QUALITATIVE ASSESSMENT
For
SR 40 at Interchange Boulevard

Volusia County
Section 79100
Mile Post 26.154

Prepared for:

THE FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 5 TRAFFIC OPERATIONS
719 South Woodland Boulevard
DeLand, Florida 32720



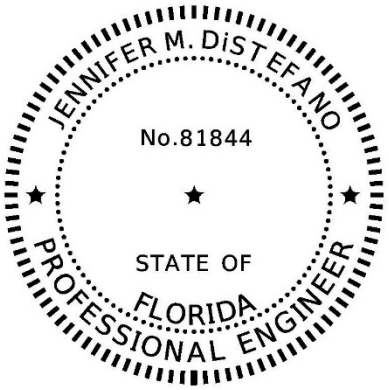
Continuing Services Contract for Traffic Operations
Financial Project No. 237988-1-32-11
Contract C-9R60
Work Order No. 25
Study 1

Prepared by:
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Orlando, FL 32801

December 2018

Qualitative Assessment for SR 40 at Interchange Boulevard
Financial Project No. 237988-1-32-11
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December 2018



This item has been digitally signed and sealed by

Jennifer M DiStefano Date: 2018.12.05 10:11:57 -05'00'

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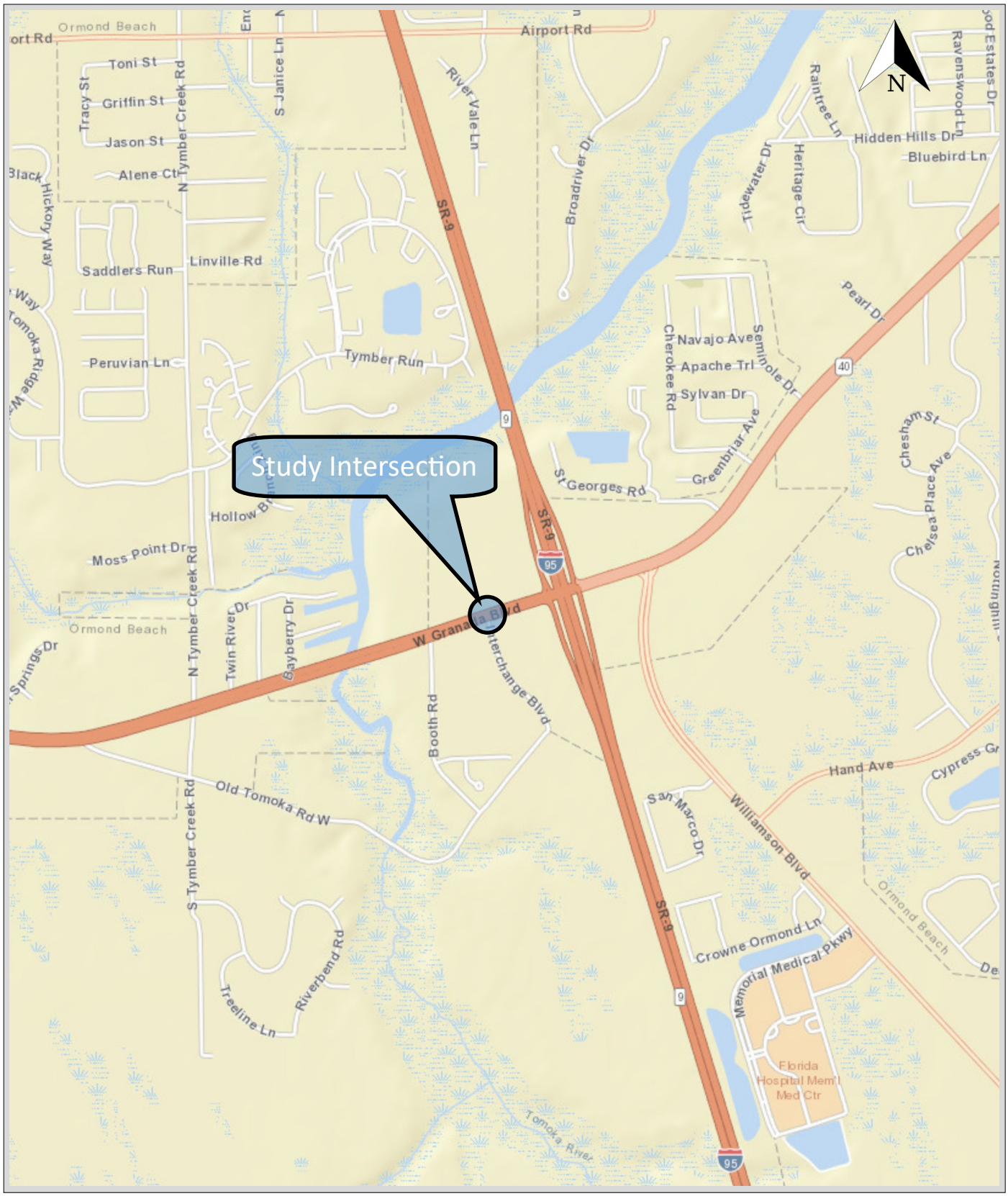


Figure 1 - Location Map

Study Intersection
SR 40 at Interchange Boulevard
Volusia County
Section: 79100000; MP: 26.154

ArcMaps by Esri| September 21st, 2018

EXISTING CONDITION

The characteristics of the study intersection of SR 40 with Interchange Boulevard in the City of Ormond Beach in Volusia County are summarized below. An intersection condition diagram and photographs of each respective approach are provided in the following pages.

Features	Description
Main Street	SR 40 oriented east-west; 4-lane divided rural section; Access Class 5.
Minor Street	Interchange Boulevard oriented north-south; 2-lane divided urban section; Miami curb.
Number of Intersection Approach Lanes	NB Approach: 1 LT-Only Lane & 1 RT-Only Lane EB Approach: 2 Thru Lanes & 1 Bike Lane WB Approach: 1 LT-Only Lane, 2 Thru Lanes, & 1 Bike Lane
Traffic Control	Stop-controlled on Interchange Boulevard
Posted Speeds	SR 40 Eastbound: Reduced from 50 mph to 45 mph 230 feet west of Interchange Blvd. SR 40 Westbound: 45 mph east of Interchange Blvd., reduced to 30 mph school advisory speed at Calvary Christian Center right-only entrance (opposite Interchange Blvd.), increased to 50 mph 230 feet west of Interchange Blvd. Interchange Boulevard: None.
Sidewalks	Both sides of SR 40 and Interchange Boulevard.
Pedestrian/Bicycle Generators	Retail/commercial development south of SR 40.
Nearest Signalized Intersections	I-95 SB Ramp 750 feet east of Interchange Boulevard and Booth Road 660 feet west of Interchange Boulevard.
Roadway Lighting	None on SR 40, one roadway light located on the southwest corner of the intersection facing Interchange Boulevard.
Surrounding Development	Retail/commercial south of SR 40, Calvary Christian Center church and school north of SR 40.

SR 40 at Interchange Boulevard
South Approach



Exhibit 1: Looking north into the intersection along Interchange Boulevard



Exhibit 2: Looking south from the intersection along Interchange Boulevard

SR 40 at Interchange Boulevard
West Approach



Exhibit 3: Looking east into the intersection along SR 40



Exhibit 4: Looking west from the intersection along SR 40

SR 40 at Interchange Boulevard
East Approach



Exhibit 5: Looking west into the intersection along SR 40



Exhibit 6: Looking east from the intersection along SR 40

CALVARY
CHRISTIAN CENTER

AUTO BODY
ENGINEERS

N

0 10 50
Feet

Barberville 20
Silver Spgs. 61
Ocala 66

BEGIN RIGHT TURN LANE
YIELD TO BIKES

SPEED LIMIT 50

NO PARKING ANY TIME

SCHOOL ENTRANCE

30 MPH

NO PARKING ANY TIME

WEST 40

STOP

STOP

14' 5'

4'
11'
11'

SR 40 (W. GRENADA BOULEVARD)

LEFT TURN LANE = 320'

4'
11'
11'
11'

12'
12'
5'

11'
12'
12'
5'
11'
4'

SR 40 (W. GRENADA BOULEVARD)

SPEED LIMIT 45

95 INTERSTATE

JCT

DO NOT BLOCK INTERSECTION

STOP

DIVIDED HIGHWAY

BEGIN RIGHT TURN LANE
YIELD TO BIKES

STOP

DO NOT ENTER

16' 10' 13'

INTERCHANGE BOULEVARD

RACE TRAC
GAS STATION

MCDONALD'S
RESTAURANT

NEPLAZA
CLEANERS
DRIVE-IN

LEGEND

Controller Cabinet	Delineator Metal Pole	Sign (1 Post)	Fence
Light Pole	Delineator Tubular	Sign (2 Posts)	Overhead Sign
Concrete Swale	Concrete Power Pole	Street Name Sign	Inlet
Trees and Bushes	Wood Power Pole	Pedestrian Signal Head	Signal Head
Wall	Traffic Signal pole	Guard Rail	Manhole
Water Meter	Fire Hydrant	Signal Pullbox	Ditch Bottom Inlet
CCTV Camera	Vehicle Sensor, Video Camera		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 40	VOLUSIA	

CONDITION DIAGRAM
SR 40 (W. GRENADA BLVD.) AT INTERCHANGE BLVD.

FIGURE NO. 2

COLLISION ANALYSIS

According to crash records obtained by VHB from Signal4Analytics and CARS, 14 crashes were reported at the intersection of SR 40 and Interchange Boulevard during the most recent 12-month period covering January 1, 2017 to December 31, 2017. One of the reported crashes involved an injury, zero involved fatalities, and 13 involved property damage only. The total property damage value was estimated at $75,100. A collision diagram and collision summary table are provided in the following pages.

The number of crashes by type are as follows:

- Rear End 6 (43%)
- Left Turn 4 (29%)
- Angle 3 (21%)
- Right Turn 1 (7%)

Two of the reported left-turn crashes (#1, #8) involved a westbound left-turning motorist and an eastbound through motorist. One of the other left-turn crashes (#7) involved a westbound u-turn and an eastbound through vehicle, while the fourth (#9) involved a westbound u-turn and a northbound right turn. One crash resulted in an injury, one occurred in dark (not lighted) conditions, and all occurred on dry pavement. Contributing causes included FTYRW and improper turn.

All three of the reported angle crashes (#2, #3, #14) occurred between a northbound left-turning motorist and an eastbound through motorist. In one crash (#2), the northbound motorist indicated that their view of the inside eastbound lane was obstructed by a motorist slowing in the outside eastbound lane. In the other two (#3, #14), the northbound motorist used the median opening to complete a two-stage left turn, but the back of their vehicle hung into the inside eastbound travel lane and was hit. One of the crashes occurred in daylight, one occurred in dark (lighted) conditions, and one occurred in dark (not lighted) conditions. None of the crashes involved an injury, and all occurred on dry pavement. Contributing causes included FTYRW and obstructing traffic. Each of these crashes is susceptible to correction by the installation of a westbound directional median opening at this intersection.

The right-turn crash (#10) occurred between a northbound right-turning motorist and an eastbound through vehicle. It occurred during the day on dry pavement and did not result in an injury. The contributing cause was FTYRW.

Five of the six rear end crashes (#4, #5, #6, #11, #12) occurred in the northbound right-turn lane on Interchange Boulevard. Four occurred when the lead motorist began their turn then stopped, and the trailing motorist kept moving forward. One crash (#12) occurred when a motorist tried to pass a vehicle stopped in the right lane on the left and hit the back of the stopped vehicle. The other rear end crash (#13) occurred in the westbound left turn lane. The leading motorist in the crash proceeded in the queue toward the median opening and stopped, however, the trailing motorist continued forward. All rear end crashes occurred during the day on dry pavement and none

resulted in an injury. The contributing cause in all six rear end crashes was careless driving.

Contributing causes cited in the crash reports are summarized as follows:

- Careless Driving 6 (43%)
- FTYRW 4 (29%)
- Improper Turn 2 (14%)
- Obstructing Traffic 2 (14%)

Lighting conditions are summarized as follows:

- Daylight 11 (79%)
- Dark (Lighted) 1 (7%)
- Dark (Not Lighted) 2 (14%)

Pavement conditions are also summarized as follows:

- Dry Pavement 14 (100%)

To date in 2018, three additional crashes have been reported at the intersection of SR 40 and Interchange Boulevard. One was a rear-end crash involving northbound right-turning vehicles and two were angle crashes. One of the angle crashes, which resulted in an injury, involved a northbound left-turn and an eastbound through motorist. The other angle crash involved a northbound left-turn and a westbound left-turn and did not result in an injury. Both angle crashes are susceptible to correction with the installation of a westbound directional median opening at the intersection.

A cursory review of 2016 crash data revealed five crashes in the vicinity of the SR 40 intersection with Interchange Boulevard. One was an angle crash involving a northbound left-turning motorist and an eastbound through motorist and one was a left-turn crash involving a westbound left-turning motorist and an eastbound through motorist. Both resulted in injuries, and one is susceptible to correction with the installation of a westbound directional median opening. The remaining three crashes in 2016 were rear end crashes, one occurring on Interchange Boulevard, one occurring on SR 40 east of Interchange Boulevard, and one occurring on westbound SR 40. The crash on westbound SR 40 occurred when a northbound left-turning motorist from Interchange Boulevard accelerating in the left westbound lane on SR 40 was hit from behind by a westbound SR 40 motorist. Two of the three rear end crashes resulted in injuries, and one of the three is susceptible to correction with a westbound directional median opening.

A cursory review of 2015 crash data did not reveal any crashes susceptible to correction by the installation of a westbound directional median opening.

TABLE 1

CRASH SUMMARY

MAJOR ROUTE: SR 40 **COUNTY:** Volusia

INTERSECTING ROUTE: Interchange Blvd **CITY:** Ormond Beach

STUDY PERIOD: 1/1/2017 to 12/31/2017 **ENGINEER:** AB

CRASH REF. NO.	HSMV NO.	DATE	DAY	TIME	DOB	AGE	PED /BIKE /MOTORCYCLE	ALCOHOL/ DRUGS	CRASH TYPE	FATAL	INJURY	PROPERTY DAMAGE	LIGHTING CONDITION	PAVEMENT CONDITIONS	CONTRIBUTING CAUSE
1	85647309	1/12/2017	Thursday	6:37 PM	1/16/1965	52	Vehicle	No	Left Turn	0	0	$5,500	Dark - Not Lighted	Dry	FTYRW
2	85648441	2/3/2017	Friday	8:04 AM	5/5/1993	24	Vehicle	No	Angle	0	0	$1,300	Daylight	Dry	FTYRW
3	85648168	2/24/2017	Friday	11:08 PM	9/1/1950	66	Vehicle	No	Angle	0	0	$35,000	Dark - Lighted	Dry	Obstructing Traffic
4	85648408	3/4/2017	Saturday	6:10 PM	9/2/1976	41	Vehicle	No	Rear End	0	0	$4,000	Daylight	Dry	Careless Driving
5	85648170	4/9/2017	Sunday	5:31 PM	7/31/1983	34	Vehicle	No	Rear End	0	0	$700	Daylight	Dry	Careless Driving
6	86952165	6/16/2017	Friday	8:26 AM	3/28/1980	37	Vehicle	No	Rear End	0	0	$700	Daylight	Dry	Careless Driving
7	86951866	7/10/2017	Monday	1:00 PM	10/26/1933	84	Vehicle	No	Left Turn	0	0	$7,000	Daylight	Dry	Improper Turn
8	86952008	8/7/2017	Monday	1:24 PM	1/17/1963	55	Vehicle	No	Left Turn	0	3	$15,000	Daylight	Dry	FTYRW
9	86951834	9/12/2017	Tuesday	5:13 PM	6/27/1951	66	Vehicle	No	Left Turn	0	0	$200	Daylight	Dry	Improper Turn
10	86952025	9/15/2017	Friday	1:44 PM	4/18/1951	66	Vehicle	No	Right Turn	0	0	$1,000	Daylight	Dry	FTYRW
11	87478215	11/8/2017	Wednesday	8:21 AM	10/19/1978	39	Vehicle	No	Rear End	0	0	$1,000	Daylight	Dry	Careless Driving
12	87478235	11/16/2017	Thursday	6:50 AM	5/27/1991	26	Vehicle	No	Rear End	0	0	$2,000	Daylight	Dry	Careless Driving
13	87478326	12/6/2017	Wednesday	8:33 AM	5/16/1958	60	Vehicle	No	Rear End	0	0	$1,000	Daylight	Dry	Careless Driving
14	87478409	12/27/2017	Wednesday	6:40 PM	9/9/1999	18	Vehicle	No	Angle	0	0	$700	Dark - Not Lighted	Dry	Obstructing Traffic
Total										0	3	$75,100			

CRASH DESCRIPTION

TOTAL CRASHES	FATAL CRASHES	INJURY CRASHES	TOTAL INJURIES	PROPERTY DAMAGE	PED/BIKE/MOTO RCYCLE	ONE VEHICLE	LIGHTING CONDITION					ROADWAY CONDITIONS	
							DAYLIGHT	DARK (SL)	DARK (NO SL)	DUSK	DAWN	WET	DRY
14	0	1	3	13	0	1	11	1	2	0	0	0	14
	0%	7%	21%	93%	0%	7%	79%	7%	14%	0%	0%	0%	100%

CRASH TYPE

BACKED INTO	PARKED CAR	COLL. W/ MV ON ROAD	PEDESTRIAN	BIKE	BIKE IN BIKE LANE	MOTORCYCLE/ MOPED	TRAIN	ANIMAL	HIT SIGN/ SIGN POST	HIT GUARDRAIL	HIT UTILITY POLE	HIT FENCE	HIT CONC BARRIER WALL
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

CRASH TYPE

OTHER FIXED OBJECT	MOVEABLE OBJECT	RAN INTO DITCH/ CULVERT	RAN OFF ROAD	OVERTURNED	OCCUPANT FELL FROM VEHICLE	TRACTOR TRAILER JACKKNIFED	FIRE	EXPLOSION	DOWNHILL RUNAWAY	CARGO LOSS OR SHIFT	SEPARATION OF UNITS	MEDIAN CROSSOVER	ALL OTHER
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

CONTRIBUTING CAUSE

ALCOHOL-UNDER INFLUENCE	DRUGS-UNDER INFLUENCE	FOLLOWED TOO CLOSELY	DISREGARDED TRAFFIC SIGNAL	EXCEEDED SAFE SPEED LIMIT	DISREGARDED STOP SIGN	FAILED TO MAINTAIN VEHICLE	IMPROPER PASSING	DROVE LEFT OF CENTER	EXCEEDED STATED SAFE SPEED LIMIT	OBSTRUCT TRAFFIC	FAILURE TO SECURE LOAD	DISREGARD OTHER TRAFFIC CONTROL	DRIVING WRONG SIDE/ WAY
0	0	0	0	0	0	0	0	0	0	2	0	0	0
0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%	0%	0%

CRASH TYPE

ANGLE	LEFT TURN	RIGHT TURN	REAR END	SIDE SWIPE	HEAD ON
3	4	1	6	0	0
21%	29%	7%	43%	0%	0%

CRASH TYPE

HIT BR/PIER/ ABUTT	HIT TREE/ SHRUB	HIT CONST SIGN/BARR/ BR/ PIER	TRAFFIC GATE	CRASH ATTENUATOR	FIXED OBJECT
0	0	0	0	0	0
0%	0%	0%	0%	0%	0%

CONTRIBUTING CAUSE

FLEEING POLICE	VEHICLE MODIFIED	DRIVER DISTRACT-ION	ALL OTHER
0	0	0	0
0%	0%	0%	0%

CONTRIBUTING CAUSE

NO IMPROPER DRIVING	CARELESS DRIVING	FTYRW	IMPROPER BACKING	IMPROPER LANE CHANGE	IMPROPER TURN
0	6	4	0	0	2
0%	43%	29%	0%	0%	14%

CALVARY
CHRISTIAN CENTER

AUTO BODY
ENGINEERS

N

0 10 50
Feet

SR 40 (W. GRENADA BOULEVARD)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

SR 40 (W. GRENADA BOULEVARD)

INTERCHANGE BOULEVARD

RACE TRAC
GAS STATION

MCD
RES

CRASH SYMBOL LEGEND

- Collision w/ Bicycle
- Collision w/ Motorcycle
- Fatality
- Collision w/ Pedestrian
- Left Turn Crash
- Fixed Object
- Rear End Crash
- Off Road
- Overturned Vehicle
- Head-On Crash
- Angle Crash
- Right Turn Crash
- Sideswipe

CRASH PERIOD: JANUARY 1, 2017 - DECEMBER 31, 2017

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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Certificate of Authorization # 3932

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 40	VOLUSIA	

CRASH DIAGRAM
SR 40 (W. GRENADA BLVD.) AT INTERCHANGE BLVD.

SHEET NO. 3

EIGHT HOUR TURNING MOVEMENT COUNTS

Eight-hour turning movement counts were collected at the intersection of SR 40 and Interchange Boulevard on a Wednesday from 7:00 a.m. – 9:00 a.m., 11:00 a.m. to 1:00 p.m., and 2:00 p.m. to 6:00 p.m. The traffic counts along SR 40 revealed a predominantly eastbound directional flow pattern during the morning time periods and a primarily westbound directional flow during the midday and p.m. periods. Hourly directional traffic volumes on eastbound SR 40 range from 1,727 vehicles per hour (vph) in the a.m. period to 940 vph in the midday period to 1,053 vph during the p.m. period. Westbound SR 40 directional traffic volumes range from 1,073 vph in the a.m. period to 1,192 vph in the midday period to 1,685 vph in the p.m. period. On the westbound approach, 139 u-turn movements were recorded and on the eastbound approach zero u-turns were recorded during the eight-hour period. Heavy vehicles accounted for approximately 2.7% of the total traffic on SR 40.

Traffic flow on northbound Interchange Boulevard ranged from 163 to 235 vph for seven of the eight hours with a peak flow of 238 vph from 5:00 p.m. to 6:00 p.m. Heavy vehicles accounted for approximately 2.2% of the traffic on Interchange Boulevard northbound.

Turning movement patterns at the intersection consist of the following:

	NB	EB	WB
U-turn	0%	0%	1.4%
Left-Turn	17.1%	0%	10.9%
Through	0.6%	96.4%	81.5%
Right Turn	82.3%	3.6%	6.2%

Within the eight-hour count period, one pedestrian crossed the south approach of Interchange Boulevard, one pedestrian crossed the east approach of SR 40, and one pedestrian crossed the west approach of SR 40. Zero pedestrians were observed on the north side of SR 40 using the existing sidewalk. Pedestrian crossing patterns at the intersection consist of the following:

	North Approach		South Approach		East Approach		West Approach	
Crossing Direction	E–W	W-E	E–W	W-E	N-S	S-N	N-S	S-N
Number of Peds	0	0	0	1	1	0	0	1
Total	0 (0%)		1 (33.3%)		1 (33.3%)		1 (33.3%)	

Within the eight-hour count period, zero bicyclists were observed at the intersection.

Turning movement, pedestrian, and bicycle counts are provided in the Appendix section of this report.

QUALITATIVE ASSESSMENT

A qualitative assessment based on field observations was performed by a registered engineer on a typical weekday during the midday and p.m. peak periods at the study intersection of SR 40 and Interchange Boulevard. The purpose of the qualitative assessment was to evaluate prevailing operating traffic flow conditions and identify areas where improvements would be potentially beneficial to roadway safety and efficiency. Of specific concern as part of this study is the turning traffic from SR 40 westbound and Interchange Boulevard northbound and the potential safety concerns associated with their passage through the intersection under the existing conditions.

1. Vehicles approaching the intersection on SR 40 were observed moving at or slightly above 45-mph posted speed limit. Westbound traffic has a 30-mph advisory speed limit passing Interchange Boulevard due to the Calvary Christian Center entrance on the north side of SR 40. Just west of the driveway, the westbound speed limit increases to 50 mph. A clear view of the intersection is available for both eastbound and westbound traffic.
2. Vehicles approaching SR 40 on Interchange Boulevard were slowing due to the stop condition at SR 40. A clear view of approaching SR 40 vehicles is available to northbound motorists from a point approximately 50 feet south of the stop bar. South of that point, shrubs and trees adjacent to the east and west sides of Interchange Boulevard limit the field of view. There is no posted speed limit on Interchange Boulevard.
3. Signage and pavement markings on Interchange Boulevard at the intersection are in good to fair condition. The gore striping between northbound and southbound traffic on Interchange Boulevard and the stop sign facing the roadway are worn, though still visible to motorists. Signage and striping on SR 40 are in good condition.
4. A right-turn only entry into the Calvary Christian Center is provided on the north side of SR 40 opposite Interchange Boulevard. In addition to that property, an auto mechanic and gas station are located north of SR 40 east of Interchange Boulevard. Mixed retail and commercial businesses are located along the south side of SR 40. Two of the properties east of Interchange Boulevard have access/egress driveways onto SR 40, while several others are provided access to SR 40 via Interchange Boulevard.
5. SR 40 has marked bike lanes on both the north and south sides of the roadway. Bicyclists were observed using the lanes in both directions. Sidewalks are located on both sides of SR 40, offset from the roadway by approximately 20 to 75 feet. Pedestrians were observed using the sidewalk on the south side of SR 40.
6. U-turns on SR 40 at the intersection are prohibited in both directions. Eastbound motorists were observed complying with the prohibition, however, westbound motorists were not. The westbound u-turn prohibition was installed following a safety study completed in July 2017. A significant number of westbound u-turns were observed during the peak hour observations. Some turned at the end of the physical median through the yellow gore striping, while others pulled into the median opening past the gore striping to complete their turn. Near-misses were

observed between westbound u-turns and both eastbound through traffic and northbound right-turns.

7. The nearby signalized intersections at the I-95 ramps east of the intersection and Booth Road west of the intersection provide gaps in SR 40 through traffic for northbound and westbound turning traffic. Gaps were larger and more frequent during the midday peak hour. Arrivals at Interchange Boulevard were platooned immediately following the phase change from red to green at the nearby signalized intersections, and then sporadic as the phase progressed. During the p.m. peak hour observations, the eastbound queue from the traffic signal at the I-95 ramps extended to just east of Interchange Boulevard but did not block the intersection.
8. As vehicles entered the westbound left turn lane, the delay time for northbound left turns was extended. Westbound left turns typically pulled into the median opening opposite Interchange Boulevard to wait for a gap in eastbound through traffic, preventing northbound left turns from beginning their turn. On several occasions, northbound left turning motorists entered the median opening around or next to a queued westbound motorist, resulting in multiple cars simultaneously queued within the opening. A northbound motorist queued in the left side of the median opening blocked the view of approaching eastbound traffic for a queued westbound left-turning motorist.
9. Northbound left-turning motorists often used the median opening to complete a two-stage turn onto SR 40 westbound. Queued vehicles in the westbound left turn lane restricted the view of approaching westbound traffic for a northbound motorist in the median opening.
10. Multiple northbound left turning motorists who used the median opening to complete their turn did not pull all the way into the median opening. The back portion of their vehicle encroached upon the inside eastbound through lane, causing sudden deceleration or avoidance maneuvers by the eastbound through motorists.
11. Northbound motorists were also observed using the median opening when traveling straight through the intersection to access the Calvary Christian Center driveway north of the intersection.
12. Delay times for northbound left-turning motorists, particularly during the p.m. peak hour, were extensive. Motorists were consistently observed waiting between one and two minutes for a gap in eastbound traffic to pull into the median opening, and then an additional 30 to 45 seconds to enter the westbound traffic stream.
13. Eastbound motorists turning right onto Interchange Boulevard decelerate in the right eastbound through lane. During this deceleration, the slowing vehicle impacts the visibility of eastbound traffic in the inside lane to northbound motorists.
14. Consideration was given to signalization of this intersection, however, a cursory check of the northbound approach traffic volumes turning left or straight through the intersection indicate that they do not meet the minimum threshold for justifying the installation of a traffic signal. Crashes susceptible to correction by a traffic signal fall short of the minimum criteria for signalization. In addition, a signal placed at this intersection would be located 670 feet from Booth Road and 715 feet from the I-95 southbound ramp, which is less than the 1,320 feet required

between by the FDOT *Median Handbook* for signals on an Access Class 5 roadway with a posted speed of 45 mph or less.

15. Consideration was given to the closure of this median opening. This would result in all displaced westbound left-turning traffic on SR 40 using the intersection at Booth Road to access Interchange Boulevard, an increase of approximately 140 vehicles per hour, which well exceeds the existing turn volumes. This option is not recommended.
16. Consideration was also given to the conversion of the existing full median opening on SR 40 at Interchange Boulevard to a directional median opening for westbound motorists. This conversion meets the FDOT *Median Handbook* 660-foot separation requirement between directional median openings on an Access Class 5 roadway with a posted speed of 45 mph or less.

    With the installation of a directional median opening, vehicles prevented from making a northbound left turn from Interchange Boulevard have three options to travel west on SR 40. The first two are to turn right and travel east on SR 40, then make a u-turn at either the I-95 northbound ramp intersection or at Williamson Boulevard. The u-turn at I-95 NB would add 0.39 miles to the travel distance, while the u-turn at Williamson Boulevard will add approximately 0.68 miles to the travel distance. The third option is to travel south on Interchange Boulevard, turn right on Old Tomoka Road, then right on Booth Road where they can make a left turn onto SR 40 using the traffic signal at Booth Road. This route adds approximately 0.82 miles to the travel distance. Due to the lengths of the added travel distances, it is expected that most users would opt to travel east on SR 40 and complete a u-turn at the I-95 NB ramp or Williamson Boulevard, limiting the impact on the residential homes along Booth Road.

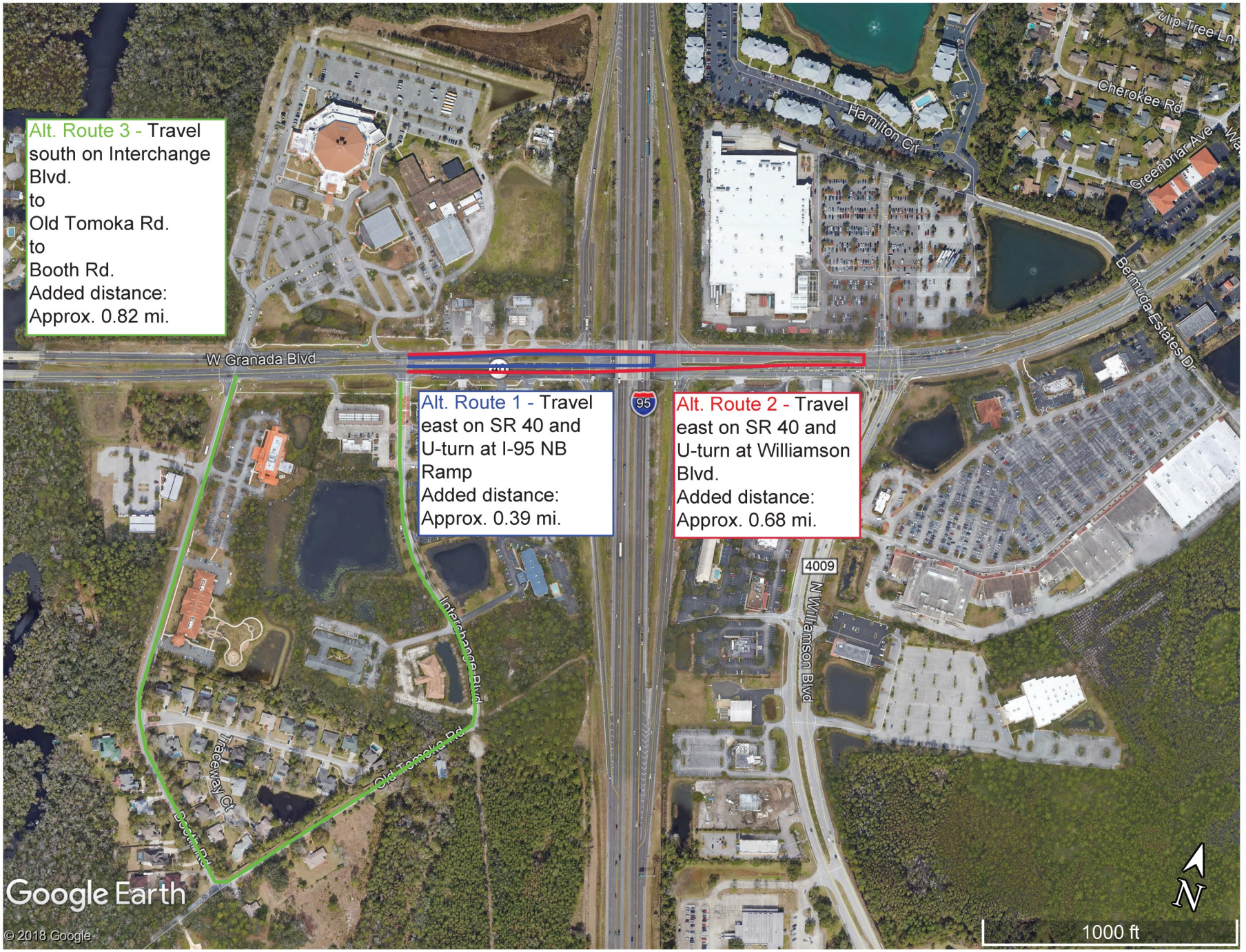


Figure 4 - Alternate Routes Map

Interchange Boulevard
Volusia County
Section: 79100000

RECOMMENDATIONS

Based on observations of traffic flow patterns and demand, pedestrian and vehicle traffic counts, crash records, qualitative assessment of the intersection operation, and consideration of potential improvement options, this study recommends the following:

- Install a directional median opening on SR 40 for westbound left turns at Interchange Boulevard. The median nose and the width of the turning lane should be designed to help deter westbound u-turns. Relocate existing no u-turn sign and install two additional signs facing the westbound left-turn lane to reinforce the movement prohibition. Remove the existing R3-4 "No U-Turn" sign and install an R3-18 combination "No Left Turn/No U-turn" sign facing eastbound traffic at the median opening. Modify striping on Interchange Boulevard to remove the existing left turn lane and provide a single 14-foot right turn lane. Remove the existing R6-3 "Divided Highway" sign below the stop sign and install an R3-5R "Right Turn Only" sign instead.
- Request law enforcement officers to monitor and enforce the westbound u-turn prohibition at the proposed directional median opening.

CALVARY CHRISTIAN CENTER

AUTO BODY ENGINEERS

N

0 10 50

Feet

INSTALL R3-4 SIGN

RELOCATE R3-4 SIGN

INSTALL R3-4 SIGN

Barberville 20
Silver Spgs. 61
Ocala 66

BEGIN RIGHT TURN LANE YIELD TO BIKES

SPEED LIMIT 50

NO PARKING ANY TIME

SCHOOL ENTRANCE

30 MPH

NO PARKING ANY TIME

WEST 40

STOP

STOP

14' 5'

4'
11'
11'

SR 40 (W. GRENADA BOULEVARD)

LEFT TURN LANE = 320'

4'
11'
11'
11'

INSTALL DIRECTIONAL MEDIAN OPENING PER FDM SECTION 212.14.5

24" WHITE, 19 LF

12'
12'
5'

SPEED LIMIT 45

DO NOT BLOCK INTERSECTION

95 INTERSTATE JCT

REMOVE R3-4 SIGN
INSTALL R3-18 SIGN

DO NOT ENTER

16'

14'

ONLY

INTERCHANGE BOULEVARD

STOP

DIVIDED HIGHWAY

BEGIN RIGHT TURN LANE YIELD TO BIKES

ONLY

REMOVE R6-3 SIGN
INSTALL R3-5R SIGN

INSTALL PAVEMENT MARKING MESSAGE

6" DOUBLE YELLOW W/ Y/Y RPM'S @ 40' C.C.

18" YELLOW @ 10' C.C.

SR 40 (W. GRENADA BOULEVARD)

4'
11'
12'
12'
5'
11'
4'

STOP

RACE TRAC GAS STATION

MCDONALD'S RESTAURANT

NEPLAZA CLEANERS DRIVE-IN

LEGEND

Controller Cabinet	Delineator Metal Pole	Sign (1 Post)	Fence
Light Pole	Delineator Tubular	Sign (2 Posts)	Overhead Sign
Concrete Swale	Concrete Power Pole	Street Name Sign	Inlet
Trees and Bushes	Wood Power Pole	Pedestrian Signal Head	Signal Head
Wall	Traffic Signal pole	Guard Rail	Manhole
Water Meter	Fire Hydrant	Signal Pullbox	Ditch Bottom Inlet
CCTV Camera	Vehicle Sensor, Video Camera		

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Vanasse Hangen Brustlin, Inc.
Transportation, Land Development, Environmental Services
225 E. Robinson St., Suite 300
Landmark Center Two
Orlando, FL 32801 (407)839-4006
Certificate of Authorization # 3932

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 40	VOLUSIA	

IMPROVEMENT DIAGRAM
SR 40 (W. GRENADA BLVD.) AT INTERCHANGE BLVD.

FIGURE NO. 5

$USER$ $DATE$ $TIME$ $FILE$

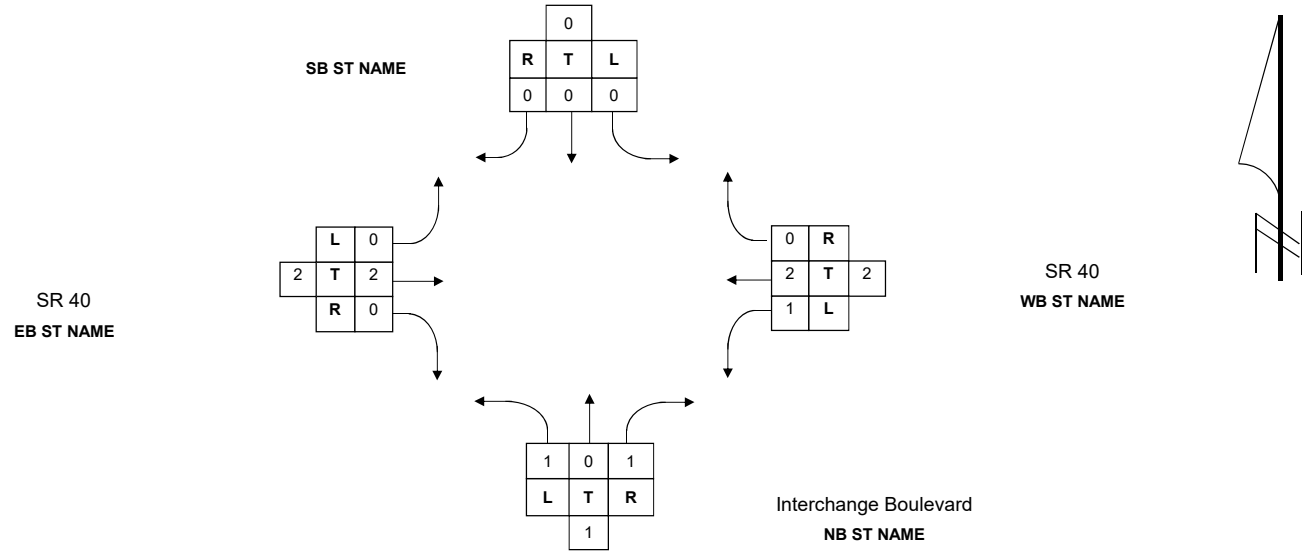
Appendix

FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION:	79100	**CITY:**	ORMOND BEACH	**COUNTY:**	VOLUSIA
STATE ROUTE:	SR 40	**INTERSECTING ROUTE:**	Interchange Boulevard	**MILEPOST:**	26.154
OBSERVER:	VHB	**DATE:**	9/19/2018		
WEATHER:	CLEAR	**ROAD CONDITION:**	GOOD		
REMARKS:					

FORM COMPLETED BY: KLC **DATE:** 10/08/18



TIME	NORTHBOUND						SOUTHBOUND						TOTAL	EASTBOUND						WESTBOUND						TOTAL
BEGIN/END	**U**	**L**	**T**	**R**	**RTOR**	**TOT**	**U**	**L**	**T**	**R**	**RTOR**	**TOT**	**N/S**	**U**	**L**	**T**	**R**	**RTOR**	**TOT**	**U**	**L**	**T**	**R**	**RTOR**	**TOT**	**E/W**
7 - 8	0	14	2	147	0	**163**	0	0	0	0	0	**0**	**163**	0	0	1,684	43	0	**1,727**	15	105	778	131	0	**1,029**	**2,756**
8 - 9	0	31	4	181	0	**216**	0	0	0	0	0	**0**	**216**	0	0	1,515	45	0	**1,560**	12	148	754	159	0	**1,073**	**2,633**
11 - 12	0	34	0	181	0	**215**	0	0	0	0	0	**0**	**215**	0	0	823	36	0	**859**	24	147	730	9	0	**910**	**1,769**
12 - 13	0	49	2	174	0	**225**	0	0	0	0	0	**0**	**225**	0	0	884	56	0	**940**	16	149	1,002	25	0	**1,192**	**2,132**
14 - 15	0	39	1	175	0	**215**	0	0	0	0	0	**0**	**215**	0	0	891	35	0	**926**	12	129	974	96	0	**1,211**	**2,137**
15 - 16	0	42	0	193	0	**235**	0	0	0	0	0	**0**	**235**	0	0	1,019	34	0	**1,053**	18	148	1,133	89	0	**1,388**	**2,441**
16 - 17	0	34	2	160	0	**196**	0	0	0	0	0	**0**	**196**	0	0	913	25	0	**938**	22	118	1,293	47	0	**1,480**	**2,418**
17 - 18	0	48	0	190	0	**238**	0	0	0	0	0	**0**	**238**	0	0	982	47	0	**1,029**	20	138	1,464	63	0	**1,685**	**2,714**
TOTAL	0	291	11	1,401	0	**1,703**	0	0	0	0	0	**0**	**1,703**	0	0	8,711	321	0	**9,032**	139	1,082	8,128	619	0	**9,968**	**19,000**

Percentage	0.0%	17.1%	0.6%	82.3%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	96.4%	3.6%	0.0%	100.0%	1.4%	10.9%	81.5%	6.2%	0.0%	100.0%	N/A
Maximum	0	49	4	193	0	238	0	0	0	0	0	0	238	0	0	1684	56	0	1727	24	149	1464	159	0	1685	1727
Minimum	0	14	0	147	0	163	0	0	0	0	0	0	163	0	0	823	25	0	859	12	105	730	9	0	910	859
Total Heavy Veh	3		0	34	0	37	0		0	0	0	0	37	0		212	3	0	215	20		265	5	0	290	505
% Heavy Veh	1.0%		0.0%	2.4%		2.2%	0.0%		0.0%	0.0%		0.0%	2.2%	0.0%		2.4%	0.9%		2.4%	1.6%		0.0%	0.8%		2.9%	2.7%

VEHICLE TURNING MOVEMENT COUNT

SECTION: 79100
STATE ROUTE: SR 40
OBSERVER: VHB
WEATHER: CLEAR
NORTH APPROACH:
SOUTH APPROACH: Interchange Boulevard

CITY: ORMOND BEACH
INTERSECTING ROUTE: Interchange Boulevard
DATE OF COUNT: Wednesday, September 19, 2018
ROAD CONDITION: GOOD
EAST APPROACH: SR 40
WEST APPROACH: SR 40
COUNT PERIODS: 7:00 AM - 9:00 AM, 11:00 AM - 1:00 PM, 2:00 PM - 6:00 PM

COUNTY: VOLUSIA
MILEPOST: 26.154

ALL VEHICLES / ALL MOVEMENTS

START	NORTHBOUND						SOUTHBOUND							EASTBOUND						WESTBOUND							GRAND
TIME	U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL	U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL	NS TOTAL	U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL	U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL	EW TOTAL	TOTAL
7:00	0	1	1	39	0	41	0	0	0	0	0	0	41	0	0	303	11	0	314	2	23	120	14	0	159	473	514
7:15	0	4	0	33	0	37	0	0	0	0	0	0	37	0	0	400	15	0	415	3	32	211	19	0	265	680	717
7:30	0	3	0	41	0	44	0	0	0	0	0	0	44	0	0	494	9	0	503	5	24	212	42	0	283	786	830
7:45	0	6	1	34	0	41	0	0	0	0	0	0	41	0	0	487	8	0	495	5	26	235	56	0	322	817	858
Total	**0**	**14**	**2**	**147**	**0**	**163**	**0**	**0**	**0**	**0**	**0**	**0**	**163**	**0**	**0**	**1,684**	**43**	**0**	**1,727**	**15**	**105**	**778**	**131**	**0**	**1,029**	**2,756**	**2,919**
8:00	0	7	0	37	0	44	0	0	0	0	0	0	44	0	0	444	15	0	459	3	49	208	106	0	366	825	869
8:15	0	6	4	49	0	59	0	0	0	0	0	0	59	0	0	439	9	0	448	1	30	192	35	0	258	706	765
8:30	0	9	0	49	0	58	0	0	0	0	0	0	58	0	0	344	13	0	357	4	35	166	9	0	214	571	629
8:45	0	9	0	46	0	55	0	0	0	0	0	0	55	0	0	288	8	0	296	4	34	188	9	0	235	531	586
Total	**0**	**31**	**4**	**181**	**0**	**216**	**0**	**0**	**0**	**0**	**0**	**0**	**216**	**0**	**0**	**1,515**	**45**	**0**	**1,560**	**12**	**148**	**754**	**159**	**0**	**1,073**	**2,633**	**2,849**
11:00	0	7	0	46	0	53	0	0	0	0	0	0	53	0	0	197	8	0	205	4	34	142	2	0	182	387	440
11:15	0	7	0	46	0	53	0	0	0	0	0	0	53	0	0	204	10	0	214	7	33	174	3	0	217	431	484
11:30	0	11	0	41	0	52	0	0	0	0	0	0	52	0	0	191	10	0	201	7	41	213	2	0	263	464	516
11:45	0	9	0	48	0	57	0	0	0	0	0	0	57	0	0	231	8	0	239	6	39	201	2	0	248	487	544
Total	**0**	**34**	**0**	**181**	**0**	**215**	**0**	**0**	**0**	**0**	**0**	**0**	**215**	**0**	**0**	**823**	**36**	**0**	**859**	**24**	**147**	**730**	**9**	**0**	**910**	**1,769**	**1,984**
12:00	0	13	2	36	0	51	0	0	0	0	0	0	51	0	0	218	13	0	231	3	39	256	5	0	303	534	585
12:15	0	13	0	37	0	50	0	0	0	0	0	0	50	0	0	220	13	0	233	5	43	271	10	0	329	562	612
12:30	0	8	0	52	0	60	0	0	0	0	0	0	60	0	0	215	18	0	233	5	36	265	7	0	313	546	606
12:45	0	15	0	49	0	64	0	0	0	0	0	0	64	0	0	231	12	0	243	3	31	210	3	0	247	490	554
Total	**0**	**49**	**2**	**174**	**0**	**225**	**0**	**0**	**0**	**0**	**0**	**0**	**225**	**0**	**0**	**884**	**56**	**0**	**940**	**16**	**149**	**1,002**	**25**	**0**	**1,192**	**2,132**	**2,357**
14:00	0	7	0	46	0	53	0	0	0	0	0	0	53	0	0	196	9	0	205	3	27	240	6	0	276	481	534
14:15	0	10	1	46	0	57	0	0	0	0	0	0	57	0	0	215	7	0	222	3	32	227	15	0	277	499	556
14:30	0	9	0	52	0	61	0	0	0	0	0	0	61	0	0	243	12	0	255	3	32	247	23	0	305	560	621
14:45	0	13	0	31	0	44	0	0	0	0	0	0	44	0	0	237	7	0	244	3	38	260	52	0	353	597	641
Total	**0**	**39**	**1**	**175**	**0**	**215**	**0**	**0**	**0**	**0**	**0**	**0**	**215**	**0**	**0**	**891**	**35**	**0**	**926**	**12**	**129**	**974**	**96**	**0**	**1,211**	**2,137**	**2,352**
15:00	0	7	0	51	0	58	0	0	0	0	0	0	58	0	0	292	11	0	303	6	36	277	48	0	367	670	728
15:15	0	11	0	51	0	62	0	0	0	0	0	0	62	0	0	270	7	0	277	7	41	286	23	0	357	634	696
15:30	0	12	0	49	0	61	0	0	0	0	0	0	61	0	0	253	7	0	260	3	27	270	11	0	311	571	632
15:45	0	12	0	42	0	54	0	0	0	0	0	0	54	0	0	204	9	0	213	2	44	300	7	0	353	566	620
Total	**0**	**42**	**0**	**193**	**0**	**235**	**0**	**0**	**0**	**0**	**0**	**0**	**235**	**0**	**0**	**1,019**	**34**	**0**	**1,053**	**18**	**148**	**1,133**	**89**	**0**	**1,388**	**2,441**	**2,676**
16:00	0	6	1	42	0	49	0	0	0	0	0	0	49	0	0	209	3	0	212	8	29	301	8	0	346	558	607
16:15	0	9	0	39	0	48	0	0	0	0	0	0	48	0	0	220	5	0	225	5	31	297	14	0	347	572	620
16:30	0	9	1	37	0	47	0	0	0	0	0	0	47	0	0	231	9	0	240	5	28	347	15	0	395	635	682
16:45	0	10	0	42	0	52	0	0	0	0	0	0	52	0	0	253	8	0	261	4	30	348	10	0	392	653	705
Total	**0**	**34**	**2**	**160**	**0**	**196**	**0**	**0**	**0**	**0**	**0**	**0**	**196**	**0**	**0**	**913**	**25**	**0**	**938**	**22**	**118**	**1,293**	**47**	**0**	**1,480**	**2,418**	**2,614**
17:00	0	12	0	52	0	64	0	0	0	0	0	0	64	0	0	261	8	0	269	4	33	368	17	0	422	691	755
17:15	0	16	0	45	0	61	0	0	0	0	0	0	61	0	0	268	7	0	275	3	36	393	16	0	448	723	784
17:30	0	9	0	44	0	53	0	0	0	0	0	0	53	0	0	244	17	0	261	6	35	373	14	0	428	689	742
17:45	0	11	0	49	0	60	0	0	0	0	0	0	60	0	0	209	15	0	224	7	34	330	16	0	387	611	671
Total	**0**	**48**	**0**	**190**	**0**	**238**	**0**	**0**	**0**	**0**	**0**	**0**	**238**	**0**	**0**	**982**	**47**	**0**	**1,029**	**20**	**138**	**1,464**	**63**	**0**	**1,685**	**2,714**	**2,952**

VEHICLE TURNING MOVEMENT COUNT

SECTION: 79100
STATE ROUTE: SR 40
OBSERVER: VHB
WEATHER: CLEAR
NORTH APPROACH:
SOUTH APPROACH: Interchange Boulevard

CITY: ORMOND BEACH
INTERSECTING ROUTE: Interchange Boulevard
DATE OF COUNT: Wednesday, September 19, 2018
ROAD CONDITION: GOOD
EAST APPROACH: SR 40
WEST APPROACH: SR 40
COUNT PERIODS: 7:00 AM - 9:00 AM, 11:00 AM - 1:00 PM, 2:00 PM - 6:00 PM

COUNTY: VOLUSIA
MILEPOST: 26.154

HEAVY VEHICLES (TRUCKS + BUSES)

START	NORTHBOUND					SOUTHBOUND						EASTBOUND					WESTBOUND						GRAND
TIME	LEFT	THRU	RIGHT	RTOR	TOTAL	LEFT	THRU	RIGHT	RTOR	TOTAL	NS TOTAL	LEFT	THRU	RIGHT	RTOR	TOTAL	LEFT	THRU	RIGHT	RTOR	TOTAL	EW TOTAL	TOTAL
7:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	1	6	0	0	7	10	10
7:15	0	0	1	0	1	0	0	0	0	0	1	0	6	0	0	6	1	9	0	0	10	16	17
7:30	0	0	1	0	1	0	0	0	0	0	1	0	7	0	0	7	0	18	0	0	18	25	26
7:45	0	0	1	0	1	0	0	0	0	0	1	0	14	0	0	14	1	10	1	0	12	26	27
Total	**0**	**0**	**3**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**30**	**0**	**0**	**30**	**3**	**43**	**1**	**0**	**47**	**77**	**80**
8:00	0	0	2	0	2	0	0	0	0	0	2	0	7	0	0	7	1	13	1	0	15	22	24
8:15	1	0	1	0	2	0	0	0	0	0	2	0	11	0	0	11	1	12	0	0	13	24	26
8:30	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	8	1	9	0	0	10	18	18
8:45	0	0	3	0	3	0	0	0	0	0	3	0	3	0	0	3	0	8	0	0	8	11	14
Total	**1**	**0**	**6**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**28**	**1**	**0**	**29**	**3**	**42**	**1**	**0**	**46**	**75**	**82**
11:00	0	0	1	0	1	0	0	0	0	0	1	0	6	0	0	6	0	5	0	0	5	11	12
11:15	0	0	1	0	1	0	0	0	0	0	1	0	12	0	0	12	0	5	1	0	6	18	19
11:30	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	2	11	0	0	13	20	20
11:45	1	0	3	0	4	0	0	0	0	0	4	0	5	0	0	5	1	6	0	0	7	12	16
Total	**1**	**0**	**5**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**30**	**0**	**0**	**30**	**3**	**27**	**1**	**0**	**31**	**61**	**67**
12:00	0	0	1	0	1	0	0	0	0	0	1	0	7	0	0	7	0	10	0	0	10	17	18
12:15	0	0	3	0	3	0	0	0	0	0	3	0	5	0	0	5	3	12	0	0	15	20	23
12:30	0	0	2	0	2	0	0	0	0	0	2	0	7	0	0	7	0	17	0	0	17	24	26
12:45	1	0	0	0	1	0	0	0	0	0	1	0	5	1	0	6	1	16	0	0	17	23	24
Total	**1**	**0**	**6**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**24**	**1**	**0**	**25**	**4**	**55**	**0**	**0**	**59**	**84**	**91**
14:00	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	6	0	0	6	13	13
14:15	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12	0	10	0	0	10	22	22
14:30	0	0	1	0	1	0	0	0	0	0	1	0	4	0	0	4	0	10	0	0	10	14	15
14:45	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17	0	10	0	0	10	27	27
Total	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**40**	**0**	**0**	**40**	**0**	**36**	**0**	**0**	**36**	**76**	**77**
15:00	0	0	1	0	1	0	0	0	0	0	1	0	7	0	0	7	1	11	0	0	12	19	20
15:15	0	0	1	0	1	0	0	0	0	0	1	0	12	0	0	12	0	6	1	0	7	19	20
15:30	0	0	1	0	1	0	0	0	0	0	1	0	6	0	0	6	2	8	0	0	10	16	17
15:45	0	0	1	0	1	0	0	0	0	0	1	0	6	1	0	7	1	9	0	0	10	17	18
Total	**0**	**0**	**4**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**31**	**1**	**0**	**32**	**4**	**34**	**1**	**0**	**39**	**71**	**75**
16:00	0	0	3	0	3	0	0	0	0	0	3	0	4	0	0	4	0	6	1	0	7	11	14
16:15	0	0	1	0	1	0	0	0	0	0	1	0	4	0	0	4	0	3	0	0	3	7	8
16:30	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	2	3	0	0	5	10	10
16:45	0	0	4	0	4	0	0	0	0	0	4	0	5	0	0	5	0	3	0	0	3	8	12
Total	**0**	**0**	**8**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**18**	**0**	**0**	**18**	**2**	**15**	**1**	**0**	**18**	**36**	**44**
17:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	3	0	0	3	8	8
17:15	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	5	0	0	5	9	9
17:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	3	3
17:45	0	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3	0	0	4	5	6
Total	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**11**	**0**	**0**	**11**	**1**	**13**	**0**	**0**	**14**	**25**	**26**

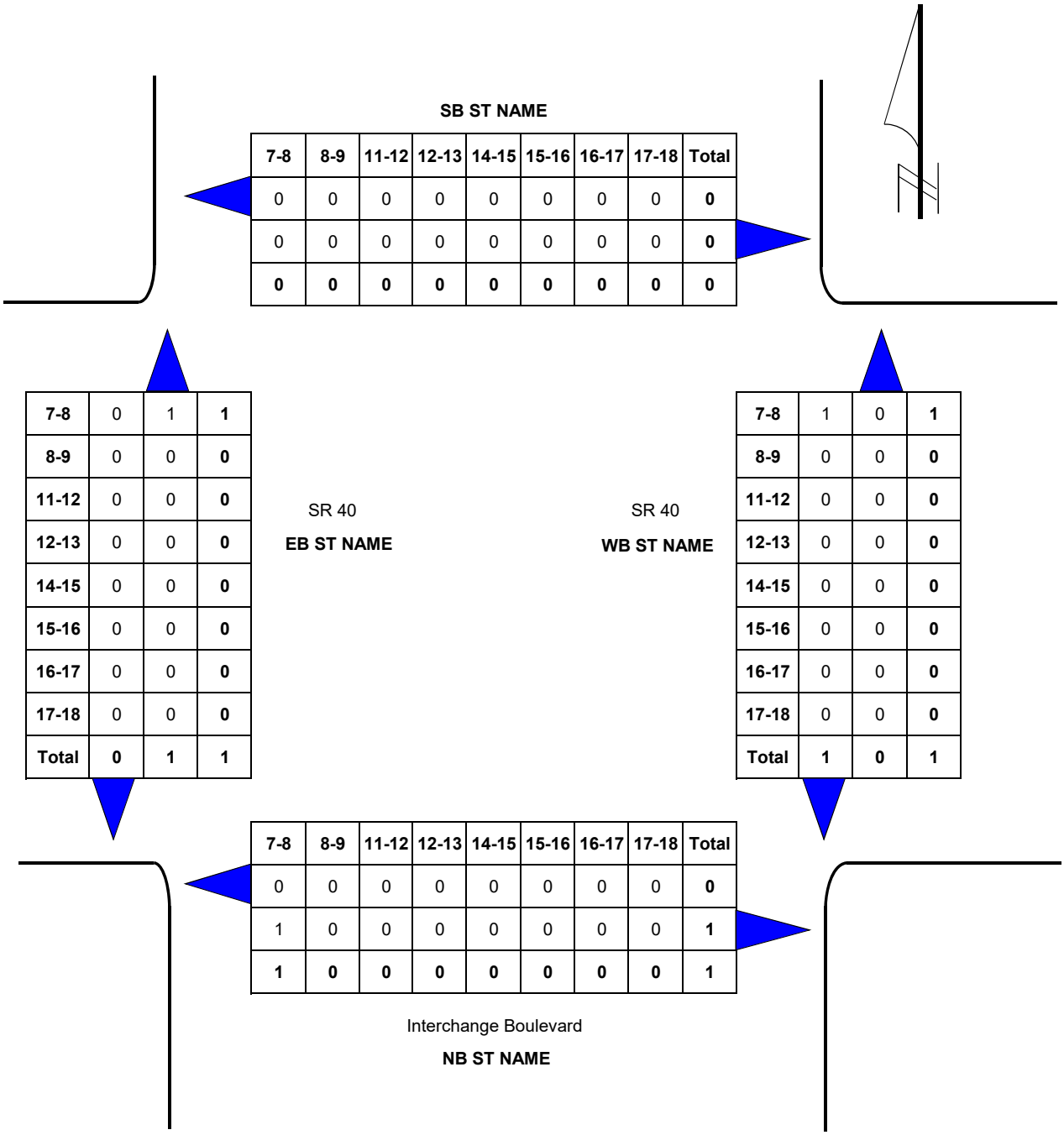
FLORIDA DEPARTMENT OF TRANSPORTATION

PEDESTRIAN MOVEMENT SUMMARY

SECTION 79100 **CITY** ORMOND BEACH **COUNTY** VOLUSIA
STATE ROUTE SR 40 **INTERSECTING ROUTE** Interchange Boulevard
OBSERVER VHB **DATE** 9/19/2018 **MILEPOST** 26.154

REMARKS

FORM COMPLETED BY KLC 10/05/18



SB ST NAME

7-8	8-9	11-12	12-13	14-15	15-16	16-17	17-18	Total
0	0	0	0	0	0	0	0	**0**
0	0	0	0	0	0	0	0	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

7-8	0	1	**1**
8-9	0	0	**0**
11-12	0	0	**0**
12-13	0	0	**0**
14-15	0	0	**0**
15-16	0	0	**0**
16-17	0	0	**0**
17-18	0	0	**0**
Total	**0**	**1**	**1**

SR 40

EB ST NAME

SR 40

WB ST NAME

7-8	1	0	**1**
8-9	0	0	**0**
11-12	0	0	**0**
12-13	0	0	**0**
14-15	0	0	**0**
15-16	0	0	**0**
16-17	0	0	**0**
17-18	0	0	**0**
Total	**1**	**0**	**1**

7-8	8-9	11-12	12-13	14-15	15-16	16-17	17-18	Total
0	0	0	0	0	0	0	0	**0**
1	0	0	0	0	0	0	0	**1**
1	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

Interchange Boulevard

NB ST NAME

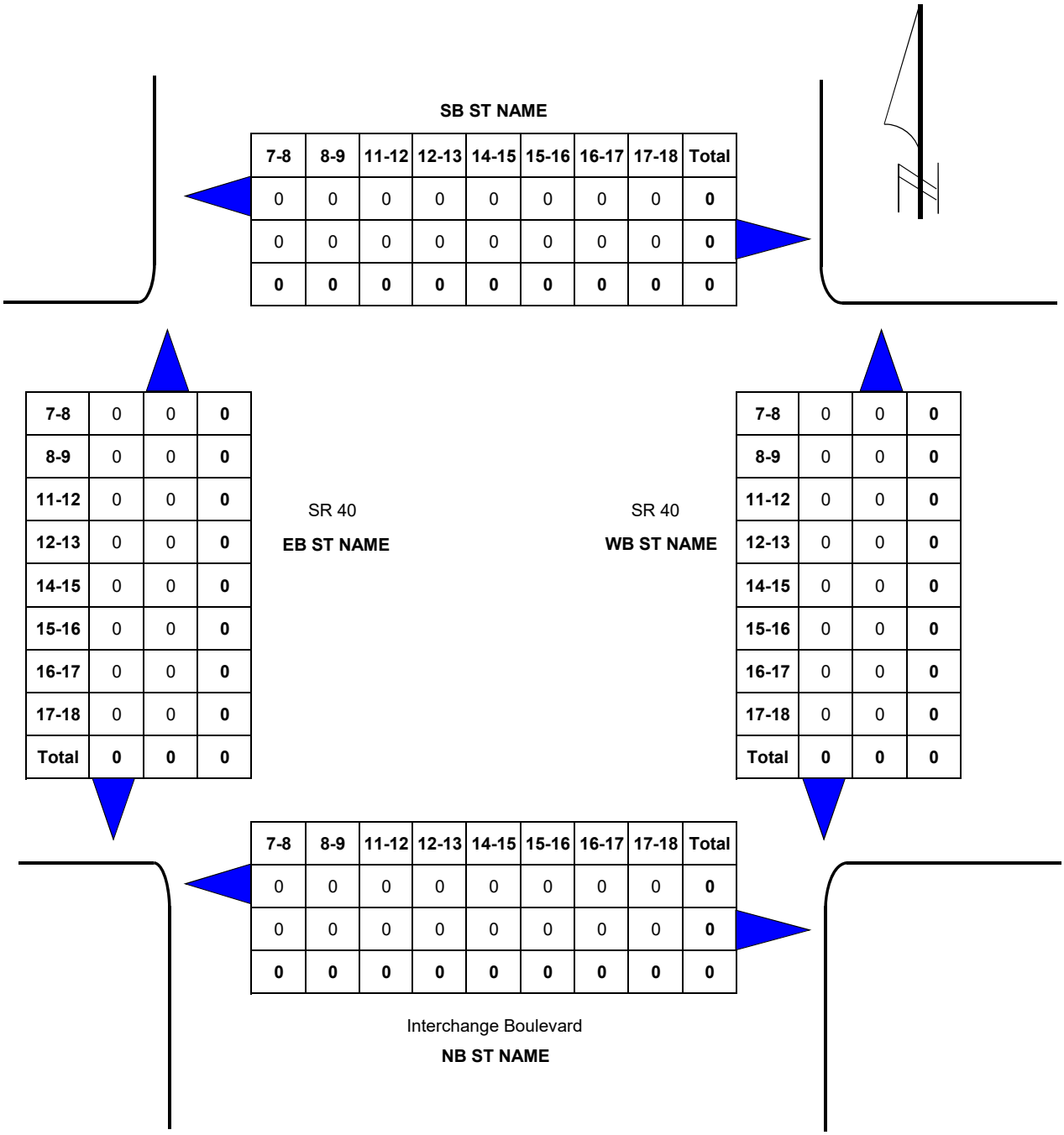
FLORIDA DEPARTMENT OF TRANSPORTATION

BICYCLE MOVEMENT SUMMARY

SECTION 79100 **CITY** ORMOND BEACH **COUNTY** VOLUSIA
STATE ROUTE SR 40 **INTERSECTING ROUTE** Interchange Boulevard
OBSERVER VHB **DATE** 9/19/2018 **MILEPOST** 26.154

REMARKS

FORM COMPLETED BY KLC 10/05/18



SB ST NAME

7-8	8-9	11-12	12-13	14-15	15-16	16-17	17-18	Total
0	0	0	0	0	0	0	0	**0**
0	0	0	0	0	0	0	0	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

7-8	0	0	**0**
8-9	0	0	**0**
11-12	0	0	**0**
12-13	0	0	**0**
14-15	0	0	**0**
15-16	0	0	**0**
16-17	0	0	**0**
17-18	0	0	**0**
Total	**0**	**0**	**0**

SR 40

EB ST NAME

SR 40

WB ST NAME

7-8	0	0	**0**
8-9	0	0	**0**
11-12	0	0	**0**
12-13	0	0	**0**
14-15	0	0	**0**
15-16	0	0	**0**
16-17	0	0	**0**
17-18	0	0	**0**
Total	**0**	**0**	**0**

7-8	8-9	11-12	12-13	14-15	15-16	16-17	17-18	Total
0	0	0	0	0	0	0	0	**0**
0	0	0	0	0	0	0	0	**0**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Interchange Boulevard

NB ST NAME