a), veh/h	551	877	391	464	922	411	973	1528	681	769	1642	732
HCM Platoon Ratio	1.00	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)	0.59	0.59	0.59	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	72.0	59.8	48.3	71.0	56.4	54.6	24.6	32.8	36.0	24.9	28.5	24.7
Incr Delay (d2), s/veh	3.4	17.6	0.2	10.7	7.9	7.8	0.1	1.1	4.7	0.6	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	5.1	19.3	3.2	6.3	16.2	12.5	1.0	10.7	14.6	3.1	8.7	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	75.4	77.3	48.5	81.7	64.3	62.4	24.7	33.9	40.7	25.4	29.0	25.0
LnGrp LOS	E	E	D	F	E	E	C	C	D	C	C	C
Approach Vol, veh/h	1194		1387				1270			1053		
Approach Delay, s/veh	74.6		67.5				35.7			27.7		
Approach LOS	E		E				D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.6	75.3	22.2	46.0	11.4	80.4	20.2	48.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	19.5	53.5	21.5	39.5	19.5	53.5	25.5	35.5				
Max Q Clear Time (g_c+I1), s	9.3	37.2	15.1	40.2	4.3	21.7	13.0	35.8				
Green Ext Time (p_c), s	0.7	6.3	0.5	0.0	0.2	5.5	0.6	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	52.4											
HCM 7th LOS	D											
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

1: Riverside Dr & Sample Rd

BY PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	174	1272	291	1293	139	480	379	133	649	181
Future Volume (vph)	174	1272	291	1293	139	480	379	133	649	181
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4		3	8	
Permitted Phases					4		4	8		8
Detector Phase	1	6	5	2	7	4	4	3	8	8
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
Minimum Split (s)	12.0	45.0	12.0	45.0	11.5	44.5	44.5	11.5	44.5	44.5
Total Split (s)	29.0	61.0	29.0	61.0	18.0	52.0	52.0	18.0	52.0	52.0
Total Split (%)	18.1%	38.1%	18.1%	38.1%	11.3%	32.5%	32.5%	11.3%	32.5%	32.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5	6.5
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	C-Min	None	C-Min	None	None	None	None	None	None
Act Effect Green (s)	20.7	53.3	30.0	62.6	49.8	38.5	38.5	49.6	38.4	38.4
Actuated g/C Ratio	0.13	0.33	0.19	0.39	0.31	0.24	0.24	0.31	0.24	0.24
v/c Ratio	0.80	0.88	0.92	0.76	0.76	0.59	0.63	0.55	0.80	0.38
Control Delay (s/veh)	92.0	57.2	86.8	28.1	61.9	56.3	15.2	44.4	64.7	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.0	57.2	86.8	28.1	61.9	56.3	15.2	44.4	64.7	13.9
LOS	F	E	F	C	E	E	B	D	E	B
Approach Delay (s/veh)		61.0		38.1		41.5			52.4	
Approach LOS		E		D		D			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay (s/veh): 48.3

Intersection LOS: D

Intersection Capacity Utilization 91.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Riverside Dr & Sample Rd



Queues

1: Riverside Dr & Sample Rd

BY PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	183	1480	306	1500	146	505	399	140	683	191
v/c Ratio	0.80	0.88	0.92	0.76	0.76	0.59	0.63	0.55	0.80	0.38
Control Delay (s/veh)	92.0	57.2	86.8	28.1	61.9	56.3	15.2	44.4	64.7	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.0	57.2	86.8	28.1	61.9	56.3	15.2	44.4	64.7	13.9
Queue Length 50th (ft)	187	529	277	478	108	248	64	103	356	33
Queue Length 95th (ft)	#300	594	#591	641	#158	293	176	149	408	100
Internal Link Dist (ft)		903		1640		1956			490	
Turn Bay Length (ft)	370		420		275		430	300		200
Base Capacity (vph)	250	1700	331	1968	193	1006	681	257	1006	558
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.87	0.92	0.76	0.76	0.50	0.59	0.54	0.68	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Riverside Dr & Sample Rd

BY PM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	1272	134	291	1293	132	139	480	379	133	649	181
Future Volume (veh/h)	174	1272	134	291	1293	132	139	480	379	133	649	181
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	1339	141	306	1361	139	146	505	399	140	683	191
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	205	1664	175	245	1776	181	231	960	428	260	951	424
Arrive On Green	0.11	0.35	0.35	0.18	0.50	0.50	0.07	0.27	0.27	0.07	0.27	0.27
Sat Flow, veh/h	1781	4691	494	1781	4707	481	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	183	972	508	306	984	516	146	505	399	140	683	191
Grp Sat Flow(s),veh/h/ln	1781	1702	1781	1781	1702	1784	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	16.2	41.2	41.2	22.0	37.4	37.4	9.4	19.3	39.3	9.1	27.9	16.1
Cycle Q Clear(g_c), s	16.2	41.2	41.2	22.0	37.4	37.4	9.4	19.3	39.3	9.1	27.9	16.1
Prop In Lane	1.00		0.28	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	1207	632	245	1284	673	231	960	428	260	951	424
V/C Ratio(X)	0.89	0.80	0.80	1.25	0.77	0.77	0.63	0.53	0.93	0.54	0.72	0.45
Avail Cap(c_a), veh/h	245	1207	632	245	1284	673	232	1011	451	265	1011	451
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.9	46.6	46.6	65.4	34.1	34.1	41.2	49.7	57.0	39.7	53.1	48.8
Incr Delay (d2), s/veh	28.2	5.8	10.5	131.9	2.8	5.3	5.4	0.4	25.7	2.1	2.3	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	9.0	18.5	20.2	18.7	15.1	16.3	4.5	8.8	18.8	4.2	12.8	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.1	52.4	57.1	197.3	37.0	39.4	46.6	50.1	82.7	41.7	55.4	49.5
LnGrp LOS	F	D	E	F	D	D	D	D	F	D	E	D
Approach Vol, veh/h	1663		1806			1050			1014			
Approach Delay, s/veh	58.9		64.8			62.0			52.4			
Approach LOS	E		E			E			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.4	67.4	17.5	49.7	29.0	63.7	17.9	49.3				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	22.0	54.0	11.5	45.5	22.0	54.0	11.5	45.5				
Max Q Clear Time (g_c+I1), s	18.2	39.4	11.1	41.3	24.0	43.2	11.4	29.9				
Green Ext Time (p_c), s	0.2	8.8	0.0	1.9	0.0	7.0	0.0	4.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	60.2											
HCM 7th LOS	E											

Timings 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

BY PM
07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	155	1537	98	1545	103	58	144	69
Future Volume (vph)	155	1537	98	1545	103	58	144	69
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	34.0	12.0	34.0	11.5	42.0	11.5	40.0
Total Split (s)	22.0	71.0	22.0	71.0	25.0	42.0	25.0	42.0
Total Split (%)	13.8%	44.4%	13.8%	44.4%	15.6%	26.3%	15.6%	26.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0
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-Min	None	C-Min	None	None	None	None
Act Effect Green (s)	23.0	88.7	14.6	80.3	27.8	14.5	33.7	17.4
Actuated g/C Ratio	0.14	0.55	0.09	0.50	0.17	0.09	0.21	0.11
v/c Ratio	0.64	0.59	0.63	0.73	0.42	0.69	0.60	0.41
Control Delay (s/veh)	57.5	28.7	63.1	59.1	54.1	71.3	60.6	28.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.5	28.7	63.1	59.1	54.1	71.3	60.6	28.1
LOS	E	C	E	E	D	E	E	C
Approach Delay (s/veh)		31.3		59.4		63.5		42.7
Approach LOS		C		E		E		D

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 84 (53%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 46.5

Intersection LOS: D

Intersection Capacity Utilization 79.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

	Ø1		Ø2 (R)		Ø3		Ø4
22 s		71 s		25 s		42 s	
	Ø5		Ø6 (R)		Ø7		Ø8
22 s		71 s		25 s		42 s	

Queues

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

BY PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	163	1679	103	1847	108	128	152	187
v/c Ratio	0.64	0.59	0.63	0.73	0.42	0.69	0.60	0.41
Control Delay (s/veh)	57.5	28.7	63.1	59.1	54.1	71.3	60.6	28.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.5	28.7	63.1	59.1	54.1	71.3	60.6	28.1
Queue Length 50th (ft)	126	605	107	595	93	99	134	36
Queue Length 95th (ft)	m164	689	m151	791	141	167	191	76
Internal Link Dist (ft)		1640		1203		306		335
Turn Bay Length (ft)	260		260				160	
Base Capacity (vph)	254	2805	180	2514	314	410	278	812
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.60	0.57	0.73	0.34	0.31	0.55	0.23

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

BY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1537	58	98	1545	210	103	58	64	144	69	108
Future Volume (veh/h)	155	1537	58	98	1545	210	103	58	64	144	69	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	1618	61	103	1626	221	108	61	67	152	73	114
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	167	2970	112	124	2563	347	218	74	81	226	201	179
Arrive On Green	0.03	0.19	0.19	0.07	0.56	0.56	0.07	0.09	0.09	0.09	0.11	0.11
Sat Flow, veh/h	1781	5050	190	1781	4547	616	1781	815	895	1781	1777	1585
Grp Volume(v), veh/h	163	1091	588	103	1216	631	108	0	128	152	73	114
Grp Sat Flow(s),veh/h/ln	1781	1702	1836	1781	1702	1759	1781	0	1709	1781	1777	1585
Q Serve(g_s), s	14.6	46.2	46.2	9.1	38.8	39.0	8.7	0.0	11.8	12.2	6.1	11.0
Cycle Q Clear(g_c), s	14.6	46.2	46.2	9.1	38.8	39.0	8.7	0.0	11.8	12.2	6.1	11.0
Prop In Lane	1.00		0.10	1.00		0.35	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	167	2002	1080	124	1919	992	218	0	154	226	201	179
V/C Ratio(X)	0.98	0.54	0.54	0.83	0.63	0.64	0.50	0.00	0.83	0.67	0.36	0.64
Avail Cap(c_a), veh/h	167	2002	1080	167	1919	992	309	0	385	277	400	357
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.48	0.48	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.3	45.2	45.2	73.5	23.7	23.8	60.6	0.0	71.6	59.3	65.7	67.8
Incr Delay (d2), s/veh	41.7	0.5	1.0	22.5	1.6	3.1	1.7	0.0	10.8	4.6	1.1	3.7
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	9.0	21.4	23.3	5.0	16.0	17.1	4.1	0.0	5.7	5.9	2.8	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	119.0	45.7	46.1	96.0	25.3	26.9	62.4	0.0	82.3	63.9	66.8	71.6
LnGrp LOS	F	D	D	F	C	C	E		F	E	E	E
Approach Vol, veh/h	1842			1950			236			339		
Approach Delay, s/veh	52.3			29.5			73.2			67.1		
Approach LOS	D			C			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	97.2	20.4	20.4	18.1	101.1	16.8	24.1				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	15.0	64.0	19.0	36.0	15.0	64.0	19.0	36.0				
Max Q Clear Time (g_c+I1), s	16.6	41.0	14.2	13.8	11.1	48.2	10.7	13.0				
Green Ext Time (p_c), s	0.0	14.7	0.2	0.7	0.1	10.3	0.1	1.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	44.4											
HCM 7th LOS	D											

HCM 7th TWSC
3: Belmonte Blvd & Sample Rd

BY PM
07/02/2024

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	13	1803	5	24	1781	23	0	0	14	0	0	14
Future Vol, veh/h	13	1803	5	24	1781	23	0	0	14	0	0	14
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	300	-	-	300	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1898	5	25	1875	24	0	0	15	0	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1899	0	0	1903	0	0	-	-	952	-	-	949
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	141	-	-	140	-	-	0	0	223	0	0	224
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	141	-	-	140	-	-	-	-	223	-	-	224
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.24			0.48			22.25			22.19		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	223	141	-	-	140	-	-	224
HCM Lane V/C Ratio	0.066	0.097	-	-	0.18	-	-	0.066
HCM Control Delay (s/veh)	22.2	33.3	-	-	36.3	-	-	22.2
HCM Lane LOS	C	D	-	-	E	-	-	C
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0.6	-	-	0.2

Timings

4: Rock Island Rd & Sample Rd

BY PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	1415	299	537	1761	130	201	310	411	112	441	103
Future Volume (vph)	139	1415	299	537	1761	130	201	310	411	112	441	103
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
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)	12.0	47.0	11.5	12.0	47.0	11.5	11.5	48.5	12.0	11.5	48.5	12.0
Total Split (s)	26.0	64.0	31.0	26.0	64.0	25.0	31.0	45.0	26.0	25.0	39.0	26.0
Total Split (%)	16.3%	40.0%	19.4%	16.3%	40.0%	15.6%	19.4%	28.1%	16.3%	15.6%	24.4%	16.3%
Yellow Time (s)	5.0	5.0	4.5	5.0	5.0	4.5	4.5	4.5	5.0	4.5	4.5	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	6.5	7.0	7.0	6.5	6.5	6.5	7.0	6.5	6.5	7.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	12.1	57.0	79.4	34.1	79.0	96.9	15.4	31.0	71.6	10.9	26.5	45.1
Actuated g/C Ratio	0.08	0.36	0.50	0.21	0.49	0.61	0.10	0.19	0.45	0.07	0.17	0.28
v/c Ratio	0.56	0.82	0.38	0.77	0.73	0.13	0.64	0.47	0.32	0.50	0.79	0.21
Control Delay (s/veh)	86.2	32.4	5.1	67.0	36.0	3.8	76.6	75.8	21.1	79.2	74.1	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	86.2	32.4	5.1	67.0	36.0	3.8	76.6	75.8	21.1	79.2	74.1	16.0
LOS	F	C	A	E	D	A	E	E	C	E	E	B
Approach Delay (s/veh)		32.1			41.1			51.6			65.9	
Approach LOS		C			D			D			E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 104 (65%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay (s/veh): 42.7

Intersection LOS: D

Intersection Capacity Utilization 83.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 4: Rock Island Rd & Sample Rd

	Ø1		Ø2 (R)		Ø3		Ø4
26 s		64 s		25 s		45 s	
	Ø5		Ø6 (R)		Ø7		Ø8
26 s		64 s		31 s		39 s	

Queues

4: Rock Island Rd & Sample Rd

BY PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	146	1489	315	565	1854	137	212	326	433	118	464	108
v/c Ratio	0.56	0.82	0.38	0.77	0.73	0.13	0.64	0.47	0.32	0.50	0.79	0.21
Control Delay (s/veh)	86.2	32.4	5.1	67.0	36.0	3.8	76.6	75.8	21.1	79.2	74.1	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	86.2	32.4	5.1	67.0	36.0	3.8	76.6	75.8	21.1	79.2	74.1	16.0
Queue Length 50th (ft)	81	148	11	289	553	6	118	177	97	62	249	28
Queue Length 95th (ft)	120	347	37	#477	731	42	154	228	165	96	300	72
Internal Link Dist (ft)		985			2330			779			1017	
Turn Bay Length (ft)	280		250	360		300	300		320	180		220
Base Capacity (vph)	407	1811	907	732	2510	1076	525	853	1319	396	719	563
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.82	0.35	0.77	0.74	0.13	0.40	0.38	0.33	0.30	0.65	0.19

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

4: Rock Island Rd & Sample Rd

BY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	1415	299	537	1761	130	201	310	411	112	441	103
Future Volume (veh/h)	139	1415	299	537	1761	130	201	310	411	112	441	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	1489	315	565	1854	137	212	326	433	118	464	108
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	193	2457	884	410	2779	938	264	653	844	164	551	334
Arrive On Green	0.07	0.64	0.64	0.12	0.54	0.54	0.08	0.18	0.18	0.05	0.15	0.15
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	2790	3456	3554	1585
Grp Volume(v), veh/h	146	1489	315	565	1854	137	212	326	433	118	464	108
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1395	1728	1777	1585
Q Serve(g_s), s	6.6	27.4	13.3	19.0	41.6	6.2	9.7	13.2	20.5	5.4	20.3	9.2
Cycle Q Clear(g_c), s	6.6	27.4	13.3	19.0	41.6	6.2	9.7	13.2	20.5	5.4	20.3	9.2
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	193	2457	884	410	2779	938	264	653	844	164	551	334
V/C Ratio(X)	0.76	0.61	0.36	1.38	0.67	0.15	0.80	0.50	0.51	0.72	0.84	0.32
Avail Cap(c_a), veh/h	410	2457	884	410	2779	938	529	855	1003	400	722	410
HCM Platoon Ratio	1.33	1.33	1.33	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	73.0	19.9	12.9	70.5	26.1	14.6	72.7	58.7	46.1	75.2	65.7	53.5
Incr Delay (d2), s/veh	6.0	1.1	1.1	184.3	1.3	0.3	5.7	0.6	0.5	5.9	7.0	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	3.1	10.1	4.5	18.9	17.2	2.4	4.5	6.0	7.3	2.5	9.8	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.0	21.0	14.0	254.8	27.4	14.9	78.4	59.3	46.5	81.0	72.7	54.0
LnGrp LOS	E	C	B	F	C	B	E	E	D	F	E	D
Approach Vol, veh/h	1950			2556			971			690		
Approach Delay, s/veh	24.2			77.0			57.8			71.2		
Approach LOS	C			E			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.9	94.1	14.1	35.9	26.0	84.0	18.7	31.3				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	19.0	57.0	18.5	38.5	19.0	57.0	24.5	32.5				
Max Q Clear Time (g_c+I1), s	8.6	43.6	7.4	22.5	21.0	29.4	11.7	22.3				
Green Ext Time (p_c), s	0.3	10.4	0.2	3.6	0.0	14.9	0.5	2.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	56.6											
HCM 7th LOS	E											
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱	↰	↱		↰	↱↱	↱	↰	↱↱	↱
Traffic Vol, veh/h	89	0	41	9	0	30	65	801	13	36	1047	173
Future Vol, veh/h	89	0	41	9	0	30	65	801	13	36	1047	173
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	0	-	-	220	-	170	180	-	150
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	94	0	43	9	0	32	68	843	14	38	1102	182
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1736	2172	551	1607	2340	422	1284	0	0	857	0	0
Stage 1	1178	1178	-	980	980	-	-	-	-	-	-	-
Stage 2	558	994	-	627	1360	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 56	46	*787	*70	36	581	685	-	-	779	-	-
Stage 1	384	397	-	*268	326	-	-	-	-	-	-	-
Stage 2	481	321	-	*742	306	-	-	-	-	-	-	-
Platoon blocked, %			0				0	-	-		-	-
Mov Cap-1 Maneuver	~ 45	39	*787	*57	31	581	685	-	-	779	-	-
Mov Cap-2 Maneuver	189	155	-	*177	129	-	-	-	-	-	-	-
Stage 1	365	378	-	*241	293	-	-	-	-	-	-	-
Stage 2	410	289	-	*667	291	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v31.51			14.99		0.8		0.28					
HCM LOS	D		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	685	-	-	189	787	177	581	779	-	-		
HCM Lane V/C Ratio	0.1	-	-	0.496	0.055	0.053	0.054	0.049	-	-		
HCM Control Delay (s/veh)	10.8	-	-	41.5	9.8	26.4	11.6	9.9	-	-		
HCM Lane LOS	B	-	-	E	A	D	B	A	-	-		
HCM 95th %tile Q(veh)	0.3	-	-	2.4	0.2	0.2	0.2	0.2	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon						

HCM 7th TWSC
6: Pinewalk Dr N & New Connection #1

BY PM
07/02/2024

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	95	2	17	142	57	0	0	12	35	1	0
Future Vol, veh/h	1	95	2	17	142	57	0	0	12	35	1	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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	100	2	18	149	60	0	0	13	37	1	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	209	0	0	102	0	0	289	348	101	317	319	179
Stage 1	-	-	-	-	-	-	103	103	-	215	215	-
Stage 2	-	-	-	-	-	-	186	245	-	102	104	-
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	-	-	1490	-	-	663	575	954	635	597	863
Stage 1	-	-	-	-	-	-	903	810	-	787	725	-
Stage 2	-	-	-	-	-	-	816	703	-	904	809	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1361	-	-	1490	-	-	653	567	954	618	589	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	653	567	-	618	589	-
Stage 1	-	-	-	-	-	-	902	809	-	776	715	-
Stage 2	-	-	-	-	-	-	804	694	-	891	808	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.08			0.59			8.82			11.22		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	954	18	-	-	134	-	-	617				
HCM Lane V/C Ratio	0.013	0.001	-	-	0.012	-	-	0.061				
HCM Control Delay (s/veh)	8.8	7.6	0	-	7.4	0	-	11.2				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2				

HCM 7th TWSC
7: New Connection #3 & Holiday Springs Dr

BY PM
07/02/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	136	0	3	137
Future Vol, veh/h	1	0	136	0	3	137
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	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	143	0	3	144

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	222	72	0
Stage 1	143	-	-
Stage 2	78	-	-
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	747	976	-
Stage 1	869	-	-
Stage 2	936	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	745	976	-
Mov Cap-2 Maneuver	745	-	-
Stage 1	869	-	-
Stage 2	933	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.84	0	0.16
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	745	1437
HCM Lane V/C Ratio	-	-	0.001	0.002
HCM Control Delay (s/veh)	-	-	9.8	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 7th TWSC
8: New Connection #3 & Pinewalk Dr N

BY PM
07/02/2024

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			A
Traffic Vol, veh/h	1	3	23	1	6	14
Future Vol, veh/h	1	3	23	1	6	14
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	3	24	1	6	15

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	52	25	0
Stage 1	25	-	-
Stage 2	27	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	956	1051	-
Stage 1	998	-	-
Stage 2	995	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	953	1051	-
Mov Cap-2 Maneuver	953	-	-
Stage 1	998	-	-
Stage 2	991	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	8.53	0	2.18
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1025	540
HCM Lane V/C Ratio	-	-	0.004	0.004
HCM Control Delay (s/veh)	-	-	8.5	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	0	2	60	0	60	4	850	78	85	882	16
Future Vol, veh/h	5	0	2	60	0	60	4	850	78	85	882	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	200	210	-	140
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	2	63	0	63	4	895	82	89	928	17
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1563	2093	464	1546	2027	447	945	0	0	977	0	0
Stage 1	1107	1107	-	903	903	-	-	-	-	-	-	-
Stage 2	456	985	-	643	1124	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*76	52	*840	*78	57	*863	935	-	-	875	-	-
Stage 1	*373	395	-	*498	494	-	-	-	-	-	-	-
Stage 2	*814	445	-	*793	386	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	*63	46	*840	*69	51	*863	935	-	-	875	-	-
Mov Cap-2 Maneuver	*228	183	-	*296	207	-	-	-	-	-	-	-
Stage 1	*335	355	-	*496	492	-	-	-	-	-	-	-
Stage 2	*751	443	-	*710	347	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v17.77			14.95		0.04		0.83					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	935	-	-	228	840	296	863	875	-	-		
HCM Lane V/C Ratio	0.005	-	-	0.023	0.003	0.213	0.073	0.102	-	-		
HCM Control Delay (s/veh)	8.9	-	-	21.2	9.3	20.4	9.5	9.6	-	-		
HCM Lane LOS	A	-	-	C	A	C	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.8	0.2	0.3	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⬆⬆			⬆⬆			⬆⬆			⬆⬆	
Traffic Vol, veh/h	6	24	4	39	49	55	2	0	20	29	0	4
Future Vol, veh/h	6	24	4	39	49	55	2	0	20	29	0	4
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	25	4	41	52	58	2	0	21	31	0	4
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	109	0	0	29	0	0	174	232	27	201	205	81
Stage 1	-	-	-	-	-	-	40	40	-	163	163	-
Stage 2	-	-	-	-	-	-	134	192	-	38	42	-
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	-	-	1584	-	-	789	668	1048	758	692	980
Stage 1	-	-	-	-	-	-	975	862	-	839	764	-
Stage 2	-	-	-	-	-	-	870	742	-	977	860	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1481	-	-	1584	-	-	761	647	1048	719	670	980
Mov Cap-2 Maneuver	-	-	-	-	-	-	761	647	-	719	670	-
Stage 1	-	-	-	-	-	-	971	858	-	816	742	-
Stage 2	-	-	-	-	-	-	842	721	-	954	856	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.31			2			8.64			10.08		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	1013	309	-	-	444	-	-	743				
HCM Lane V/C Ratio	0.023	0.004	-	-	0.026	-	-	0.047				
HCM Control Delay (s/veh)	8.6	7.4	0	-	7.3	0	-	10.1				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile O(veh)	0.1	0	-	-	0.1	-	-	0.1				

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	0	42	8	1	3	64	857	7	9	915	59
Future Vol, veh/h	42	0	42	8	1	3	64	857	7	9	915	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	230	-	230	250	-	250
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	0	44	8	1	3	67	902	7	9	963	62
Major/Minor	Minor2		Minor1			Major1		Major2				
Conflicting Flow All	1568	2026	482	1537	2081	451	1025	0	0	909	0	0
Stage 1	982	982	-	1037	1037	-	-	-	-	-	-	-
Stage 2	586	1044	-	501	1044	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*75	57	531	79	53	*837	673	-	-	979	-	-
Stage 1	*267	325	-	428	437	-	-	-	-	-	-	-
Stage 2	*789	433	-	521	304	-	-	-	-	-	-	-
Platoon blocked, %						0		-	-	0	-	-
Mov Cap-1 Maneuver	*66	51	531	65	47	*837	673	-	-	979	-	-
Mov Cap-2 Maneuver	*198	182	-	210	154	-	-	-	-	-	-	-
Stage 1	*265	322	-	385	394	-	-	-	-	-	-	-
Stage 2	*705	390	-	473	301	-	-	-	-	-	-	-
Approach	EB		WB			NB		SB				
HCM Control Delay, s/v20.36			19.99			0.75		0.08				
HCM LOS	C		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	673	-	-	198	531	210	396	979	-	-		
HCM Lane V/C Ratio	0.1	-	-	0.223	0.083	0.04	0.011	0.01	-	-		
HCM Control Delay (s/veh)	10.9	-	-	28.3	12.4	22.9	14.2	8.7	-	-		
HCM Lane LOS	B	-	-	D	B	C	B	A	-	-		
HCM 95th %tile Q(veh)	0.3	-	-	0.8	0.3	0.1	0	0	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

HCM 7th TWSC
12: Holiday Springs Blvd & Pinewalk Dr S

BY PM
07/02/2024

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	87	124	16	12	17
Future Vol, veh/h	13	87	124	16	12	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	170	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	92	131	17	13	18
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	147	0	-	0	212	74
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	73	-
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	1432	-	-	-	757	973
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	941	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1432	-	-	-	750	973
Mov Cap-2 Maneuver	-	-	-	-	750	-
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	941	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.98	0		9.31		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1432	-	-	-	866	
HCM Lane V/C Ratio	0.01	-	-	-	0.035	
HCM Control Delay (s/veh)	7.5	-	-	-	9.3	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings

13: Rock Island Rd & Holiday Springs Blvd

BY PM

07/02/2024

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	24	5	105	16	2	146	968	57	25	834	30
Future Volume (vph)	24	5	105	16	2	146	968	57	25	834	30
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8	5	2			6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	4	4	4	8	8	5	2	2	6	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)	39.5	39.5	39.5	42.5	42.5	11.5	32.5	32.5	32.5	32.5	32.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	12.0	50.0	50.0	38.0	38.0	38.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	15.0%	62.5%	62.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?						Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effect Green (s)	7.0	7.0	7.0	7.0	7.0	62.4	63.7	63.7	48.5	48.5	48.5
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.09	0.78	0.80	0.80	0.61	0.61	0.61
v/c Ratio	0.20	0.03	0.42	0.13	0.10	0.31	0.36	0.04	0.08	0.40	0.03
Control Delay (s/veh)	37.1	32.6	9.5	35.3	19.1	3.3	1.5	0.1	10.4	13.2	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 (s/veh)	37.1	32.6	9.5	35.3	19.1	3.3	1.5	0.1	10.4	13.2	0.1
LOS	D	C	A	D	B	A	A	A	B	B	A
Approach Delay (s/veh)		15.2			27.5		1.7			12.7	
Approach LOS		B			C		A			B	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 52 (65%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay (s/veh): 7.3

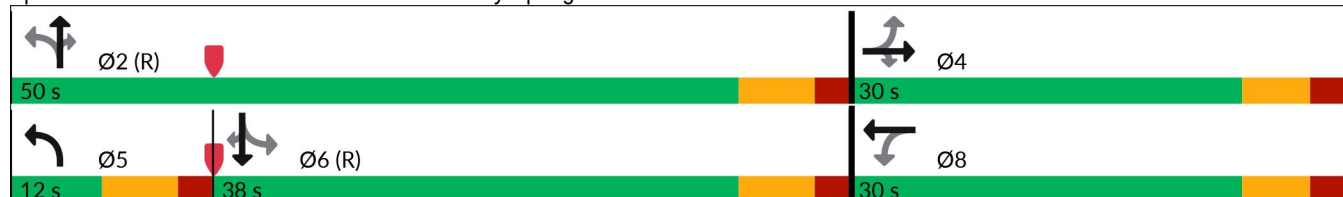
Intersection LOS: A

Intersection Capacity Utilization 55.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 13: Rock Island Rd & Holiday Springs Blvd



Queues

13: Rock Island Rd & Holiday Springs Blvd

BY PM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	25	5	111	17	16	154	1019	60	26	878	32
v/c Ratio	0.20	0.03	0.42	0.13	0.10	0.31	0.36	0.04	0.08	0.40	0.03
Control Delay (s/veh)	37.1	32.6	9.5	35.3	19.1	3.3	1.5	0.1	10.4	13.2	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 (s/veh)	37.1	32.6	9.5	35.3	19.1	3.3	1.5	0.1	10.4	13.2	0.1
Queue Length 50th (ft)	12	2	0	8	1	12	47	0	8	284	0
Queue Length 95th (ft)	34	12	32	26	18	22	55	m1	m18	327	m0
Internal Link Dist (ft)	2605				671			840		1231	
Turn Bay Length (ft)	175							170		250	
Base Capacity (vph)	408	547	561	412	485	489	2816	1272	316	2144	1012
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.01	0.20	0.04	0.03	0.31	0.36	0.05	0.08	0.41	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary 13: Rock Island Rd & Holiday Springs Blvd

BY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	5	105	16	2	13	146	968	57	25	834	30
Future Volume (veh/h)	24	5	105	16	2	13	146	968	57	25	834	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	5	111	17	2	14	154	1019	60	26	878	32
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	178	151	209	19	135	485	2637	1176	404	2134	952
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.12	1.00	1.00	0.60	0.60	0.60
Sat Flow, veh/h	1397	1870	1585	1276	202	1414	1781	3554	1585	523	3554	1585
Grp Volume(v), veh/h	25	5	111	17	0	16	154	1019	60	26	878	32
Grp Sat Flow(s),veh/h/ln	1397	1870	1585	1276	0	1616	1781	1777	1585	523	1777	1585
Q Serve(g_s), s	1.3	0.2	5.4	1.0	0.0	0.7	2.5	0.0	0.0	1.7	10.5	0.7
Cycle Q Clear(g_c), s	2.1	0.2	5.4	1.2	0.0	0.7	2.5	0.0	0.0	1.7	10.5	0.7
Prop In Lane	1.00		1.00	1.00		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	178	151	209	0	154	485	2637	1176	404	2134	952
V/C Ratio(X)	0.12	0.03	0.73	0.08	0.00	0.10	0.32	0.39	0.05	0.06	0.41	0.03
Avail Cap(c_a), veh/h	488	549	466	462	0	475	500	2637	1176	404	2134	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	32.8	35.2	33.4	0.0	33.1	5.2	0.0	0.0	6.7	8.5	6.5
Incr Delay (d2), s/veh	0.2	0.1	6.7	0.2	0.0	0.3	0.3	0.3	0.1	0.3	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	0.5	0.1	2.3	0.3	0.0	0.3	0.7	0.1	0.0	0.2	3.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.2	32.9	41.9	33.5	0.0	33.4	5.5	0.3	0.1	7.0	9.1	6.6
LnGrp LOS	C	C	D	C		C	A	A	A	A	A	A
Approach Vol, veh/h	141		33			1233			936			
Approach Delay, s/veh	40.2		33.4			1.0			8.9			
Approach LOS	D		C			A			A			
Timer - Assigned Phs	2		4		5	6		8				
Phs Duration (G+Y+Rc), s	65.9		14.1		11.3	54.5		14.1				
Change Period (Y+Rc), s	6.5		6.5		6.5	6.5		6.5				
Max Green Setting (Gmax), s	43.5		23.5		5.5	31.5		23.5				
Max Q Clear Time (g_c+I1), s	2.0		7.4		4.5	12.5		3.2				
Green Ext Time (p_c), s	9.7		0.3		0.0	6.6		0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			7.0									
HCM 7th LOS			A									
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

14: Royal Palm Blvd & Riverside Dr

BY PM

07/02/2024

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	236	901	379	274	1023	389	680	257	144	664
Future Volume (vph)	236	901	379	274	1023	389	680	257	144	664
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
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
Minimum Split (s)	11.5	36.5	36.5	11.5	36.5	11.5	37.5	37.5	11.5	37.5
Total Split (s)	25.0	48.0	48.0	32.0	55.0	35.0	45.0	45.0	35.0	45.0
Total Split (%)	15.6%	30.0%	30.0%	20.0%	34.4%	21.9%	28.1%	28.1%	21.9%	28.1%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)	61.3	42.8	42.8	72.4	48.5	73.5	52.5	52.5	53.0	38.5
Actuated g/C Ratio	0.38	0.27	0.27	0.45	0.30	0.46	0.33	0.33	0.33	0.24
v/c Ratio	0.99	1.00	0.62	0.92	1.25	1.13	0.61	0.38	0.51	1.11
Control Delay (s/veh)	101.6	87.4	18.0	87.7	155.3	132.9	48.7	6.0	33.8	119.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	101.6	87.4	18.0	87.7	155.3	132.9	48.7	6.0	33.8	119.1
LOS	F	F	B	F	F	F	D	A	C	F
Approach Delay (s/veh)		72.3			143.3		65.1			107.2
Approach LOS		E			F		E			F

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 143 (89%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay (s/veh): 97.3

Intersection LOS: F

Intersection Capacity Utilization 117.6%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Royal Palm Blvd & Riverside Dr

	Ø1		Ø2 (R)		Ø3		Ø4
25 s		55 s		35 s		45 s	
	Ø5		Ø6 (R)		Ø7		Ø8
32 s		48 s		35 s		45 s	



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	248	948	399	288	1326	409	716	271	152	933
v/c Ratio	0.99	1.00	0.62	0.92	1.25	1.13	0.61	0.38	0.51	1.11
Control Delay (s/veh)	101.6	87.4	18.0	87.7	155.3	132.9	48.7	6.0	33.8	119.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	101.6	87.4	18.0	87.7	155.3	132.9	48.7	6.0	33.8	119.1
Queue Length 50th (ft)	213	~557	91	187	~890	~444	330	0	93	~574
Queue Length 95th (ft)	#406	#695	215	#413	#1043	#665	428	71	143	#714
Internal Link Dist (ft)		1554			4475		1024			1484
Turn Bay Length (ft)	260		280	370		190		325	200	
Base Capacity (vph)	250	945	639	327	1055	361	1161	701	450	839
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	1.00	0.62	0.88	1.26	1.13	0.62	0.39	0.34	1.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary
14: Royal Palm Blvd & Riverside Dr

BY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	901	379	274	1023	237	389	680	257	144	664	222
Future Volume (veh/h)	236	901	379	274	1023	237	389	680	257	144	664	222
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	248	948	399	288	1077	249	409	716	271	152	699	234
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	251	968	432	309	870	200	362	1211	540	284	629	211
Arrive On Green	0.12	0.27	0.27	0.15	0.30	0.30	0.18	0.34	0.34	0.08	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	2869	660	1781	3554	1585	1781	2615	875
Grp Volume(v), veh/h	248	948	399	288	665	661	409	716	271	152	475	458
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1752	1781	1777	1585	1781	1777	1713
Q Serve(g_s), s	18.2	42.3	39.2	21.2	48.5	48.5	28.5	26.6	21.8	10.2	38.5	38.5
Cycle Q Clear(g_c), s	18.2	42.3	39.2	21.2	48.5	48.5	28.5	26.6	21.8	10.2	38.5	38.5
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	251	968	432	309	539	531	362	1211	540	284	428	412
V/C Ratio(X)	0.99	0.98	0.92	0.93	1.23	1.25	1.13	0.59	0.50	0.54	1.11	1.11
Avail Cap(c_a), veh/h	251	969	432	332	539	531	362	1211	540	462	428	412
HCM Platoon Ratio	1.00	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	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	57.7	56.6	50.1	55.8	55.8	52.7	43.6	42.0	41.1	60.7	60.8
Incr Delay (d2), s/veh	53.4	24.2	27.8	26.2	117.6	122.1	87.0	0.8	0.7	1.6	77.2	78.0
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	13.9	22.3	19.0	10.1	39.3	39.4	19.0	12.0	8.7	4.7	26.5	25.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	104.6	82.0	84.4	76.3	173.3	177.8	139.7	44.3	42.7	42.6	138.0	138.8
LnGrp LOS	F	F	F	E	F	F	F	D	D	D	F	F
Approach Vol, veh/h	1595			1614			1396			1085		
Approach Delay, s/veh	86.1			157.8			71.9			125.0		
Approach LOS	F			F			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	55.0	19.0	61.0	29.9	50.1	35.0	45.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	18.5	48.5	28.5	38.5	25.5	41.5	28.5	38.5				
Max Q Clear Time (g_c+I1), s	20.2	50.5	12.2	28.6	23.2	44.3	30.5	40.5				
Green Ext Time (p_c), s	0.0	0.0	0.3	4.2	0.2	0.0	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	110.4											
HCM 7th LOS	F											

Timings

15: Royal Palm Blvd & Rock Island Rd

BY PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	803	132	324	822	262	149	757	451	237	726	112
Future Volume (vph)	166	803	132	324	822	262	149	757	451	237	726	112
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	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)	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5
Total Split (s)	31.0	45.0	45.0	25.0	39.0	39.0	26.0	64.0	64.0	26.0	64.0	64.0
Total Split (%)	19.4%	28.1%	28.1%	15.6%	24.4%	24.4%	16.3%	40.0%	40.0%	16.3%	40.0%	40.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effect Green (s)	13.5	48.1	48.1	20.2	54.8	54.8	63.1	53.5	53.5	68.4	56.2	56.2
Actuated g/C Ratio	0.08	0.30	0.30	0.13	0.34	0.34	0.39	0.33	0.33	0.43	0.35	0.35
v/c Ratio	0.60	0.79	0.25	0.78	0.71	0.44	0.33	0.67	0.62	0.51	0.61	0.18
Control Delay (s/veh)	63.6	84.6	43.3	80.9	50.8	26.9	26.3	48.3	14.8	28.4	47.0	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 (s/veh)	63.6	84.6	43.3	80.9	50.8	26.9	26.3	48.3	14.8	28.4	47.0	11.7
LOS	E	F	D	F	D	C	C	D	B	C	D	B
Approach Delay (s/veh)		76.5			53.3			34.8			39.3	
Approach LOS		E			D			C			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 104 (65%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay (s/veh): 50.4

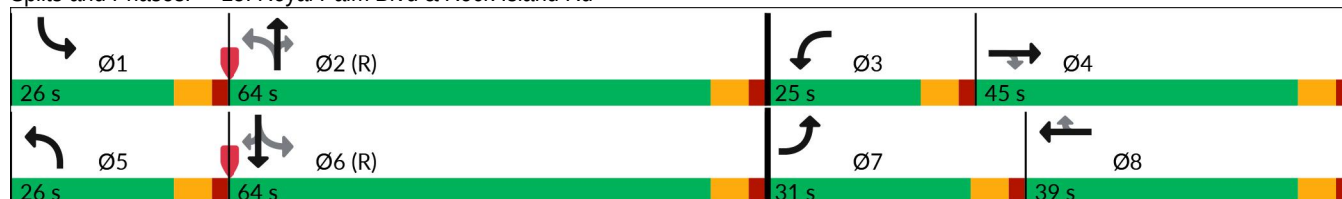
Intersection LOS: D

Intersection Capacity Utilization 80.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 15: Royal Palm Blvd & Rock Island Rd



Queues

15: Royal Palm Blvd & Rock Island Rd

BY PM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	175	845	139	341	865	276	157	797	475	249	764	118
v/c Ratio	0.60	0.79	0.25	0.78	0.71	0.44	0.33	0.67	0.62	0.51	0.61	0.18
Control Delay (s/veh)	63.6	84.6	43.3	80.9	50.8	26.9	26.3	48.3	14.8	28.4	47.0	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 (s/veh)	63.6	84.6	43.3	80.9	50.8	26.9	26.3	48.3	14.8	28.4	47.0	11.7
Queue Length 50th (ft)	98	485	85	179	412	123	48	381	114	102	356	40
Queue Length 95th (ft)	m109	m#532	m99	#260	#615	245	62	413	218	100	406	77
Internal Link Dist (ft)		4475			2131			1468			840	
Turn Bay Length (ft)	340		170	210		150	220		190	220		250
Base Capacity (vph)	525	1063	553	440	1211	620	680	1293	795	624	1313	658
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.79	0.25	0.78	0.71	0.45	0.23	0.62	0.60	0.40	0.58	0.18

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.

HCM 7th Signalized Intersection Summary

15: Royal Palm Blvd & Rock Island Rd

BY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	803	132	324	822	262	149	757	451	237	726	112
Future Volume (veh/h)	166	803	132	324	822	262	149	757	451	237	726	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	175	845	139	341	865	276	157	797	475	249	764	118
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	225	855	381	382	1017	453	724	1525	680	510	1585	707
Arrive On Green	0.07	0.24	0.24	0.11	0.29	0.29	0.04	0.43	0.43	0.11	0.89	0.89
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	175	845	139	341	865	276	157	797	475	249	764	118
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	8.0	37.9	11.7	15.6	36.7	24.1	4.0	26.4	39.1	6.5	6.5	1.5
Cycle Q Clear(g_c), s	8.0	37.9	11.7	15.6	36.7	24.1	4.0	26.4	39.1	6.5	6.5	1.5
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	225	855	381	382	1017	453	724	1525	680	510	1585	707
V/C Ratio(X)	0.78	0.99	0.36	0.89	0.85	0.61	0.22	0.52	0.70	0.49	0.48	0.17
Avail Cap(c_a), veh/h	529	855	381	400	1017	453	1006	1525	680	734	1585	707
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.45	0.45	0.45	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	73.6	60.5	50.6	70.2	53.9	49.4	23.7	33.6	37.2	24.2	5.1	4.9
Incr Delay (d2), s/veh	2.6	17.8	0.3	20.9	7.0	2.4	0.1	1.3	5.9	0.7	1.0	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	3.6	19.2	4.7	8.0	17.5	9.9	1.7	11.8	16.4	2.5	1.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.3	78.4	50.8	91.1	60.9	51.7	23.8	34.9	43.1	24.9	6.1	5.3
LnGrp LOS	E	E	D	F	E	D	C	C	D	C	A	A
Approach Vol, veh/h	1159				1482				1429		1131	
Approach Delay, s/veh	74.8				66.1				36.4		10.2	
Approach LOS	E				E				D		B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.6	75.2	24.2	45.0	12.9	77.9	16.9	52.3				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	19.5	57.5	18.5	38.5	19.5	57.5	24.5	32.5				
Max Q Clear Time (g_c+I1), s	8.5	41.1	17.6	39.9	6.0	8.5	10.0	38.7				
Green Ext Time (p_c), s	0.6	6.9	0.1	0.0	0.4	6.9	0.5	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			47.7									
HCM 7th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

1: Riverside Dr & Sample Rd

FY AM

07/02/2024

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	207	1165	257	1206	155	608	488	153	371	194
Future Volume (vph)	207	1165	257	1206	155	608	488	153	371	194
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4		3	8	
Permitted Phases					4		4	8		8
Detector Phase	1	6	5	2	7	4	4	3	8	8
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
Minimum Split (s)	12.0	45.0	12.0	45.0	11.5	44.5	44.5	11.5	44.5	44.5
Total Split (s)	29.0	61.0	29.0	61.0	18.0	48.0	48.0	22.0	52.0	52.0
Total Split (%)	18.1%	38.1%	18.1%	38.1%	11.3%	30.0%	30.0%	13.8%	32.5%	32.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5	6.5
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	C-Min	None	C-Min	None	None	None	None	None	None
Act Effect Green (s)	22.3	53.7	27.6	59.0	48.9	37.5	37.5	54.5	40.3	40.3
Actuated g/C Ratio	0.14	0.34	0.17	0.37	0.31	0.23	0.23	0.34	0.25	0.25
v/c Ratio	0.88	0.78	0.88	0.80	0.51	0.77	0.84	0.69	0.43	0.37
Control Delay (s/veh)	100.3	51.5	93.3	49.8	41.9	63.9	35.5	50.6	51.2	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 (s/veh)	100.3	51.5	93.3	49.8	41.9	63.9	35.5	50.6	51.2	7.1
LOS	F	D	F	D	D	E	D	D	D	A
Approach Delay (s/veh)		58.4		56.5		50.1			39.2	
Approach LOS		E		E		D			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 13 (8%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay (s/veh): 53.1

Intersection LOS: D

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Riverside Dr & Sample Rd



Queues

1: Riverside Dr & Sample Rd

FY AM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	218	1328	271	1494	163	640	514	161	391	204
v/c Ratio	0.88	0.78	0.88	0.80	0.51	0.77	0.84	0.69	0.43	0.37
Control Delay (s/veh)	100.3	51.5	93.3	49.8	41.9	63.9	35.5	50.6	51.2	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 (s/veh)	100.3	51.5	93.3	49.8	41.9	63.9	35.5	50.6	51.2	7.1
Queue Length 50th (ft)	224	456	287	534	116	328	220	115	178	0
Queue Length 95th (ft)	#387	515	#514	599	172	393	378	170	225	64
Internal Link Dist (ft)		903		1640		1956			490	
Turn Bay Length (ft)	370		420		275		430	300		200
Base Capacity (vph)	253	1701	305	1846	316	917	641	246	1006	596
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.78	0.89	0.81	0.52	0.70	0.80	0.65	0.39	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Riverside Dr & Sample Rd

FY AM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1165	97	257	1206	214	155	608	488	153	371	194
Future Volume (veh/h)	207	1165	97	257	1206	214	155	608	488	153	371	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	218	1226	102	271	1269	225	163	640	514	161	391	204
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	1707	142	245	1568	278	318	922	411	233	947	422
Arrive On Green	0.13	0.36	0.36	0.14	0.36	0.36	0.07	0.26	0.26	0.08	0.27	0.27
Sat Flow, veh/h	1781	4803	400	1781	4362	773	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	218	869	459	271	990	504	163	640	514	161	391	204
Grp Sat Flow(s),veh/h/ln	1781	1702	1798	1781	1702	1731	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	19.3	35.3	35.4	22.0	42.1	42.1	10.8	26.0	41.5	10.5	14.5	17.3
Cycle Q Clear(g_c), s	19.3	35.3	35.4	22.0	42.1	42.1	10.8	26.0	41.5	10.5	14.5	17.3
Prop In Lane	1.00		0.22	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	1210	639	245	1223	622	318	922	411	233	947	422
V/C Ratio(X)	0.92	0.72	0.72	1.11	0.81	0.81	0.51	0.69	1.25	0.69	0.41	0.48
Avail Cap(c_a), veh/h	245	1210	639	245	1223	622	318	922	411	265	1011	451
HCM Platoon Ratio	1.00	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	0.62	0.62	0.62	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.4	44.6	44.6	69.0	46.3	46.3	40.1	53.5	59.2	41.7	48.4	49.4
Incr Delay (d2), s/veh	35.3	3.7	6.8	77.3	3.7	7.0	1.4	2.3	131.4	6.4	0.3	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	11.2	15.7	17.1	15.3	18.5	19.4	4.9	12.0	31.7	5.1	6.6	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	103.7	48.3	51.4	146.3	50.0	53.3	41.5	55.8	190.6	48.1	48.7	50.3
LnGrp LOS	F	D	D	F	D	D	D	E	F	D	D	D
Approach Vol, veh/h	1546			1765			1317			756		
Approach Delay, s/veh	57.1			65.7			106.6			49.0		
Approach LOS	E			E			F			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.4	64.5	19.1	48.0	29.0	63.9	18.0	49.1				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	22.0	54.0	15.5	41.5	22.0	54.0	11.5	45.5				
Max Q Clear Time (g_c+I1), s	21.3	44.1	12.5	43.5	24.0	37.4	12.8	19.3				
Green Ext Time (p_c), s	0.0	6.6	0.1	0.0	0.0	8.5	0.0	3.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	70.9											
HCM 7th LOS	E											

Timings 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

FY AM
07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	108	1589	37	1432	107	48	207	53
Future Volume (vph)	108	1589	37	1432	107	48	207	53
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	34.0	12.0	34.0	11.5	42.0	11.5	40.0
Total Split (s)	20.0	70.0	20.0	70.0	28.0	42.0	28.0	42.0
Total Split (%)	12.5%	43.8%	12.5%	43.8%	17.5%	26.3%	17.5%	26.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	None	None	None	None
Act Effect Green (s)	12.3	60.6	8.3	53.2	23.2	11.3	33.3	16.6
Actuated g/C Ratio	0.10	0.50	0.07	0.44	0.19	0.09	0.28	0.14
v/c Ratio	0.63	0.67	0.32	0.74	0.39	0.59	0.61	0.31
Control Delay (s/veh)	72.6	26.2	66.2	30.6	39.1	51.8	44.3	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.6	26.2	66.2	30.6	39.1	51.8	44.3	19.8
LOS	E	C	E	C	D	D	D	B
Approach Delay (s/veh)		29.2		31.5		45.5		33.6
Approach LOS		C		C		D		C

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 120.7

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay (s/veh): 31.4

Intersection LOS: C

Intersection Capacity Utilization 76.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

	Ø1		Ø2		Ø3		Ø4
20 s		70 s		28 s		42 s	
	Ø5		Ø6		Ø7		Ø8
20 s		70 s		28 s		42 s	

Queues

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

FY AM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	114	1725	39	1648	113	114	218	171
v/c Ratio	0.63	0.67	0.32	0.74	0.39	0.59	0.61	0.31
Control Delay (s/veh)	72.6	26.2	66.2	30.6	39.1	51.8	44.3	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.6	26.2	66.2	30.6	39.1	51.8	44.3	19.8
Queue Length 50th (ft)	89	383	30	386	69	60	142	21
Queue Length 95th (ft)	#194	529	74	507	126	133	232	58
Internal Link Dist (ft)		1640		1203		306		335
Turn Bay Length (ft)	260		260				160	
Base Capacity (vph)	195	2751	195	2697	427	548	406	1054
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.63	0.20	0.61	0.26	0.21	0.54	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

FY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 						 	
Traffic Volume (veh/h)	108	1589	49	37	1432	134	107	48	60	207	53	109
Future Volume (veh/h)	108	1589	49	37	1432	134	107	48	60	207	53	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	1673	52	39	1507	141	113	51	63	218	56	115
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	143	2482	77	59	2092	196	302	69	86	336	260	232
Arrive On Green	0.08	0.49	0.49	0.03	0.44	0.44	0.08	0.09	0.09	0.13	0.15	0.15
Sat Flow, veh/h	1781	5088	158	1781	4750	444	1781	761	940	1781	1777	1585
Grp Volume(v), veh/h	114	1119	606	39	1080	568	113	0	114	218	56	115
Grp Sat Flow(s),veh/h/ln	1781	1702	1842	1781	1702	1790	1781	0	1701	1781	1777	1585
Q Serve(g_s), s	6.3	25.3	25.3	2.2	26.2	26.2	5.7	0.0	6.6	10.7	2.8	6.7
Cycle Q Clear(g_c), s	6.3	25.3	25.3	2.2	26.2	26.2	5.7	0.0	6.6	10.7	2.8	6.7
Prop In Lane	1.00		0.09	1.00		0.25	1.00		0.55	1.00		1.00
Lane Grp Cap(c), veh/h	143	1660	898	59	1499	789	302	0	155	336	260	232
V/C Ratio(X)	0.80	0.67	0.67	0.66	0.72	0.72	0.37	0.00	0.73	0.65	0.22	0.50
Avail Cap(c_a), veh/h	230	2128	1151	230	2128	1119	557	0	608	493	635	566
HCM Platoon Ratio	1.00	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	1.00	1.00
Uniform Delay (d), s/veh	45.5	19.7	19.7	48.2	23.1	23.1	37.4	0.0	44.6	33.9	37.9	39.6
Incr Delay (d2), s/veh	9.7	0.6	1.1	12.1	0.7	1.3	0.8	0.0	6.6	2.1	0.4	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	3.2	9.7	10.6	1.2	10.3	10.9	2.5	0.0	3.0	4.8	1.2	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.2	20.3	20.8	60.3	23.8	24.4	38.2	0.0	51.2	36.0	38.3	41.3
LnGrp LOS	E	C	C	E	C	C	D		D	D	D	D
Approach Vol, veh/h	1839			1687			227			389		
Approach Delay, s/veh	22.6			24.9			44.7			37.9		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.1	51.4	19.1	15.2	10.3	56.2	13.6	20.7				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	63.0	22.0	36.0	13.0	63.0	22.0	36.0				
Max Q Clear Time (g_c+I1), s	8.3	28.2	12.7	8.6	4.2	27.3	7.7	8.7				
Green Ext Time (p_c), s	0.1	16.2	0.4	0.6	0.0	17.3	0.2	1.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	26.2											
HCM 7th LOS	C											

HCM 7th TWSC
3: Belmonte Blvd & Sample Rd

FY AM
07/02/2024

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱ ↑↑↑ ↱ ↑↑↑ ↱											
Traffic Vol, veh/h	55	1754	56	34	1689	7	76	0	67	0	0	9
Future Vol, veh/h	55	1754	56	34	1689	7	76	0	67	0	0	9
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	300	-	-	300	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	1846	59	36	1778	7	80	0	71	0	0	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1785	0	0	1905	0	0	2774	-	953	-	-	893
Stage 1	-	-	-	-	-	-	1992	-	-	-	-	-
Stage 2	-	-	-	-	-	-	783	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	161	-	-	140	-	-	~ 20	0	223	0	0	244
Stage 1	-	-	-	-	-	-	~ 39	0	-	0	0	-
Stage 2	-	-	-	-	-	-	320	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	161	-	-	140	-	-	~ 9	-	223	-	-	244
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 9	-	-	-	-	-
Stage 1	-	-	-	-	-	-	~ 25	-	-	-	-	-
Stage 2	-	-	-	-	-	-	229	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	1.17			0.78			28.43			20.32		
HCM LOS							D			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	223	161	-	-	140	-	-	244				
HCM Lane V/C Ratio	0.316	0.361	-	-	0.256	-	-	0.039				
HCM Control Delay (s/veh)	28.4	39.6	-	-	39.4	-	-	20.3				
HCM Lane LOS	D	E	-	-	E	-	-	C				
HCM 95th %tile Q(veh)	1.3	1.5	-	-	1	-	-	0.1				
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Timings

4: Rock Island Rd & Sample Rd

FY AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	1454	251	321	1160	142	289	527	816	239	367	158
Future Volume (vph)	159	1454	251	321	1160	142	289	527	816	239	367	158
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
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)	12.0	47.0	11.5	12.0	47.0	11.5	11.5	48.5	12.0	11.5	48.5	12.0
Total Split (s)	30.0	54.0	25.0	30.0	54.0	25.0	25.0	51.0	30.0	25.0	51.0	30.0
Total Split (%)	18.8%	33.8%	15.6%	18.8%	33.8%	15.6%	15.6%	31.9%	18.8%	15.6%	31.9%	18.8%
Yellow Time (s)	5.0	5.0	4.5	5.0	5.0	4.5	4.5	4.5	5.0	4.5	4.5	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	6.5	7.0	7.0	6.5	6.5	6.5	7.0	6.5	6.5	7.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	13.1	62.2	86.7	23.1	72.2	95.6	17.6	31.3	61.0	16.4	30.1	49.7
Actuated g/C Ratio	0.08	0.39	0.54	0.14	0.45	0.60	0.11	0.20	0.38	0.10	0.19	0.31
v/c Ratio	0.59	0.77	0.28	0.68	0.53	0.14	0.80	0.80	0.77	0.72	0.57	0.30
Control Delay (s/veh)	79.4	47.1	11.8	71.7	34.1	3.8	86.3	70.3	44.2	81.4	62.0	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.4	47.1	11.8	71.7	34.1	3.8	86.3	70.3	44.2	81.4	62.0	23.0
LOS	E	D	B	E	C	A	F	E	D	F	E	C
Approach Delay (s/veh)		45.1			39.0			60.1			60.1	
Approach LOS		D			D			E			E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 68 (43%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay (s/veh): 49.5

Intersection LOS: D

Intersection Capacity Utilization 81.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Rock Island Rd & Sample Rd

	Ø1		Ø2 (R)		Ø3		Ø4
30 s		54 s		25 s		51 s	
	Ø5		Ø6 (R)		Ø7		Ø8
30 s		54 s		25 s		51 s	

Queues

4: Rock Island Rd & Sample Rd

FY AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	167	1531	264	338	1221	149	304	555	859	252	386	166
v/c Ratio	0.59	0.77	0.28	0.68	0.53	0.14	0.80	0.80	0.77	0.72	0.57	0.30
Control Delay (s/veh)	79.4	47.1	11.8	71.7	34.1	3.8	86.3	70.3	44.2	81.4	62.0	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.4	47.1	11.8	71.7	34.1	3.8	86.3	70.3	44.2	81.4	62.0	23.0
Queue Length 50th (ft)	88	513	67	176	336	7	161	295	416	133	196	73
Queue Length 95th (ft)	127	#718	153	221	440	45	217	345	439	181	237	124
Internal Link Dist (ft)		985			2330			779			1017	
Turn Bay Length (ft)	280		250	360		300	300		320	180		220
Base Capacity (vph)	493	1976	927	530	2295	1018	396	984	1133	396	984	634
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.77	0.28	0.64	0.53	0.15	0.77	0.56	0.76	0.64	0.39	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

4: Rock Island Rd & Sample Rd

FY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	1454	251	321	1160	142	289	527	816	239	367	158
Future Volume (veh/h)	159	1454	251	321	1160	142	289	527	816	239	367	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	1531	264	338	1221	149	304	555	859	252	386	166
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	216	1807	721	389	2062	777	349	988	1090	300	937	517
Arrive On Green	0.06	0.35	0.35	0.11	0.40	0.40	0.10	0.28	0.28	0.09	0.26	0.26
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	2790	3456	3554	1585
Grp Volume(v), veh/h	167	1531	264	338	1221	149	304	555	859	252	386	166
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1395	1728	1777	1585
Q Serve(g_s), s	7.6	44.3	17.4	15.4	30.0	8.5	13.9	21.4	43.4	11.5	14.4	12.6
Cycle Q Clear(g_c), s	7.6	44.3	17.4	15.4	30.0	8.5	13.9	21.4	43.4	11.5	14.4	12.6
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	216	1807	721	389	2062	777	349	988	1090	300	937	517
V/C Ratio(X)	0.77	0.85	0.37	0.87	0.59	0.19	0.87	0.56	0.79	0.84	0.41	0.32
Avail Cap(c_a), veh/h	497	1807	721	497	2062	777	400	988	1090	400	988	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(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	73.9	47.7	28.5	69.8	37.4	22.9	70.9	49.4	42.9	72.0	48.6	40.5
Incr Delay (d2), s/veh	5.7	5.1	1.4	12.7	1.3	0.5	16.9	0.7	3.9	11.5	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	3.6	19.7	7.0	7.5	12.9	3.4	7.0	9.7	15.6	5.6	6.5	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.6	52.8	29.9	82.5	38.6	23.5	87.7	50.1	46.9	83.5	48.9	40.9
LnGrp LOS	E	D	C	F	D	C	F	D	D	F	D	D
Approach Vol, veh/h	1962			1708			1718			804		
Approach Delay, s/veh	52.0			46.0			55.2			58.1		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	71.6	20.4	51.0	25.0	63.6	22.7	48.7				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	23.0	47.0	18.5	44.5	23.0	47.0	18.5	44.5				
Max Q Clear Time (g_c+I1), s	9.6	32.0	13.5	45.4	17.4	46.3	15.9	16.4				
Green Ext Time (p_c), s	0.4	8.1	0.4	0.0	0.6	0.6	0.3	3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	52.0											
HCM 7th LOS	D											

Intersection												
Int Delay, s/veh	13.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	199	1	124	24	0	41	17	1402	13	37	790	85
Future Vol, veh/h	199	1	124	24	0	41	17	1402	13	37	790	85
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	0	-	-	220	-	170	180	-	150
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	209	1	131	25	0	43	18	1476	14	39	832	89
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1683	2435	416	2006	2511	738	921	0	0	1489	0	0
Stage 1	909	909	-	1512	1512	-	-	-	-	-	-	-
Stage 2	774	1525	-	494	999	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 87	31	*867	*43	27	360	924	-	-	447	-	-
Stage 1	487	487	-	*126	181	-	-	-	-	-	-	-
Stage 2	358	178	-	*818	434	-	-	-	-	-	-	-
Platoon blocked, %	0	0	0	0	0	0	0	-	-	-	-	-
Mov Cap-1 Maneuver	~ 68	28	*867	*33	24	360	924	-	-	447	-	-
Mov Cap-2 Maneuver	~ 182	104	-	*101	120	-	-	-	-	-	-	-
Stage 1	445	444	-	*123	178	-	-	-	-	-	-	-
Stage 2	309	175	-	*633	396	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/veh	108.09		29.48		0.11		0.56					
HCM LOS	F		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	924	-	-	181	867	101	360	447	-	-		
HCM Lane V/C Ratio	0.019	-	-	1.161	0.151	0.249	0.12	0.087	-	-		
HCM Control Delay (s/veh)	9	-	-	169	9.9	51.9	16.3	13.8	-	-		
HCM Lane LOS	A	-	-	F	A	F	C	B	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	10.9	0.5	0.9	0.4	0.3	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 7th TWSC
6: Pinewalk Dr N & New Connection #1

FY AM
07/02/2024

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⬇			⬆			⬆			⬆	
Traffic Vol, veh/h	0	189	1	8	68	32	0	0	20	89	0	1
Future Vol, veh/h	0	189	1	8	68	32	0	0	20	89	0	1
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	199	1	8	72	34	0	0	21	94	0	1
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	200	0	0	288	322	199	304	305	88
Stage 1	-	-	-	-	-	-	199	199	-	105	105	-
Stage 2	-	-	-	-	-	-	88	122	-	199	200	-
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	1486	-	-	1372	-	-	664	596	842	648	608	970
Stage 1	-	-	-	-	-	-	802	736	-	900	808	-
Stage 2	-	-	-	-	-	-	919	795	-	803	736	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1486	-	-	1372	-	-	659	592	842	628	604	970
Mov Cap-2 Maneuver	-	-	-	-	-	-	659	592	-	628	604	-
Stage 1	-	-	-	-	-	-	802	736	-	895	803	-
Stage 2	-	-	-	-	-	-	912	790	-	783	736	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.57			9.39			11.72		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	842	1486	-	-	125	-	-	630				
HCM Lane V/C Ratio	0.025	-	-	-	0.006	-	-	0.15				
HCM Control Delay (s/veh)	9.4	0	-	-	7.6	0	-	11.7				
HCM Lane LOS	A	A	-	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.5				

HCM 7th TWSC
7: New Connection #3 & Holiday Springs Dr

FY AM
07/02/2024

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	34	109	11	25	90
Future Vol, veh/h	14	34	109	11	25	90
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	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	36	115	12	26	95

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	221	63	0
Stage 1	121	-	-
Stage 2	100	-	-
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	748	988	-
Stage 1	892	-	-
Stage 2	913	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	734	988	-
Mov Cap-2 Maneuver	734	-	-
Stage 1	892	-	-
Stage 2	896	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.25	0	1.63
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	898	1458
HCM Lane V/C Ratio	-	-	0.056	0.018
HCM Control Delay (s/veh)	-	-	9.2	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

HCM 7th TWSC
8: New Connection #3 & Pinewalk Dr N

FY AM
07/02/2024

Intersection						
Int Delay, s/veh	5.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			A
Traffic Vol, veh/h	49	38	8	31	25	33
Future Vol, veh/h	49	38	8	31	25	33
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	40	8	33	26	35
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	112	25	0	0	41	0
Stage 1	25	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	885	1051	-	-	1568	-
Stage 1	998	-	-	-	-	-
Stage 2	936	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	869	1051	-	-	1568	-
Mov Cap-2 Maneuver	869	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	9.24	0		3.16		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	941	776	-	-
HCM Lane V/C Ratio	-	-	0.097	0.017	-	-
HCM Control Delay (s/veh)	-	-	9.2	7.3	-	0
HCM Lane LOS	-	-	A	A	-	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	-

HCM 7th TWSC
9: Rock Island Rd & NW 30th St

FY AM
07/02/2024

Intersection												
Int Delay, s/veh	8.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	0	55	103	0	133	38	1241	42	64	836	27
Future Vol, veh/h	51	0	55	103	0	133	38	1241	42	64	836	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	200	210	-	140
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	0	58	108	0	140	40	1306	44	67	880	28
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1748	2445	440	1961	2429	653	908	0	0	1351	0	0
Stage 1	1015	1015	-	1386	1386	-	-	-	-	-	-	-
Stage 2	733	1431	-	575	1043	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	77	30	*854	*~ 49	31	410	954	-	-	506	-	-
Stage 1	423	436	-	*151	209	-	-	-	-	-	-	-
Stage 2	378	198	-	*805	420	-	-	-	-	-	-	-
Platoon blocked, %	0	0	0	0	0	0	0	-	-	-	-	-
Mov Cap-1 Maneuver	~ 42	25	*854	*~ 38	26	410	954	-	-	506	-	-
Mov Cap-2 Maneuver	123	93	-	*116	124	-	-	-	-	-	-	-
Stage 1	366	378	-	*144	200	-	-	-	-	-	-	-
Stage 2	239	190	-	*651	364	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s/v31.57			69.43			0.26			0.91			
HCM LOS	D		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	954	-	-	123	854	116	410	506	-	-		
HCM Lane V/C Ratio	0.042	-	-	0.437	0.068	0.932	0.342	0.133	-	-		
HCM Control Delay (s/veh)	8.9	-	-	55.3	9.5	135.5	18.3	13.2	-	-		
HCM Lane LOS	A	-	-	F	A	F	C	B	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	1.9	0.2	5.9	1.5	0.5	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	53	36	5	23	20	22	31	39	81	49	9
Future Vol, veh/h	2	53	36	5	23	20	22	31	39	81	49	9
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	56	38	5	24	21	23	33	41	85	52	9
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	45	0	0	94	0	0	139	135	75	122	143	35
Stage 1	-	-	-	-	-	-	79	79	-	45	45	-
Stage 2	-	-	-	-	-	-	61	56	-	76	98	-
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	1563	-	-	1501	-	-	831	756	987	853	748	1038
Stage 1	-	-	-	-	-	-	930	829	-	969	857	-
Stage 2	-	-	-	-	-	-	951	848	-	933	814	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1563	-	-	1501	-	-	763	752	987	779	744	1038
Mov Cap-2 Maneuver	-	-	-	-	-	-	763	752	-	779	744	-
Stage 1	-	-	-	-	-	-	928	828	-	965	854	-
Stage 2	-	-	-	-	-	-	882	845	-	857	813	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.16			0.77			9.85			10.69		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	840	37	-	-	172	-	-	779				
HCM Lane V/C Ratio	0.115	0.001	-	-	0.004	-	-	0.188				
HCM Control Delay (s/veh)	9.8	7.3	0	-	7.4	0	-	10.7				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.7				

HCM 7th TWSC
11: Pinewalk Dr S & Rock Island Rd

FY AM
07/02/2024

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	87	1	97	16	0	43	12	1195	8	39	911	43
Future Vol, veh/h	87	1	97	16	0	43	12	1195	8	39	911	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	230	-	230	250	-	250
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	1	102	17	0	45	13	1258	8	41	959	45
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1695	2333	479	1845	2369	629	1004	0	0	1266	0	0
Stage 1	1041	1041	-	1283	1283	-	-	-	-	-	-	-
Stage 2	654	1292	-	562	1086	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 60	36	532	46	34	425	685	-	-	545	-	-
Stage 1	246	305	-	174	234	-	-	-	-	-	-	-
Stage 2	422	232	-	479	291	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 49	33	532	34	31	425	685	-	-	545	-	-
Mov Cap-2 Maneuver	144	117	-	118	125	-	-	-	-	-	-	-
Stage 1	227	282	-	171	230	-	-	-	-	-	-	-
Stage 2	370	227	-	356	269	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v38.22			21.56		0.1		0.48					
HCM LOS	E		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	685	-	-	144	514	118	425	545	-	-		
HCM Lane V/C Ratio	0.018	-	-	0.636	0.201	0.143	0.106	0.075	-	-		
HCM Control Delay (s/veh)	10.4	-	-	65.8	13.8	40.6	14.5	12.1	-	-		
HCM Lane LOS	B	-	-	F	B	E	B	B	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	3.4	0.7	0.5	0.4	0.2	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 7th TWSC
12: Holiday Springs Blvd & Pinewalk Dr S

FY AM
07/02/2024

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	133	68	33	58	50
Future Vol, veh/h	37	133	68	33	58	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	170	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	140	72	35	61	53
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	106	0	-	0	237	53
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	148	-
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	1483	-	-	-	731	1003
Stage 1	-	-	-	-	924	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1483	-	-	-	711	1003
Mov Cap-2 Maneuver	-	-	-	-	711	-
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	864	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	1.63	0		10.08		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1483	-	-	-	822	
HCM Lane V/C Ratio	0.026	-	-	-	0.138	
HCM Control Delay (s/veh)	7.5	-	-	-	10.1	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	

Timings

13: Rock Island Rd & Holiday Springs Blvd

FY AM

07/02/2024

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	36	15	157	5	9	72	1127	18	24	1044	18
Future Volume (vph)	36	15	157	5	9	72	1127	18	24	1044	18
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8	5	2			6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	4	4	4	8	8	5	2	2	6	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)	39.5	39.5	39.5	42.5	42.5	11.5	32.5	32.5	32.5	32.5	32.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	12.0	50.0	50.0	38.0	38.0	38.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	15.0%	62.5%	62.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?						Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	Min	Min	Min
Act Effect Green (s)	7.4	7.4	7.4	7.4	7.4	35.9	35.9	35.9	29.4	29.4	29.4
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13	0.63	0.63	0.63	0.52	0.52	0.52
v/c Ratio	0.21	0.06	0.47	0.02	0.12	0.22	0.52	0.01	0.10	0.59	0.02
Control Delay (s/veh)	27.5	25.0	10.0	24.6	15.8	5.6	6.6	0.4	11.1	12.5	0.0
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 (s/veh)	27.5	25.0	10.0	24.6	15.8	5.6	6.6	0.4	11.1	12.5	0.0
LOS	C	C	B	C	B	A	A	A	B	B	A
Approach Delay (s/veh)		14.2			17.1		6.5			12.4	
Approach LOS		B			B		A			B	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 56.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay (s/veh): 9.8

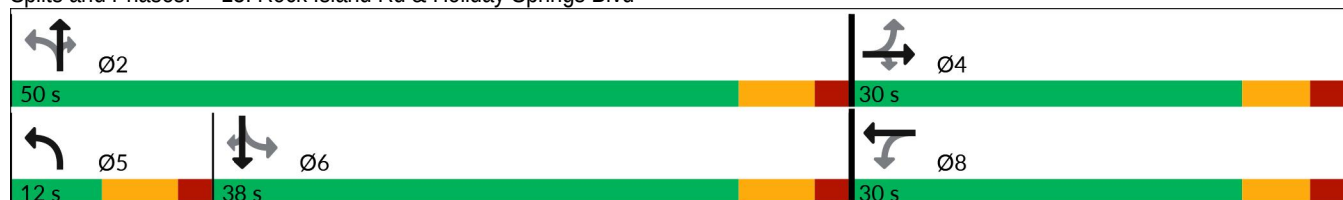
Intersection LOS: A

Intersection Capacity Utilization 60.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 13: Rock Island Rd & Holiday Springs Blvd



Queues

13: Rock Island Rd & Holiday Springs Blvd

FY AM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	16	165	5	30	76	1186	19	25	1099	19
v/c Ratio	0.21	0.06	0.47	0.02	0.12	0.22	0.52	0.01	0.10	0.59	0.02
Control Delay (s/veh)	27.5	25.0	10.0	24.6	15.8	5.6	6.6	0.4	11.1	12.5	0.0
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 (s/veh)	27.5	25.0	10.0	24.6	15.8	5.6	6.6	0.4	11.1	12.5	0.0
Queue Length 50th (ft)	12	5	0	2	3	8	92	0	5	152	0
Queue Length 95th (ft)	38	21	47	10	24	22	154	2	19	234	0
Internal Link Dist (ft)	2605				671			840		1231	
Turn Bay Length (ft)	175							170		250	
Base Capacity (vph)	586	794	769	593	722	333	2792	1259	253	2022	962
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.02	0.21	0.01	0.04	0.23	0.42	0.02	0.10	0.54	0.02

Intersection Summary

HCM 7th Signalized Intersection Summary

13: Rock Island Rd & Holiday Springs Blvd

FY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	15	157	5	9	20	72	1127	18	24	1044	18
Future Volume (veh/h)	36	15	157	5	9	20	72	1127	18	24	1044	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	16	165	5	9	21	76	1186	19	25	1099	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	311	271	229	299	72	168	334	2184	974	329	1532	683
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.06	0.61	0.61	0.43	0.43	0.43
Sat Flow, veh/h	1380	1870	1585	1203	498	1163	1781	3554	1585	464	3554	1585
Grp Volume(v), veh/h	38	16	165	5	0	30	76	1186	19	25	1099	19
Grp Sat Flow(s),veh/h/ln	1380	1870	1585	1203	0	1661	1781	1777	1585	464	1777	1585
Q Serve(g_s), s	1.3	0.4	5.4	0.2	0.0	0.8	1.1	10.4	0.3	1.8	13.7	0.4
Cycle Q Clear(g_c), s	2.2	0.4	5.4	0.6	0.0	0.8	1.1	10.4	0.3	2.3	13.7	0.4
Prop In Lane	1.00		1.00	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	311	271	229	299	0	240	334	2184	974	329	1532	683
V/C Ratio(X)	0.12	0.06	0.72	0.02	0.00	0.12	0.23	0.54	0.02	0.08	0.72	0.03
Avail Cap(c_a), veh/h	712	814	690	648	0	723	404	2864	1277	400	2074	925
HCM Platoon Ratio	1.00	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	21.1	19.9	22.0	20.2	0.0	20.1	8.9	6.0	4.1	9.5	12.6	8.8
Incr Delay (d2), s/veh	0.2	0.1	4.2	0.0	0.0	0.2	0.3	0.2	0.0	0.1	0.8	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	0.4	0.2	2.1	0.1	0.0	0.3	0.4	2.7	0.1	0.2	4.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	20.0	26.3	20.2	0.0	20.3	9.2	6.2	4.1	9.6	13.4	8.9
LnGrp LOS	C	C	C	C		C	A	A	A	A	B	A
Approach Vol, veh/h	219			35			1281			1143		
Approach Delay, s/veh	24.9			20.3			6.4			13.3		
Approach LOS	C			C			A			B		
Timer - Assigned Phs	2			4		5	6		8			
Phs Duration (G+Y+Rc), s	39.7			14.3		9.9	29.8		14.3			
Change Period (Y+Rc), s	6.5			6.5		6.5	6.5		6.5			
Max Green Setting (Gmax), s	43.5			23.5		5.5	31.5		23.5			
Max Q Clear Time (g_c+I1), s	12.4			7.4		3.1	15.7		2.8			
Green Ext Time (p_c), s	10.9			0.6		0.0	7.5		0.1			
Intersection Summary												
HCM 7th Control Delay, s/veh				11.0								
HCM 7th LOS				B								
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

14: Royal Palm Blvd & Riverside Dr

FY AM

07/02/2024

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	229	967	443	186	796	367	726	285	252	699
Future Volume (vph)	229	967	443	186	796	367	726	285	252	699
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
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
Minimum Split (s)	11.5	36.5	36.5	11.5	36.5	11.5	37.5	37.5	11.5	37.5
Total Split (s)	30.0	61.0	61.0	30.0	61.0	28.0	41.0	41.0	28.0	41.0
Total Split (%)	18.8%	38.1%	38.1%	18.8%	38.1%	17.5%	25.6%	25.6%	17.5%	25.6%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)	80.0	58.8	58.8	73.0	55.3	58.8	36.4	36.4	55.6	34.5
Actuated g/C Ratio	0.50	0.37	0.37	0.46	0.35	0.37	0.23	0.23	0.35	0.22
v/c Ratio	0.85	0.78	0.57	0.72	0.91	1.28	0.94	0.51	0.94	1.37
Control Delay (s/veh)	72.1	50.5	12.0	31.8	63.0	190.6	81.9	9.0	87.6	219.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.1	50.5	12.0	31.8	63.0	190.6	81.9	9.0	87.6	219.0
LOS	E	D	B	C	E	F	F	A	F	F
Approach Delay (s/veh)		43.2			58.3		95.8			192.3
Approach LOS		D			E		F			F

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 112 (70%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay (s/veh): 93.5

Intersection LOS: F

Intersection Capacity Utilization 113.0%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Royal Palm Blvd & Riverside Dr

	Ø1		Ø2 (R)		Ø3		Ø4
30 s		61 s		28 s		41 s	
	Ø5		Ø6 (R)		Ø7		Ø8
30 s		61 s		28 s		41 s	

Queues

14: Royal Palm Blvd & Riverside Dr

FY AM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	241	1018	466	196	1094	386	764	300	265	1038
v/c Ratio	0.85	0.78	0.57	0.72	0.91	1.28	0.94	0.51	0.94	1.37
Control Delay (s/veh)	72.1	50.5	12.0	31.8	63.0	190.6	81.9	9.0	87.6	219.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.1	50.5	12.0	31.8	63.0	190.6	81.9	9.0	87.6	219.0
Queue Length 50th (ft)	192	491	75	148	611	~485	~426	5	226	~739
Queue Length 95th (ft)	#331	612	202	m100	#717	#702	#571	92	#407	#880
Internal Link Dist (ft)		1554			4475		1024			1484
Turn Bay Length (ft)	260		280	370		190		325	200	
Base Capacity (vph)	305	1300	810	332	1198	300	805	586	284	757
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.78	0.58	0.59	0.91	1.29	0.95	0.51	0.93	1.37

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.

HCM 7th Signalized Intersection Summary

14: Royal Palm Blvd & Riverside Dr

FY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	967	443	186	796	243	367	726	285	252	699	287
Future Volume (veh/h)	229	967	443	186	796	243	367	726	285	252	699	287
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	241	1018	466	196	838	256	386	764	300	265	736	302
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	275	1447	646	248	1051	321	284	769	343	284	530	217
Arrive On Green	0.10	0.41	0.41	0.08	0.39	0.39	0.13	0.22	0.22	0.13	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	2681	818	1781	3554	1585	1781	2458	1008
Grp Volume(v), veh/h	241	1018	466	196	555	539	386	764	300	265	532	506
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1723	1781	1777	1585	1781	1777	1689
Q Serve(g_s), s	12.8	38.1	39.5	10.4	44.2	44.3	21.5	34.3	29.3	19.4	34.5	34.5
Cycle Q Clear(g_c), s	12.8	38.1	39.5	10.4	44.2	44.3	21.5	34.3	29.3	19.4	34.5	34.5
Prop In Lane	1.00		1.00	1.00		0.48	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	275	1447	646	248	697	675	284	769	343	284	383	364
V/C Ratio(X)	0.88	0.70	0.72	0.79	0.80	0.80	1.36	0.99	0.88	0.93	1.39	1.39
Avail Cap(c_a), veh/h	366	1447	646	367	697	675	284	769	343	285	383	364
HCM Platoon Ratio	1.00	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	0.71	0.71	0.71	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	39.4	39.8	33.2	43.0	43.0	51.1	62.6	60.6	48.7	62.7	62.8
Incr Delay (d2), s/veh	16.8	2.9	6.9	5.0	6.7	6.9	182.1	30.9	21.4	35.8	190.3	191.3
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	6.8	17.3	16.7	4.9	20.8	20.2	23.2	18.8	13.9	10.9	35.9	34.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.1	42.3	46.7	38.2	49.7	50.0	233.2	93.5	82.0	84.5	253.1	254.1
LnGrp LOS	D	D	D	D	D	D	F	F	F	F	F	F
Approach Vol, veh/h	1725			1290			1450			1303		
Approach Delay, s/veh	44.7			48.1			128.3			219.2		
Approach LOS	D			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.8	69.2	27.9	41.1	19.3	71.7	28.0	41.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	23.5	54.5	21.5	34.5	23.5	54.5	21.5	34.5				
Max Q Clear Time (g_c+I1), s	14.8	46.3	21.4	36.3	12.4	41.5	23.5	36.5				
Green Ext Time (p_c), s	0.4	4.4	0.0	0.0	0.4	7.3	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	105.9											
HCM 7th LOS	F											

Timings

15: Royal Palm Blvd & Rock Island Rd

FY AM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	251	812	92	274	749	313	85	721	419	307	662	135
Future Volume (vph)	251	812	92	274	749	313	85	721	419	307	662	135
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	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)	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5
Total Split (s)	32.0	46.0	46.0	28.0	42.0	42.0	26.0	60.0	60.0	26.0	60.0	60.0
Total Split (%)	20.0%	28.8%	28.8%	17.5%	26.3%	26.3%	16.3%	37.5%	37.5%	16.3%	37.5%	37.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effect Green (s)	17.6	44.5	44.5	18.3	45.2	45.2	64.8	57.2	57.2	77.1	63.6	63.6
Actuated g/C Ratio	0.11	0.28	0.28	0.11	0.28	0.28	0.41	0.36	0.36	0.48	0.40	0.40
v/c Ratio	0.70	0.86	0.18	0.73	0.78	0.58	0.15	0.60	0.57	0.55	0.49	0.19
Control Delay (s/veh)	57.2	58.5	16.5	79.9	59.4	29.5	23.4	45.2	14.3	27.5	38.1	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	0.0
Total Delay (s/veh)	57.2	58.5	16.5	79.9	59.4	29.5	23.4	45.2	14.3	27.5	38.1	5.0
LOS	E	E	B	E	E	C	C	D	B	C	D	A
Approach Delay (s/veh)		54.9			56.6			33.2			31.2	
Approach LOS		D			E			C			C	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 41 (26%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay (s/veh): 44.4

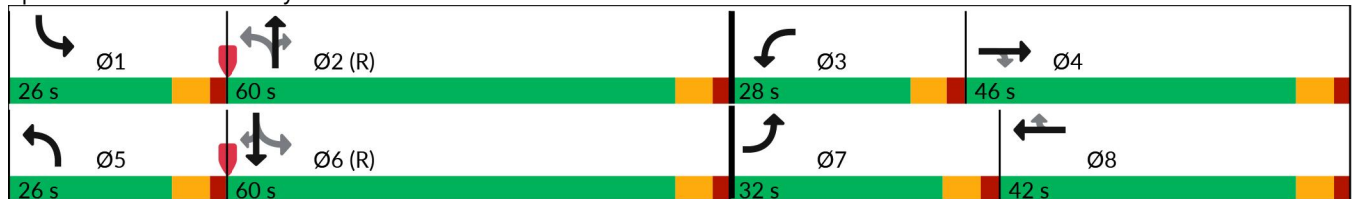
Intersection LOS: D

Intersection Capacity Utilization 80.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 15: Royal Palm Blvd & Rock Island Rd



Queues

15: Royal Palm Blvd & Rock Island Rd

FY AM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	264	855	97	288	788	329	89	759	441	323	697	142
v/c Ratio	0.70	0.86	0.18	0.73	0.78	0.58	0.15	0.60	0.57	0.55	0.49	0.19
Control Delay (s/veh)	57.2	58.5	16.5	79.9	59.4	29.5	23.4	45.2	14.3	27.5	38.1	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	0.0
Total Delay (s/veh)	57.2	58.5	16.5	79.9	59.4	29.5	23.4	45.2	14.3	27.5	38.1	5.0
Queue Length 50th (ft)	141	482	32	152	386	146	26	359	99	103	301	0
Queue Length 95th (ft)	m178	m#613	m54	201	#542	279	41	417	212	126	347	46
Internal Link Dist (ft)		4475			2131			1468			840	
Turn Bay Length (ft)	340		170	210		150	220		190	220		250
Base Capacity (vph)	547	983	520	461	999	561	810	1276	775	676	1406	714
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.87	0.19	0.62	0.79	0.59	0.11	0.59	0.57	0.48	0.50	0.20

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.

HCM 7th Signalized Intersection Summary

15: Royal Palm Blvd & Rock Island Rd

FY AM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	812	92	274	749	313	85	721	419	307	662	135
Future Volume (veh/h)	251	812	92	274	749	313	85	721	419	307	662	135
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	855	97	288	788	329	89	759	441	323	697	142
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	318	877	391	338	899	401	617	1507	672	569	1642	732
Arrive On Green	0.09	0.25	0.25	0.10	0.25	0.25	0.03	0.42	0.42	0.07	0.46	0.46
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	264	855	97	288	788	329	89	759	441	323	697	142
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	12.0	38.2	7.9	13.1	34.1	31.3	2.3	25.0	35.5	8.2	21.0	8.5
Cycle Q Clear(g_c), s	12.0	38.2	7.9	13.1	34.1	31.3	2.3	25.0	35.5	8.2	21.0	8.5
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	318	877	391	338	899	401	617	1507	672	569	1642	732
V/C Ratio(X)	0.83	0.97	0.25	0.85	0.88	0.82	0.14	0.50	0.66	0.57	0.42	0.19
Avail Cap(c_a), veh/h	551	877	391	464	899	401	932	1507	672	753	1642	732
HCM Platoon Ratio	1.00	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)	0.57	0.57	0.57	1.00	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	71.4	59.8	48.3	71.0	57.4	56.4	25.2	33.7	36.8	25.3	28.8	25.4
Incr Delay (d2), s/veh	3.3	17.2	0.2	10.7	9.8	12.8	0.1	1.2	5.0	0.7	0.6	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	5.5	19.3	3.2	6.3	16.6	14.0	1.0	11.2	14.8	3.5	9.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.7	76.9	48.5	81.7	67.2	69.1	25.3	34.9	41.7	26.0	29.4	25.9
LnGrp LOS	E	E	D	F	E	E	C	C	D	C	C	C
Approach Vol, veh/h	1216				1405				1289			
Approach Delay, s/veh	74.2				70.6				36.6			
Approach LOS	E				E				D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.5	74.4	22.2	46.0	11.4	80.4	21.2	47.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	19.5	53.5	21.5	39.5	19.5	53.5	25.5	35.5				
Max Q Clear Time (g_c+I1), s	10.2	37.5	15.1	40.2	4.3	23.0	14.0	36.1				
Green Ext Time (p_c), s	0.8	6.4	0.5	0.0	0.2	6.0	0.7	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	53.1											
HCM 7th LOS	D											
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

1: Riverside Dr & Sample Rd

FY PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	174	1313	305	1326	139	480	396	167	649	181
Future Volume (vph)	174	1313	305	1326	139	480	396	167	649	181
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	5	2	7	4		3	8	
Permitted Phases					4		4	8		8
Detector Phase	1	6	5	2	7	4	4	3	8	8
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
Minimum Split (s)	12.0	45.0	12.0	45.0	11.5	44.5	44.5	11.5	44.5	44.5
Total Split (s)	29.0	61.0	29.0	61.0	18.0	52.0	52.0	18.0	52.0	52.0
Total Split (%)	18.1%	38.1%	18.1%	38.1%	11.3%	32.5%	32.5%	11.3%	32.5%	32.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5	6.5
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	C-Min	None	C-Min	None	None	None	None	None	None
Act Effect Green (s)	20.7	53.4	29.9	62.6	49.4	38.1	38.1	50.0	38.4	38.4
Actuated g/C Ratio	0.13	0.33	0.19	0.39	0.31	0.24	0.24	0.31	0.24	0.24
v/c Ratio	0.80	0.90	0.97	0.79	0.76	0.59	0.68	0.69	0.80	0.38
Control Delay (s/veh)	92.0	59.1	98.5	27.1	61.8	56.6	19.2	52.5	64.7	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.0	59.1	98.5	27.1	61.8	56.6	19.2	52.5	64.7	13.9
LOS	F	E	F	C	E	E	B	D	E	B
Approach Delay (s/veh)		62.6		39.3		42.8			53.5	
Approach LOS		E		D		D			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 146 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay (s/veh): 49.5

Intersection LOS: D

Intersection Capacity Utilization 93.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Riverside Dr & Sample Rd



Queues

1: Riverside Dr & Sample Rd

FY PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	183	1523	321	1564	146	505	417	176	683	191
v/c Ratio	0.80	0.90	0.97	0.79	0.76	0.59	0.68	0.69	0.80	0.38
Control Delay (s/veh)	92.0	59.1	98.5	27.1	61.8	56.6	19.2	52.5	64.7	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	92.0	59.1	98.5	27.1	61.8	56.6	19.2	52.5	64.7	13.9
Queue Length 50th (ft)	187	552	~306	524	108	248	99	132	356	33
Queue Length 95th (ft)	#300	618	m#614	666	#156	293	214	185	408	100
Internal Link Dist (ft)		903		1640		1956			490	
Turn Bay Length (ft)	370		420		275		430	300		200
Base Capacity (vph)	250	1699	330	1967	193	1006	672	255	1006	558
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.90	0.97	0.80	0.76	0.50	0.62	0.69	0.68	0.34

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.

HCM 7th Signalized Intersection Summary

1: Riverside Dr & Sample Rd

FY PM

07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	1313	134	305	1326	160	139	480	396	167	649	181
Future Volume (veh/h)	174	1313	134	305	1326	160	139	480	396	167	649	181
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	1382	141	321	1396	168	146	505	417	176	683	191
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	205	1621	165	245	1695	204	239	986	440	269	991	442
Arrive On Green	0.11	0.34	0.34	0.18	0.49	0.49	0.07	0.28	0.28	0.07	0.28	0.28
Sat Flow, veh/h	1781	4708	480	1781	4619	556	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	183	999	524	321	1029	535	146	505	417	176	683	191
Grp Sat Flow(s),veh/h/ln	1781	1702	1784	1781	1702	1770	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	16.2	43.6	43.6	22.0	41.4	41.4	9.3	19.1	41.3	11.4	27.5	15.8
Cycle Q Clear(g_c), s	16.2	43.6	43.6	22.0	41.4	41.4	9.3	19.1	41.3	11.4	27.5	15.8
Prop In Lane	1.00		0.27	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	1172	614	245	1249	650	239	986	440	269	991	442
V/C Ratio(X)	0.89	0.85	0.85	1.31	0.82	0.82	0.61	0.51	0.95	0.66	0.69	0.43
Avail Cap(c_a), veh/h	245	1172	614	245	1249	650	241	1011	451	269	1011	451
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.55	0.55	0.55	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.9	48.7	48.7	65.4	36.5	36.5	40.0	48.7	56.7	39.2	51.5	47.3
Incr Delay (d2), s/veh	28.2	7.9	14.0	155.1	3.5	6.6	4.4	0.4	29.3	5.6	2.0	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	9.0	19.8	21.8	20.3	16.9	18.1	4.4	8.7	20.1	5.5	12.6	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.1	56.6	62.7	220.5	40.0	43.1	44.5	49.1	85.9	44.8	53.5	48.0
LnGrp LOS	F	E	E	F	D	D	D	D	F	D	D	D
Approach Vol, veh/h	1706		1885			1068			1050			
Approach Delay, s/veh	62.9		71.6			62.9			51.0			
Approach LOS	E		E			E			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.4	65.7	18.0	50.9	29.0	62.1	17.8	51.1				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	22.0	54.0	11.5	45.5	22.0	54.0	11.5	45.5				
Max Q Clear Time (g_c+I1), s	18.2	43.4	13.4	43.3	24.0	45.6	11.3	29.5				
Green Ext Time (p_c), s	0.2	7.2	0.0	1.1	0.0	5.9	0.0	4.9				
Intersection Summary												
HCM 7th Control Delay, s/veh			63.6									
HCM 7th LOS			E									

Timings 2: Holiday Springs Blvd/Woodside Dr & Sample Rd

FY PM
07/02/2024



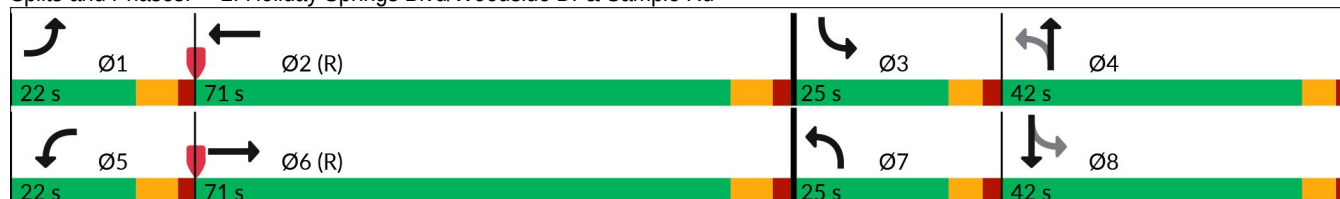
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	155	1625	98	1621	120	75	144	89
Future Volume (vph)	155	1625	98	1621	120	75	144	89
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	34.0	12.0	34.0	11.5	42.0	11.5	40.0
Total Split (s)	22.0	71.0	22.0	71.0	25.0	42.0	25.0	42.0
Total Split (%)	13.8%	44.4%	13.8%	44.4%	15.6%	26.3%	15.6%	26.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0
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-Min	None	C-Min	None	None	None	None
Act Effect Green (s)	23.0	86.5	14.6	78.1	31.3	16.7	34.6	18.4
Actuated g/C Ratio	0.14	0.54	0.09	0.49	0.20	0.10	0.22	0.12
v/c Ratio	0.64	0.65	0.63	0.78	0.46	0.71	0.59	0.43
Control Delay (s/veh)	54.7	31.5	63.5	60.8	53.4	76.0	58.3	31.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.7	31.5	63.5	60.8	53.4	76.0	58.3	31.3
LOS	D	C	E	E	D	E	E	C
Approach Delay (s/veh)		33.5		61.0		65.6		42.7
Approach LOS		C		E		E		D

Intersection Summary

Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 84 (53%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 120
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay (s/veh): 48.2
 Intersection Capacity Utilization 82.1%
 Analysis Period (min) 15

Intersection LOS: D
 ICU Level of Service E

Splits and Phases: 2: Holiday Springs Blvd/Woodside Dr & Sample Rd



Queues

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

FY PM

07/02/2024



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	163	1793	103	1927	126	146	152	208
v/c Ratio	0.64	0.65	0.63	0.78	0.46	0.71	0.59	0.43
Control Delay (s/veh)	54.7	31.5	63.5	60.8	53.4	76.0	58.3	31.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.7	31.5	63.5	60.8	53.4	76.0	58.3	31.3
Queue Length 50th (ft)	131	654	107	651	108	125	132	47
Queue Length 95th (ft)	m163	740	m149	#825	159	197	187	88
Internal Link Dist (ft)		1640		1203		306		335
Turn Bay Length (ft)	260		260				160	
Base Capacity (vph)	254	2731	180	2447	318	409	284	819
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.66	0.57	0.79	0.40	0.36	0.54	0.25

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.

HCM 7th Signalized Intersection Summary

2: Holiday Springs Blvd/Woodside Dr & Sample Rd

FY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	1625	78	98	1621	210	120	75	64	144	89	108
Future Volume (veh/h)	155	1625	78	98	1621	210	120	75	64	144	89	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	1711	82	103	1706	221	126	79	67	152	94	114
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	167	2889	138	124	2538	327	233	94	79	225	201	180
Arrive On Green	0.03	0.19	0.19	0.05	0.37	0.37	0.08	0.10	0.10	0.09	0.11	0.11
Sat Flow, veh/h	1781	4992	239	1781	4578	590	1781	935	793	1781	1777	1585
Grp Volume(v), veh/h	163	1166	627	103	1267	660	126	0	146	152	94	114
Grp Sat Flow(s),veh/h/ln	1781	1702	1827	1781	1702	1764	1781	0	1728	1781	1777	1585
Q Serve(g_s), s	14.6	50.0	50.1	9.2	49.8	50.2	10.0	0.0	13.3	12.1	7.9	11.0
Cycle Q Clear(g_c), s	14.6	50.0	50.1	9.2	49.8	50.2	10.0	0.0	13.3	12.1	7.9	11.0
Prop In Lane	1.00		0.13	1.00		0.33	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	167	1970	1057	124	1888	978	233	0	173	225	201	180
V/C Ratio(X)	0.98	0.59	0.59	0.83	0.67	0.67	0.54	0.00	0.84	0.68	0.47	0.63
Avail Cap(c_a), veh/h	167	1970	1057	167	1888	978	309	0	389	278	400	357
HCM Platoon Ratio	0.33	0.33	0.33	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.42	0.42	0.42	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	77.3	47.5	47.5	75.3	38.1	38.2	58.7	0.0	70.7	58.1	66.4	67.8
Incr Delay (d2), s/veh	38.7	0.6	1.0	22.1	1.9	3.7	2.0	0.0	10.5	4.7	1.7	3.7
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	8.9	23.2	25.1	5.1	22.4	23.9	4.7	0.0	6.4	5.8	3.7	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	116.0	48.0	48.6	97.5	40.0	41.9	60.7	0.0	81.3	62.8	68.1	71.4
LnGrp LOS	F	D	D	F	D	D	E		F	E	E	E
Approach Vol, veh/h	1956			2030			272			360		
Approach Delay, s/veh	53.9			43.5			71.7			66.9		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.0	95.7	20.2	22.0	18.1	99.6	18.1	24.1				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	15.0	64.0	19.0	36.0	15.0	64.0	19.0	36.0				
Max Q Clear Time (g_c+I1), s	16.6	52.2	14.1	15.3	11.2	52.1	12.0	13.0				
Green Ext Time (p_c), s	0.0	9.2	0.2	0.7	0.1	8.8	0.2	1.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	51.4											
HCM 7th LOS	D											

HCM 7th TWSC
3: Belmonte Blvd & Sample Rd

FY PM
07/02/2024

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱ ↑↑↑			↱ ↑↑↑					↱			↱
Traffic Vol, veh/h	13	1803	93	64	1781	23	76	0	48	0	0	14
Future Vol, veh/h	13	1803	93	64	1781	23	76	0	48	0	0	14
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	300	-	-	300	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1898	98	67	1875	24	80	0	51	0	0	15
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1899	0	0	1996	0	0	2859	-	998	-	-	949
Stage 1	-	-	-	-	-	-	1974	-	-	-	-	-
Stage 2	-	-	-	-	-	-	885	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	6.44	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	7.34	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.74	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	3.82	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	141	-	-	126	-	-	~ 18	0	208	0	0	224
Stage 1	-	-	-	-	-	-	~ 40	0	-	0	0	-
Stage 2	-	-	-	-	-	-	277	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	141	-	-	126	-	-	~ 7	-	208	-	-	224
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 7	-	-	-	-	-
Stage 1	-	-	-	-	-	-	~ 36	-	-	-	-	-
Stage 2	-	-	-	-	-	-	120	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.23			2.15			27.76			22.19		
HCM LOS							D			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	208	141	-	-	126	-	-	224				
HCM Lane V/C Ratio	0.243	0.097	-	-	0.536	-	-	0.066				
HCM Control Delay (s/veh)	27.8	33.3	-	-	62.7	-	-	22.2				
HCM Lane LOS	D	D	-	-	F	-	-	C				
HCM 95th %tile Q(veh)	0.9	0.3	-	-	2.6	-	-	0.2				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings

4: Rock Island Rd & Sample Rd

FY PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	1434	299	601	1785	130	201	329	463	112	465	113
Future Volume (vph)	147	1434	299	601	1785	130	201	329	463	112	465	113
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	7	5	2	3	7	4	5	3	8	1
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)	12.0	47.0	11.5	12.0	47.0	11.5	11.5	48.5	12.0	11.5	48.5	12.0
Total Split (s)	26.0	64.0	31.0	26.0	64.0	25.0	31.0	45.0	26.0	25.0	39.0	26.0
Total Split (%)	16.3%	40.0%	19.4%	16.3%	40.0%	15.6%	19.4%	28.1%	16.3%	15.6%	24.4%	16.3%
Yellow Time (s)	5.0	5.0	4.5	5.0	5.0	4.5	4.5	4.5	5.0	4.5	4.5	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	7.0	7.0	6.5	7.0	7.0	6.5	6.5	6.5	7.0	6.5	6.5	7.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	None	None	C-Min	None	None	None	None	None	None	None
Act Effect Green (s)	12.6	57.0	79.4	32.9	77.3	95.2	15.4	32.2	71.6	10.9	27.7	46.8
Actuated g/C Ratio	0.08	0.36	0.50	0.21	0.48	0.60	0.10	0.20	0.45	0.07	0.17	0.29
v/c Ratio	0.57	0.83	0.38	0.89	0.76	0.13	0.64	0.48	0.36	0.50	0.79	0.23
Control Delay (s/veh)	83.7	36.2	5.7	76.9	37.8	4.1	76.0	70.9	24.0	79.2	73.3	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 (s/veh)	83.7	36.2	5.7	76.9	37.8	4.1	76.0	70.9	24.0	79.2	73.3	17.5
LOS	F	D	A	E	D	A	E	E	C	E	E	B
Approach Delay (s/veh)		35.1			45.4			50.2			65.2	
Approach LOS		D			D			D			E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 104 (65%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay (s/veh): 45.3

Intersection LOS: D

Intersection Capacity Utilization 85.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 4: Rock Island Rd & Sample Rd

	Ø1		Ø2 (R)		Ø3		Ø4
26 s		64 s		25 s		45 s	
	Ø5		Ø6 (R)		Ø7		Ø8
26 s		64 s		31 s		39 s	

Queues

4: Rock Island Rd & Sample Rd

FY PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	155	1509	315	633	1879	137	212	346	487	118	489	119
v/c Ratio	0.57	0.83	0.38	0.89	0.76	0.13	0.64	0.48	0.36	0.50	0.79	0.23
Control Delay (s/veh)	83.7	36.2	5.7	76.9	37.8	4.1	76.0	70.9	24.0	79.2	73.3	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 (s/veh)	83.7	36.2	5.7	76.9	37.8	4.1	76.0	70.9	24.0	79.2	73.3	17.5
Queue Length 50th (ft)	86	200	14	337	582	7	117	184	127	62	261	36
Queue Length 95th (ft)	125	393	65	#571	760	44	154	233	197	96	314	82
Internal Link Dist (ft)		985			2330			779			1017	
Turn Bay Length (ft)	280		250	360		300	300		320	180		220
Base Capacity (vph)	407	1811	907	705	2457	1060	525	859	1318	396	724	574
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.83	0.35	0.90	0.76	0.13	0.40	0.40	0.37	0.30	0.68	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

4: Rock Island Rd & Sample Rd

FY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	1434	299	601	1785	130	201	329	463	112	465	113
Future Volume (veh/h)	147	1434	299	601	1785	130	201	329	463	112	465	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	1509	315	633	1879	137	212	346	487	118	489	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	202	2423	873	410	2731	923	264	677	863	164	575	349
Arrive On Green	0.08	0.63	0.63	0.12	0.53	0.53	0.08	0.19	0.19	0.05	0.16	0.16
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	3554	2790	3456	3554	1585
Grp Volume(v), veh/h	155	1509	315	633	1879	137	212	346	487	118	489	119
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1777	1395	1728	1777	1585
Q Serve(g_s), s	7.0	28.7	13.6	19.0	43.3	6.3	9.7	14.0	23.4	5.4	21.4	10.1
Cycle Q Clear(g_c), s	7.0	28.7	13.6	19.0	43.3	6.3	9.7	14.0	23.4	5.4	21.4	10.1
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	202	2423	873	410	2731	923	264	677	863	164	575	349
V/C Ratio(X)	0.77	0.62	0.36	1.54	0.69	0.15	0.80	0.51	0.56	0.72	0.85	0.34
Avail Cap(c_a), veh/h	410	2423	873	410	2731	923	529	855	1003	400	722	415
HCM Platoon Ratio	1.33	1.33	1.33	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	72.7	20.8	13.5	70.5	27.4	15.3	72.7	58.1	46.2	75.2	65.2	52.6
Incr Delay (d2), s/veh	6.0	1.2	1.2	256.0	1.4	0.3	5.7	0.6	0.6	5.9	7.9	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	3.3	10.7	4.7	23.0	18.0	2.4	4.5	6.4	8.3	2.5	10.4	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.8	22.0	14.6	326.5	28.8	15.6	78.4	58.7	46.8	81.0	73.1	53.2
LnGrp LOS	E	C	B	F	C	B	E	E	D	F	E	D
Approach Vol, veh/h	1979			2649			1045			726		
Approach Delay, s/veh	25.3			99.3			57.1			71.1		
Approach LOS	C			F			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.3	92.6	14.1	37.0	26.0	82.9	18.7	32.4				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	19.0	57.0	18.5	38.5	19.0	57.0	24.5	32.5				
Max Q Clear Time (g_c+I1), s	9.0	45.3	7.4	25.4	21.0	30.7	11.7	23.4				
Green Ext Time (p_c), s	0.3	9.3	0.2	3.7	0.0	14.7	0.5	2.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	66.3											
HCM 7th LOS	E											
Notes												
User approved pedestrian interval to be less than phase max green.												

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	144	0	41	9	0	30	65	835	13	36	1087	237
Future Vol, veh/h	144	0	41	9	0	30	65	835	13	36	1087	237
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	120	0	-	-	220	-	170	180	-	150
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	152	0	43	9	0	32	68	879	14	38	1144	249
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1796	2249	572	1664	2485	439	1394	0	0	893	0	0
Stage 1	1220	1220	-	1016	1016	-	-	-	-	-	-	-
Stage 2	576	1029	-	648	1469	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 50	41	*774	*64	29	565	611	-	-	755	-	-
Stage 1	369	384	-	*255	314	-	-	-	-	-	-	-
Stage 2	470	309	-	*730	266	-	-	-	-	-	-	-
Platoon blocked, %			0				0	-	-		-	-
Mov Cap-1 Maneuver	~ 40	35	*774	*51	24	565	611	-	-	755	-	-
Mov Cap-2 Maneuver	180	146	-	*167	112	-	-	-	-	-	-	-
Stage 1	351	365	-	*226	279	-	-	-	-	-	-	-
Stage 2	394	274	-	*654	253	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v67.62			15.46		0.83		0.27					
HCM LOS	F		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR		
Capacity (veh/h)	611	-	-	180	774	167	565	755	-	-		
HCM Lane V/C Ratio	0.112	-	-	0.844	0.056	0.057	0.056	0.05	-	-		
HCM Control Delay (s/veh)	11.6	-	-	84.1	9.9	27.9	11.7	10	-	-		
HCM Lane LOS	B	-	-	F	A	D	B	B	-	-		
HCM 95th %tile Q(veh)	0.4	-	-	6	0.2	0.2	0.2	0.2	-	-		
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⬇			⬆			⬆			⬆	
Traffic Vol, veh/h	1	129	2	17	182	81	0	0	12	56	1	0
Future Vol, veh/h	1	129	2	17	182	81	0	0	12	56	1	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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	136	2	18	192	85	0	0	13	59	1	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	277	0	0	138	0	0	367	452	137	408	410	234
Stage 1	-	-	-	-	-	-	139	139	-	270	270	-
Stage 2	-	-	-	-	-	-	228	313	-	138	140	-
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	1286	-	-	1446	-	-	589	503	912	554	531	805
Stage 1	-	-	-	-	-	-	864	782	-	736	686	-
Stage 2	-	-	-	-	-	-	775	657	-	865	781	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1286	-	-	1446	-	-	579	496	912	538	523	805
Mov Cap-2 Maneuver	-	-	-	-	-	-	579	496	-	538	523	-
Stage 1	-	-	-	-	-	-	863	781	-	725	676	-
Stage 2	-	-	-	-	-	-	762	647	-	852	780	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.06			0.46			9			12.54		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	912	14	-	-	103	-	-	537				
HCM Lane V/C Ratio	0.014	0.001	-	-	0.012	-	-	0.112				
HCM Control Delay (s/veh)	9	7.8	0	-	7.5	0	-	12.5				
HCM Lane LOS	A	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.4				

HCM 7th TWSC
7: New Connection #3 & Holiday Springs Dr

FY PM
07/02/2024

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑		W	↑↑
Traffic Vol, veh/h	15	34	136	16	43	137
Future Vol, veh/h	15	34	136	16	43	137
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	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	36	143	17	45	144
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	314	80	0	0	160	0
Stage 1	152	-	-	-	-	-
Stage 2	163	-	-	-	-	-
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	654	964	-	-	1417	-
Stage 1	861	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	633	964	-	-	1417	-
Mov Cap-2 Maneuver	633	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	9.62	0		1.82		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	831	1417	-	
HCM Lane V/C Ratio	-	-	0.062	0.032	-	
HCM Control Delay (s/veh)	-	-	9.6	7.6	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-	

HCM 7th TWSC
8: New Connection #3 & Pinewalk Dr N

FY PM
07/02/2024

Intersection						
Int Delay, s/veh	5.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			A
Traffic Vol, veh/h	49	37	23	57	46	14
Future Vol, veh/h	49	37	23	57	46	14
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	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	39	24	60	48	15
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	166	54	0	0	84	0
Stage 1	54	-	-	-	-	-
Stage 2	112	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	825	1013	-	-	1513	-
Stage 1	968	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	798	1013	-	-	1513	-
Mov Cap-2 Maneuver	798	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	884	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	9.57	0		5.72		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-		878	1380	-
HCM Lane V/C Ratio	-	-		0.103	0.032	-
HCM Control Delay (s/veh)	-	-		9.6	7.5	0
HCM Lane LOS	-	-		A	A	A
HCM 95th %tile Q(veh)	-	-		0.3	0.1	-

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱↱	↰	↰	↱↱	↰
Traffic Vol, veh/h	39	0	50	60	0	60	60	850	78	85	882	56
Future Vol, veh/h	39	0	50	60	0	60	60	850	78	85	882	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	200	-	200	210	-	140
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	0	53	63	0	63	63	895	82	89	928	59

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1681	2211	464	1664	2187	447	987	0	0	977	0	0
Stage 1	1107	1107	-	1021	1021	-	-	-	-	-	-	-
Stage 2	574	1103	-	643	1166	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*62	44	*840	*63	45	*863	893	-	-	875	-	-
Stage 1	*373	395	-	*407	425	-	-	-	-	-	-	-
Stage 2	*814	382	-	*793	365	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	*48	36	*840	*~ 50	38	*863	893	-	-	875	-	-
Mov Cap-2 Maneuver	*217	155	-	*234	161	-	-	-	-	-	-	-
Stage 1	*335	355	-	*378	395	-	-	-	-	-	-	-
Stage 2	*701	355	-	*667	328	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.5	17.76	0.57	0.8
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	893	-	-	217	840	234	863	875	-	-
HCM Lane V/C Ratio	0.071	-	-	0.189	0.063	0.27	0.073	0.102	-	-
HCM Control Delay (s/veh)	9.3	-	-	25.4	9.6	26	9.5	9.6	-	-
HCM Lane LOS	A	-	-	D	A	D	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.2	1.1	0.2	0.3	-	-

Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

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	6	24	38	39	49	55	42	56	20	29	48	4
Future Vol, veh/h	6	24	38	39	49	55	42	56	20	29	48	4
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	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	25	40	41	52	58	44	59	21	31	51	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	109	0	0	65	0	0	217	249	45	230	241	81
Stage 1	-	-	-	-	-	-	58	58	-	163	163	-
Stage 2	-	-	-	-	-	-	159	192	-	67	78	-
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	-	-	1537	-	-	740	653	1024	725	661	980
Stage 1	-	-	-	-	-	-	954	847	-	839	764	-
Stage 2	-	-	-	-	-	-	843	742	-	943	830	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1481	-	-	1537	-	-	657	632	1024	625	639	980
Mov Cap-2 Maneuver	-	-	-	-	-	-	657	632	-	625	639	-
Stage 1	-	-	-	-	-	-	950	843	-	815	742	-
Stage 2	-	-	-	-	-	-	760	721	-	855	826	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.66	2.02	11.41	11.43
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	686	141	-	-	444	-	-	645
HCM Lane V/C Ratio	0.181	0.004	-	-	0.027	-	-	0.132
HCM Control Delay (s/veh)	11.4	7.4	0	-	7.4	0	-	11.4
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	0.5

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱↱	↰	↰	↱↱	↰
Traffic Vol, veh/h	58	0	42	8	1	43	64	857	7	43	915	73
Future Vol, veh/h	58	0	42	8	1	43	64	857	7	43	915	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	230	-	230	250	-	250
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	0	44	8	1	45	67	902	7	45	963	77

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1640	2098	482	1609	2167	451	1040	0	0	909	0	0
Stage 1	1054	1054	-	1037	1037	-	-	-	-	-	-	-
Stage 2	586	1044	-	572	1131	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
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	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	*66	51	531	70	46	*837	664	-	-	979	-	-
Stage 1	*242	301	-	428	437	-	-	-	-	-	-	-
Stage 2	*789	433	-	472	277	-	-	-	-	-	-	-
Platoon blocked, %						0		-	-	0	-	-
Mov Cap-1 Maneuver	*~ 53	44	531	55	40	*837	664	-	-	979	-	-
Mov Cap-2 Maneuver	*172	163	-	191	135	-	-	-	-	-	-	-
Stage 1	*230	287	-	384	393	-	-	-	-	-	-	-
Stage 2	*669	389	-	413	264	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v26.68		12.37	0.76	0.37
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	664	-	-	172	531	191	748	979	-	-
HCM Lane V/C Ratio	0.101	-	-	0.355	0.083	0.044	0.062	0.046	-	-
HCM Control Delay (s/veh)	11	-	-	37	12.4	24.7	10.1	8.9	-	-
HCM Lane LOS	B	-	-	E	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.5	0.3	0.1	0.2	0.1	-	-

Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

HCM 7th TWSC
12: Holiday Springs Blvd & Pinewalk Dr S

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Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	87	124	16	12	17
Future Vol, veh/h	13	87	124	16	12	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	170	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	92	131	17	13	18
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	147	0	-	0	212	74
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	73	-
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	1432	-	-	-	757	973
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	941	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1432	-	-	-	750	973
Mov Cap-2 Maneuver	-	-	-	-	750	-
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	941	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	0.98	0		9.31		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1432	-	-	-	866	
HCM Lane V/C Ratio	0.01	-	-	-	0.035	
HCM Control Delay (s/veh)	7.5	-	-	-	9.3	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Timings

13: Rock Island Rd & Holiday Springs Blvd

FY PM

07/02/2024

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	24	19	105	16	18	146	968	57	39	834	30
Future Volume (vph)	24	19	105	16	18	146	968	57	39	834	30
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	Perm	Perm	NA	Perm
Protected Phases		4			8	5	2			6	
Permitted Phases	4		4	8		2		2	6		6
Detector Phase	4	4	4	8	8	5	2	2	6	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)	39.5	39.5	39.5	42.5	42.5	11.5	32.5	32.5	32.5	32.5	32.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	12.0	50.0	50.0	38.0	38.0	38.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	15.0%	62.5%	62.5%	47.5%	47.5%	47.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.5	2.5	2.5	2.5	2.5	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag						Lead			Lag	Lag	Lag
Lead-Lag Optimize?						Yes			Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min
Act Effect Green (s)	7.1	7.1	7.1	7.1	7.1	62.3	63.6	63.6	48.4	48.4	48.4
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.09	0.78	0.80	0.80	0.61	0.61	0.61
v/c Ratio	0.20	0.12	0.42	0.13	0.28	0.31	0.36	0.04	0.12	0.41	0.03
Control Delay (s/veh)	37.2	34.2	9.4	35.2	22.0	2.8	1.5	0.1	10.8	12.5	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 (s/veh)	37.2	34.2	9.4	35.2	22.0	2.8	1.5	0.1	10.8	12.5	0.2
LOS	D	C	A	D	C	A	A	A	B	B	A
Approach Delay (s/veh)		17.1			25.4		1.6			12.1	
Approach LOS		B			C		A			B	

Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 52 (65%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay (s/veh): 7.4

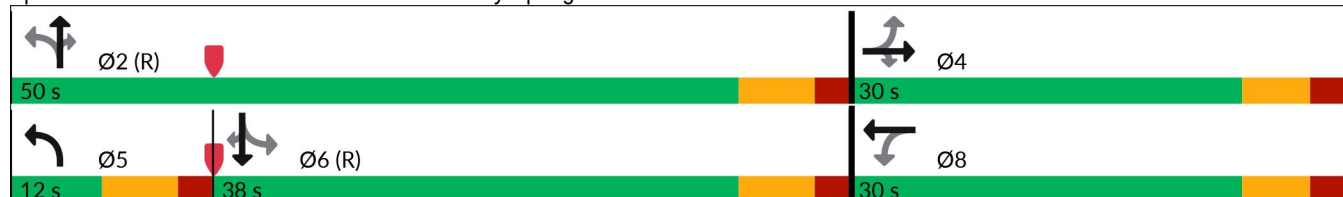
Intersection LOS: A

Intersection Capacity Utilization 55.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 13: Rock Island Rd & Holiday Springs Blvd



Queues

13: Rock Island Rd & Holiday Springs Blvd

FY PM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	25	20	111	17	50	154	1019	60	41	878	32
v/c Ratio	0.20	0.12	0.42	0.13	0.28	0.31	0.36	0.04	0.12	0.41	0.03
Control Delay (s/veh)	37.2	34.2	9.4	35.2	22.0	2.8	1.5	0.1	10.8	12.5	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 (s/veh)	37.2	34.2	9.4	35.2	22.0	2.8	1.5	0.1	10.8	12.5	0.2
Queue Length 50th (ft)	12	9	0	8	9	11	46	0	12	245	0
Queue Length 95th (ft)	34	29	32	26	40	19	54	m1	m30	m333	m1
Internal Link Dist (ft)	2605				671	840				1231	
Turn Bay Length (ft)	175					230			170	250	220
Base Capacity (vph)	396	547	561	407	518	489	2812	1270	316	2141	1011
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.04	0.20	0.04	0.10	0.31	0.36	0.05	0.13	0.41	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

13: Rock Island Rd & Holiday Springs Blvd

FY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	19	105	16	18	29	146	968	57	39	834	30
Future Volume (veh/h)	24	19	105	16	18	29	146	968	57	39	834	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	20	111	17	19	31	154	1019	60	41	878	32
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	185	182	155	200	62	102	484	2630	1173	403	2126	948
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.12	1.00	1.00	0.60	0.60	0.60
Sat Flow, veh/h	1355	1870	1585	1259	639	1043	1781	3554	1585	523	3554	1585
Grp Volume(v), veh/h	25	20	111	17	0	50	154	1019	60	41	878	32
Grp Sat Flow(s),veh/h/ln	1355	1870	1585	1259	0	1683	1781	1777	1585	523	1777	1585
Q Serve(g_s), s	1.4	0.8	5.4	1.0	0.0	2.2	2.5	0.0	0.0	2.7	10.5	0.7
Cycle Q Clear(g_c), s	3.6	0.8	5.4	1.8	0.0	2.2	2.5	0.0	0.0	2.7	10.5	0.7
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	182	155	200	0	164	484	2630	1173	403	2126	948
V/C Ratio(X)	0.14	0.11	0.72	0.08	0.00	0.30	0.32	0.39	0.05	0.10	0.41	0.03
Avail Cap(c_a), veh/h	451	549	466	448	0	494	498	2630	1173	403	2126	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.71	0.71	0.71	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	32.9	35.0	33.7	0.0	33.6	5.3	0.0	0.0	7.0	8.6	6.6
Incr Delay (d2), s/veh	0.3	0.3	6.1	0.2	0.0	1.0	0.3	0.3	0.1	0.5	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	0.5	0.4	2.3	0.3	0.0	0.9	0.7	0.1	0.0	0.3	3.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.6	33.2	41.1	33.9	0.0	34.6	5.6	0.3	0.1	7.5	9.2	6.7
LnGrp LOS	D	C	D	C		C	A	A	A	A	A	A
Approach Vol, veh/h	156		67			1233			951			
Approach Delay, s/veh	39.2		34.4			1.0			9.0			
Approach LOS	D		C			A			A			
Timer - Assigned Phs	2		4		5	6		8				
Phs Duration (G+Y+Rc), s	65.7		14.3		11.3	54.4		14.3				
Change Period (Y+Rc), s	6.5		6.5		6.5	6.5		6.5				
Max Green Setting (Gmax), s	43.5		23.5		5.5	31.5		23.5				
Max Q Clear Time (g_c+I1), s	2.0		7.4		4.5	12.5		4.2				
Green Ext Time (p_c), s	9.7		0.4		0.0	6.7		0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			7.6									
HCM 7th LOS			A									
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

14: Royal Palm Blvd & Riverside Dr

FY PM

07/02/2024

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	243	921	379	291	1040	389	690	277	144	672
Future Volume (vph)	243	921	379	291	1040	389	690	277	144	672
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
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
Minimum Split (s)	11.5	36.5	36.5	11.5	36.5	11.5	37.5	37.5	11.5	37.5
Total Split (s)	25.0	48.0	48.0	32.0	55.0	35.0	45.0	45.0	35.0	45.0
Total Split (%)	15.6%	30.0%	30.0%	20.0%	34.4%	21.9%	28.1%	28.1%	21.9%	28.1%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)	60.5	42.0	42.0	73.1	48.5	73.5	52.4	52.4	53.1	38.5
Actuated g/C Ratio	0.38	0.26	0.26	0.46	0.30	0.46	0.33	0.33	0.33	0.24
v/c Ratio	1.01	1.04	0.63	0.95	1.27	1.13	0.62	0.40	0.52	1.12
Control Delay (s/veh)	109.1	97.2	18.9	97.3	161.8	132.9	49.1	6.0	34.0	124.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	109.1	97.2	18.9	97.3	161.8	132.9	49.1	6.0	34.0	124.2
LOS	F	F	B	F	F	F	D	A	C	F
Approach Delay (s/veh)		79.9			149.9		64.4			111.8
Approach LOS		E			F		E			F

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 143 (89%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.27

Intersection Signal Delay (s/veh): 102.0

Intersection LOS: F

Intersection Capacity Utilization 118.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 14: Royal Palm Blvd & Riverside Dr

	Ø1		Ø2 (R)		Ø3		Ø4
25 s		55 s		35 s		45 s	
	Ø5		Ø6 (R)		Ø7		Ø8
32 s		48 s		35 s		45 s	

Queues

14: Royal Palm Blvd & Riverside Dr

FY PM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	256	969	399	306	1344	409	726	292	152	947
v/c Ratio	1.01	1.04	0.63	0.95	1.27	1.13	0.62	0.40	0.52	1.12
Control Delay (s/veh)	109.1	97.2	18.9	97.3	161.8	132.9	49.1	6.0	34.0	124.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	109.1	97.2	18.9	97.3	161.8	132.9	49.1	6.0	34.0	124.2
Queue Length 50th (ft)	~232	~581	98	218	~911	~444	337	0	93	~590
Queue Length 95th (ft)	#423	#721	222	#468	#1061	#665	435	74	143	#729
Internal Link Dist (ft)		1554			4475		1024			1484
Turn Bay Length (ft)	260		280	370		190		325	200	
Base Capacity (vph)	251	929	629	327	1055	361	1158	714	446	840
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	1.04	0.63	0.94	1.27	1.13	0.63	0.41	0.34	1.13

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary 14: Royal Palm Blvd & Riverside Dr

FY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	243	921	379	291	1040	237	389	690	277	144	672	228
Future Volume (veh/h)	243	921	379	291	1040	237	389	690	277	144	672	228
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	256	969	399	306	1095	249	409	726	292	152	707	240
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	251	930	415	325	873	197	362	1211	540	279	627	213
Arrive On Green	0.12	0.26	0.26	0.16	0.30	0.30	0.18	0.34	0.34	0.08	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	2879	651	1781	3554	1585	1781	2604	884
Grp Volume(v), veh/h	256	969	399	306	673	671	409	726	292	152	482	465
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1753	1781	1777	1585	1781	1777	1711
Q Serve(g_s), s	18.5	41.9	39.7	23.1	48.5	48.5	28.5	27.1	23.8	10.2	38.5	38.5
Cycle Q Clear(g_c), s	18.5	41.9	39.7	23.1	48.5	48.5	28.5	27.1	23.8	10.2	38.5	38.5
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	251	930	415	325	539	531	362	1211	540	279	428	412
V/C Ratio(X)	1.02	1.04	0.96	0.94	1.25	1.26	1.13	0.60	0.54	0.54	1.13	1.13
Avail Cap(c_a), veh/h	251	930	415	329	539	531	362	1211	540	457	428	412
HCM Platoon Ratio	1.00	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	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	59.1	58.3	51.5	55.8	55.8	52.7	43.7	42.6	41.1	60.7	60.8
Incr Delay (d2), s/veh	62.1	41.1	35.7	28.1	123.7	128.7	87.0	0.8	1.1	1.7	83.4	84.1
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	14.6	24.1	20.1	14.9	40.2	40.4	19.0	12.2	9.6	4.7	27.3	26.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	113.3	100.1	93.9	79.6	179.5	184.5	139.7	44.5	43.7	42.8	144.1	144.9
LnGrp LOS	F	F	F	E	F	F	F	D	D	D	F	F
Approach Vol, veh/h	1624			1650				1427			1099	
Approach Delay, s/veh	100.7			163.0				71.6			130.4	
Approach LOS	F			F				E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	55.0	19.0	61.0	31.6	48.4	35.0	45.0				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	18.5	48.5	28.5	38.5	25.5	41.5	28.5	38.5				
Max Q Clear Time (g_c+I1), s	20.5	50.5	12.2	29.1	25.1	43.9	30.5	40.5				
Green Ext Time (p_c), s	0.0	0.0	0.3	4.1	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	116.9											
HCM 7th LOS	F											

Timings

15: Royal Palm Blvd & Rock Island Rd

FY PM

07/02/2024

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	207	803	132	324	822	296	149	791	451	265	754	145
Future Volume (vph)	207	803	132	324	822	296	149	791	451	265	754	145
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	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)	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5	11.5	43.5	43.5
Total Split (s)	31.0	45.0	45.0	25.0	39.0	39.0	26.0	64.0	64.0	26.0	64.0	64.0
Total Split (%)	19.4%	28.1%	28.1%	15.6%	24.4%	24.4%	16.3%	40.0%	40.0%	16.3%	40.0%	40.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Min	C-Min	None	C-Min	C-Min
Act Effect Green (s)	15.5	46.9	46.9	20.1	51.5	51.5	63.5	54.0	54.0	70.5	57.5	57.5
Actuated g/C Ratio	0.10	0.29	0.29	0.13	0.32	0.32	0.40	0.34	0.34	0.44	0.36	0.36
v/c Ratio	0.65	0.81	0.25	0.79	0.75	0.51	0.33	0.69	0.63	0.58	0.62	0.23
Control Delay (s/veh)	64.5	85.0	43.3	81.1	54.5	29.6	25.7	48.8	16.1	29.6	46.7	11.5
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 (s/veh)	64.5	85.0	43.3	81.1	54.5	29.6	25.7	48.8	16.1	29.6	46.7	11.5
LOS	E	F	D	F	D	C	C	D	B	C	D	B
Approach Delay (s/veh)		76.5			55.4			35.8			38.5	
Approach LOS		E			E			D			D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 104 (65%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay (s/veh): 50.9

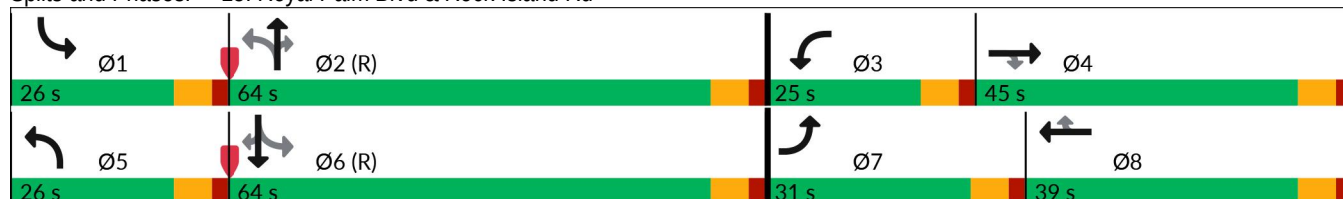
Intersection LOS: D

Intersection Capacity Utilization 82.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 15: Royal Palm Blvd & Rock Island Rd



Queues

15: Royal Palm Blvd & Rock Island Rd

FY PM

07/02/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	218	845	139	341	865	312	157	833	475	279	794	153
v/c Ratio	0.65	0.81	0.25	0.79	0.75	0.51	0.33	0.69	0.63	0.58	0.62	0.23
Control Delay (s/veh)	64.5	85.0	43.3	81.1	54.5	29.6	25.7	48.8	16.1	29.6	46.7	11.5
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 (s/veh)	64.5	85.0	43.3	81.1	54.5	29.6	25.7	48.8	16.1	29.6	46.7	11.5
Queue Length 50th (ft)	122	485	84	179	427	148	47	400	127	112	367	53
Queue Length 95th (ft)	m131	m#506	m94	#266	#651	285	62	437	234	110	424	92
Internal Link Dist (ft)		4475			2131			1468			840	
Turn Bay Length (ft)	340		170	210		150	220		190	220		250
Base Capacity (vph)	525	1036	542	439	1139	602	677	1292	786	607	1326	681
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.82	0.26	0.78	0.76	0.52	0.23	0.64	0.60	0.46	0.60	0.22

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.

HCM 7th Signalized Intersection Summary 15: Royal Palm Blvd & Rock Island Rd

FY PM
07/02/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	803	132	324	822	296	149	791	451	265	754	145
Future Volume (veh/h)	207	803	132	324	822	296	149	791	451	265	754	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	218	845	139	341	865	312	157	833	475	279	794	153
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	855	381	382	971	433	691	1504	671	509	1584	707
Arrive On Green	0.08	0.24	0.24	0.11	0.27	0.27	0.04	0.42	0.42	0.13	0.89	0.89
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	218	845	139	341	865	312	157	833	475	279	794	153
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	9.9	37.9	11.7	15.6	37.4	28.5	4.1	28.3	39.5	7.4	7.0	2.1
Cycle Q Clear(g_c), s	9.9	37.9	11.7	15.6	37.4	28.5	4.1	28.3	39.5	7.4	7.0	2.1
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	270	855	381	382	971	433	691	1504	671	509	1584	707
V/C Ratio(X)	0.81	0.99	0.36	0.89	0.89	0.72	0.23	0.55	0.71	0.55	0.50	0.22
Avail Cap(c_a), veh/h	529	855	381	400	971	433	973	1504	671	712	1584	707
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	72.6	60.5	50.6	70.2	55.9	52.6	24.2	34.8	38.0	24.9	5.2	4.9
Incr Delay (d2), s/veh	2.4	16.7	0.2	20.9	10.4	5.8	0.2	1.5	6.2	0.9	1.0	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	4.5	19.1	4.7	8.0	18.2	12.1	1.7	12.7	16.6	2.9	2.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.9	77.2	50.8	91.1	66.2	58.4	24.3	36.2	44.2	25.7	6.2	5.6
LnGrp LOS	E	E	D	F	E	E	C	D	D	C	A	A
Approach Vol, veh/h	1202			1518			1465			1226		
Approach Delay, s/veh	73.7			70.2			37.5			10.6		
Approach LOS	E			E			D			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.6	74.2	24.2	45.0	13.0	77.8	19.0	50.2				
Change Period (Y+Rc), s	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Max Green Setting (Gmax), s	19.5	57.5	18.5	38.5	19.5	57.5	24.5	32.5				
Max Q Clear Time (g_c+I1), s	9.4	41.5	17.6	39.9	6.1	9.0	11.9	39.4				
Green Ext Time (p_c), s	0.7	7.1	0.1	0.0	0.4	7.5	0.6	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	48.6											
HCM 7th LOS	D											
Notes												
User approved pedestrian interval to be less than phase max green.												

APPENDIX G: FDOT 2023 QUALITY/LEVEL OF SERVICE
HANDBOOK GENERALIZED SERVICE VOLUMES

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

Peak Hour Directional

	B	C	D	E
1 Lane	*	760	1,070	**
2 Lane	*	1,520	1,810	**
3 Lane	*	2,360	2,680	**
4 Lane	*	3,170	3,180	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,380	1,950	**
4 Lane	*	2,760	3,290	**
6 Lane	*	4,290	4,870	**
8 Lane	*	5,760	5,780	**

AADT

	B	C	D	E
2 Lane	*	15,300	21,700	**
4 Lane	*	30,700	36,600	**
6 Lane	*	47,700	54,100	**
8 Lane	*	64,000	64,200	**



(C3C-Suburban Commercial)



(C3R-Suburban Residential)

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

Adjustment Factors

The peak hour directional service volumes should be adjusted by multiplying by 1.2 for one-way facilities
 The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided
 Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
 2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80

Exclusive right turn lane(s): Multiply by 1.05
 Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
 Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
 Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

Input Parameters

Roadway Characteristics

	C3C	C3R
Number of Lanes (one direction)	1-4	1-3
Posted Speed (mph)	45	45
Facility Length (miles)	3.98	2.57

Traffic Characteristics

	C3C		C3R	
Planning Analysis Hour Factor (K)	0.09		0.09	
Directional Distribution Factor (D)	0.55		0.55	
Peak Hour Factor (PHF)	0.95		0.92	
Base Saturation Flow Rate	1,950		1,950	
Heavy Vehicle Percent (%)	4		4	
Lane Width	12		12	
Median Type	Non Restrictive (1 lane)	Restrictive (2,3,4 lanes)	Non Restrictive (1 lane)	Restrictive (2,3 lanes)
Roadway Edge Type	Curbed		Flush	
On-Street Parking	None		None	

Control Characteristics

	C3C		C3R
Cycle Length	160		190
Major Street Through g/c	0.5 (1,2,3 lanes)	0.45 (4 lanes)	0.5
Yellow Change Interval	5.1		5.1
Red Change Interval	2		2
Number of Signals	10		5