

**QUALITATIVE ASSESSMENT  
For  
SR 40 at Booth Road**

Volusia County  
Section 79100  
Mile Post 26.027

Prepared for:

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



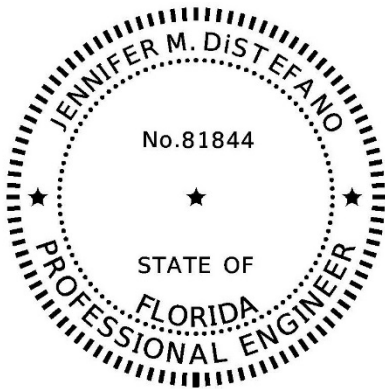
Continuing Services Contract for Traffic Operations  
Financial Project No. 237988-1-32-11  
Contract C-9R60  
Work Order No. 25  
Study 2

Prepared by:  
**Vanasse Hangen Brustlin, Inc.**  
225 East Robinson Street, Suite 300  
Orlando, FL 32801

December 2018

Qualitative Assessment for SR 40 at Booth Road  
Financial Project No. 237988-1-32-11  
Contract C-9R60  
Work Order No. 25  
Study 2

December 2018

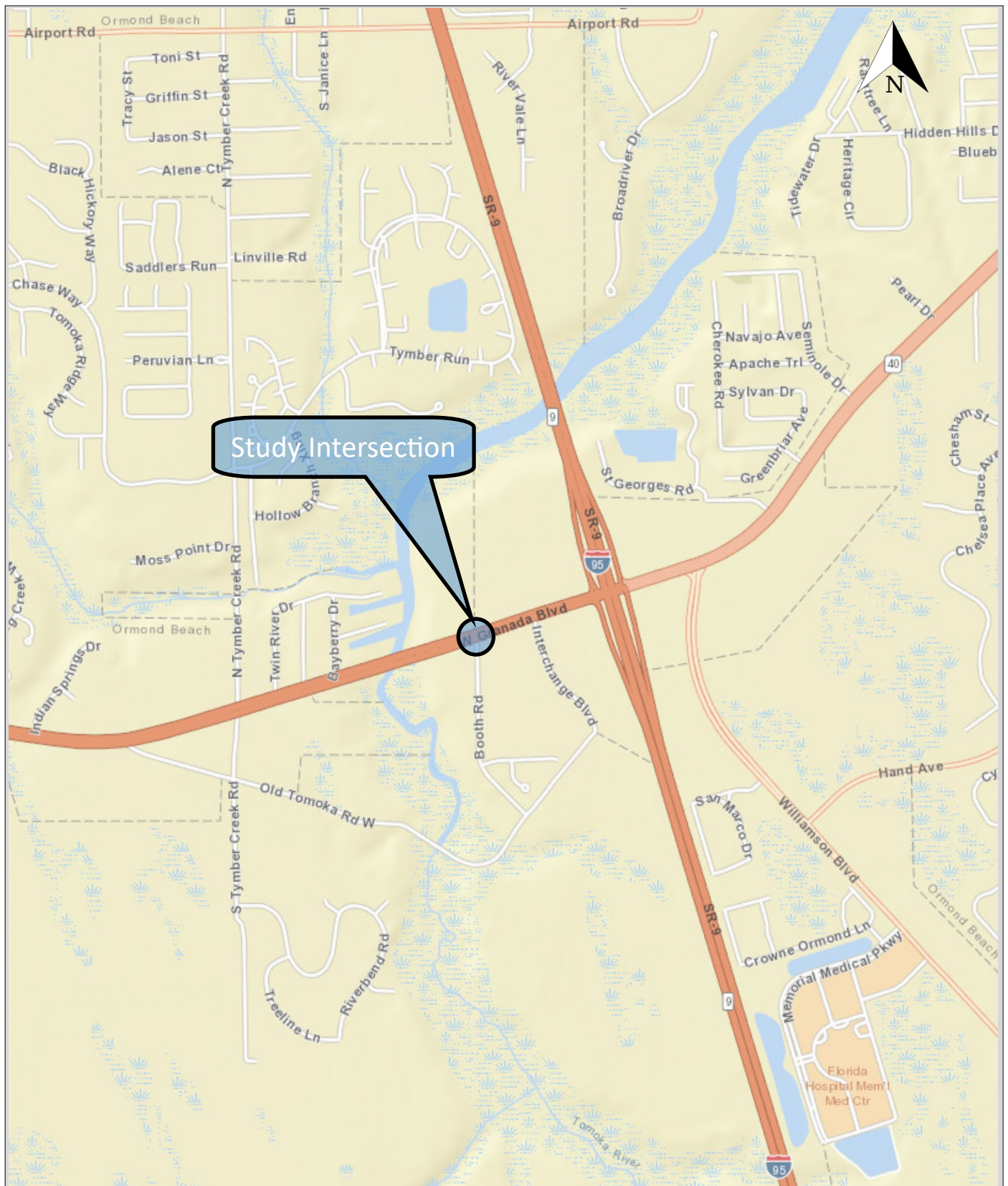


This item has been digitally  
signed and sealed by

on the date adjacent to the seal.

Printed copies of this document are not  
considered signed and sealed and the  
signature must be verified on any electronic  
copies.

Vanasse Hangen Brustlin, Inc.  
225 E. Robinson Street, Suite 300  
Orlando, FL 32801  
Certificate of Authorization 3932  
Jennifer M. DiStefano, P.E. No. 81844



**Figure 1 - Location Map**

Study Intersection

SR 40 at Booth Road

Volusia County

Section: 79100000; MP: 26.027

ArcMaps by Esri| September 21st, 2018

## EXISTING CONDITION

The characteristics of the study intersection of SR 40 with Booth Road 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; four-lane divided rural section; Access Class 5.
Minor Street	Booth Road (south approach) oriented north-south; two-lane undivided rural section; Calvary Christian Center Driveway (north approach) oriented north-south; four-lane undivided urban section with Miami curb on the east side and Type F curb on the west side.
Number of Intersection Approach Lanes	NB Approach: 1 Lane SB Approach: 1 LT-Only Lane & 1 Thru/Right Lane EB Approach: 1 LT-Only Lane, 2 Thru Lanes, & 1 Bike Lane WB Approach: 1 LT-Only Lane, 2 Thru Lanes, 1 RT-Only Lane, & 1 Bike Lane
Traffic Control	Signalized
Posted Speeds	SR 40: 50 mph Booth Road: None Calvary Christian Center Driveway: None
Sidewalks	Both sides of SR 40 east of Booth Road.
Pedestrian/Bicycle Generators	Retail/commercial development southeast of the intersection.
Nearest Signalized Intersections	I-95 SB Ramp 0.27 mi. east of Booth Road on SR 40 and Tymber Creek Road 0.54 mi. west of Booth Road.
Roadway Lighting	None on SR 40 or Booth Road, lights located within the Calvary Christian Center Driveway north of SR 40.
Surrounding Development	Office/Medical south of SR 40, Institutional/Religious north of SR 40, Retail/Commercial east of the intersection on SR 40.



**SR 40 at Booth Road  
North Approach**



Exhibit 1: Looking south into the intersection along Calvary Christian Center Driveway



Exhibit 2: Looking north from the intersection along Calvary Christian Center Driveway



**SR 40 at Booth Road  
South Approach**



Exhibit 3: Looking north into the intersection along Booth Road



Exhibit 4: Looking south from the intersection along Booth Road



**SR 40 at Booth Road  
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 Booth Road  
East Approach**

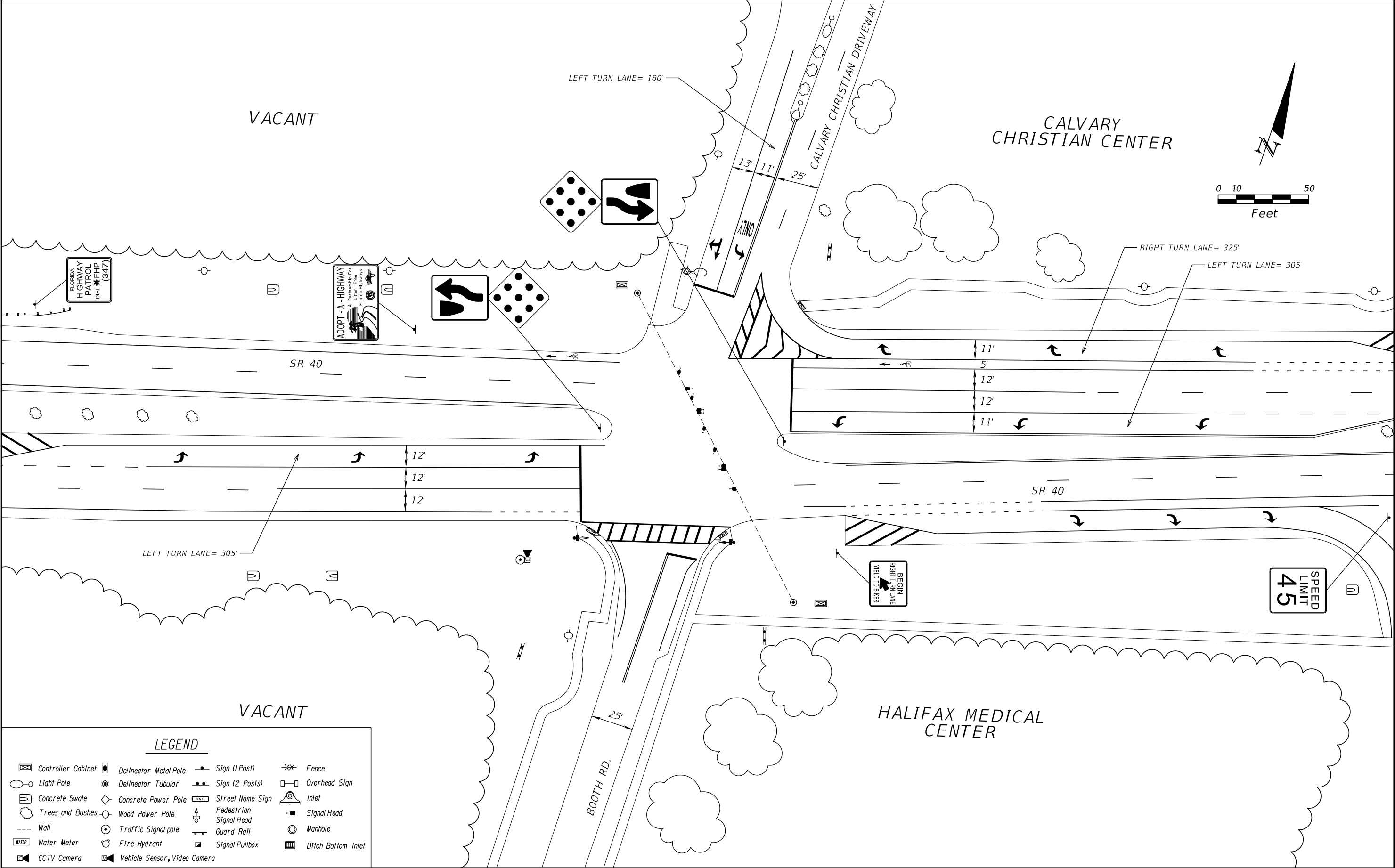


Exhibit 5: Looking west into the intersection along SR 40



Exhibit 6: Looking east from the intersection along SR 40





REVISIONS				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		CONDITION DIAGRAM SR 40 AT BOOTH RD.	FIGURE NO.  2
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY		
					SR 40	VOLUSIA		

## COLLISION ANALYSIS

According to crash records obtained by VHB from Signal4Analytics and CARS, one crash was reported near the intersection of SR 40 and Booth Road during the most recent 12-month period covering January 1, 2017 to December 31, 2017. The crash did not involve an injury or fatality, and the total property damage value was estimated at \$2,300. A collision diagram and collision summary table are provided in the following pages.

The number of crashes by type are as follows:

- Rear End 1 (100%)

The rear end crash (#1) involved two eastbound vehicles stopped at a red light. As the light turned green the trailing vehicle rolled forward into the leading vehicle. The crash did not result in an injury, and occurred during the day on dry pavement. Careless driving was listed as the contributing cause.

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

- Careless Driving 1 (100%)

Lighting conditions are summarized as follows:

- Daylight 1 (100%)

Pavement conditions are also summarized as follows:

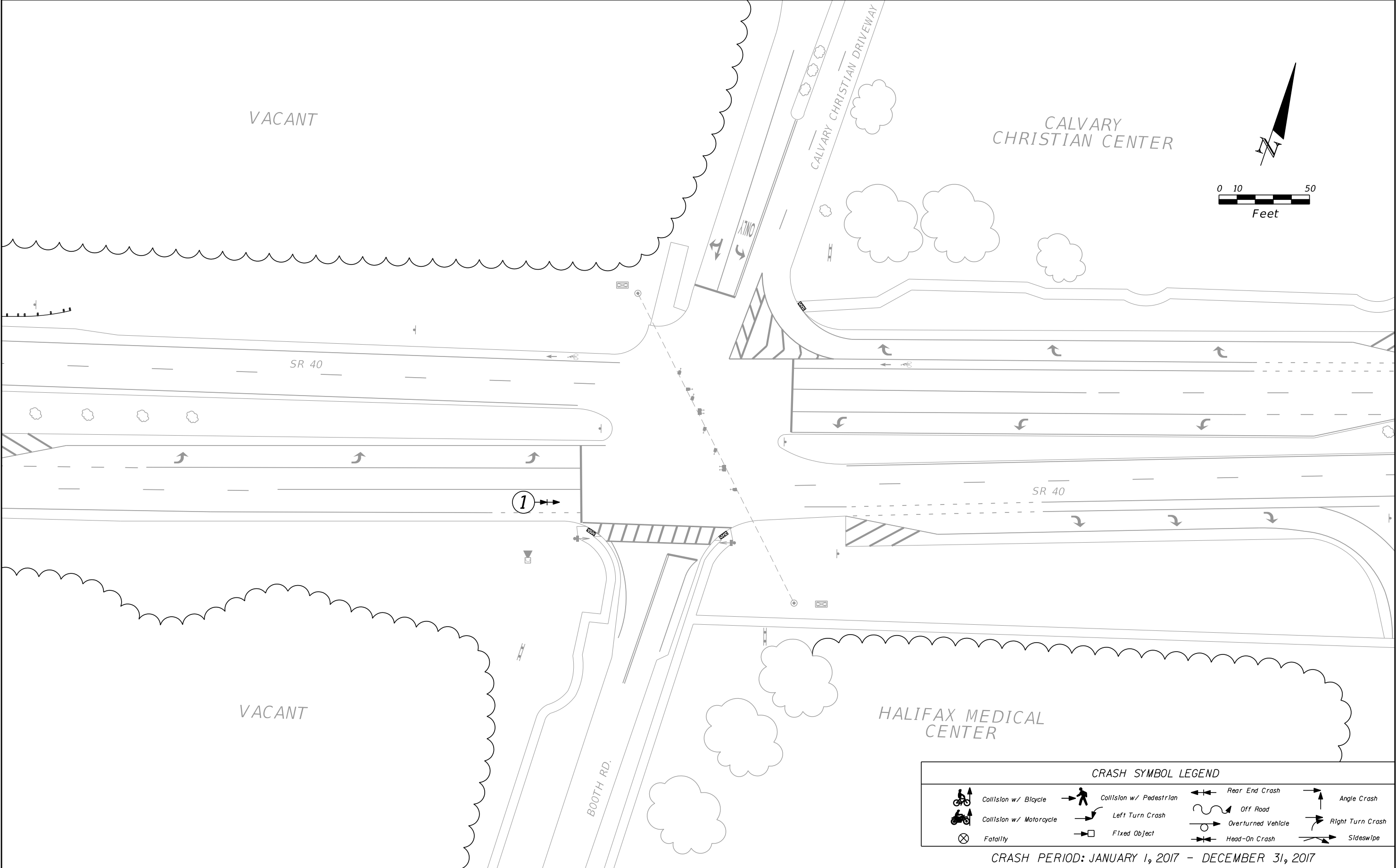
- Dry Pavement 1 (100%)

Additional crash data from January 2018 to date was reviewed to determine if a crash pattern extends beyond the initial year of data. According to the available reports, three additional rear end crashes have been reported thus far in 2018. Two involved injuries, one occurred in dark-lighted conditions, and one occurred on wet pavement. Contributing causes included careless driving and driving under the influence.



**TABLE 1**  
**CRASH SUMMARY**

MAJOR ROUTE: SR 40 INTERSECTING ROUTE: Booth Road STUDY PERIOD: 1/1/2017 to 12/31/2017										COUNTY: Volusia CITY: Ormond Beach 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	85511276	7/19/2017	Wednesday	7:53 AM	5/20/1996	21	Vehicle	No	Rear End	0	0	\$2,300	Daylight	Dry	Careless Driving					
Total										0	0	\$2,300								
	CRASH DESCRIPTION													CRASH TYPE						
	TOTAL CRASHES	FATAL CRASHES	INJURY CRASHES	TOTAL INJURIES	PROPERTY DAMAGE	PED/BIKE/MOTO RCYCLE	ONE VEHICLE	LIGHTING CONDITION					ROADWAY CONDITIONS		ANGLE	LEFT TURN	RIGHT TURN	REAR END	SIDE SWIPE	HEAD ON
								DAYLIGHT	DARK (SL)	DARK (NO SL)	DUSK	DAWN	WET	DRY						
	1	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0
	0%	0%	0%	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%
	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	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	0	0	0	0	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														CONTRIBUTING CAUSE					
	OTHER FIXED OBJECT	MOVEABLE OBJECT	RAN INTO DITCH/ CULVERT	RAN OFF ROAD	OVERTURNED	OCCUPANT FELL FROM VEHICLE	TRACTOR TRAILER JACKKNIFE	FIRE	EXPLOSION	DOWNHILL RUNAWAY	CARGO LOSS OR SHIFT	SEPARATION OF UNITS	MEDIAN CROSSOVER	ALL OTHER	NO IMPROPER DRIVING	CARELESS DRIVING	FTYRW	IMPROPER BACKING	IMPROPER LANE CHANGE	IMPROPER TURN
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	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	FLEEING POLICE	VEHICLE MODIFIED	DRIVER DISTRACT- ION	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%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	



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				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	DEPARTMENT OF TRANSPORTATION			CRASH DIAGRAM SR 40 AT BOOTH RD.	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID		3
					SR 40	VOLUSIA			



## EIGHT HOUR TURNING MOVEMENT COUNTS

Eight-hour turning movement counts were collected at the intersection of SR 40 and Booth Road 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 period and a primarily westbound directional flow during the midday and p.m. periods. Hourly directional traffic volumes on eastbound SR 40 range from 1,671 vehicles per hour (vph) in the a.m. period to 868 vph in the midday period to 999 vph during the p.m. period. Westbound SR 40 directional traffic volumes range from 784 vph in the a.m. period to 1,051 vph in the midday period to 1,524 vph in the p.m. period. On the westbound approach, 162 u-turn movements were recorded and on the eastbound approach six u-turns were recorded during the eight-hour period. Heavy vehicles accounted for approximately 2.9% of the total traffic on SR 40.

Traffic flow on northbound Booth Road ranged from 26 to 78 vph for seven of the eight hours with a peak flow of 82 vph from 12:00 p.m. to 1:00 p.m. Heavy vehicles accounted for approximately 0.6% of the traffic on Booth Road northbound. The southbound approach at the intersection is the driveway to Calvary Christian Center. Traffic volumes on the driveway ranged from 30 vph to 192 vph for seven of the eight hours with a peak flow of 199 vehicles during the 8:00 a.m. to 9:00 a.m. hour. The peak hours on the driveway are consistent with school drop-off and pick-up times. Heavy trucks accounted for approximately 0.9% of the driveway traffic.

Turning movement patterns at the intersection consist of the following:

	NB	SB	EB	WB
<b>U-turn</b>	0%	0.3%	0.1%	1.9%
<b>Left-Turn</b>	24.9%	82.6%	1.4%	3.8%
<b>Through</b>	2.6%	0.6%	96.5%	93.7%
<b>Right Turn</b>	29.5%	6.5%	1.0%	0.6%
<b>RTOR</b>	43.0%	10.0%	1.0%	0%

Within the eight-hour count period, two pedestrians crossed the south approach of Booth Road and two pedestrians crossed the north approach, the Calvary Christian Center driveway. Zero pedestrians crossed SR 40 at the intersection. Pedestrian crossing patterns at the intersection consist of the following:

	North Approach		South Approach		East Approach		West Approach	
<b>Crossing Direction</b>	E-W	W-E	E-W	W-E	N-S	S-N	N-S	S-N
<b>Number of Peds</b>	0	2	0	2	0	0	0	0
<b>Total</b>	2 (50%)		2 (50%)		0 (0%)		0 (0%)	

Within the eight-hour count period, one bicyclist was observed at the intersection crossing the north approach from the west to the east. 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 a.m. and midday peak periods at the study intersection of SR 40 and Booth Road. 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 shared north/south signal phase and the possible need for a dual left turn lane from the Calvary Christian Center Driveway.

1. Vehicles approaching the intersection on SR 40 were observed moving at or slightly above the 50-mph posted speed limit. A clear view of the intersection is available for both eastbound and westbound traffic.
2. Vehicles approaching SR 40 on Booth Road from both directions were slowing due to the signalized intersection at SR 40. A clear view of the intersection is available for both northbound and southbound traffic. There is no posted speed limit on Booth Road.
3. Pavement markings at the intersection are in good to fair condition. Crosswalk and lane markings on Booth Road are visible but faded. Likewise, the gore markings between the westbound through traffic and the westbound right turn lane are visible but faded. There is no crosswalk marked across the Calvary Christian Center driveway, as the sidewalk on SR 40 stops east of the driveway.
4. The signalized intersection is a diagonal span with a concrete strain pole in the northwest and southeast corners. Six of the eight signal heads are three-section heads with backplates while the remaining two are five-section cluster heads with backplates. The northbound and southbound approaches on Booth Road have two red/yellow/green ball indications. Pedestrian signal heads and detectors are installed and operational for the south leg pedestrian movement. The signal operates under a modified SOP 7 plan. The eastbound and westbound left turns run concurrently, followed by the eastbound and westbound through movements, prior to a shared northbound/southbound phase.
5. The pedestrian phase for movements across Booth Road is activated following the protected westbound left turn phase, concurrent with the eastbound/westbound green indications.
6. The curb cut ramp installed on the northwest corner of the intersection is not the current FDOT standard design and does not have a detectable warning surface installed.
7. A low volume of pedestrians was observed at the intersection during the peak hour reviews. Most pedestrians observed used the pedestrian detectors, however, some crossed in the crosswalk at the first available break in traffic.
8. The heaviest side street movement for both the a.m. and midday peak hours was observed to be the southbound left turn, generated by Calvary Christian School drop-off and pick-up. Several motorists were observed running the red light to complete their left turn during the a.m. peak hour.
9. The longest queue observed in the southbound left turn lane was 17 vehicles. The southbound left turn queue could clear within one cycle when approximately 14

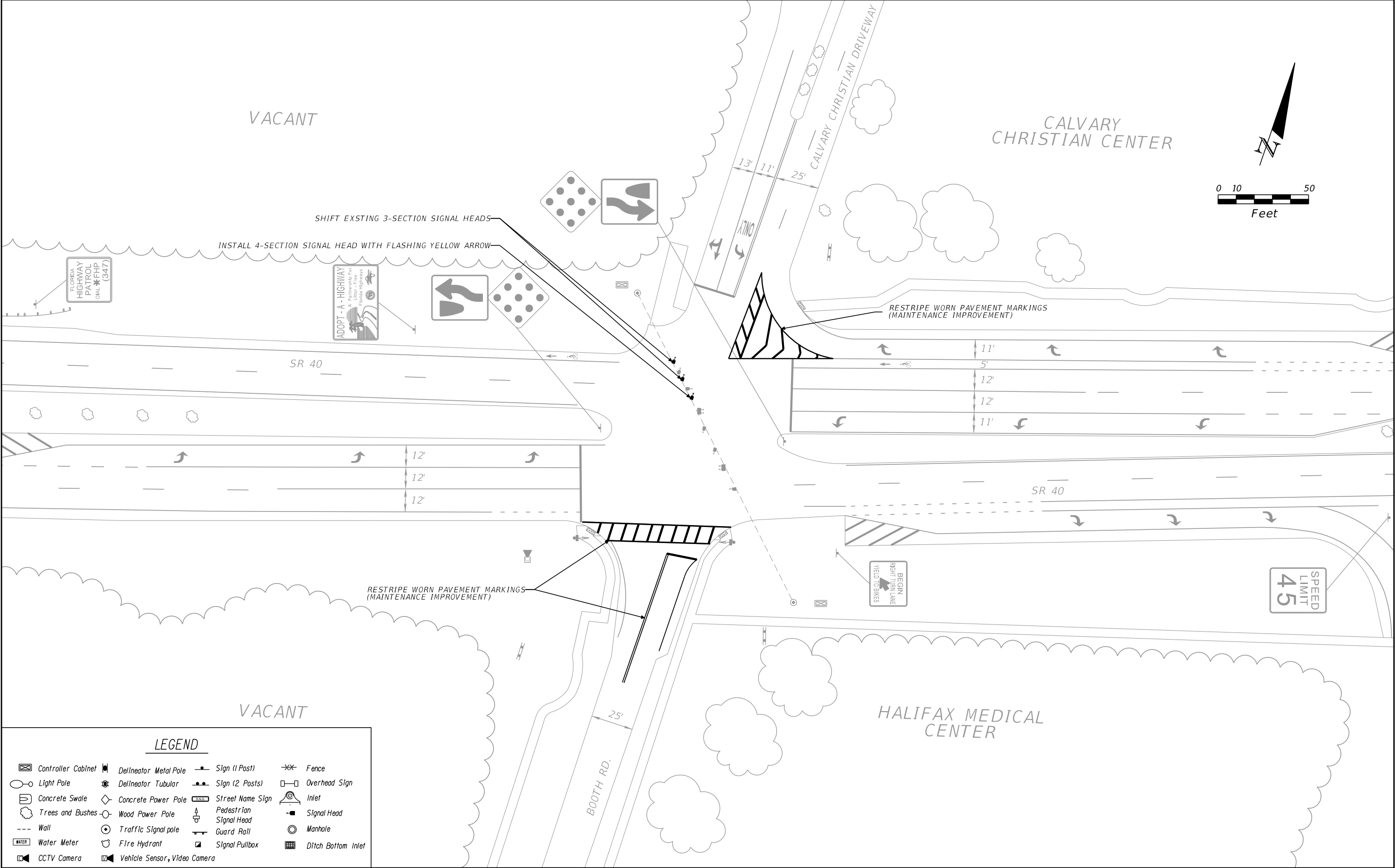


- vehicles were waiting. Beyond that, the queue spilled into a second cycle. During the school's a.m. and p.m. peak hour periods with high exiting traffic, the northbound/southbound phase was observed maxing out on several occasions. One left turn was observed from the southbound right turn lane. A sign is posted in the Calvary Christian Driveway stating that "Left turns from the right lane are prohibited Monday – Saturday."
10. When northbound right-turning motorists were queued opposite southbound left-turning motorists, the northbound traffic generally waited for the southbound queue to clear before beginning their turn. Southbound motorists were observed turning into both the inside and outside eastbound lane on SR 40. The longest northbound queue observed was three vehicles.
  11. The maximum queue observed in the westbound left turn lane was five vehicles, while a maximum of one vehicle was observed in the eastbound left turn lane. During the midday peak hour, gaps were available throughout the SR 40 green cycle for westbound left turns to complete their movement.
  12. The maximum southbound hourly left turn volume recorded during the eight-hour data collection 173 vehicles, which is less than the FDOT Design Manual Section 232.2 threshold of 300 vph for consideration of a second left turn lane.

## **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:

- Introduce a southbound leading left turn phase into the SOP for the intersection and optimize the signal timing to accommodate the revised SOP. This change will require that the existing three-section R/Y/G ball indications be shifted on the span wire and that a four-section head with FYA be added for the left turn lane. A structural analysis is required to ensure that the existing span wire can accommodate the added load.
- Restripe worn pavement markings at the intersection (maintenance improvement).



LEGEND

Controller Cabinet

Light Pole

Concrete Swale

Trees and Bushes

Wall

Water Meter

CCTV Camera

Delineator Metal Pole

Concrete Power Pole

Wood Power Pole

Traffic Signal pole

Fire Hydrant

Vehicle Sensor, Video Camera

Sign (1 Post)

Sign (2 Posts)

Street Name Sign

Pedestrian Signal Head

Guard Rail

Signal Pullbox

Fence

Overhead Sign

Inlet

Signal Head

Manhole

Ditch Bottom Inlet

REVISIONS				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			CONCEPTUAL IMPROVEMENT DIAGRAM SR 40 AT BOOTH RD.		FIGURE NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID			4
					SR 40	VOLUSIA				



## Appendix

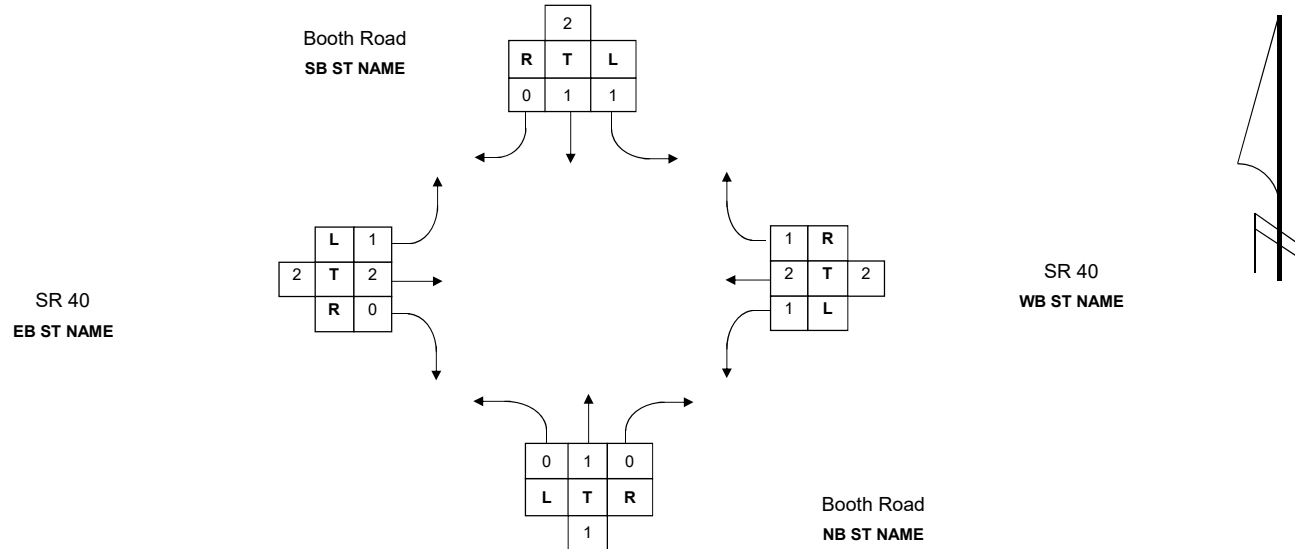
FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF VEHICLE MOVEMENTS

SECTION: 79100 CITY: ORMOND BEACH COUNTY: VOLUSIA  
 STATE ROUTE: SR 40 INTERSECTING ROUTE: Booth Road MILEPOST: 26.027  
 OBSERVER: VHB DATE: 9/19/2018  
 WEATHER: CLEAR ROAD CONDITION: GOOD  
 REMARKS:

FORM COMPLETED BY: KLC

DATE: 10/11/18



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	6	2	11	7	26	0	76	1	8	6	91	117	0	36	1,627	8	0	1,671	24	46	709	1	0	780	2,451
8 - 9	0	13	2	22	21	58	0	173	0	9	17	199	257	1	37	1,359	14	1	1,412	27	72	678	7	0	784	2,196
11 - 12	0	8	0	12	25	45	0	25	0	0	5	30	75	0	2	840	9	0	851	18	29	701	7	0	755	1,606
12 - 13	0	19	0	15	48	82	2	28	0	4	3	37	119	1	7	856	4	0	868	27	34	985	5	0	1,051	1,919
14 - 15	0	13	3	14	28	58	0	39	1	1	7	48	106	1	18	873	8	1	901	15	47	919	7	0	988	1,889
15 - 16	0	21	4	14	26	65	0	157	2	11	22	192	257	2	9	893	8	1	913	19	33	1,118	9	0	1,179	2,092
16 - 17	0	18	1	36	23	78	0	75	0	12	6	93	171	0	4	853	6	0	863	17	24	1,278	1	0	1,320	2,183
17 - 18	0	22	1	18	29	70	0	64	0	5	12	81	151	1	9	985	4	0	999	15	29	1,468	12	0	1,524	2,523
TOTAL	0	120	13	142	207	482	2	637	4	50	78	771	1,253	6	122	8,286	61	3	8,478	162	314	7,856	49	0	8,381	16,859

Percentage	0.0%	24.9%	2.6%	29.5%	43.0%	100.0%	0.3%	82.6%	0.6%	6.5%	10.0%	100.0%	N/A	0.1%	1.4%	96.5%	1.0%	1.0%	100.0%	1.9%	3.8%	93.7%	0.6%	0.0%	100.0%	N/A
Maximum	0	22	4	36	48	82	2	173	2	12	22	199	N/A	2	37	1627	14	1	1671	27	72	1468	12	0	1524	1671
Minimum	0	6	0	11	7	0	0	25	0	0	3	0	0	0	2	840	4	0	0	15	24	678	1	0	0	0
Total Heavy Veh	0		0	2	1	3	7		0	0	0	7	10	0		211	5	0	216	10		255	2	0	267	483
% Heavy Veh	0.0%		0.0%	0.9%		0.6%	1.1%		0.0%	0.0%		0.9%	0.8%	0.0%		2.5%	7.8%		2.5%	2.1%		0.0%	4.1%		3.2%	2.9%

# VEHICLE TURNING MOVEMENT COUNT

SECTION: 79100  
 STATE ROUTE: SR 40  
 OBSERVER: VHB  
 WEATHER: CLEAR  
 NORTH APPROACH: Booth Road  
 SOUTH APPROACH: Booth Road

CITY: ORMOND BEACH  
 INTERSECTING ROUTE: Booth Road  
 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: 26.027

## ALL VEHICLES / ALL MOVEMENTS

START TIME	NORTHBOUND						SOUTHBOUND						NS TOTAL	EASTBOUND						WESTBOUND						EW TOTAL	GRAND TOTAL
	U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL	U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL		U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL	U-TURN	LEFT	THRU	RIGHT	RTOR	TOTAL		
7:00	0	0	0	2	2	4	0	4	1	0	2	7	11	0	0	318	0	0	318	6	7	122	0	0	135	453	464
7:15	0	3	0	2	3	8	0	17	0	1	0	18	26	0	5	400	3	0	408	6	8	183	0	0	197	605	631
7:30	0	3	2	3	2	10	0	20	0	1	2	23	33	0	13	473	2	0	488	6	10	206	0	0	222	710	743
7:45	0	0	0	4	0	4	0	35	0	6	2	43	47	0	18	436	3	0	457	6	21	198	1	0	226	683	730
<b>Total</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>11</b>	<b>7</b>	<b>26</b>	<b>0</b>	<b>76</b>	<b>1</b>	<b>8</b>	<b>6</b>	<b>91</b>	<b>117</b>	<b>0</b>	<b>36</b>	<b>1,627</b>	<b>8</b>	<b>0</b>	<b>1,671</b>	<b>24</b>	<b>46</b>	<b>709</b>	<b>1</b>	<b>0</b>	<b>780</b>	<b>2,451</b>	<b>2,568</b>
8:00	0	2	2	6	2	12	0	79	0	5	5	89	101	0	17	366	4	1	388	9	21	179	1	0	210	598	699
8:15	0	6	0	6	7	19	0	51	0	1	5	57	76	0	13	392	4	0	409	8	18	168	3	0	197	606	682
8:30	0	3	0	0	8	11	0	35	0	3	7	45	56	0	5	321	3	0	329	6	14	146	2	0	168	497	553
8:45	0	2	0	10	4	16	0	8	0	0	0	8	24	1	2	280	3	0	286	4	19	185	1	0	209	495	519
<b>Total</b>	<b>0</b>	<b>13</b>	<b>2</b>	<b>22</b>	<b>21</b>	<b>58</b>	<b>0</b>	<b>173</b>	<b>0</b>	<b>9</b>	<b>17</b>	<b>199</b>	<b>257</b>	<b>1</b>	<b>37</b>	<b>1,359</b>	<b>14</b>	<b>1</b>	<b>1,412</b>	<b>27</b>	<b>72</b>	<b>678</b>	<b>7</b>	<b>0</b>	<b>784</b>	<b>2,196</b>	<b>2,453</b>
11:00	0	3	0	1	6	10	0	3	0	0	2	5	15	0	1	216	3	0	220	0	9	144	1	0	154	374	389
11:15	0	2	0	1	6	9	0	6	0	0	1	7	16	0	1	206	2	0	209	3	4	166	1	0	174	383	399
11:30	0	1	0	5	7	13	0	7	0	0	1	8	21	0	0	201	2	0	203	8	10	199	3	0	220	423	444
11:45	0	2	0	5	6	13	0	9	0	0	1	10	23	0	0	217	2	0	219	7	6	192	2	0	207	426	449
<b>Total</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>12</b>	<b>25</b>	<b>45</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>30</b>	<b>75</b>	<b>0</b>	<b>2</b>	<b>840</b>	<b>9</b>	<b>0</b>	<b>851</b>	<b>18</b>	<b>29</b>	<b>701</b>	<b>7</b>	<b>0</b>	<b>755</b>	<b>1,606</b>	<b>1,681</b>
12:00	0	5	0	5	17	27	0	6	0	2	0	8	35	0	2	205	0	0	207	5	10	250	1	0	266	473	508
12:15	0	3	0	7	11	21	0	2	0	1	1	4	25	0	3	214	1	0	218	12	5	265	2	0	284	502	527
12:30	0	6	0	3	10	19	1	16	0	1	2	20	39	0	2	218	1	0	221	3	8	260	1	0	272	493	532
12:45	0	5	0	0	10	15	1	4	0	0	0	5	20	1	0	219	2	0	222	7	11	210	1	0	229	451	471
<b>Total</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>15</b>	<b>48</b>	<b>82</b>	<b>2</b>	<b>28</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>37</b>	<b>119</b>	<b>1</b>	<b>7</b>	<b>856</b>	<b>4</b>	<b>0</b>	<b>868</b>	<b>27</b>	<b>34</b>	<b>985</b>	<b>5</b>	<b>0</b>	<b>1,051</b>	<b>1,919</b>	<b>2,038</b>
14:00	0	4	3	2	5	14	0	6	1	0	0	7	21	0	3	201	2	0	206	6	9	217	2	0	234	440	461
14:15	0	1	0	0	4	5	0	12	0	0	3	15	20	0	6	212	2	1	221	3	11	223	3	0	240	461	481
14:30	0	7	0	11	9	27	0	13	0	1	2	16	43	0	5	242	2	0	249	4	14	223	0	0	241	490	533
14:45	0	1	0	1	10	12	0	8	0	0	2	10	22	1	4	218	2	0	225	2	13	256	2	0	273	498	520
<b>Total</b>	<b>0</b>	<b>13</b>	<b>3</b>	<b>14</b>	<b>28</b>	<b>58</b>	<b>0</b>	<b>39</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>48</b>	<b>106</b>	<b>1</b>	<b>18</b>	<b>873</b>	<b>8</b>	<b>1</b>	<b>901</b>	<b>15</b>	<b>47</b>	<b>919</b>	<b>7</b>	<b>0</b>	<b>988</b>	<b>1,889</b>	<b>1,995</b>
15:00	0	4	1	3	5	13	0	71	0	4	9	84	97	1	3	227	2	1	234	10	9	277	3	0	299	533	630
15:15	0	5	1	5	7	18	0	60	2	5	5	72	90	0	2	213	2	0	217	0	9	262	2	0	273	490	580
15:30	0	6	1	4	10	21	0	16	0	1	3	20	41	0	2	236	3	0	241	4	7	286	1	0	298	539	580
15:45	0	6	1	2	4	13	0	10	0	1	5	16	29	1	2	217	1	0	221	5	8	293	3	0	309	530	559
<b>Total</b>	<b>0</b>	<b>21</b>	<b>4</b>	<b>14</b>	<b>26</b>	<b>65</b>	<b>0</b>	<b>157</b>	<b>2</b>	<b>11</b>	<b>22</b>	<b>192</b>	<b>257</b>	<b>2</b>	<b>9</b>	<b>893</b>	<b>8</b>	<b>1</b>	<b>913</b>	<b>19</b>	<b>33</b>	<b>1,118</b>	<b>9</b>	<b>0</b>	<b>1,179</b>	<b>2,092</b>	<b>2,349</b>
16:00	0	4	1	9	7	21	0	19	0	3	0	22	43	0	0	196	1	0	197	3	9	283	1	0	296	493	536
16:15	0	6	0	5	4	15	0	19	0	1	1	21	36	0	1	199	2	0	202	5	6	312	0	0	323	525	561
16:30	0	5	0	7	6	18	0	24	0	4	2	30	48	0	2	235	1	0	238	7	4	331	0	0	342	580	628
16:45	0	3	0	15	6	24	0	13	0	4	3	20	44	0	1	223	2	0	226	2	5	352	0	0	359	585	629
<b>Total</b>	<b>0</b>	<b>18</b>	<b>1</b>	<b>36</b>	<b>23</b>	<b>78</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>12</b>	<b>6</b>	<b>93</b>	<b>171</b>	<b>0</b>	<b>4</b>	<b>853</b>	<b>6</b>	<b>0</b>	<b>863</b>	<b>17</b>	<b>24</b>	<b>1,278</b>	<b>1</b>	<b>0</b>	<b>1,320</b>	<b>2,183</b>	<b>2,354</b>
17:00	0	5	0	5	13	23	0	23	0	4	4	31	54	1	2	262	2	0	267	2	11	370	3	0	386	653	707
17:15	0	7	0	6	5	18	0	20	0	1	4	25	43	0	3	251	0	0	254	5	8	378	2	0	393	647	690
17:30	0	3	0	4	9	16	0	8	0	0	0	8	24	0	1	240	1	0	242	6	6	389	3	0	404	646	670
17:45	0	7	1	3	2	13	0	13	0	0	4	17	30	0	3	232	1	0	236	2	4	331	4	0	341	577	607
<b>Total</b>	<b>0</b>	<b>22</b>	<b>1</b>	<b>18</b>	<b>29</b>	<b>70</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>5</b>	<b>12</b>	<b>81</b>	<b>151</b>	<b>1</b>	<b>9</b>	<b>985</b>	<b>4</b>	<b>0</b>	<b>999</b>	<b>15</b>	<b>29</b>	<b>1,468</b>	<b>12</b>	<b>0</b>	<b>1,524</b>	<b>2,523</b>	<b>2,674</b>



# VEHICLE TURNING MOVEMENT COUNT

SECTION: 79100  
STATE ROUTE: SR 40  
OBSERVER: VHB  
WEATHER: CLEAR  
NORTH APPROACH: Booth Road  
SOUTH APPROACH: Booth Road

CITY: ORMOND BEACH  
INTERSECTING ROUTE: Booth Road  
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: 26.027

## HEAVY VEHICLES (TRUCKS + BUSES)

START TIME	NORTHBOUND					SOUTHBOUND					NS TOTAL	EASTBOUND					WESTBOUND					EW TOTAL	GRAND TOTAL
	LEFT	THRU	RIGHT	RTOR	TOTAL	LEFT	THRU	RIGHT	RTOR	TOTAL		LEFT	THRU	RIGHT	RTOR	TOTAL	LEFT	THRU	RIGHT	RTOR	TOTAL		
7:00	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	7	0	0	7	11	11
7:15	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	9	0	0	9	17	17
7:30	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	18	0	0	18	25	25
7:45	0	0	1	0	1	1	0	0	0	1	2	0	14	0	0	14	0	8	0	0	8	22	24
Total	0	0	1	0	1	1	0	0	0	1	2	0	33	0	0	33	0	42	0	0	42	75	77
8:00	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	13	0	0	13	19	19
8:15	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	11	0	0	11	21	21
8:30	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	13	0	0	13	22	22
8:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	10	0	0	10	13	13
Total	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	28	0	47	0	0	47	75	75
11:00	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	8	0	0	8	16	16
11:15	0	0	0	0	0	1	0	0	0	1	1	0	14	1	0	15	0	5	0	0	5	20	21
11:30	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	9	0	0	9	16	16
11:45	0	0	0	0	0	0	0	0	0	0	0	0	9	1	0	10	0	7	0	0	7	17	17
Total	0	0	0	0	0	1	0	0	0	1	1	0	38	2	0	40	0	29	0	0	29	69	70
12:00	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	10	0	0	10	15	15
12:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	12	0	0	12	14	14
12:30	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	1	12	0	0	13	21	21
12:45	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	17	0	0	17	22	22
Total	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20	1	51	0	0	52	72	72
14:00	0	0	0	1	1	0	0	0	0	0	1	0	6	1	0	7	0	6	0	0	6	13	14
14:15	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12	0	13	0	0	13	25	25
14:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	7	0	0	7	10	10
14:45	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	14	0	9	1	0	10	24	24
Total	0	0	0	1	1	0	0	0	0	0	1	0	35	1	0	36	0	35	1	0	36	72	73
15:00	0	0	0	0	0	2	0	0	0	2	2	0	8	0	0	8	0	8	1	0	9	17	19
15:15	0	0	0	0	0	2	0	0	0	2	2	0	8	1	0	9	0	6	0	0	6	15	17
15:30	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	9	0	0	9	15	15
15:45	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	7	0	0	7	15	15
Total	0	0	0	0	0	4	0	0	0	4	4	0	30	1	0	31	0	30	1	0	31	62	66
16:00	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	4	0	0	4	7	7
16:15	0	0	0	0	0	1	0	0	0	1	1	0	4	0	0	4	1	1	0	0	2	6	7
16:30	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	2	0	0	2	6	6
16:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	0	0	2	5	5
Total	0	0	0	0	0	1	0	0	0	1	1	0	14	0	0	14	1	9	0	0	10	24	25
17:00	0	0	1	0	1	0	0	0	0	0	1	0	7	1	0	8	0	4	0	0	4	12	13
17:15	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	4	0	0	4	7	7
17:30	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	0	0	2	5	5
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	2
Total	0	0	1	0	1	0	0	0	0	0	1	0	13	1	0	14	0	12	0	0	12	26	27

FLORIDA DEPARTMENT OF TRANSPORTATION

PEDESTRIAN MOVEMENT SUMMARY

SECTION 79100  
STATE ROUTE SR 40  
OBSERVER VHB

CITY ORMOND BEACH  
INTERSECTING ROUTE Booth Road  
DATE 9/19/2018

COUNTY VOLUSIA  
MILEPOST 26.027

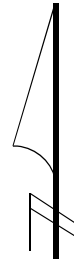
REMARKS

FORM COMPLETED BY KLC 10/11/18

Booth Road

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



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

Booth Road

NB ST NAME

## FLORIDA DEPARTMENT OF TRANSPORTATION

## BICYCLE MOVEMENT SUMMARY

SECTION 79100  
 STATE ROUTE SR 40  
 OBSERVER VHB

CITY ORMOND BEACH  
 INTERSECTING ROUTE Booth Road  
 DATE 9/19/2018

COUNTY VOLUSIA  
 MILEPOST 26.027

REMARKS \_\_\_\_\_

FORM COMPLETED BY KLC 10/11/18

Booth Road

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

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

Booth Road

NB ST NAME