

Memo

Date: April 28, 2023

Project: Lena Road from North of 44th Avenue East to SR 64

To: Shari K. Barnwell, PE

From: Jason Starr, PE, HDR Project Manager
Heather Hubbard, PE, HDR Transportation and Traffic Engineer

Subject: Lena Road Alternatives Evaluation and Traffic Analysis

1.0 Purpose of Study

The purpose of this memorandum is to document the traffic operations and queueing analysis results at two study intersections along Lena Road for the design year (2045) Build Alternative, which includes extending Lena Road from S of 44th Avenue E to S of 34th Avenue E. Lena Road will have one lane in each direction on this new segment. This improvement will form a connection from SR 70 to SR 64. The SR 64/Lena Road intersection is currently signalized, and it was assumed that the Lena Road/Landfill Road intersection would be signalized by the design year (2045). Three Alternatives were considered for the northbound approach of the SR 64/Lena Road intersection. These Alternatives were compared and one is proposed for implementation. Queue lengths were analyzed at the study intersections to determine appropriate storage lengths under the Build Alternative.

2.0 Study Intersections

Lena Road is proposed as a 2-lane collector within the study area. The following two study intersections were analyzed for queue storage lengths:

- Lena Road/Powell Johnson Road-Landfill Road
- SR 64/Lena Road

It was assumed that both intersections would be signalized by the design year (2045). Lena Road has a proposed speed limit of 30 mph. The Landfill Road speed limit is 25 mph and the SR 64 speed limit is 50 mph. The project location is shown on **Figure 2.1**.

3.0 Traffic Data Collection

Eight-hour peak period turning movement counts were collected on June 14, 2022 at the study intersections. These counts were collected from 7:00 AM to 10:00 AM and 2:00 PM to 6:00 PM. The traffic count data can be found in **Attachment A**.



Figure 2.1 – Lena Road Study Intersection Locations

4.0 Design Year (2045) Traffic Volume Development

Seasonal factors of 1.05 and 1.02 were applied to the raw AM and PM turning movement counts at the Lena Road/Landfill Road and SR 64/Lena Road intersections, respectively. The seasonal factors were taken from the 2021 Florida Traffic Online Manatee County Seasonal Factors Report for off-system roads east of I-75 and countywide, respectively, and can be found in **Attachment B**. These adjusted counts were used as the basis for design year (2045) volume development. A linear growth rate of 3.04 percent, taken from the Lena Road Corridor Study Traffic Analysis Memorandum, dated October 4, 2021, was applied to the adjusted counts to obtain the design year (2045) peak-hour volumes and the Determined Growth Rates section is provided in **Attachment C**. **Table 4.1** shows the design year (2045) AM and PM peak-hour volumes.

Table 4.1. Design Year (2045) AM and PM Peak-Hour Volumes

Intersection	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM																
Lena Rd/ Landfill Rd	0	9	0	0	0	2	0	103	0	0	86	2	0	91	168	5
SR 64/ Lena Rd	9	75	2425	151	3	140	3388	38	0	215	19	166	0	206	28	55
PM																
Lena Rd/ Landfill Rd	0	0	0	0	0	2	2	145	0	4	175	4	0	75	100	11
SR 64/ Lena Rd	24	130	3206	87	2	90	2792	201	0	315	66	180	0	257	42	147

5.0 SR 64/Lena Road Northbound Approach Alternatives

Three northbound approach Alternatives were analyzed for the SR 64/Lena Road intersection using Synchro, version 11.1.2.9. The Alternatives considered are:

- 1 left-turn lane, 2 through lanes, and 1 right-turn lane (originally shown in draft plans),
- 1 left-turn lane, 1 left-through lane, 1 through lane, and 1 right-turn lane (requires split phasing), and
- 2 left-turn lanes, 1 through lane, and 1 right-turn lane (dual left-turn lanes considered based on volume splits).

6.0 SR 64/Lena Road Design Year (2045) Operational Analysis - Comparison of Alternatives

A peak-hour factor (PHF) of 0.95 was used in the future year analyses rather than the existing PHFs. Truck percentages for each movement from the turning movement counts were maintained in the design year (2045) analysis. The cycle lengths were maintained at 160 and 180 seconds in the AM and PM peak hours, respectively, for all three Alternatives to facilitate a consistent comparison. **Table 6.1** shows the delay and Level of Service (LOS) results comparison based on the Synchro results. The Synchro output results can be found in **Attachment D**.

Table 6.1. SR 64/Lena Road Design Year (2045) LOS and Delay Comparison

SR 64/Lena Rd Northbound Approach Alternatives	Eastbound		Westbound		Northbound		Southbound		Overall Intersection	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
AM										
1L-2T-1R	37.3	D	90.7	F	108.2	F	102.0	F	71.6	E
1L-1LT-1T-1R	38.0	D	94.7	F	81.6	F	118.9	F	73.1	E
2L-1T-1R	36.7	D	75.8	E	97.6	F	102.0	F	63.1	E
PM										
1L-2T-1R	113.0	F	75.3	E	125.9	F	125.3	F	99.3	F
1L-1LT-1T-1R	93.8	F	61.0	E	102.1	F	137.8	F	83.6	F
2L-1T-1R	80.5	F	54.7	D	110.4	F	112.0	F	74.0	E

7.0 SR 64/Lena Road Design Year (2045) Queue Analysis - Comparison of Alternatives

Table 7.1 shows the 95th percentile queue length comparison results for the design year (2045) rounded up to the nearest 25 feet (ft). **Table 7.2** shows the available queue storage space, deceleration length needs based on FDOT Design Manual (FDM) Section 212 (Intersection, Exhibit 212-1), and turn bay storage needs for the study intersections. The Synchro output results can be found in **Attachment D**.

Table 7.1. SR 64/Lena Road Design Year (2045) 95th Percentile Queue Lengths (ft) Comparison

SR 64/Lena Rd Northbound Approach Alternatives	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM												
1L-2T-1R	#225	925	50	#325	#1625	0	#425	50	100	#225	#150	-
1L-1LT-1T-1R	#225	925	50	#325	#1650	0	#300	125	100	#225	125	-
2L-1T-1R	#225	925	25	#275	#1600	0	#250	75	#125	#375	#150	-
PM												
1L-2T-1R	#400	#1775	25	#275	#1475	50	#675	75	200	#250	#375	-
1L-1LT-1T-1R	#375	#1725	25	#275	#1425	50	#450	225	#200	#300	#350	-
2L-1T-1R	#375	#1675	25	#275	#1400	50	#350	150	#275	#450	#375	-

*Queue lengths from Synchro reports.

**# indicates 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.

Table 7.2. SR 64/Lena Road Design Year (2045) Queue Storage Space Needs (ft) Comparison

SR 64/Lena Rd Northbound Approach Alternatives	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
1L-2T-1R								
*Maximum Queue Length (ft)	400	50	325	50	675	200	250	-
Available Storage Space (ft)	775	400	350	575	460	275	800	-
Design Speed (mph)	50	50	50	50	30	30	30	30
**Deceleration Length (ft)	240	240	240	240	145	145	145	-
Storage Space Needed (ft)	640	290	565	290	820	345	395	-
Available-Needed Storage Space (ft)	135	110	-215	285	-360	-70	405	-
1L-1LT-1T-1R								
*Maximum Queue Length (ft)	375	50	325	50	450	200	300	-
Available Storage Space (ft)	775	400	350	575	460	275	800	-
Design Speed (mph)	50	50	50	50	30	30	30	30
**Deceleration Length (ft)	240	240	240	240	145	145	145	-
Storage Space Needed (ft)	615	290	565	290	595	345	445	-
Available-Needed Storage Space (ft)	160	110	-215	285	-135	-70	355	-
2L-1T-1R								
*Maximum Queue Length (ft)	375	25	275	50	350	275	450	-
Available Storage Space (ft)	775	400	350	575	460	275	800	-
Design Speed (mph)	50	50	50	50	30	30	30	30
**Deceleration Length (ft)	240	240	240	240	145	145	145	-
Storage Space Needed (ft)	615	265	515	290	495	420	595	-
Available-Needed Storage Space (ft)	160	135	-165	285	-35	-145	205	-

*Maximum AM or PM 95th percentile queue length reported

**Deceleration Lengths are from the Florida Design Manual 2022, Section 212

**Deceleration length for roadways with a design speed of 35 mph was used for roadways with a posted speed less than 35 mph.

8.0 SR 64/Lena Road Proposed Northbound Approach Geometry

Overall, the dual-left Alternative has the lowest intersection delay and the queue storage accommodates the expected queues sufficiently, with three turn bays expected to spill back minimally. Note that the turn bays accommodate the expected vehicle queues when deceleration lengths are not considered. The timing may be further optimized by taking green time away from the eastbound and westbound approaches and fine-tuning in the field when the signal is in place. This Alternative is also conducive to safe and efficient pedestrian crossing phases.

9.0 Design Year (2045) Build Alternative Operational Analysis

The intersection analyses were conducted using Synchro, version 11.1.2.9. The dual-left northbound approach Alternative for the SR 64/Lena Road intersection is shown in the results tables below, as it is the proposed geometry. A PHF of 0.95 was used in the future year analyses rather than the existing PHFs. Truck percentages for each movement from the turning movement counts were maintained in the design year (2045) analysis. **Table 9.1** shows delay and LOS results based on the Synchro results. The Synchro output results can be found in **Attachment E**.

Table 9.1. Design Year (2045) LOS and Delay

Intersection	Eastbound		Westbound		Northbound		Southbound		Overall Intersection	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
AM										
Lena Rd/Landfill Rd	18.3	B	7.1	A	14.7	B	5.7	A	7.9	A
SR 64/Lena Rd	36.7	D	75.8	E	97.6	F	102.0	F	63.1	E
PM										
Lena Rd/Landfill Rd	0.0	A	8.6	A	15.0	B	6.0	A	9.9	A
SR 64/Lena Rd	80.5	F	54.7	D	110.4	F	112.0	F	74.0	E

10.0 Design Year (2045) Build Alternative Queue Analysis

Table 10.1 shows the 95th percentile queue length results for the design year (2045) rounded up to the nearest 25 ft. **Table 10.2** shows the available queue storage space, deceleration length needs based on FDM Section 212 (Intersection, Exhibit 212-1), and turn bay storage needs for the study intersections. The Synchro output results can be found in **Attachment E**.

Table 10.1. Design Year (2045) 95th Percentile Queue Lengths (ft)

Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
AM												
Lena Rd/Landfill Rd	-	25	-	-	25	-	0	75	0	50	50	-
SR 64/Lena Rd	#225	925	25	#275	#1600	0	#250	75	#125	#225	#150	-
PM												
Lena Rd/Landfill Rd	-	0	-	-	50	-	25	125	0	50	50	-
SR 64/Lena Rd	#375	#1675	0	#275	#1400	50	#350	150	#200	200	#375	-

*Queue lengths from Synchro reports.

**# indicates 95th percentile volume exceeds capacity; queue may be longer. Queue shown is maximum after two cycles.

Table 10.2. Design Year (2045) Queue Storage Space Needs (ft)

Intersection	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Lena Rd/Landfill Rd								
*Maximum Queue Length (ft)	-	-	-	-	25	0	50	-
Available Storage Space (ft)	-	-	-	-	250	250	350	-
Design Speed (mph)	25	25	25	25	30	30	30	30
**Deceleration Length (ft)	-	-	-	-	145	145	145	145
Storage Space Needed (ft)	-	-	-	-	170	145	195	-
Available-Needed Storage Space (ft)	-	-	-	-	80	105	155	-
SR 64/Lena Rd								
*Maximum Queue Length (ft)	375	25	275	50	350	200	225	-
Available Storage Space (ft)	775	400	350	575	460	275	800	-
Design Speed (mph)	50	50	50	50	30	30	30	30
**Deceleration Length (ft)	240	240	240	240	145	145	145	-
Storage Space Needed (ft)	615	265	515	290	495	345	370	-
Available-Needed Storage Space (ft)	160	135	-165	285	-35	-70	430	-

*Maximum AM or PM 95th percentile queue length reported

**Deceleration Lengths are from the Florida Design Manual 2022, Section 212

**Deceleration length for roadways with a design speed of 35 mph was used for roadways with a posted speed less than 35 mph.

11.0 Summary and Conclusions

The results of the traffic operational analysis indicate that the Lena Road/Landfill Road intersection is expected to operate at LOS A through the design year (2045) in both peak hours under the proposed Build Alternative. The queuing analysis shows that this intersection design is expected to have sufficient storage space to accommodate the projected traffic demand.

Three northbound approach configurations were analyzed at the SR 64/Lena Road intersection and it is expected that the geometry that includes 2 left-turn lanes, 1 through lane, and 1 right-turn lane will perform most efficiently in terms of accommodating the project traffic demand. The results of the traffic operational analysis indicate that the SR 64/Lena Road intersection is expected to operate at LOS E through the design year (2045) in both peak hours under the proposed Build Alternative. The timing may be further optimized by taking green time away from the eastbound and westbound approaches and fine-tuning in the field when the signal is in place.

The queue storage space accommodates the expected queues sufficiently at the SR 64/Lena Road intersection, with three turn bays expected to spill back minimally. Note that all turn bays accommodate the expected vehicle queues when deceleration lengths are not considered. The SR 64/Lena Road intersection northbound dual left-turn bays should be extended back towards the Lena Road/Brower Drive-Musgrave Ranch Road intersection, which is being proposed as a roundabout, to maximize storage space.

Attachment A
Traffic Count Data

Intersection Turning Movement Count

City/County: Bradenton/Manatee
 Weather: Clear
 Comments:

File Name : Lena&Landfill
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	LENA ROAD Southbound				LANDFILL ROAD Westbound				81ST COURT E Northbound				POWELL JOHNSON/LENA ROAD Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	10	25	0	35	0	0	2	2	0	7	1	8	0	0	0	0	45
07:15 AM	9	19	1	29	0	0	2	2	0	4	0	4	0	0	0	0	35
07:30 AM	5	25	0	30	0	0	4	4	0	11	0	11	0	0	0	0	45
07:45 AM	11	28	2	41	0	0	3	3	0	17	1	18	0	0	0	0	62
Total	35	97	3	135	0	0	11	11	0	39	2	41	0	0	0	0	187
08:00 AM	7	14	1	22	0	0	3	3	0	12	0	12	1	0	0	1	38
08:15 AM	4	19	0	23	0	0	10	10	0	6	0	6	2	0	0	2	41
08:30 AM	3	21	0	24	0	0	6	6	0	9	0	9	2	0	0	2	41
08:45 AM	5	25	0	30	1	0	6	7	0	13	0	13	1	0	0	1	51
Total	19	79	1	99	1	0	25	26	0	40	0	40	6	0	0	6	171
09:00 AM	6	18	3	27	0	0	6	6	0	11	0	11	0	0	0	0	44
09:15 AM	4	12	0	16	0	0	7	7	0	10	1	11	0	0	0	0	34
09:30 AM	2	16	0	18	0	0	4	4	0	10	0	10	0	0	0	0	32
09:45 AM	5	7	1	13	0	0	5	5	0	4	1	5	2	0	0	2	25
Total	17	53	4	74	0	0	22	22	0	35	2	37	2	0	0	2	135
10:00 AM	3	10	0	13	0	0	3	3	0	17	1	18	0	0	0	0	34
10:15 AM	2	15	1	18	0	0	3	3	0	7	0	7	0	0	0	0	28
10:30 AM	6	9	0	15	0	0	6	6	0	9	0	9	0	0	0	0	30
10:45 AM	8	11	0	19	0	0	7	7	0	13	0	13	0	0	0	0	39
Total	19	45	1	65	0	0	19	19	0	46	1	47	0	0	0	0	131
*** BREAK ***																	
02:00 PM	3	10	2	15	0	0	3	3	0	11	0	11	0	0	0	0	29
02:15 PM	6	11	1	18	0	0	5	5	0	21	1	22	2	0	0	2	47
02:30 PM	9	15	0	24	0	0	8	8	0	17	0	17	1	0	0	1	50
02:45 PM	5	7	1	13	0	0	6	6	1	6	1	8	0	0	0	0	27
Total	23	43	4	70	0	0	22	22	1	55	2	58	3	0	0	3	153
03:00 PM	8	9	1	18	1	0	9	10	1	15	0	16	2	0	0	2	46
03:15 PM	9	7	0	16	0	0	13	13	0	9	0	9	2	0	0	2	40
03:30 PM	5	11	0	16	0	0	31	31	0	11	0	11	0	0	0	0	58
03:45 PM	8	11	1	20	1	1	8	10	0	25	1	26	0	0	0	0	56
Total	30	38	2	70	2	1	61	64	1	60	1	62	4	0	0	4	200
04:00 PM	3	18	2	23	0	0	11	11	1	29	0	30	0	0	0	0	64
04:15 PM	3	9	1	13	0	0	5	5	0	24	1	25	0	0	0	0	43
04:30 PM	3	9	3	15	0	0	7	7	0	23	0	23	2	0	0	2	47
04:45 PM	5	4	2	11	0	0	4	4	0	17	0	17	4	0	0	4	36
Total	14	40	8	62	0	0	27	27	1	93	1	95	6	0	0	6	190
05:00 PM	1	6	0	7	0	0	12	12	0	31	0	31	5	0	0	5	55
05:15 PM	2	3	0	5	0	0	1	1	0	26	0	26	0	0	0	0	32
05:30 PM	0	2	0	2	0	0	5	5	0	11	0	11	0	0	0	0	18
05:45 PM	2	4	0	6	0	0	1	1	0	11	0	11	6	0	0	6	24
Total	5	15	0	20	0	0	19	19	0	79	0	79	11	0	0	11	129
Grand Total	162	410	23	595	3	1	206	210	3	447	9	459	32	0	0	32	1296
Apprch %	27.2	68.9	3.9		1.4	0.5	98.1		0.7	97.4	2		100	0	0		
Total %	12.5	31.6	1.8	45.9	0.2	0.1	15.9	16.2	0.2	34.5	0.7	35.4	2.5	0	0	2.5	

Intersection Turning Movement Count

File Name : Lena&Landfill

Site Code : 22022

Start Date : 6/14/2022

Page No : 2

Start Time	LENA ROAD Southbound				LANDFILL ROAD Westbound				81ST COURT E Northbound				POWELL JOHNSON/LENA ROAD Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	10	25	0	35	0	0	2	2	0	7	1	8	0	0	0	0	45
07:15 AM	9	19	1	29	0	0	2	2	0	4	0	4	0	0	0	0	35
07:30 AM	5	25	0	30	0	0	4	4	0	11	0	11	0	0	0	0	45
07:45 AM	11	28	2	41	0	0	3	3	0	17	1	18	0	0	0	0	62
Total Volume	35	97	3	135	0	0	11	11	0	39	2	41	0	0	0	0	187
% App. Total	25.9	71.9	2.2		0	0	100		0	95.1	4.9		0	0	0		
PHF	.795	.866	.375	.823	.000	.000	.688	.688	.000	.574	.500	.569	.000	.000	.000	.000	.754

Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				08:15 AM				07:30 AM				08:00 AM			
+0 mins.	10	25	0	35	0	0	10	10	0	11	0	11	1	0	0	1
+15 mins.	9	19	1	29	0	0	6	6	0	17	1	18	2	0	0	2
+30 mins.	5	25	0	30	1	0	6	7	0	12	0	12	2	0	0	2
+45 mins.	11	28	2	41	0	0	6	6	0	6	0	6	1	0	0	1
Total Volume	35	97	3	135	1	0	28	29	0	46	1	47	6	0	0	6
% App. Total	25.9	71.9	2.2		3.4	0	96.6		0	97.9	2.1		100	0	0	
PHF	.795	.866	.375	.823	.250	.000	.700	.725	.000	.676	.250	.653	.750	.000	.000	.750

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:30 PM

03:30 PM	5	11	0	16	0	0	31	31	0	11	0	11	0	0	0	0	58
03:45 PM	8	11	1	20	1	1	8	10	0	25	1	26	0	0	0	0	56
04:00 PM	3	18	2	23	0	0	11	11	1	29	0	30	0	0	0	0	64
04:15 PM	3	9	1	13	0	0	5	5	0	24	1	25	0	0	0	0	43
Total Volume	19	49	4	72	1	1	55	57	1	89	2	92	0	0	0	0	221
% App. Total	26.4	68.1	5.6		1.8	1.8	96.5		1.1	96.7	2.2		0	0	0		
PHF	.594	.681	.500	.783	.250	.250	.444	.460	.250	.767	.500	.767	.000	.000	.000	.000	.863

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	03:15 PM				03:15 PM				03:45 PM				04:15 PM			
+0 mins.	9	7	0	16	0	0	13	13	0	25	1	26	0	0	0	0
+15 mins.	5	11	0	16	0	0	31	31	1	29	0	30	2	0	0	2
+30 mins.	8	11	1	20	1	1	8	10	0	24	1	25	4	0	0	4
+45 mins.	3	18	2	23	0	0	11	11	0	23	0	23	5	0	0	5
Total Volume	25	47	3	75	1	1	63	65	1	101	2	104	11	0	0	11
% App. Total	33.3	62.7	4		1.5	1.5	96.9		1	97.1	1.9		100	0	0	
PHF	.694	.653	.375	.815	.250	.250	.508	.524	.250	.871	.500	.867	.550	.000	.000	.550

Intersection Turning Movement Count

City/County: Bradenton/Manatee
 Weather: Clear
 Comments:

File Name : Lena&Landfill
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 1

Groups Printed- Heavy Vehicles

Start Time	LENA ROAD Southbound				LANDFILL ROAD Westbound				81ST COURT E Northbound				POWELL JOHNSON/LENA ROAD Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	0	0	1	1	0	1	2	0	8	2	10	0	0	0	0	13
07:15 AM	1	1	0	2	0	0	1	1	0	7	0	7	0	0	0	0	10
07:30 AM	1	0	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
07:45 AM	5	0	0	5	0	0	1	1	0	1	0	1	0	0	0	0	7
Total	8	1	0	9	1	0	3	4	0	19	2	21	0	0	0	0	34
08:00 AM	5	1	0	6	0	0	1	1	0	3	1	4	0	0	0	0	11
08:15 AM	9	2	0	11	0	0	9	9	0	2	0	2	0	0	0	0	22
08:30 AM	6	4	0	10	0	0	6	6	0	2	0	2	0	0	0	0	18
08:45 AM	5	0	0	5	0	0	7	7	0	1	1	2	0	0	0	0	14
Total	25	7	0	32	0	0	23	23	0	8	2	10	0	0	0	0	65
09:00 AM	13	5	0	18	0	0	8	8	0	4	0	4	0	0	0	0	30
09:15 AM	6	3	0	9	0	0	6	6	0	2	0	2	0	0	0	0	17
09:30 AM	3	1	0	4	0	0	12	12	0	1	0	1	0	0	0	0	17
09:45 AM	6	2	0	8	0	0	4	4	0	2	0	2	0	0	0	0	14
Total	28	11	0	39	0	0	30	30	0	9	0	9	0	0	0	0	78
10:00 AM	7	2	1	10	0	0	3	3	0	3	0	3	0	0	0	0	16
10:15 AM	8	6	1	15	0	1	6	7	0	4	0	4	1	0	1	2	28
10:30 AM	6	5	0	11	0	0	7	7	0	4	1	5	0	0	0	0	23
10:45 AM	1	2	0	3	0	0	6	6	0	4	1	5	1	0	0	1	15
Total	22	15	2	39	0	1	22	23	0	15	2	17	2	0	1	3	82
*** BREAK ***																	
02:00 PM	14	1	0	15	0	0	6	6	0	1	0	1	0	0	0	0	22
02:15 PM	8	1	1	10	1	0	7	8	0	0	0	0	0	0	0	0	18
02:30 PM	3	1	0	4	0	0	12	12	0	0	0	0	0	0	0	0	16
02:45 PM	4	3	0	7	0	0	5	5	0	2	0	2	0	0	0	0	14
Total	29	6	1	36	1	0	30	31	0	3	0	3	0	0	0	0	70
03:00 PM	11	3	0	14	0	0	7	7	0	0	0	0	0	0	0	0	21
03:15 PM	7	1	0	8	0	0	8	8	0	1	0	1	0	0	0	0	17
03:30 PM	4	5	0	9	0	0	8	8	1	2	0	3	0	0	0	0	20
03:45 PM	6	0	0	6	0	0	5	5	0	5	0	5	0	0	0	0	16
Total	28	9	0	37	0	0	28	28	1	8	0	9	0	0	0	0	74
04:00 PM	5	2	0	7	0	0	8	8	0	2	0	2	0	0	0	0	17
04:15 PM	8	0	2	10	0	0	5	5	0	0	0	0	0	0	0	0	15
04:30 PM	10	1	3	14	0	0	5	5	0	0	0	0	0	0	0	0	19
04:45 PM	5	2	0	7	0	0	10	10	0	0	0	0	0	0	0	0	17
Total	28	5	5	38	0	0	28	28	0	2	0	2	0	0	0	0	68
05:00 PM	4	2	0	6	0	0	7	7	0	2	0	2	0	0	0	0	15
05:15 PM	8	2	0	10	0	0	4	4	0	0	1	1	0	0	0	0	15
05:30 PM	0	1	0	1	0	0	5	5	0	1	0	1	0	0	0	0	7
05:45 PM	0	0	1	1	0	0	4	4	0	0	0	0	0	0	0	0	5
Total	12	5	1	18	0	0	20	20	0	3	1	4	0	0	0	0	42
Grand Total	180	59	9	248	2	1	184	187	1	67	7	75	2	0	1	3	513
Apprch %	72.6	23.8	3.6		1.1	0.5	98.4		1.3	89.3	9.3		66.7	0	33.3		
Total %	35.1	11.5	1.8	48.3	0.4	0.2	35.9	36.5	0.2	13.1	1.4	14.6	0.4	0	0.2	0.6	

Intersection Turning Movement Count

File Name : Lena&Landfill

Site Code : 22022

Start Date : 6/14/2022

Page No : 2

	LENA ROAD Southbound				LANDFILL ROAD Westbound				81ST COURT E Northbound				POWELL JOHNSON/LENA ROAD Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:15 AM																	
08:15 AM	9	2	0	11	0	0	9	9	0	2	0	2	0	0	0	0	22
08:30 AM	6	4	0	10	0	0	6	6	0	2	0	2	0	0	0	0	18
08:45 AM	5	0	0	5	0	0	7	7	0	1	1	2	0	0	0	0	14
09:00 AM	13	5	0	18	0	0	8	8	0	4	0	4	0	0	0	0	30
Total Volume	33	11	0	44	0	0	30	30	0	9	1	10	0	0	0	0	84
% App. Total	75	25	0		0	0	100		0	90	10		0	0	0		
PHF	.635	.550	.000	.611	.000	.000	.833	.833	.000	.563	.250	.625	.000	.000	.000	.000	.700

Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:15 AM				08:45 AM				07:00 AM				10:00 AM			
+0 mins.	9	2	0	11	0	0	7	7	0	8	2	10	0	0	0	0
+15 mins.	6	4	0	10	0	0	8	8	0	7	0	7	1	0	1	2
+30 mins.	5	0	0	5	0	0	6	6	0	3	0	3	0	0	0	0
+45 mins.	13	5	0	18	0	0	12	12	0	1	0	1	1	0	0	1
Total Volume	33	11	0	44	0	0	33	33	0	19	2	21	2	0	1	3
% App. Total	75	25	0		0	0	100		0	90.5	9.5		66.7	0	33.3	
PHF	.635	.550	.000	.611	.000	.000	.688	.688	.000	.594	.250	.525	.500	.000	.250	.375

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 03:00 PM

03:00 PM	11	3	0	14	0	0	7	7	0	0	0	0	0	0	0	0	21
03:15 PM	7	1	0	8	0	0	8	8	0	1	0	1	0	0	0	0	17
03:30 PM	4	5	0	9	0	0	8	8	1	2	0	3	0	0	0	0	20
03:45 PM	6	0	0	6	0	0	5	5	0	5	0	5	0	0	0	0	16
Total Volume	28	9	0	37	0	0	28	28	1	8	0	9	0	0	0	0	74
% App. Total	75.7	24.3	0		0	0	100		11.1	88.9	0		0	0	0		
PHF	.636	.450	.000	.661	.000	.000	.875	.875	.250	.400	.000	.450	.000	.000	.000	.000	.881

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:45 PM				02:15 PM				03:15 PM				02:00 PM			
+0 mins.	4	3	0	7	1	0	7	8	0	1	0	1	0	0	0	0
+15 mins.	11	3	0	14	0	0	12	12	1	2	0	3	0	0	0	0
+30 mins.	7	1	0	8	0	0	5	5	0	5	0	5	0	0	0	0
+45 mins.	4	5	0	9	0	0	7	7	0	2	0	2	0	0	0	0
Total Volume	26	12	0	38	1	0	31	32	1	10	0	11	0	0	0	0
% App. Total	68.4	31.6	0		3.1	0	96.9		9.1	90.9	0		0	0	0	
PHF	.591	.600	.000	.679	.250	.000	.646	.667	.250	.500	.000	.550	.000	.000	.000	.000

Intersection Pedestrian & Bicycle Count

Date: 6/14/22

Day: Tuesday

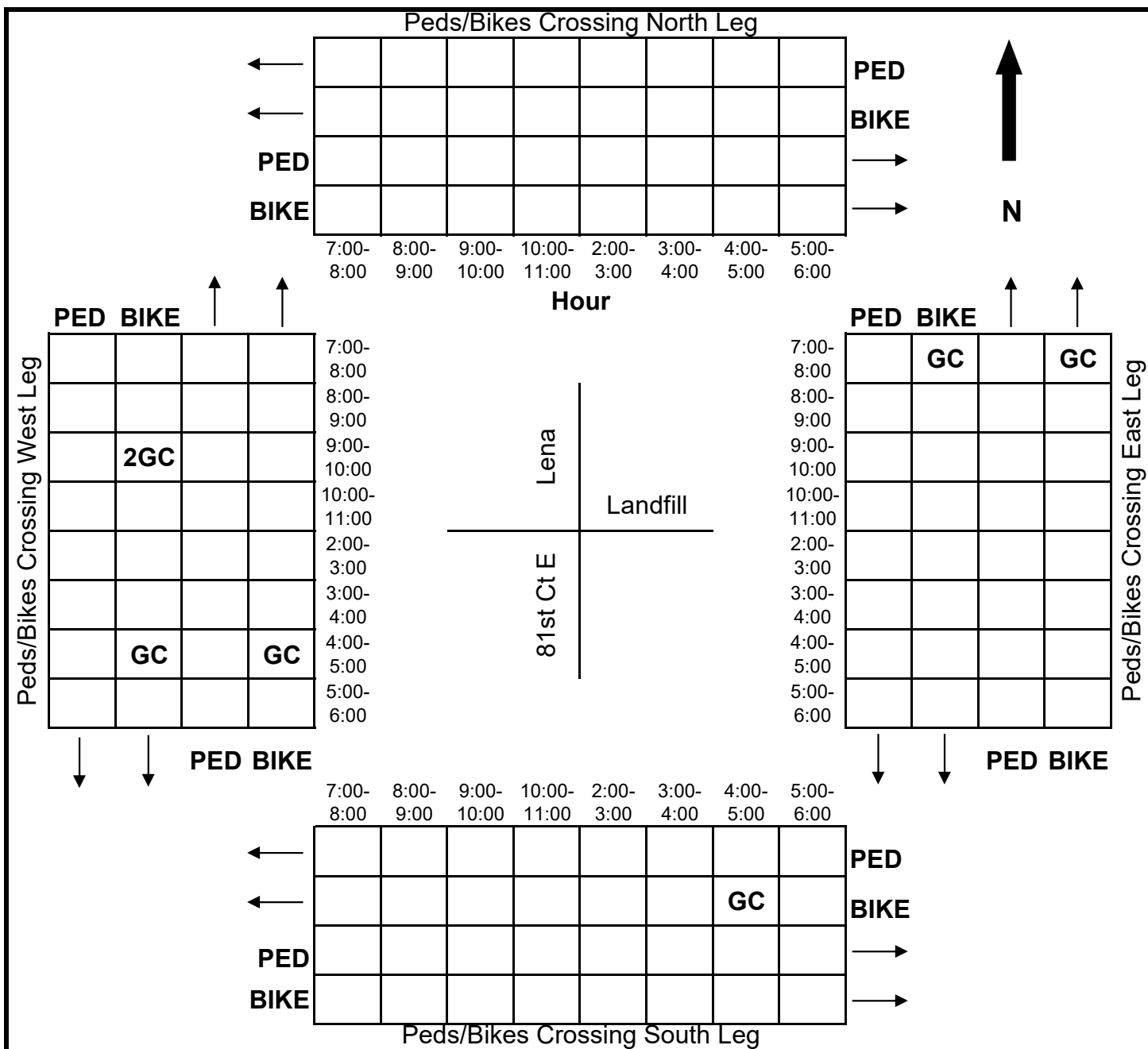
Count Times: 7-11am & 2-6pm

Weather: Clear

Intersection: Lena Road at Landfill Road

Comments: GC - Golf Carts - traveled in roadway

C - Children under 12; S - Seniors 65 or over; D - Physical Disability



Intersection Turning Movement Count

City/County: Bradenton/Manatee
 Weather: Clear
 Comments:

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - UTurns

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
07:00 AM	26	0	0	11	37	13	439	2	1	455	23	4	5	10	42	7	270	19	12	308	842
07:15 AM	27	5	8	12	52	16	442	2	3	463	28	1	6	13	48	12	305	13	7	337	900
07:30 AM	44	6	9	8	67	27	487	3	0	517	40	4	8	25	77	7	327	8	14	356	1017
07:45 AM	28	5	2	2	37	25	552	7	0	584	34	2	6	13	55	16	385	13	12	426	1102
Total	125	16	19	33	193	81	1920	14	4	2019	125	11	25	61	222	42	1287	53	45	1427	3861
08:00 AM	21	4	4	0	29	12	400	3	2	417	23	3	11	17	54	11	364	13	6	394	894
08:15 AM	26	1	2	5	34	19	516	4	3	542	27	2	6	10	45	14	323	9	12	358	979
08:30 AM	24	2	6	1	33	11	402	8	4	425	25	5	7	11	48	22	378	21	8	429	935
08:45 AM	44	8	4	9	65	18	396	6	8	428	25	1	10	11	47	20	283	8	8	319	859
Total	115	15	16	15	161	60	1714	21	17	1812	100	11	34	49	194	67	1348	51	34	1500	3667
09:00 AM	20	2	4	9	35	21	419	11	6	457	29	4	2	19	54	14	254	22	9	299	845
09:15 AM	36	6	5	10	57	13	363	6	5	387	21	3	6	11	41	12	235	11	7	265	750
09:30 AM	24	2	10	8	44	15	364	6	15	400	31	4	7	8	50	17	279	8	6	310	804
09:45 AM	30	5	3	4	42	11	373	2	6	392	23	1	1	5	30	15	274	9	6	304	768
Total	110	15	22	31	178	60	1519	25	32	1636	104	12	16	43	175	58	1042	50	28	1178	3167
10:00 AM	43	6	8	7	64	12	344	5	8	369	28	5	11	5	49	20	222	18	8	268	750
10:15 AM	22	6	4	15	47	9	400	6	6	421	24	2	5	14	45	18	254	20	4	296	809
10:30 AM	31	3	9	7	50	16	359	9	8	392	24	4	4	10	42	25	269	14	5	313	797
10:45 AM	34	2	2	14	52	8	330	7	5	350	27	7	5	9	48	15	260	18	4	297	747
Total	130	17	23	43	213	45	1433	27	27	1532	103	18	25	38	184	78	1005	70	21	1174	3103
*** BREAK ***																					
02:00 PM	33	10	15	14	72	12	279	9	3	303	27	5	4	15	51	18	331	16	14	379	805
02:15 PM	37	7	8	11	63	12	344	7	13	376	40	6	10	8	64	27	301	6	9	343	846
02:30 PM	33	8	11	8	60	10	342	5	9	366	36	8	14	13	71	22	362	4	14	402	899
02:45 PM	36	5	10	9	60	18	321	6	8	353	23	3	7	14	47	13	332	9	10	364	824
Total	139	30	44	42	255	52	1286	27	33	1398	126	22	35	50	233	80	1326	35	47	1488	3374
03:00 PM	38	6	8	10	62	14	327	12	10	363	40	6	3	15	64	25	359	11	9	404	893
03:15 PM	35	1	1	20	57	15	307	9	6	337	27	4	7	15	53	22	398	8	11	439	886
03:30 PM	30	2	2	17	51	15	361	21	10	407	58	4	7	15	84	25	376	10	8	419	961
03:45 PM	33	3	7	8	51	15	327	9	12	363	40	5	11	16	72	21	418	12	6	457	943
Total	136	12	18	55	221	59	1322	51	38	1470	165	19	28	61	273	93	1551	41	34	1719	3683
04:00 PM	29	5	10	14	58	12	305	7	19	343	42	6	12	16	76	23	391	5	11	430	907
04:15 PM	26	1	9	9	45	18	325	6	12	361	43	2	10	17	72	32	426	7	8	473	951
04:30 PM	30	7	8	5	50	8	374	12	13	407	36	6	13	17	72	20	497	9	14	540	1069
04:45 PM	38	9	13	8	68	19	380	21	16	436	33	12	22	15	82	23	431	3	7	464	1050
Total	123	22	40	36	221	57	1384	46	60	1547	154	26	57	65	302	98	1745	24	40	1907	3977

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 2

Groups Printed- Passenger Vehicles - Heavy Vehicles - UTurns

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
05:00 PM	33	5	11	17	66	12	411	9	18	450	75	12	10	5	102	22	444	6	3	475	1093
05:15 PM	47	3	6	17	73	14	446	11	16	487	38	8	9	13	68	24	478	6	2	510	1138
05:30 PM	30	5	9	9	53	13	402	15	25	455	28	2	11	15	56	28	465	6	3	502	1066
05:45 PM	34	1	3	19	57	12	392	27	7	438	31	4	14	6	55	22	395	5	5	427	977
Total	144	14	29	62	249	51	1651	62	66	1830	172	26	44	39	281	96	1782	23	13	1914	4274
Grand Total	1022	141	211	317	1691	465	12229	273	277	13244	1049	145	264	406	1864	612	11086	347	262	12307	29106
Apprch %	60.4	8.3	12.5	18.7		3.5	92.3	2.1	2.1		56.3	7.8	14.2	21.8		5	90.1	2.8	2.1		
Total %	3.5	0.5	0.7	1.1	5.8	1.6	42	0.9	1	45.5	3.6	0.5	0.9	1.4	6.4	2.1	38.1	1.2	0.9	42.3	
Passenger Vehicles	1014	134	203	314	1665	388	11762	270	272	12692	826	141	229	361	1557	517	10684	233	185	11619	27533
% Passenger Vehicles	99.2	95	96.2	99.1	98.5	83.4	96.2	98.9	98.2	95.8	78.7	97.2	86.7	88.9	83.5	84.5	96.4	67.1	70.6	94.4	94.6
Heavy Vehicles	6	7	8	3	24	68	467	3	5	543	223	4	35	45	307	7	402	114	77	600	1474
% Heavy Vehicles	0.6	5	3.8	0.9	1.4	14.6	3.8	1.1	1.8	4.1	21.3	2.8	13.3	11.1	16.5	1.1	3.6	32.9	29.4	4.9	5.1
UTurns	2	0	0	0	2	9	0	0	0	9	0	0	0	0	0	88	0	0	0	88	99
% UTurns	0.2	0	0	0	0.1	1.9	0	0	0	0.1	0	0	0	0	0	14.4	0	0	0	0.7	0.3

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	44	6	9	8	67	27	487	3	0	517	40	4	8	25	77	7	327	8	14	356	1017
07:45 AM	28	5	2	2	37	25	552	7	0	584	34	2	6	13	55	16	385	13	12	426	1102
08:00 AM	21	4	4	0	29	12	400	3	2	417	23	3	11	17	54	11	364	13	6	394	894
08:15 AM	26	1	2	5	34	19	516	4	3	542	27	2	6	10	45	14	323	9	12	358	979
Total Volume	119	16	17	15	167	83	1955	17	5	2060	124	11	31	65	231	48	1399	43	44	1534	3992
% App. Total	71.3	9.6	10.2	9		4	94.9	0.8	0.2		53.7	4.8	13.4	28.1		3.1	91.2	2.8	2.9		
PHF	.676	.667	.472	.469	.623	.769	.885	.607	.417	.882	.775	.688	.705	.650	.750	.750	.908	.827	.786	.900	.906
Passenger Vehicles	119	15	17	15	166	75	1885	17	5	1982	93	11	28	55	187	43	1307	30	37	1417	3752
% Passenger Vehicles	100	93.8	100	100	99.4	90.4	96.4	100	100	96.2	75.0	100	90.3	84.6	81.0	89.6	93.4	69.8	84.1	92.4	94.0
Heavy Vehicles	0	1	0	0	1	6	70	0	0	76	31	0	3	10	44	0	92	13	7	112	233
% Heavy Vehicles	0	6.3	0	0	0.6	7.2	3.6	0	0	3.7	25.0	0	9.7	15.4	19.0	0	6.6	30.2	15.9	7.3	5.8
UTurns	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	5	0	0	0	5	7
% UTurns	0	0	0	0	0	2.4	0	0	0	0.1	0	0	0	0	0	10.4	0	0	0	0.3	0.2

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 3

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	

Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	10:00 AM					07:30 AM					07:15 AM					07:45 AM				
+0 mins.	43	6	8	7	64	27	487	3	0	517	28	1	6	13	48	16	385	13	12	426
+15 mins.	22	6	4	15	47	25	552	7	0	584	40	4	8	25	77	11	364	13	6	394
+30 mins.	31	3	9	7	50	12	400	3	2	417	34	2	6	13	55	14	323	9	12	358
+45 mins.	34	2	2	14	52	19	516	4	3	542	23	3	11	17	54	22	378	21	8	429
Total Volume	130	17	23	43	213	83	1955	17	5	2060	125	10	31	68	234	63	1450	56	38	1607
% App. Total	61	8	10.8	20.2		4	94.9	0.8	0.2		53.4	4.3	13.2	29.1		3.9	90.2	3.5	2.4	
PHF	.756	.708	.639	.717	.832	.769	.885	.607	.417	.882	.781	.625	.705	.680	.760	.716	.942	.667	.792	.936
Passenger Vehicles	129	17	23	42	211	75	1885	17	5	1982	93	10	28	57	188	55	1351	36	28	1470
% Passenger Vehicles	99.2	100	100	97.7	99.1	90.4	96.4	100	100	96.2	74.4	100	90.3	83.8	80.3	87.3	93.2	64.3	73.7	91.5
Heavy Vehicles	1	0	0	1	2	6	70	0	0	76	32	0	3	11	46	0	99	20	10	129
% Heavy Vehicles	0.8	0	0	2.3	0.9	7.2	3.6	0	0	3.7	25.6	0	9.7	16.2	19.7	0	6.8	35.7	26.3	8
UTurns	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	8	0	0	0	8
% UTurns	0	0	0	0	0	2.4	0	0	0	0.1	0	0	0	0	0	12.7	0	0	0	0.5

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:30 PM

04:30 PM	30	7	8	5	50	8	374	12	13	407	36	6	13	17	72	20	497	9	14	540	1069
04:45 PM	38	9	13	8	68	19	380	21	16	436	33	12	22	15	82	23	431	3	7	464	1050
05:00 PM	33	5	11	17	66	12	411	9	18	450	75	12	10	5	102	22	444	6	3	475	1093
05:15 PM	47	3	6	17	73	14	446	11	16	487	38	8	9	13	68	24	478	6	2	510	1138
Total Volume	148	24	38	47	257	53	1611	53	63	1780	182	38	54	50	324	89	1850	24	26	1989	4350
% App. Total	57.6	9.3	14.8	18.3		3	90.5	3	3.5		56.2	11.7	16.7	15.4		4.5	93	1.2	1.3		
PHF	.787	.667	.731	.691	.880	.697	.903	.631	.875	.914	.607	.792	.614	.735	.794	.927	.931	.667	.464	.921	.956
Passenger Vehicles	147	23	37	46	253	33	1570	52	63	1718	156	38	50	48	292	75	1833	19	15	1942	4205
% Passenger Vehicles	99.3	95.8	97.4	97.9	98.4	62.3	97.5	98.1	100	96.5	85.7	100	92.6	96.0	90.1	84.3	99.1	79.2	57.7	97.6	96.7
Heavy Vehicles	1	1	1	1	4	19	41	1	0	61	26	0	4	2	32	0	17	5	11	33	130
% Heavy Vehicles	0.7	4.2	2.6	2.1	1.6	35.8	2.5	1.9	0	3.4	14.3	0	7.4	4.0	9.9	0	0.9	20.8	42.3	1.7	3.0
UTurns	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	14	0	0	0	14	15
% UTurns	0	0	0	0	0	1.9	0	0	0	0.1	0	0	0	0	0	15.7	0	0	0	0.7	0.3

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 4

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM					05:00 PM					04:15 PM					04:30 PM				
+0 mins.	38	9	13	8	68	12	411	9	18	450	43	2	10	17	72	20	497	9	14	540
+15 mins.	33	5	11	17	66	14	446	11	16	487	36	6	13	17	72	23	431	3	7	464
+30 mins.	47	3	6	17	73	13	402	15	25	455	33	12	22	15	82	22	444	6	3	475
+45 mins.	30	5	9	9	53	12	392	27	7	438	75	12	10	5	102	24	478	6	2	510
Total Volume	148	22	39	51	260	51	1651	62	66	1830	187	32	55	54	328	89	1850	24	26	1989
% App. Total	56.9	8.5	15	19.6		2.8	90.2	3.4	3.6		57	9.8	16.8	16.5		4.5	93	1.2	1.3	
PHF	.787	.611	.750	.750	.890	.911	.925	.574	.660	.939	.623	.667	.625	.794	.804	.927	.931	.667	.464	.921
Passenger Vehicles	147	21	39	50	257	34	1607	62	65	1768	163	32	49	53	297	75	1833	19	15	1942
% Passenger Vehicles	99.3	95.5	100	98	98.8	66.7	97.3	100	98.5	96.6	87.2	100	89.1	98.1	90.5	84.3	99.1	79.2	57.7	97.6
Heavy Vehicles	1	1	0	1	3	14	44	0	1	59	24	0	6	1	31	0	17	5	11	33
% Heavy Vehicles	0.7	4.5	0	2	1.2	27.5	2.7	0	1.5	3.2	12.8	0	10.9	1.9	9.5	0	0.9	20.8	42.3	1.7
UTurns	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	14	0	0	0	14
% UTurns	0	0	0	0	0	5.9	0	0	0	0.2	0	0	0	0	0	15.7	0	0	0	0.7

Intersection Turning Movement Count

City/County: Bradenton/Manatee
 Weather: Clear
 Comments:

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
07:00 AM	26	0	0	11	37	13	430	2	1	446	13	4	4	9	30	7	247	18	12	284	797
07:15 AM	27	5	8	12	52	15	436	2	3	456	17	1	5	11	34	11	286	12	7	316	858
07:30 AM	44	6	9	8	67	24	474	3	0	501	28	4	6	21	59	7	309	7	13	336	963
07:45 AM	28	4	2	2	36	24	529	7	0	560	28	2	6	11	47	13	360	10	10	393	1036
Total	125	15	19	33	192	76	1869	14	4	1963	86	11	21	52	170	38	1202	47	42	1329	3654
08:00 AM	21	4	4	0	29	9	387	3	2	401	20	3	11	14	48	11	340	8	5	364	842
08:15 AM	26	1	2	5	34	18	495	4	3	520	17	2	5	9	33	12	298	5	9	324	911
08:30 AM	24	2	6	1	33	10	390	8	4	412	21	5	6	9	41	19	353	13	4	389	875
08:45 AM	43	8	4	9	64	16	383	6	6	411	16	1	9	10	36	18	268	7	7	300	811
Total	114	15	16	15	160	53	1655	21	15	1744	74	11	31	42	158	60	1259	33	25	1377	3439
09:00 AM	20	2	4	9	35	18	399	11	6	434	22	4	2	19	47	13	246	12	5	276	792
09:15 AM	36	6	5	10	57	13	345	6	5	369	19	3	4	9	35	12	218	6	5	241	702
09:30 AM	24	1	9	8	42	13	345	6	14	378	19	4	6	7	36	11	261	5	5	282	738
09:45 AM	29	5	3	4	41	10	363	2	6	381	18	0	0	4	22	13	258	5	4	280	724
Total	109	14	21	31	175	54	1452	25	31	1562	78	11	12	39	140	49	983	28	19	1079	2956
10:00 AM	42	6	8	7	63	11	327	5	8	351	22	5	8	4	39	14	212	8	5	239	692
10:15 AM	22	6	4	14	46	8	383	5	6	402	17	2	3	12	34	12	243	10	2	267	749
10:30 AM	31	3	9	7	50	15	347	9	8	379	16	4	4	7	31	20	259	8	3	290	750
10:45 AM	34	2	2	14	52	6	317	6	5	334	18	6	5	8	37	11	245	15	3	274	697
Total	129	17	23	42	211	40	1374	25	27	1466	73	17	20	31	141	57	959	41	13	1070	2888
*** BREAK ***																					
02:00 PM	33	8	13	14	68	8	267	9	3	287	21	5	4	12	42	11	316	10	6	343	740
02:15 PM	35	6	8	11	60	11	322	7	13	353	30	6	9	7	52	25	295	5	5	330	795
02:30 PM	33	8	11	7	59	10	324	5	9	348	28	6	10	12	56	22	355	4	13	394	857
02:45 PM	35	4	9	9	57	16	307	6	8	337	19	3	6	12	40	12	320	6	5	343	777
Total	136	26	41	41	244	45	1220	27	33	1325	98	20	29	43	190	70	1286	25	29	1410	3169
03:00 PM	37	6	6	10	59	9	306	12	9	336	29	6	3	15	53	18	349	7	4	378	826
03:15 PM	35	1	1	20	57	12	288	9	6	315	23	4	4	14	45	19	390	6	9	424	841
03:30 PM	30	2	1	17	50	11	347	21	10	389	48	4	5	15	72	21	366	6	8	401	912
03:45 PM	33	3	7	8	51	11	310	9	12	342	35	5	9	13	62	20	406	7	5	438	893
Total	135	12	15	55	217	43	1251	51	37	1382	135	19	21	57	232	78	1511	26	26	1641	3472
04:00 PM	29	5	10	14	58	10	285	7	19	321	39	6	12	12	69	19	383	3	7	412	860
04:15 PM	26	1	9	9	45	13	313	6	12	344	37	2	8	17	64	28	417	4	4	453	906
04:30 PM	30	7	7	5	49	5	366	11	13	395	32	6	11	16	65	19	491	8	8	526	1035
04:45 PM	38	8	13	8	67	15	370	21	16	422	26	12	21	15	74	17	428	2	5	452	1015
Total	123	21	39	36	219	43	1334	45	60	1482	134	26	52	60	272	83	1719	17	24	1843	3816

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 2

Groups Printed- Passenger Vehicles

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
05:00 PM	33	5	11	16	65	6	402	9	18	435	68	12	9	5	94	16	440	5	1	462	1056
05:15 PM	46	3	6	17	72	7	432	11	16	466	30	8	9	12	59	23	474	4	1	502	1099
05:30 PM	30	5	9	9	53	11	391	15	24	441	26	2	11	14	53	25	459	3	1	488	1035
05:45 PM	34	1	3	19	57	10	382	27	7	426	24	4	14	6	48	18	392	4	4	418	949
Total	143	14	29	61	247	34	1607	62	65	1768	148	26	43	37	254	82	1765	16	7	1870	4139
Grand Total	1014	134	203	314	1665	388	11762	270	272	12692	826	141	229	361	1557	517	10684	233	185	11619	27533
Apprch %	60.9	8	12.2	18.9		3.1	92.7	2.1	2.1		53.1	9.1	14.7	23.2		4.4	92	2	1.6		
Total %	3.7	0.5	0.7	1.1	6	1.4	42.7	1	1	46.1	3	0.5	0.8	1.3	5.7	1.9	38.8	0.8	0.7	42.2	

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	44	6	9	8	67	24	474	3	0	501	28	4	6	21	59	7	309	7	13	336	963
07:45 AM	28	4	2	2	36	24	529	7	0	560	28	2	6	11	47	13	360	10	10	393	1036
08:00 AM	21	4	4	0	29	9	387	3	2	401	20	3	11	14	48	11	340	8	5	364	842
08:15 AM	26	1	2	5	34	18	495	4	3	520	17	2	5	9	33	12	298	5	9	324	911
Total Volume	119	15	17	15	166	75	1885	17	5	1982	93	11	28	55	187	43	1307	30	37	1417	3752
% App. Total	71.7	9	10.2	9		3.8	95.1	0.9	0.3		49.7	5.9	15	29.4		3	92.2	2.1	2.6		
PHF	.676	.625	.472	.469	.619	.781	.891	.607	.417	.885	.830	.688	.636	.655	.792	.827	.908	.750	.712	.901	.905

Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	10:00 AM					07:30 AM					07:15 AM					07:45 AM				
+0 mins.	42	6	8	7	63	24	474	3	0	501	17	1	5	11	34	13	360	10	10	393
+15 mins.	22	6	4	14	46	24	529	7	0	560	28	4	6	21	59	11	340	8	5	364
+30 mins.	31	3	9	7	50	9	387	3	2	401	28	2	6	11	47	12	298	5	9	324
+45 mins.	34	2	2	14	52	18	495	4	3	520	20	3	11	14	48	19	353	13	4	389
Total Volume	129	17	23	42	211	75	1885	17	5	1982	93	10	28	57	188	55	1351	36	28	1470
% App. Total	61.1	8.1	10.9	19.9		3.8	95.1	0.9	0.3		49.5	5.3	14.9	30.3		3.7	91.9	2.4	1.9	
PHF	.768	.708	.639	.750	.837	.781	.891	.607	.417	.885	.830	.625	.636	.679	.797	.724	.938	.692	.700	.935

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:30 PM

04:30 PM	30	7	7	5	49	5	366	11	13	395	32	6	11	16	65	19	491	8	8	526	1035
04:45 PM	38	8	13	8	67	15	370	21	16	422	26	12	21	15	74	17	428	2	5	452	1015
05:00 PM	33	5	11	16	65	6	402	9	18	435	68	12	9	5	94	16	440	5	1	462	1056
05:15 PM	46	3	6	17	72	7	432	11	16	466	30	8	9	12	59	23	474	4	1	502	1099
Total Volume	147	23	37	46	253	33	1570	52	63	1718	156	38	50	48	292	75	1833	19	15	1942	4205
% App. Total	58.1	9.1	14.6	18.2		1.9	91.4	3	3.7		53.4	13	17.1	16.4		3.9	94.4	1	0.8		
PHF	.799	.719	.712	.676	.878	.550	.909	.619	.875	.922	.574	.792	.595	.750	.777	.815	.933	.594	.469	.923	.957

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 3

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM					05:00 PM					04:15 PM					04:30 PM				
+0 mins.	38	8	13	8	67	6	402	9	18	435	37	2	8	17	64	19	491	8	8	526
+15 mins.	33	5	11	16	65	7	432	11	16	466	32	6	11	16	65	17	428	2	5	452
+30 mins.	46	3	6	17	72	11	391	15	24	441	26	12	21	15	74	16	440	5	1	462
+45 mins.	30	5	9	9	53	10	382	27	7	426	68	12	9	5	94	23	474	4	1	502
Total Volume	147	21	39	50	257	34	1607	62	65	1768	163	32	49	53	297	75	1833	19	15	1942
% App. Total	57.2	8.2	15.2	19.5		1.9	90.9	3.5	3.7		54.9	10.8	16.5	17.8		3.9	94.4	1	0.8	
PHF	.799	.656	.750	.735	.892	.773	.930	.574	.677	.948	.599	.667	.583	.779	.790	.815	.933	.594	.469	.923

Intersection Turning Movement Count

City/County: Bradenton/Manatee
 Weather: Clear
 Comments:

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 1

Groups Printed- Heavy Vehicles

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
07:00 AM	0	0	0	0	0	0	9	0	0	9	10	0	1	1	12	0	23	1	0	24	45
07:15 AM	0	0	0	0	0	1	6	0	0	7	11	0	1	2	14	0	19	1	0	20	41
07:30 AM	0	0	0	0	0	2	13	0	0	15	12	0	2	4	18	0	18	1	1	20	53
07:45 AM	0	1	0	0	1	1	23	0	0	24	6	0	0	2	8	0	25	3	2	30	63
Total	0	1	0	0	1	4	51	0	0	55	39	0	4	9	52	0	85	6	3	94	202
08:00 AM	0	0	0	0	0	2	13	0	0	15	3	0	0	3	6	0	24	5	1	30	51
08:15 AM	0	0	0	0	0	1	21	0	0	22	10	0	1	1	12	0	25	4	3	32	66
08:30 AM	0	0	0	0	0	1	12	0	0	13	4	0	1	2	7	0	25	8	4	37	57
08:45 AM	0	0	0	0	0	2	13	0	2	17	9	0	1	1	11	1	15	1	1	18	46
Total	0	0	0	0	0	6	59	0	2	67	26	0	3	7	36	1	89	18	9	117	220
09:00 AM	0	0	0	0	0	3	20	0	0	23	7	0	0	0	7	0	8	10	4	22	52
09:15 AM	0	0	0	0	0	0	18	0	0	18	2	0	2	2	6	0	17	5	2	24	48
09:30 AM	0	1	1	0	2	1	19	0	1	21	12	0	1	1	14	1	18	3	1	23	60
09:45 AM	1	0	0	0	1	1	10	0	0	11	5	1	1	1	8	0	16	4	2	22	42
Total	1	1	1	0	3	5	67	0	1	73	26	1	4	4	35	1	59	22	9	91	202
10:00 AM	1	0	0	0	1	0	17	0	0	17	6	0	3	1	10	1	10	10	3	24	52
10:15 AM	0	0	0	1	1	1	17	1	0	19	7	0	2	2	11	0	11	10	2	23	54
10:30 AM	0	0	0	0	0	1	12	0	0	13	8	0	0	3	11	1	10	6	2	19	43
10:45 AM	0	0	0	0	0	1	13	1	0	15	9	1	0	1	11	1	15	3	1	20	46
Total	1	0	0	1	2	3	59	2	0	64	30	1	5	7	43	3	46	29	8	86	195
*** BREAK ***																					
02:00 PM	0	2	2	0	4	4	12	0	0	16	6	0	0	3	9	1	15	6	8	30	59
02:15 PM	2	1	0	0	3	1	22	0	0	23	10	0	1	1	12	1	6	1	4	12	50
02:30 PM	0	0	0	1	1	0	18	0	0	18	8	2	4	1	15	0	7	0	1	8	42
02:45 PM	1	1	1	0	3	2	14	0	0	16	4	0	1	2	7	0	12	3	5	20	46
Total	3	4	3	1	11	7	66	0	0	73	28	2	6	7	43	2	40	10	18	70	197
03:00 PM	0	0	2	0	2	4	21	0	1	26	11	0	0	0	11	0	10	4	5	19	58
03:15 PM	0	0	0	0	0	3	19	0	0	22	4	0	3	1	8	0	8	2	2	12	42
03:30 PM	0	0	1	0	1	4	14	0	0	18	10	0	2	0	12	0	10	4	0	14	45
03:45 PM	0	0	0	0	0	4	17	0	0	21	5	0	2	3	10	0	12	5	1	18	49
Total	0	0	3	0	3	15	71	0	1	87	30	0	7	4	41	0	40	15	8	63	194
04:00 PM	0	0	0	0	0	2	20	0	0	22	3	0	0	4	7	0	8	2	4	14	43
04:15 PM	0	0	0	0	0	5	12	0	0	17	6	0	2	0	8	0	9	3	4	16	41
04:30 PM	0	0	1	0	1	3	8	1	0	12	4	0	2	1	7	0	6	1	6	13	33
04:45 PM	0	1	0	0	1	4	10	0	0	14	7	0	1	0	8	0	3	1	2	6	29
Total	0	1	1	0	2	14	50	1	0	65	20	0	5	5	30	0	26	7	16	49	146

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 2

Groups Printed- Heavy Vehicles

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
05:00 PM	0	0	0	1	1	5	9	0	0	14	7	0	1	0	8	0	4	1	2	7	30
05:15 PM	1	0	0	0	1	7	14	0	0	21	8	0	0	1	9	0	4	2	1	7	38
05:30 PM	0	0	0	0	0	1	11	0	1	13	2	0	0	1	3	0	6	3	2	11	27
05:45 PM	0	0	0	0	0	1	10	0	0	11	7	0	0	0	7	0	3	1	1	5	23
Total	1	0	0	1	2	14	44	0	1	59	24	0	1	2	27	0	17	7	6	30	118
Grand Total	6	7	8	3	24	68	467	3	5	543	223	4	35	45	307	7	402	114	77	600	1474
Apprch %	25	29.2	33.3	12.5		12.5	86	0.6	0.9		72.6	1.3	11.4	14.7		1.2	67	19	12.8		
Total %	0.4	0.5	0.5	0.2	1.6	4.6	31.7	0.2	0.3	36.8	15.1	0.3	2.4	3.1	20.8	0.5	27.3	7.7	5.2	40.7	

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	1	0	0	1	1	23	0	0	24	6	0	0	2	8	0	25	3	2	30	63
08:00 AM	0	0	0	0	0	2	13	0	0	15	3	0	0	3	6	0	24	5	1	30	51
08:15 AM	0	0	0	0	0	1	21	0	0	22	10	0	1	1	12	0	25	4	3	32	66
08:30 AM	0	0	0	0	0	1	12	0	0	13	4	0	1	2	7	0	25	8	4	37	57
Total Volume	0	1	0	0	1	5	69	0	0	74	23	0	2	8	33	0	99	20	10	129	237
% App. Total	0	100	0	0		6.8	93.2	0	0		69.7	0	6.1	24.2		0	76.7	15.5	7.8		
PHF	.000	.250	.000	.000	.250	.625	.750	.000	.000	.771	.575	.000	.500	.667	.688	.000	.990	.625	.625	.872	.898

Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	09:30 AM					08:45 AM					07:00 AM					07:45 AM				
+0 mins.	0	1	1	0	2	2	13	0	2	17	10	0	1	1	12	0	25	3	2	30
+15 mins.	1	0	0	0	1	3	20	0	0	23	11	0	1	2	14	0	24	5	1	30
+30 mins.	1	0	0	0	1	0	18	0	0	18	12	0	2	4	18	0	25	4	3	32
+45 mins.	0	0	0	1	1	1	19	0	1	21	6	0	0	2	8	0	25	8	4	37
Total Volume	2	1	1	1	5	6	70	0	3	79	39	0	4	9	52	0	99	20	10	129
% App. Total	40	20	20	20		7.6	88.6	0	3.8		75	0	7.7	17.3		0	76.7	15.5	7.8	
PHF	.500	.250	.250	.250	.625	.500	.875	.000	.375	.859	.813	.000	.500	.563	.722	.000	.990	.625	.625	.872

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 02:00 PM

02:00 PM	0	2	2	0	4	4	12	0	0	16	6	0	0	3	9	1	15	6	8	30	59
02:15 PM	2	1	0	0	3	1	22	0	0	23	10	0	1	1	12	1	6	1	4	12	50
02:30 PM	0	0	0	1	1	0	18	0	0	18	8	2	4	1	15	0	7	0	1	8	42
02:45 PM	1	1	1	0	3	2	14	0	0	16	4	0	1	2	7	0	12	3	5	20	46
Total Volume	3	4	3	1	11	7	66	0	0	73	28	2	6	7	43	2	40	10	18	70	197
% App. Total	27.3	36.4	27.3	9.1		9.6	90.4	0	0		65.1	4.7	14	16.3		2.9	57.1	14.3	25.7		
PHF	.375	.500	.375	.250	.688	.438	.750	.000	.000	.793	.700	.250	.375	.583	.717	.500	.667	.417	.563	.583	.835

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 3

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:00 PM					03:00 PM					02:15 PM					02:00 PM				
+0 mins.	0	2	2	0	4	4	21	0	1	26	10	0	1	1	12	1	15	6	8	30
+15 mins.	2	1	0	0	3	3	19	0	0	22	8	2	4	1	15	1	6	1	4	12
+30 mins.	0	0	0	1	1	4	14	0	0	18	4	0	1	2	7	0	7	0	1	8
+45 mins.	1	1	1	0	3	4	17	0	0	21	11	0	0	0	11	0	12	3	5	20
Total Volume	3	4	3	1	11	15	71	0	1	87	33	2	6	4	45	2	40	10	18	70
% App. Total	27.3	36.4	27.3	9.1		17.2	81.6	0	1.1		73.3	4.4	13.3	8.9		2.9	57.1	14.3	25.7	
PHF	.375	.500	.375	.250	.688	.938	.845	.000	.250	.837	.750	.250	.375	.500	.750	.500	.667	.417	.563	.583

Intersection Turning Movement Count

City/County: Bradenton/Manatee
 Weather: Clear
 Comments:

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 1

Groups Printed- UTurns

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	
*** BREAK ***																					
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
07:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	4	5
08:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
08:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	6	0	0	0	6	8
09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
09:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5	0	0	0	5	6
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	8	0	0	0	8	9
10:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5	0	0	0	5	6
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
10:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3	0	0	0	3	4
Total	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	18	0	0	0	18	20
*** BREAK ***																					
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
*** BREAK ***																					
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	8
03:00 PM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	7	0	0	0	7	9
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	15	0	0	0	15	17
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	6
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	15	15

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 2

Groups Printed- UTurns

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total		
05:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	6	0	0	0	0	6	7
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3	0	0	0	0	3	4
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	0	4	5
Total	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	14	0	0	0	0	14	17
Grand Total	2	0	0	0	2	9	0	0	0	9	0	0	0	0	0	88	0	0	0	0	88	99
Apprch %	100	0	0	0		100	0	0	0		0	0	0	0		100	0	0	0			
Total %	2	0	0	0	2	9.1	0	0	0	9.1	0	0	0	0	0	88.9	0	0	0	0	88.9	

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total		
Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 09:30 AM																						
09:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5	0	0	0	0	5	6
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
10:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	5	0	0	0	0	5	6
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
Total Volume	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	18	0	0	0	0	18	20
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.000	.000	.500	.000	.000	.000	.000	.000	.750	.000	.000	.000	.000	.750	.833

Peak Hour Analysis From 07:00 AM to 10:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM					07:15 AM					07:00 AM					09:30 AM					
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
+15 mins.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2	0	0	0	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
+45 mins.	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	6	0	0	0	0	6
Total Volume	1	0	0	0	1	2	0	0	0	2	0	0	0	0	0	18	0	0	0	0	18
% App. Total	100	0	0	0	0	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0	
PHF	.250	.000	.000	.000	.250	.500	.000	.000	.000	.500	.000	.000	.000	.000	.000	.750	.000	.000	.000	.000	.750

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:15 PM

04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
05:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	6	0	0	0	0	6	7
Total Volume	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	17	0	0	0	0	17	18
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	100	0	0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.000	.000	.000	.000	.000	.708	.000	.000	.000	.000	.708	.643

Intersection Turning Movement Count

File Name : SR64&Lena
 Site Code : 22022
 Start Date : 6/14/2022
 Page No : 3

Start Time	HERITAGE GREEN WAY Southbound					SR 64 Westbound					LENA ROAD Northbound					SR 64 Eastbound					Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	

Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	02:15 PM					05:00 PM					02:00 PM					04:15 PM				
+0 mins.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	4
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+30 mins.	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	6	0	0	0	6
+45 mins.	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	6	0	0	0	6
Total Volume	1	0	0	0	1	3	0	0	0	3	0	0	0	0	0	17	0	0	0	17
% App. Total	100	0	0	0		100	0	0	0		0	0	0	0		100	0	0	0	
PHF	.250	.000	.000	.000	.250	.750	.000	.000	.000	.750	.000	.000	.000	.000	.000	.708	.000	.000	.000	.708

Intersection Pedestrian & Bicycle Count

Date: 6/14/22

Day: Tuesday

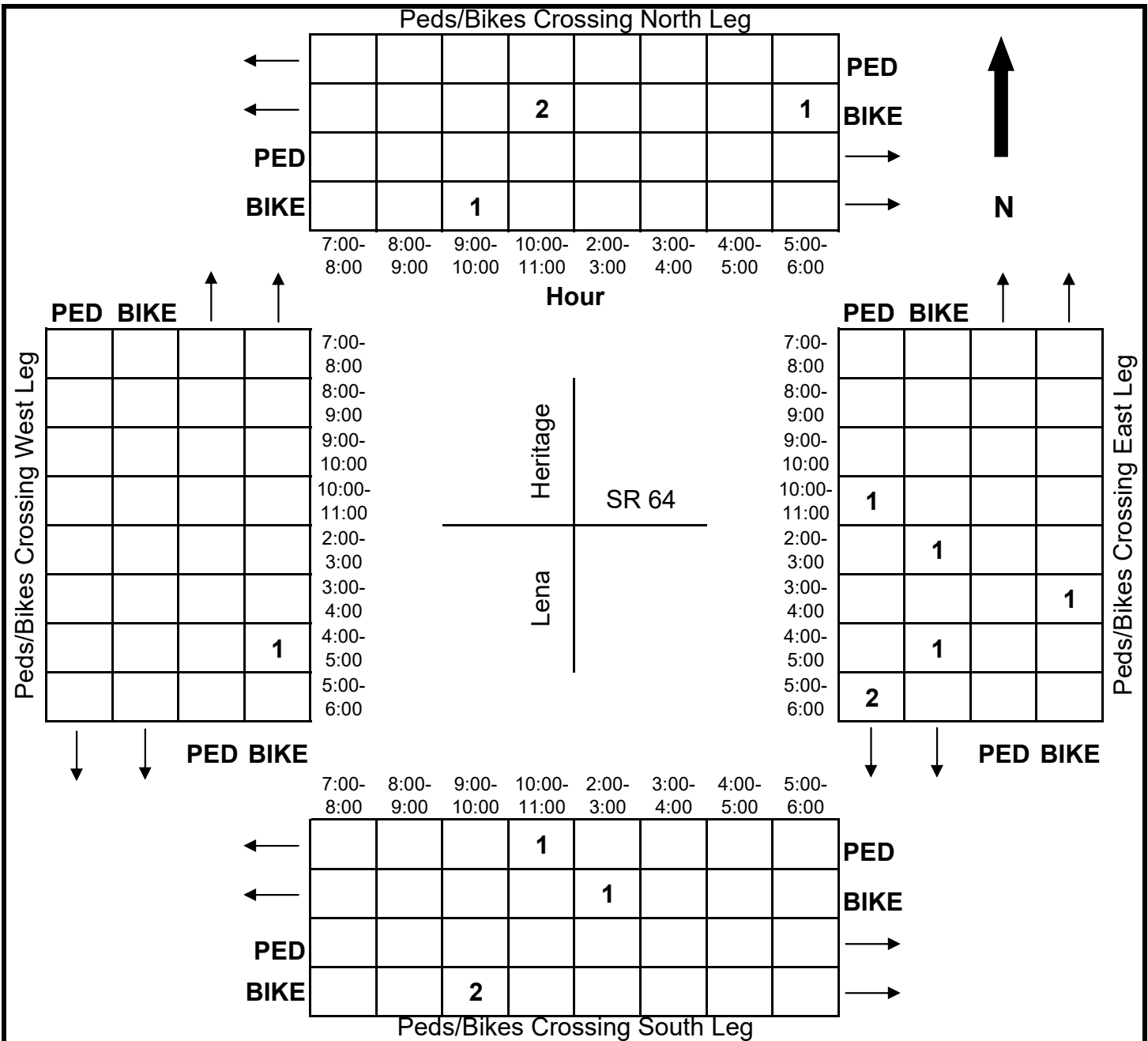
Count Times: 7-11am & 2-6pm

Weather: Clear

Intersection: SR 64 at Lena Road/Heritage Green Way

Comments: _____

C - Children under 12; S - Seniors 65 or over; D - Physical Disability



Attachment B
Historical Data

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1300 MANATEE COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2021 - 01/02/2021	0.96	1.01
2	01/03/2021 - 01/09/2021	1.00	1.05
3	01/10/2021 - 01/16/2021	1.03	1.08
4	01/17/2021 - 01/23/2021	1.02	1.07
5	01/24/2021 - 01/30/2021	1.01	1.06
6	01/31/2021 - 02/06/2021	1.00	1.05
7	02/07/2021 - 02/13/2021	0.99	1.04
8	02/14/2021 - 02/20/2021	0.98	1.03
* 9	02/21/2021 - 02/27/2021	0.97	1.02
*10	02/28/2021 - 03/06/2021	0.96	1.01
*11	03/07/2021 - 03/13/2021	0.94	0.99
*12	03/14/2021 - 03/20/2021	0.93	0.98
*13	03/21/2021 - 03/27/2021	0.93	0.98
*14	03/28/2021 - 04/03/2021	0.94	0.99
*15	04/04/2021 - 04/10/2021	0.94	0.99
*16	04/11/2021 - 04/17/2021	0.95	1.00
*17	04/18/2021 - 04/24/2021	0.95	1.00
*18	04/25/2021 - 05/01/2021	0.96	1.01
*19	05/02/2021 - 05/08/2021	0.97	1.02
*20	05/09/2021 - 05/15/2021	0.98	1.03
*21	05/16/2021 - 05/22/2021	0.98	1.03
22	05/23/2021 - 05/29/2021	0.99	1.04
23	05/30/2021 - 06/05/2021	1.00	1.05
24	06/06/2021 - 06/12/2021	1.01	1.06
25	06/13/2021 - 06/19/2021	1.02	1.07
26	06/20/2021 - 06/26/2021	1.03	1.08
27	06/27/2021 - 07/03/2021	1.05	1.11
28	07/04/2021 - 07/10/2021	1.06	1.12
29	07/11/2021 - 07/17/2021	1.08	1.14
30	07/18/2021 - 07/24/2021	1.08	1.14
31	07/25/2021 - 07/31/2021	1.08	1.14
32	08/01/2021 - 08/07/2021	1.08	1.14
33	08/08/2021 - 08/14/2021	1.09	1.15
34	08/15/2021 - 08/21/2021	1.09	1.15
35	08/22/2021 - 08/28/2021	1.09	1.15
36	08/29/2021 - 09/04/2021	1.09	1.15
37	09/05/2021 - 09/11/2021	1.08	1.14
38	09/12/2021 - 09/18/2021	1.08	1.14
39	09/19/2021 - 09/25/2021	1.06	1.12
40	09/26/2021 - 10/02/2021	1.03	1.08
41	10/03/2021 - 10/09/2021	1.01	1.06
42	10/10/2021 - 10/16/2021	0.99	1.04
43	10/17/2021 - 10/23/2021	0.99	1.04
44	10/24/2021 - 10/30/2021	0.99	1.04
45	10/31/2021 - 11/06/2021	0.98	1.03
46	11/07/2021 - 11/13/2021	0.98	1.03
47	11/14/2021 - 11/20/2021	0.98	1.03
48	11/21/2021 - 11/27/2021	0.98	1.03
49	11/28/2021 - 12/04/2021	0.97	1.02
50	12/05/2021 - 12/11/2021	0.97	1.02
51	12/12/2021 - 12/18/2021	0.96	1.01
52	12/19/2021 - 12/25/2021	1.00	1.05
53	12/26/2021 - 12/31/2021	1.03	1.08

* PEAK SEASON

08-MAR-2022 12:36:23

830UPD

1_1300_PKSEASON.TXT

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1301 SR70,E OF US 41 & 301

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2021 - 01/02/2021	0.98	1.03
2	01/03/2021 - 01/09/2021	1.00	1.05
3	01/10/2021 - 01/16/2021	1.02	1.07
4	01/17/2021 - 01/23/2021	1.01	1.06
5	01/24/2021 - 01/30/2021	1.00	1.05
6	01/31/2021 - 02/06/2021	0.99	1.04
7	02/07/2021 - 02/13/2021	0.99	1.04
8	02/14/2021 - 02/20/2021	0.98	1.03
* 9	02/21/2021 - 02/27/2021	0.96	1.01
*10	02/28/2021 - 03/06/2021	0.95	1.00
*11	03/07/2021 - 03/13/2021	0.93	0.98
*12	03/14/2021 - 03/20/2021	0.92	0.97
*13	03/21/2021 - 03/27/2021	0.92	0.97
*14	03/28/2021 - 04/03/2021	0.93	0.98
*15	04/04/2021 - 04/10/2021	0.93	0.98
*16	04/11/2021 - 04/17/2021	0.94	0.99
*17	04/18/2021 - 04/24/2021	0.95	1.00
*18	04/25/2021 - 05/01/2021	0.96	1.01
*19	05/02/2021 - 05/08/2021	0.96	1.01
*20	05/09/2021 - 05/15/2021	0.97	1.02
*21	05/16/2021 - 05/22/2021	0.98	1.03
22	05/23/2021 - 05/29/2021	0.99	1.04
23	05/30/2021 - 06/05/2021	1.00	1.05
24	06/06/2021 - 06/12/2021	1.01	1.06
25	06/13/2021 - 06/19/2021	1.02	1.07
26	06/20/2021 - 06/26/2021	1.04	1.09
27	06/27/2021 - 07/03/2021	1.05	1.11
28	07/04/2021 - 07/10/2021	1.07	1.13
29	07/11/2021 - 07/17/2021	1.09	1.15
30	07/18/2021 - 07/24/2021	1.09	1.15
31	07/25/2021 - 07/31/2021	1.09	1.15
32	08/01/2021 - 08/07/2021	1.10	1.16
33	08/08/2021 - 08/14/2021	1.10	1.16
34	08/15/2021 - 08/21/2021	1.10	1.16
35	08/22/2021 - 08/28/2021	1.10	1.16
36	08/29/2021 - 09/04/2021	1.10	1.16
37	09/05/2021 - 09/11/2021	1.09	1.15
38	09/12/2021 - 09/18/2021	1.09	1.15
39	09/19/2021 - 09/25/2021	1.06	1.12
40	09/26/2021 - 10/02/2021	1.04	1.09
41	10/03/2021 - 10/09/2021	1.01	1.06
42	10/10/2021 - 10/16/2021	0.98	1.03
43	10/17/2021 - 10/23/2021	0.98	1.03
44	10/24/2021 - 10/30/2021	0.99	1.04
45	10/31/2021 - 11/06/2021	0.99	1.04
46	11/07/2021 - 11/13/2021	0.99	1.04
47	11/14/2021 - 11/20/2021	0.99	1.04
48	11/21/2021 - 11/27/2021	0.99	1.04
49	11/28/2021 - 12/04/2021	0.99	1.04
50	12/05/2021 - 12/11/2021	0.98	1.03
51	12/12/2021 - 12/18/2021	0.98	1.03
52	12/19/2021 - 12/25/2021	1.00	1.05
53	12/26/2021 - 12/31/2021	1.02	1.07

* PEAK SEASON

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830UPD

1_1301_PKSEASON.TXT

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1302 US 41, 19 & 301

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2021 - 01/02/2021	0.95	0.98
2	01/03/2021 - 01/09/2021	1.00	1.03
3	01/10/2021 - 01/16/2021	1.05	1.08
4	01/17/2021 - 01/23/2021	1.04	1.07
5	01/24/2021 - 01/30/2021	1.03	1.06
6	01/31/2021 - 02/06/2021	1.02	1.05
7	02/07/2021 - 02/13/2021	1.01	1.04
8	02/14/2021 - 02/20/2021	1.00	1.03
* 9	02/21/2021 - 02/27/2021	0.98	1.01
*10	02/28/2021 - 03/06/2021	0.97	1.00
*11	03/07/2021 - 03/13/2021	0.96	0.99
*12	03/14/2021 - 03/20/2021	0.95	0.98
*13	03/21/2021 - 03/27/2021	0.95	0.98
*14	03/28/2021 - 04/03/2021	0.95	0.98
*15	04/04/2021 - 04/10/2021	0.95	0.98
*16	04/11/2021 - 04/17/2021	0.96	0.99
*17	04/18/2021 - 04/24/2021	0.96	0.99
*18	04/25/2021 - 05/01/2021	0.97	1.00
*19	05/02/2021 - 05/08/2021	0.98	1.01
*20	05/09/2021 - 05/15/2021	0.99	1.02
*21	05/16/2021 - 05/22/2021	0.99	1.02
22	05/23/2021 - 05/29/2021	1.00	1.03
23	05/30/2021 - 06/05/2021	1.01	1.04
24	06/06/2021 - 06/12/2021	1.01	1.04
25	06/13/2021 - 06/19/2021	1.02	1.05
26	06/20/2021 - 06/26/2021	1.03	1.06
27	06/27/2021 - 07/03/2021	1.04	1.07
28	07/04/2021 - 07/10/2021	1.05	1.08
29	07/11/2021 - 07/17/2021	1.06	1.09
30	07/18/2021 - 07/24/2021	1.06	1.09
31	07/25/2021 - 07/31/2021	1.06	1.09
32	08/01/2021 - 08/07/2021	1.07	1.10
33	08/08/2021 - 08/14/2021	1.07	1.10
34	08/15/2021 - 08/21/2021	1.07	1.10
35	08/22/2021 - 08/28/2021	1.07	1.10
36	08/29/2021 - 09/04/2021	1.07	1.10
37	09/05/2021 - 09/11/2021	1.07	1.10
38	09/12/2021 - 09/18/2021	1.07	1.10
39	09/19/2021 - 09/25/2021	1.05	1.08
40	09/26/2021 - 10/02/2021	1.03	1.06
41	10/03/2021 - 10/09/2021	1.01	1.04
42	10/10/2021 - 10/16/2021	1.00	1.03
43	10/17/2021 - 10/23/2021	0.99	1.02
44	10/24/2021 - 10/30/2021	0.99	1.02
45	10/31/2021 - 11/06/2021	0.98	1.01
46	11/07/2021 - 11/13/2021	0.98	1.01
47	11/14/2021 - 11/20/2021	0.97	1.00
48	11/21/2021 - 11/27/2021	0.96	0.99
49	11/28/2021 - 12/04/2021	0.96	0.99
50	12/05/2021 - 12/11/2021	0.95	0.98
51	12/12/2021 - 12/18/2021	0.95	0.98
52	12/19/2021 - 12/25/2021	1.00	1.03
53	12/26/2021 - 12/31/2021	1.05	1.08

* PEAK SEASON

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830UPD

1_1302_PKSEASON.TXT

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1303 BEACH AREAS

WEEK	DATES	SF	MOCF: 0.94 PSCF
1	01/01/2021 - 01/02/2021	0.95	1.01
2	01/03/2021 - 01/09/2021	0.99	1.05
3	01/10/2021 - 01/16/2021	1.04	1.11
4	01/17/2021 - 01/23/2021	1.02	1.09
5	01/24/2021 - 01/30/2021	1.00	1.06
6	01/31/2021 - 02/06/2021	0.98	1.04
7	02/07/2021 - 02/13/2021	0.96	1.02
* 8	02/14/2021 - 02/20/2021	0.94	1.00
* 9	02/21/2021 - 02/27/2021	0.94	1.00
*10	02/28/2021 - 03/06/2021	0.94	1.00
*11	03/07/2021 - 03/13/2021	0.94	1.00
*12	03/14/2021 - 03/20/2021	0.94	1.00
*13	03/21/2021 - 03/27/2021	0.93	0.99
*14	03/28/2021 - 04/03/2021	0.93	0.99
*15	04/04/2021 - 04/10/2021	0.93	0.99
*16	04/11/2021 - 04/17/2021	0.93	0.99
*17	04/18/2021 - 04/24/2021	0.94	1.00
*18	04/25/2021 - 05/01/2021	0.95	1.01
*19	05/02/2021 - 05/08/2021	0.95	1.01
*20	05/09/2021 - 05/15/2021	0.96	1.02
21	05/16/2021 - 05/22/2021	0.99	1.05
22	05/23/2021 - 05/29/2021	1.02	1.09
23	05/30/2021 - 06/05/2021	1.04	1.11
24	06/06/2021 - 06/12/2021	1.07	1.14
25	06/13/2021 - 06/19/2021	1.10	1.17
26	06/20/2021 - 06/26/2021	1.11	1.18
27	06/27/2021 - 07/03/2021	1.11	1.18
28	07/04/2021 - 07/10/2021	1.12	1.19
29	07/11/2021 - 07/17/2021	1.12	1.19
30	07/18/2021 - 07/24/2021	1.10	1.17
31	07/25/2021 - 07/31/2021	1.09	1.16
32	08/01/2021 - 08/07/2021	1.07	1.14
33	08/08/2021 - 08/14/2021	1.06	1.13
34	08/15/2021 - 08/21/2021	1.04	1.11
35	08/22/2021 - 08/28/2021	1.04	1.11
36	08/29/2021 - 09/04/2021	1.05	1.12
37	09/05/2021 - 09/11/2021	1.05	1.12
38	09/12/2021 - 09/18/2021	1.05	1.12
39	09/19/2021 - 09/25/2021	1.03	1.10
40	09/26/2021 - 10/02/2021	1.02	1.09
41	10/03/2021 - 10/09/2021	1.00	1.06
42	10/10/2021 - 10/16/2021	0.99	1.05
43	10/17/2021 - 10/23/2021	0.99	1.05
44	10/24/2021 - 10/30/2021	0.99	1.05
45	10/31/2021 - 11/06/2021	0.99	1.05
46	11/07/2021 - 11/13/2021	0.99	1.05
47	11/14/2021 - 11/20/2021	1.00	1.06
48	11/21/2021 - 11/27/2021	0.98	1.04
49	11/28/2021 - 12/04/2021	0.97	1.03
50	12/05/2021 - 12/11/2021	0.96	1.02
51	12/12/2021 - 12/18/2021	0.95	1.01
52	12/19/2021 - 12/25/2021	0.99	1.05
53	12/26/2021 - 12/31/2021	1.04	1.11

* PEAK SEASON

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830UPD

1_1303_PKSEASON.TXT

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1310 HPMS OFF-SYSTEM

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2021 - 01/02/2021	0.95	0.98
2	01/03/2021 - 01/09/2021	1.02	1.05
3	01/10/2021 - 01/16/2021	1.09	1.12
4	01/17/2021 - 01/23/2021	1.07	1.10
5	01/24/2021 - 01/30/2021	1.05	1.08
6	01/31/2021 - 02/06/2021	1.03	1.06
7	02/07/2021 - 02/13/2021	1.01	1.04
8	02/14/2021 - 02/20/2021	0.99	1.02
9	02/21/2021 - 02/27/2021	0.99	1.02
10	02/28/2021 - 03/06/2021	0.98	1.01
11	03/07/2021 - 03/13/2021	0.98	1.01
12	03/14/2021 - 03/20/2021	0.98	1.01
13	03/21/2021 - 03/27/2021	0.98	1.01
14	03/28/2021 - 04/03/2021	0.98	1.01
15	04/04/2021 - 04/10/2021	0.98	1.01
16	04/11/2021 - 04/17/2021	0.98	1.01
17	04/18/2021 - 04/24/2021	0.97	1.00
18	04/25/2021 - 05/01/2021	0.97	1.00
19	05/02/2021 - 05/08/2021	0.97	1.00
20	05/09/2021 - 05/15/2021	0.97	1.00
21	05/16/2021 - 05/22/2021	0.99	1.02
22	05/23/2021 - 05/29/2021	1.01	1.04
23	05/30/2021 - 06/05/2021	1.02	1.05
24	06/06/2021 - 06/12/2021	1.04	1.07
25	06/13/2021 - 06/19/2021	1.06	1.09
26	06/20/2021 - 06/26/2021	1.07	1.10
27	06/27/2021 - 07/03/2021	1.08	1.11
28	07/04/2021 - 07/10/2021	1.10	1.13
29	07/11/2021 - 07/17/2021	1.11	1.14
30	07/18/2021 - 07/24/2021	1.09	1.12
31	07/25/2021 - 07/31/2021	1.07	1.10
32	08/01/2021 - 08/07/2021	1.05	1.08
33	08/08/2021 - 08/14/2021	1.03	1.06
34	08/15/2021 - 08/21/2021	1.01	1.04
35	08/22/2021 - 08/28/2021	1.01	1.04
36	08/29/2021 - 09/04/2021	1.00	1.03
37	09/05/2021 - 09/11/2021	1.00	1.03
38	09/12/2021 - 09/18/2021	0.99	1.02
*39	09/19/2021 - 09/25/2021	0.98	1.01
*40	09/26/2021 - 10/02/2021	0.97	1.00
*41	10/03/2021 - 10/09/2021	0.96	0.99
*42	10/10/2021 - 10/16/2021	0.95	0.98
*43	10/17/2021 - 10/23/2021	0.95	0.98
*44	10/24/2021 - 10/30/2021	0.96	0.99
*45	10/31/2021 - 11/06/2021	0.97	1.00
*46	11/07/2021 - 11/13/2021	0.98	1.01
*47	11/14/2021 - 11/20/2021	0.99	1.02
*48	11/21/2021 - 11/27/2021	0.98	1.01
*49	11/28/2021 - 12/04/2021	0.97	1.00
*50	12/05/2021 - 12/11/2021	0.96	0.99
*51	12/12/2021 - 12/18/2021	0.95	0.98
52	12/19/2021 - 12/25/2021	1.02	1.05
53	12/26/2021 - 12/31/2021	1.09	1.12

* PEAK SEASON

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830UPD

1_1310_PKSEASON.TXT

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1327 MANATEE I275

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2021 - 01/02/2021	0.96	1.01
2	01/03/2021 - 01/09/2021	1.03	1.08
3	01/10/2021 - 01/16/2021	1.10	1.16
4	01/17/2021 - 01/23/2021	1.08	1.14
5	01/24/2021 - 01/30/2021	1.06	1.12
6	01/31/2021 - 02/06/2021	1.04	1.09
7	02/07/2021 - 02/13/2021	1.02	1.07
8	02/14/2021 - 02/20/2021	1.01	1.06
9	02/21/2021 - 02/27/2021	0.99	1.04
10	02/28/2021 - 03/06/2021	0.97	1.02
*11	03/07/2021 - 03/13/2021	0.95	1.00
*12	03/14/2021 - 03/20/2021	0.93	0.98
*13	03/21/2021 - 03/27/2021	0.93	0.98
*14	03/28/2021 - 04/03/2021	0.94	0.99
*15	04/04/2021 - 04/10/2021	0.94	0.99
*16	04/11/2021 - 04/17/2021	0.95	1.00
*17	04/18/2021 - 04/24/2021	0.95	1.00
*18	04/25/2021 - 05/01/2021	0.96	1.01
*19	05/02/2021 - 05/08/2021	0.96	1.01
*20	05/09/2021 - 05/15/2021	0.97	1.02
*21	05/16/2021 - 05/22/2021	0.97	1.02
*22	05/23/2021 - 05/29/2021	0.97	1.02
*23	05/30/2021 - 06/05/2021	0.97	1.02
24	06/06/2021 - 06/12/2021	0.97	1.02
25	06/13/2021 - 06/19/2021	0.97	1.02
26	06/20/2021 - 06/26/2021	0.98	1.03
27	06/27/2021 - 07/03/2021	1.00	1.05
28	07/04/2021 - 07/10/2021	1.01	1.06
29	07/11/2021 - 07/17/2021	1.03	1.08
30	07/18/2021 - 07/24/2021	1.04	1.09
31	07/25/2021 - 07/31/2021	1.05	1.11
32	08/01/2021 - 08/07/2021	1.06	1.12
33	08/08/2021 - 08/14/2021	1.07	1.13
34	08/15/2021 - 08/21/2021	1.09	1.15
35	08/22/2021 - 08/28/2021	1.08	1.14
36	08/29/2021 - 09/04/2021	1.08	1.14
37	09/05/2021 - 09/11/2021	1.07	1.13
38	09/12/2021 - 09/18/2021	1.07	1.13
39	09/19/2021 - 09/25/2021	1.05	1.11
40	09/26/2021 - 10/02/2021	1.03	1.08
41	10/03/2021 - 10/09/2021	1.02	1.07
42	10/10/2021 - 10/16/2021	1.00	1.05
43	10/17/2021 - 10/23/2021	0.99	1.04
44	10/24/2021 - 10/30/2021	0.98	1.03
45	10/31/2021 - 11/06/2021	0.98	1.03
46	11/07/2021 - 11/13/2021	0.97	1.02
47	11/14/2021 - 11/20/2021	0.96	1.01
48	11/21/2021 - 11/27/2021	0.96	1.01
49	11/28/2021 - 12/04/2021	0.96	1.01
50	12/05/2021 - 12/11/2021	0.96	1.01
51	12/12/2021 - 12/18/2021	0.96	1.01
52	12/19/2021 - 12/25/2021	1.03	1.08
53	12/26/2021 - 12/31/2021	1.10	1.16

* PEAK SEASON

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830UPD

1_1327_PKSEASON.TXT

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1340 OFF-SYSTEM EAST OF I-75

MOCF: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2021 - 01/02/2021	0.97	1.01
2	01/03/2021 - 01/09/2021	1.01	1.05
3	01/10/2021 - 01/16/2021	1.06	1.10
4	01/17/2021 - 01/23/2021	1.04	1.08
5	01/24/2021 - 01/30/2021	1.02	1.06
6	01/31/2021 - 02/06/2021	1.00	1.04
7	02/07/2021 - 02/13/2021	0.99	1.03
* 8	02/14/2021 - 02/20/2021	0.97	1.01
* 9	02/21/2021 - 02/27/2021	0.97	1.01
*10	02/28/2021 - 03/06/2021	0.96	1.00
*11	03/07/2021 - 03/13/2021	0.96	1.00
*12	03/14/2021 - 03/20/2021	0.96	1.00
*13	03/21/2021 - 03/27/2021	0.95	0.99
*14	03/28/2021 - 04/03/2021	0.95	0.99
*15	04/04/2021 - 04/10/2021	0.95	0.99
*16	04/11/2021 - 04/17/2021	0.94	0.98
*17	04/18/2021 - 04/24/2021	0.95	0.99
*18	04/25/2021 - 05/01/2021	0.95	0.99
*19	05/02/2021 - 05/08/2021	0.96	1.00
*20	05/09/2021 - 05/15/2021	0.96	1.00
21	05/16/2021 - 05/22/2021	0.98	1.02
22	05/23/2021 - 05/29/2021	1.00	1.04
23	05/30/2021 - 06/05/2021	1.01	1.05
24	06/06/2021 - 06/12/2021	1.03	1.07
25	06/13/2021 - 06/19/2021	1.05	1.09
26	06/20/2021 - 06/26/2021	1.06	1.10
27	06/27/2021 - 07/03/2021	1.08	1.13
28	07/04/2021 - 07/10/2021	1.10	1.15
29	07/11/2021 - 07/17/2021	1.11	1.16
30	07/18/2021 - 07/24/2021	1.10	1.15
31	07/25/2021 - 07/31/2021	1.09	1.14
32	08/01/2021 - 08/07/2021	1.09	1.14
33	08/08/2021 - 08/14/2021	1.08	1.13
34	08/15/2021 - 08/21/2021	1.07	1.11
35	08/22/2021 - 08/28/2021	1.06	1.10
36	08/29/2021 - 09/04/2021	1.05	1.09
37	09/05/2021 - 09/11/2021	1.04	1.08
38	09/12/2021 - 09/18/2021	1.03	1.07
39	09/19/2021 - 09/25/2021	1.01	1.05
40	09/26/2021 - 10/02/2021	0.99	1.03
41	10/03/2021 - 10/09/2021	0.97	1.01
42	10/10/2021 - 10/16/2021	0.95	0.99
43	10/17/2021 - 10/23/2021	0.96	1.00
44	10/24/2021 - 10/30/2021	0.97	1.01
45	10/31/2021 - 11/06/2021	0.97	1.01
46	11/07/2021 - 11/13/2021	0.98	1.02
47	11/14/2021 - 11/20/2021	0.98	1.02
48	11/21/2021 - 11/27/2021	0.98	1.02
49	11/28/2021 - 12/04/2021	0.98	1.02
50	12/05/2021 - 12/11/2021	0.97	1.01
51	12/12/2021 - 12/18/2021	0.97	1.01
52	12/19/2021 - 12/25/2021	1.01	1.05
53	12/26/2021 - 12/31/2021	1.06	1.10

* PEAK SEASON

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2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1341 OFF-SYSTEM WEST OF I-75

MOCF: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2021 - 01/02/2021	0.94	0.98
2	01/03/2021 - 01/09/2021	0.99	1.03
3	01/10/2021 - 01/16/2021	1.04	1.08
4	01/17/2021 - 01/23/2021	1.02	1.06
5	01/24/2021 - 01/30/2021	1.01	1.05
6	01/31/2021 - 02/06/2021	0.99	1.03
* 7	02/07/2021 - 02/13/2021	0.98	1.02
* 8	02/14/2021 - 02/20/2021	0.97	1.01
* 9	02/21/2021 - 02/27/2021	0.96	1.00
*10	02/28/2021 - 03/06/2021	0.96	1.00
*11	03/07/2021 - 03/13/2021	0.96	1.00
*12	03/14/2021 - 03/20/2021	0.96	1.00
*13	03/21/2021 - 03/27/2021	0.96	1.00
*14	03/28/2021 - 04/03/2021	0.96	1.00
*15	04/04/2021 - 04/10/2021	0.95	0.99
*16	04/11/2021 - 04/17/2021	0.95	0.99
*17	04/18/2021 - 04/24/2021	0.96	1.00
*18	04/25/2021 - 05/01/2021	0.97	1.01
*19	05/02/2021 - 05/08/2021	0.98	1.02
20	05/09/2021 - 05/15/2021	0.99	1.03
21	05/16/2021 - 05/22/2021	1.00	1.04
22	05/23/2021 - 05/29/2021	1.02	1.06
23	05/30/2021 - 06/05/2021	1.04	1.08
24	06/06/2021 - 06/12/2021	1.05	1.09
25	06/13/2021 - 06/19/2021	1.07	1.11
26	06/20/2021 - 06/26/2021	1.07	1.11
27	06/27/2021 - 07/03/2021	1.08	1.13
28	07/04/2021 - 07/10/2021	1.09	1.14
29	07/11/2021 - 07/17/2021	1.09	1.14
30	07/18/2021 - 07/24/2021	1.08	1.13
31	07/25/2021 - 07/31/2021	1.07	1.11
32	08/01/2021 - 08/07/2021	1.06	1.10
33	08/08/2021 - 08/14/2021	1.04	1.08
34	08/15/2021 - 08/21/2021	1.03	1.07
35	08/22/2021 - 08/28/2021	1.03	1.07
36	08/29/2021 - 09/04/2021	1.03	1.07
37	09/05/2021 - 09/11/2021	1.02	1.06
38	09/12/2021 - 09/18/2021	1.02	1.06
39	09/19/2021 - 09/25/2021	1.01	1.05
40	09/26/2021 - 10/02/2021	1.00	1.04
41	10/03/2021 - 10/09/2021	0.98	1.02
42	10/10/2021 - 10/16/2021	0.97	1.01
43	10/17/2021 - 10/23/2021	0.97	1.01
44	10/24/2021 - 10/30/2021	0.97	1.01
45	10/31/2021 - 11/06/2021	0.98	1.02
46	11/07/2021 - 11/13/2021	0.98	1.02
47	11/14/2021 - 11/20/2021	0.98	1.02
48	11/21/2021 - 11/27/2021	0.97	1.01
49	11/28/2021 - 12/04/2021	0.96	1.00
50	12/05/2021 - 12/11/2021	0.95	0.99
51	12/12/2021 - 12/18/2021	0.94	0.98
52	12/19/2021 - 12/25/2021	0.99	1.03
53	12/26/2021 - 12/31/2021	1.04	1.08

* PEAK SEASON

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2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1375 MANATEE I75

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2021 - 01/02/2021	0.00	0.00
2	01/03/2021 - 01/09/2021	0.00	0.00
3	01/10/2021 - 01/16/2021	1.07	1.13
4	01/17/2021 - 01/23/2021	1.05	1.11
5	01/24/2021 - 01/30/2021	1.04	1.09
6	01/31/2021 - 02/06/2021	1.02	1.07
7	02/07/2021 - 02/13/2021	1.01	1.06
8	02/14/2021 - 02/20/2021	0.99	1.04
9	02/21/2021 - 02/27/2021	0.98	1.03
*10	02/28/2021 - 03/06/2021	0.96	1.01
*11	03/07/2021 - 03/13/2021	0.95	1.00
*12	03/14/2021 - 03/20/2021	0.93	0.98
*13	03/21/2021 - 03/27/2021	0.93	0.98
*14	03/28/2021 - 04/03/2021	0.94	0.99
*15	04/04/2021 - 04/10/2021	0.94	0.99
*16	04/11/2021 - 04/17/2021	0.94	0.99
*17	04/18/2021 - 04/24/2021	0.95	1.00
*18	04/25/2021 - 05/01/2021	0.96	1.01
*19	05/02/2021 - 05/08/2021	0.96	1.01
*20	05/09/2021 - 05/15/2021	0.97	1.02
*21	05/16/2021 - 05/22/2021	0.97	1.02
*22	05/23/2021 - 05/29/2021	0.97	1.02
23	05/30/2021 - 06/05/2021	0.97	1.02
24	06/06/2021 - 06/12/2021	0.97	1.02
25	06/13/2021 - 06/19/2021	0.97	1.02
26	06/20/2021 - 06/26/2021	0.98	1.03
27	06/27/2021 - 07/03/2021	1.00	1.05
28	07/04/2021 - 07/10/2021	1.01	1.06
29	07/11/2021 - 07/17/2021	1.02	1.07
30	07/18/2021 - 07/24/2021	1.03	1.08
31	07/25/2021 - 07/31/2021	1.04	1.09
32	08/01/2021 - 08/07/2021	1.06	1.12
33	08/08/2021 - 08/14/2021	1.07	1.13
34	08/15/2021 - 08/21/2021	1.08	1.14
35	08/22/2021 - 08/28/2021	1.08	1.14
36	08/29/2021 - 09/04/2021	1.08	1.14
37	09/05/2021 - 09/11/2021	1.07	1.13
38	09/12/2021 - 09/18/2021	1.07	1.13
39	09/19/2021 - 09/25/2021	1.05	1.11
40	09/26/2021 - 10/02/2021	1.04	1.09
41	10/03/2021 - 10/09/2021	1.02	1.07
42	10/10/2021 - 10/16/2021	1.00	1.05
43	10/17/2021 - 10/23/2021	1.01	1.06
44	10/24/2021 - 10/30/2021	1.01	1.06
45	10/31/2021 - 11/06/2021	1.02	1.07
46	11/07/2021 - 11/13/2021	1.03	1.08
47	11/14/2021 - 11/20/2021	1.03	1.08
48	11/21/2021 - 11/27/2021	1.04	1.09
49	11/28/2021 - 12/04/2021	1.04	1.09
50	12/05/2021 - 12/11/2021	1.05	1.11
51	12/12/2021 - 12/18/2021	1.06	1.12
52	12/19/2021 - 12/25/2021	1.06	1.12
53	12/26/2021 - 12/31/2021	1.07	1.13

* PEAK SEASON

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FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2021 HISTORICAL AADT REPORT

COUNTY: 13 - MANATEE

SITE: 0072 - SR 64, EAST OF LENA ROAD

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	49000	C	E 24500		W 24500	9.00	56.10	4.50
2020	44000	C	E 22000		W 22000	9.00	56.30	4.90
2019	47000	C	E 23500		W 23500	9.00	56.80	4.50
2018	43000	C	E 21500		W 21500	9.00	55.80	4.30
2017	39500	C	E 20000		W 19500	9.00	56.50	6.60
2016	37500	C	E 18500		W 19000	9.00	55.90	6.60
2015	35000	C	E 17500		W 17500	9.00	56.10	6.60
2014	32000	C	E 16000		W 16000	9.00	55.60	7.20
2013	28500	F	E 14000		W 14500	9.00	56.40	5.40
2012	27500	C	E 13500		W 14000	9.00	55.80	5.40
2011	28000	F	E 14000		W 14000	9.00	56.90	6.50
2010	27000	C	E 13500		W 13500	13.38	57.76	6.50
2009	23000	C	E 11500		W 11500	13.22	60.14	7.40
2008	28000	F	E 14000		W 14000	10.99	59.34	7.80
2007	29000	C	E 14500		W 14500	10.21	55.66	7.80
2006	28000	C	E 14000		W 14000	10.19	54.91	11.00

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

COUNTY: 13
 STATION: 0072
 DESCRIPTION: SR 64, EAST OF LENA ROAD
 START DATE: 02/10/2021
 START TIME: 0000

TIME	DIRECTION: E					DIRECTION: W					COMBINED TOTAL
	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	
0000	28	25	19	25	97	23	15	7	13	58	155
0100	12	20	11	8	51	8	3	10	7	28	79
0200	14	7	2	8	31	2	9	9	6	26	57
0300	2	11	4	15	32	12	9	16	22	59	91
0400	6	9	17	36	68	25	41	54	65	185	253
0500	28	48	56	101	233	92	111	138	195	536	769
0600	134	188	291	293	906	265	292	378	403	1338	2244
0700	315	334	481	531	1661	509	575	519	494	2097	3758
0800	489	456	431	384	1760	469	511	481	442	1903	3663
0900	396	313	301	367	1377	480	430	379	411	1700	3077
1000	350	350	339	325	1364	410	415	435	444	1704	3068
1100	341	369	402	387	1499	392	421	452	413	1678	3177
1200	386	390	408	413	1597	427	416	428	430	1701	3298
1300	401	385	385	408	1579	385	383	417	383	1568	3147
1400	369	420	458	464	1711	414	383	445	428	1670	3381
1500	496	533	466	486	1981	393	508	517	462	1880	3861
1600	584	498	542	566	2190	405	506	450	461	1822	4012
1700	551	549	587	557	2244	485	500	490	429	1904	4148
1800	480	402	356	365	1603	390	401	328	297	1416	3019
1900	342	313	303	246	1204	244	216	192	158	810	2014
2000	235	255	205	226	921	141	125	111	111	488	1409
2100	169	162	141	104	576	86	93	80	58	317	893
2200	96	68	76	61	301	75	46	39	44	204	505
2300	61	36	46	43	186	35	32	22	22	111	297
24-HOUR TOTALS:	25172					25203					50375

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	730	1957	700	2097	730	3950
P.M.	1645	2253	1645	1936	1645	4189
DAILY	1645	2253	700	2097	1645	4189

Attachment C

Lena Road Corridor Study Traffic Analysis Memorandum Determined Growth Rates

Determined Growth Rates

The Lena Road corridor connection between south of 44th Avenue East to north of Landfill Road does not currently exist. The historical traffic growth rates were based on Station 08-51 along Lena Road, north of the project limits.

Growth rates for existing and no build scenarios were not applicable as the segment doesn't currently exist.

A Build growth rate of 3.04% was used to forecast the Design Year (2045) traffic volumes for the Build 2-lane roadway connection scenario, based on the 10-year historical traffic trend growth rate from station 08-51.

Table A shows the growth rate comparison and the proposed growth rates for the Lena Road corridor.

Table A | Determined Growth Rate

Source	Calculated Growth Rate
Historical Traffic (5 Years) - Manatee County Station 08-51	3.85%
Historical Traffic (10 Years) - Manatee County Station 08-51	3.04%
BEBR - Low	0.51%
BEBR - Medium	1.46%
BEBR - High	2.56%
D1RPMv2.0 - No Build	N/A
D1RPMv2.0 - Build	N/A
D1RPMv2.0 - Project Area SE Data	3.10%
Proposed Growth Rate	Existing N/A No Build N/A Build 3.04%

Attachment D

SR 64/Lena Road Alternatives Synchro Output

Lanes, Volumes, Timings
 5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.05	0.58	0.58		0.10	0.64	0.64	0.18	0.07	0.07	0.07	0.04	
v/c Ratio		1.02	0.90	0.20		0.92	1.13	0.04	1.19	0.08	0.68	0.92	0.76	
Control Delay		174.5	34.8	2.1		121.9	90.4	0.1	176.8	69.9	24.1	113.5	73.3	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		174.5	34.8	2.1		121.9	90.4	0.1	176.8	69.9	24.1	113.5	73.3	
LOS		F	C	A		F	F	A	F	E	C	F	E	
Approach Delay			37.3				90.7			108.2			102.0	
Approach LOS			D				F			F			F	
90th %ile Green (s)	7.9	7.9	93.5	93.5	16.0	16.0	101.6	101.6	16.3	11.8	11.8	11.2	7.0	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	7.9	7.9	93.5	93.5	16.0	16.0	101.6	101.6	16.3	11.8	11.8	11.2	7.0	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	7.9	7.9	93.5	93.5	16.0	16.0	101.6	101.6	16.3	11.8	11.8	11.2	7.0	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
30th %ile Green (s)	7.9	7.9	93.5	93.5	16.0	16.0	101.6	101.6	16.3	11.8	11.8	11.2	7.0	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
10th %ile Green (s)	7.9	7.9	93.5	93.5	16.0	16.0	101.6	101.6	16.3	11.8	11.8	11.2	7.0	
10th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
Stops (vph)		70	2061	8		125	2920	0	167	20	27	185	37	
Fuel Used(gal)		6	110	4		11	231	1	12	1	4	11	3	
CO Emissions (g/hr)		431	7669	278		743	16139	97	871	50	272	743	237	
NOx Emissions (g/hr)		84	1492	54		145	3140	19	169	10	53	145	46	
VOC Emissions (g/hr)		100	1777	64		172	3740	22	202	12	63	172	55	
Dilemma Vehicles (#)		0	76	0		0	94	0	0	0	0	0	0	
Queue Length 50th (ft)		~97	830	0		158	~1573	0	~230	10	5	118	42	
Queue Length 95th (ft)		#221	901	27		#302	#1623	0	#410	26	88	#201	#137	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		86	2833	812		163	3167	1035	190	257	258	236	115	
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		1.02	0.90	0.20		0.92	1.13	0.04	1.19	0.08	0.68	0.92	0.76	

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 170
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.19
 Intersection Signal Delay: 71.6 Intersection LOS: E
 Intersection Capacity Utilization 106.2% ICU Level of Service G
 Analysis Period (min) 15
 ~ 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.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64



Lanes, Volumes, Timings
 5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.08	0.57	0.57		0.07	0.55	0.55	0.26	0.12	0.12	0.10	0.07	
v/c Ratio		1.12	1.16	0.13		1.15	1.06	0.23	1.23	0.17	0.70	0.85	1.15	
Control Delay		181.6	112.8	0.5		213.4	76.0	2.9	182.0	72.6	47.0	102.7	156.0	
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		181.6	112.8	0.5		213.4	76.0	2.9	182.0	72.6	47.0	102.7	156.0	
LOS		F	F	A		F	E	A	F	E	D	F	F	
Approach Delay			113.0				75.3			125.9			125.3	
Approach LOS			F				E			F			F	
90th %ile Green (s)	14.9	14.9	101.9	101.9	11.8	11.8	98.8	98.8	27.3	21.1	21.1	17.7	11.8	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	14.9	14.9	101.9	101.9	11.8	11.8	98.8	98.8	27.3	21.1	21.1	17.7	11.8	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	14.9	14.9	101.9	101.9	11.8	11.8	98.8	98.8	27.3	21.1	21.1	17.7	11.8	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
30th %ile Green (s)	14.9	14.9	101.9	101.9	11.8	11.8	98.8	98.8	27.3	21.1	21.1	17.7	11.8	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
10th %ile Green (s)	14.9	14.9	101.9	101.9	11.8	11.8	98.8	98.8	27.3	23.5	23.5	15.3	11.8	
10th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Gap	Max	
Stops (vph)		125	2722	0		73	2505	11	228	59	78	244	87	
Fuel Used(gal)		11	196	2		8	184	8	18	2	5	13	11	
CO Emissions (g/hr)		802	13694	153		593	12834	533	1293	172	373	893	764	
NOx Emissions (g/hr)		156	2664	30		115	2497	104	251	34	73	174	149	
VOC Emissions (g/hr)		186	3174	36		137	2974	124	300	40	86	207	177	
Dilemma Vehicles (#)		0	77	0		0	72	0	0	0	0	0	0	
Queue Length 50th (ft)		~220	~1720	0		~134	~1394	2	~434	39	94	164	~187	
Queue Length 95th (ft)		#386	#1763	2		#268	#1452	43	#651	67	192	#237	#370	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		144	2907	731		84	2764	942	269	418	270	329	173	
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		1.13	1.16	0.13		1.15	1.06	0.23	1.23	0.17	0.70	0.82	1.15	

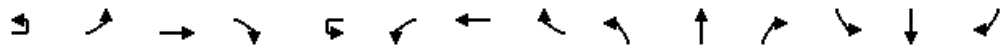
Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 102 (57%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 180
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.23
 Intersection Signal Delay: 99.3 Intersection LOS: F
 Intersection Capacity Utilization 118.4% ICU Level of Service H
 Analysis Period (min) 15
 ~ 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.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64



Lanes, Volumes, Timings
 5: Lena Road/Heritage Green Way & SR 64



Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.05	0.58	0.58		0.10	0.63	0.63	0.08	0.08	0.08	0.06	0.06	
v/c Ratio		1.02	0.91	0.20		0.94	1.13	0.04	1.08	1.03dl	0.64	1.05	0.60	
Control Delay		174.5	35.5	2.1		126.2	94.5	0.1	175.0	83.2	20.1	145.0	53.5	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		174.5	35.5	2.1		126.2	94.5	0.1	175.0	83.2	20.1	145.0	53.5	
LOS		F	D	A		F	F	A	F	F	C	F	D	
Approach Delay			38.0				94.7			81.6			118.9	
Approach LOS			D				F			F			F	
90th %ile Green (s)	7.9	7.9	93.0	93.0	15.7	15.7	100.8	100.8	13.3	13.3	13.3	9.8	9.8	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	7.9	7.9	93.0	93.0	15.7	15.7	100.8	100.8	13.3	13.3	13.3	9.8	9.8	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	7.9	7.9	93.0	93.0	15.7	15.7	100.8	100.8	13.3	13.3	13.3	9.8	9.8	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
30th %ile Green (s)	7.9	7.9	93.0	93.0	15.7	15.7	100.8	100.8	13.3	13.3	13.3	9.8	9.8	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
10th %ile Green (s)	7.9	7.9	93.0	93.0	15.7	15.7	100.8	100.8	13.3	13.3	13.3	9.8	9.8	
10th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
Stops (vph)		70	2070	7		123	2902	0	87	120	23	178	39	
Fuel Used(gal)		6	110	4		11	233	1	6	5	4	12	3	
CO Emissions (g/hr)		431	7703	277		750	16317	97	432	351	261	833	215	
NOx Emissions (g/hr)		84	1499	54		146	3175	19	84	68	51	162	42	
VOC Emissions (g/hr)		100	1785	64		174	3782	22	100	81	61	193	50	
Dilemma Vehicles (#)		0	76	0		0	93	0	0	0	0	0	0	
Queue Length 50th (ft)		~97	837	0		159	~1583	0	~143	75	0	~126	40	
Queue Length 95th (ft)		#221	909	26		#305	#1633	0	#293	117	81	#218	103	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		86	2817	809		160	3142	1028	105	219	274	207	144	
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		1.02	0.91	0.20		0.94	1.13	0.04	1.08	0.61	0.64	1.05	0.60	

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 180
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.13
 Intersection Signal Delay: 73.1 Intersection LOS: E
 Intersection Capacity Utilization 100.6% ICU Level of Service G
 Analysis Period (min) 15
 ~ 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.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64



Lanes, Volumes, Timings
5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.09	0.59	0.59		0.07	0.57	0.57	0.11	0.11	0.11	0.08	0.08	
v/c Ratio		1.04	1.12	0.12		1.07	1.02	0.22	1.11	1.07dl	0.74	1.06	1.05	
Control Delay		157.8	93.2	1.8		186.9	61.1	2.5	175.8	93.1	48.4	147.8	124.3	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		157.8	93.2	1.8		186.9	61.1	2.5	175.8	93.1	48.4	147.8	124.3	
LOS		F	F	A		F	E	A	F	F	D	F	F	
Approach Delay			93.8				61.0			102.1				137.8
Approach LOS			F				E			F				F
90th %ile Green (s)	16.1	16.1	105.9	105.9	12.8	12.8	102.6	102.6	19.3	19.3	19.3	13.8	13.8	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	16.1	16.1	105.9	105.9	12.8	12.8	102.6	102.6	19.3	19.3	19.3	13.8	13.8	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	16.1	16.1	105.9	105.9	12.8	12.8	102.6	102.6	19.3	19.3	19.3	13.8	13.8	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
30th %ile Green (s)	16.1	16.1	105.9	105.9	12.8	12.8	102.6	102.6	19.3	19.3	19.3	13.8	13.8	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
10th %ile Green (s)	16.1	16.1	105.9	105.9	12.8	12.8	102.6	102.6	19.3	19.3	19.3	13.8	13.8	
10th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
Stops (vph)		132	2805	3		75	2523	10	128	213	72	222	95	
Fuel Used(gal)		11	184	2		8	175	8	9	9	5	15	10	
CO Emissions (g/hr)		758	12890	158		560	12261	531	640	653	374	1049	682	
NOx Emissions (g/hr)		147	2508	31		109	2386	103	124	127	73	204	133	
VOC Emissions (g/hr)		176	2987	37		130	2842	123	148	151	87	243	158	
Dilemma Vehicles (#)		0	80	0		0	74	0	0	0	0	0	0	
Queue Length 50th (ft)		~205	~1669	0		~125	~1346	0	~245	150	88	~179	~167	
Queue Length 95th (ft)		#372	#1711	18		#260	#1405	39	#430	206	#198	#282	#350	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		156	3021	741		91	2870	972	149	315	257	256	190	
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		1.04	1.12	0.12		1.07	1.02	0.22	1.11	0.75	0.74	1.06	1.05	

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 180
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.12
 Intersection Signal Delay: 83.6 Intersection LOS: F
 Intersection Capacity Utilization 112.9% ICU Level of Service H
 Analysis Period (min) 15
 ~ 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.
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64



Lanes, Volumes, Timings
5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.05	0.59	0.59		0.12	0.65	0.65	0.08	0.05	0.05	0.07	0.04	
v/c Ratio		1.02	0.90	0.19		0.80	1.09	0.04	1.09	0.21	0.74	0.92	0.76	
Control Delay		174.5	34.1	1.9		98.2	75.7	0.1	152.9	78.5	28.2	113.5	73.3	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		174.5	34.1	1.9		98.2	75.7	0.1	152.9	78.5	28.2	113.5	73.3	
LOS		F	C	A		F	E	A	F	E	C	F	E	
Approach Delay			36.7				75.8			97.6			102.0	
Approach LOS			D				E			F			F	
90th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
30th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
10th %ile Green (s)	7.9	7.9	97.1	97.1	15.4	15.4	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
10th %ile Term Code	Max	Max	Coord	Coord	Gap	Gap	Coord	Coord	Max	Hold	Hold	Max	Max	
Stops (vph)		70	2044	6		131	2952	0	183	20	20	185	37	
Fuel Used(gal)		6	109	4		10	221	1	12	1	4	11	3	
CO Emissions (g/hr)		431	7626	276		702	15466	97	804	52	279	743	237	
NOx Emissions (g/hr)		84	1484	54		137	3009	19	156	10	54	145	46	
VOC Emissions (g/hr)		100	1767	64		163	3585	22	186	12	65	172	55	
Dilemma Vehicles (#)		0	76	0		0	97	0	0	0	0	0	0	
Queue Length 50th (ft)		~97	831	0		155	~1536	0	~136	20	0	118	42	
Queue Length 95th (ft)		#221	902	25		#268	#1586	0	#228	52	#102	#201	#137	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		86	2852	818		194	3260	1063	208	94	236	236	115	
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		1.02	0.90	0.19		0.77	1.09	0.04	1.09	0.21	0.74	0.92	0.76	

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 180
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.09
 Intersection Signal Delay: 63.1 Intersection LOS: E
 Intersection Capacity Utilization 100.6% ICU Level of Service G
 Analysis Period (min) 15
 ~ 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.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64



Lanes, Volumes, Timings
5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (vph)	24	130	3206	87	2	90	2792	201	315	66	180	257	42	147
Future Volume (vph)	24	130	3206	87	2	90	2792	201	315	66	180	257	42	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	11	12	11	11	11	11	11	11	11
Storage Length (ft)		775		400		350		575	275		275	0		200
Storage Lanes		1		1		1		1	2		1	2		0
Taper Length (ft)		25				25			25			25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt				0.850				0.850				0.850		0.883
Flt Protected		0.950				0.950			0.950			0.950		
Satd. Flow (prot)	0	1745	5136	1183	0	1290	5036	1546	2969	1837	1459	3351	1583	0
Flt Permitted		0.950				0.950			0.950			0.712		
Satd. Flow (perm)	0	1745	5136	1183	0	1290	5036	1546	2969	1837	1459	2512	1583	0
Right Turn on Red				Yes				Yes			Yes			Yes
Satd. Flow (RTOR)				153				212			113			75
Link Speed (mph)			50				50				30			30
Link Distance (ft)			3959				5758				2265			3018
Travel Time (s)			54.0				78.5				51.5			68.6
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	0.95	0.95
Heavy Vehicles (%)	0%	0%	1%	32%	0%	36%	3%	1%	14%	0%	7%	1%	4%	2%
Adj. Flow (vph)	25	137	3375	92	2	95	2939	212	332	69	189	271	44	155
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	162	3375	92	0	97	2939	212	332	69	189	271	199	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)			11				30				22			22
Link Offset(ft)			0				0				0			0
Crosswalk Width(ft)			16				16				16			16
Two way Left Turn Lane														
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9	15		9	9	15		9	15		9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94				94			94
Detector 2 Size(ft)			6				6				6			6
Detector 2 Type			Cl+Ex				Cl+Ex				Cl+Ex			Cl+Ex
Detector 2 Channel														
Detector 2 Extend (s)			0.0				0.0				0.0			0.0
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	
Protected Phases	1	1	6		5	5	2		7	4		3	8	
Permitted Phases				6				2			4	4	8	
Detector Phase	1	1	6	6	5	5	2	2	7	4	4	3	8	
Switch Phase														
Minimum Initial (s)	5.0	5.0	15.0	15.0	5.0	5.0	15.0	15.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	12.1	12.1	22.1	22.1	12.2	12.2	22.2	22.2	13.7	13.7	13.7	14.2	14.2	
Total Split (s)	24.0	24.0	116.0	116.0	20.0	20.0	112.0	112.0	25.0	26.4	26.4	17.6	19.0	
Total Split (%)	13.3%	13.3%	64.4%	64.4%	11.1%	11.1%	62.2%	62.2%	13.9%	14.7%	14.7%	9.8%	10.6%	
Maximum Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
Yellow Time (s)	5.1	5.1	5.1	5.1	5.2	5.2	5.2	5.2	3.7	3.7	3.7	3.7	3.7	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.5	3.5	
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)		7.1	7.1	7.1			7.2	7.2	7.2	6.7	6.7	6.7	7.2	7.2
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.0	3.0	
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)		16.9	108.9	108.9			12.8	104.8	104.8	18.3	19.7	19.7	22.2	11.8

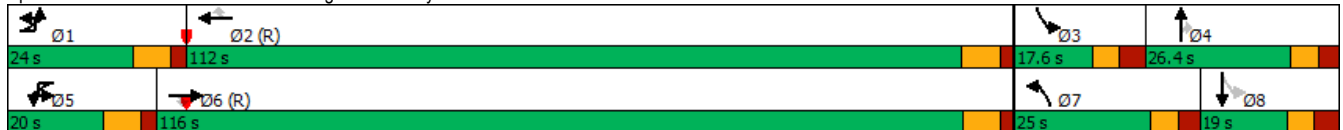
Lanes, Volumes, Timings
5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.09	0.60	0.60		0.07	0.58	0.58	0.10	0.11	0.11	0.12	0.07	
v/c Ratio		0.99	1.09	0.12		1.07	1.00	0.21	1.10	0.34	0.73	0.76	1.15	
Control Delay		147.1	79.5	0.3		186.9	54.1	2.3	152.6	79.4	47.6	79.7	156.0	
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		147.1	79.5	0.3		186.9	54.1	2.3	152.6	79.4	47.6	79.7	156.0	
LOS		F	E	A		F	D	A	F	E	D	E	F	
Approach Delay			80.5				54.7			110.4			112.0	
Approach LOS			F				D			F			F	
90th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
30th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
10th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
10th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
Stops (vph)		134	2837	0		75	2524	10	269	61	73	275	87	
Fuel Used(gal)		11	176	2		8	171	8	17	3	5	12	11	
CO Emissions (g/hr)		736	12298	153		560	11987	530	1177	180	372	821	764	
NOx Emissions (g/hr)		143	2393	30		109	2332	103	229	35	72	160	149	
VOC Emissions (g/hr)		171	2850	35		130	2778	123	273	42	86	190	177	
Dilemma Vehicles (#)		0	81	0		0	75	0	0	0	0	0	0	
Queue Length 50th (ft)		195	~1631	0		~125	~1250	0	~228	77	88	144	~187	
Queue Length 95th (ft)		#362	#1673	0		#260	#1377	38	#338	134	#189	193	#370	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		163	3107	776		91	2932	988	301	201	260	358	173	
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		0.99	1.09	0.12		1.07	1.00	0.21	1.10	0.34	0.73	0.76	1.15	

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 170
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.15
 Intersection Signal Delay: 74.0 Intersection LOS: E
 Intersection Capacity Utilization 110.8% ICU Level of Service H
 Analysis Period (min) 15
 ~ 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.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64



Attachment E

Build Alternatives Synchro Output

Lanes, Volumes, Timings
4: Lena Rd & Powell Johnson Rd/Landfill Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↖	↗	↖	↖	↗	
Traffic Volume (vph)	9	0	0	2	0	103	0	86	2	91	168	5
Future Volume (vph)	9	0	0	2	0	103	0	86	2	91	168	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	0		0	0		0	250		250	350		0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.867				0.850		0.996	
Flt Protected		0.950			0.999					0.950		
Satd. Flow (prot)	0	1745	0	0	1053	0	1837	1543	781	1057	1638	0
Flt Permitted		0.994			0.993					0.510		
Satd. Flow (perm)	0	1826	0	0	1047	0	1837	1543	781	568	1638	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					138				138		3	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		2638			2619			1959			3417	
Travel Time (s)		71.9			71.4			44.5			77.7	
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
Heavy Vehicles (%)	0%	0%	0%	0%	0%	52%	0%	19%	100%	65%	12%	0%
Adj. Flow (vph)	9	0	0	2	0	108	0	91	2	96	177	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	9	0	0	110	0	0	91	2	96	182	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		2	2	2	1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0	15.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		24.0	24.0	24.0	12.1	24.0	
Total Split (s)	29.0	29.0		29.0	29.0		30.0	30.0	30.0	21.0	51.0	
Total Split (%)	36.3%	36.3%		36.3%	36.3%		37.5%	37.5%	37.5%	26.3%	63.8%	
Maximum Green (s)	23.0	23.0		23.0	23.0		24.0	24.0	24.0	13.9	45.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	5.1	4.0	
All-Red Time (s)	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	
Total Lost Time (s)		6.0			6.0		6.0	6.0	6.0	7.1	6.0	
Lead/Lag							Lag	Lag	Lag	Lead		
Lead-Lag Optimize?							Yes	Yes	Yes	Yes		
Vehicle Extension (s)	3.0	3.0		5.0	5.0		3.0	3.0	3.0	3.0	5.0	
Recall Mode	None	None		None	None		Min	Min	Min	None	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0	7.0		7.0	

Lanes, Volumes, Timings
5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Volume (vph)	9	75	2425	151	3	140	3388	38	215	19	166	206	28	55
Future Volume (vph)	9	75	2425	151	3	140	3388	38	215	19	166	206	28	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	11	11	11	12	11	11	11	11	11	11	11
Storage Length (ft)		775		400		350		575	275		275	0		0
Storage Lanes		1		1		1		1	2		1	2		0
Taper Length (ft)		25				25			25			25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	1.00	0.91	1.00	0.97	1.00	1.00	0.97	1.00	1.00
Frt				0.850				0.850				0.850		0.900
Flt Protected		0.950				0.950			0.950			0.950		
Satd. Flow (prot)	0	1745	4848	1269	0	1633	4988	1561	2708	1837	1369	3385	1621	0
Flt Permitted		0.950				0.950			0.950			0.950		
Satd. Flow (perm)	0	1745	4848	1269	0	1633	4988	1561	2708	1837	1369	3385	1621	0
Right Turn on Red				Yes				Yes			Yes			Yes
Satd. Flow (RTOR)				175				125			175			47
Link Speed (mph)			50				50			30				30
Link Distance (ft)			3959				5758			2265			3018	
Travel Time (s)			54.0				78.5			51.5			68.6	
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	0.95	0.95
Heavy Vehicles (%)	0%	0%	7%	23%	0%	7%	4%	0%	25%	0%	14%	0%	6%	0%
Adj. Flow (vph)	9	79	2553	159	3	147	3566	40	226	20	175	217	29	58
Shared Lane Traffic (%)														
Lane Group Flow (vph)	0	88	2553	159	0	150	3566	40	226	20	175	217	87	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Left	Right	R NA	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)			11				30			22			22	
Link Offset(ft)			0				0			0			0	
Crosswalk Width(ft)			16				16			16			16	
Two way Left Turn Lane														
Headway Factor	1.04	1.04	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	9	15		9	9	15		9	15		9	15		9
Number of Detectors	1	1	2	1	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Left	Thru	Right	Left	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	20	100	20	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	20	6	20	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel														
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94				94			94			94	
Detector 2 Size(ft)			6				6			6			6	
Detector 2 Type			Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel														
Detector 2 Extend (s)			0.0				0.0			0.0			0.0	
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	1	6		5	5	2		7	4		3	8	
Permitted Phases				6				2			4			
Detector Phase	1	1	6	6	5	5	2	2	7	4	4	3	8	
Switch Phase														
Minimum Initial (s)	5.0	5.0	15.0	15.0	5.0	5.0	15.0	15.0	7.0	7.0	7.0	5.0	7.0	
Minimum Split (s)	12.1	12.1	22.1	22.1	12.2	12.2	22.2	22.2	13.7	13.7	13.7	12.1	14.2	
Total Split (s)	15.0	15.0	100.5	100.5	26.3	26.3	111.8	111.8	19.0	14.9	14.9	18.3	14.2	
Total Split (%)	9.4%	9.4%	62.8%	62.8%	16.4%	16.4%	69.9%	69.9%	11.9%	9.3%	9.3%	11.4%	8.9%	
Maximum Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
Yellow Time (s)	5.1	5.1	5.1	5.1	5.2	5.2	5.2	5.2	3.7	3.7	3.7	5.1	3.7	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	2.0	3.5	
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)		7.1	7.1	7.1			7.2	7.2	7.2	6.7	6.7	6.7	7.1	7.2
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.0	3.0	
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	None	None	
Act Effct Green (s)		7.9	94.1	94.1			18.4	104.6	104.6	12.3	8.2	8.2	11.2	7.0

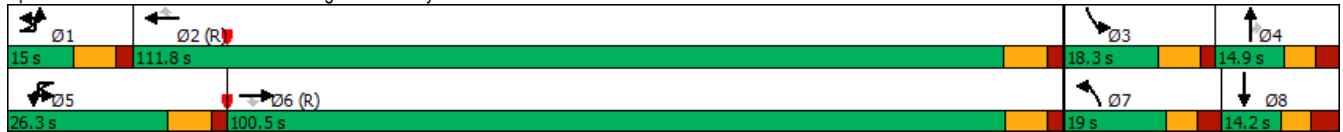
Lanes, Volumes, Timings
5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.05	0.59	0.59		0.12	0.65	0.65	0.08	0.05	0.05	0.07	0.04	
v/c Ratio		1.02	0.90	0.19		0.80	1.09	0.04	1.09	0.21	0.74	0.92	0.76	
Control Delay		174.5	34.1	1.9		98.2	75.7	0.1	152.9	78.5	28.2	113.5	73.3	
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		174.5	34.1	1.9		98.2	75.7	0.1	152.9	78.5	28.2	113.5	73.3	
LOS		F	C	A		F	E	A	F	E	C	F	E	
Approach Delay			36.7				75.8			97.6			102.0	
Approach LOS			D				E			F			F	
90th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
30th %ile Green (s)	7.9	7.9	93.4	93.4	19.1	19.1	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
10th %ile Green (s)	7.9	7.9	97.1	97.1	15.4	15.4	104.6	104.6	12.3	8.2	8.2	11.2	7.0	
10th %ile Term Code	Max	Max	Coord	Coord	Gap	Gap	Coord	Coord	Max	Hold	Hold	Max	Max	
Stops (vph)		70	2044	6		131	2952	0	183	20	20	185	37	
Fuel Used(gal)		6	109	4		10	221	1	12	1	4	11	3	
CO Emissions (g/hr)		431	7626	276		702	15466	97	804	52	279	743	237	
NOx Emissions (g/hr)		84	1484	54		137	3009	19	156	10	54	145	46	
VOC Emissions (g/hr)		100	1767	64		163	3585	22	186	12	65	172	55	
Dilemma Vehicles (#)		0	76	0		0	97	0	0	0	0	0	0	
Queue Length 50th (ft)		~97	831	0		155	~1536	0	~136	20	0	118	42	
Queue Length 95th (ft)		#221	902	25		#268	#1586	0	#228	52	#102	#201	#137	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		86	2852	818		194	3260	1063	208	94	236	236	115	
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		1.02	0.90	0.19		0.77	1.09	0.04	1.09	0.21	0.74	0.92	0.76	

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 180
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.09
 Intersection Signal Delay: 63.1 Intersection LOS: E
 Intersection Capacity Utilization 100.6% ICU Level of Service G
 Analysis Period (min) 15
 ~ 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.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64



Lanes, Volumes, Timings
5: Lena Road/Heritage Green Way & SR 64

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.09	0.60	0.60		0.07	0.58	0.58	0.10	0.11	0.11	0.12	0.07	
v/c Ratio		0.99	1.09	0.12		1.07	1.00	0.21	1.10	0.34	0.73	0.76	1.15	
Control Delay		147.1	79.5	0.3		186.9	54.1	2.3	152.6	79.4	47.6	79.7	156.0	
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		147.1	79.5	0.3		186.9	54.1	2.3	152.6	79.4	47.6	79.7	156.0	
LOS		F	E	A		F	D	A	F	E	D	E	F	
Approach Delay			80.5				54.7			110.4			112.0	
Approach LOS			F				D			F			F	
90th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
90th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
70th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
70th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Max	Max	Max	Max	
50th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
50th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
30th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
30th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
10th %ile Green (s)	16.9	16.9	108.9	108.9	12.8	12.8	104.8	104.8	18.3	19.7	19.7	10.4	11.8	
10th %ile Term Code	Max	Max	Coord	Coord	Max	Max	Coord	Coord	Max	Hold	Hold	Max	Max	
Stops (vph)		134	2837	0		75	2524	10	269	61	73	275	87	
Fuel Used(gal)		11	176	2		8	171	8	17	3	5	12	11	
CO Emissions (g/hr)		736	12298	153		560	11987	530	1177	180	372	821	764	
NOx Emissions (g/hr)		143	2393	30		109	2332	103	229	35	72	160	149	
VOC Emissions (g/hr)		171	2850	35		130	2778	123	273	42	86	190	177	
Dilemma Vehicles (#)		0	81	0		0	75	0	0	0	0	0	0	
Queue Length 50th (ft)		195	~1631	0		~125	~1250	0	~228	77	88	144	~187	
Queue Length 95th (ft)		#362	#1673	0		#260	#1377	38	#338	134	#189	193	#370	
Internal Link Dist (ft)			3879				5678			2185			2938	
Turn Bay Length (ft)		775		400		350		575	275		275			
Base Capacity (vph)		163	3107	776		91	2932	988	301	201	260	358	173	
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		0.99	1.09	0.12		1.07	1.00	0.21	1.10	0.34	0.73	0.76	1.15	

Intersection Summary

Area Type: Other
 Cycle Length: 180
 Actuated Cycle Length: 180
 Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green
 Natural Cycle: 170
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.15
 Intersection Signal Delay: 74.0 Intersection LOS: E
 Intersection Capacity Utilization 110.8% ICU Level of Service H
 Analysis Period (min) 15
 ~ 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.

Splits and Phases: 5: Lena Road/Heritage Green Way & SR 64

