

DRAFT TRAFFIC STUDY  
CR 337 from SW 46<sup>th</sup> Avenue to SR 26  
ALACHUA COUNTY



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**DRAFT**

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## Executive Summary

Based on the 2035 No Build condition operational analysis, higher delays are anticipated on the northbound and southbound approaches of the SR 26 at CR 337 and SR 26 at SW 264th St intersections. Delays at these two intersections are increased in the Build condition with the introduction of the Westone development traffic. The intersection of CR 337 at SW 46th Ave operates acceptably under the No Build and Build conditions. The arterial Level of Service of CR 337 remains adequate for both Build and No Build conditions. Florida Department of Transportation's (FDOT) West Newberry Road Improvements Project (Financial Project ID 207850-2) proposes a roundabout at the intersection of SR 26 and CR 337 and improvements at the SR 26 and SW 264th St intersection. This project will address any operational issues associated with these SR 26 intersections.

The safety analysis used crash data from the University of Florida Signal Four Analytics (UFSFA) crash mapping and analysis system for the 60-month period from January 1, 2018, to December 31, 2022. During this period, twenty-five (25) crashes occurred, of which two (2) of them were fatal crashes. Both fatal crashes occurred on a dry roadway surface while drivers were under alcohol/drug influence in both instances. Crashes related to driver impairment due to drugs and/or alcohol are not considered correctable through the introduction of safety countermeasures. Based on the safety analysis, 7 crashes are anticipated to occur in 2035 under the No Build condition while 13 crashes are anticipated to occur in 2035 under the Build condition. This increase is due to the increase in traffic due to the development.

As a means to minimize future crashes, three (3) safety improvements were considered. The first evaluated the crash reduction associated with widening the roadway to 22 feet (11-foot lane in each direction), the second considered widening the roadway while also eliminating the curves by converting each to all-way stop-controlled intersections, and the third increased the radius of the curves to accommodate a 50 MPH design speed.

In order to substantiate improvements within the study area, a comprehensive benefit-cost (B/C) analysis was conducted to provide insights into the feasibility and potential advantages of these safety improvements. The construction and improvement costs for safety countermeasures have been evaluated based on FDOT Design Manual KABCO Crash Costs. The benefit of safety countermeasures was estimated by the number of crashes reduced and the associated crash cost. Crashes associated with impaired drivers were removed from the analysis as these are not considered susceptible to correction. A B/C ratio higher than 1.0 suggests benefits outweigh the costs of an improvement and further consideration should be given to implementing the improvement. Based on the B/C ratios associated with each improvement in the No Build and Build conditions, none of the improvements are considered feasible. Therefore, this study does not recommend installing any improvements at this time.



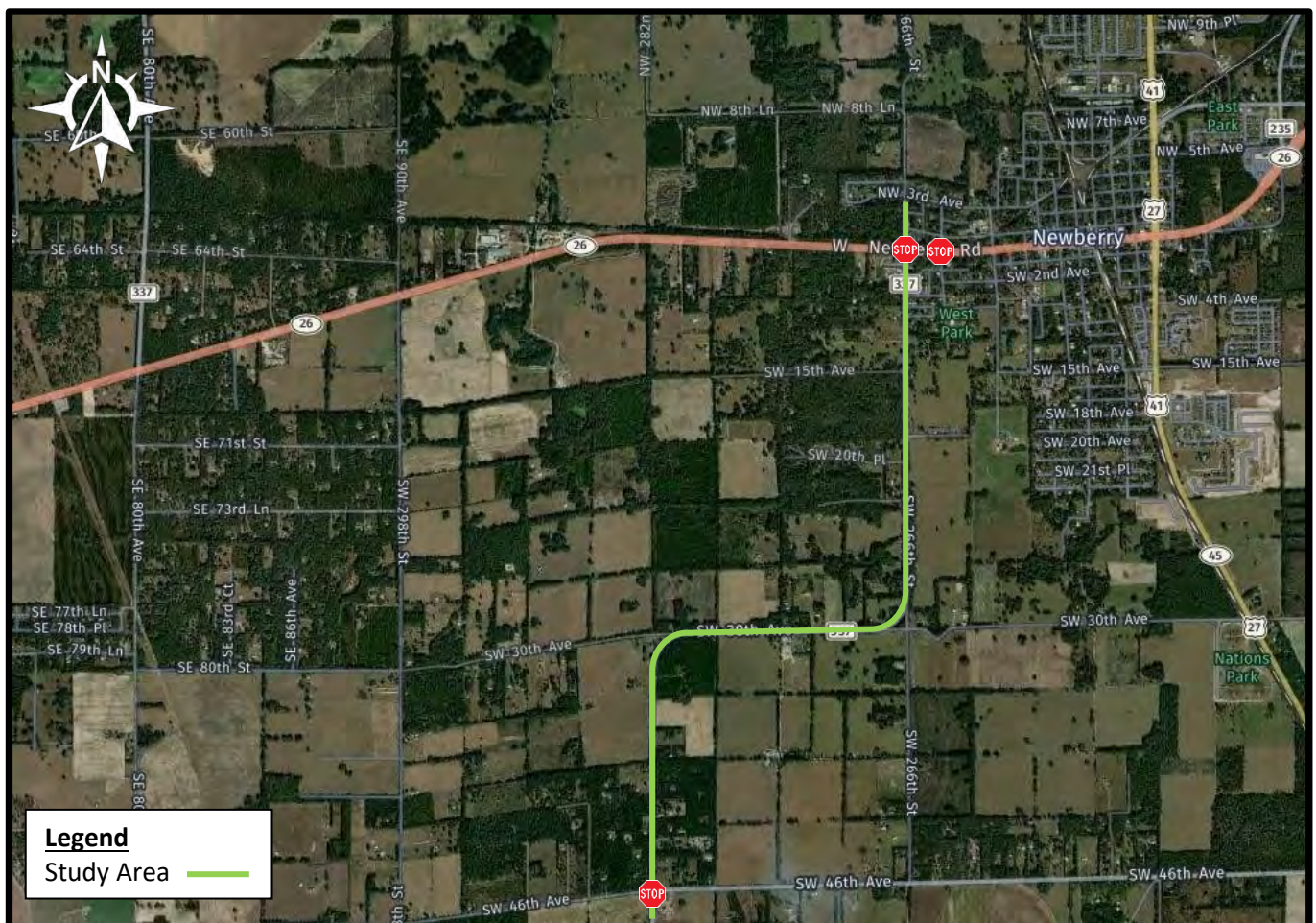
## 1.0 Introduction

This study investigates improvements along CR 337 from north of SW 46th Avenue to SR 26 from a traffic operations perspective and its impacts on the local network. The study area encompasses the geographical region bounded by SR 26 to the north, SW 46th Avenue to the south, the county line to the west, and SW 260th Street to the east. Within this delineated boundary, an examination of the County's and private developer's proposed land uses will be conducted to any proposed geometric adjustments for CR 337. This analysis will encompass both the Build (County development only) and No Build conditions, with the impact of the Westone Residential Development project for 2035. Furthermore, a comprehensive benefit-cost analysis has been conducted to provide insights into the feasibility and potential advantages of these proposed improvements.

## 2.0 Study Area

The study area is along CR 337 from north SW 46<sup>th</sup> Avenue to SR 26. Figure 1 provides a study area map.

Figure 1: Study Area Map



### 3.0 Data Collection

Seventy-two-hour counts and 8-hours turning movement counts (TMC) were collected throughout the study area of this project. Table 1 summarizes the location, type of count, and dates when the data was collected. Appendix A provides the raw counts and seasonal factors.

**Table 1: Data Collection**

Location	Count Type	Dates
CR 337/SW 46 <sup>th</sup> Avenue	8-hr turning movement counts	6/14/2023
SR 26/CR 337	8-hr turning movement counts	6/15/2023
SR 26/SW 264 <sup>th</sup> Street	8-hr turning movement counts	6/15/2023
SR 26 west of CR 337	72-hr counts	6/20/23 - 6/23/23
SR 26 east of CR 337	72-hr counts	6/20/23 - 6/23/23
NW 266 <sup>th</sup> Street north of SR 26	72-hr counts	6/20/23 - 6/23/23
CR 337 north of SW 46 <sup>th</sup> Avenue	72-hr counts	6/26/2023 - 6/29/23
CR 337 south of SR 26	72-hr counts	6/26/23 - 6/29/23
SW 3 <sup>rd</sup> Place east of CR 337	72-hr counts	6/26/23 - 6/29/23

### 3.1 Field Review

A field review was performed by a professional engineer on June 21, 2023. According to the field observations, CR 337 has a posted speed of 55 MPH from SW 46<sup>th</sup> Avenue to approximately SW 15<sup>th</sup> Avenue and 45 MPH from SW 15<sup>th</sup> Avenue to SR 26. There is no existing street lighting throughout the study area. The roadway pavement exhibits large cracks and multiple potholes. A breakdown of observations per intersection follows.

#### SR 26 at CR 337

The eastbound approach has a posted speed of 40 MPH and consists of a shared through-right lane, a left turn lane, four-foot wide shoulders and both lanes are 12 feet wide. The left-turn storage length is approximately 340 feet. The westbound approach consists of one through lane, one left turn lane, and a right turn lane, all 12- feet wide and a four-foot wide shoulder. The posted speed in this approach is 40 MPH. Storage lengths for the left and right turn lanes are 400 feet and 300 feet, respectively. The northbound approach has a 9-foot shared lane with no shoulder and a posted speed of 45 MPH. In the southbound approach, there is an 11-foot shared lane with no shoulder and a posted speed of 30 MPH.

#### SR 26 at SW 264<sup>th</sup> Street

The eastbound and westbound approaches have a posted speed of 40 MPH and consist of a 12-foot shared lane and a five-foot wide shoulder. The northbound and southbound approaches are consistent with a 10-foot shared lane, no shoulder, and a posted speed of 30 MPH.

#### CR 337 and SW 46<sup>th</sup> Avenue

The eastbound approach is unpaved, with only one shared lane and no shoulder. The total width of the approach is 23 feet. No speed limit sign is posted along this corridor. The westbound approach consists of an 11-foot shared lane with no shoulder and a posted speed of 55 MPH. Both the northbound and southbound approaches have a 10-foot shared lane with no shoulder and a posted speed of 55 MPH.

## 4.0 Development of Traffic Volumes

### 4.1 Traffic Analysis Assumptions

Background traffic was developed for the opening year (2025) and design year (2035). Future traffic conditions and growth rates were based on the methodology described in the 2019 FDOT Project Traffic Forecasting Handbook.

### 4.2 Growth Rate

Using the FDOT Trends Analysis Tool and the latest FDOT Traffic Online AADTs, updated growth rates were established along SR 26. In addition, the latest Bureau of Economic and Business Research (BEBR) growth rates were used to determine a reasonable updated growth rate for the area. Traffic counts from the past 10 years (2013-2022) were utilized to calculate an average growth rate for the project area. Appendices B and C provide the historical AADT report and the Trends analysis output, respectively. Table 2 provides each segment's growth rates and the overall average growth rate.

**Table 2: Trends Analysis**

Count Station	Location	First Year of Data	Growth Rate
260004	SR 26 200' W of CR 337	2013	2.42%
260493	SR 26 0.1 MI W of SR 45	2013	1.50%
269157	SW 282 <sup>nd</sup> St 0.1 MI S of SR 26	2013	1.56%
269123	SW 46 <sup>th</sup> Ave 0.1 MI W of CR 241	2013	2.27
Average Growth Rate		1.94%	

Note: Growth Rates were calculated using the most recent 10-year data as recommended in the 2019 Project Traffic Forecasting Handbook

Table 3 provides the most current BEBR population estimate and the average annual growth rates associated with each.

**Table 3: 2022 BEBR estimate in Alachua County**

Projection	Population Estimates (x1000)				Average Annual Growth Rate (2025-2035)
Year	2022	2025	2030	2035	
Alachua County	287,872				
Low		282,800	285,000	284,300	-0.10%
Medium		297,600	311,500	322,100	0.91%
High		312,500	338,000	360,000	1.93%

Population projections are expected to be higher than the medium range estimated by the considering there are land use developments being planned for this area.

The latest Gainesville Urbanized Area Transportation Study Model's (GUATS) was utilized to provide an additional growth rate based on six segments of road near the project location. Table 4 summarizes each annual growth rate.

**Table 4: GUATS Growth Rates**

Segment	2015 Model AADT	2045 Model AADT	Annual Growth Rate
SR 26 West of CR 337	6,493	8,284	0.92%
SR 26 East of CR 337	6,507	7,918	0.72%
SR 26 West of US 27	7,951	9,816	0.78%
CR 337 South of SR 26	203	532	5.40%
CR 337 North of SW 46th Ave	856	1,557	2.73%
SW 46th Ave	25	34	1.20%
Average	1.96%		

Considering both Trend analysis and GUATS reflect the recent increase in population, the GUATS growth rate of 1.96% was selected. Table 5 summarizes the trends, BEBR and GUATS rates, and the adopted rate for this report. Future traffic volumes will be calculated using linear growth at 1.96% annually.

**Table 5: Summary of Growth Rate**

Analysis Tool	Growth Rate
Trends	1.94%
GUATS	1.96%
BEBR	1.93%
Adopted Growth Rate	1.96%

## 5.0 Traffic and Operational Analysis – No Build Condition

### 5.1 Background Traffic

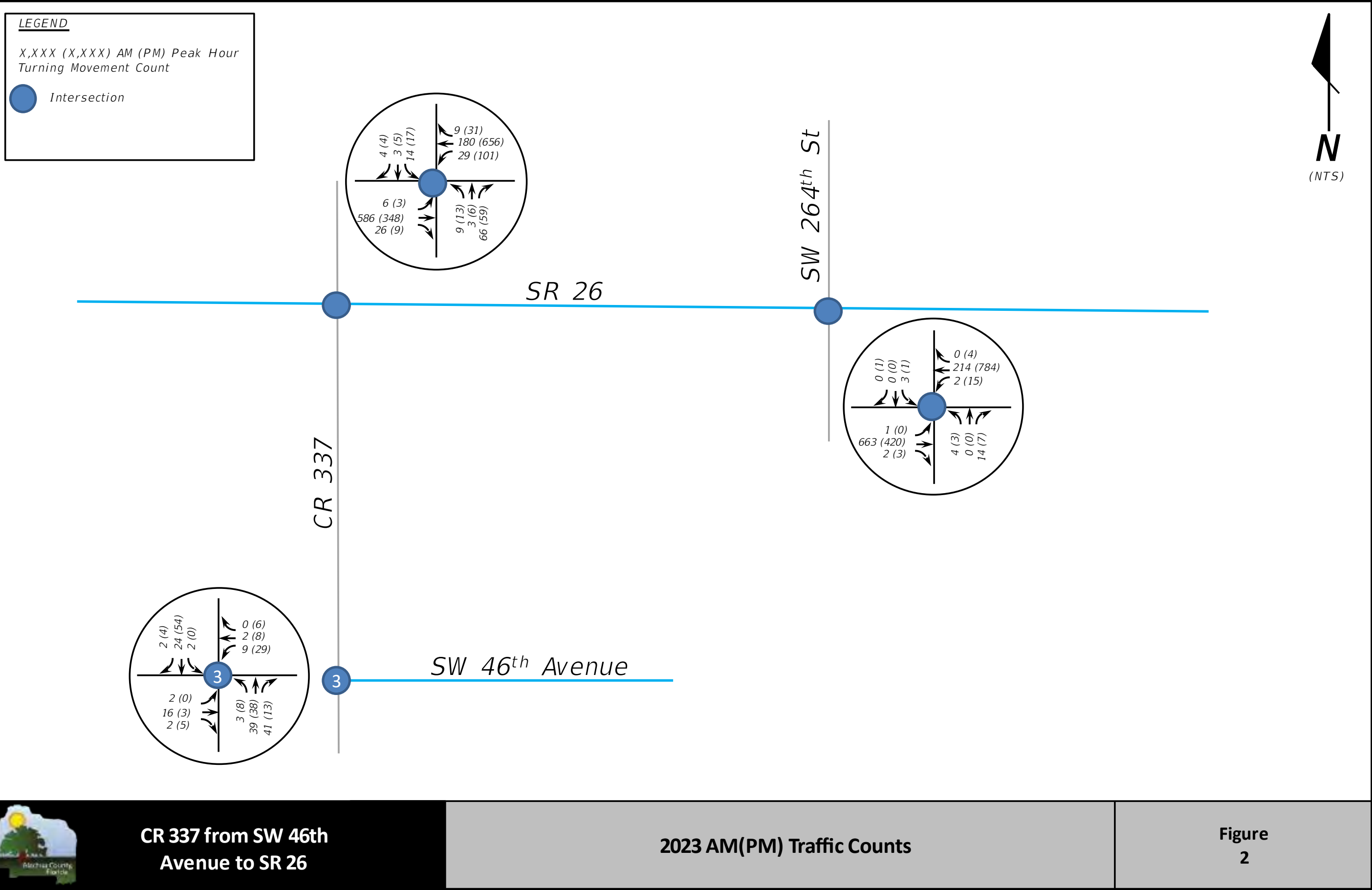
The No Build scenario assumes background traffic growth plus the addition of any new County owned/operated facilities within the study area. An adopted growth rate of 1.96% and a seasonal factor of 1.01 were applied to TMCs collected in June 2023 to develop traffic for 2025 and 2035. In addition, to background growth, the County expects a facility operated by Life Soils, LLC to be located along CR 337. This site is expected to generate 46 total trips per day (23 inbound/23 outbound). As these trips will occur outside the limits of the AM and PM peak hours, there is no impact to the traffic operations associated with this study. Tables 6 and 7 as well as Figures 2 through 4 provide 2023, 2025, and 2035 seasonally corrected counts for both the AM and PM peaks, respectively.

**Table 6: AM Turning Movement Counts**

Intersection	Year	Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
SR 26 and CR 337	2023	9	3	66	14	3	4	6	586	26	29	180	9
	2025	10	4	69	15	4	5	7	610	28	31	189	10
	2035	12	4	82	18	4	5	8	724	33	36	223	12
SR 26 and SW 264 <sup>th</sup> St	2023	4	0	14	3	0	0	1	663	2	2	214	0
	2025	5	0	15	4	0	0	2	689	3	3	223	0
	2035	5	0	18	4	0	0	2	819	3	3	266	0
CR 337 and SW 46 <sup>th</sup> Ave	2023	3	39	41	2	24	2	2	16	2	9	2	0
	2025	4	41	43	3	25	3	3	17	3	10	3	0
	2035	4	49	51	3	30	3	3	20	3	12	3	1


**Table 7: PM Turning Movement Counts**

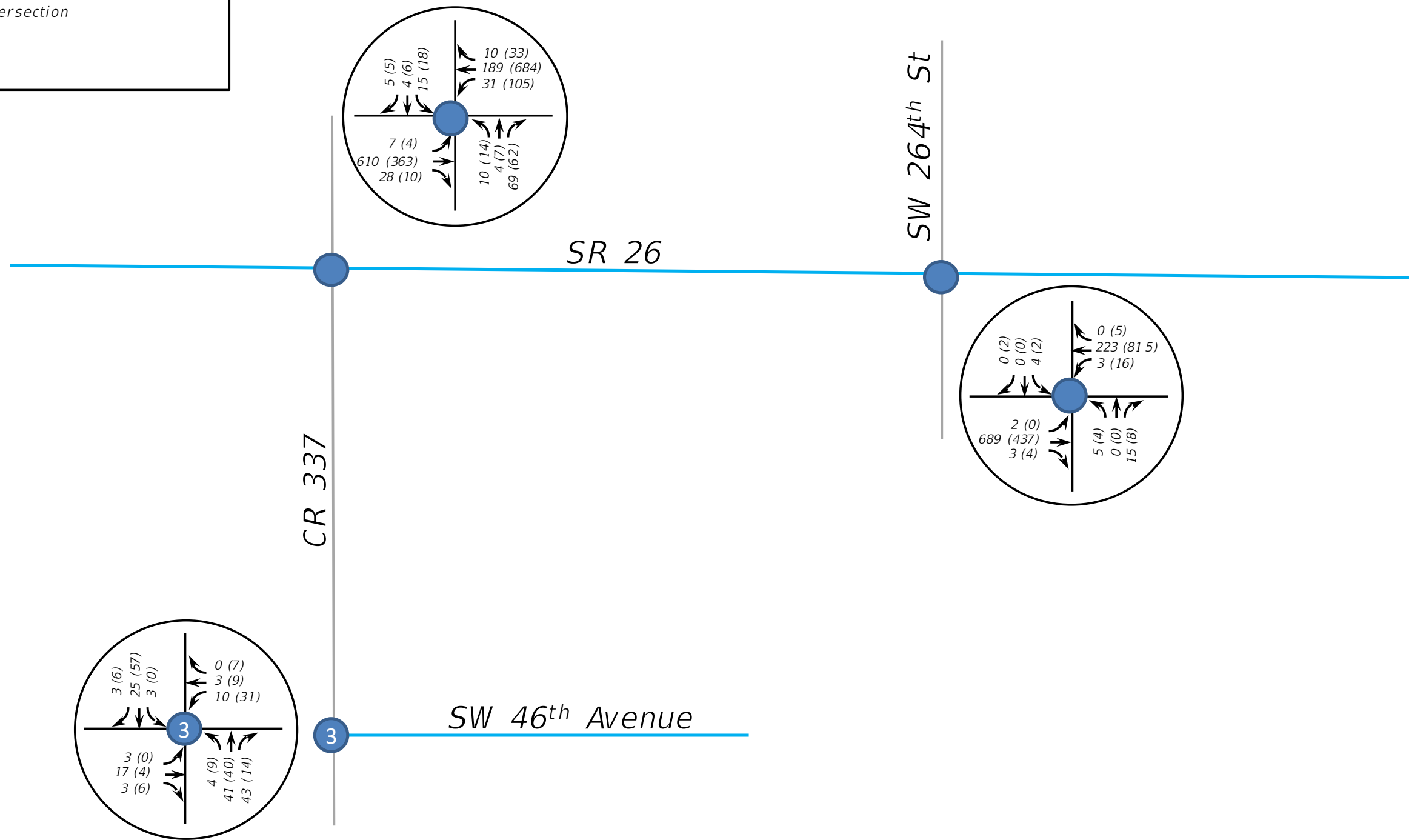
Intersection	Year	Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
SR 26 and CR 337	2023	13	6	59	17	5	4	3	348	9	101	656	31
	2025	14	7	62	18	6	5	4	363	10	105	684	33
	2035	17	8	73	21	7	5	4	430	12	125	811	39
SR 26 and SW 264 <sup>th</sup> St	2023	3	0	7	1	0	1	0	420	3	15	784	4
	2025	4	0	8	2	0	2	0	437	4	16	815	5
	2035	4	0	9	2	0	2	0	520	4	19	969	5
CR 337 and SW 46 <sup>th</sup> Ave	2023	8	38	13	0	54	5	0	3	5	29	8	6
	2025	9	40	14	0	57	6	0	4	6	31	9	7
	2035	10	47	17	0	67	7	0	4	7	36	10	8



**LEGEND**

X,XXX (X,XXX) AM (PM) Peak Hour  
Turning Movement Count

 Intersection




CR 337 from SW 46<sup>th</sup>  
Avenue to SR 26

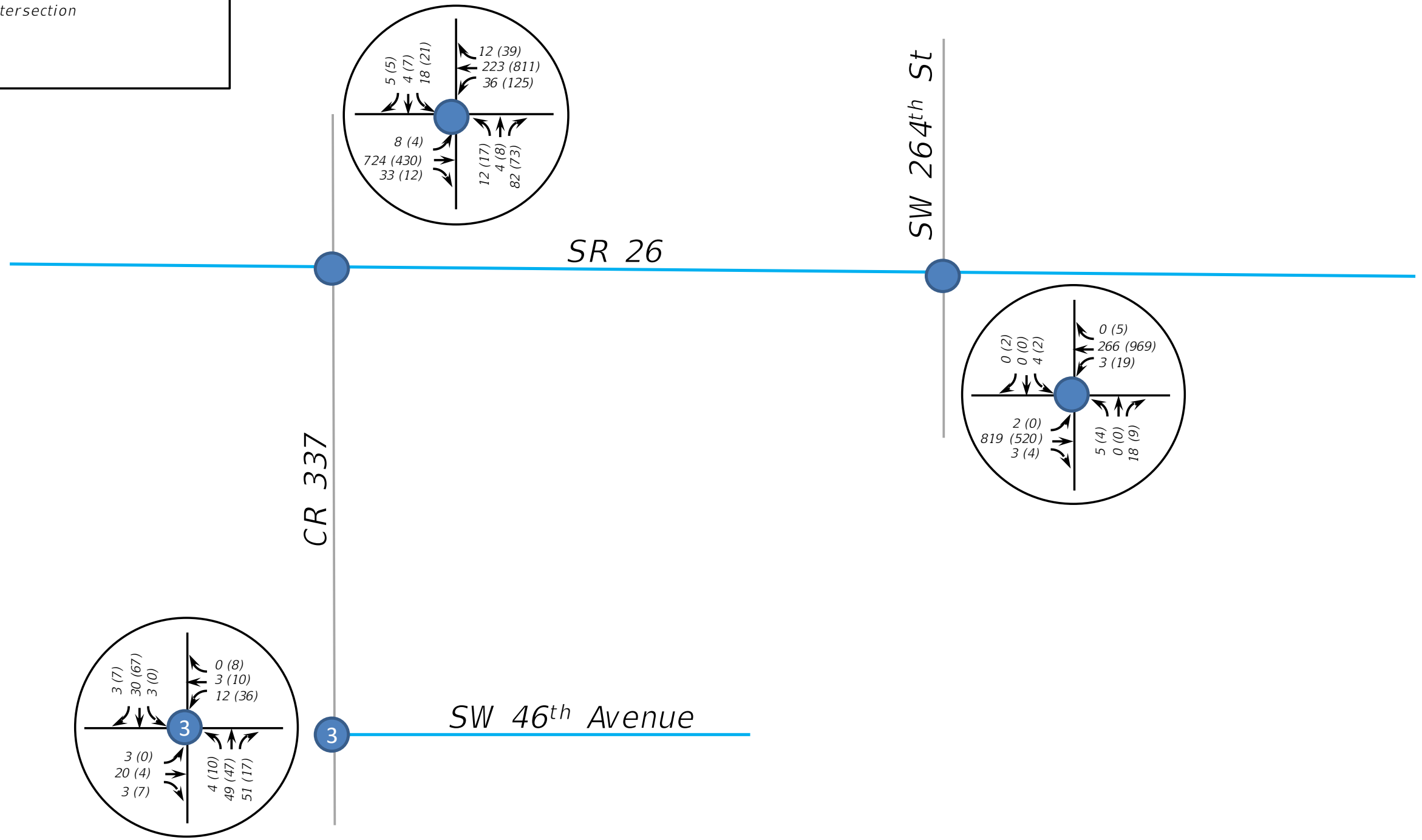
2025 AM(PM) Traffic Counts

Figure  
3

**LEGEND**

X,XXX (X,XXX) AM (PM) Peak Hour  
Turning Movement Count

 Intersection



**CR 337 from SW46th  
Avenue to SR 26**

**2035 AM(PM) Traffic Counts**

**Figure  
4**



## 5.2 Operational Analysis

Synchro 11.0 and FDOT 2020 Quality/Level of Service Handbook were used to analyze existing and future traffic conditions. Tables 8 through 13 summarize approach delay and level of service for each of the study intersections from Synchro 11.0 and Table 14 summarizes the arterial LOS from FDOT QLOS Handbook.

**Table 8: AM Existing Condition MOEs**

2023 AM Existing Condition MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.1		1.4		16.1	C	24.0	C
SR 26 and SW 264 <sup>th</sup> St	0		0.1		15.5	C	21.4	C
CR 337 and SW 46 <sup>th</sup> Ave	9.8	A	9.8	A	0.3		0.5	

**Table 9: PM Existing Condition MOEs**

2023 PM Existing Condition MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.2		1.3		26.5	D	72.3	F
SR 26 and SW 264 <sup>th</sup> St	0.0		0.2		18.9	C	26.1	D
CR 337 and SW 46 <sup>th</sup> Ave	9.2	A	9.9	A	1.0		0.0	

**Table 10: AM No Build Condition MOEs**

2025 AM MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.2		1.5		17.2	C	26.2	D
SR 26 and SW 264 <sup>th</sup> St	0.0		0.1		16.4	C	22.8	C
CR 337 and SW 46 <sup>th</sup> Ave	9.8	A	9.9	A	0.3		0.7	

**Table 11: PM No Build Condition MOEs**

2025 PM No Build Condition MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.2		1.3		32.4	D	97.1	F
SR 26 and SW 264 <sup>th</sup> St	0.0		0.2		19.3	C	28.9	D
CR 337 and SW 46 <sup>th</sup> Ave	9.2	A	10	B	1.1		0	

**Table 12: AM No Build Condition MOEs**

2035 AM No Build Condition MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.2		1.5		22.3	C	43.5	E
SR 26 and SW 264 <sup>th</sup> St	0.0		0.1		19.5	C	30.1	D
CR 337 and SW 46 <sup>th</sup> Ave	10.0	B	10.1	B	0.3		0.6	

**Table 13: PM No Build Condition MOEs**

2035 PM No Build Condition MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.2		1.4		92.2	F	342.7	F
SR 26 and SW 264 <sup>th</sup> St	0.0		0.2		28.4	D	40.8	E
CR 337 and SW 46 <sup>th</sup> Ave	9.3	A	10.3	B	1.0		0	

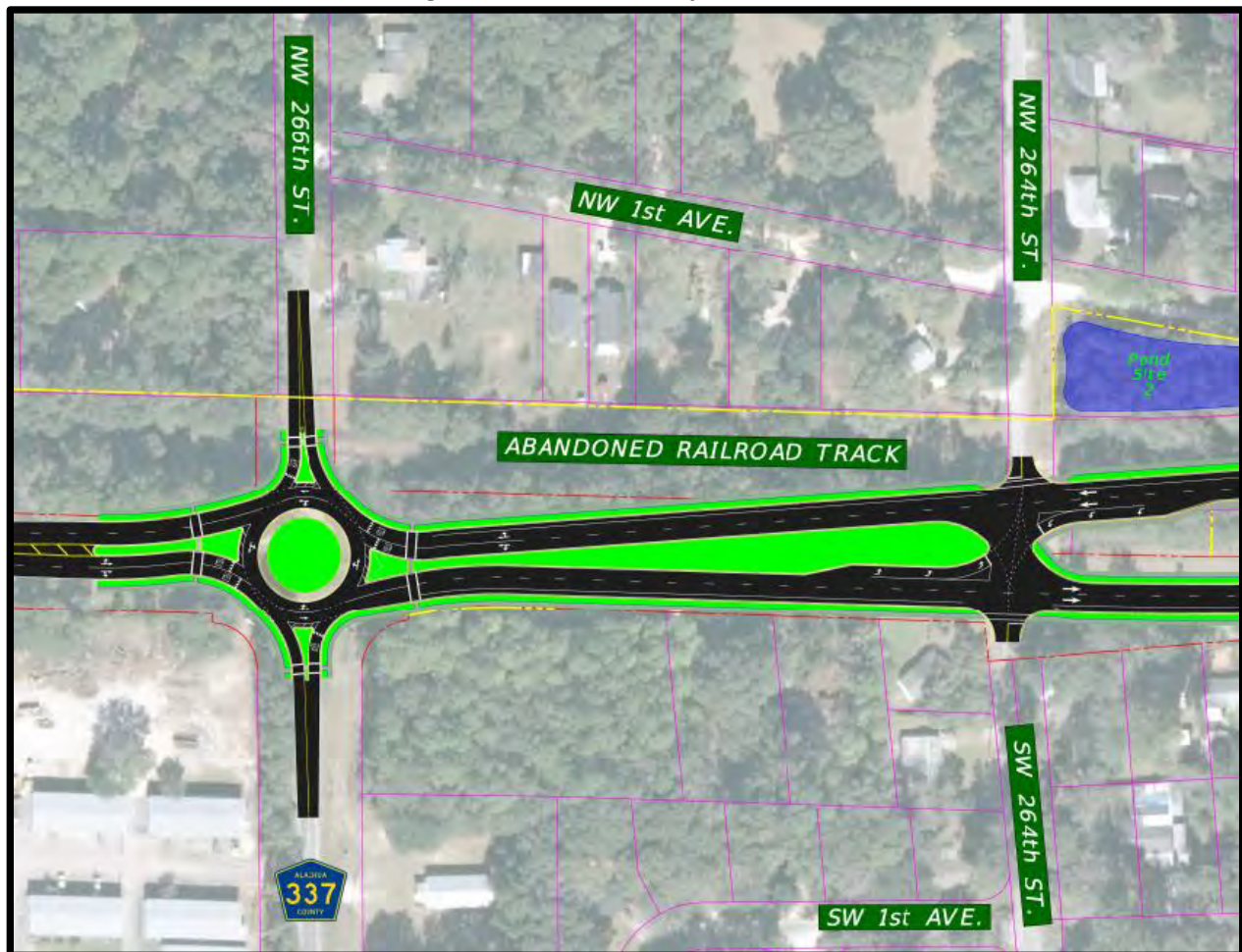
**Table 14: No Build Condition Arterial LOS**

Roadway Segment	Service Volume		2023 LOS		2025 LOS		2035 LOS (No Build)	
	AADT	LOS	AADT	LOS	AADT	LOS	AADT	LOS
CR 337	9,288	C	1,800	C	1,871	C	2,269	C
SR 26 (E of CR 337)	10,320	C	14,500	E	15,068	E	17,910	E
SR 26 (W of CR 337)			11,000	C	11,431	E	13,587	E
SW 46 <sup>th</sup> Ave	9,288	C	1,200	C	1,247	C	1,482	C

As shown in Table 9 and Table 11 the southbound approach at the intersection of SR 26 and CR 337 is experiencing higher delays despite the low volumes on the side street. Similarly, in the 2035 PM No Build Scenario, both SR 26 at CR 337 and SR 26 at SW 264<sup>th</sup> St northbound and southbound approaches are experiencing higher delays. These delays are common for the stop-controlled approaches at unsignalized intersections.

The FDOT's West Newberry Road Improvements Project (Financial Project ID 207850-2) evaluated the SR 26 corridor through Newberry and proposes to construct a roundabout at the CR 337 / SR 26 intersection and improve the SW 264<sup>th</sup> St / SR 26 intersection. These improvements would eliminate the operational issues identified in the 2035 No Build analysis. Figure 5 is a rendering of the proposed improvements.

Figure 5: FDOT SR 26 Improvements



### 5.3 Safety Analysis

Crash data was obtained from the University of Florida Signal Four Analytics (UFSFA) crash mapping and analysis system for the 60-month period from January 1, 2018, to December 31, 2022. There were 25 reported crashes during this period that resulted in 15 injuries, two (2) fatalities, and \$178,500 in property damage. Table 15 summarizes the crash type by year and Figure 6 provides a heatmap of the crash locations. A detailed summary of all the crashes can be found in Appendix D.

There were two (2) crashes resulting in two (2) fatalities along CR 337 during the study period. The first fatal crash was the result of an off-road event where the driver lost control and swerved across the road into a culvert before overturning. This occurred at the bend on CR 337, where the County Road transitions from SW 30<sup>th</sup> Ave to SW 266<sup>th</sup> St. The crash occurred during the day in cloudy weather, with a dry roadway surface. The driver of this vehicle was under alcohol and drug influence.

The second fatality was also a result of an off-road crash, which occurred when the driver failed to negotiate the curve where CR 337 transitions from SW 30<sup>th</sup> Ave to SW 282<sup>nd</sup> St. The vehicle traveled off the paved roadway, began to rotate, and finally overturned and rolled to a stop. The crash occurred at night with no lights illuminating the road at the location of the crash. The weather was clear and the road surface was dry. The driver involved in this crash was under alcohol influence.

Crashes related to driver impairment due to drugs and/or alcohol are not considered correctable through the introduction of safety countermeasures.

### Table 15: Crash Summary by Year

Type	2018	2019	2020	2021	2022	Total
Property Damage Only	2	4	3	3	3	15
Possible Injury	0	2	0	1	0	3
Non-Incapacitating Injury	2	1	0	1	1	5
Incapacitating Injury	0	0	0	0	0	0
Fatal	1	0	1	0	0	2
Total	5	7	4	5	4	25

### Figure 6: Collision Heat Map



## 5.4 Crash Rate Analysis

Based on the summary data in Table 15, the average number of crashes per year for the study segment is 5 crashes/year from 2018 to 2022. The crash rate was calculated using the formula below, expressed as the number of crashes per million vehicle miles (MVM). The actual crash rate is calculated from the number of crashes in a year, AADT, and the length of the segment based on the equation below:

$$\text{Crash Rate} = \frac{\text{Number of crashes per year} * 1,000,000}{(\text{AADT} * 365 \text{ days} * \text{segment length})}$$

$$022 \text{ Crash Rate} = \frac{5 * 1,000,000}{(1800 * 365 \text{ days} * 3.39)} = 2.24 \text{ crashes/MVM}$$

The crash rate was assumed to be constant through the design year 2035. Using the growth factor of 1.96%, the estimated AADT for 2035 is 2,224 vehicles. Using this forecasted AADT the following number of crashes can be forecasted for 2035 No Build condition.

$$\text{Number of crashes in 2035} = (2.24 * 2224 * 365 * 3.39) / 1,000,000 = 6.16 = 7 \text{ crashes/year}$$

The crash rate has also been estimated for the design year for each crash type as shown in Table 16.

**Table 16: 2035 Base Condition Crash Prediction**

Type	5 Years Crash Rate	2035 Crash Number
Property Damage Only	1.35	4
Possible Injury	0.27	1
Non-Incapacitating Injury	0.45	1
Incapacitating Injury	0.00	0
Fatal*	0.18*	0*
Total	2.24	7

\*Crashes due to driver impairment are not considered correctable and are removed from further analyses.

## 5.5 Proposed Improvement

Three scenarios have been considered as the improvements. With the introduction of the FDOT project at the intersection of SR 26 and CR 337, no improvements were considered at the intersection. With 10 of the 25 collisions along the corridor involving vehicles going off the road or hitting a tree/shrub adjacent to the road, widening the roadway is a possible corrective action. Per the draft 2023 Edition of the *FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways* (Florida Greenbook), a rural roadway section with average daily traffic greater than 1,500 vehicles per day, regardless of speed, requires 12-foot lanes unless the design speed is below 50 MPH (Table 3-20). CR 337 currently has ADTs above 1,800 vehicles per day. The following scenarios assume any roadway changes would be designed to the 50 MPH threshold.

- Scenario 1: Widening the roadway to 22 feet (11-foot lane in each direction)
- Scenario 2: Eliminate the curves and change the geometry to a four-leg intersection with an all-way stop control at SW 266<sup>th</sup> St and a three-leg all-way stop at SW 30<sup>th</sup> Ave
- Scenario 3: Increase the radius of the curves to maintain a 50 MPH design speed



The volumes for 2035 have been evaluated for the all-way stop control. Per the MUTCD minimum criteria, all-way stop control is not warranted at either location. The introduction of the all-way stop will likely increase rear-end collisions. Figure 7 through Figure 9 show high-level concepts of the proposed geometric changes.

**Figure 7: Scenario 2 - Curve Re-alignment at SW 30<sup>th</sup> Ave and SW 266<sup>th</sup> St**



**Figure 8: Scenario 2 - Curve Re-alignment at SW 30<sup>th</sup> Ave**



**Figure 9: Scenario 3 - Curve Re-alignment**



## 5.6 Benefit-Cost Analysis

A benefit-cost analysis has been conducted for the proposed improvements using Crash Modification Factors (CMF). Since crashes related to driver impairment due to drugs and/or alcohol are not considered correctable through the introduction of safety countermeasures, these crashes have been removed from the benefit-cost analysis. CMF documentation can be found in Appendix E.

Scenario 1: From the CMF Clearinghouse, the CMF for increasing 1 ft on both sides is 0.95. The CMF for 2 ft widening is  $= 0.950 \times 0.950 \times 0.929 = 0.847$

Scenario 2: From the CMF Clearinghouse, the CMF for flattening/removing the horizontal curve is 0.330. With the combination of flattening the curve and 2 ft widening with milling and resurfacing the existing pavement, the CMF for this scenario is  $= 0.33 \times 0.847 \times 1.03 = 0.288$

Scenario 3: Similar to Scenario 2, the CMF for flattening/removing the horizontal curve is 0.330. With the combination of flattening the curve and 2 ft widening with milling and resurfacing the existing pavement, the CMF for this scenario is  $= 0.33 \times 0.847 = 0.280$

The predicted crash number for year 2035 after applying the CMF is shown in Table 17.

**Table 17: 2035 Base Condition Crash Prediction After Improvement**

Type	2035 Crash Number	Scenario 1	Scenario 2	Scenario 3
Property Damage Only	4	3	1	1
Possible Injury	1	1	0	0
Non-Incapacitating Injury	1	1	0	0
Incapacitating Injury	0	0	0	0
Total	6	5	1	1

Table 18 provides the 2020 FDOT Design Manual KABCO Crash Costs escalated to 2035.

**Table 18: FDOT CABCO Crash Cost**

Crash Severity	Comprehensive Crash Cost (2020)	Predicted Cost for 2035 (i=3%)
Fatal (K)	\$10,890,000	\$16,966,265
Severe Injury (A)	\$888,030	\$1,383,522
Moderate Injury (B)	\$180,180	\$280,715
Minor Injury (C)	\$103,950	\$161,951
Property Damage Only (O)	\$7,700	\$11,996

The construction and improvement costs for all the scenarios have been evaluated. Table 19 shows the cost estimation for the proposed improvements for the current year (2023) and the future year (2035). The benefit for each scenario has also been calculated using the number of crashes reduced by the implementation of countermeasures along with the predicted cost for the future year for each crash type and extrapolated over 12 years. Right-of-way (R/W) acquisition has not been considered towards the improvement cost. The B/C ratio of scenarios 2 and 3 will decrease with the introduction of R/W costs. The details of improvement cost are shown in Appendix F.

**Table 19: Improvement Cost – No Build Condition**

Scenarios	2023 Improvement Cost	2035 Improvement Cost	Benefit from Crash Reduction	B/C Ratio
Scenario 1	\$4,995,500	\$7,122,389	\$143,952	0.02
Scenario 2	\$6,995,800	\$9,974,338	\$5,743,848	0.58*
Scenario 3	\$11,514,900	\$16,417,494	\$5,743,848	0.34*

*\*Cost of R/W accusation not included*



## 6.0 Traffic and Operational Analysis –Build Condition

### 6.1 Background Traffic

The Westone Residential Development is a proposed project situated at the southwest corner of the SR 26 and CR 337 intersection. Westone is slated to comprise a total of 850 single-family residential units. Among these, 681 will be detached single-family homes, and 169 will be townhouse-style attached single-family homes. The anticipated completion timeline for this development is set for the year 2035.

A Traffic Impact Analysis (TIA) report developed by Hagan Consultant Services LLC for the proposed Westone Residential Development details the expected trip generation and distribution of the site. The TIA report considered access to the development primarily via SR 26 and CR 337. The TIA report is attached as Appendix G.

Table 20, as well as Figure 10 and Figure 11, provide the 2035 seasonally corrected peak hour traffic counts along development traffic.

**Table 20: 2035 Build Condition TMC**

Intersection	Peak	Northbound			Southbound			Eastbound			Westbound		
		L	T	R	L	T	R	L	T	R	L	T	R
SR 26 and CR 337	AM	12	4	207	18	4	5	8	939	33	80	298	12
	PM	17	8	160	21	7	5	4	580	12	269	1060	39
SR 26 and SW 264 <sup>th</sup> St	AM	5	0	18	4	0	0	2	1159	3	3	385	0
	PM	4	0	9	2	0	2	0	757	4	19	1362	5
CR 337 and SW 46 <sup>th</sup> Ave	AM	4	49	51	3	30	3	3	20	3	12	3	0
	PM	10	47	17	0	67	7	0	4	7	36	10	8

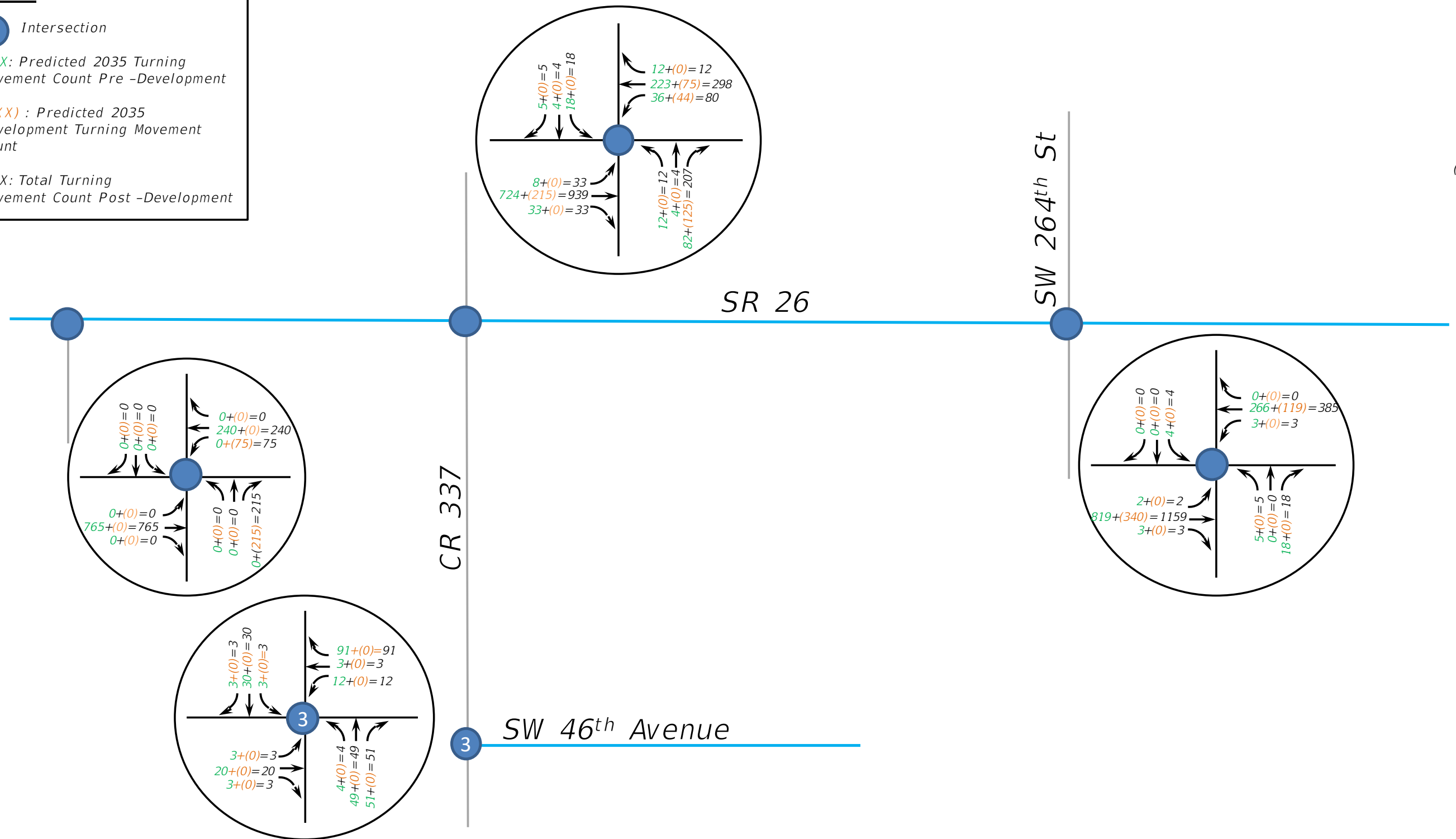
**LEGEND**

 Intersection

XXX: Predicted 2035 Turning Movement Count Pre -Development

(XXX): Predicted 2035 Development Turning Movement Count

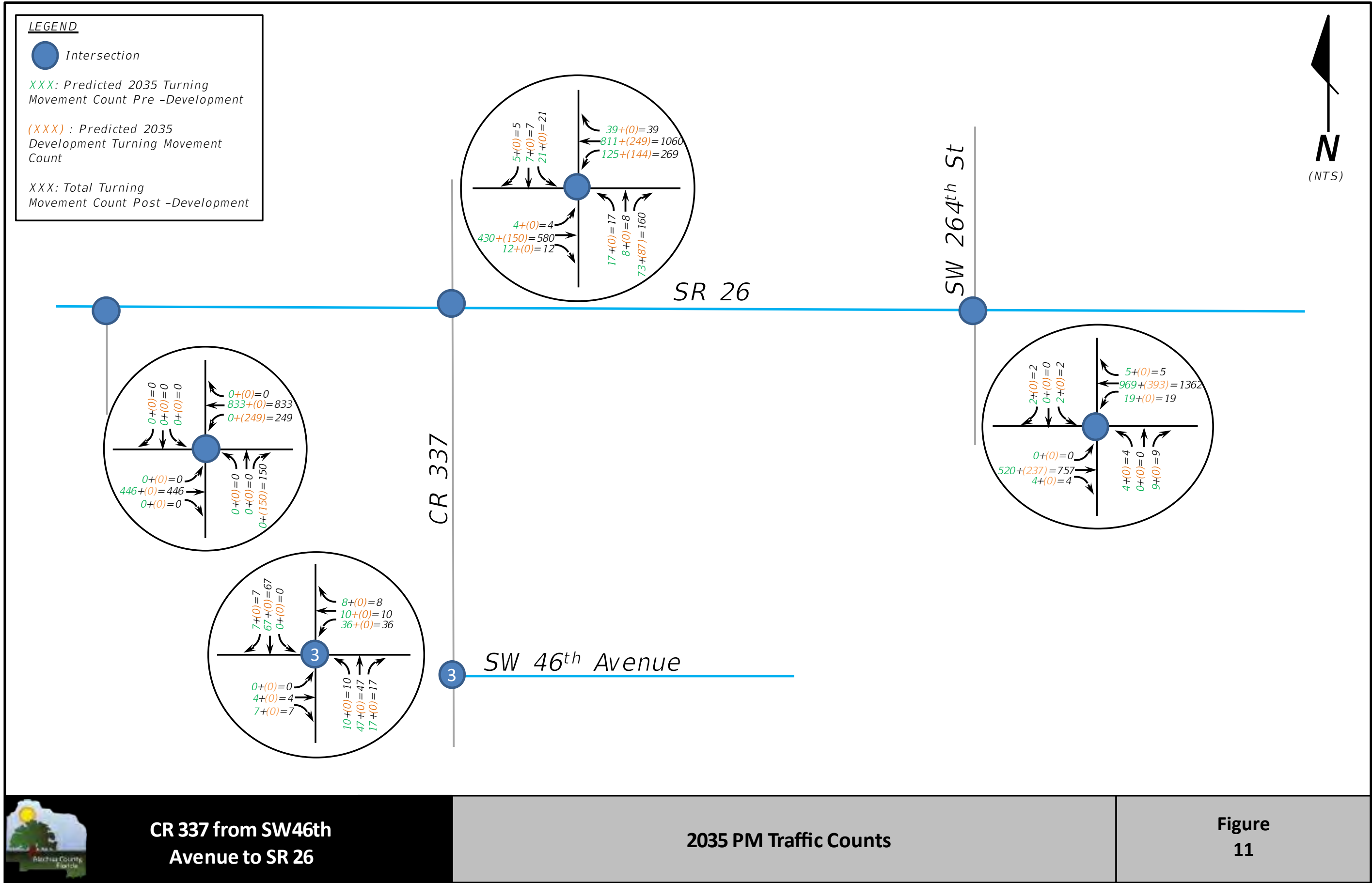
XXX: Total Turning Movement Count Post -Development



CR 337 from SW 46th Avenue to SR 26

2035 AM Traffic Counts

Figure 10



## 6.2 Operational Analysis

Synchro 11.0 and FDOT 2020 Quality/Level of Service Handbook were used to analyze Build condition future traffic conditions based on the 2035 forecasted volumes and the movement due to development. Table 21 and Table 22 summarize approach delay and level of service for each of the two-way stop-controlled intersections from Synchro 11.0 and Table 23 summarizes the arterial LOS from FDOT QLOS Handbook.

**Table 21: AM Build Condition MOEs**

2035 AM Build Condition MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.1		2.7		127.7	F	1685	E
SR 26 and SW 264 <sup>th</sup> St	0.0		0.1		35.1	E	66.3	F
CR 337 and SW 46 <sup>th</sup> Ave	10.0	B	10.1	B	0.3		0.6	

**Table 22: PM Build Condition MOEs**

2035 PM Build Condition MOE								
Intersection	Approach							
	Eastbound		Westbound		Northbound		Southbound	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
SR 26 and CR 337	0.2		2.6		*	F	*	F
SR 26 and SW 264 <sup>th</sup> St	0.0		0.1		98.4	F	134.1	F
CR 337 and SW 46 <sup>th</sup> Ave	9.3	A	10.3	B	1.0		0	

\*Volume exceeds capacity

**Table 23: Build Condition Arterial LOS**

Roadway Segment	Service Volume		2023 LOS		2035 LOS (Build)	
	AADT	LOS	AADT	LOS	AADT	LOS
CR 337	9,288	C	1,800	C	4,622	C
SR 26 (E of CR 337)	10,320	C	14,500	E	24,328	E
SR 26 (W of CR 337)			11,000	C	17,652	E
SW 46 <sup>th</sup> Ave	9,288	C	1,200	C	1,482	C

With the FDOT improvements slated for the intersections at SR 26 at CR 337 and SR 26 at SW 264<sup>th</sup> St, the future operations of these intersections are expected to meet level of service standards. The Westone development is not expected to distribute traffic to the south on CR 337 and therefore operations at SW 46<sup>th</sup> Ave will continue to meet level of service standards. From an arterial operations perspective, CR 337 has adequate capacity to accommodate the traffic demand through 2035. The FDOT SR 26 improvements will address the capacity issues associated with the state road.

### 6.3 Safety Analysis

According to the TIA, there are 7,131 estimated trips generated from the development in the design year 2035 and 33 percent of that traffic will be traveling on CR 337. Combining the background traffic and the development traffic results in an AADT for the design year 2035 of 4,578 on CR 337. Using the previously calculated crash rate crash rate of 2.24, the number of predicted crashes in 2035 after the development can be calculated using the following formula,

$$\text{Number of crashes in 2035} = (2.24 * 4578 * 365 * 3.39) / 1,000,000 = 12.69 = 13 \text{ crashes/year}$$

The crash rate has also been estimated for the 2035 Build condition for each crash type as shown in Table 24.

**Table 24: 2035 Build Condition Crash Prediction**

Type	2025 Total	5 Years Crash Rate	2035 Crash Number
Property Damage Only	15	1.35	8
Possible Injury	3	0.27	1
Non-Incapacitating Injury	5	0.45	3
Incapacitating Injury	0	0.00	0
Fatal	2*	0.18*	-
Total	25	2.24	12

\*Crashes due to driver impairment are not considered correctable and are removed from further analyses.

### 6.4 Proposed Improvement:

The proposed improvements for the Build condition are the same as the background condition of 2035.

- Scenario 1: Widening the roadway to 22 ft (11ft lane in each direction)
- Scenario 2: Eliminate the curves and change the geometry to a four-leg intersection with all-way stop control.
- Scenario 3: Flatten the curves to accommodate a 50 MPH design speed.

### 6.5 Benefit-Cost Analysis:

To evaluate the benefit-cost for the future build year 2035 with the proposed development, the same CMF has been used as the No Build condition since the proposed improvement is similar.

The predicted crash number for the year 2035, after applying the CMF, is shown in Table 25

**Table 25: 2035 Base Scenario Crash Prediction After Improvement**

Type	2035 Crash Number	Scenario 1	Scenario 2	Scenario 3
Property Damage Only	8	6	2	2
Possible Injury	1	1	0	0
Non-Incapacitating Injury	3	2	1	1
Incapacitating Injury	0	0	0	0
Total	12	9	3	3

Table 26 provides the 2020 FDOT Design Manual KABCO Crash Costs with an escalation to 2035.

**Table 26: FDOT CABCO Crash Cost**

Crash Severity	Comprehensive Crash Cost (2020)	Predicted Cost for 2035 (i=3%)
Fatal (K)	\$10,890,000	\$16,966,265
Severe Injury (A)	\$888,030	\$1,383,522
Moderate Injury (B)	\$180,180	\$280,715
Minor Injury (C)	\$103,950	\$161,951
Property Damage Only (O)	\$7,700	\$11,996

The construction and improvement costs for each scenario have been evaluated. Table 27 shows the cost estimation for the proposed improvements for the current year (2023) and the future year (2035). The benefit for each scenario has also been calculated by the number of crash reductions with the predicted cost for the future year for each crash type. The cost of R/W acquisition has not been considered towards the improvement cost. The B/C ratio of scenarios 2 and 3 will be lower with the introduction of R/W acquisition. The details of improvement cost are shown in Appendix F.

**Table 27: Improvement Cost – Build Condition**

Scenarios	2023 Improvement Cost	2035 Improvement Cost	Benefit from crash reduction	B/C Ratio
Scenario 1	\$4,995,500	\$7,122,389	\$3,656,484	0.51
Scenario 2	\$6,995,800*	\$9,974,338*	\$9,544,284	0.96*
Scenario 3	\$11,514,900	\$16,417,494	\$9,544,284	0.58*

*\*Cost of R/W acquisition not included*

## 7.0 Conclusion

This study was conducted to investigate if geometric improvements are necessary along CR 337 from SW 46th Ave to SR 26 based on future traffic volumes and safety issues. The study evaluated existing conditions and two future years, 2025 and 2035 with a focus on three intersections (SR 26 at CR 337, SR 26 at SW 264th St, and CR 337 at SW 46th Ave) and the two curves along CR 337. The No Build condition considered background traffic growth and the inclusion of County owned/operated facilities along CR 337 for the years 2025 and 2035. The Build condition included the same growth as the No Build condition plus the addition of the Westone Residential Development. The growth rate was determined as 1.96% based on three sources (i) FDOT Trend Analysis (ii) Bureau of Economic and Business Research (BEBR) (iii) Gainesville Urbanized Area Transportation Study Model's (GUATS). Westone development traffic was extracted from the developer's traffic impact study.

Based on the 2035 No Build condition operational analysis, higher delays are anticipated on the northbound and southbound approaches of the SR 26 at CR 337 and SR 26 at SW 264th St intersections. Delays at these two intersections are increased in the Build condition with the introduction of the Westone development traffic. The intersection of CR 337 at SW 46th Ave operates acceptably under the No Build and Build conditions. The arterial Level of Service of CR 337 remains adequate for both Build and No Build conditions. FDOT's West Newberry Road Improvements Project (Financial Project ID 207850-2) proposes a roundabout at the intersection of SR 26 and CR 337 and improvements at the SR 26 and SW 264th St intersection. This project will address any operational issues associated with these SR 26 intersections.

The safety analysis used crash data from the University of Florida Signal Four Analytics (UFSFA) crash mapping and analysis system for the 60-month period from January 1, 2018, to December 31, 2022. During this period, twenty-five (25) crashes occurred, of which two (2) of them were fatal crashes. Both fatal crashes occurred on a dry roadway surface while drivers were under alcohol/drug influence in both instances. Crashes related to driver impairment due to drugs and/or alcohol are not considered correctable through the introduction of safety countermeasures. Based on the safety analysis, 7 crashes are anticipated to occur in 2035 under the No Build condition while 13 crashes are anticipated to occur in 2035 under the Build condition. This increase is due to the increase in traffic due to the development.

As a means to minimize future crashes, three (3) safety improvements were considered. The first evaluated the crash reduction associated with widening the roadway to 22 feet (11-foot lane in each direction), the second considered widening the roadway while also eliminating the curves by converting each to all-way stop-controlled intersections, and the third increased the radius of the curves to accommodate a 50 MPH design speed.

In order to substantiate improvements within the study area, a comprehensive benefit-cost (B/C) analysis was conducted to provide insights into the feasibility and potential advantages of these safety improvements. The construction and improvement costs for safety countermeasures were evaluated based on FDOT Design Manual KABCO Crash Costs. The benefit of safety countermeasures was estimated by the number of crashes reduced and the associated crash cost. Crashes associated with impaired drives were removed from the analysis as these are not considered susceptible to correction. A B/C ratio higher than 1.0 suggests benefits outweigh the costs of an improvement and further consideration should be given to implementing the improvement. Based on the B/C ratios associated with each improvement in the No Build and Build conditions, none of the improvements are considered feasible. Therefore, this study does not recommend installing any improvements at this time.

# APPENDIX A

## Traffic Movement Count



**CR 337 (SW 282nd St) and SW 46th Ave  
Newberry, Florida  
Wednesday, June 14, 2023**

Time	Southbound CR 337 (SW 282ndSt)						Westbound SW 46th Ave						Northbound CR 337 (SW 282ndSt)						Eastbound SW 46th Ave						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	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
12:15 AM	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
12:30 AM	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
12:45 AM	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
Hourly 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
1:00 AM	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
1:15 AM	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
1:30 AM	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
1:45 AM	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
Hourly 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
2:00 AM	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
2:15 AM	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
2:30 AM	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
2:45 AM	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
Hourly 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
3:00 AM	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
3:15 AM	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
3:30 AM	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
3:45 AM	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
Hourly 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
4:00 AM	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
4:15 AM	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
4:30 AM	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
4:45 AM	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
Hourly 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
5:00 AM	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
5:15 AM	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
5:30 AM	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
5:45 AM	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
Hourly 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
6:00 AM	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
6:15 AM	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
6:30 AM	0	1	2	1	0	4	0	1	0	0	0	1	0	0	12	10	0	22	0	0	4	1	0	5	32
6:45 AM	0	1	3	3	0	7	0	4	0	1	0	5	0	1	15	11	0	27	0	1	0	1	0	2	41
Hourly Total	0	2	5	4	0	11	0	5	0	1	0	6	0	1	27	21	0	49	0	1	4	2	0	7	73
7:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	8	11	0	20	0	0	4	1	0	5	27
7:15 AM	0	1	5	2	0	8	0	3	0	0	0	3	0	1	8	9	0	18	0	0	3	0	0	3	32
7:30 AM	0	0	8	0	0	8	0	4	1	0	0	5	0	0	11	11	0	22	0	0	5	1	0	6	41
7:45 AM	0	1	5	0	0	6	0	1	0	0	0	1	0	2	12	9	0	23	0	1	4	0	0	5	35
Hourly Total	0	2	20	2	0	24	0	8	1	0	0	9	0	4	39	40	0	83	0	1	16	2	0	19	135

**CR 337 (SW 282nd St) and SW 46th Ave**  
**Newberry, Florida**  
**Wednesday, June 14, 2023**

Time	Southbound CR 337 (SW 282ndSt)						Westbound SW 46th Ave						Northbound CR 337 (SW 282ndSt)						Eastbound SW 46th Ave						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
8:00 AM	0	0	6	0	0	6	0	1	1	0	0	2	0	0	8	12	0	20	0	1	4	1	0	6	34
8:15 AM	0	1	8	0	0	9	1	2	3	1	0	7	0	0	8	6	0	14	0	0	0	1	0	1	31
8:30 AM	0	0	3	0	0	3	0	2	1	0	0	3	0	0	9	7	0	16	0	2	2	1	0	5	27
8:45 AM	0	1	8	0	0	9	0	2	1	0	0	3	0	3	10	4	0	17	0	0	2	0	0	2	31
Hourly Total	0	2	25	0	0	27	1	7	6	1	0	15	0	3	35	29	0	67	0	3	8	3	0	14	123
9:00 AM	0	0	2	0	0	2	0	1	0	0	0	1	0	0	5	5	0	10	0	0	3	0	0	3	16
9:15 AM	0	0	4	0	0	4	0	6	0	1	0	7	0	1	8	5	0	14	0	0	0	2	0	2	27
9:30 AM	0	0	13	0	0	13	0	0	0	1	0	1	0	1	6	4	0	11	0	0	3	0	0	3	28
9:45 AM	0	1	5	0	0	6	0	7	1	0	0	8	0	1	3	3	0	7	0	1	3	2	0	6	27
Hourly Total	0	1	24	0	0	25	0	14	1	2	0	17	0	3	22	17	0	42	0	1	9	4	0	14	98
10:00 AM	0	0	4	1	0	5	0	0	1	0	0	1	0	0	3	6	0	9	0	0	2	2	0	4	19
10:15 AM	0	1	6	0	0	7	0	2	2	0	0	4	0	0	5	3	0	8	0	0	6	1	0	7	26
10:30 AM	0	0	4	1	0	5	0	1	1	0	0	2	0	0	3	5	0	8	0	0	0	0	0	0	15
10:45 AM	0	1	3	0	0	4	0	3	1	0	0	4	0	0	9	3	0	12	0	1	2	0	0	3	23
Hourly Total	0	2	17	2	0	21	0	6	5	0	0	11	0	0	20	17	0	37	0	1	10	3	0	14	83
11:00 AM	0	0	4	0	0	4	0	2	1	0	0	3	0	0	10	3	0	13	0	1	0	0	0	1	21
11:15 AM	0	0	7	0	0	7	0	2	1	0	0	3	0	1	4	1	0	6	0	0	4	0	0	4	20
11:30 AM	0	1	5	0	0	6	0	0	1	3	0	4	0	0	4	6	0	10	1	0	1	0	0	2	22
11:45 AM	0	0	7	1	0	8	0	7	0	0	0	7	0	0	6	4	0	10	0	0	0	0	0	0	25
Hourly Total	0	1	23	1	0	25	0	11	3	3	0	17	0	1	24	14	0	39	1	1	5	0	0	7	88
12:00 PM	0	0	6	1	0	7	0	2	2	2	0	6	0	0	7	6	0	13	0	0	2	1	0	3	29
12:15 PM	0	0	8	0	0	8	0	3	5	0	0	8	0	0	6	6	0	12	0	1	0	2	0	3	31
12:30 PM	0	1	5	0	0	6	0	6	0	0	0	6	0	1	8	4	0	13	0	0	1	1	0	2	27
12:45 PM	0	0	7	0	0	7	0	2	4	1	0	7	0	1	4	3	0	8	0	0	1	0	0	1	23
Hourly Total	0	1	26	1	0	28	0	13	11	3	0	27	0	2	25	19	0	46	0	1	4	4	0	9	110
1:00 PM	0	1	10	0	0	11	0	1	1	4	0	6	0	0	7	0	0	7	0	0	0	1	0	1	25
1:15 PM	0	2	11	0	0	13	0	5	2	1	0	8	0	1	2	3	0	6	0	0	3	0	0	3	30
1:30 PM	0	0	2	0	0	2	0	2	2	1	0	5	0	4	6	1	0	11	0	2	1	1	0	4	22
1:45 PM	0	0	7	1	0	8	0	1	4	1	0	6	0	0	7	3	0	10	0	0	2	1	0	3	27
Hourly Total	0	3	30	1	0	34	0	9	9	7	0	25	0	5	22	7	0	34	0	2	6	3	0	11	104
2:00 PM	0	0	6	1	0	7	0	1	2	1	0	4	0	1	3	4	0	8	0	2	1	0	0	3	22
2:15 PM	0	0	5	1	0	6	0	2	0	0	0	2	0	1	3	3	0	7	0	0	2	0	0	2	17
2:30 PM	0	0	11	2	0	13	0	8	2	1	0	11	1	0	6	2	0	9	0	0	2	2	0	4	37
2:45 PM	0	0	9	0	0	9	0	4	1	1	0	6	0	0	9	3	0	12	0	1	0	3	0	4	31
Hourly Total	0	0	31	4	0	35	0	15	5	3	0	23	1	2	21	12	0	36	0	3	5	5	0	13	107
3:00 PM	0	0	7	0	0	7	0	3	1	0	0	4	0	0	9	3	0	12	0	0	0	0	0	0	23
3:15 PM	0	1	8	1	0	10	0	5	0	1	0	6	0	0	9	2	0	11	0	0	0	0	0	0	27
3:30 PM	0	1	5	1	0	7	0	6	1	2	0	9	0	1	7	1	0	9	0	0	0	1	0	1	26
3:45 PM	0	2	4	2	0	8	0	3	4	1	0	8	0	2	5	3	0	10	0	1	1	0	0	2	28
Hourly Total	0	4	24	4	0	32	0	17	6	4	0	27	0	3	30	9	0	42	0	1	1	1	0	3	104

**CR 337 (SW 282nd St) and SW 46th Ave**  
**Newberry, Florida**  
**Wednesday, June 14, 2023**

Time	Southbound CR 337 (SW 282ndSt)						Westbound SW 46th Ave						Northbound CR 337 (SW 282ndSt)						Eastbound SW 46th Ave						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:00 PM	0	0	14	1	0	15	0	8	1	1	0	10	0	5	8	6	0	19	0	0	1	1	0	2	46
4:15 PM	0	0	14	1	0	15	0	6	4	4	0	14	0	2	11	5	0	18	0	0	1	3	0	4	51
4:30 PM	0	0	14	1	0	15	0	8	2	1	0	11	0	0	12	1	0	13	0	0	0	1	0	1	40
4:45 PM	0	0	12	2	0	14	0	7	1	0	0	8	0	1	7	1	0	9	0	0	1	0	0	1	32
Hourly Total	0	0	54	5	0	59	0	29	8	6	0	43	0	8	38	13	0	59	0	0	3	5	0	8	169
5:00 PM	0	0	5	1	0	6	0	9	3	2	0	14	0	0	11	3	0	14	0	0	1	1	0	2	36
5:15 PM	0	0	24	1	0	25	0	6	2	0	0	8	0	1	6	1	0	8	0	0	0	0	0	0	41
5:30 PM	0	0	7	0	0	7	0	8	2	1	0	11	0	2	7	7	0	16	0	0	0	0	0	0	34
5:45 PM	0	0	12	0	0	12	0	9	2	2	0	13	0	0	5	1	0	6	0	1	0	1	0	2	33
Hourly Total	0	0	48	2	0	50	0	32	9	5	0	46	0	3	29	12	0	44	0	1	1	2	0	4	144
6:00 PM	0	0	18	2	0	20	0	9	1	1	0	11	0	1	4	2	0	7	0	0	3	0	0	3	41
6:15 PM	0	1	9	0	0	10	0	5	0	2	0	7	0	2	11	5	0	18	0	0	0	1	0	1	36
6:30 PM	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
6:45 PM	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
Hourly Total	0	1	27	2	0	30	0	14	1	3	0	18	0	3	15	7	0	25	0	0	3	1	0	4	77
7:00 PM	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
7:15 PM	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
7:30 PM	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
7:45 PM	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
Hourly 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
8:00 PM	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
8:15 PM	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
8:30 PM	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
8:45 PM	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
Hourly 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
9:00 PM	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
9:15 PM	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
9:30 PM	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
9:45 PM	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
Hourly 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
10:00 PM	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
10:15 PM	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
10:30 PM	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
10:45 PM	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
Hourly 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
11:00 PM	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
11:15 PM	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
11:30 PM	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
11:45 PM	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
Hourly 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
<b>DAILY TOTAL</b>	<b>0</b>	<b>19</b>	<b>354</b>	<b>28</b>	<b>0</b>	<b>401</b>	<b>1</b>	<b>180</b>	<b>65</b>	<b>38</b>	<b>0</b>	<b>284</b>	<b>1</b>	<b>38</b>	<b>347</b>	<b>217</b>	<b>0</b>	<b>603</b>	<b>1</b>	<b>16</b>	<b>75</b>	<b>35</b>	<b>0</b>	<b>127</b>	<b>1415</b>
<b>Cars</b>	0	17	331	28	0	376	1	174	60	37	0	272	1	34	331	213	0	579	1	16	74	34	0	125	1352
<b>Heavy Vehicles</b>	0	2	23	0	0	25	0	6	5	1	0	12	0	4	16	4	0	24	0	0	1	1	0	2	63
<b>Heavy Vehicle %</b>	0.00%	10.53%	6.50%	0.00%	0.00%	6.23%	0.00%	3.33%	7.69%	2.63%	0.00%	4.23%	0.00%	10.53%	4.61%	1.84%	0.00%	3.98%	0.00%	0.00%	1.33%	2.86%	0.00%	1.57%	4.45%

**CR 337 (SW 282nd St) and SW 46th Ave**  
**Newberry, Florida**  
**Wednesday, June 14, 2023**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
7:15 AM	0	1	5	2	0	8	0	3	0	0	0	3	0	1	8	9	0	18	0	0	3	0	0	3	32
7:30 AM	0	0	8	0	0	8	0	4	1	0	0	5	0	0	11	11	0	22	0	0	5	1	0	6	41
7:45 AM	0	1	5	0	0	6	0	1	0	0	0	1	0	2	12	9	0	23	0	1	4	0	0	5	35
8:00 AM	0	0	6	0	0	6	0	1	1	0	0	2	0	0	8	12	0	20	0	1	4	1	0	6	34
Peak Hour Total PHF	0.000	0.500	0.750	0.250	0.000	0.875	0.000	0.563	0.500	0.000	0.000	0.550	0.000	0.375	0.813	0.854	0.000	0.902	0.000	0.500	0.800	0.500	0.000	0.833	0.866

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:00 PM	0	0	14	1	0	15	0	8	1	1	0	10	0	5	8	6	0	19	0	0	1	1	0	2	46
4:15 PM	0	0	14	1	0	15	0	6	4	4	0	14	0	2	11	5	0	18	0	0	1	3	0	4	51
4:30 PM	0	0	14	1	0	15	0	8	2	1	0	11	0	0	12	1	0	13	0	0	0	1	0	1	40
4:45 PM	0	0	12	2	0	14	0	7	1	0	0	8	0	1	7	1	0	9	0	0	1	0	0	1	32
Peak Hour Total PHF	0.000	0.000	0.964	0.625	0.000	0.983	0.000	0.906	0.500	0.375	0.000	0.768	0.000	0.400	0.792	0.542	0.000	0.776	0.000	0.000	0.750	0.417	0.000	0.500	0.828

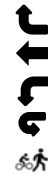
Total Vehicles On Leg				802			
Vehicles Entering Intersection			401	Vehicles Exiting Intersection			401
Southbound							
Cars	28	331	17	0	0	0	
Heavy	0	23	2	0	0	0	
Total	28	354	19	0	0	0	



Total Vehicles on Leg 259	Vehicles Entering Intersection 127	Eastbound	Cars	Heavy	Total
	Vehicles Exiting Intersection 132		0	0	0
			1	0	1
			16	0	16
			74	1	75
			34	1	35



Daily Volumes



Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 284	Total Vehicles on Leg 596
37	1	38			
60	5	65			
174	6	180			
1	0	1			
0	0	0			
				Vehicles Exiting Intersection 312	

Cars	0	1	34	331	213
Heavy	0	0	4	16	4
Total	0	1	38	347	217
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
603			570		
Total Vehicles On Leg			1173		

**SR 26 and CR 337 (SW 266th St)/NW 266th St  
Newberry, Florida  
Thursday, June 15, 2023**

Time	Southbound NW 266th St						Westbound SR 26						Northbound CR 337 (SW 266th St)						Eastbound SR 26						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	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
12:15 AM	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
12:30 AM	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
12:45 AM	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
Hourly 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
1:00 AM	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
1:15 AM	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
1:30 AM	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
1:45 AM	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
Hourly 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
2:00 AM	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
2:15 AM	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
2:30 AM	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
2:45 AM	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
Hourly 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
3:00 AM	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
3:15 AM	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
3:30 AM	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
3:45 AM	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
Hourly 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
4:00 AM	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
4:15 AM	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
4:30 AM	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
4:45 AM	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
Hourly 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
5:00 AM	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
5:15 AM	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
5:30 AM	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
5:45 AM	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
Hourly 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
6:00 AM	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
6:15 AM	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
6:30 AM	0	3	0	0	0	3	0	7	27	0	0	34	0	1	0	19	0	20	0	0	151	3	0	154	211
6:45 AM	0	2	0	0	0	2	0	5	48	1	0	54	0	4	0	18	0	22	0	1	145	3	0	149	227
Hourly Total	0	5	0	0	0	5	0	12	75	1	0	88	0	5	0	37	0	42	0	1	296	6	0	303	438
7:00 AM	0	8	0	2	0	10	0	6	36	2	0	44	0	1	2	13	0	16	0	3	150	14	0	167	237
7:15 AM	0	3	1	1	0	5	0	8	49	4	0	61	0	3	0	15	0	18	0	2	142	4	0	148	232
7:30 AM	0	1	2	1	0	4	0	10	47	2	0	59	0	1	1	20	0	22	0	0	145	5	0	150	235
7:45 AM	0	5	0	1	0	6	0	11	53	3	0	67	0	2	0	15	0	17	0	0	116	2	0	118	208
Hourly Total	0	17	3	5	0	25	0	35	185	11	0	231	0	7	3	63	0	73	0	5	553	25	0	583	912

**SR 26 and CR 337 (SW 266th St)/NW 266th St  
Newberry, Florida  
Thursday, June 15, 2023**

Time	Southbound NW 266th St						Westbound SR 26						Northbound CR 337 (SW 266th St)						Eastbound SR 26						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
8:00 AM	0	4	0	0	1	4	0	9	49	3	0	61	0	1	0	14	0	15	0	1	105	4	0	110	190
8:15 AM	0	4	0	0	0	4	0	9	59	1	0	69	0	2	0	13	0	15	0	0	118	2	0	120	208
8:30 AM	0	6	1	2	0	9	0	4	37	3	0	44	0	2	3	10	0	15	0	0	91	3	0	94	162
8:45 AM	0	1	1	2	0	4	0	10	57	3	0	70	0	2	9	13	0	24	0	0	109	3	0	112	210
Hourly Total	0	15	2	4	1	21	0	32	202	10	0	244	0	7	12	50	0	69	0	1	423	12	0	436	770
9:00 AM	0	5	0	1	0	6	0	7	38	1	0	46	0	0	1	13	0	14	0	1	108	5	0	114	180
9:15 AM	0	3	1	2	0	6	0	12	66	2	0	80	0	4	0	9	0	13	0	1	110	1	0	112	211
9:30 AM	0	1	5	1	0	7	0	13	54	2	0	69	0	4	0	10	0	14	0	0	97	0	0	97	187
9:45 AM	0	2	1	0	0	3	0	7	59	0	0	66	0	0	5	19	0	24	0	0	88	3	0	91	184
Hourly Total	0	11	7	4	0	22	0	39	217	5	0	261	0	8	6	51	0	65	0	2	403	9	0	414	762
10:00 AM	0	1	3	0	0	4	0	12	55	3	0	70	0	2	2	14	0	18	0	0	73	1	0	74	166
10:15 AM	0	2	0	1	0	3	0	11	74	2	0	87	0	1	2	13	0	16	0	1	91	3	0	95	201
10:30 AM	0	1	3	0	0	4	0	8	69	3	0	80	0	4	1	9	0	14	0	0	105	6	0	111	209
10:45 AM	0	1	1	1	0	3	0	5	54	3	0	62	0	2	2	17	0	21	0	1	70	3	0	74	160
Hourly Total	0	5	7	2	0	14	0	36	252	11	0	299	0	9	7	53	0	69	0	2	339	13	0	354	736
11:00 AM	0	2	3	1	0	6	0	10	65	4	0	79	0	2	0	16	0	18	0	2	85	0	0	87	190
11:15 AM	0	2	2	0	0	4	0	8	62	1	0	71	1	2	0	9	0	12	0	0	101	2	0	103	190
11:30 AM	0	1	2	1	0	4	0	10	70	2	0	82	0	3	0	13	0	16	0	0	56	5	0	61	163
11:45 AM	0	6	4	1	0	11	0	10	76	4	0	90	0	2	1	19	0	22	0	0	78	6	0	84	207
Hourly Total	0	11	11	3	0	25	0	38	273	11	0	322	1	9	1	57	0	68	0	2	320	13	0	335	750
12:00 PM	0	1	0	0	0	1	0	16	92	3	0	111	0	5	0	9	0	14	0	0	75	0	0	75	201
12:15 PM	0	2	0	0	0	2	0	11	71	4	0	86	0	0	0	14	0	14	0	0	89	0	0	89	191
12:30 PM	0	3	0	1	0	4	0	16	85	1	0	102	0	0	0	10	0	10	0	0	98	4	0	102	218
12:45 PM	0	4	1	0	0	5	0	13	84	2	0	99	0	0	0	9	0	9	0	0	78	2	0	80	193
Hourly Total	0	10	1	1	0	12	0	56	332	10	0	398	0	5	0	42	0	47	0	0	340	6	0	346	803
1:00 PM	0	4	0	1	0	5	1	13	84	6	0	104	0	1	0	17	0	18	0	0	75	1	0	76	203
1:15 PM	0	3	1	2	0	6	0	12	92	3	0	107	0	7	2	10	0	19	0	1	86	3	0	90	222
1:30 PM	0	0	0	0	0	0	0	8	92	1	0	101	0	2	1	13	0	16	0	1	75	0	0	76	193
1:45 PM	0	3	3	0	0	6	0	10	90	6	0	106	0	1	2	8	0	11	0	5	71	2	0	78	201
Hourly Total	0	10	4	3	0	17	1	43	358	16	0	418	0	11	5	48	0	64	0	7	307	6	0	320	819
2:00 PM	0	2	1	0	0	3	0	14	96	6	0	116	0	5	2	11	0	18	0	0	81	1	0	82	219
2:15 PM	0	3	0	0	0	3	0	10	97	4	0	111	0	4	3	12	0	19	0	0	73	2	0	75	208
2:30 PM	0	2	0	0	0	2	0	11	111	3	0	125	0	3	0	7	0	10	0	1	61	5	0	67	204
2:45 PM	0	2	0	0	0	2	0	15	106	4	0	125	0	2	0	17	0	19	0	0	84	1	0	85	231
Hourly Total	0	9	1	0	0	10	0	50	410	17	0	477	0	14	5	47	0	66	0	1	299	9	0	309	862
3:00 PM	0	2	5	0	0	7	0	11	147	3	0	161	0	2	1	13	0	16	0	0	60	0	0	60	244
3:15 PM	0	4	2	0	0	6	0	12	136	6	0	154	0	2	3	16	0	21	0	0	63	1	0	64	245
3:30 PM	0	2	5	3	0	10	0	17	142	3	0	162	0	1	2	11	0	14	0	0	59	1	0	60	246
3:45 PM	0	3	1	1	0	5	0	17	131	4	0	152	0	0	4	7	0	11	0	0	70	1	0	71	239
Hourly Total	0	11	13	4	0	28	0	57	556	16	0	629	0	5	10	47	0	62	0	0	252	3	0	255	974

**SR 26 and CR 337 (SW 266th St)/NW 266th St  
Newberry, Florida  
Thursday, June 15, 2023**

Time	Southbound NW 266th St						Westbound SR 26						Northbound CR 337 (SW 266th St)						Eastbound SR 26						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	
4:00 PM	0	1	2	1	0	4	0	22	146	6	0	174	0	8	1	13	0	22	0	0	64	3	0	67	267
4:15 PM	0	4	2	4	3	10	0	19	132	5	0	156	0	5	1	19	0	25	0	1	70	6	0	77	268
4:30 PM	0	3	4	3	0	10	0	20	135	4	0	159	0	3	2	20	0	25	0	0	80	3	0	83	277
4:45 PM	0	4	2	1	0	7	0	26	155	6	0	187	0	2	2	15	0	19	0	2	90	0	0	92	305
Hourly Total	0	12	10	9	3	31	0	87	568	21	0	676	0	18	6	67	0	91	0	3	304	12	0	319	1117
5:00 PM	0	2	0	1	0	3	0	22	162	9	0	193	1	1	1	20	0	23	0	0	72	2	0	74	293
5:15 PM	0	7	0	0	0	7	0	30	161	10	0	201	0	5	1	12	2	18	0	1	101	4	0	106	332
5:30 PM	0	4	3	2	0	9	0	22	169	6	0	197	0	4	2	12	0	18	0	0	82	3	0	85	309
5:45 PM	0	2	1	2	0	5	0	29	133	4	0	166	0	2	0	9	0	11	0	3	73	2	0	78	260
Hourly Total	0	15	4	5	0	24	0	103	625	29	0	757	1	12	4	53	2	70	0	4	328	11	0	343	1194
6:00 PM	0	3	1	2	0	6	0	23	136	6	0	165	0	2	3	11	0	16	0	0	68	7	0	75	262
6:15 PM	0	1	2	1	0	4	0	17	121	13	0	151	0	5	2	7	0	14	0	1	58	1	0	60	229
6:30 PM	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
6:45 PM	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
Hourly Total	0	4	3	3	0	10	0	40	257	19	0	316	0	7	5	18	0	30	0	1	126	8	0	135	491
7:00 PM	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
7:15 PM	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
7:30 PM	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
7:45 PM	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
Hourly 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
8:00 PM	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
8:15 PM	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
8:30 PM	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
8:45 PM	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
Hourly 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
9:00 PM	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
9:15 PM	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
9:30 PM	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
9:45 PM	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
Hourly 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
10:00 PM	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
10:15 PM	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
10:30 PM	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
10:45 PM	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
Hourly 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
11:00 PM	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
11:15 PM	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
11:30 PM	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
11:45 PM	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
Hourly 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
<b>DAILY TOTAL</b>	<b>0</b>	<b>135</b>	<b>66</b>	<b>43</b>	<b>4</b>	<b>244</b>	<b>1</b>	<b>628</b>	<b>4310</b>	<b>177</b>	<b>0</b>	<b>5116</b>	<b>2</b>	<b>117</b>	<b>64</b>	<b>633</b>	<b>2</b>	<b>816</b>	<b>0</b>	<b>29</b>	<b>4290</b>	<b>133</b>	<b>0</b>	<b>4452</b>	<b>10628</b>
<b>Cars</b>	0	132	26	42	4	200	1	586	4093	173	0	4853	2	111	27	591	1	731	0	24	4114	123	0	4261	10045
<b>Heavy Vehicles</b>	0	3	40	1	0	44	0	42	217	4	0	263	0	6	37	42	1	85	0	5	176	10	0	191	583
<b>Heavy Vehicle %</b>	0.00%	2.22%	60.61%	2.33%	0.00%	18.03%	0.00%	6.69%	5.03%	2.26%	0.00%	5.14%	0.00%	5.13%	57.81%	6.64%	50.00%	10.42%	0.00%	17.24%	4.10%	7.52%	0.00%	4.29%	5.49%

**SR 26 and CR 337 (SW 266th St)/NW 266th St**  
**Newberry, Florida**  
**Thursday, June 15, 2023**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
6:45 AM	0	2	0	0	0	2	0	5	48	1	0	54	0	4	0	18	0	22	0	1	145	3	0	149	227
7:00 AM	0	8	0	2	0	10	0	6	36	2	0	44	0	1	2	13	0	16	0	3	150	14	0	167	237
7:15 AM	0	3	1	1	0	5	0	8	49	4	0	61	0	3	0	15	0	18	0	2	142	4	0	148	232
7:30 AM	0	1	2	1	0	4	0	10	47	2	0	59	0	1	1	20	0	22	0	0	145	5	0	150	235
Peak Hour Total	0	14	3	4	0	21	0	29	180	9	0	218	0	9	3	66	0	78	0	6	582	26	0	614	931
PHF	0.000	0.438	0.375	0.500	0.000	0.525	0.000	0.725	0.918	0.563	0.000	0.893	0.000	0.563	0.375	0.825	0.000	0.886	0.000	0.500	0.970	0.464	0.000	0.919	0.982

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:45 PM	0	4	2	1	0	7	0	26	155	6	0	187	0	2	2	15	0	19	0	2	90	0	0	92	305
5:00 PM	0	2	0	1	0	3	0	22	162	9	0	193	1	1	1	20	0	23	0	0	72	2	0	74	293
5:15 PM	0	7	0	0	0	7	0	30	161	10	0	201	0	5	1	12	2	18	0	1	101	4	0	106	332
5:30 PM	0	4	3	2	0	9	0	22	169	6	0	197	0	4	2	12	0	18	0	0	82	3	0	85	309
Peak Hour Total	0	17	5	4	0	26	0	100	647	31	0	778	1	12	6	59	2	78	0	3	345	9	0	357	1239
PHF	0.000	0.607	0.417	0.500	0.000	0.722	0.000	0.833	0.957	0.775	0.000	0.968	0.250	0.600	0.750	0.738	0.250	0.848	0.000	0.375	0.854	0.563	0.000	0.842	0.933

Total Vehicles On Leg				514	
Vehicles Entering Intersection				244	
Vehicles Exiting Intersection				270	
Southbound					
Cars	42	26	132	0	4
Heavy	1	40	3	0	0
Total	43	66	135	0	4








Total Vehicles on Leg 8922	Vehicles Entering Intersection 4452	Eastbound	Cars	Heavy	Total
	Vehicles Exiting Intersection 4470		0	0	0
			0	0	0
			24	5	29
			4114	176	4290
			123	10	133



Daily Volumes



Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 5116	Total Vehicles on Leg 10175
173	4	177			
4093	217	4310			
586	42	628			
1	0	1			
0	0	0		Vehicles Exiting Intersection 5059	

					
Cars	1	2	111	27	591
Heavy	1	0	6	37	42
Total	2	2	117	64	633
Northbound					
Vehicles Entering Intersection			816	Vehicles Exiting Intersection	
				829	
Total Vehicles On Leg			1645		



**SR 26 and SW/NW 264th St  
Newberry, Florida  
Thursday, June 15, 2023**

Time	Southbound NW 264th St						Westbound SR 26						Northbound SW 264th St						Eastbound SR 26						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	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
12:15 AM	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
12:30 AM	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
12:45 AM	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
Hourly 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
1:00 AM	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
1:15 AM	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
1:30 AM	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
1:45 AM	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
Hourly 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
2:00 AM	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
2:15 AM	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
2:30 AM	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
2:45 AM	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
Hourly 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
3:00 AM	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
3:15 AM	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
3:30 AM	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
3:45 AM	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
Hourly 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
4:00 AM	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
4:15 AM	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
4:30 AM	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
4:45 AM	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
Hourly 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
5:00 AM	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
5:15 AM	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
5:30 AM	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
5:45 AM	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
Hourly 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
6:00 AM	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
6:15 AM	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
6:30 AM	0	1	0	0	0	1	0	0	37	1	0	38	0	0	0	5	0	5	0	0	177	1	0	178	222
6:45 AM	0	1	0	0	0	1	0	0	50	0	0	50	0	1	0	3	0	4	0	0	162	1	0	163	218
Hourly Total	0	2	0	0	0	2	0	0	87	1	0	88	0	1	0	8	0	9	0	0	339	2	0	341	440
7:00 AM	0	1	0	0	0	1	0	0	46	0	0	46	0	0	0	5	0	5	0	1	175	0	0	176	228
7:15 AM	0	0	0	0	0	0	0	1	60	0	0	61	0	2	0	1	0	3	0	0	159	0	0	159	223
7:30 AM	0	1	0	0	0	1	0	1	56	0	0	57	0	1	0	5	0	6	0	0	161	1	0	162	226
7:45 AM	0	0	0	0	0	0	0	2	70	1	0	73	0	0	0	4	0	4	0	0	138	0	0	138	215
Hourly Total	0	2	0	0	0	2	0	4	232	1	0	237	0	3	0	15	0	18	0	1	633	1	0	635	892

**SR 26 and SW/NW 264th St  
Newberry, Florida  
Thursday, June 15, 2023**

Time	Southbound NW 264th St						Westbound SR 26						Northbound SW 264th St						Eastbound SR 26						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
8:00 AM	0	0	0	0	1	0	0	0	61	0	0	61	0	1	0	2	0	3	0	0	122	0	0	122	186
8:15 AM	0	0	0	0	0	0	0	4	71	1	0	76	0	0	1	2	0	3	0	0	132	0	0	132	211
8:30 AM	0	0	0	0	0	0	0	0	41	1	0	42	0	0	0	4	0	4	0	1	108	0	0	109	155
8:45 AM	0	1	0	0	0	1	0	0	71	0	0	71	0	0	0	4	0	4	0	0	124	0	0	124	200
Hourly Total	0	1	0	0	1	1	0	4	244	2	0	250	0	1	1	12	0	14	0	1	486	0	0	487	752
9:00 AM	0	1	0	0	0	1	0	1	47	0	0	48	0	0	0	1	0	1	0	0	121	0	0	121	171
9:15 AM	0	0	0	0	0	0	0	1	79	1	0	81	0	0	0	2	0	2	0	0	125	0	0	125	208
9:30 AM	0	0	0	0	0	0	0	0	70	0	0	70	0	0	0	1	0	1	0	1	107	0	0	108	179
9:45 AM	0	1	0	0	0	1	0	0	68	0	0	68	0	0	0	2	0	2	0	0	113	0	0	113	184
Hourly Total	0	2	0	0	0	2	0	2	264	1	0	267	0	0	0	6	0	6	0	1	466	0	0	467	742
10:00 AM	0	1	0	0	0	1	0	2	73	0	0	75	0	0	0	2	0	2	0	0	84	0	0	84	162
10:15 AM	0	1	0	0	0	1	0	1	83	1	0	85	0	0	0	1	2	1	0	1	108	0	0	109	196
10:30 AM	0	0	0	0	0	0	0	1	80	0	0	81	1	0	0	1	0	2	0	0	109	2	0	111	194
10:45 AM	0	2	0	1	0	3	0	2	60	0	0	62	0	1	0	0	0	1	0	0	85	0	0	85	151
Hourly Total	0	4	0	1	0	5	0	6	296	1	0	303	1	1	0	4	2	6	0	1	386	2	0	389	703
11:00 AM	0	0	0	0	0	0	0	0	82	0	0	82	0	1	0	2	0	3	0	0	106	0	0	106	191
11:15 AM	0	0	0	0	0	0	0	0	70	1	0	71	0	0	0	1	0	1	0	0	110	0	0	110	182
11:30 AM	0	1	0	0	0	1	0	2	79	2	0	83	0	0	0	0	0	0	0	0	71	0	0	71	155
11:45 AM	0	1	0	1	0	2	0	0	89	0	0	89	0	0	0	0	0	0	0	0	102	0	0	102	193
Hourly Total	0	2	0	1	0	3	0	2	320	3	0	325	0	1	0	3	0	4	0	0	389	0	0	389	721
12:00 PM	0	0	0	0	0	0	0	1	112	1	0	114	0	0	0	0	0	0	0	1	83	0	0	84	198
12:15 PM	0	0	0	0	0	0	0	1	86	1	0	88	0	0	0	2	0	2	0	0	104	0	0	104	194
12:30 PM	0	0	0	0	0	0	0	0	103	2	0	105	0	0	1	2	0	3	0	0	111	0	0	111	219
12:45 PM	0	0	0	1	0	1	0	4	96	0	0	100	0	0	0	2	0	2	0	0	88	0	0	88	191
Hourly Total	0	0	0	1	0	1	0	6	397	4	0	407	0	0	1	6	0	7	0	1	386	0	0	387	802
1:00 PM	0	2	0	0	0	2	0	1	107	0	0	108	0	0	0	2	0	2	0	0	100	0	0	100	212
1:15 PM	0	0	0	0	0	0	0	2	105	1	0	108	1	0	1	1	0	3	1	1	92	1	0	95	206
1:30 PM	0	0	0	0	0	0	0	3	103	0	0	106	0	0	0	2	0	2	0	0	91	0	0	91	199
1:45 PM	0	0	0	0	0	0	0	2	104	0	0	106	0	0	0	8	0	8	0	0	78	0	0	78	192
Hourly Total	0	2	0	0	0	2	0	8	419	1	0	428	1	0	1	13	0	15	1	1	361	1	0	364	809
2:00 PM	0	0	0	0	0	0	0	2	116	0	0	118	0	0	1	3	0	4	0	0	93	0	0	93	215
2:15 PM	0	0	0	0	0	0	0	0	114	0	0	114	0	0	1	2	0	3	0	0	92	0	0	92	209
2:30 PM	0	0	0	0	0	0	0	1	126	0	0	127	0	0	0	2	0	2	0	0	70	0	0	70	199
2:45 PM	0	1	0	0	0	1	0	4	122	0	0	126	0	0	0	2	0	2	0	0	101	0	0	101	230
Hourly Total	0	1	0	0	0	1	0	7	478	0	0	485	0	0	2	9	0	11	0	0	356	0	0	356	853
3:00 PM	0	0	0	0	0	0	1	4	163	1	0	169	0	0	0	4	0	4	0	0	76	1	0	77	250
3:15 PM	0	1	0	1	3	2	0	2	150	0	0	152	0	1	0	0	0	1	0	1	81	0	0	82	237
3:30 PM	0	0	0	0	0	0	0	2	162	2	0	166	0	1	0	3	0	4	0	0	75	0	0	75	245
3:45 PM	0	1	0	0	0	1	0	2	156	0	0	158	0	0	0	2	0	2	0	0	78	0	0	78	239
Hourly Total	0	2	0	1	3	3	1	10	631	3	0	645	0	2	0	9	0	11	0	1	310	1	0	312	971

**SR 26 and SW/NW 264th St  
Newberry, Florida  
Thursday, June 15, 2023**

Time	Southbound NW 264th St						Westbound SR 26						Northbound SW 264th St						Eastbound SR 26						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	
4:00 PM	0	2	0	1	0	3	0	7	173	1	0	181	0	0	0	2	0	2	0	0	77	0	0	77	263
4:15 PM	0	0	0	0	3	0	0	4	160	0	0	164	0	0	0	2	0	2	0	0	93	1	0	94	260
4:30 PM	0	1	0	2	0	3	0	3	161	0	0	164	0	0	0	5	0	5	0	0	98	0	0	98	270
4:45 PM	0	0	0	1	0	1	0	3	185	3	0	191	0	0	0	2	0	2	0	0	110	0	0	110	304
Hourly Total	0	3	0	4	3	7	0	17	679	4	0	700	0	0	0	11	0	11	0	0	378	1	0	379	1097
5:00 PM	0	0	0	0	1	0	0	4	194	1	0	199	0	2	0	0	0	2	0	0	92	0	1	92	293
5:15 PM	0	1	0	0	0	1	0	4	204	0	0	208	0	1	0	2	1	3	0	0	118	2	0	120	332
5:30 PM	0	0	0	0	0	0	0	4	194	0	0	198	0	0	0	3	0	3	0	0	96	1	0	97	298
5:45 PM	0	2	0	1	0	3	0	3	167	1	0	171	0	0	1	3	0	4	0	0	84	0	0	84	262
Hourly Total	0	3	0	1	1	4	0	15	759	2	0	776	0	3	1	8	1	12	0	0	390	3	1	393	1185
6:00 PM	0	0	1	0	0	1	0	4	168	1	0	173	0	0	0	3	0	3	0	0	77	1	0	78	255
6:15 PM	0	0	0	0	0	0	0	5	150	0	0	155	0	0	0	1	0	1	0	0	67	1	1	68	224
6:30 PM	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
6:45 PM	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
Hourly Total	0	0	1	0	0	1	0	9	318	1	0	328	0	0	0	4	0	4	0	0	144	2	1	146	479
7:00 PM	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
7:15 PM	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
7:30 PM	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
7:45 PM	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
Hourly 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
8:00 PM	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
8:15 PM	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
8:30 PM	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
8:45 PM	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
Hourly 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
9:00 PM	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
9:15 PM	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
9:30 PM	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
9:45 PM	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
Hourly 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
10:00 PM	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
10:15 PM	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
10:30 PM	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
10:45 PM	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
Hourly 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
11:00 PM	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
11:15 PM	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
11:30 PM	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
11:45 PM	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
Hourly 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
<b>DAILY TOTAL</b>	<b>0</b>	<b>24</b>	<b>1</b>	<b>9</b>	<b>8</b>	<b>34</b>	<b>1</b>	<b>90</b>	<b>5124</b>	<b>24</b>	<b>0</b>	<b>5239</b>	<b>2</b>	<b>12</b>	<b>6</b>	<b>108</b>	<b>3</b>	<b>128</b>	<b>1</b>	<b>7</b>	<b>5024</b>	<b>13</b>	<b>2</b>	<b>5045</b>	<b>10446</b>
<b>Cars</b>	0	23	1	9	8	33	1	85	4845	23	0	4954	2	12	6	103	2	123	1	7	4814	13	2	4835	9945
<b>Heavy Vehicles</b>	0	1	0	0	0	1	0	5	279	1	0	285	0	0	0	5	1	5	0	0	210	0	0	210	501
<b>Heavy Vehicle %</b>	0.00%	4.17%	0.00%	0.00%	0.00%	2.94%	0.00%	5.56%	5.44%	4.17%	0.00%	5.44%	0.00%	0.00%	0.00%	4.63%	33.33%	3.91%	0.00%	0.00%	4.18%	0.00%	0.00%	4.16%	4.80%

**SR 26 and SW/NW 264th St  
Newberry, Florida  
Thursday, June 15, 2023**



**AM Peak Hour**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
6:45 AM	0	1	0	0	0	1	0	0	50	0	0	50	0	1	0	3	0	4	0	0	162	1	0	163	218
7:00 AM	0	1	0	0	0	1	0	0	46	0	0	46	0	0	0	5	0	5	0	1	175	0	0	176	228
7:15 AM	0	0	0	0	0	0	0	1	60	0	0	61	0	2	0	1	0	3	0	0	159	0	0	159	223
7:30 AM	0	1	0	0	0	1	0	1	56	0	0	57	0	1	0	5	0	6	0	0	161	1	0	162	226
Peak Hour Total	0	3	0	0	0	3	0	2	212	0	0	214	0	4	0	14	0	18	0	1	657	2	0	660	895
PHF	0.000	0.750	0.000	0.000	0.000	0.750	0.000	0.500	0.883	0.000	0.000	0.877	0.000	0.500	0.000	0.700	0.000	0.750	0.000	0.250	0.939	0.500	0.000	0.938	0.981

**PM Peak Hour**

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:45 PM	0	0	0	1	0	1	0	3	185	3	0	191	0	0	0	2	0	2	0	0	110	0	0	110	304
5:00 PM	0	0	0	0	1	0	0	4	194	1	0	199	0	2	0	0	0	2	0	0	92	0	1	92	293
5:15 PM	0	1	0	0	0	1	0	4	204	0	0	208	0	1	0	2	1	3	0	0	118	2	0	120	332
5:30 PM	0	0	0	0	0	0	0	4	194	0	0	198	0	0	0	3	0	3	0	0	96	1	0	97	298
Peak Hour Total	0	1	0	1	1	2	0	15	777	4	0	796	0	3	0	7	1	10	0	0	416	3	1	419	1227
PHF	0.000	0.250	0.000	0.250	0.250	0.500	0.000	0.938	0.952	0.333	0.000	0.957	0.000	0.375	0.000	0.583	0.250	0.833	0.000	0.000	0.881	0.375	0.250	0.873	0.924

Total Vehicles On Leg				71			
Vehicles Entering Intersection 34				Vehicles Exiting Intersection 37			
Southbound							
Cars	9	1	23	0	8		
Heavy	0	0	1	0	0		
Total	9	1	24	0	8		

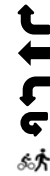




Total Vehicles on Leg 10191	Vehicles Entering Intersection 5045	Eastbound	Cars	Heavy	Total
			2	0	2
			1	0	1
	7		0	7	
	4814		210	5024	
	13		0	13	



Daily Volumes



Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 5239	Total Vehicles on Leg 10396
23	1	24			
4845	279	5124			
85	5	90			
1	0	1			
0	0	0			
				Vehicles Exiting Intersection 5157	

Cars	2	2	12	6	103
Heavy	1	0	0	0	5
Total	3	2	12	6	108
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
128			106		
Total Vehicles On Leg			234		

# APPENDIX B

## Historical AADT Report

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2022 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0004 - SR 26 200 ' W. OF CR 337 (NEWBERRY)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	11000 C		E 0		W 0	9.50	57.90	5.50
2021	10500 S		0		0	9.50	57.80	5.20
2020	10500 F		0		0	9.50	58.00	5.10
2019	11000 C	E	0		W 0	9.50	58.00	4.40
2018	11000 C	E	0		W 0	9.50	57.90	5.40
2017	11000 C	E	0		W 0	9.50	53.80	3.80
2016	10500 C	E	0		W 0	9.50	53.60	5.60
2015	9600 C	E	0		W 0	9.50	57.00	3.70
2014	9800 C	E			W	9.50	57.40	5.40
2013	8100 C	E	0		W 0	9.50	57.80	4.10
2012	8700 C	E	0		W 0	9.50	58.40	3.30
2011	9600 C	E	0		W 0	9.50	58.80	3.20
2010	9700 C	E	0		W 0	10.13	59.87	4.30
2009	9400 C	E	0		W 0	10.04	57.81	3.80
2008	9400 C	E	0		W 0	10.17	57.73	5.90
2007	9300 C	E	0		W 0	10.22	58.44	5.30

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

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2022 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0493 - SR 26 .1 MI. W. OF SR 45

YEAR	AADT		DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----		-----	-----	-----
2022	14500	C	E	0	W	0	9.50	57.90	5.50
2021	14500	S		0		0	9.50	57.80	5.20
2020	14500	F		0		0	9.50	58.00	5.10
2019	15000	C	E	0	W	0	9.50	58.00	4.40
2018	15000	C	E	0	W	0	9.50	57.90	5.40
2017	15000	C	E	0	W	0	9.50	53.80	3.80
2016	15000	C	E	0	W	0	9.50	53.60	5.60
2015	13500	C	E	0	W	0	9.50	57.00	3.70
2014	13500	C	E		W		9.50	57.40	5.40
2013	12000	C	E	0	W	0	9.50	57.80	4.10
2012	12500	C	E	0	W	0	9.50	58.40	3.30
2011	13000	C	E	0	W	0	9.50	58.80	3.20
2010	14000	C	E	0	W	0	10.13	59.87	4.30
2009	13500	C	E	0	W	0	10.04	57.81	3.80
2008	14000	C	E	0	W	0	10.17	57.73	5.90
2007	13500	C	E	0	W	0	10.22	58.44	5.30

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

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2022 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 9157 - SW 282ND ST .1 MI. S. OF SR 26 HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	
----	-----		-----		-----	-----	-----	-----	
2022	1800 C		N	0	S	0	9.50	57.90	2.90
2021	1700 S			0		0	9.50	57.80	3.00
2020	1700 F			0		0	9.50	58.00	2.90
2019	1800 C		N	0	S	0	9.50	58.00	2.60
2018	1900 S			0		0	9.50	57.90	2.70
2017	1900 F			0		0	9.50	53.80	2.60
2016	1800 C		N	0	S	0	9.50	53.60	2.80
2015	1500 R			0		0	9.50	57.00	2.60
2014	1500 T						9.50	57.40	2.40
2013	1500 S			0		0	9.50	57.80	2.60
2012	1500 F			0		0	9.50	58.40	2.50
2011	1500 C		N	0	S	0	9.50	58.80	2.80

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



FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2022 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 9123 - SW 46TH AVE. .1 MI. W. OF CR 241 (HPMS)

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
----	-----		-----		-----	-----	-----	-----
2022	1200 T		0		0	9.50	57.90	2.90
2021	1200 S		0		0	9.50	57.80	3.00
2020	1200 F		0		0	9.50	58.00	2.90
2019	1200 C	E	0	W	0	9.50	58.00	2.60
2018	1400 R		0		0	9.50	57.90	2.70
2017	1400 T		0		0	9.50	53.80	2.60
2016	1300 S		0		0	9.50	53.60	2.80
2015	1200 F		0		0	9.50	57.00	2.60
2014	1200 C	E		W		9.50	57.40	2.40
2013	750 S		0		0	9.50	57.80	2.60
2012	750 F		0		0	9.50	58.40	2.50
2011	750 C	E	0	W	0	9.50	58.80	2.80

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

# APPENDIX C

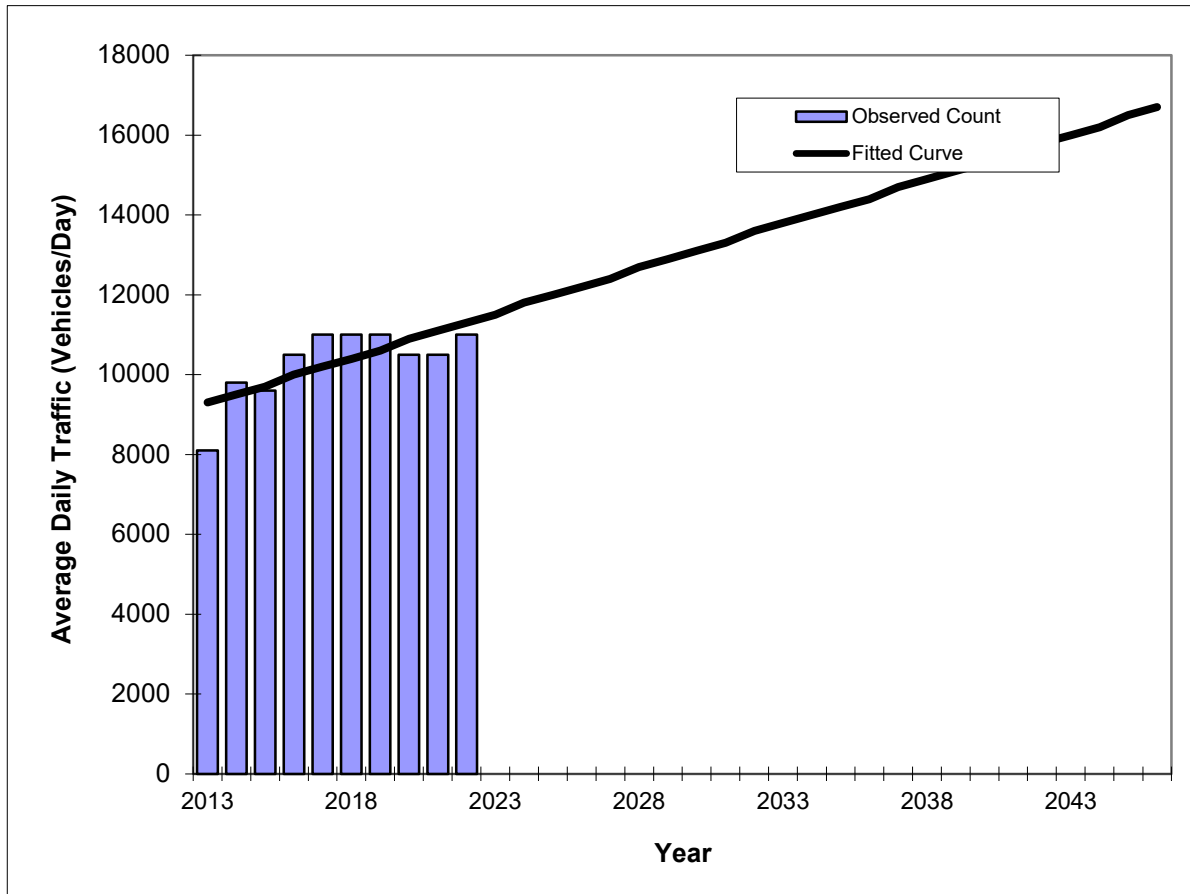
## Trend Analysis Output

# Traffic Trends - V03.a

## SR 26 -- 200' W of CR 337 (Newberry)

FIN#	1234
Location	1

County:	Alachua (26)
Station #:	4
Highway:	SR 26



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	8100	9300
2014	9800	9500
2015	9600	9700
2016	10500	10000
2017	11000	10200
2018	11000	10400
2019	11000	10600
2020	10500	10900
2021	10500	11100
2022	11000	11300
2025 Opening Year Trend		
2025	N/A	12000
2030 Mid-Year Trend		
2030	N/A	13100
2035 Design Year Trend		
2035	N/A	14200
TRANPLAN Forecasts/Trends		

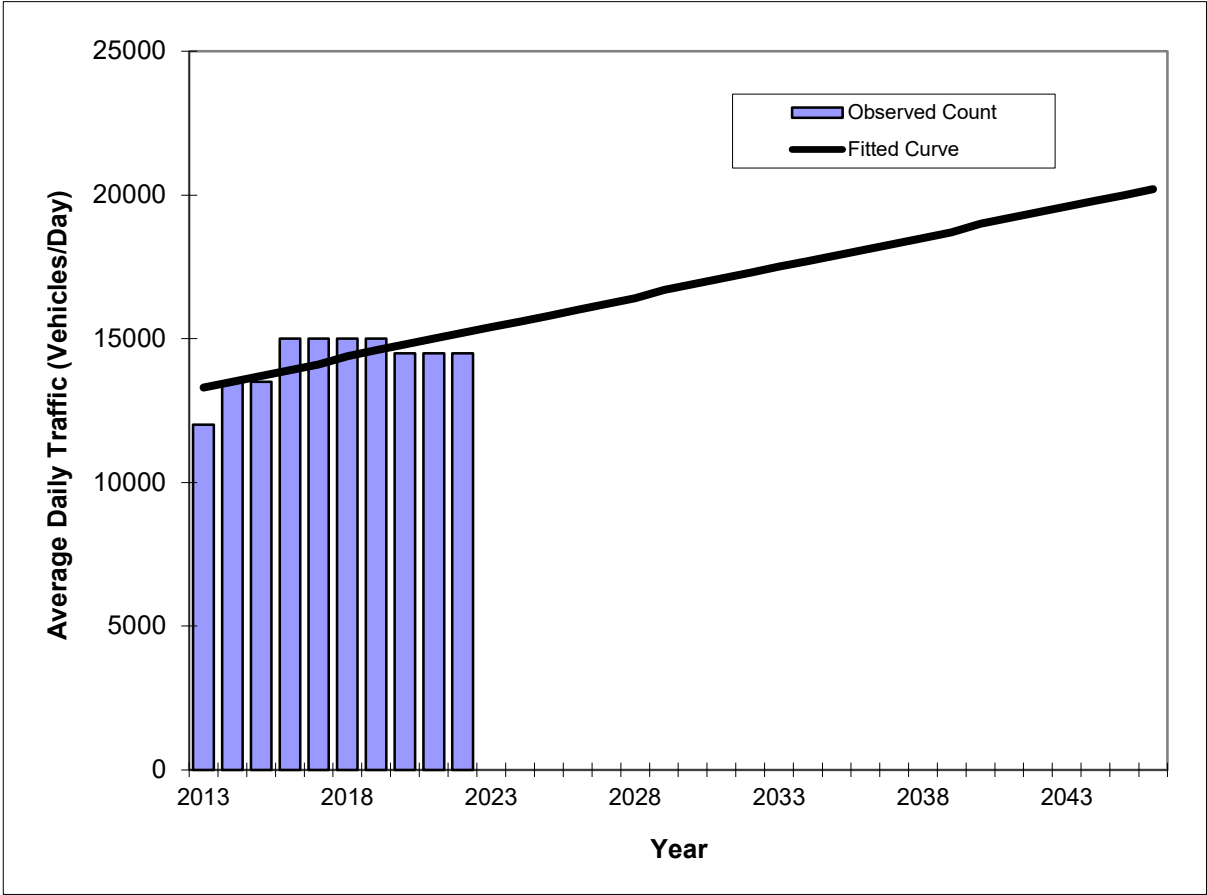
** Annual Trend Increase:	224
Trend R-squared:	54.16%
Trend Annual Historic Growth Rate:	2.42%
Trend Growth Rate (2022 to Design Year):	3.02%
Printed:	21-Jun-23
Straight Line Growth Option	

\*Axle-Adjusted

Traffic Trends - V03.a  
SR 26 -- .1 Mi W of SR 45

FIN#	1234
Location	1

County:	Alachua (26)
Station #:	0493
Highway:	SR 26



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	12000	13300
2014	13500	13500
2015	13500	13700
2016	15000	13900
2017	15000	14100
2018	15000	14400
2019	15000	14600
2020	14500	14800
2021	14500	15000
2022	14500	15200
2025 Opening Year Trend		
2025	N/A	15800
2030 Mid-Year Trend		
2030	N/A	16900
2035 Design Year Trend		
2035	N/A	17900
TRANPLAN Forecasts/Trends		

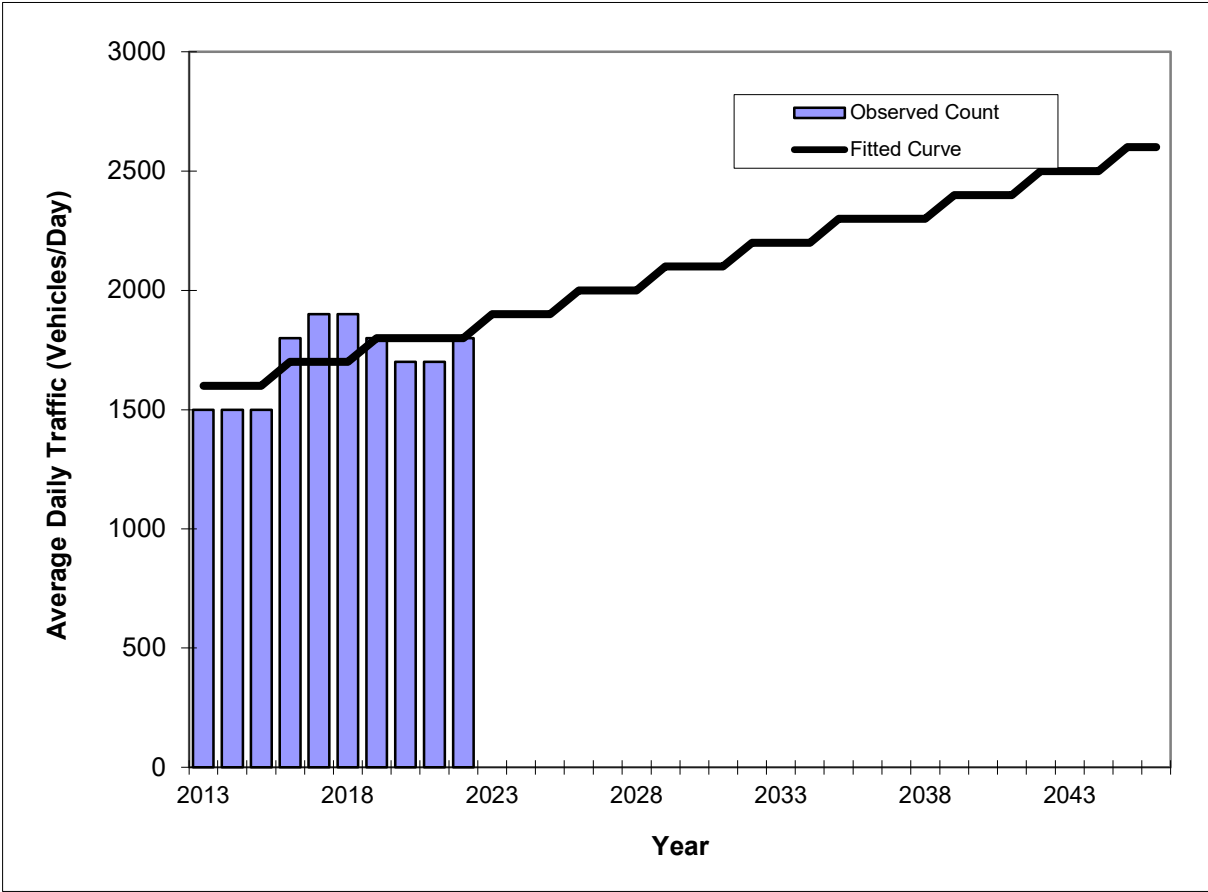
** Annual Trend Increase:	209
Trend R-squared:	41.82%
Trend Annual Historic Growth Rate:	1.50%
Trend Growth Rate (2022 to Design Year):	2.07%
Printed:	21-Jun-23
Straight Line Growth Option	

\*Axle-Adjusted

# **Traffic Trends - V03.a** **CR 337 -- .1 Mi S of SR 26**

FIN#	1234
Location	1

County:	Alachua (26)
Station #:	9157
Highway:	CR 337



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	1500	1600
2014	1500	1600
2015	1500	1600
2016	1800	1700
2017	1900	1700
2018	1900	1700
2019	1800	1800
2020	1700	1800
2021	1700	1800
2022	1800	1800
2025 Opening Year Trend		
2025	N/A	1900
2030 Mid-Year Trend		
2030	N/A	2100
2035 Design Year Trend		
2035	N/A	2300
TRANPLAN Forecasts/Trends		

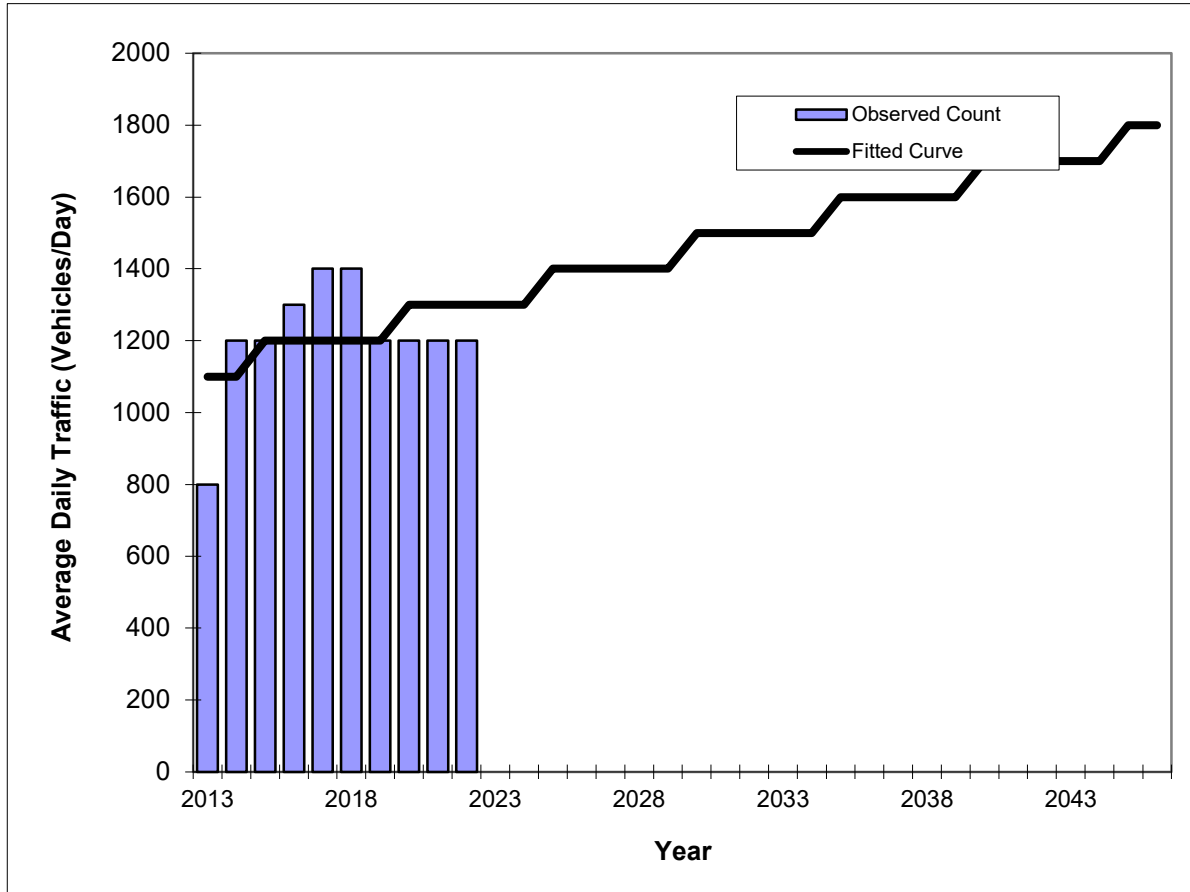
** Annual Trend Increase:	31
Trend R-squared:	34.42%
Trend Annual Historic Growth Rate:	1.56%
Trend Growth Rate (2022 to Design Year):	2.71%
Printed:	21-Jun-23
Straight Line Growth Option	

\*Axle-Adjusted

# **Traffic Trends - V03.a** **SW 46th Ave -- .1 Mi W of CR 241 (HPMS)**

FIN#	1234
Location	1

County:	Alachua (26)
Station #:	9123
Highway:	SW 46th Ave



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	800	1100
2014	1200	1100
2015	1200	1200
2016	1300	1200
2017	1400	1200
2018	1400	1200
2019	1200	1200
2020	1200	1300
2021	1200	1300
2022	1200	1300
2025 Opening Year Trend		
2025	N/A	1400
2030 Mid-Year Trend		
2030	N/A	1500
2035 Design Year Trend		
2035	N/A	1600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	20
Trend R-squared:	13.25%
Trend Annual Historic Growth Rate:	2.27%
Trend Growth Rate (2022 to Design Year):	2.56%
Printed:	21-Jun-23
Straight Line Growth Option	

\*Axle-Adjusted

# APPENDIX D

## Crash Summary

Section: Intersecting Street: SR 26, SW 30th Ave, SW 46th Ave Source Data: Signal 4 Analytics															Route: County: City:		CR 337 Alachua Newberry	
Study Period:			From		1/1/2018		to		12/31/2022		60		Months					
No.	Report No	Long or Short Form	Date	Day	Time	Gender	Age	Alcohol / Drugs Involved	Lighting Condition	Roadway Surface	Weather	Fatal	Injury	Most Severe Injury	Harmful Event	Property Damage	Distracted	Contributing Cause
1	87886655	L	03/30/18	Friday	9:57:00 PM	Male	57	none	Dark - Not Lighted	Dry	Clear	0	1	Non-Incapacitating Injury	Rollover	\$10,000	Y	Improper Lane Change
2	87189630	L	06/16/18	Saturday	3:17:00 PM	Male	32	Alcohol & Drugs	Daylight	Dry	Cloudy	1	0	Fatal (within 30 days)	Off Road	\$20,000	N	Alcohol/Drugs-Under Influence
3	87282459	L	12/04/18	Tuesday	8:50:00 AM		0	none	Daylight	Dry	Clear	0	0	No Injury	Moveable Object	\$5,000	N	Improper Load
4	87190533	L	07/12/18	Thursday	5:20:00 AM	Male	21	none	Dark - Not Lighted	Dry	Clear	0	1	Non-Incapacitating Injury	Off Road	\$7,000	Y	Careless Driving
5	87886659	L	05/26/18	Saturday	4:15:00 PM	Male	25	none	Daylight	Dry	Cloudy	0	0	No Injury	Off Road	\$5,300	Y	Improper Backing
6	89027340	L	06/06/19	Thursday	6:05:00 AM	Female	21	none	Daylight	Dry	Clear	0	0	No Injury	Rear End	\$14,000	N	Careless Driving
7	89027497	L	11/03/19	Sunday	11:50:00 AM	Male	30	none	Daylight	Dry	Clear	0	0	No Injury	Moveable Object	\$6,000	N	Followed Too Closely
8	88055273	L	01/04/19	Friday	6:52:00 PM	Male	40	none	Dark - Not Lighted	Dry	Cloudy	0	1	Possible Injury	Sideswipe	\$14,000	N	Improper Turn
9	89027293	L	08/13/19	Tuesday	8:57:00 PM	Male	33	none	Dark - Not Lighted	Dry	Clear	0	1	Non-Incapacitating Injury	Left Turn	\$10,000	N	Careless Driving
10	89027401	S	09/16/19	Monday	4:05:00 PM	Male	40	none	Daylight	Dry	Clear	0	0	No Injury	Sideswipe	\$500	N	Improper Passing
11	89027407	S	09/15/19	Sunday	12:00:00 AM	Female	26	none	Dusk	Dry	Clear	0	0	No Injury	Hit Tree/Shrub	\$2,000	N	No Improper Driving
12	88070481	L	05/17/19	Friday	7:20:00 PM	Female	20	none	Daylight	Dry	Cloudy	0	1	Possible Injury	Angle	\$5,000	N	FTYROW
13	88375422	L	08/31/20	Monday	1:15:00 PM	Female	19	none	Daylight	Dry	Clear	0	0	No Injury	Rear End	\$6,000	Y	Careless Driving
14	24092028	S	12/27/20	Sunday	6:48:00 AM	Female	23	none	Dawn	Ice/Frost	Clear	0	0	No Injury	Off Road	\$2,500	N	Careless Driving
15	88030749	L	07/23/20	Thursday	11:42:00 PM	Male	26	alcohol	Dark - Not Lighted	Dry	Clear	1	0	Fatal (within 30 days)	Off Road	\$10,000	N	Alcohol Under Influence
16	89474387	S	05/20/20	Wednesday	10:45:00 AM	Male	50	none	Daylight	Dry	Clear	0	0	No Injury	Rear End	\$2,700	N	Improper Backing
17	24092320	S	04/24/21	Saturday	10:50:00 AM	Female	32	none	Daylight	Dry	Clear	0	0	No Injury	Off Road	\$1,000	N	No Improper Driving
18	24486535	L	09/10/21	Friday	5:54:00 AM	Male	43	none	Dark - Not Lighted	Dry	Clear	0	0	No Injury	Other Fixed Object	\$3,000	N	No Improper Driving
19	24486481	L	11/27/21	Saturday	7:35:00 PM	Female	23	none	Dark - Not Lighted	Dry	Clear	0	1	Non-Incapacitating Injury	Hit Tree/Shrub	\$5,000	N	Exceeded Stated Safe Speed Limit
20	24486575	L	06/23/21	Wednesday	3:29:00 PM	Male	52	none	Daylight	Mud, Dirt, Gravel	Cloudy	0	0	No Injury	Off Road	\$2,500	N	Careless Driving
21	24092057	L	05/02/21	Sunday	12:00:00 AM	Male	38	alcohol	Daylight	Dry	Cloudy	0	1	Possible Injury	Off Road	\$5,000	Y	Alcohol Under Influence
22	24904119	L	04/10/22	Sunday	7:30:00 PM	Male	41	none	Daylight	Dry	Clear	0	1	Non-Incapacitating Injury	Rear End	\$15,000	N	Careless Driving
23	24486923	S	01/13/22	Thursday	2:45:00 PM	Female	25	none	Daylight	Dry	Clear	0	0	No Injury	Rear End	\$4,000	N	Followed Too Closely
24	24752783	S	10/26/22	Wednesday	4:12:00 PM	Male	82	none	Daylight	Dry	Clear	0	0	No Injury	Sideswipe	\$3,000	N	Careless Driving
25	24752587	L	06/23/22	Thursday	5:16:00 PM	Male	42	none	Daylight	Dry	Clear	0	0	No Injury	Rear End	\$20,000	N	Careless Driving

CRASH STATISTICS								INJURY SEVERITY					LIGHTING					ROADWAY CONDITION			
	Total Number of Crashes	Total Number of Long Form	Total Property Damage	Total Number of Fatalities	Number of Fatal Crashes	Total Number of Injuries	Number of Injury Crashes	No Injury	Possible Injury	Non-Incapacitating Injury	Incapacitating Injury	Fatal (within 30 days)	Daylight	Dark - Lighted	Dark - Not Lighted	Dawn	Dusk	Mud, Dirt, Gravel	Dry	Ice/Frost	
	25	18	\$178,500	2	2	15	8	15	3	5	0	2	16	0	7	1	1	1	23	1	
	100%	72%	--	--	8%	--	32%	60%	12%	20%	0%	8%	64%	0%	28%	4%	4%	4%	92%	4%	

HARMFUL EVENT																				
Rear End	Head On	Angle	Left Turn	Right Turn	Sideswipe	Backed Into	Off Road	Rollover	Pedestrian	Bicycle	Bike (Bike Lane)	Moped	Train	Animal	Hit Sign/Sign Post	Median Crossover	Separation of Units	Hit Utility Pole	Hit Guardrail	
6	0	1	1	0	3	0	8	1	0	0	0	0	0	0	0	0	0	0	0	
24%	0%	4%	4%	0%	12%	0%	32%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Hit Fence	Hit Concrete Barrier Wall	Hit Br/Pier/Abutt	Hit Tree/Shrub	Hit Const Barricd/SignBr/ Pier/Abutt	Traffic Gate	Crash Attenuator	Fixed Object Above Road	Other Fixed Object	Moveable Object	Ran Into Ditch/Culvert	Ran Off Rd Into Water	Overturne d	Occupant Fell From Vehicle	Trac/Trail Jackknifed	Cargo Loss or Shift	Occupant Fell From Vehicle	Crash Attenuator	Unknown	Other	
0	0	0	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	
0%	0%	0%	8%	0%	0%	0%	0%	4%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

CONTRIBUTING CAUSE																				
	No Improper Driving	Careless Driving	FTYROW	Improper Backing	Improper Load	Improper Turn	Followed Too Closely	Improper Lane Change	Exceeded Stated Safe Speed Limit	Disregarded Other Traffic Control	Failed to Maintain Equipment	Improper Passing	Drove Left of Center	Disregarded Stop Sign	Drove Left of Center	Drugs-Under Influence	Alcohol Under Influence	Alcohol/Drugs-Under Influence	Driving Wrong Side/Way	Fleeing Police
	3	9	1	2	1	1	2	1	1	0	0	1	0	0	0	0	2	1	0	0
	12%	36%	4%	8%	4%	4%	8%	4%	4%	0%	0%	4%	0%	0%	0%	0%	8%	4%	0%	0%



# APPENDIX E

## Crash Modification Factors

# CMF / CRF Details

CMF ID: 9289

CMF Name: Resurface pavement

Description:

Prior Condition: No Prior Condition(s)

Category: Roadway

Study ID: [Time series trends of the safety effects of pavement resurfacing, Park et al. 2017](#)

Star Quality Rating	
Star Quality Rating:	4 Stars

Crash Modification Factor (CMF)	
Value:	0.929
Adjusted Standard Error:	
Unadjusted Standard Error:	0.04

Crash Reduction Factor	
Value:	7.1
Adjusted Standard Error:	
Unadjusted Standard Error:	4

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Principal Arterial Other
Minimum Number of Lanes:	1
Maximum Number of Lanes:	4
Number of Lanes Direction:	
Number of Lanes Comment:	
Road Division Type:	
Minimum Speed Limit:	25
Maximum Speed Limit:	65
Speed Unit:	mph
Speed Limit Comment:	
Area Type:	Urban
Traffic Volume:	Minimum of 2100 to Maximum of 40500 Annual Average Daily Traffic (AADT)
Average Traffic Volume:	
Time of Day:	Not specified
<i>If countermeasure is intersection-based.</i>	
Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

<b>Average Major Road Volume:</b>	
<b>Average Minor Road Volume:</b>	

Development Details	
<b>Date Range of Data Used:</b>	2004 to 2013
<b>Municipality:</b>	
<b>State:</b>	FL
<b>Country:</b>	USA
<b>Type of Methodology Used:</b>	Before/after using comparison group
<b>Sample Size (crashes):</b>	1157 crashes before, 1158 crashes after
<b>Sample Size (sites):</b>	195 sites before, 195 sites after
<b>Sample Size (miles):</b>	115.443 miles before

Other Details	
<b>Included in HSM:</b>	No
<b>Date Added to Clearinghouse:</b>	Jun 17, 2018
<b>Comments:</b>	

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## CMF / CRF Details

**CMF ID:** 3

**CMF Name:** Increase lane width from 11 feet to 12 feet

**Description:**

**Prior Condition:** No Prior Condition(s)

**Category:** Roadway

**Study ID:** [Lane Width and Safety, Hauer, E. 2000](#)

### Star Quality Rating

Star Quality Rating:

4 Stars

### Crash Modification Factor (CMF)

Value:

0.95

Adjusted Standard Error:

0.32

Unadjusted Standard Error:

0.11

### Crash Reduction Factor

Value:

5

Adjusted Standard Error:

32

Unadjusted Standard Error:

11

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Minimum Number of Lanes:	2
Maximum Number of Lanes:	2
Number of Lanes Direction:	
Number of Lanes Comment:	
Road Division Type:	
Minimum Speed Limit:	
Maximum Speed Limit:	
Speed Unit:	
Speed Limit Comment:	
Area Type:	Rural
Traffic Volume:	
Average Traffic Volume:	
Time of Day:	
<i>If countermeasure is intersection-based.</i>	
Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

<b>Average Major Road Volume:</b>	
<b>Average Minor Road Volume:</b>	

Development Details	
<b>Date Range of Data Used:</b>	
<b>Municipality:</b>	
<b>State:</b>	
<b>Country:</b>	
<b>Type of Methodology Used:</b>	Meta-analysis

Other Details	
<b>Included in HSM:</b>	No
<b>Date Added to Clearinghouse:</b>	Dec 01, 2009
<b>Comments:</b>	

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## CMF / CRF Details

**CMF ID:** 10550

**CMF Name:** Convert minor-road stop control to all-way stop control

**Description:**

**Prior Condition:** Intersections with stops signs on minor approaches

**Category:** Intersection traffic control

**Study ID:** [Estimate of the Safety Effect of All-Way Stop Control Conversion in Washington, DC, Deng et al. 2020](#)

Star Quality Rating	
Star Quality Rating:	4 Stars

Crash Modification Factor (CMF)	
Value:	1.03
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor	
Value:	-3
Adjusted Standard Error:	
Unadjusted Standard Error:	



Applicability	
Crash Type:	Rear end
Crash Severity:	All
Roadway Types:	Not specified
Minimum Number of Lanes:	
Maximum Number of Lanes:	
Number of Lanes Direction:	
Number of Lanes Comment:	
Road Division Type:	
Minimum Speed Limit:	
Maximum Speed Limit:	
Speed Unit:	
Speed Limit Comment:	
Area Type:	Not specified
Traffic Volume:	
Average Traffic Volume:	
Time of Day:	Not specified
<i>If countermeasure is intersection-based.</i>	
Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	3-leg,4-leg
Traffic Control:	Stop-controlled
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

<b>Average Major Road Volume:</b>	
<b>Average Minor Road Volume:</b>	

Development Details	
<b>Date Range of Data Used:</b>	2009 to 2016
<b>Municipality:</b>	
<b>State:</b>	DC
<b>Country:</b>	
<b>Type of Methodology Used:</b>	Before/after using comparison group
<b>Sample Size (sites):</b>	53 sites before, 53 sites after
<b>Sample Size (site-years):</b>	site-years before, 159 site-years after

Other Details	
<b>Included in HSM:</b>	No
<b>Date Added to Clearinghouse:</b>	Dec 17, 2020
<b>Comments:</b>	

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This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

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# CMF / CRF Details

CMF ID: 2826

CMF Name: Flatten horizontal curve

Description:

Prior Condition: curve with smaller radius

Category: Alignment

Study ID: [Benefit-Cost Analysis of In-Vehicle Technologies and Infrastructure Modifications as a Means to Prevent Crashes Along Curves and Shoulders, Pitale et al. 2009](#)

Star Quality Rating	
Star Quality Rating:	1 Star

Crash Modification Factor (CMF)	
Value:	0.33
Adjusted Standard Error:	
Unadjusted Standard Error:	0.32

Crash Reduction Factor	
Value:	67
Adjusted Standard Error:	
Unadjusted Standard Error:	32.1

Applicability	
Crash Type:	All
Crash Severity:	All
Roadway Types:	Principal Arterial Other
Minimum Number of Lanes:	2
Maximum Number of Lanes:	2
Number of Lanes Direction:	
Number of Lanes Comment:	
Road Division Type:	
Minimum Speed Limit:	
Maximum Speed Limit:	
Speed Unit:	
Speed Limit Comment:	
Area Type:	
Traffic Volume:	
Average Traffic Volume:	
Time of Day:	All
<i>If countermeasure is intersection-based.</i>	
Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

<b>Average Major Road Volume:</b>	
<b>Average Minor Road Volume:</b>	

Development Details	
<b>Date Range of Data Used:</b>	
<b>Municipality:</b>	
<b>State:</b>	MN
<b>Country:</b>	USA
<b>Type of Methodology Used:</b>	Simple before/after
<b>Sample Size (crashes):</b>	2 crashes before, 3 crashes after

Other Details	
<b>Included in HSM:</b>	No
<b>Date Added to Clearinghouse:</b>	Mar 21, 2011
<b>Comments:</b>	For 4 curves.

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# Crash Modification Factors (CMFs)

## Introduction

Local and rural road owners often have limited financial resources available to implement highway safety improvements. Therefore, it is important that safety improvements return the highest level of benefit for each dollar invested. A primary benefit of safety improvements is to reduce crashes and fatalities, so it is useful for local and rural road owners to understand how much a particular safety improvement, or set of safety improvements, can reduce crashes. Published resources are available to assist local and rural road owners in understanding the crash reduction potential associated with specific safety improvements. This briefing sheet describes these resources and provides an example of how a crash modification factor can be used to assess the safety impact of a set of improvements.

## Developing CMFs

Highway safety professionals have conducted numerous studies measuring the crash reduction potential of various types of safety improvements. Many of these estimates have been developed by comparing crashes “before” implementation of a safety improvement against crashes “after” implementation. The measured change in crashes is used to develop a “crash modification factor,” or CMF. A CMF is a multiplicative factor used to compute the expected number of crashes after implementing a given countermeasure at a specific site.

While some experience and judgment is required to develop and apply CMFs, the information derived from their proper application can benefit local and rural road owners in selecting safety improvements or “countermeasures” by providing a basis to understand how crashes are affected by a particular safety improvement or set of improvements.

## Resources

Application of CMFs requires an appreciation of their sources and limitations. The CMF Clearinghouse<sup>1</sup> contains over 3,000 CMFs, each developed through one or more safety studies. The Clearinghouse provides a searchable database for CMFs and accompanying background information on each. The practitioner can use the search tools available with the Clearinghouse to find the CMFs that match the facility where they have a safety need; e.g., intersections or roadway segments. Each CMF has a “star rating” indicating the quality or confidence in the results of the study producing the CMF. A higher number of stars indicate a better rating, with five stars representing the best quality of research for the CMF. Each CMF will have an accompanying study along with the countermeasure’s impact on crash severity, crash types, and where the countermeasure was deployed (e.g., rural or urban area).

The *Highway Safety Manual* (HSM), published in 2010, provides practitioners with information and tools to consider safety when making decisions concerning the design and operation of roadways. The CMFs used in the HSM are considered the “best of the best” at the time of publication. This tool can help practitioners evaluate alternatives and determine expected impacts on roadway safety. Two chapters in Part C Predictive Method are specific to rural roadways. Chapter 10 provides a methodology to analyze rural two-lane roadways, and chapter 11 is about rural multilane highways. It is important to note the current HSM pertains to only paved roadways.



## Estimating Countermeasure Benefits

The *Highway Safety Manual* and CMF Clearinghouse also provide directions for how to calculate the combined effects of applying multiple safety improvements. In these cases, the CMFs are typically multiplied to estimate the combined effect of independent countermeasures such as adding pedestrian signals and left-turn lane at a signalized intersection. The HSM recommends that practitioners multiply no more than 3 CMFs to estimate the combined effect of multiple safety improvements. Practitioners are cautioned about multiplying CMFs for countermeasures targeting the same crash type, such as using chevrons and widened shoulders at a curve to reduce roadway departure crashes. This practice can overestimate the benefits of combined treatments. In this case, caution and engineering judgment should be exercised.<sup>2</sup>

While the number of CMFs for newer or more innovative safety improvements is limited, the CMF Clearinghouse can provide local and rural road managers with a good start in compiling benefits and comparing the relative effectiveness of potential improvements.

Local and rural road operators can gain an understanding of safety treatment effectiveness by comparing CMFs for countermeasures that reduce the occurrence of the same crash type. For example, the table below presents a series of safety countermeasures to treat run-off-the-road crashes, a frequent challenge on two-lane local and rural roads, by increasing cost.

CMFs for Selected Run-Off-The-Road Crash Countermeasures

Countermeasure	CMF	Cost	Reference
Install Advance Curve Warning Signs	0.70	Low	R. Elvik, and T. Vaa, "Handbook of Road Safety Measures," Oxford, United Kingdom, Elsevier (2004).
Provide Road Delineation Signing	0.65	Low	A. Montella, "Safety Evaluation of Curve Delineation Improvements An Empirical Bayes Observational Before-After Study," TRB 88th Annual Meeting Compendium of Papers CD-ROM, Washington, DC: TRB, 2009).
Install Edge Line Striping	0.62 to 0.56	Low to Moderate	X. Sun and S. Das, "Safety Improvement from Edge Lines on Rural Two-Lane Highways," Louisiana Department of Transportation and Development, Report No. FHWA/LA.11/487, (Baton Rouge: 2011).
Install Edge Line Rumble Strips	0.90 to 0.78	Low to Moderate	D.J. Torbic, J.M. Hutton, C.D. Bokenkroger, et al. <i>NCHRP Report 641: Guidance for the Design and Application of Shoulder and Centerline Rumble Strips</i> , National Cooperative Highway Research Program (Washington DC: TRB, 2009).
Widen Shoulders	0.98	Low to Moderate	K. Haleem, A. Gan, and J. Lu. "Using multivariate adaptive regression splines (MARS) to develop crash modification factors for urban freeway interchange influence areas," <i>Accident Analysis and Prevention</i> 55 (2013): 12-21.

Countermeasure	CMF	Cost	Reference
Remove or Shield Roadside Obstacles	0.62	Low to Moderate	P.W. Hovey and M. Chowdhury, <i>Development of Crash Reduction Factors</i> , 14801(0), Ohio Department of Transportation, (2005).
Flatten Horizontal Curve	0.33	High	Pitale, J.T., Shankwitz, C., Preston, H., and Barry, M., <i>Benefit-Cost Analysis of In-Vehicle Technologies and Infrastructure Modifications as a Means to Prevent Crashes Along Curves and Shoulders</i> , Minnesota Department of Transportation, (2009).

Source: Federal Highway Administration, "Crash Modification Factors (CMF) Clearinghouse." Available online at: [www.cmfclearinghouse.org](http://www.cmfclearinghouse.org).

As presented in this table, the installation of advance curve warning signs has a CMF of 0.70. By applying this treatment to horizontal curves along a two-lane rural road experiencing an average of ten horizontal curve/run-off-the-road crashes per year, one can expect seven horizontal curve/run-off-the-road crashes per year following the implementation of the countermeasure ( $10 \times 0.70 = 7$ ). In other words, crashes can be reduced by 30 percent. Conversely, widening shoulders, a more costly countermeasure, would result in a more modest reduction in crashes. Based on this knowledge, and supplemented with experienced application of CMFs, local and rural road agencies can quickly understand the potential safety benefits from applying a range of safety treatments.

#### Crash Modification Factor Example:

$$\frac{\text{Average Crashes (after CM implementation)} - (\text{CMF} \times \text{Avg. Crashes (Before CM Implementation)})}{\text{Average Crashes (Before CM Implementation)}} = \text{Crash Reduction}$$

#### Adding Advance Warning Signs at Curves

$$10 - (0.7 \times 10 \text{ crashes/year}) = 3 \text{ crashes per year reduced}$$

Some CMFs apply to the average of all crashes on a roadway segment or intersection, while others may apply to crashes based on severity, such as fatal or injury crashes. This allows agencies to rank the benefits of countermeasures based on the severity of the crashes that can be prevented and to target more severe crashes in a road safety strategy.

Local and rural road owners are sometimes able to fund highly effective, lower-cost projects using local funds more quickly than they can fund more effective but perhaps considerably more costly projects. Reviewing CMFs, along with implementation costs, provides local and rural road owners with an opportunity to understand the benefit/cost (B/C) ratio of different countermeasures before undertaking a more detailed assessment. As shown in the table above, a local road owner could choose to implement a lower cost option, such as signing or striping, as a first step in improvement while perhaps waiting for State or Federal funding for more costly strategies that may have greater long-term effectiveness.



## Resources



American Association of State Highway and Transportation Officials, *Highway Safety Manual*. Available at: <http://www.highwaysafetymanual.org/>



Federal Highway Administration, *Introduction to Crash Modification Factors*, FHWA-SA-13-015 (Washington, DC: 2013). Available at: <http://safety.fhwa.dot.gov/tools/crf/resources/cmfs/intro.cfm>



Federal Highway Administration, “Crash Modification Factors (CMF) Clearinghouse” web page. Available at: [www.cmfclearinghouse.org](http://www.cmfclearinghouse.org)



Federal Highway Administration, “Crash Modification Factors in Practice” web page. Available at: <http://safety.fhwa.dot.gov/tools/crf/resources/cmfs/>



F. Gross and K. Yunk, “Using CRFs to Improve Highway Safety,” *Public Roads*, May/June (2009): 26-31. Available at: <http://www.fhwa.dot.gov/publications/publicroads/09june/04.cfm>

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<sup>1</sup> Federal Highway Administration, “Crash Modification Factors (CMF) Clearinghouse” web page. Available online at: [www.cmfclearinghouse.org](http://www.cmfclearinghouse.org)

<sup>2</sup> Ibid.

# APPENDIX F

## Cost Estimation

Developed by:

HNTB

9/27/2023

**ENGINEER'S ESTIMATE OF PROBABLE COST - CR 337**  
**Option 1 - Widen to 11ft Lanes (No Shoulder)**

ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
<b>ROADWAY</b>						
120-1	REGULAR EXCAVATION	CY	\$ 10.16	AREA 6 UNIT COST	7,458	\$ 75,776.67
120-6	EMBANKMENT	CY	\$ 11.10	AREA 6 UNIT COST	7,458	\$ 82,787.50
160-4	TYPE B STABILIZATION	SY	\$ 8.90	AREA 6 UNIT COST	7,956	\$ 70,804.44
110-1-1	CLEARING & GRUBBING	AC	\$ 29,196.39	AREA 6 UNIT COST	4.11	\$ 119,975.98
285-706	OPTIONAL BASE GROUP 06	SY	\$ 51.98	AREA 6 UNIT COST	7,956	\$ 413,529.78
327-70-5	MILLING EXISTING ASPHALT PAVEMENT, 2" AVG DEPTH	SY	\$ 3.76	AREA 6 UNIT COST	35,800	\$ 134,608.00
334-1-12	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B	TN	\$ 276.00	AREA 6 UNIT COST	2,406.6	\$ 664,209.33
337-7-81	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC B, FC-9.5, PG 76-22	TN	\$ 375.00	AREA 6 UNIT COST	2,406.6	\$ 902,458.33
570-1-2	PERFORMANCE TURF, SOD	SY	\$ 4.41	AREA 6 UNIT COST	11,933.3	\$ 52,626.00
	<b>SUBTOTAL ROADWAY</b>					<b>\$ 2,516,776.04</b>
<b>SIGNING &amp; PAVEMENT MARKING</b>						
700-1-500	SINGLE POST SIGN, RELOCATE	AS	\$ 344.39	AREA 6 UNIT COST	4	\$ 1,377.56
706-1-3	RAISED PAVEMENT MARKER, TYPE B	EA	\$ 4.61	AREA 6 UNIT COST	895	\$ 4,125.95
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	\$ 6.11	AREA 6 UNIT COST	22	\$ 134.42
711-11-241	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SKIP, 6"	GM	\$ 1,570.48	AREA 6 UNIT COST	3.390	\$ 5,324.17
711-16-101	THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	\$ 5,499.72	AREA 6 UNIT COST	6.780	\$ 37,289.77
711-16-201	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	\$ 5,474.30	AREA 6 UNIT COST	3.390	\$ 18,558.71
	<b>SUBTOTAL S&amp;PM</b>					<b>\$ 66,810.57</b>
<b>TRAFFIC</b>						
695-1-1	TRAFFIC MONITORING SITE VEHICLE SENSOR-NON-WEIGHT, FURNISH & INSTALL	EA	\$ 2,091.47	AREA 6 UNIT COST	1	\$ 2,091.47
<b>MISCELLANEOUS</b>						
101-1	MOBILIZATION (10%)	LS			1	\$ 258,567.81
102-1	MAINTENANCE OF TRAFFIC (10%)	LS			1	\$ 258,567.81
	<b>SUBTOTAL MISCELLANEOUS</b>					<b>\$ 517,135.62</b>
	<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 3,102,813.69</b>
	PROJECT UNKNOWNNS (15%)	LS			1	\$ 465,422.05
	<b>CONSTRUCTION TOTAL</b>					<b>\$ 3,568,235.75</b>
	CONTINGENCY (10%)	LS			1	\$ 356,823.57
	DESIGN COST (20% OF CONSTRUCTION TOTAL) (60% TO FINAL)					\$ 713,647.15
	CEI COST (10% OF CONSTRUCTION TOTAL)					\$ 356,823.57
	<b>GRAND TOTAL</b>					<b>\$ 4,995,500.00</b>

- Unit costs provided from FDOT Historical Average Area 06 (From 2022/07/01 to 2023/06/30).

Developed by:

HNTB

9/27/2023

**ENGINEER'S ESTIMATE OF PROBABLE COST - CR 337**  
**Option 2 - Widen to 11ft Lanes (No Shoulder) with Realignment**

ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	<b>ROADWAY</b>					
110-1-1	CLEARING & GRUBBING	AC	\$ 29,196.39	AREA 6 UNIT COST	6.80	\$ 198,546.85
120-1	REGULAR EXCAVATION	CY	\$ 10.16	AREA 6 UNIT COST	17,010	\$ 172,821.60
120-6	EMBANKMENT	CY	\$ 11.10	AREA 6 UNIT COST	7,469	\$ 82,910.71
160-4	TYPE B STABILIZATION	SY	\$ 8.90	AREA 6 UNIT COST	14,138	\$ 125,829.13
285-706	OPTIONAL BASE GROUP 06	SY	\$ 51.98	AREA 6 UNIT COST	14,138	\$ 734,898.67
327-70-5	MILLING EXISTING ASPHALT PAVEMENT, 2" AVG DEPTH	SY	\$ 3.76	AREA 6 UNIT COST	35,800	\$ 134,608.00
334-1-12	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC B	TN	\$ 276.00	AREA 6 UNIT COST	3,256.7	\$ 898,837.06
337-7-81	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC B, FC-9.5, PG 76-22	TN	\$ 375.00	AREA 6 UNIT COST	2,746.6	\$ 1,029,973.40
570-1-2	PERFORMANCE TURF, SOD	SY	\$ 4.41	AREA 6 UNIT COST	20,616.7	\$ 90,919.50
	<b>SUBTOTAL ROADWAY</b>					<b>\$ 3,270,798.08</b>
ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	<b>SIGNING &amp; PAVEMENT MARKING</b>					
700-1-500	SINGLE POST SIGN, RELOCATE	AS	\$ 344.39	AREA 6 UNIT COST	4	\$ 1,377.56
700-1-600	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	\$ 49.41	AREA 6 UNIT COST	5	\$ 247.05
706-1-3	RAISED PAVEMENT MARKER, TYPE B	EA	\$ 4.61	AREA 6 UNIT COST	895	\$ 4,125.95
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE AND CROSSWALK	LF	\$ 6.11	AREA 6 UNIT COST	22	\$ 134.42
711-11-241	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SKIP, 6"	GM	\$ 1,570.48	AREA 6 UNIT COST	3.390	\$ 5,324.17
711-16-101	THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	\$ 5,499.72	AREA 6 UNIT COST	6.780	\$ 37,289.77
711-16-201	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	\$ 5,474.30	AREA 6 UNIT COST	3.390	\$ 18,558.71
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE	LF	\$ 6.33	AREA 6 UNIT COST	44.000	\$ 278.52
700-1-111	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	\$ 557.64	AREA 6 UNIT COST	4.000	\$ 2,230.56
	<b>SUBTOTAL S&amp;PM</b>					<b>\$ 69,566.70</b>
ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	<b>TRAFFIC</b>					
695-1-1	TRAFFIC MONITORING SITE VEHICLE SENSOR-NON-WEIGHT, FURNISH & INSTALL	EA	\$ 2,091.47	AREA 6 UNIT COST	1	\$ 2,091.47
ITEM NUMBER	ITEM DESCRIPTION	UNIT			QTY	ESTIMATED COSTS (\$)
	<b>MISCELLANEOUS</b>					
101-1	MOBILIZATION (10%)	LS			1	\$ 334,245.62
102-1	MAINTENANCE OF TRAFFIC (10%)	LS			1	\$ 334,245.62
	R/W (10%)	LS			1	\$ 334,245.62
	<b>SUBTOTAL MISCELLANEOUS</b>					<b>\$ 1,002,736.87</b>
	<b>CONSTRUCTION SUBTOTAL</b>					<b>\$ 4,345,193.12</b>
	PROJECT UNKNOWNNS (15%)	LS			1	\$ 651,778.97
	<b>CONSTRUCTION TOTAL</b>					<b>\$ 4,996,972.09</b>
	CONTINGENCY (10%)	LS			1	\$ 499,697.21
	DESIGN COST (20% OF CONSTRUCTION TOTAL) (60% TO FINAL)					\$ 999,394.42
	CEI COST (10% OF CONSTRUCTION TOTAL)					\$ 499,697.21
	<b>GRAND TOTAL</b>					<b>\$ 6,995,800.00</b>

HNTB

10/11/2023

**ENGINEER'S ESTIMATE OF PROBABLE COST - CR 337**

ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	ROADWAY					
107-1	LITTER REMOVAL	AC	\$ 49.86	AREA 6 UNIT COST	98.62	\$ 4,917.19
107-2	MOWING	AC	\$ 96.58	AREA 6 UNIT COST	92.05	\$ 8,890.19
110-1-1	CLEARING & GRUBBING	AC	\$ 29,196.39	AREA 6 UNIT COST	22.26	\$ 649,911.64
110-4-10	REMOVAL OF EXISTING CONCRETE	SY	\$ 26.95	AREA 6 UNIT COST	479	\$ 12,909.05
110-7-1	MAILBOX, F&I SINGLE	EA	\$ 357.03	AREA 6 UNIT COST	76	\$ 27,134.28
120-1	REGULAR EXCAVATION	CY	\$ 10.16	AREA 6 UNIT COST	5,582	\$ 56,708.04
120-6	EMBANKMENT	CY	\$ 11.10	AREA 6 UNIT COST	30,967.5	\$ 343,739.25
160-4	TYPE B STABILIZATION	SY	\$ 8.92	AREA 6 UNIT COST	60,027	\$ 535,440.84
285-701	OPTIONAL BASE GROUP 01	SY	\$ 30.18	AREA 6 UNIT COST	10,246	\$ 309,224.28
285-706	OPTIONAL BASE GROUP 06	SY	\$ 51.98	AREA 6 UNIT COST	28,177	\$ 1,464,640.46
327-70-5	MILLING EXISTING ASPHALT PAVEMENT, 2" AVG DEPTH	SY	\$ 3.76	AREA 6 UNIT COST	25,619	\$ 96,327.44
334-1-13	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C	TN	\$ 134.91	AREA 6 UNIT COST	4,748.2	\$ 640,579.66
337-7-82	ASPHALT CONCRETE FRICTION COURSE,TRAFFIC C, FC-9.5, PG 76-22	TN	\$ 196.47	STATEWIDE 6 MONTH	2,844.1	\$ 558,780.33
570-1-2	PERFORMANCE TURF, SOD	SY	\$ 4.47	AREA 6 UNIT COST	83,733	\$ 374,286.51
	SUBTOTAL ROADWAY					\$ 5,083,489.16
ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	DRAINAGE					
110-1-1	PIPE CULVERT,OPTIONAL MATERIAL,ROUND, 18"S/CD	LF	\$ 120.70	AREA 6 UNIT COST	2,432	\$ 293,542.40
430-984-125	MITERED END SECTION, OPTIONAL ROUND, 18" SD	EA	\$ 2,811.31	AREA 6 UNIT COST	152	\$ 427,319.12
	SUBTOTAL DRAINAGE					\$ 720,861.52
ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	SIGNING & PAVEMENT MARKING					
700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	\$ 557.64	AREA 6 UNIT COST	40	\$ 22,305.60
700-1-12	SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF	AS	\$ 1,753.44	AREA 6 UNIT COST	8	\$ 14,027.52
700-1-60	SINGLE POST SIGN, REMOVE	AS	\$ 49.41	AREA 6 UNIT COST	40	\$ 1,976.40
706-1-3	RAISED PAVEMENT MARKER, TYPE B	EA	\$ 4.61	AREA 6 UNIT COST	896	\$ 4,130.56
710-90	PAINTED PAVEMENT MARKINGS, FINAL SURFACE	LS	\$ 18,173.75	AREA 6 UNIT COST	1	\$ 18,173.75
711-11-125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE	LF	\$ 6.33	AREA 6 UNIT COST	72	\$ 455.76
711-16-101	THERMOPLASTIC, STANDARD-OTHER SURFACES, WHITE, SOLID, 6"	GM	\$ 5,499.72	AREA 6 UNIT COST	6.780	\$ 37,288.10
711-16-201	THERMOPLASTIC, STANDARD-OTHER SURFACES, YELLOW, SOLID, 6"	GM	\$ 5,474.30	AREA 6 UNIT COST	6.780	\$ 37,115.75
	SUBTOTAL S&PM					\$ 153,647.20
ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	TRAFFIC					
695-1-1	TRAFFIC MONITORING SITE VEHICLE SENSOR-NON-WEIGHT, FURNISH & INSTALL	EA	\$ 2,091.47	AREA 6 UNIT COST	1	\$ 2,091.47
ITEM NUMBER	ITEM DESCRIPTION	UNIT	UNIT COST	SOURCE	QTY	ESTIMATED COSTS (\$)
	MISCELLANEOUS					
101-1	MOBILIZATION (10%)	LS			1	\$ 596,008.94
102-1	MAINTENANCE OF TRAFFIC (10%)	LS			1	\$ 596,008.94
	SUBTOTAL MISCELLANEOUS					\$ 1,192,017.87
	CONSTRUCTION SUBTOTAL					\$ 7,152,107.23
	PROJECT UNKNOWNNS (15%)	LS			1	\$ 1,072,816.08
	CONSTRUCTION TOTAL					\$ 8,224,923.31
	CONTIGENCY (10%)	LS			1	\$ 822,492.33
	DESIGN COST (20% OF CONSTRUCTION TOTAL) (60% TO FINAL)					\$ 1,644,984.66
	CEI COST (10% OF CONSTRUCTION TOTAL)					\$ 822,492.33
	GRAND TOTAL					\$ 11,514,900.00

# APPENDIX G

## Traffic Impact Analysis Report

# TRAFFIC IMPACT STUDY

## **Westone** **Newberry, Florida**

**April 10, 2023**

*prepared for:*

**City of Newberry**  
and  
**Florida DOT District 2**

*submitted on behalf of:*

**JBPro**

*prepared by:*



## PROFESSIONAL ENGINEER ENDORSEMENT

I hereby certify that I am a Registered Professional Engineer in the State of Florida and currently practicing as the principal of Hagen Consulting Services, LLC.

Hagen Consulting Services, LLC is authorized via Registry No: 27955 to operate as an Engineering Business by the Florida Board of Professional Engineers, State of Florida, Department of Professional Regulation.

I have prepared or supervised the preparation of the evaluation, findings, conclusions, recommendations, and professional opinions/advice contained in this document. My endorsement constitutes my approval of these items.

**PROJECT:** Westone

**LOCATION:** Newberry, Florida – Alachua County

**CLIENT:** JBPro

The results contained in this report were developed using procedures and references standard to the transportation engineering practice. These references and procedures were applied using professional judgment and experience.

**Name:** Lawrence T. Hagen, P.E., PTOE, RSP

**Florida P.E. No.:** 43968



This item has been digitally signed and sealed by Lawrence T. Hagen on the date adjacent to the seal.

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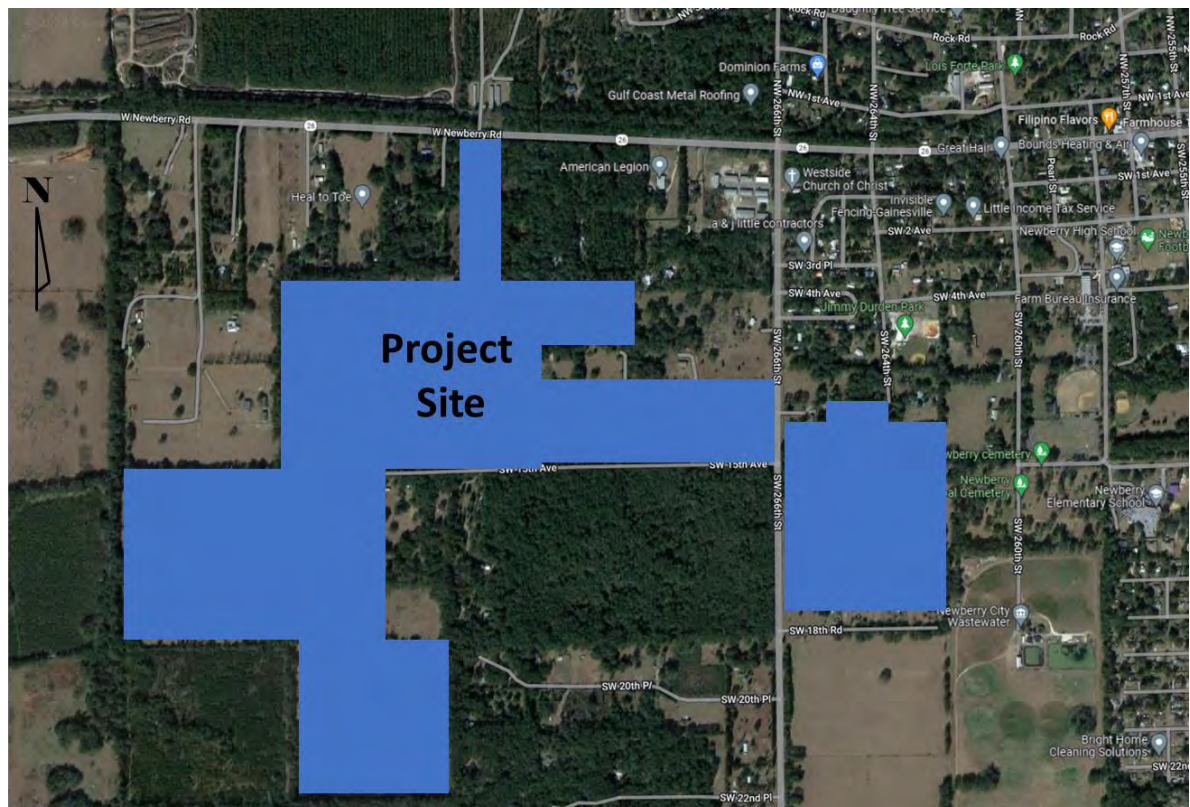
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## INTRODUCTION

Hagen Consulting Services, LLC is assisting JBPro with the transportation impacts for the proposed new Westone residential development. Westone is planned to contain a total of 850 single-family residential units. The preliminary plan is for a total of 681 detached single-family homes, and 169 townhouse attached single-family homes. Westone is located west of the City of Newberry in Alachua County, Florida. Access to the development will be provided primarily via State Road 26 (Newberry Road) and SW 266<sup>th</sup> Street (County Road 337). State Road 26 in the vicinity of the site is a two-lane undivided rural cross-section and is functionally classified as a rural principal arterial other with an FDOT access management classification of 3 and a posted speed limit of 60 mph west of the site. The speed limit drops to 50 mph just west of the proposed connection to SR 26 and drops to 40 west of SW 266<sup>th</sup> Street. The site is currently vacant and partially wooded. The project location is shown in **Figure 1** below.



*Figure 1 - Project Location Map*

The preliminary site plan for the proposed Westone single-family home development is included in **Appendix A**.

The 11<sup>th</sup> Edition of the Institute of Transportation Engineers (ITE) *Trip Generation* is the recognized authoritative source for estimating the trips generated by developments such as the proposed residential development. According to *Trip Generation*, a residential development such as proposed here falls under ITE Land Use Code 210 – Single-Family Detached Housing and ITE Land Use Code 215 – Single-Family Attached Housing. The assessment of the traffic impacts of the proposed residential housing development will be based on the impacts to traffic in the PM peak hour period.

The traffic impacts of the proposed development will be based on a Highway Capacity Software analysis of the operation of the intersections adjoining the site both with and without the traffic generated by the development. A comparison of the delay and Level Of Service (LOS) with and without the project traffic will serve as the basis of the analysis.

## EXISTING CONDITIONS

State Road 26 is a state-maintained roadway (Roadway ID 26070000) that runs in a predominantly West to East orientation in the vicinity of the project site. It is functionally classified as a rural principal arterial other and has an FDOT access management classification of 3. The typical cross-section is two-lane undivided rural section with paved shoulders and open drainage with grass ditches. There are no existing marked bike lanes or sidewalks on either side of the roadway. There are existing 4-foot-wide paved shoulders. As indicated above, the current posted speed limit in the vicinity of the where the Westone development's traffic will access State Road 26 is 50 mph. West of the access connection the speed limit raises to 60 mph and to the East it drops to 40 mph as it approaches NW 266<sup>th</sup> Street. As SR 26 approaches SW 266<sup>th</sup> Street a left turn bay exists to the West of the intersection and left turn and right turn lanes exist on the East side of the intersection. The intersection with NW 266<sup>th</sup> Street is at mile post 2.035 according to FDOT's straight line diagram for the roadway.

According to data from Florida Traffic Online, the segment of State Road 26 west of SW 266<sup>th</sup> Street has an AADT of 10,500. The segment of State Road 26 east of SW 266<sup>th</sup> Street has an AADT of 14,500. SW 266<sup>th</sup> Street south of State Road 26 has an AADT of 1,700 vehicles per day.

Existing turning movement count data at the intersection of SR 26 at SW 266<sup>th</sup> Street were collected on Thursday, December 8, 2022. Four hours of traffic data were collected, from 7 AM to 9 AM and from 4 PM to 6 PM. The traffic count data is included in **Appendix B**.

## TRIP GENERATION

The Institute of Transportation Engineers (ITE) *Trip Generation* 11<sup>th</sup> Edition was used to calculate the project trip estimates for the new land use at the project site. Trip generation estimates are shown in terms of daily traffic, as well as the AM and PM peak hours. The proposed Westone development falls under ITE Land Use Code 210 – Single-Family Detached Housing and ITE Land Use Code 215 – Single-Family Attached Housing. The total trip generation information for the proposed residential development is shown in **Table 1**, **Table 2**, and **Table 3** below.

**TABLE 1: Trip Generation**  
**Single-Family Detached Housing – ITE Land Use 210 – 681 Units**

Period	ITE Equation	Units	Trips	Distribution		Trips	
				% In	% Out	In	Out
Weekday	$\ln(T) = 0.92 \ln(X) + 2.68$	681	5,894	50%	50%	2,947	2,947
AM Peak	$\ln(T) = 0.91 \ln(X) + 0.12$	681	427	26%	74%	111	316
PM Peak	$\ln(T) = 0.94 \ln(X) + 0.27$	681	603	63%	37%	380	223

*Source: ITE 11th Edition of Trip Generation - Units: # of dwelling units*

**TABLE 2: Trip Generation**  
**Single-Family Attached Housing – ITE Land Use 215 – 169 Units**

Period	ITE Equation	Units	Trips	Distribution		Trips	
				% In	% Out	In	Out
Weekday	$T = 7.62(X) - 50.48$	169	1,237	50%	50%	619	619
AM Peak	$T = 0.52(X) - 5.70$	169	82	25%	75%	21	62
PM Peak	$T = 0.60(X) - 3.93$	169	97	59%	41%	58	40

*Source: ITE 11th Edition of Trip Generation - Units: # of dwelling units*

**TABLE 3: Trip Generation**  
**Total Trip Generation for Westone**

Period	Trips		
	In	Out	Total
Weekday	3,566	3,566	7,131
AM Peak	132	378	509
PM Peak	437	263	700

## SCHEDULE OF DEVELOPMENT

The proposed Westone development consists of three phases. For this preliminary analysis, we will presume that construction will begin in 2023 with the first phase being open in 2025. The subsequent phases will be assumed to be completed in five-year increments.

For the purposes of this analysis, we will just be considering the PM Peak Hour traffic volumes. Due to the non-linear nature of the trip generation equation for the single-family detached housing land use, the trip generation numbers are not simply additive for each phase, so the cumulative impacts of each of the phases must be tabulated and assessed. The PM Peak Hour trip generation for each phase of the development is shown in **Table 4**, **Table 5**, and **Table 6** below.

**TABLE 4: Trip Generation – PM Peak Hour Phase 1**

Land Use	ITE Equation	Units	Trips	Distribution		Trips	
				% In	% Out	In	Out
Single-Family Detached	$\ln(T) = 0.94 \ln(X) + 0.27$	173	166	63%	37%	105	62
Single-Family Attached	$T = 0.60(X) - 3.93$	169	97	59%	41%	58	40
Total						162	102

**TABLE 5: Trip Generation – PM Peak Hour Phase 2**

Land Use	ITE Equation	Units	Trips	Distribution		Trips	
				% In	% Out	In	Out
Single-Family Detached	$\ln(T) = 0.94 \ln(X) + 0.27$	423	385	63%	37%	243	143
Single-Family Attached	$T = 0.60(X) - 3.93$	169	97	59%	41%	58	40
Total						300	183

**TABLE 6: Trip Generation – PM Peak Hour Phase 3**

Land Use	ITE Equation	Units	Trips	Distribution		Trips	
				% In	% Out	In	Out
Single-Family Detached	$\ln(T) = 0.94 \ln(X) + 0.27$	681	603	63%	37%	380	223
Single-Family Attached	$T = 0.60(X) - 3.93$	169	97	59%	41%	58	40
Total						437	263



## TRIP DISTRIBUTION

The distribution of peak period project trips on the roadway network is typically a manual assignment derived from the peak period traffic data collected on the adjacent roadway and a review of existing locations of interacting land-uses. The distribution is based on engineering judgment of the expected routes that patrons would take to / from the proposed development. Since the Westone development will be developed in three phases, the trip distribution must be done on a phase-by-phase basis.

For Phase 1 of the development, just the portions of the property adjacent to SW 266<sup>th</sup> Street will be developed. This includes all of the 169 attached housing units for Westone and 173 of the detached housing units. Due to the very rural nature of the surrounding lands to the south and west of the project, the majority of traffic is presumed to be to/from the north on SW 266<sup>th</sup> Street and then to/from the east on State Road 26 towards Newberry. A small portion of traffic is also assigned to SW 15<sup>th</sup> Avenue. The PM Peak Hour Project Trip Distribution for Phase 1 is shown in **Figure 2** below.

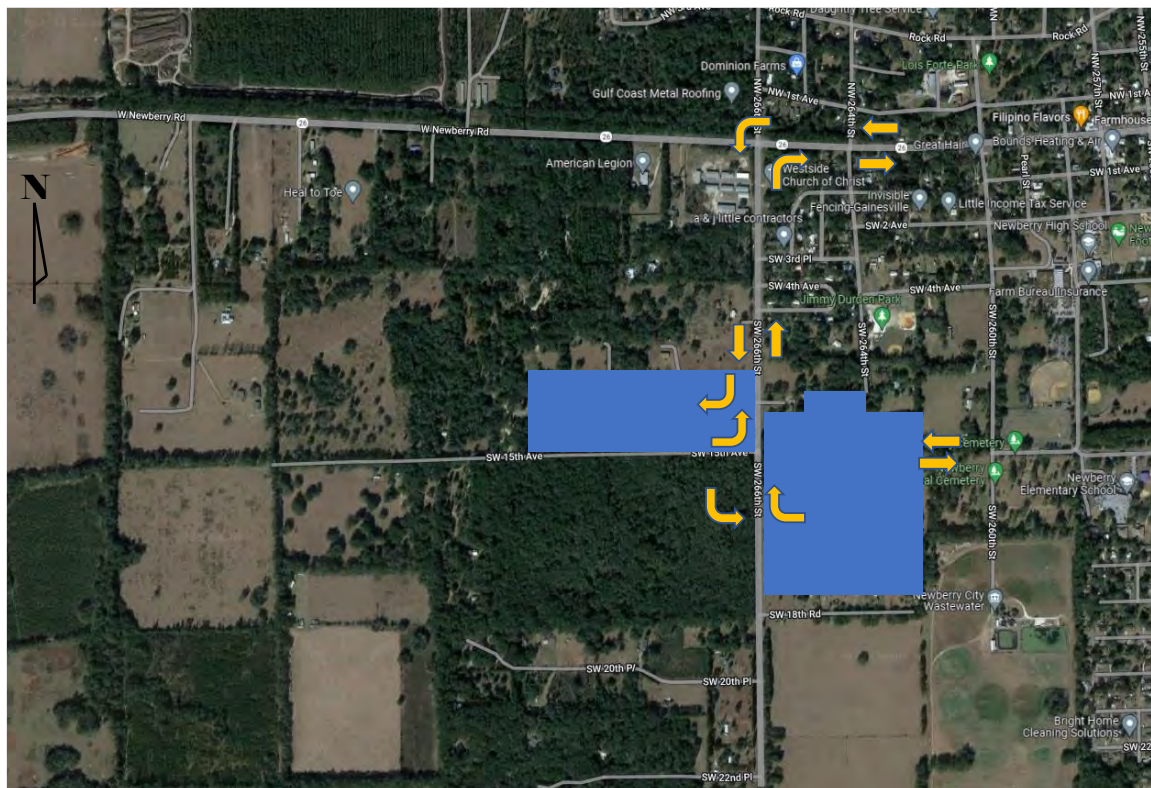
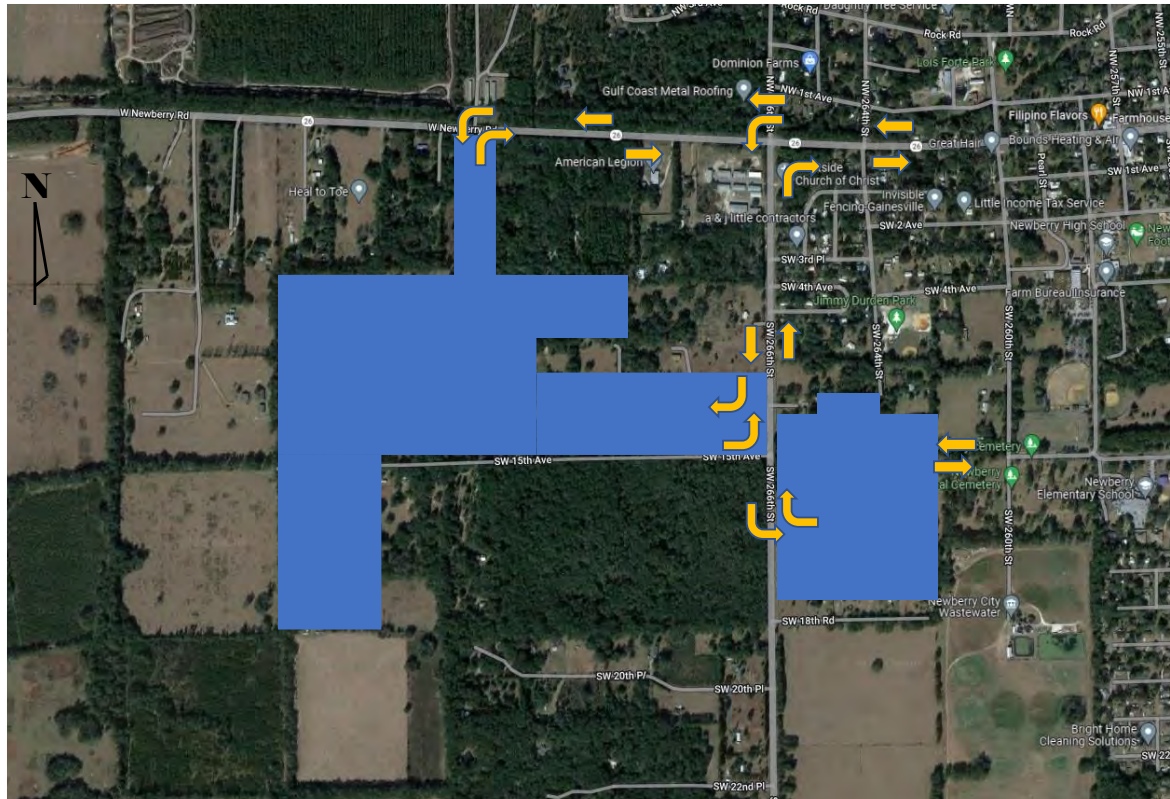


Figure 2 – PM Peak Hour Project Trip Distribution – Phase 1

For Phase 2 of Westone the project expands to the west, and a new roadway connecting to State Road 26 is constructed. It is presumed that the majority of the homes added in Phase 2 of the project will utilize the new connection onto W Newberry Road (State Road 26). Again, some traffic is assigned to SW 15<sup>th</sup> Avenue, which provides access to the Newberry Elementary School and to US 41 to the east for destinations further east and south. The PM Peak Hour Project Trip Distribution for Phase 2 is shown in **Figure 3** below:



*Figure 3 – PM Peak Hour Project Trip Distribution – Phase 2*

Similarly, for Phase 3 of the development, parcels of land in the SW corner of the property will be developed with an additional 258 single-family detached homes. It is presumed that the majority of these trips also will primarily use the newer constructed access to W Newberry Road (State Road 26). The PM Peak Hour Project Trip Distribution for Phase 3, and the ultimate Project Trip Distribution for the Westone project is shown in **Figure 4** which can be found on the following page:



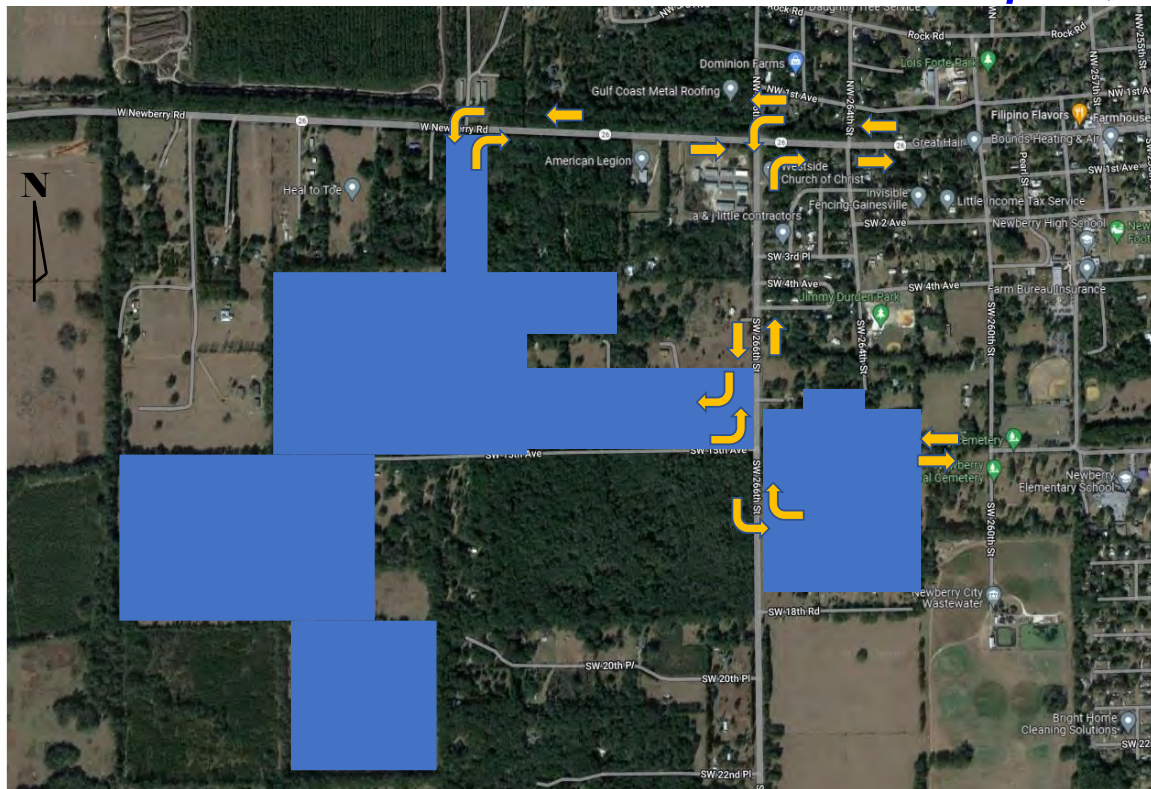


Figure 4 - PM Peak Hour Project Trip Distribution - Phase 3

## INTERSECTION LEVEL OF SERVICE (LOS) ANALYSIS

The roadway Level Of Service (LOS) analysis is conducted using the procedures outlined in the Transportation Research Board's *Highway Capacity Manual* (HCM). The HCM procedures represent the state-of-the-practice for the analysis of transportation facilities. In the early stages of the Westone development, it is presumed that the intersection of W Newberry Road and SW 266<sup>th</sup> Street can continue to operate as a two-way STOP-controlled intersection.

In order to assess the intersection LOS and operational efficiency, existing turning movement count data was collected at the intersection of W Newberry Road and SW 266<sup>th</sup> Street on Thursday, December 8, 2022. These raw counts were then multiplied by a seasonal adjustment factor from the Florida DOT Peak Season Factor Category report for Alachua County to convert to AADT-type counts. The numbers were then multiplied by a compounding 2% growth rate to convert to 2025 counts for analysis. The Highway Capacity analysis is then performed on 2025 traffic with and without Phase 1 of Westone. The development of the traffic volumes for the Highway Capacity analysis is shown in **Table 7** below. In the table, the rows present the data as follows:

- 2022 represents the raw PM Peak Hour turning movement counts
- Seasonal adds the seasonal adjustment factor
- 2023 adds one year of growth and represents the current background traffic
- 2025 adds two years of background traffic growth – this is the no-build case
- Project represent the project trips assigned to the intersection
- Phase 1 adds the Project trips to the 2025 traffic – this is the build case

**TABLE 7: Traffic Volumes for Capacity Analysis – Phase 1**

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
2022	1	385	11	72	609	28	16	1	36	9	4	5
Seasonal	1	389	11	73	615	28	16	1	36	9	4	5
2023	1	397	11	74	627	29	16	1	37	9	4	5
2025	1	413	12	77	653	30	17	1	39	10	4	5
Project				146					92			
Phase 1	1	413	12	223	653	30	17	1	131	10	4	5

Analysis beyond Phase 1 of the project has not been performed. The Florida DOT has a planned project for the widening of State Road 26 from Gilchrist County to County Road 26A east of Newberry that is scheduled for construction in 2027. This will totally alter the roadway network prior to Phase 2 and Phase 3 of the Westone project. The results of the Highway Capacity analyses are included in the appendix and are summarized in **Table 8** below:

**TABLE 8: Highway Capacity Analysis Results**

	EB Left		WB Left		NB		SB	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
No-Build	9.1	A	8.5	A	21.8	C	31.5	D
Phase 1	9.1	A	9.1	A	28.8	D	74.5	F

The results of the Highway Capacity analysis shows that even with the addition of the traffic from Phase 1 of the development, the westbound left turn will continue to operate at LOS A. The westbound left turn shows a 95<sup>th</sup> percentile queue length of less than one vehicle, indicating that the existing left turn lane will continue to perform well even under the Phase 1 volume levels. The northbound approach degrades to LOS D, but it is important to recognize that 131 of the 149 vehicles on that approach will be making right turns, and will be moving relatively easily onto Newberry Road. The v/c ratio for that movement is still only 0.51 and the 95<sup>th</sup> percentile queue length is 2.7 vehicles. Similarly, the southbound approach degrades to LOS F, however it is important to realize that the volume for this minor approach is only 19 vehicles in the peak hour, and the 95<sup>th</sup> percentile queue is just 1.0 vehicles. It also is important to remember that the Highway Capacity Two-Way STOP-Controlled Intersection Analysis procedures are known to be conservative and tend to overestimate the delay of the minor street approaches. Additionally, FDOT's planned improvement to State Road 26 will certainly include improvements to the intersection that will alleviate any operational issues when constructed.

## **CONCLUSIONS AND RECOMMENDATIONS**

Based on the foregoing data and analysis provided, the following conclusions and recommendations are offered:

### Conclusions:

- The proposed Westone residential development, when fully constructed is estimated to generate 7,131 daily trips, with 509 trips in the AM Peak Hour and 700 trips in the PM Peak Hour.
- The initial phase of the development can operate adequately with the STOP-controlled intersection at W Newberry Road and SW 266<sup>th</sup> Street serving Westone.
- Florida DOT has a planned widening project for State Road 26 that will widen and improve the roadway prior to Phase 2 or Phase 3 of Westone.

### Recommendation:

- Provide preliminary approval for the Westone project to move forward.
- Additional analyses of traffic impacts of Phase 2 and Phase 3 will be needed once the details of the planned Florida DOT widening project are known.

## **APPENDIX A: SITE PLAN**

DEVELOPMENT AREA	ALLOWABLE USES:	MAXIMUM POTENTIAL DEVELOPMENT	ACRES	DIMENSIONAL STANDARDS			SITE %
SINGLE-FAMILY RESIDENTIAL (A)	<ul style="list-style-type: none"><li>SINGLE-FAMILY DETACHED</li><li>STORMWATER MANAGEMENT FACILITIES</li><li>ALL ALLOWABLE USES PER LDR 4.20.2</li></ul>	590 D.U.	168.4±	SINGLE-FAMILY DETACHED MIN. LOT AREA = 5,000 SF MIN. LOT WIDTH = 50' FRONT = 20' SIDE = 5.0' REAR = 10' MAX BUILDING HEIGHT = 45'			N/A
CIRCULATION (B)	<ul style="list-style-type: none"><li>ROADWAYS</li><li>PARKING</li><li>DRIVEWAYS</li><li>BICYCLE AND PEDESTRIAN PATHWAYS</li><li>SUPPORTIVE INFRASTRUCTURE IMPROVEMENTS</li><li>STORMWATER MANAGEMENT FACILITIES</li><li>COMMON AREA/OPEN SPACE</li></ul>	N/A	21.5±	ROADWAY TYPE	ACCESS WIDTH	PAVED SURFACE	N/A
				PRIVATE	15' (MIN)	10' (MIN)	
				PUBLIC	PER LDR ARTICLE 5		
SINGLE-FAMILY RESIDENTIAL (C)	<ul style="list-style-type: none"><li>SINGLE-FAMILY ATTACHED</li><li>SINGLE-FAMILY DETACHED</li><li>STORMWATER MANAGEMENT FACILITIES</li><li>ALL ALLOWABLE USES PER LDR 4.20.2</li></ul>	260 D.U.	42.0±	SINGLE-FAMILY DETACHED MIN. LOT AREA = 5,000 SF MIN. LOT WIDTH = 50' FRONT = 20' SIDE = 5.0' REAR = 10' MAX BUILDING HEIGHT = 45'		S.F. ATTACHED TOWNHOUSE MIN. LOT AREA = 2,000 SF MIN. LOT WIDTH = 20' FRONT = 5' SIDE = 0' REAR = 5' MAX BUILDING HEIGHT = 45'	N/A
COMMON AREA/OPEN SPACE (D)	<ul style="list-style-type: none"><li>PUBLIC OR PRIVATE PARKS</li><li>RECREATIONAL TRAIL</li><li>RESOURCE-BASED RECREATION</li><li>STORMWATER MANAGEMENT FACILITIES</li></ul>	N/A	26.4±	N/A			15% MINIMUM

SITE DEVELOPMENT NOTES

- TOTAL DEVELOPMENT AREA = 258.3 AC
- EXISTING ZONING: AGRICULTURAL (A) AND AGRICULTURE (A)  
PROPOSED ZONING: PLANNED RESIDENTIAL DEVELOPMENT (PRD)
- PARCELS:
  - 01981-001-001
  - 02508-002-000
  - 02514-000-000
  - 02522-000-000
  - 02523-001-000
  - 02523-001-001
  - 02538-000-000
  - 02538-004-001
  - 02538-004-002
  - 02538-006-000
  - 02538-006-002
- DEVELOPMENT AREAS:

DEVELOPMENT AREA "A": TOTAL NUMBER OF DETACHED SINGLE-FAMILY UNITS = 590 UNITS

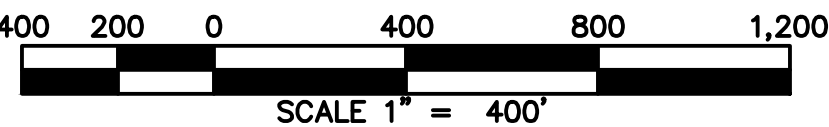
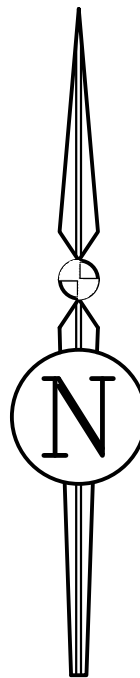
DEVELOPMENT AREA "C": TOTAL NUMBER OF DETACHED AND ATTACHED SINGLE-FAMILY UNITS = 260 UNITS; ATTACHED UNITS WILL ONLY BE PERMISSIBLE WITHIN DEVELOPMENT AREA "C".
- OPEN SPACE CALCULATIONS:

THE PRD SHALL HAVE A MINIMUM OF 15% OF THE TOTAL GROSS AREA: 258.3 AC X 0.15 = 38.8 AC

NOTE: STORMWATER MANAGEMENT FACILITIES COUNT TOWARDS TOTAL OPEN SPACE AREA.
- POTABLE WATER AND WASTEWATER SERVICE PROVIDED BY THE CITY OF NEWBERRY.
- NO WETLANDS LOCATED WITHIN PRD.
- THE PROJECT IS ANTICIPATED TO BE DEVELOPED IN MULTIPLE PHASES. EACH PHASE SHALL BE INCLUSIVE TO ITSELF. THE PROJECT WILL TENTATIVELY BEGIN IN THE PROCESS OF CONSTRUCTION YEARS 2023 AND 2024. PLEASE NOTE, THESE TIME FRAMES ARE NOT BINDING AND ARE SUBJECT TO CHANGE.
- THE INTERNAL PROJECT DEVELOPMENT AREA BOUNDARIES, ROADWAYS, AND OPEN SPACE ARE SUBJECT TO CHANGE DURING FINAL ENGINEERING.
- THE PROJECT SHALL BE CONSTRUCTED IN 3 PHASES. PHASES MAY ADJUSTED DURING FINAL ENGINEERING.
- TOTAL RESIDENTIAL ACREAGE = 219.5 AC  
TOTAL RESIDENTIAL UNITS = 850 UNITS  
TOTAL RESIDENTIAL INTENSITY = 3.87 DU/AC
- THE RESIDENTIAL FLOOR AREA RATIO = 0.75 WITH A MAXIMUM IMPERVIOUS AREA FOR EACH LOT OF 75%.

LAND USES:

- SINGLE-FAMILY RESIDENTIAL (A)
- CIRCULATION (B)
- SINGLE-FAMILY RESIDENTIAL (C)
- COMMON AREA/OPEN SPACE (D)



REVISIONS				
NO.	DATE	DESCRIPTION	DRWN	APPR

ENGINEER OF RECORD:		CHRISTOPHER A. POTTS, P.E. FLORIDA LICENSE NO. 73842
DATE:		MAY 2022
PROJECT NO.:		368-22-02
SHEET NO.:		PD-1

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

THIS DOCUMENT IS ISSUED FOR THE PURPOSE OF REVIEW ONLY AND IS NOT INTENDED FOR FINAL PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES.

**JBPro**

CIVIL ENGINEERING | LAND PLANNING  
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SHEET TITLE:		PLANNED RESIDENTIAL DEVELOPMENT MASTER PLAN	
CLIENT:		M3 DEVELOPMENT NEWBERRY, FLORIDA	PROJECT:
		WESTONE	

## **APPENDIX B: TRAFFIC COUNTS**



# Westone - TMC

Thu Dec 8, 2022

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 1022794, Location: 29.645896, -82.623066, Site Code: Newberry Rd & NW 266th St



Provided by: Hagen Consulting Services  
361 Strawder Road,  
Ray City, GA, 31645, US

Leg Direction	W Newberry Road Eastbound					W Newberry Road Westbound					NW 266th Street Northbound					NW 266th Street Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2022-12-08 7:00AM	1	162	5	0	168	5	48	2	0	55	3	0	13	0	16	2	0	1	0	3	242
7:15AM	1	159	10	0	170	9	47	0	0	56	2	0	12	0	14	5	2	1	0	8	248
7:30AM	0	115	5	0	120	7	62	7	0	76	5	0	20	0	25	0	1	3	0	4	225
7:45AM	1	134	2	0	137	11	54	1	0	66	3	0	11	0	14	2	0	1	0	3	220
Hourly Total	3	570	22	0	595	32	211	10	0	253	13	0	56	0	69	9	3	6	0	18	935
8:00AM	0	119	0	0	119	6	61	2	0	69	4	0	15	0	19	4	0	1	0	5	212
8:15AM	1	134	2	0	137	8	73	2	0	83	0	1	13	0	14	2	0	0	0	2	236
8:30AM	0	117	4	0	121	10	62	3	0	75	1	0	15	0	16	1	1	0	0	2	214
8:45AM	1	97	3	0	101	6	48	1	0	55	1	1	16	0	18	5	0	0	0	5	179
Hourly Total	2	467	9	0	478	30	244	8	0	282	6	2	59	0	67	12	1	1	0	14	841
4:00PM	1	84	1	0	86	18	146	4	0	168	2	1	7	0	10	5	0	1	0	6	270
4:15PM	1	79	3	0	83	15	148	5	0	168	2	0	13	0	15	5	0	3	0	8	274
4:30PM	0	84	1	0	85	18	164	9	0	191	2	0	9	0	11	2	0	0	0	2	289
4:45PM	1	103	0	0	104	22	137	5	0	164	5	0	11	0	16	0	1	3	0	4	288
Hourly Total	3	350	5	0	358	73	595	23	0	691	11	1	40	0	52	12	1	7	0	20	1121
5:00PM	0	86	5	0	91	19	151	11	0	181	7	1	7	0	15	5	0	1	0	6	293
5:15PM	0	98	3	0	101	21	144	7	0	172	2	0	9	0	11	3	1	1	0	5	289
5:30PM	0	98	3	0	101	10	177	5	0	192	2	0	9	0	11	1	2	0	0	3	307
5:45PM	1	75	4	0	80	21	138	7	0	166	1	1	18	0	20	2	0	4	0	6	272
Hourly Total	1	357	15	0	373	71	610	30	0	711	12	2	43	0	57	11	3	6	0	20	1161
Total	9	1744	51	0	1804	206	1660	71	0	1937	42	5	198	0	245	44	8	20	0	72	4058
% Approach	0.5%	96.7%	2.8%	0%	-	10.6%	85.7%	3.7%	0%	-	17.1%	2.0%	80.8%	0%	-	61.1%	11.1%	27.8%	0%	-	-
% Total	0.2%	43.0%	1.3%	0%	44.5%	5.1%	40.9%	1.7%	0%	47.7%	1.0%	0.1%	4.9%	0%	6.0%	1.1%	0.2%	0.5%	0%	1.8%	-
Lights and Motorcycles	9	1684	50	0	1743	203	1592	71	0	1866	42	5	195	0	242	43	8	18	0	69	3920
% Lights and Motorcycles	100%	96.6%	98.0%	0%	96.6%	98.5%	95.9%	100%	0%	96.3%	100%	100%	98.5%	0%	98.8%	97.7%	100%	90.0%	0%	95.8%	96.6%
Heavy	0	60	1	0	61	3	68	0	0	71	0	0	3	0	3	1	0	2	0	3	138
% Heavy	0%	3.4%	2.0%	0%	3.4%	1.5%	4.1%	0%	0%	3.7%	0%	0%	1.5%	0%	1.2%	2.3%	0%	10.0%	0%	4.2%	3.4%

\*L: Left, R: Right, T: Thru, U: U-Turn



**Westone - TMC**

Thu Dec 8, 2022

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 1022794, Location: 29.645896, -82.623066, Site Code: Newberry Rd & NW 266th St



Provided by: Hagen Consulting Services  
361 Strawder Road,  
Ray City, GA, 31645, US

**[N] NW 266th Street**

Total: 157

In: 72 Out: 85

20 8 44

**[W] W Newberry Road**

Total: 3526

In: 1804 Out: 1722

9  
1744

51

71

1660

206

In: 1937 Out: 1986

Total: 3923

**[E] W Newberry Road**

Out: 265 In: 245  
Total: 510

**[S] NW 266th Street**

42 5 198

# Westone - TMC

Thu Dec 8, 2022

AM Peak (7 AM - 8 AM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 1022794, Location: 29.645896, -82.623066, Site Code: Newberry Rd & NW 266th St



Provided by: Hagen Consulting Services  
361 Strawder Road,  
Ray City, GA, 31645, US

Leg Direction	W Newberry Road Eastbound					W Newberry Road Westbound					NW 266th Street Northbound					NW 266th Street Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2022-12-08 7:00AM	1	162	5	0	168	5	48	2	0	55	3	0	13	0	16	2	0	1	0	3	242
7:15AM	1	159	10	0	170	9	47	0	0	56	2	0	12	0	14	5	2	1	0	8	248
7:30AM	0	115	5	0	120	7	62	7	0	76	5	0	20	0	25	0	1	3	0	4	225
7:45AM	1	134	2	0	137	11	54	1	0	66	3	0	11	0	14	2	0	1	0	3	220
<b>Total</b>	3	570	22	0	595	32	211	10	0	253	13	0	56	0	69	9	3	6	0	18	935
<b>% Approach</b>	0.5%	95.8%	3.7%	0%	-	12.6%	83.4%	4.0%	0%	-	18.8%	0%	81.2%	0%	-	50.0%	16.7%	33.3%	0%	-	-
<b>% Total</b>	0.3%	61.0%	2.4%	0%	63.6%	3.4%	22.6%	1.1%	0%	27.1%	1.4%	0%	6.0%	0%	7.4%	1.0%	0.3%	0.6%	0%	1.9%	-
<b>PHF</b>	0.750	0.880	0.550	-	0.875	0.727	0.851	0.357	-	0.832	0.650	-	0.700	-	0.690	0.450	0.375	0.500	-	0.563	0.943
<b>Lights and Motorcycles</b>	3	551	22	0	576	32	198	10	0	240	13	0	56	0	69	9	3	4	0	16	901
<b>% Lights and Motorcycles</b>	100%	96.7%	100%	0%	96.8%	100%	93.8%	100%	0%	94.9%	100%	0%	100%	0%	100%	100%	100%	66.7%	0%	88.9%	96.4%
<b>Heavy</b>	0	19	0	0	19	0	13	0	0	13	0	0	0	0	0	0	0	2	0	2	34
<b>% Heavy</b>	0%	3.3%	0%	0%	3.2%	0%	6.2%	0%	0%	5.1%	0%	0%	0%	0%	0%	0%	0%	33.3%	0%	11.1%	3.6%

\* L: Left, R: Right, T: Thru, U: U-Turn

**Westone - TMC**

Thu Dec 8, 2022

AM Peak (7 AM - 8 AM)

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 1022794, Location: 29.645896, -82.623066, Site Code: Newberry Rd & NW 266th St



Provided by: Hagen Consulting Services  
361 Strawder Road,  
Ray City, GA, 31645, US

**[N] NW 266th Street**

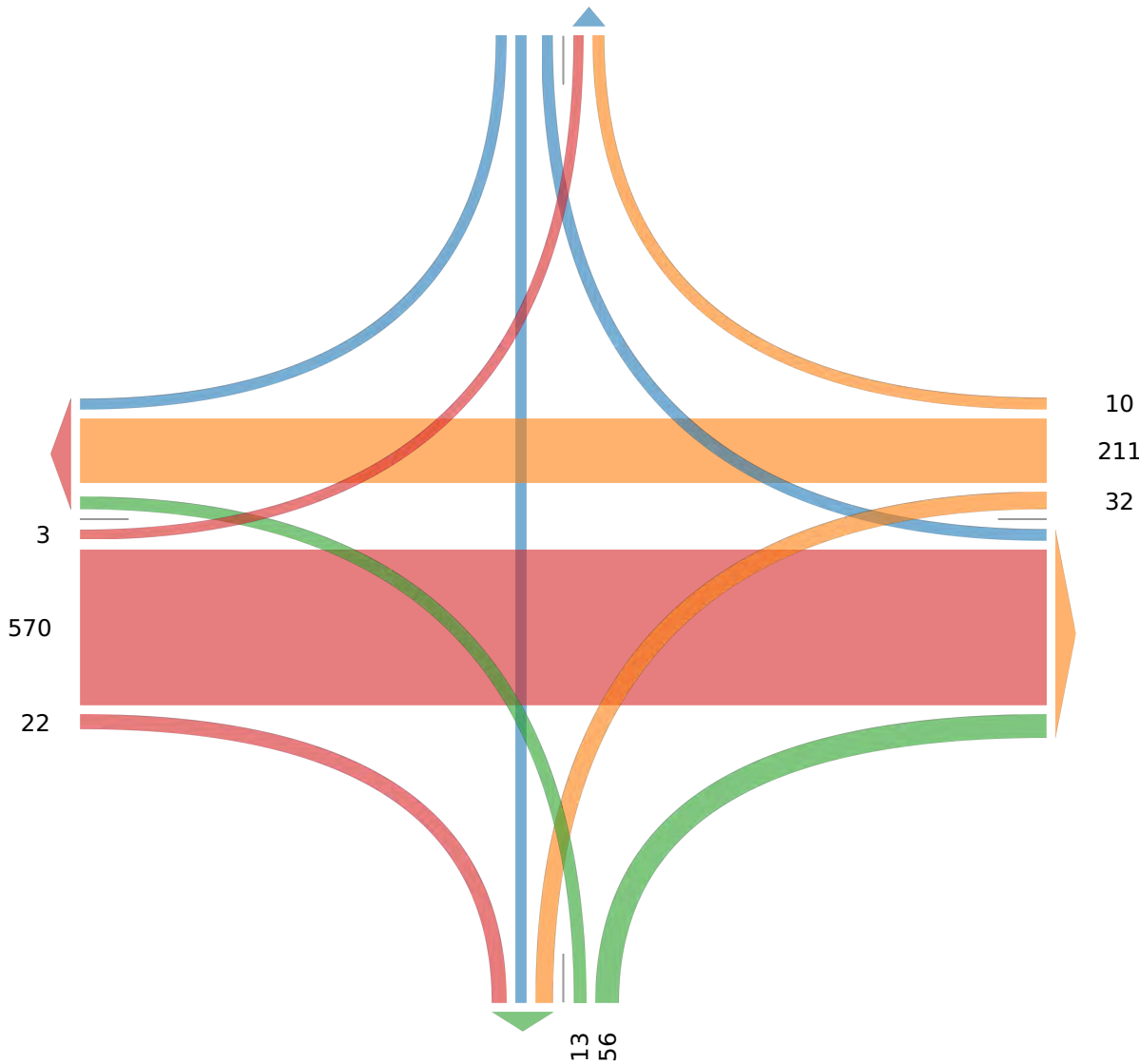
Total: 31

In: 18 Out: 13

63 9

**[W] W Newberry Road**

Total: 825  
In: 595 Out: 230



10  
211  
32  
In: 253  
Total: 888  
Out: 635

**[E] W Newberry Road**

Out: 57 In: 69  
Total: 126  
**[S] NW 266th Street**

# Westone - TMC

Thu Dec 8, 2022

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 1022794, Location: 29.645896, -82.623066, Site Code: Newberry Rd & NW 266th St



Provided by: Hagen Consulting Services  
361 Strawder Road,  
Ray City, GA, 31645, US

Leg Direction	W Newberry Road Eastbound					W Newberry Road Westbound					NW 266th Street Northbound					NW 266th Street Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2022-12-08 4:45PM	1	103	0	0	104	22	137	5	0	164	5	0	11	0	16	0	1	3	0	4	288
5:00PM	0	86	5	0	91	19	151	11	0	181	7	1	7	0	15	5	0	1	0	6	293
5:15PM	0	98	3	0	101	21	144	7	0	172	2	0	9	0	11	3	1	1	0	5	289
5:30PM	0	98	3	0	101	10	177	5	0	192	2	0	9	0	11	1	2	0	0	3	307
<b>Total</b>	1	385	11	0	397	72	609	28	0	709	16	1	36	0	53	9	4	5	0	18	1177
<b>% Approach</b>	0.3%	97.0%	2.8%	0%	-	10.2%	85.9%	3.9%	0%	-	30.2%	1.9%	67.9%	0%	-	50.0%	22.2%	27.8%	0%	-	-
<b>% Total</b>	0.1%	32.7%	0.9%	0%	33.7%	6.1%	51.7%	2.4%	0%	60.2%	1.4%	0.1%	3.1%	0%	4.5%	0.8%	0.3%	0.4%	0%	1.5%	-
<b>PHF</b>	0.250	0.934	0.550	-	0.954	0.818	0.860	0.636	-	0.923	0.571	0.250	0.818	-	0.828	0.450	0.500	0.417	-	0.750	0.958
<b>Lights and Motorcycles</b>	1	374	11	0	386	69	600	28	0	697	16	1	35	0	52	9	4	5	0	18	1153
<b>% Lights and Motorcycles</b>	100%	97.1%	100%	0%	97.2%	95.8%	98.5%	100%	0%	98.3%	100%	100%	97.2%	0%	98.1%	100%	100%	100%	0%	100%	98.0%
<b>Heavy</b>	0	11	0	0	11	3	9	0	0	12	0	0	1	0	1	0	0	0	0	0	24
<b>% Heavy</b>	0%	2.9%	0%	0%	2.8%	4.2%	1.5%	0%	0%	1.7%	0%	0%	2.8%	0%	1.9%	0%	0%	0%	0%	0%	2.0%

\* L: Left, R: Right, T: Thru, U: U-Turn

**Westone - TMC**

Thu Dec 8, 2022

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy)

All Movements

ID: 1022794, Location: 29.645896, -82.623066, Site Code: Newberry Rd & NW 266th St



Provided by: Hagen Consulting Services  
361 Strawder Road,  
Ray City, GA, 31645, US

**[N] NW 266th Street**

Total: 48

In: 18 Out: 30

54 9

**[W] W Newberry Road**

Total: 1027

In: 397 Out: 630

1  
385  
11

28  
609  
72

Out: 430 In: 709

Total: 1139

**[E] W Newberry Road**

Out: 87 In: 53  
Total: 140  
**[S] NW 266th Street**

16 36

## **APPENDIX C: SEASONAL ADJUSTMENT**

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 2600 ALACHUA COUNTYWIDE

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

\* PEAK SEASON

08-MAR-2022 12:36:24

830UPD

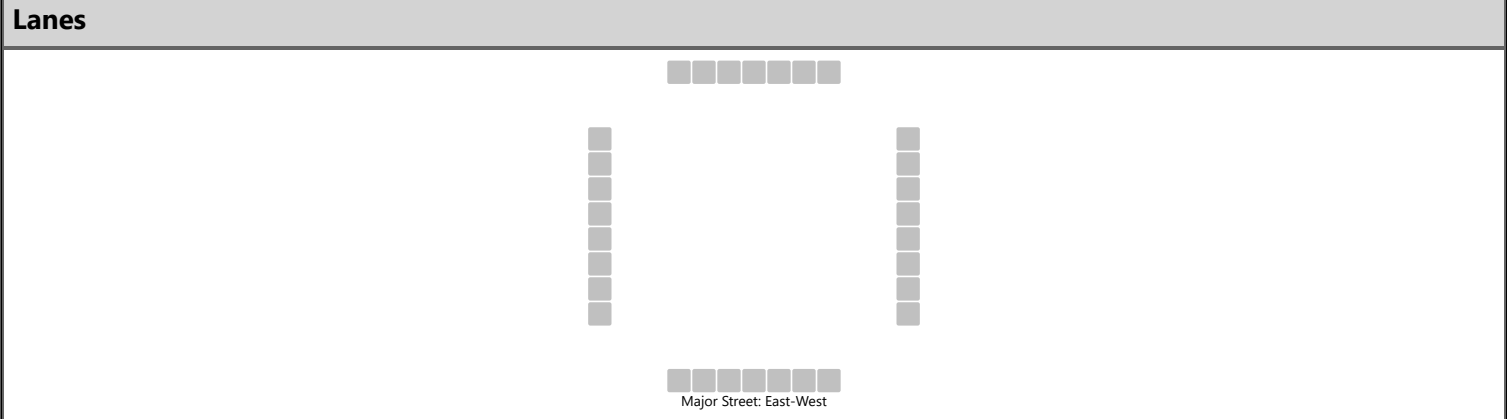
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## **APPENDIX D: HIGHWAY CAPACITY ANALYSES**



HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	LTH	Intersection	Newberry Road & SW 266th Street
Agency/Co.	Hagen Consulting Services	Jurisdiction	Newberry-Alachua County
Date Performed	2/10/2023	East/West Street	Newberry Road (SR 26)
Analysis Year	2025	North/South Street	SW 266th Street
Time Analyzed	PM Peak	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Westone - No Build		



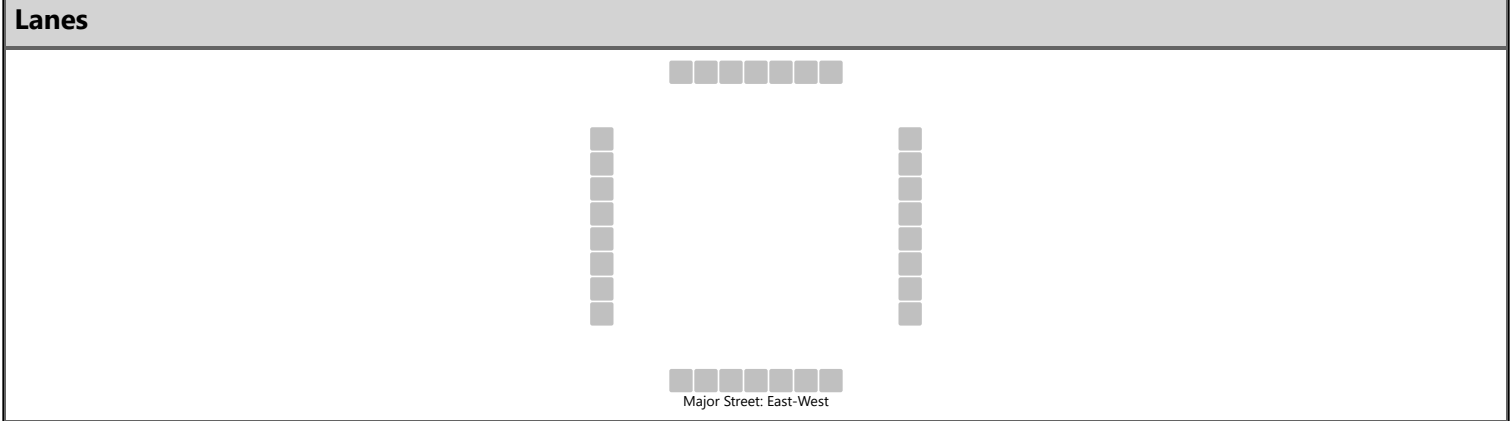
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	1		0	1	0		0	1	0
Configuration		L		TR		L	T	R			LTR				LTR	
Volume (veh/h)		1	413	12		77	653	30		17	1	39		10	4	5
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type   Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		1				80					59				20	
Capacity, c (veh/h)		883				1112					274				156	
v/c Ratio		0.00				0.07					0.22				0.13	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.2					0.8				0.4	
Control Delay (s/veh)		9.1				8.5					21.8				31.5	
Level of Service (LOS)		A				A					C				D	
Approach Delay (s/veh)	0.0				0.9				21.8				31.5			
Approach LOS	A				A				C				D			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	LTH	Intersection	Newberry Road & SW 266th Street
Agency/Co.	Hagen Consulting Services	Jurisdiction	Newberry-Alachua County
Date Performed	4/10/2023	East/West Street	Newberry Road (SR 26)
Analysis Year	2025	North/South Street	SW 266th Street
Time Analyzed	PM Peak	Peak Hour Factor	0.96
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Westone - Build Westone		



Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	1	1	1		0	1	0		0	1	0
Configuration		L		TR		L	T	R			LTR				LTR	
Volume (veh/h)		1	413	12		223	653	30		17	1	131		10	4	5
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type   Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		1				232					155				20	
Capacity, c (veh/h)		883				1112					303				71	
v/c Ratio		0.00				0.21					0.51				0.28	
95% Queue Length, Q <sub>95</sub> (veh)		0.0				0.8					2.7				1.0	
Control Delay (s/veh)		9.1				9.1					28.8				74.5	
Level of Service (LOS)		A				A					D				F	
Approach Delay (s/veh)	0.0				2.2				28.8				74.5			
Approach LOS	A				A				D				F			