



Multi-Way Stop Warrant Analysis

Intersection: Lely Resort Blvd. @ Wildflower Way / Lely County Club

Requestors: Neighborhood Inquiry

Collier County Growth Management Department

Traffic Operations Section

Prepared by:

Daniel G. Hall, P.E.

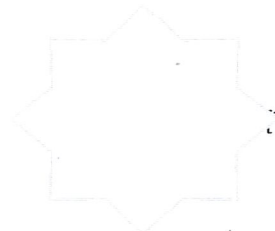
Principal Project Manager

Registration No: 58050

Signature: 

Date 4-16-19

16 April 2019





Multi-Way Stop Warrant Conclusion

WARRANT CONSIDERATION RESULTS

CONDITIONS SATISFIED

TRAFFIC CONTROL SIGNAL INSTALLATION SCHEDULED	NO
TRAFFIC VOLUMES ~ EQUAL / BALANCED-VOLUMES OF APPROACH	NO
CRASH DATA - PAST 12 MONTHS OF (5) OR MORE SUSCEPTIBLE TO CORRECTION	NO
VEHICULAR DATA	
ENTERING INTERSECTION FROM MAJOR APPROACH (300 vehicles per hour Average) AND	YES
COMBINED VEHICULAR, PEDESTRIAN AND BICYCLE VOLUME (200 units per hour combined on minor approach) ****	YES
DELAY ON MINOR APPROACH FOR VEHICULAR TRAFFIC (> 30 seconds per vehicle – peak hours)	N / A
APPROACH SPEED – MAJOR STREET TRAFFIC - > 40 MPH (if > 40mph vehicular data are reduce to 70% of stated values)	N / A
SIGHT LINE DISTANCE BASED ON SPEED / ROAD GEOMETRY	NO
TURNING CONFLICT – VEHICULAR	N / A
TURNING CONFLICT - PEDESTRIAN TRAFFIC	N / A
OTHER CRITERIA FOR CONSIDERATION	NO

CONCLUSION:

Based on the analysis of the data sets summarized above, in accordance with the MUTCD guidelines / protocols, overall functionality, traffic metrics, crash history and engineering judgment:

This intersection, **DOES** meet the merits for a multi-way stop intersection.

It is therefore, recommended that a multi-way stop control be installed, at this time.

Intersection:

Lely Resort Blvd. @
Wildflower Way/Lely Country Club

Requestors: Neighborhood Inquiry

Work Order #: _____

Project Scope

This report is the summation of result of a traffic warrant analysis for a multi-way stop request at this intersection in Collier County Florida.

The purpose of this report is to summarize, quantify and evaluate specific criteria to benefit commuters at this location in an attempt to improve safety and reduce delay in accordance with the MUTCD's requirements.

The MUTCD is a document issued by the Federal Highway Administration and is the national standard for traffic control devices.

The FDOT has adopted the MUTCD per Section 316.0745 of the Florida Statutes for traffic control devices for all locations.

Analysis Summarized By:

Kyle Kemmish

Reviewed by:

Daniel G. Hall



Multi-Way Stop Intersection Study: Lely Resort Blvd. @ Wildflower Way / Lely Country Club

BACKGROUND

The Traffic Operations Section of the Collier County Growth Management Department conducted a Multi-Way Stop Intersection Study at the intersection of Lely Resort Blvd. @ Wildflower Way / Lely Country Club in Naples, Florida.

The purpose of this study was to determine if the intersection met warrant requirements for a multi-way stop installation as set forth in the Manual on Uniform Traffic Control Devices (MUTCD). A general vicinity aerial of this area is noted below in "Figure 1" and a more detailed intersection aerial is noted as "Figure 2."

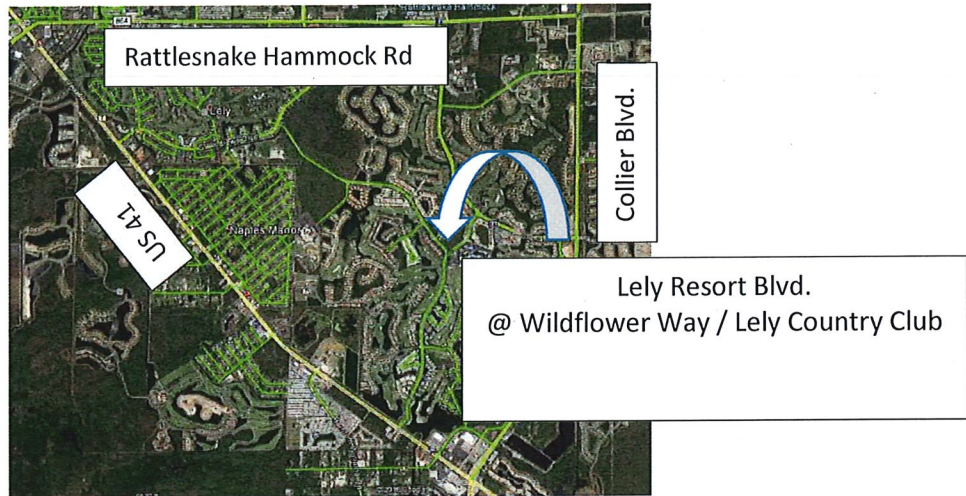


Figure 1, Vicinity Map

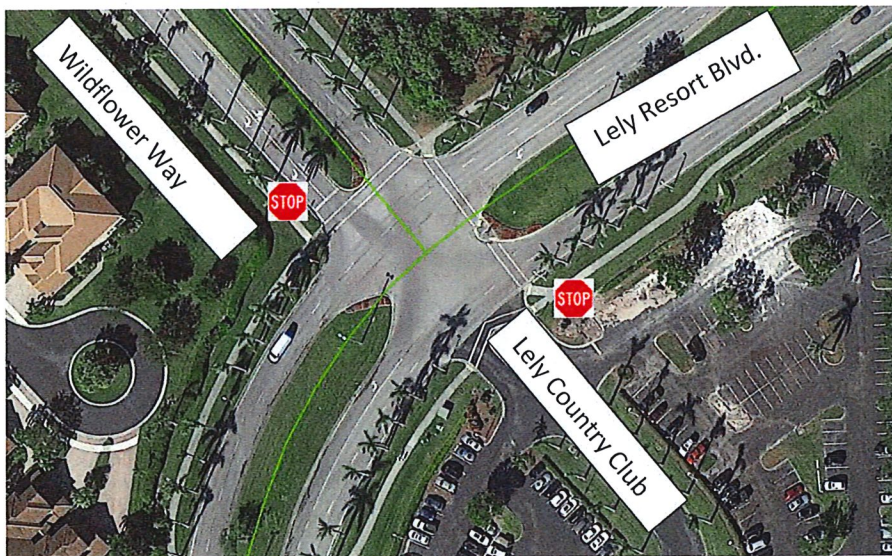


Figure 2, Intersection Map



Authority Governance

The MUTCD, prepared by the Federal Highway Administration, has been designated by the State of Florida to govern placement and design of traffic signals, signs, and pavement markings on public and private roads within the state.

Guidance

Multi-way stops control can be useful as a safety measure at intersections if certain conditions exist.

Road Characteristics / Existing Configuration

This intersection is comprised of Lely Resort Blvd and Wildflower Way which are four-lane, median divided roadways and Lely Country Club which is a two-lane roadway that serves as egress to a business. Lely Resort Blvd and Wildflower Way are functionally classified as Access Class Arterials.

This intersection is within "Various Subdivision Boundaries."

Posted Speed:

The speed limit on Lely Resort Blvd. is 30 mph.

The speed limit on Wildflower Way is 30 mph.

Wildflower Way / Lely Country Club are stop-controlled.

MUTCD Minimum Volume Requirements for a Multi-Way Stop Sign Installation:

Stop signs should not be used to control speed. The function of a stop sign is to assign right-of-way for vehicles entering an intersection. Multi-way stop control can be useful as a safety measure at intersections when there are concerns associated with pedestrians, bicyclists, and vehicular road users expecting other road users to stop.

The MUTCD identifies the following criteria to be considered in the study for a multi-way stop condition when the volume of traffic on the intersecting roads is approximately equal:

1. The vehicular volumes entering the major street approaches (total of both approaches) averages at least 300 vehicles per hour (vph) for any 8 hours of an average day, and
2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) average at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but
3. When the 85-percentile speed of the major street exceeds 40 mph, the minimum volume warrant is 70% of the above requirements.

When the 85-percentile speed exceeds 40 mph, the traffic volumes on the major street should be at least 210 vehicles **per hour** for any 8 hours and the traffic volumes on the minor street should be at least 140 vehicles **per hour** for the same 8 hours.

Other criteria for consideration of a multi-way stop include:

- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop condition.
- Locations where the intersection sight distance is limited.
- The need to control vehicle turning conflicts and where high pedestrian volumes exist.
- At intersections of two residential neighborhood streets of similar design and operating characteristics where multi-way stop control would improve the traffic operational characteristics of the intersection.

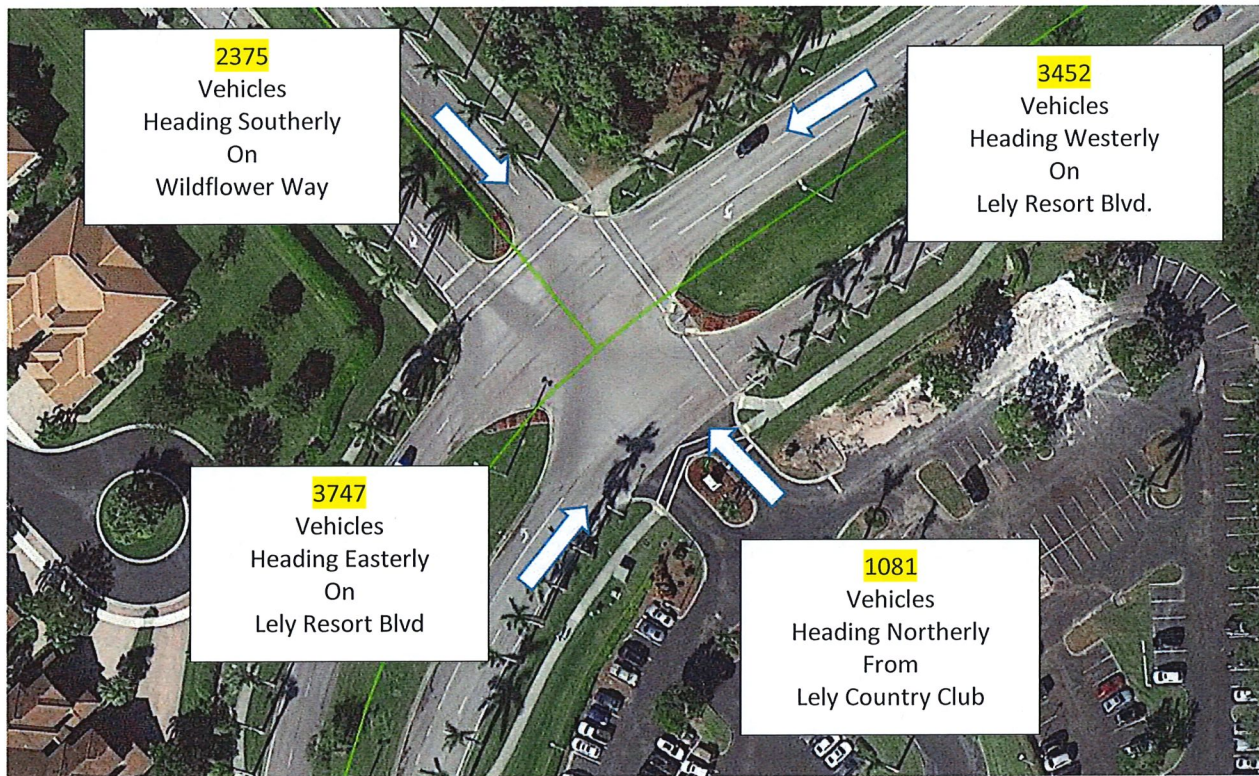
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Traffic Volume

A 24-hour traffic volume count was performed on the 26 of March 2019 (Appendix A). The data collected includes traffic approaching from all directions at the intersection. The merits of the analysis may include the following: Equivalency / Balanced Metric, Quantitative Metric, Speed Metric, Intersection Delay and Field Observations.

Traffic Volume – Part Ia – Equivalency / Balanced Metric –

A multi way stop control may be used where the volume of traffic of intersecting roads are approximately equal.



Quantitative Summation:

Northerly and Southerly Intersection Traffic: 3,456 Vehicles
 Easterly and Westerly Intersection Traffic: 7,199 Vehicles

Equivalency Metric warrant for Lely Resort Blvd @ Wildflower Way and Lely Country Club are not met



Traffic Volume – Part Ib – Equivalency / Balanced Metric –

A multi way stop control may be used where the volume of traffic of intersecting roads are approximately equal.

Lely Resort Blvd – Eastbound - Equivalency Metric - Vehicles Per 24 Hour Period (VPH) – Major Street

Interval (Hours)	Northbound %	Approach Total Quantity
0:00 - 12:00 Hrs.	38.4%	1438
12:00 - 0:00 Hrs.	61.6%	2309
24 Hr. Total	100.0%	3747

Lely Island Blvd – Westbound - Equivalency Metric - Vehicles Per 24 Hour Period (VPH) – Major Street

Interval (Hours)	Southbound %	Approach Total Quantity
0:00 - 12:00 Hrs.	34.0%	1174
12:00 - 0:00 Hrs.	66.0%	2278
24 Hr. Total	100.0%	3452

Wildflower Way (Southbound) - Equivalency Metric - Vehicles Per 24 Hour Period (VPH) – Minor Street

Interval (Hours)	Eastbound %	Approaches Total Quantity
0:00 - 12:00 Hrs.	50.1%	1191
12:00 - 0:00 Hrs.	49.9%	1184
24 Hr. Total	100.0%	2375

Lely Country Club (Northbound) - Equivalency Metric - Vehicles Per 24 Hour Period (VPH) – Minor Street

Interval (Hours)	Westbound %	Approaches Total Quantity
0:00 - 12:00 Hrs.	18.5%	200
12:00 - 0:00 Hrs.	81.5%	881
24 Hr. Total	100.0%	1081

Equivalency Metric warrant for Lely Resort Blvd @ Wildflower Way and Lely Country Club are not met



Traffic Volume – Part II – Quantitative Metric –

The Quantitative Metric is utilized when the volume of traffic of the intersection of road has a minimum of 300 vehicles **per hour** on an average day for any 8-hour period for the Major Approach AND a minimum of 200 units in a combination of vehicles, pedestrian or bicycle for the same 8-hour period on the Minor Approach. See Appendix A

The data with the highest hourly traffic volumes are summarized as follows:

Time	Approach Major EB LRB	Approach Major WB LRB	Total	Approach Minor NB LCC	Approach Minor SB WFW	Total
8:00	232	180	412	31	173	204
9:00	236	199	435	36	192	228
10:00	294	254	548	44	190	234
11:00	285	239	524	56	196	252
12:00	293	234	527	51	177	228
13:00	298	270	568	100	282	382
15:00	273	291	564	86	180	266
16:00	306	298	604	94	109	203

NOTE: Both Major and Minor Approaches met the minimum criteria

Quantitative Metric warrant for Lely Resort Blvd @ Wildflower Way and Lely County Club are met



Traffic Volume – Part III – Speed Metric – continued

The speed limit is 30 mph on Lely Resort Boulevard

The speed limit is 30 mph on Wildflower Way

The MUTCD has a speed criterion for intersections when the 85-percentile speed of the major street exceeds 40 mph, if met, the minimum volume warrant is reduced to: 70% of the base line requirements.

Due to the Posted Speed Limit being less than 40 mph, this metric was not utilized

Lely Resort Blvd - Speed Metric

85% Speed Observed:	N/A mph
Other Speed Metrics Observed:	
Average (Mean) Speed:	N/A mph
Maximum Speed:	N/A mph
Pace Range: {00.0 – 00.0 mph}	N/A percent
Excessive Speed > xx mph	N/A percent

Speed Metric warrant for Lely Resort Blvd is NOT met

Wildflower Way / Lely Country Club - Speed Metric

85% Speed Observed:	N/A mph
Other Speed Metrics Observed:	
Average (Mean) Speed:	N/A mph
Maximum Speed:	N/A mph
Pace Range: {00.0 – 00.0 mph}	N/A percent
Excessive Speed > xx mph	N/A percent

Speed Metric warrant for Wildflower Way / Lely Country Club is not met



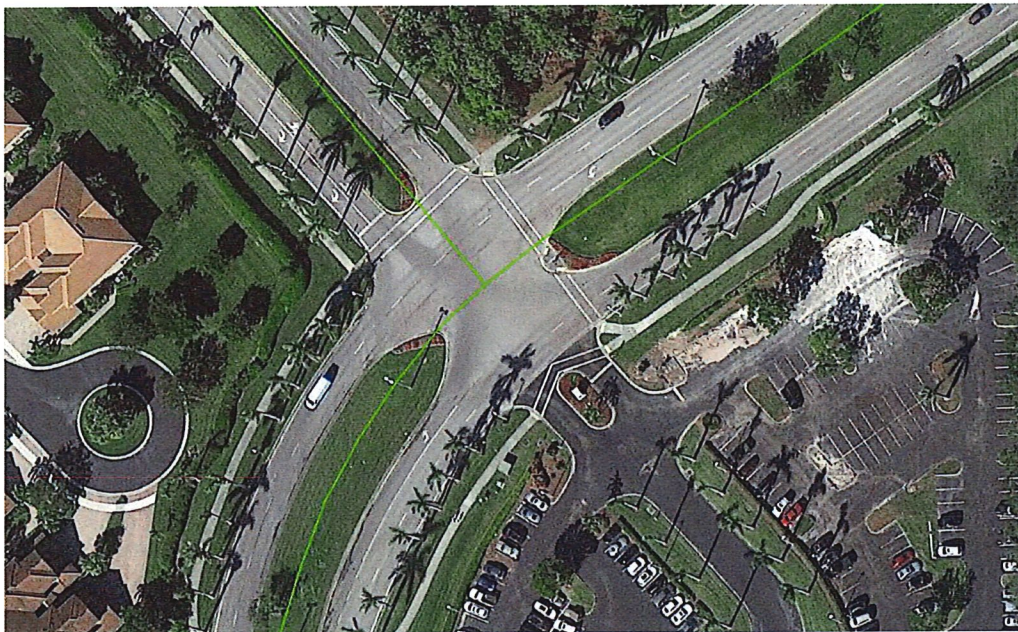
Traffic Volume – Part III – Crash Metric

Crash / Accident History

The intersection crash history was reviewed from 2014 through present (Appendix B). During this five year plus time period, there was a total of 10 recorded crashes near the intersection. The MUTCD required five or more crashes in a 12-month period that are susceptible to correction by a multi-way stop application.

Crash Data – Detailed in Appendix B

2019	2 reported crash	Crash Data Metric warrant are not met
2018	3 reported crash	Crash Data Metric warrant are not met
2017	0 reported crash	Crash Data Metric warrant are not met
2016	4 four reported crashes	Crash Data Metric warrant are not met
2015	1 one reported crashes	Crash Data Metric warrant are not met
2014	0 reported crashes	Crash Data Metric warrant are not met



Quantitative Metric warrant for Lely Resort Blvd & Wildflower Way / Lely Country Club are not met

Turning Conflict

Due to minimal Traffic Volume Count – Turning Conflict was not conducted.

Vehicle	Vehicular Data Metric warrant are: N / A
Pedestrian	Vehicular Data Metric warrant are: N / A

[Title]

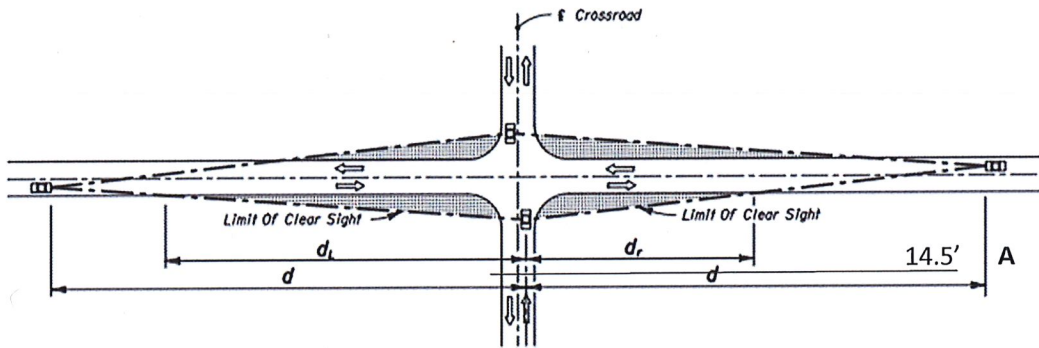


Traffic Volume – Part III – Sight Distance

The Traffic Engineering Handbook identifies that motorist approaching intersections should have a sufficient, unobstructed view of the intersection and approaches. The American Association of State Highway and Transportation Officials (AASHTO) and the Florida Department of Transportation (FDOT) provide standards and guidelines regarding intersection sight distance.

Intersection Sight Distance Per FDOT Index546 (2013) and Site Pictures in Appendix C

Sight Line Compliance based on Road Geometry



PICTORIAL
2 LANE UNDIVIDED

Design Speed	d	d _L	d _r
30 mph	335	240	150
35 mph	390	275	175
40 mph	445	315	200
45 mph	500	350	225
50 mph	555	390	250
55 mph	610	430	275

Passenger Cars

Design Speed	d	d _L	d _r
30 mph	420	295	190
35 mph	490	345	220
40 mph	560	395	250
45 mph	630	445	280
50 mph	700	495	310
55 mph	770	495	345

SU Vehicle

Speed Limit: 30 mph

A: ~14.5 From edge of Road to Decision Point / Driver

d: ~ based on speed

An engineering field review has shown that this intersection does provide adequate sight distance for the turn movements.

Lely Resort Blvd - Eastbound

Traffic Approaching from the Left
Traffic Approaching from the Right

Sight Line Compliance (Road Geometry) Metric warrant not met
Sight Line Compliance (Road Geometry) Metric warrant not met

Lely Resort Blvd - Westbound

Traffic Approaching from the Left
Traffic Approaching from the Right

Sight line Compliance (Road Geometry) Metric warrant not met
Sight line Compliance (Road Geometry) Metric warrant not met

Wildflower Way

Traffic Approaching from the Left
Traffic Approaching from the Right

Sight line Compliance (Road Geometry) Metric warrant not met
Sight line Compliance (Road Geometry) Metric warrant not met

Lely Country Club

Traffic Approaching from the Left
Traffic Approaching from the Right

Sight line Compliance (Road Geometry) Metric warrant not met
Sight line Compliance (Road Geometry) Metric warrant not met



Traffic Volume – Part III – Intersection Delay

The MUTCD warrant for a multi-way stop control requires that the average delay to the minor street vehicular traffic to be at least 30 seconds per vehicle during the highest hour.

Due to the volume of vehicle traffic being minimal, an Intersection Delay Study was not conducted

An intersection delay study was performed for the peak hour of N / A on N / A , the N / A of N / A N / A. The average delay per approach vehicle was found to be N / A seconds.

Due to minimal Traffic Volume Count – Intersection Delay Study was not conducted.

Quantitative Metric warrant for Lely Resort Blvd and Wildflower Way / Lely Country Club are not met

Traffic Volume – Part III – Field Observation

N / A

Other Criteria for Consideration of a Multi-Way Stop

Vehicle & Pedestrian Conflicts

Warrant: Where the need to control vehicle turning conflicts and where high pedestrian volumes exists.

Observations: Crash data did not indicate a high percentile of turn related crashes, nor did site visit indicate excessive vehicle or pedestrian conflicts.

Street Design and Functionality

Warrant: The neighborhood streets are of similar design / operating characteristics and a multi-way stop control may improve the traffic operational characteristics of the intersection.

Observations: The neighborhood streets are **NOT** of similar design and have similar operating characteristics and a multi-way stop control may enhance the operational characteristics of the intersection.

Other Criteria for Consideration Metric for Lely Resort Blvd. & Wildflower Way / Lely Country Club are NOT met.



CONCLUSION & RECOMMENDATION

Based on the analysis of the data sets summarized and as described, in accordance with the MUTCD guidelines / protocols, overall functionality, traffic metrics, crash history and engineering judgment of this intersection:

At this time, this intersection, **DOES** meet the merits for a multi-way stop intersection.

It is therefore, recommended that a multi-way stop control be installed, at this time.



APPENDIX A

Traffic Volume Counts – Raw Data

Collier County Transportation Department
 Traffic Operations
 Technician: Luis Trujillo

LOCATION : LELY COUNTRY CLUB Site: 325190020001
 CROSS ST : NB APPROACH TO LELY RESORT BLVD 3/26/2019
 CITY : NAPLES Tuesday

24 Hour Volume, per Channel (Volume factor 0.5)

NB					
Interval Start			Interval Start		
11:00	15	56	23:00	2	2
11:15	15		23:15	0	
11:30	8		23:30	0	
11:45	18		23:45	0	
12:00	6	51	3/27/2019 00:00	0	0
12:15	13		00:15	0	
12:30	22		00:30	0	
12:45	10		00:45	0	
13:00	26	100	01:00	0	0
13:15	10		01:15	0	
13:30	32		01:30	0	
13:45	32		01:45	0	
14:00	30	90	02:00	0	0
14:15	24		02:15	0	
14:30	20		02:30	0	
14:45	16		02:45	0	
15:00	18	86	03:00	0	0
15:15	16		03:15	0	
15:30	20		03:30	0	
15:45	32		03:45	0	
16:00	11	94	04:00	0	0
16:15	36		04:15	0	
16:30	22		04:30	0	
16:45	25		04:45	0	
17:00	19	104	05:00	0	2
17:15	32		05:15	2	
17:30	33		05:30	0	
17:45	20		05:45	0	
18:00	18	94	06:00	0	8
18:15	22		06:15	2	
18:30	29		06:30	2	
18:45	25		06:45	4	
19:00	36	99	07:00	1	23
19:15	25		07:15	3	
19:30	16		07:30	9	
19:45	22		07:45	10	
20:00	32	97	08:00	6	31
20:15	18		08:15	4	
20:30	26		08:30	9	
20:45	21		08:45	12	
21:00	12	39	09:00	16	36
21:15	10		09:15	4	
21:30	13		09:30	10	
21:45	4		09:45	6	
22:00	10	25	10:00	3	44
22:15	2		10:15	8	
22:30	7		10:30	17	
22:45	6		10:45	16	

24 Hour Total 1081

00:00 - 12:00
 12 Hour Count 200
 Peak Hour 11:00
 Peak Volume 56
 Factor 0.78

12:00 - 00:00
 12 Hour Count 881
 Peak Hour 13:30
 Peak Volume 118
 Factor 0.92



APPENDIX A

Traffic Volume Counts – Raw Data

Collier County Transportation Department
 Traffic Operations
 Technician: Luis Trujillo

Site: 325190020002
 3/26/2019
 Tuesday

LOCATION : WILDFLOWER WAY
 CROSS ST : SB APPROACH TO LELY RESORT BLVD
 CITY : NAPLES

24 Hour Volume (Volume factor 0.5)

Interval Start	SBRT	SBLT-THRU	Combined	Interval Start	SBRT	SBLT-THRU	Combined
11:00	17	81	115	23:00	1	1	0
11:15	32	31	63	23:15	0	0	0
11:30	16	34	50	23:30	0	0	0
11:45	16	32	48	23:45	0	0	0
12:00	18	85	103	00:00	0	0	0
12:15	27	26	53	00:15	0	0	0
12:30	19	20	39	00:30	0	0	0
12:45	21	24	45	00:45	0	0	0
13:00	40	148	188	01:00	0	1	1
13:15	46	58	104	01:15	0	0	0
13:30	26	20	46	01:30	1	0	1
13:45	16	34	50	01:45	0	0	0
14:00	32	78	110	02:00	0	0	0
14:15	22	14	36	02:15	0	0	0
14:30	11	19	30	02:30	0	0	0
14:45	13	30	43	02:45	1	1	2
15:00	28	87	115	03:00	0	0	0
15:15	17	22	39	03:15	0	0	0
15:30	18	26	44	03:30	0	1	1
15:45	24	27	51	03:45	0	2	2
16:00	32	52	84	04:00	0	1	1
16:15	12	21	33	04:15	0	2	2
16:30	12	15	27	04:30	0	1	1
16:45	14	15	29	04:45	1	5	6
17:00	17	36	53	05:00	3	31	34
17:15	3	22	25	05:15	3	6	9
17:30	10	11	21	05:30	8	14	22
17:45	6	11	17	05:45	17	26	43
18:00	7	35	42	06:00	38	76	114
18:15	11	6	17	06:15	18	28	46
18:30	9	10	19	06:30	9	26	35
18:45	8	5	13	06:45	11	26	37
19:00	18	39	57	07:00	15	62	77
19:15	4	5	9	07:15	16	20	36
19:30	8	5	13	07:30	12	15	27
19:45	9	10	19	07:45	16	30	46
20:00	2	8	10	08:00	14	57	71
20:15	2	3	5	08:15	16	26	42
20:30	3	3	6	08:30	9	21	30
20:45	1	2	3	08:45	18	32	50
21:00	3	8	11	09:00	20	78	98
21:15	3	0	3	09:15	12	27	39
21:30	0	2	2	09:30	18	28	46
21:45	2	3	5	09:45	18	28	46
22:00	1	4	5	10:00	32	101	133
22:15	1	1	2	10:15	27	29	56
22:30	1	1	2	10:30	30	19	49
22:45	0	0	0	10:45	23	24	47



APPENDIX A

Traffic Volume Counts – Raw Data

Collier County Transportation Department
 Traffic Operations
 Technician: Luis Trujillo

LOCATION : LELY RESORT BLVD
 CROSS ST : EB APPROACH TO LELY COUNTRY CLUB
 CITY : NAPLES

Site: 325190020003
 3/26/2019
 Tuesday

24 Hour Volume, per Channel (Volume factor 0.5)

EB			EB		
Interval Start			Interval Start		
11:00	66	285	23:00	5	16
11:15	66		23:15	6	
11:30	78		23:30	4	
11:45	75		23:45	1	
12:00	67	293	3/27/2019 00:00	1	3
12:15	82		00:15	1	
12:30	70		00:30	1	
12:45	74		00:45	0	
13:00	53	298	01:00	2	5
13:15	78		01:15	0	
13:30	88		01:30	1	
13:45	79		01:45	2	
14:00	71	273	02:00	1	1
14:15	66		02:15	0	
14:30	68		02:30	0	
14:45	68		02:45	0	
15:00	65	273	03:00	1	4
15:15	75		03:15	1	
15:30	61		03:30	1	
15:45	72		03:45	1	
16:00	75	306	04:00	0	8
16:15	76		04:15	3	
16:30	83		04:30	1	
16:45	72		04:45	4	
17:00	83	282	05:00	5	21
17:15	74		05:15	6	
17:30	58		05:30	4	
17:45	67		05:45	6	
18:00	56	182	06:00	11	160
18:15	41		06:15	18	
18:30	38		06:30	37	
18:45	47		06:45	94	
19:00	44	151	07:00	75	189
19:15	30		07:15	34	
19:30	39		07:30	36	
19:45	38		07:45	44	
20:00	30	109	08:00	60	232
20:15	35		08:15	46	
20:30	24		08:30	60	
20:45	20		08:45	66	
21:00	20	81	09:00	56	236
21:15	22		09:15	54	
21:30	22		09:30	50	
21:45	17		09:45	76	
22:00	13	45	10:00	64	294
22:15	10		10:15	78	
22:30	13		10:30	68	
22:45	9		10:45	84	

24 Hour Total 3747

00:00 - 12:00
 12 Hour Count 1438
 Peak Hour 10:00
 Peak Volume 294
 Factor 0.88

12:00 - 00:00
 12 Hour Count 2309
 Peak Hour 13:15
 Peak Volume 316
 Factor 0.90



APPENDIX A

Traffic Volume Counts – Raw Data

Collier County Transportation Department
 Traffic Operations
 Technician: Luis Trujillo

LOCATION : LELY RESORT BLVD Site: 325190020004
 CROSS ST : WB APPROACH TO WILDFLOWER WAY 3/26/2019
 CITY : NAPLES Tuesday

24 Hour Volume, per Channel (Volume factor 0.5)

WB			WB		
Interval Start			Interval Start		
11:00	58	239	23:00	4	15
11:15	66		23:15	3	
11:30	63		23:30	4	
11:45	52		23:45	4	
12:00	52	234	3/27/2019 00:00	2	6
12:15	74		00:15	0	
12:30	46		00:30	1	
12:45	62		00:45	3	
13:00	66	270	01:00	1	4
13:15	56		01:15	1	
13:30	64		01:30	2	
13:45	84		01:45	0	
14:00	61	260	02:00	1	2
14:15	69		02:15	1	
14:30	69		02:30	0	
14:45	61		02:45	0	
15:00	72	291	03:00	0	2
15:15	84		03:15	1	
15:30	73		03:30	0	
15:45	62		03:45	1	
16:00	82	298	04:00	0	3
16:15	69		04:15	0	
16:30	63		04:30	1	
16:45	84		04:45	2	
17:00	71	244	05:00	1	6
17:15	63		05:15	1	
17:30	58		05:30	1	
17:45	52		05:45	3	
18:00	46	218	06:00	6	87
18:15	54		06:15	12	
18:30	65		06:30	17	
18:45	53		06:45	52	
19:00	42	179	07:00	52	192
19:15	43		07:15	36	
19:30	56		07:30	34	
19:45	38		07:45	70	
20:00	35	141	08:00	40	180
20:15	42		08:15	46	
20:30	32		08:30	42	
20:45	32		08:45	52	
21:00	23	95	09:00	54	199
21:15	45		09:15	41	
21:30	15		09:30	52	
21:45	12		09:45	52	
22:00	8	33	10:00	62	254
22:15	12		10:15	58	
22:30	7		10:30	60	
22:45	6		10:45	74	

24 Hour Total 3452

00:00 - 12:00
 12 Hour Count 1174
 Peak Hour 10:00
 Peak Volume 254
 Factor 0.86

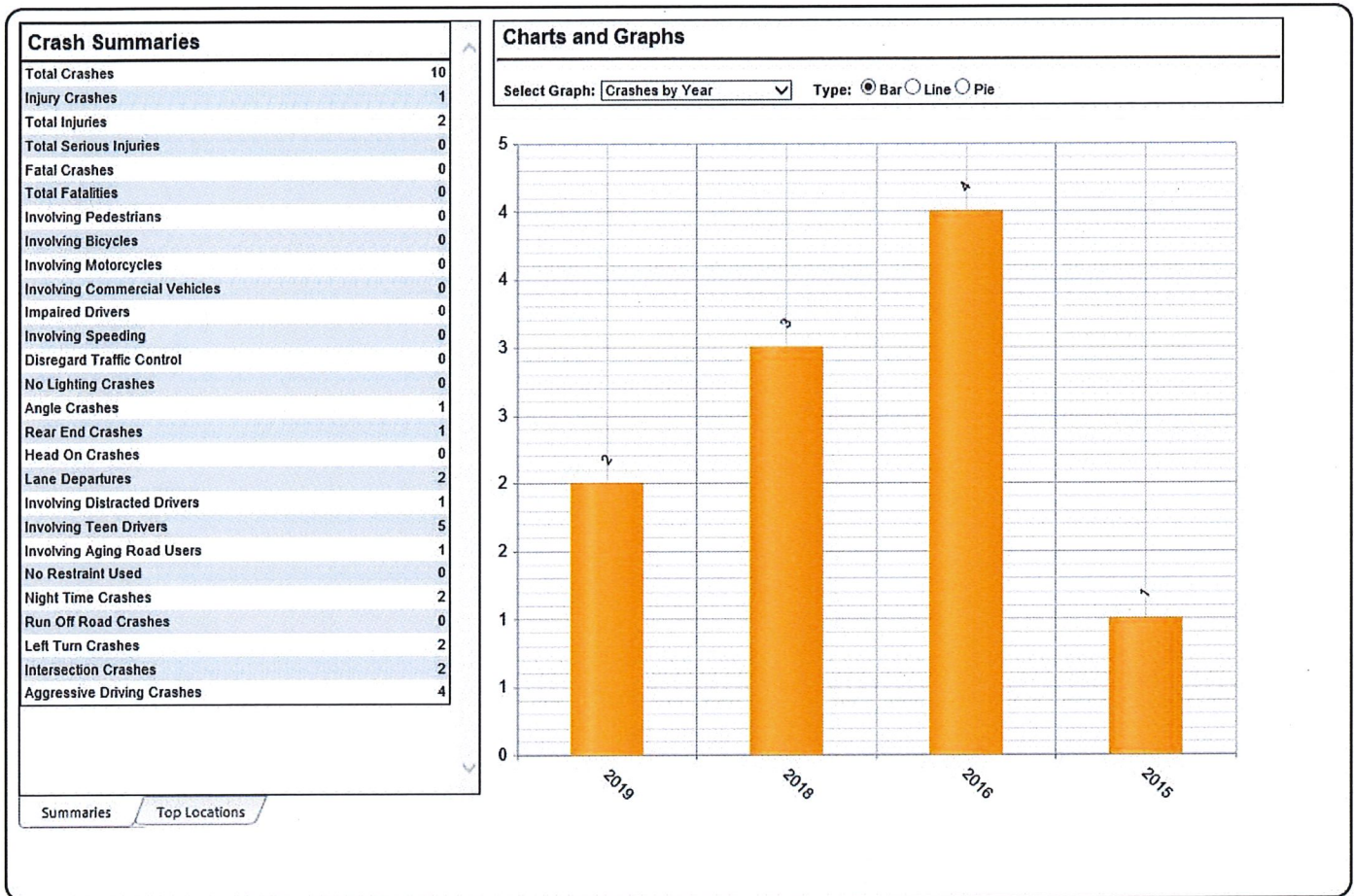
12:00 - 00:00
 12 Hour Count 2278
 Peak Hour 15:15
 Peak Volume 301
 Factor 0.90



APPENDIX B

Crash History

Time Frame: 2019, 2018, 2017, 2016, 2015 and 2014



Guideline Merits: Past 12 Months (5 or more)



APPENDIX C

Sight Lines Constraints Pictures

Lely Resort Boulevard – Westbound – Looking Left



[Title]



APPENDIX C (CONTINUED)

Sight Lines Constraints Pictures

Lely Resort Boulevard – Westbound – Looking Right





APPENDIX C (CONTINUED)

Sight Lines Constraints Pictures

Lely Resort Boulevard – Eastbound – Looking Right





APPENDIX C (CONTINUED)

Sight Lines Constraints Pictures

Lely Resort Boulevard – Eastbound – Looking Left





APPENDIX C (CONTINUED)

Sight Lines Constraints Pictures

Lely County Club – North Bound – Looking Left





APPENDIX C (CONTINUED)

Sight Lines Constraints Pictures

Lely County Club – North Bound – Looking Right





APPENDIX C (CONTINUED)

Sight Lines Constraints Pictures

Wildflower Way – Southbound – Looking Right





APPENDIX C (CONTINUED)

Sight Lines Constraints Pictures

Wildflower Way – Southbound – Looking Left



End of Report