

TRAFFIC IMPACT ANALYSIS

CREEK CROSSING
VOLUSIA COUNTY, FLORIDA



Prepared for:

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June 2025
Revised October 2025

TPD № 6023

PROFESSIONAL ENGINEERING CERTIFICATION

I hereby certify that I am a Professional Engineer properly registered in the State of Florida practicing with Traffic Planning and Design, Inc., a corporation authorized to operate as an engineering business, EB-3702, by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluations, findings, opinions, conclusions, or technical advice attached hereto for:

PROJECT: Creek Crossing
LOCATION: Volusia County, Florida
CLIENT: Spruce Creek Crossing, LLC

I hereby acknowledge that the procedures and references used to develop the results contained in these computations are standard to the professional practice of Transportation Engineering as applied through professional judgment and experience.

NAME: Turgut Dervish
P.E. No.: 20400
DATE: October 14, 2025

SIGNATURE:



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INTRODUCTION

This analysis was conducted in order to assess the traffic impact of the proposed Creek Crossing residential development in Volusia County, Florida. The development is located on the east side of Country Circle Drive E, approximately one-half mile east of Tomoka Farms Road. **Figure 1** depicts the site location. The proposed development is for 130 single-family homes, to be completed by the end of 2027. Access to the site is proposed via the extension of Creek Crossing Road into the site. **Figure 2** depicts the conceptual site plan and access configuration.

This analysis was conducted according to the guidelines of the River to Sea Transportation Planning Organization (R2CTPO). A study methodology was submitted to and approved by Volusia County, and is included in **Appendix A** along with related correspondence. Data used in the analysis consisted of site plans and development information provided by the Project Engineers, the Volusia County AADT Spreadsheet, and A.M./P.M. peak hour intersection counts made by Traffic Planning and Design, Inc. (TPD) personnel.

Study Area

As per the study methodology, the following roadway segments and intersections are included in the analysis:

Roadway Segments:

- Tomoka Farms Road,
 - o Pioneer Trail to Taylor Road
- Taylor Road,
 - o Spruce Creek Boulevard to Crane Lake Boulevard (critical)
 - o Crane Lake Boulevard to Summertree Road (critical)

Intersections:

- Tomoka Farms Road & Taylor Road (signalized)
- Tomoka Farms Road & Country Circle Drive E
- Country Circle Drive E & Creek Crossing Road (site access)





Creek Crossing
Project № 6023
Figure 1

Site Location





Site Plan



EXISTING TRAFFIC CONDITIONS

Capacity analysis was conducted for the study roadway segments and intersections. The analysis was conducted in accordance with the procedures of the *Highway Capacity Manual (HCM)*, utilizing existing roadway/intersection geometry along with existing peak hour traffic volumes in order to establish the current operating conditions in terms of Levels of Service.

Existing Roadway Capacity Analysis

Roadway capacity analysis was performed for the study roadway segments by comparing their existing peak hour traffic volumes with their corresponding capacities. Existing traffic volumes and capacities were obtained from the Volusia County AADT Spreadsheet for use in the analysis. **Table 1** shows the roadway segments along with their number of lanes, adopted capacities, and existing traffic volumes. The results of the analysis indicate that two of the study roadway segments are currently operating satisfactorily with excess capacity available. The segment of Taylor Road from Crane Lake Boulevard to Summertree Road, however, is currently operating over-capacity due to the existing traffic volumes. Pertinent pages from the Volusia County AADT Spreadsheet are included in **Appendix B**.

Existing Intersection Capacity Analysis

Intersection capacity analysis was conducted for the existing A.M. and P.M. peak hour traffic conditions at the study intersections. The analysis was conducted utilizing *HCS* software along with the existing peak hour traffic volumes, intersection geometries, and signal timing data. The turning movement counts were made on May 13th, 2025, when the FDOT Seasonal Factor for Volusia County was 0.99, and therefore the counts were not adjusted. The peak hour traffic volumes used in the analysis are shown in **Figure 3**. The turning movement counts, signal timing data, FDOT Seasonal Factor report and excerpts from the plans showing the improvements to the intersection of Tomaka Farms Road and Taylor Road currently under construction are included in **Appendix C**.

The results of the analysis are summarized in **Table 2**, which shows that the study intersections are currently operating at satisfactory Levels of Service. Detailed capacity analysis worksheets are included in **Appendix D**.



Table 1
Existing Roadway Capacity Analysis

Count Station	Segment	Adopted*				Existing Volume	Available Capacity
		Length (mi)	Lanes	LOS Std	2-Way Capacity		
Tomoka Farms Road							
1843	Pioneer Tr to Taylor Rd	2.80	2	E	2,200	1,015	1,185
Taylor Road							
1811	Spruce Creek Blvd to Crane Lake Blvd	1.10	2	E	1,540	850	690
1812	Crane Lake Blvd to Summertree Rd	0.75	2	E	1,540	1,890	0

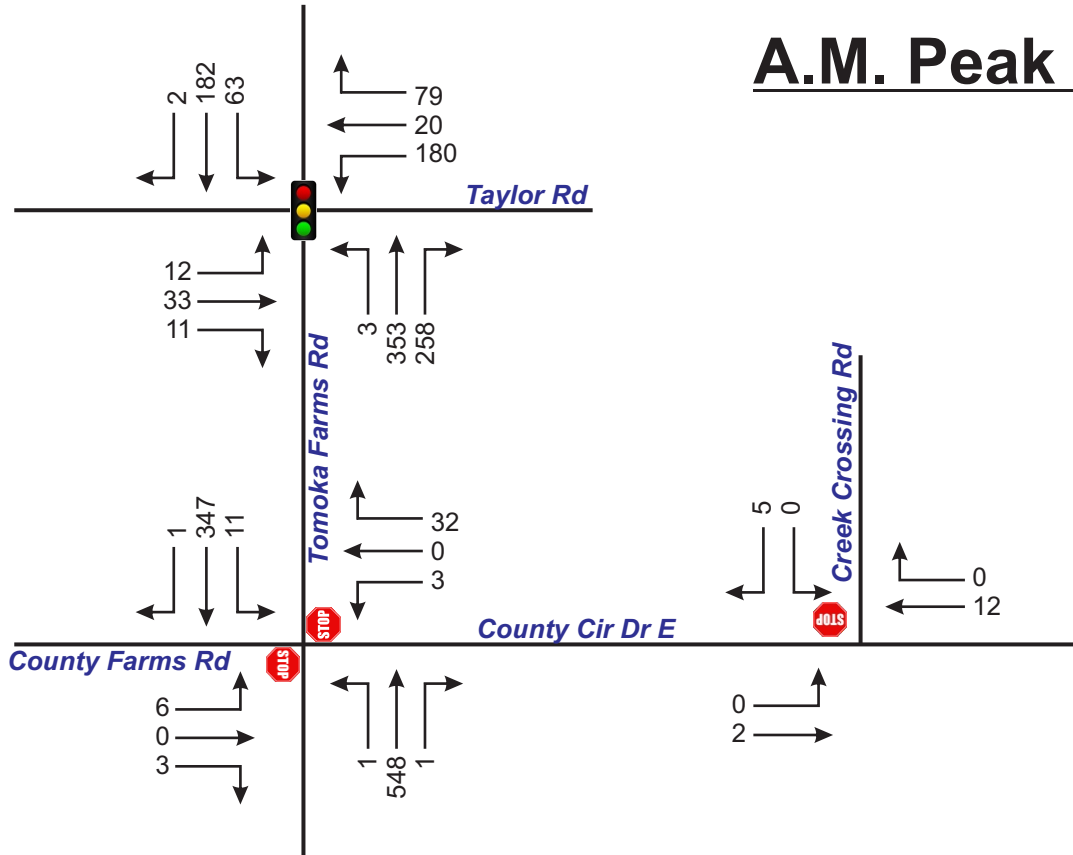
* Obtained from the Volusia County AADT Spreadsheet

Table 2
Existing Intersection Capacity Analysis

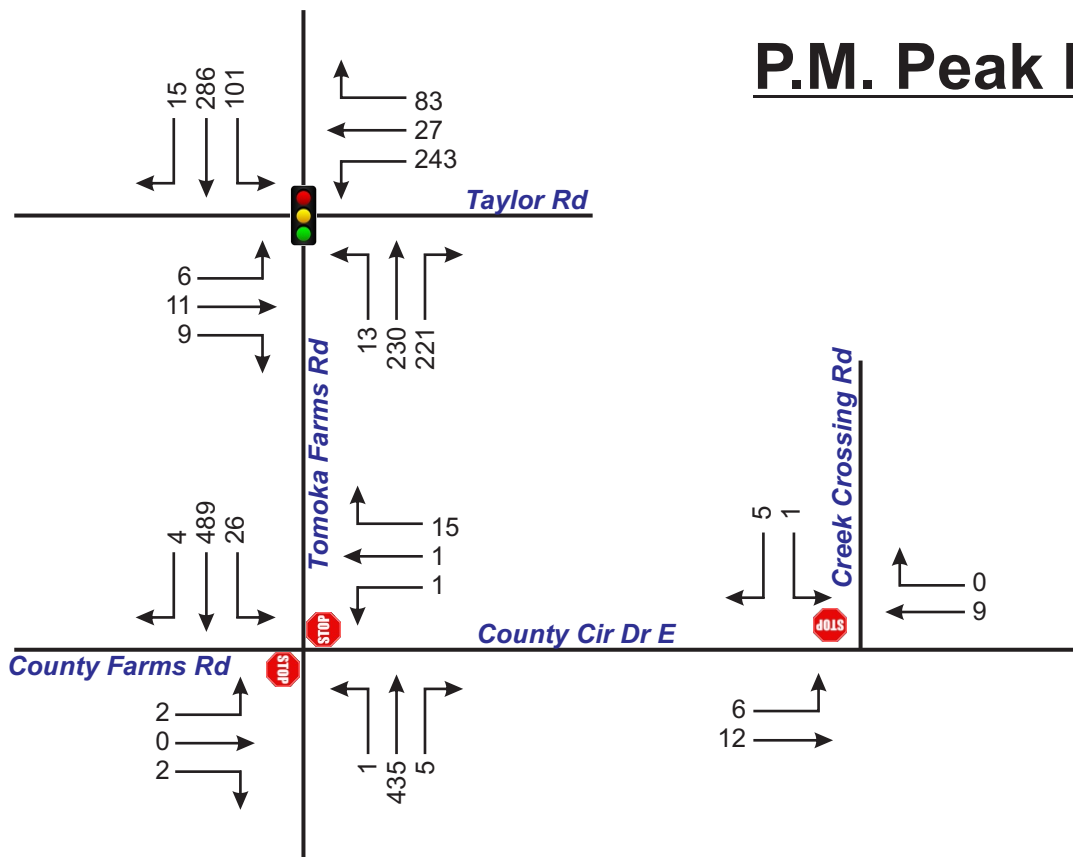
Intersection	Control	Time Period	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Tomoka Farms Rd & Taylor Rd	Signal	A.M.	32.0	C	22.4	C	27.1	C	15.4	B	23.8	C
		P.M.	30.3	C	20.6	C	29.0	C	18.2	B	23.1	C
Tomoka Farms Rd & Country Cir Dr E	Stop	A.M.	18.8	C	13.6	B	8.0	A	8.6	A	--	--
		P.M.	18.2	C	12.7	B	10.3	B	8.4	A	--	--
Country Cir Dr E & Creek Crossing Rd	Stop	A.M.	7.2	A	--	--	--	--	8.6	A	--	--
		P.M.	7.2	A	--	--	--	--	8.4	A	--	--



A.M. Peak Hour



P.M. Peak Hour



PROPOSED DEVELOPMENT AND TRIP GENERATION

The proposed development will consist of 130 single-family homes to be completed by the end of 2027. In order to determine the impact of this development in the area, an analysis of its trip generation characteristics was conducted. This included the determination of the trips to be generated and the distribution/assignment of these trips to the study roadway segments and intersections.

Trip Generation

The trip generation of the proposed development was calculated using data obtained from the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. The results of the trip generation calculation are summarized in **Table 3**. As shown in the table, the proposed development will generate 1,285 daily trips, of which 95 will occur during the A.M. peak hour and 127 during the P.M. peak hour. The detailed ITE trip generation sheets are included in the study methodology in Appendix A.

Table 3
Trip Generation Summary

ITE Code	Land Use	Size	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate*	Trips	Rate*	Enter	Exit	Total	Rate*	Enter	Exit	Total
210	Single-Family Detached Housing	130 DU**	9.88	1,285	0.73	24	71	95	0.98	80	47	127

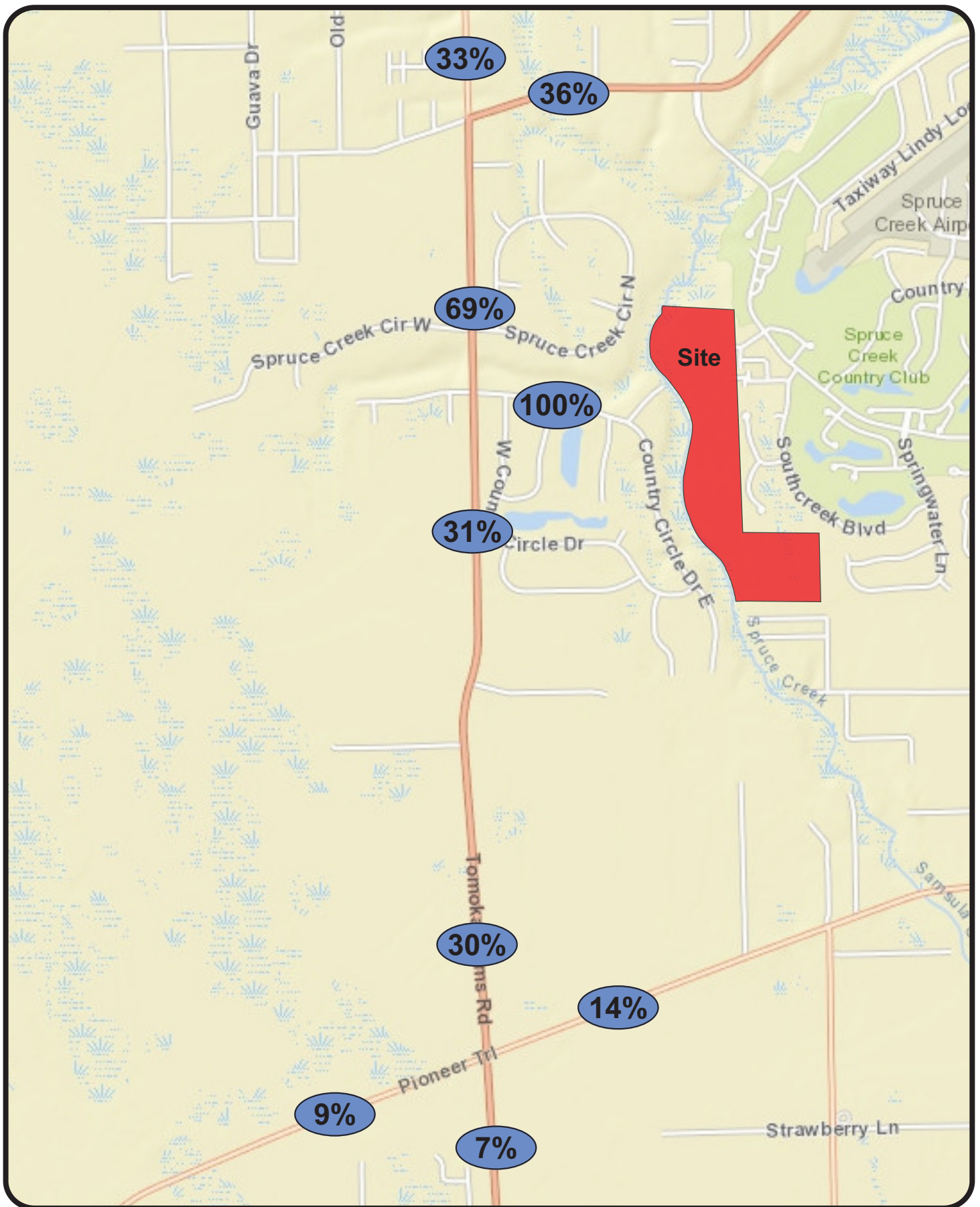
* More than 20 studies available and $R^2 > 0.75$; therefore, Equations used

** DU = Dwelling Unit

Trip Distribution and Assignment

A distribution pattern for the proposed development was determined with the use of the Central Florida Regional Planning Model (CFRPM). A Select Zone Analysis (SZA) was conducted by modifying the 2035 interim year model network to include a Traffic Analysis Zone (TAZ) representing the proposed project, and the model's socio-economic data was updated to reflect the proposed project buildout. **Figure 4** depicts the trip distribution pattern for the development. The project trips were assigned to the area roadways based on this distribution. The model distribution plots are included in the study methodology in Appendix A.





PROJECTED TRAFFIC CONDITIONS

Projected traffic conditions were analyzed in order to assess the impact of the proposed development on the study roadway segments and intersections. The analysis consisted of roadway and intersection capacity analyses using the total projected traffic volumes, which consist of background traffic combined with the project trips. Background traffic was determined by applying the annual growth rates as determined in the study methodology. The detailed trends analysis worksheets are included in the study methodology in Appendix A.

Projected Roadway Capacity Analysis

Roadway capacity analysis was performed for the study roadway segments by comparing their total projected traffic volumes with their corresponding capacities. The results of the analysis are summarized in **Table 4**. As can be seen from the table, the study roadway segments are projected to operate similarly to the existing conditions analysis. The segment of Tomoka Farms Road and the segment of Taylor Road from Spruce Creek Boulevard to Crane Lake Boulevard will continue to operate satisfactorily with excess capacity available upon the completion of the project. The segment of Taylor Road from Crane Lake Boulevard to Summertree Road, however, will continue to operate over-capacity due to the background growth of the existing traffic. This segment is failing in the existing condition and will continue to do so regardless of the completion of the project.

Projected Intersection Capacity Analysis

In order to assess the projected operating conditions at the study intersections, intersection capacity analysis was conducted for the total projected traffic volumes, including the project trips. Similar to the existing conditions analysis, the study intersections were analyzed using *HCS* software in accordance with the procedures of the *HCM*. Projected traffic volumes were determined by combining background traffic with the project trips. The total projected traffic volumes used in the analysis are depicted in **Figures 5a** and **5b**.

The results of the analysis are summarized in **Table 5**. As can be seen from the table, the study intersections are projected to continue to operate at satisfactory Levels of Service upon the addition of the project trips. The detailed capacity analysis worksheets are included in **Appendix E**.



Table 4
Projected Roadway Capacity Analysis

Count Station	Segment	Adopted				Existing Volume	Bkgd Growth	Committed Trips*	Project Trips**		Total Volume	Available Capacity
		Length (mi)	Lanes	LOS Std	2-Way Capacity				%	Vol		
Tomoka Farms Road												
1843	Pioneer Tr to Taylor Rd	2.80	2	E	2,200	1,015	10	0	69%	88	1,113	1,087
Taylor Road												
1811	Spruce Creek Blvd to Crane Lake Blvd	1.10	2	E	1,540	850	9	0	35%	44	903	637
1812	Crane Lake Blvd to Summertree Rd	0.75	2	E	1,540	1,890	140	115	33%	42	2,072	0

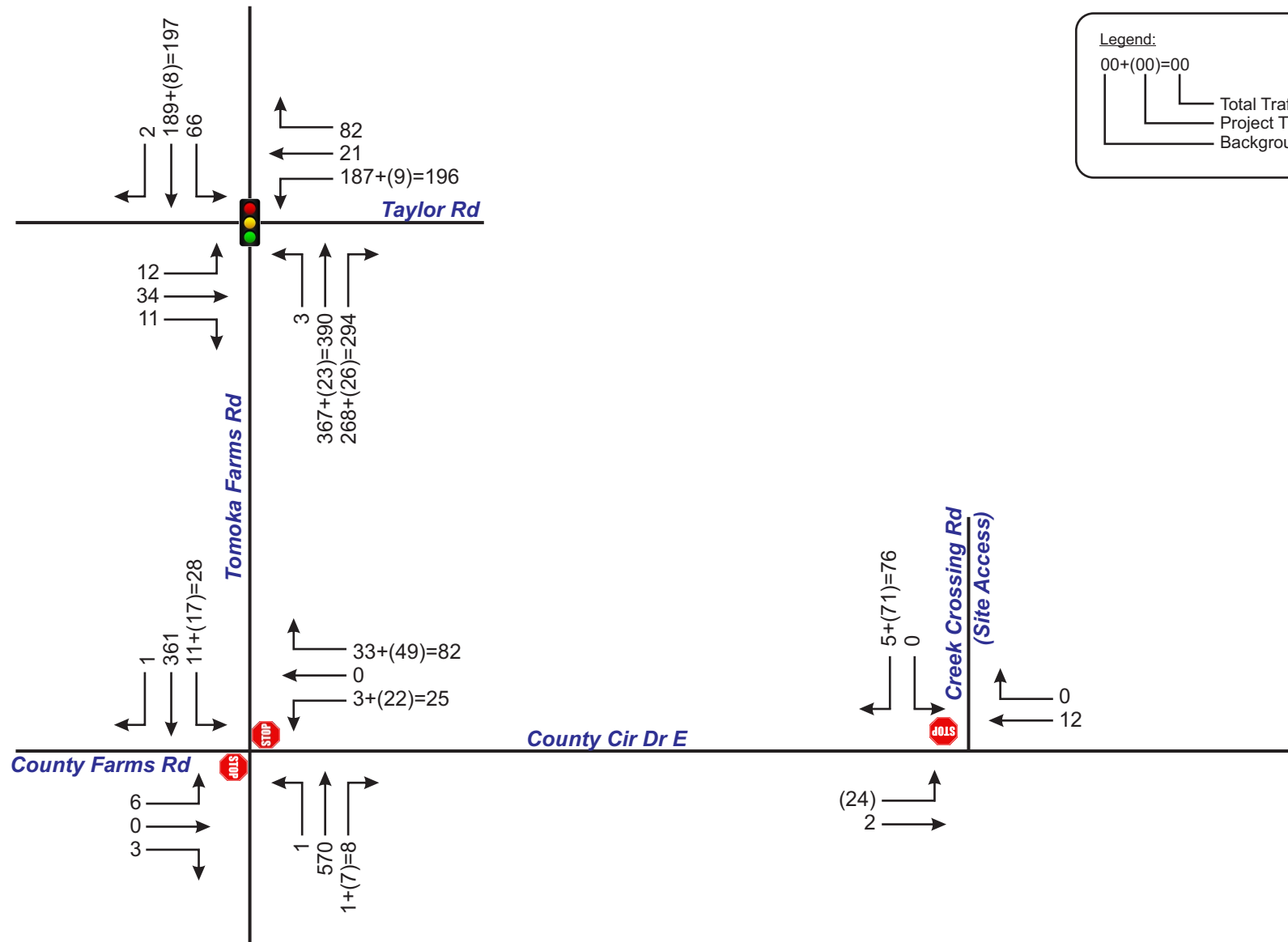
* Obtained from the Volusia County Vested Trip Database

** Highest on Segment

Table 5
Projected Intersection Capacity Analysis

Intersection	Control	Time Period	EB		WB		NB		SB		Overall	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Tomoka Farms Rd & Taylor Rd	Signal	A.M.	34.3	C	24.0	C	27.9	C	15.7	B	24.8	C
		P.M.	33.1	C	22.3	C	30.3	C	19.3	B	24.5	C
Tomoka Farms Rd & Country Cir Dr E	Stop	A.M.	23.4	C	19.3	C	8.0	A	8.8	A	--	--
		P.M.	24.1	C	19.4	C	10.4	B	8.8	A	--	--
Country Cir Dr E & Creek Crossing Rd	Stop	A.M.	7.3	A	--	--	--	--	8.9	A	--	--
		P.M.	7.4	A	--	--	--	--	8.6	A	--	--

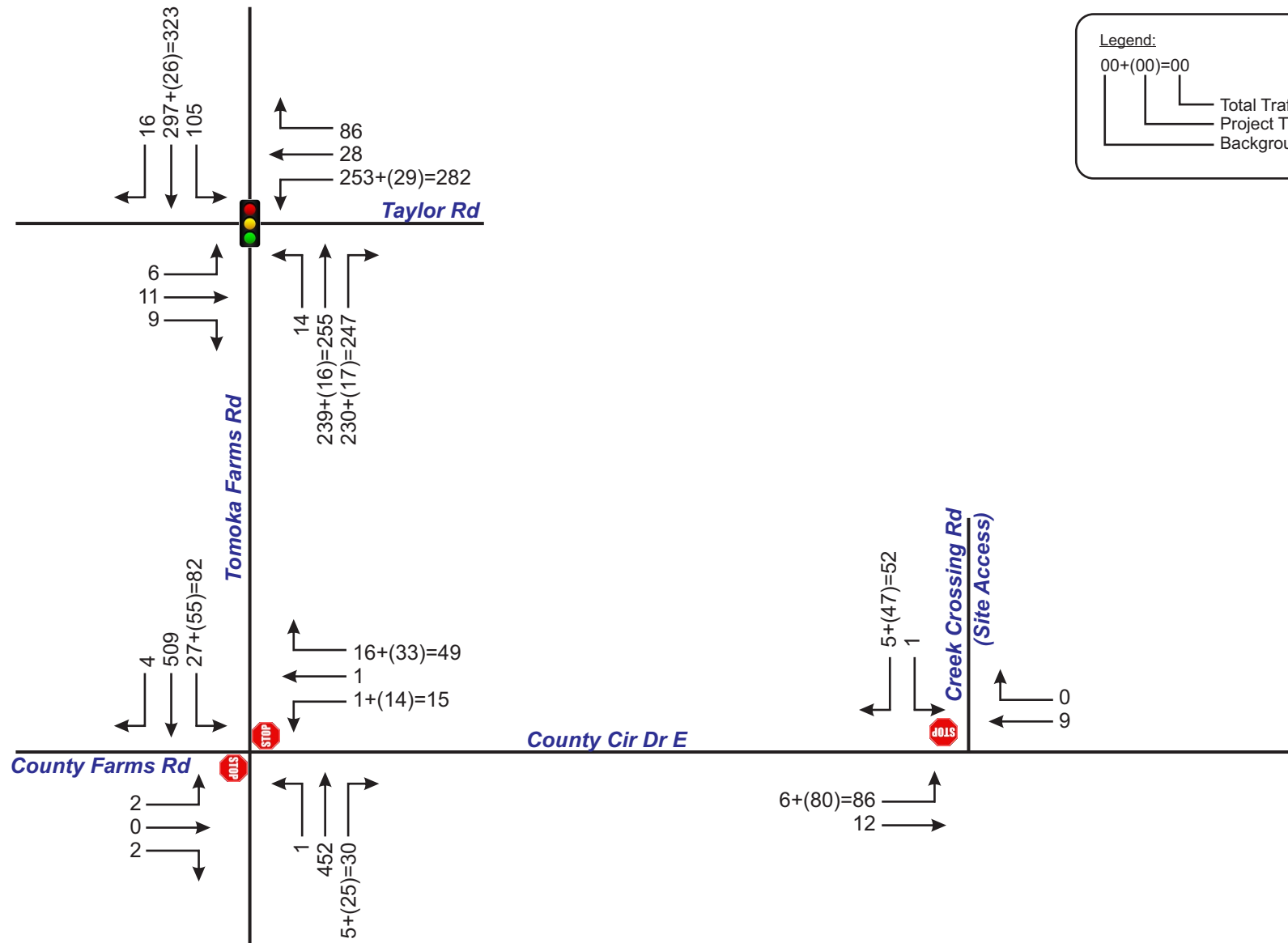




Creek Crossing
 Project No 6023
 Figure 5a

**Projected A.M. Peak
 Hour Volumes**





Creek Crossing
 Project No 6023
 Figure 5b

**Projected P.M. Peak
 Hour Volumes**



Turn Lane Analysis

In order to assess the lengths of the existing turn lanes affected by the project trips, turn lane analysis was conducted using queue lengths obtained from the results of the intersection capacity analysis. The results of the analysis are shown in **Table 6**, which shows the affected turn lanes at the study intersections along with the number of lanes, approach speeds, existing lengths, and total lengths required for the background and total projected traffic conditions. As can be seen from the table, the westbound left turn lane at the intersection of Tomoka Farms Road and Taylor Road is deficient in both peak hours for both the background traffic and the total projected traffic conditions. The turn lane should therefore be extended by 190 feet in order to serve the total projected traffic volumes, with the addition of the project trips contributing 62.5 feet to the deficiency. The detailed capacity analysis worksheets for the background traffic scenario are included in **Appendix F**.

Proportionate Share Calculations

The Developer will participate in the cost of improving the deficient roadway segment and turn lane in order to secure concurrency. The participation will be on a proportionate share basis. The Developer will then be entitled to receive impact fee credits in the amount paid towards the improvements when building permits are pulled. In order to estimate the Developer's proportionate fair share cost of the improvements, proportionate share calculations were conducted using the Volusia County Master Prop Share Approved Costs & Formulas spreadsheet. The results of the analysis are summarized in **Table 7a** for the roadway improvements and **Table 7b** for the intersection improvements. As can be seen, the Developer's total proportionate fair share cost of the improvements is \$340,463.75.



**Table 6
Turn Lane Analysis**

Intersection	Turn Lane	Existing Length (ft)	Posted Speed Limit (mph)	Required Deceleration (ft)	Background Traffic				Total Projected Traffic				Deficiency Caused by Project (ft)	Project Trip Volume
					# of Lanes	95th % Queue Length (veh x 25 ft)	Total Required Turn Lane Length (ft)	Lane Length Deficiency (ft)	# of Lanes	95th % Queue Length (veh x 25 ft)	Total Required Turn Lane Length (ft)	Lane Length Deficiency (ft)		
A.M. Peak Hour														
Tomoka Farms Rd & Taylor Rd	WBL	285	45	185	1	195	380	95	1	245	430	145	50	9
P.M. Peak Hour														
Tomoka Farms Rd & Taylor Rd	WBL	285	45	185	1	225	410	125	1	287.5	472.5	187.5	62.5	29

**Table 7a
Proportionate Share Calculations – Roadway Improvements**

Segment	Existing Capacity	Improvement*			Improved Capacity	Capacity Increase	Project Trips**		Proportionate Share	
		Type	Length (mi)	Total Cost			%	Vol	%	Cost
Taylor Road										
Crane Lake Blvd to Summertree Rd	1,540	Widen 2-4 lanes, urban	0.74	10,522,000.00	3,410	1,870	36%	46	2.46%	\$258,841.20

* Obtained from the Volusia County Master Prop Fair Share Approved Costs & Formulas spreadsheet

** Highest on Segment

**Table 7b
Proportionate Share Calculations – Intersection Improvements**

Intersection	Improvement	FDOT Cost	Total Improvement Estimated Cost* (a)	Queue Length (ft)		Proportionate Share Cost (d)=(b)-(c)+300*(a)
				Buildout (b)	Bkgd (c)	
Tomoka Farms Rd & Taylor Rd	Extend WBL lane 160'	\$313,430.61	\$391,788.26	287.5	225	\$81,622.55

* FDOT Cost x 1.25



MULTI-MODAL MOBILITY REVIEW

A review of the available multi-modal transportation facilities in the vicinity of the site was conducted. This included a review of the available motorized and non-motorized options.

Sidewalks and Pedestrian Facilities

A survey of the existing sidewalks in the vicinity of the site was conducted using aerial photography. It was determined that there are no existing sidewalks on either side of Country Circle Drive E or Tomoka Farms Road. Additionally, it was determined that there are no existing crosswalks or pedestrian lighting features in the vicinity of the site.

Bicycle Facilities

The study roadways in the vicinity of the site were surveyed to identify any dedicated bicycle facilities that may be available to facilitate bicycle travel in the area. It was determined that there are no marked bicycle lanes on Country Circle Drive E, however, there is a 2-3 feet wide shoulder on both sides of Tomoka Farms Road which may provide some degree of refuge for bicyclists.

Mass Transit Facilities

The Votran Transit route maps were reviewed to identify any fixed route bus service routes within the vicinity of the site, and it was determined that there are no fixed route bus services within one-quarter mile of the site. Additionally, it was determined that there are no rail lines, rail stations, or other intermodal facilities located within one-half mile of the site.



SAFETY ANALYSIS

In order to assess the existing crash patterns and to determine if the proposed development will result in a significant increase in crashes, safety analysis was conducted as per the guidelines of the *2023 FDOT Multimodal Transportation Site Impact Handbook*, Section 4.9. Crash data for 27 crashes that have occurred in the last five years was obtained for use in the analysis. 18 of the crashes occurred at the intersection of Tomoka Farms Road and Taylor Road, and 9 of the crashes occurred at the intersection of Tomoka Farms Road and Country Circle Drive E. The results of the safety analysis are as follows:

Tomoka Farms Road & Taylor Road

Data was obtained for 18 crashes that have occurred in the last five years at the intersection of Tomoka Farms Road and Taylor Road. The available details of the crashes are summarized in **Table 8**, and the locations of the crashes are depicted in **Figure 6**. The analysis revealed that 50% of the crashes were rear-end crashes and 39% were angle crashes. There was one sideswipe crash, and one fatal crash involving a pedestrian. 17 of the crashes resulted in minor or no injuries. 78% of the crashes occurred during the day when intersection lighting was not a contributing factor, and 61% of the crashes occurred when the roadway surface conditions were not a contributing factor.

The crash resulting in a pedestrian fatality occurred approximately 200 feet north of the intersection, at the Circle-K driveway. The pedestrian crossed Tomoka Farms Road at an unmarked crossing location and was struck by a vehicle. The crash occurred in dry roadway surface conditions at night, which suggests that lack of visibility was the main contributing factor to the crash. Due to the distance from the intersection, however, increased intersection lighting would not have prevented this crash.

Overall, the existing crash patterns at the intersection of Tomoka Farms Road and Taylor Road are as-expected. The intersection is signalized, so it is to be expected that the majority of the crashes are rear-end crashes and angle crashes. The project is expected to increase the peak hour volumes at the intersection by less than 10%; therefore, the addition of the project trips is not expected to alter the existing crash patterns or to significantly increase the existing rate of crashes at the intersection.



Table 8
Crash Table – Tomoka Farms Road & Taylor Road

Report #	Crash #	Roadway Surface Conditions	Crash Type	Injuries	Day or Night
88287400	1	Dry	Rear-End	Minor	Day
88192636	2	Dry	Rear-End	Minor	Day
89402019	3	Wet	Rear-End	None	Day
88406268	4	Dry	Angle	None	Day
24654407	5	Wet	Angle	None	Night
88394471	6	Dry	Angle	None	Day
88497789	7	Dry	Rear-End	None	Day
88555099	8	Wet	Rear-End	Minor	Day
88445027	9	Wet	Angle	Minor	Day
24768890	10	Dry	Angle	None	Night
24768355	11	Dry	Sideswipe	None	Night
89718427	12	Dry	Pedestrian	Fatality	Night
89713908	13	Wet	Angle	Minor	Day
89602841	14	Wet	Rear-End	Minor	Day
24769284	15	Dry	Rear-End	None	Day
25734989	16	Dry	Rear-End	None	Day
26380166	17	Wet	Rear-End	None	Day
89760403	18	Dry	Angle	None	Day





Creek Crossing
Project № 6023
Figure 6

***Crash Diagram: Tomoka
Farms Road & Taylor Road***



Tomoka Farms Road & Country Circle Drive E

Data was obtained for 9 total crashes that have occurred in the last five years at the intersection of Tomoka Farms Road and Country Circle Drive E. The available details of the crashes are summarized in **Table 9**, and the locations of the crashes are depicted in **Figure 7**. Analysis of the data revealed that 8 of the 9 crashes were rear-end crashes, with the ninth crash being a sideswipe. 7 of the crashes resulted in minor or no injuries, one resulted in serious injuries, and one resulted in a fatality. 8 of the 9 crashes occurred during the day, which indicates that intersection lighting is not an issue.

The crash that resulted in a fatality occurred in the southbound lane of Tomoka Farms Road. It was a rear-end crash that occurred during the day in dry roadway conditions. The crash data indicates that one vehicle and two motorcycles were involved, and that the fatality was one of the motorcyclists. The crash data indicates that the major contributing factors include drug use and aging drivers.

While the existing crash patterns indicate an elevated rate of rear-end crashes compared to other crash types, the overall rate of crashes at the intersection is very low (less than 2 crashes per year). The proposed project is expected to increase the peak hour volumes at the intersection by approximately 11%; therefore, the addition of the project trips is not expected to alter the existing crash patterns or to significantly increase the existing rate of crashes at the intersection.

Table 9
Crash Table – Tomoka Farms Road & Country Circle Drive E

Report #	Crash #	Roadway Surface Conditions	Crash Type	Injuries	Day or Night
88240481	1	Dry	Rear-End	Serious	Day
88268189	2	Dry	Rear-End	Fatality	Day
88442468	3	Dry	Sideswipe	Minor	Day
88482176	4	Wet	Rear-End	Minor	Day
88555648	5	Dry	Rear-End	Minor	Day
88512418	6	Wet	Rear-End	None	Day
24768307	7	Wet	Rear-End	None	Day
24654887	8	Wet	Rear-End	None	Day
26281566	9	Dry	Rear-End	Minor	Night



Legend:

- | | |
|----------------|----------------------|
| ● = Rear-End | ○ = No Injuries |
| ● = Sideswipe | ⊕ = Minor Injuries |
| ● = Angle | ⊖ = Serious Injuries |
| ● = Pedestrian | ⊗ = Fatality |



Creek Crossing
Project № 6023
Figure 7

***Crash Diagram: Tomoka
Farms Road & Country
Circle Drive E***



CONCLUSIONS

This analysis was undertaken in order to assess the traffic impact of the proposed Creek Crossing residential development in Volusia County, Florida. The development is located on the east side of Country Circle Drive E, approximately one-half mile east of Tomoka Farms Road. The proposed development is for 130 single-family homes to be completed by the end of 2027. The results of the analysis as documented herein are summarized as follows:

- The proposed development will generate 1,285 daily trips, of which 95 will occur during the A.M. peak hour and 127 during the P.M. peak hour.
- Roadway capacity analysis revealed that the segment of Tomoka Farms Road from Pioneer Trail to Taylor Road and the segment of Taylor Road from Spruce Creek Boulevard to Crane Lake Boulevard are currently operating satisfactorily and will continue to do so upon the completion of the project. The segment of Taylor Road from Crane Lake Boulevard to Summertree Road, however, is currently operating over-capacity in the existing condition and will continue to do so regardless of the completion of the project.
- The intersection capacity analysis revealed that the study intersections currently operate at overall satisfactory Levels of Service and will continue to do so upon the addition of the project trips.
- Access to the site is proposed via the extension of Creek Crossing Road into the site. Analysis revealed that the site access driveway is projected to operate at satisfactory Levels of Service upon the completion of the project.
- Turn lane analysis revealed that the westbound left turn lane at the intersection of Tomoka Farms Road and Taylor Road is deficient under background traffic conditions. The turn lane should therefore be extended by 190 feet in order to serve the total projected traffic volumes, with the addition of the project trips contributing 62.5 feet to the deficiency.
- Safety analysis determined that the proposed development is not expected to significantly alter the existing crash patterns or increase the overall volume of crashes at the study intersections.



APPENDICES

APPENDIX A
Methodology and Related Correspondence

The following proposed development project has an **APPROVED TIA METHODOLOGY**:

Project:	Creek Crossing
Pacel Number(s)/Short PID:	623600000050, 623502010210
Date on Methodology/RTC Revision:	June 12, 2025
Date of Approval:	June 17, 2025
Date of Expiration:	December 17, 2025
Volusia County Reference Number:	2025-TRAF-022

Conditions:

The respective TIA can now be accepted for review by the county. TIAs must be completed per the Volusia-Flagler TPO TIA Guidelines, which can be found on the R2CTPO.org website.

Approval Signature: _____



TIA SUBMISSION TO COUNTY:

- 1) Submit the following items through email to VolusiaTiaReview@volusia.org
 - PDF copy of the complete TIA (TIA needs to include completed TIA checklist)
 - Response to Comments (if resubmitted)
- 2) Due size limitations and computer input file incompatibility issues, send the following directly to VCTE by Mail or Delivery:
 - CD or USB drive containing all computer input files

***REMINDERS:**

- TIA approval needs to be obtained within a year of the approved methodology based on the interpretation of the TPO TIA Guidelines, which state that an approved methodology is valid for up to 6 months and a TIA is valid for up to a year..
- The TIA submitted to support a development plan or use permit cannot be older than one year.
- Advisory: If the applicant waits to submit the TIA or TIA revisions, requested updates to vested trip data, growth rates, traffic count data, etc. are likely to occur. (Example: Applicant submits TIA, receives comments, but doesn't update the TIA and respond to comments until 10 months later.)
- Copy VolusiaTiaReview@volusia.org on all email correspondence.
- Questions about TIAs and Methodologies should be addressed to wdwhite@volusia.org

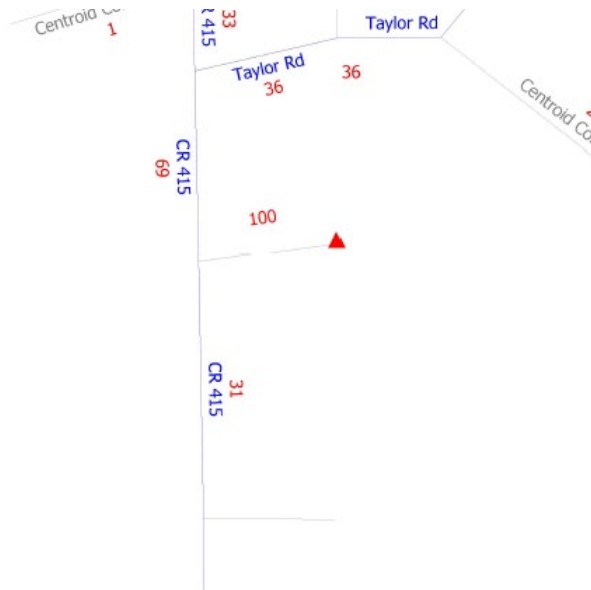


Response to County Comments Creek Crossing TIA Methodology

The following is our response to the comments dated June 12th, 2025, for the above-referenced project. Each comment is listed in **bold** followed by our response.

Comment 1 – Confirm with illustration that the submitted model output capture updated TAZ with corresponding connectivity to connecting roadways.

Response: The CFRPM model network does not include Country Circle Drive East in its roadway database; therefore, the model was run using a single centroid connector representing Country Circle Drive East and its connection to Tomoka Farms Road. The CFRPM model output included in Attachment B of the study methodology depicts this connection to Tomoka Farms Road, and is shown below for your convenience.



Comment 2 – Please clarify the proposed development and its road connectivity to Russel Rd versus the submitted model distribution assumptions.

Response: The connection to Russel Road shown on the site plan will be a secondary access point opened for emergency access only. Therefore, it is not considered a site access driveway for use in the analysis and was not included in the model distribution.

TPD #6023
June 16th, 2025

Traffic Planning and Design, Inc.

535 Versailles Drive, Maitland, Florida 32751 ■ Phone (407) 628-9955 ■ Fax (407) 628-8850 ■ www.tpdtraffic.com



TO: William White, Volusia County Traffic Engineering

FROM: Turgut Dervish, P.E.
Sean Smith, E.I.

DATE: June 5th, 2025

RE: **Creek Crossing, Traffic Impact Analysis Methodology REVISED**
Volusia County, Florida
TPD No. 6023

The following is an outline of the proposed methodology for the Traffic Impact Analysis of the Creek Crossing residential development located in Volusia County, Florida. The proposed development is located on the east side of Country Circle Drive East, approximately one-half mile east of Tomoka Farms Road. **Figure 1** depicts the site location and the area roadways. The analysis will be conducted as per the guidelines established by the River to Sea TPO (R2CTPO).

1. Proposed Development

The proposed development will consist of 130 single-family homes. **Figure 2** depicts the conceptual site plan along with the proposed access connections. Access to the site is proposed via the extension of Creek Crossing Road into the site. The development will be completed by the end of 2027.

2. Trip Generation

Trip generation data from the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual* will be used for the trip generation estimation of the development. **Table 1** provides a summary of the trip generation for the proposed development calculated with the ITE data. As can be seen, the project is expected to generate a total of 1,285 daily trips, of which 95 will occur during the A.M. peak hour and 127 during P.M. peak hour. The ITE trip generation worksheets are included in **Attachment A**.

Table 1
Trip Generation Calculation Summary

ITE Code	Land Use	Size	Daily		A.M. Peak Hour				P.M. Peak Hour			
			Rate*	Trips	Rate*	Enter	Exit	Total	Rate*	Enter	Exit	Total
210	Single-Family Detached Housing	130 DU**	9.88	1,285	0.73	24	71	95	0.98	80	47	127

* More than 20 studies available and $R^2 > 0.75$; therefore, Equations used

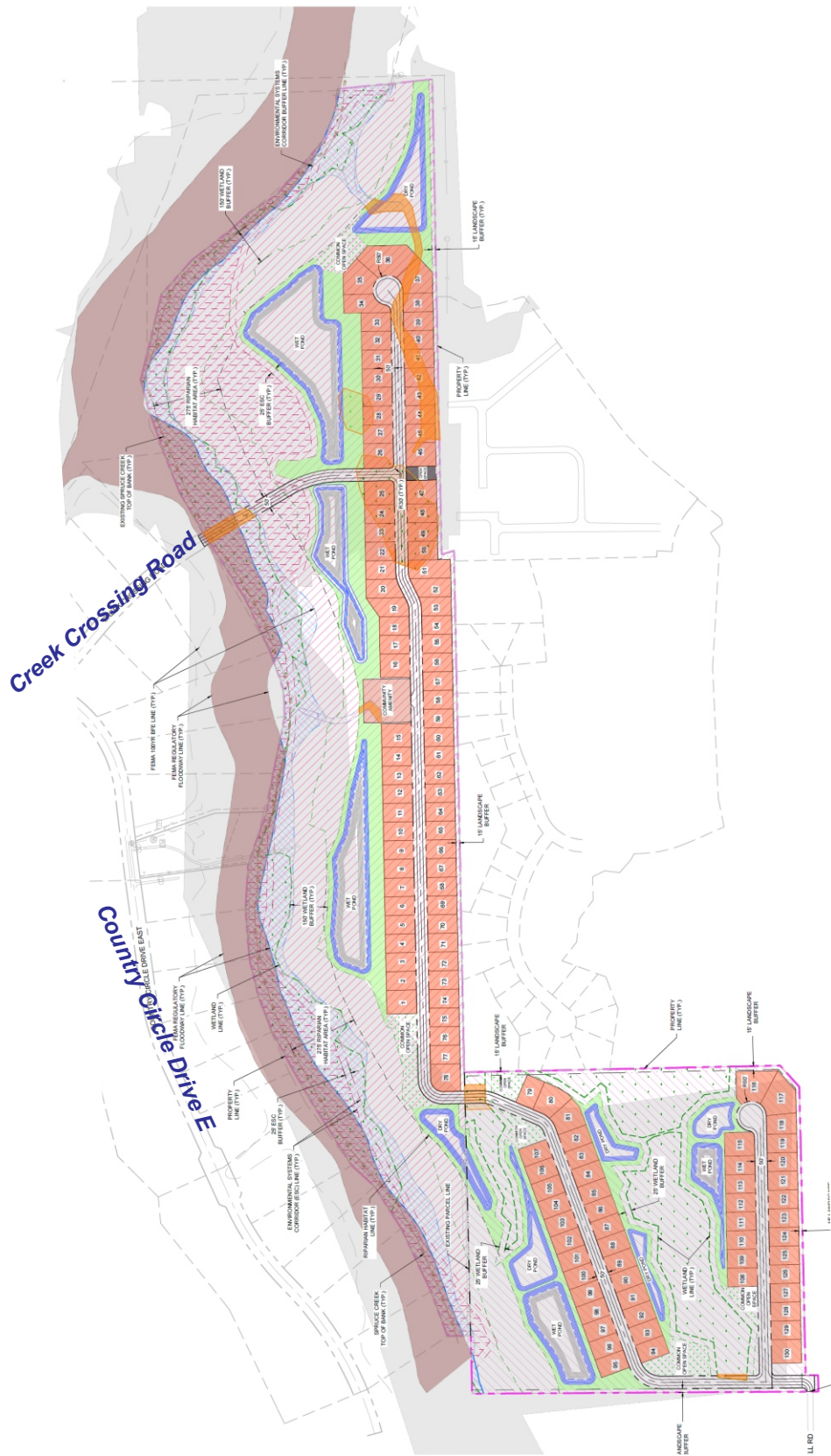
** DU = Dwelling Unit



Creek Crossing
Project № 6023
Figure 1

Site Location





Creek Crossing
Project № 6023
Figure 2

Site Plan



3. Trip Distribution

A distribution pattern for the proposed project was estimated using the currently adopted Central Florida Regional Planning Model (CFRPM). A Select Zone Analysis (SZA) was conducted by modifying the 2035 interim year model network to include a Traffic Analysis Zone (TAZ) representing the proposed project, and the model's socio-economic data was updated to reflect the proposed project buildout. The trip distribution is shown in **Figure 3** and the detailed model distribution plots are included in **Attachment B**. Using this trip distribution, the project trips will be assigned to the study roadway segments and intersections for use in the analysis.

4. Impact Area

As per R2CTPO guidelines, the impact area for the development shall include the adjacent major roadway segment which provides direct access to the site, along with all roadway segments for which the project consumes three percent or more of the peak hour two-way capacity of the segment. Therefore, a significance analysis was conducted in order to determine the significantly impacted roadway segments. The results of the analysis are summarized in **Table 2**, which shows that only one roadway segment will be significantly impacted by the project trips. Additionally, the Volusia County Critical/Near-Critical Roadway Segments map was reviewed, and it was determined that there are two critical/near-critical roadway segments within a 3-mile radius of the site, as shown in **Figure 4**. Therefore, the impacted and critical/near-critical roadway segments will be included in the analysis along with the major intersections as follows:

Roadway Segments:

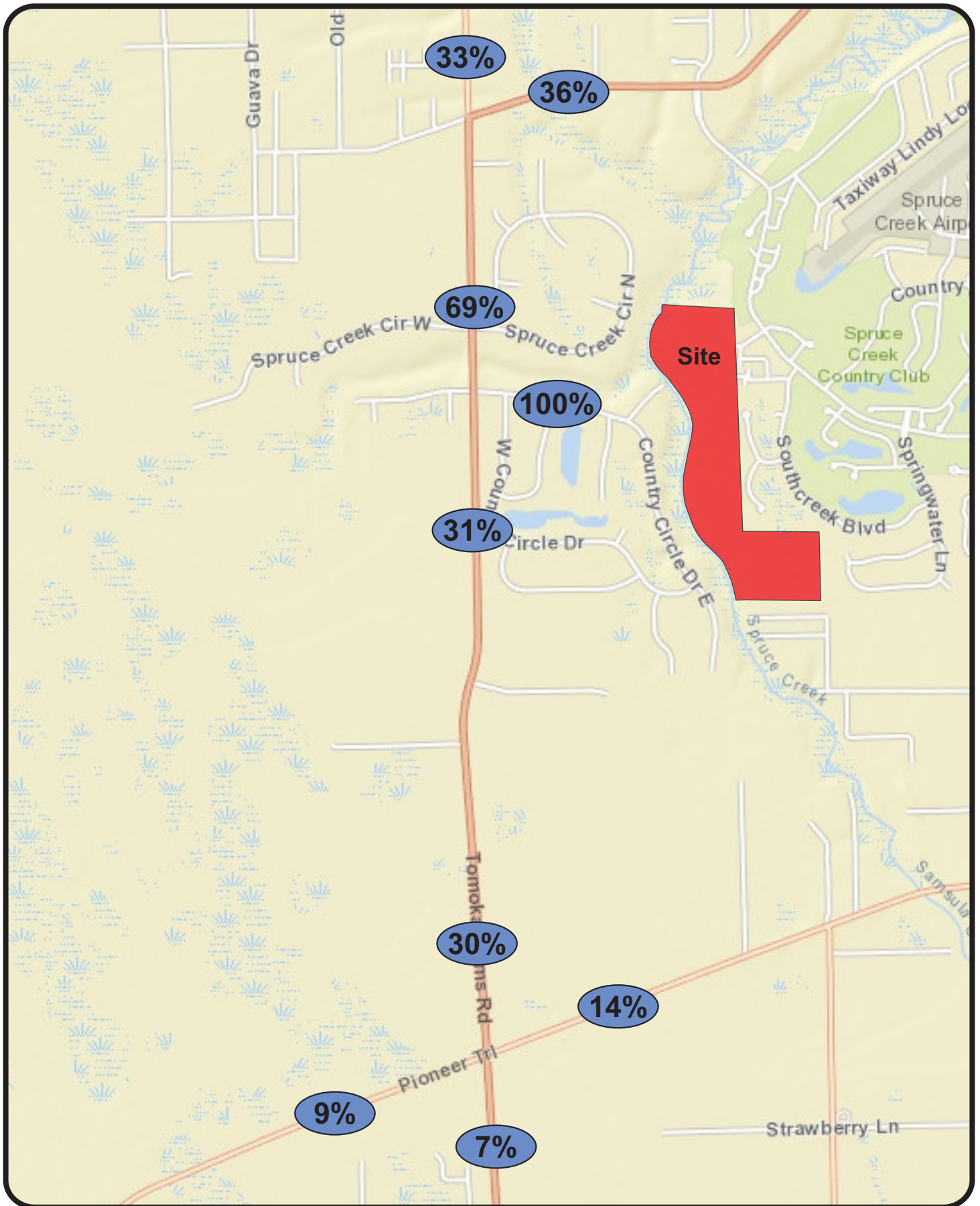
- Tomoka Farms Road,
 - o Pioneer Trail to Taylor Road
- Taylor Road,
 - o Spruce Creek Boulevard to Crane Lake Boulevard (critical)
 - o Crane Lake Boulevard to Summertree Road (critical)

Intersections:

- Tomoka Farms Road & Country Circle Drive East
- Tomoka Farms Road & Taylor Road (signalized)
- Country Circle Drive East & Creek Crossing Road (site access)

5. Trends Analysis

In order to determine the background growth of the existing traffic at the study roadway segments and intersections, trends analysis was conducted using historical AADT's obtained from the nearest FDOT count stations on the study roadway segments. The analysis was conducted according to the guidelines of *Volusia County's Segment Growth Rate and Vested Trips Instructions Policy*. The results of the trends analysis are displayed in **Table 3**, which shows each study roadway segment along with its applicable growth rate which will be used in the analysis. The detailed trends analysis worksheets are included in **Attachment C**.



Creek Crossing
Project № 6023
Figure 3

Trip Distribution



Table 2
Significance Analysis

Count Station	Segment	Adopted*				Project Trips**		Significance
		Length (mi)	Lanes	LOS Std	2-Way Capacity	%	Vol	
Tomoka Farms Road								
1840	SR 44 to Pioneer Tr	2.20	2	C	1,120	7%	9	0.80%
1843	Pioneer Tr to Taylor Rd	2.80	2	E	2,200	69%	88	4.00%
1844	Taylor Rd to Townwest Blvd	1.45	2	E	2,200	33%	42	1.91%
Taylor Road								
1810	Tomoka Farms Rd to Spruce Creek Blvd	0.70	2	E	1,540	36%	46	2.99%
Pioneer Trail								
1461	SR 44 to Tomoka Farms Rd	4.00	2	C	1,120	9%	11	0.98%
1464	Tomoka Farms Rd to Airport Rd	1.40	2	E	1,230	14%	18	1.46%

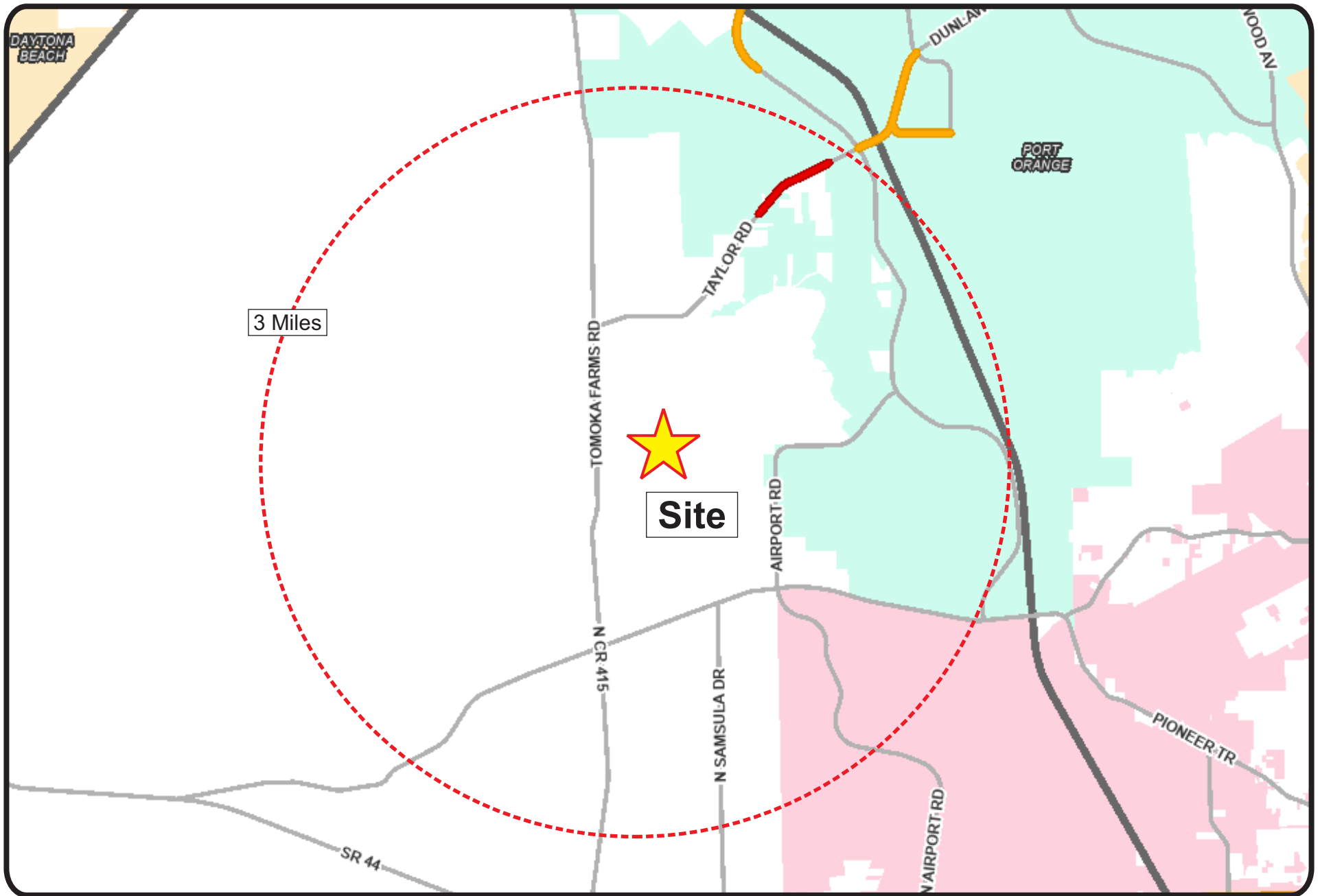
* Obtained from the Volusia County AADT Spreadsheet

** Highest on Segment

Table 3
Trends Analysis

Segment	Regression Analysis	Study Segment				Adjacent Segments				Use in Analysis
		5 Years		10 Years		Previous Segment - 5 Years		Next Segment - 5 Years		
		R ²	Growth Rate	R ²	Growth Rate	R ²	Growth Rate	R ²	Growth Rate	
Tomoka Farms Road										
Pioneer Tr to Taylor Rd	Linear	58.74%	-1.97%	48.18%	1.32%	12.50%	-1.52%	N/A*	N/A*	Min 1.00% + Vested trips for roadways; Min 2.00% for intersections
	Exponential	57.50%	-1.85%	49.43%	1.41%	11.52%	-1.42%	N/A*	N/A*	
Taylor Road										
Spruce Creek Blvd to Crane Lake Blvd	Linear	12.29%	4.05%	16.60%	2.01%	61.39%	2.38%	22.58%	4.69%	Min 1.00% + Vested trips
	Exponential	11.56%	4.55%	14.31%	2.15%	60.78%	2.47%	24.33%	5.05%	
Crane Lake Blvd to Summertree Rd	Linear	22.58%	4.69%	19.00%	18.00%	12.29%	4.05%	61.25%	6.19%	7.40% or Vested trips, whichever is higher
	Exponential	24.33%	5.05%	0.01%	0.05%	11.56%	4.55%	65.35%	7.40%	

* Historical traffic volumes not available



Creek Crossing
Project № 6023
Figure 4

**Critical/Near-Critical
Roadway Segments**



6. Traffic Impact Assessment

a) Roadway

- Obtain existing P.M. peak hour traffic volumes on the study roadway segments from the Volusia County AADT Spreadsheet for use in the traffic analysis.
- Determine background traffic with the use of the annual growth rate and committed trips as previously determined.
- Combine project traffic with background traffic to obtain total traffic volumes.
- Perform P.M. peak hour roadway analysis utilizing R2CTPO standards.

b) Intersections

- Conduct intersection counts and use seasonal factors to adjust intersection data during the A.M. and P.M. peak periods at the study intersections.
- Determine background traffic with the use of the annual growth rates as previously determined.
- Combine project traffic with background traffic to obtain total traffic.
- Perform intersection capacity analysis for the A.M. and P.M. peak hours utilizing *HCS Software* in accordance with the procedures of the *Highway Capacity Manual (HCM)*.

7. Traffic Report

Prepare traffic report summarizing study procedures, analyses and recommendations. If you have any questions or concerns, please contact us at (407) 628-9955.

Attachments

Attachment A

ITE Trip Generation Worksheets

Single-Family Detached Housing (210)

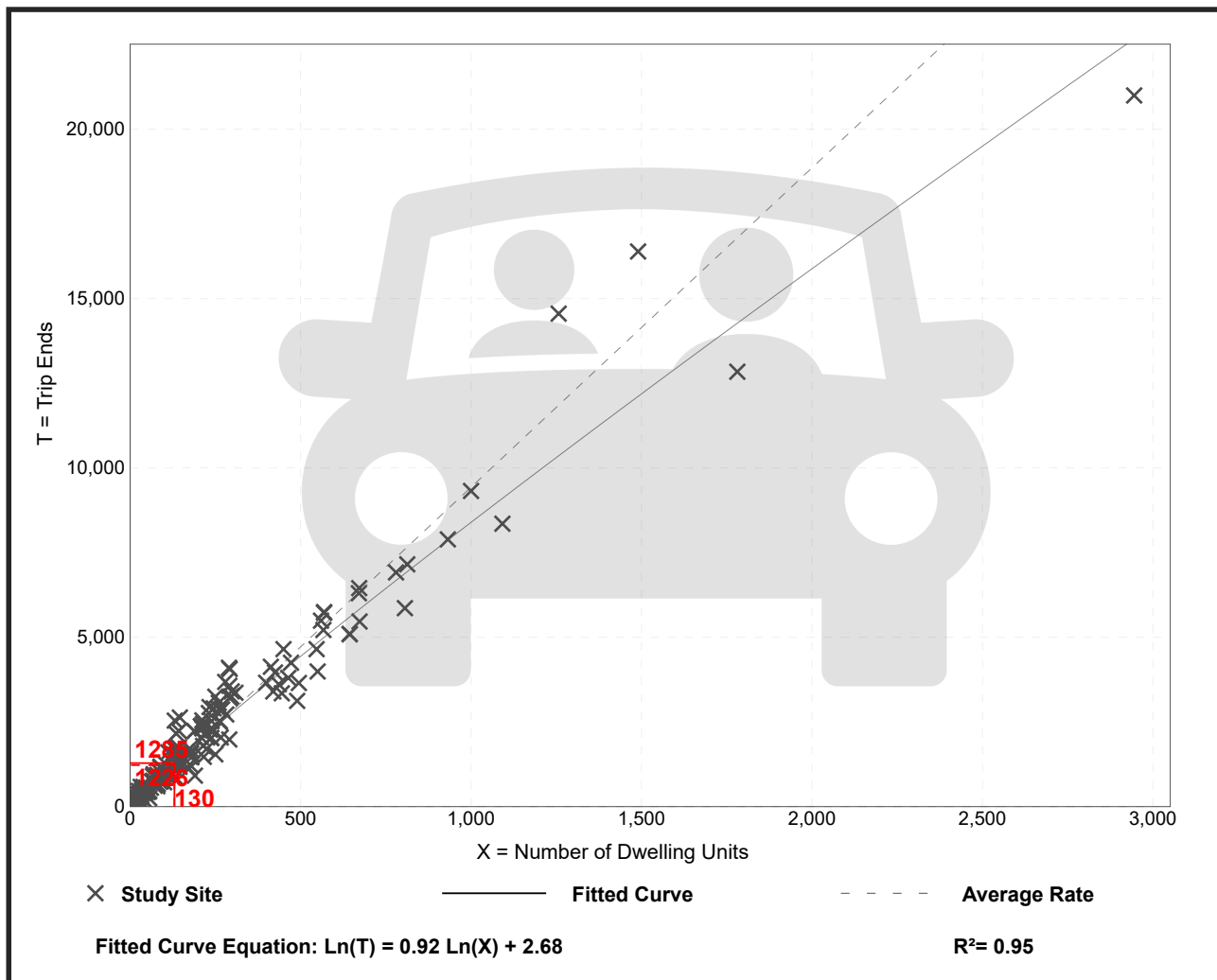
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 192

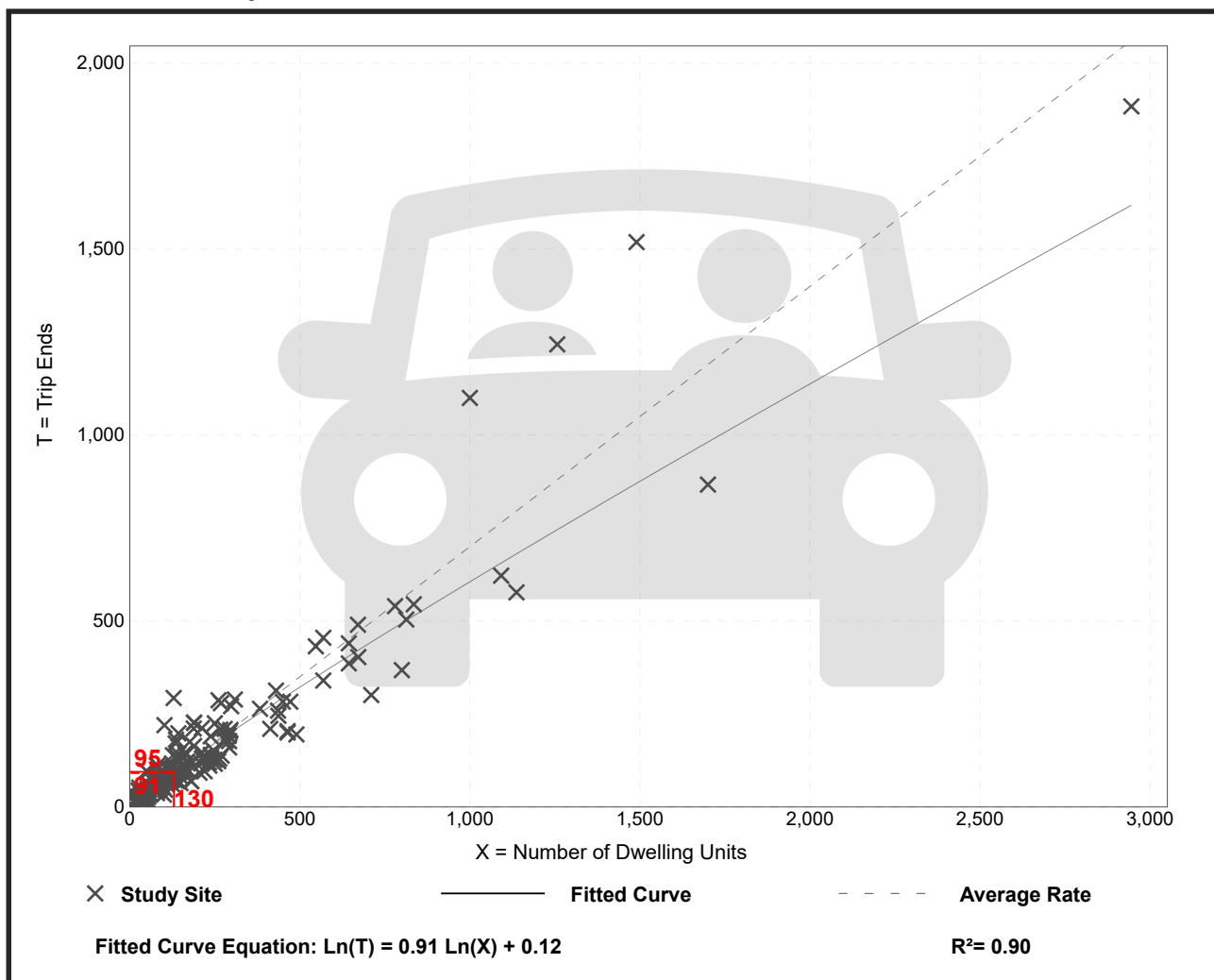
Avg. Num. of Dwelling Units: 226

Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



Single-Family Detached Housing (210)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 208

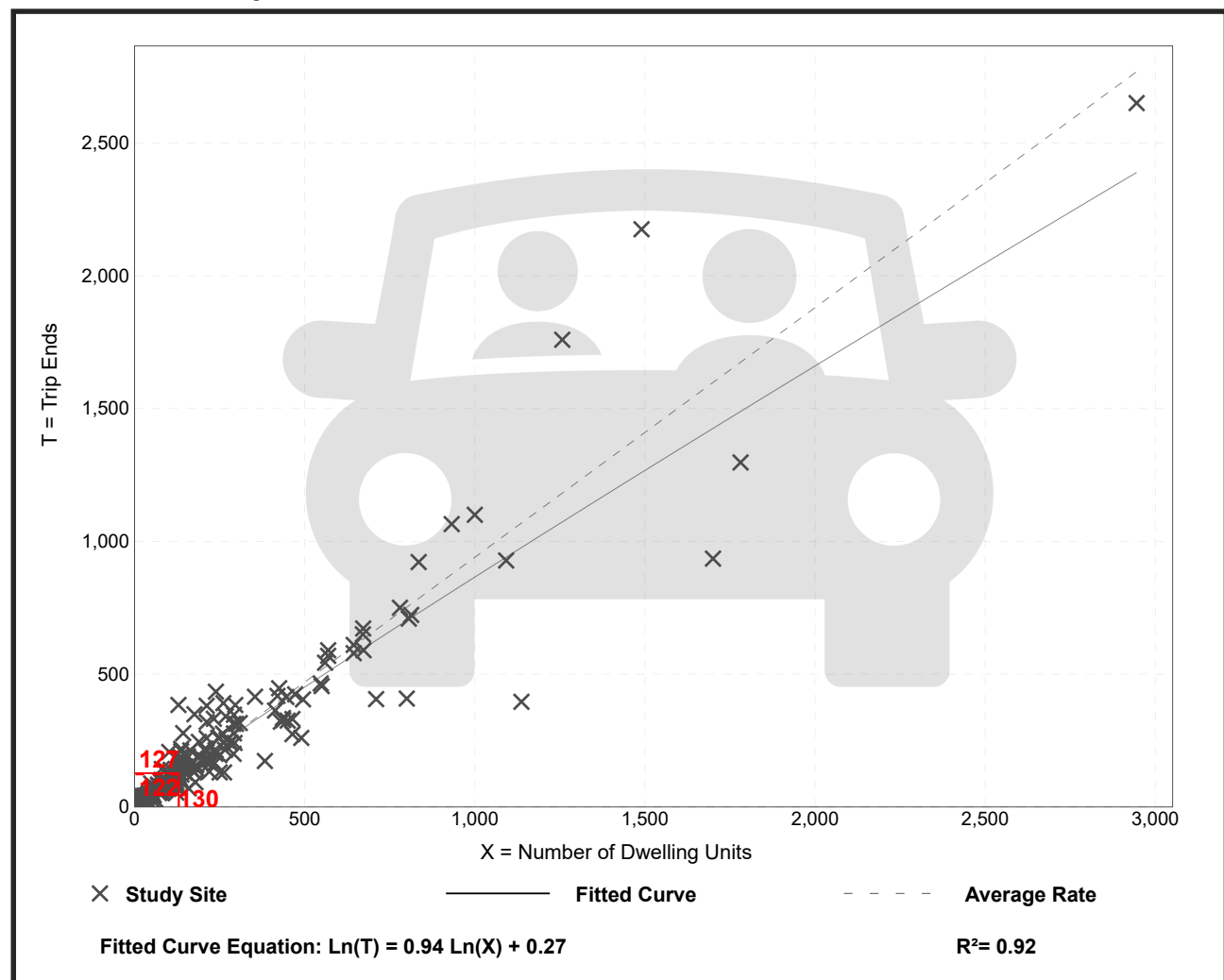
Avg. Num. of Dwelling Units: 248

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

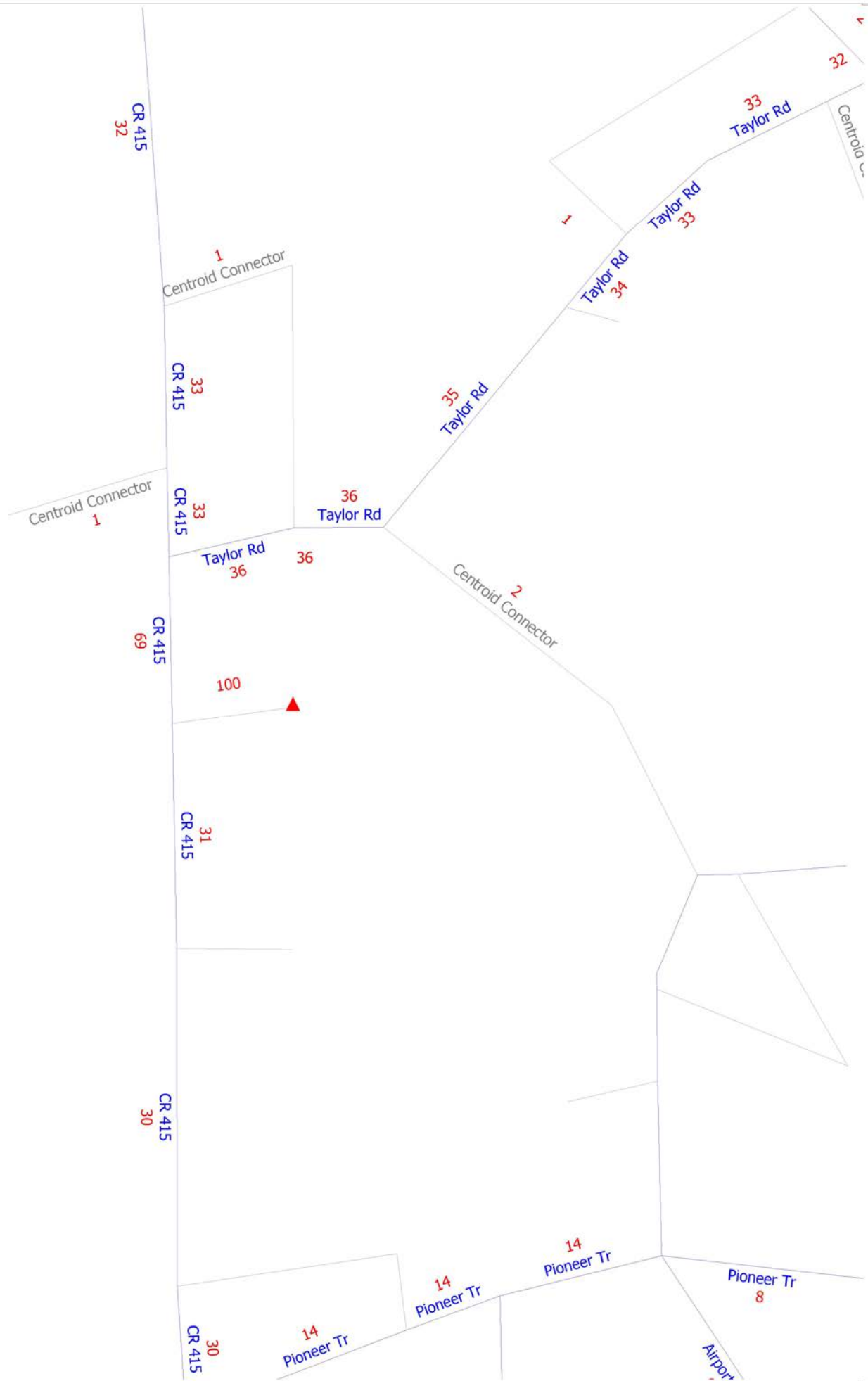
Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

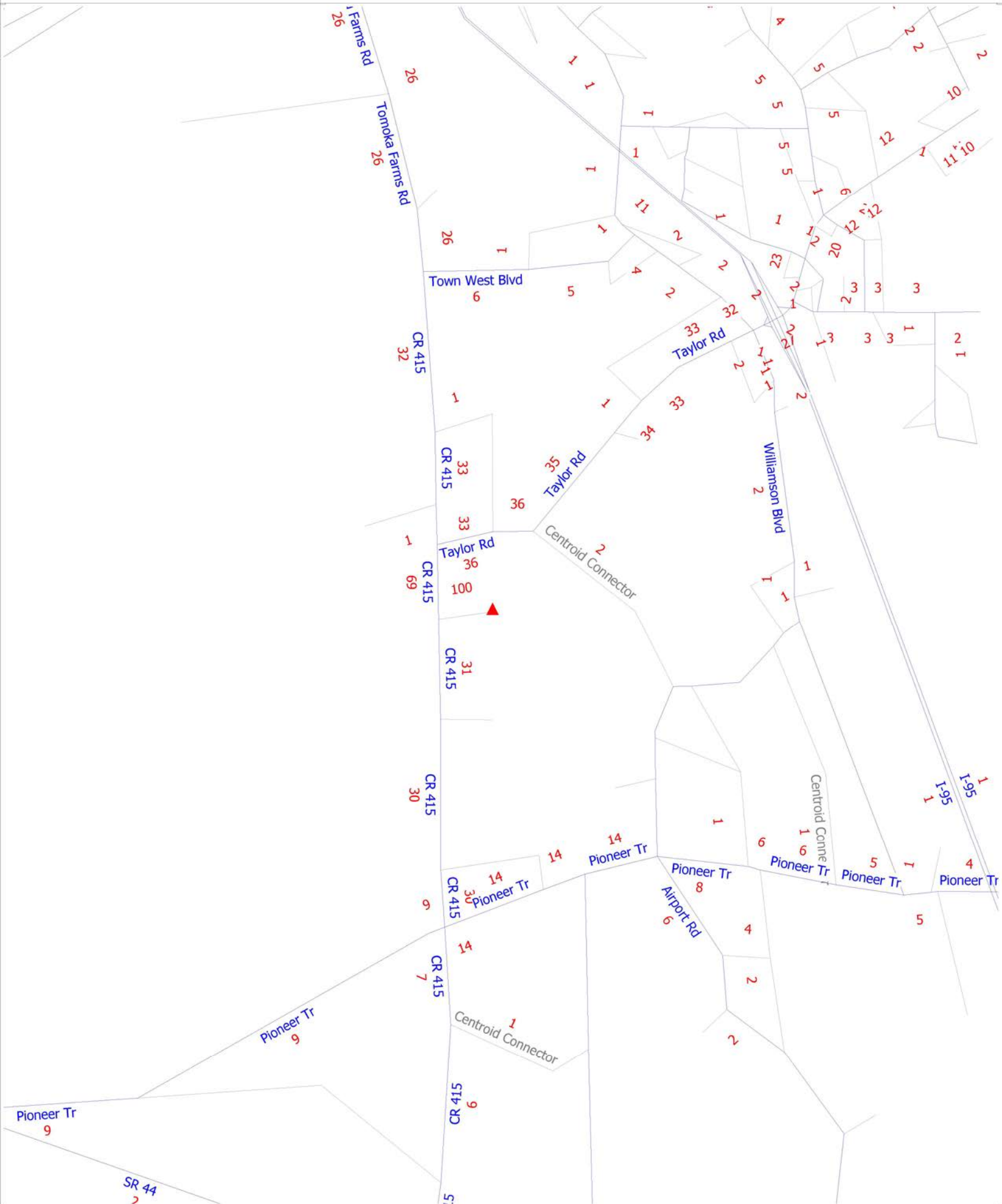
Data Plot and Equation



Attachment B

CFRPM Model Output





Attachment C

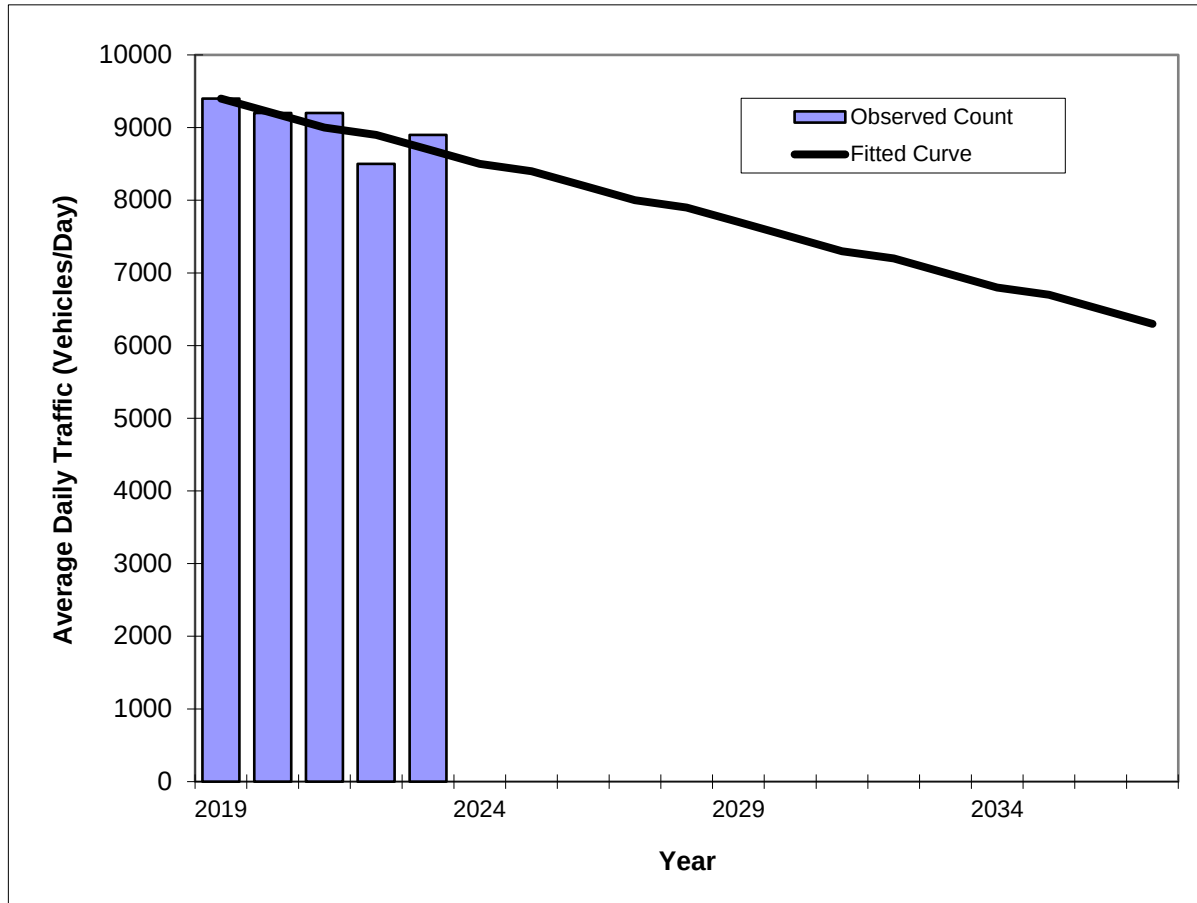
Trends Analysis Worksheets

Traffic Trends - V03.a

TOMOKA FARMS RD -- Pioneer Tr to Taylor Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7047
Highway:	TOMOKA FARMS RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	9400	9400
2020	9200	9200
2021	9200	9000
2022	8500	8900
2023	8900	8700
2035 Opening Year Trend		
2035	N/A	6700
2036 Mid-Year Trend		
2036	N/A	6500
2037 Design Year Trend		
2037	N/A	6300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-170
Trend R-squared:	58.74%
Trend Annual Historic Growth Rate:	-1.86%
Trend Growth Rate (2023 to Design Year):	-1.97%
Printed:	8-Apr-25
Straight Line Growth Option	

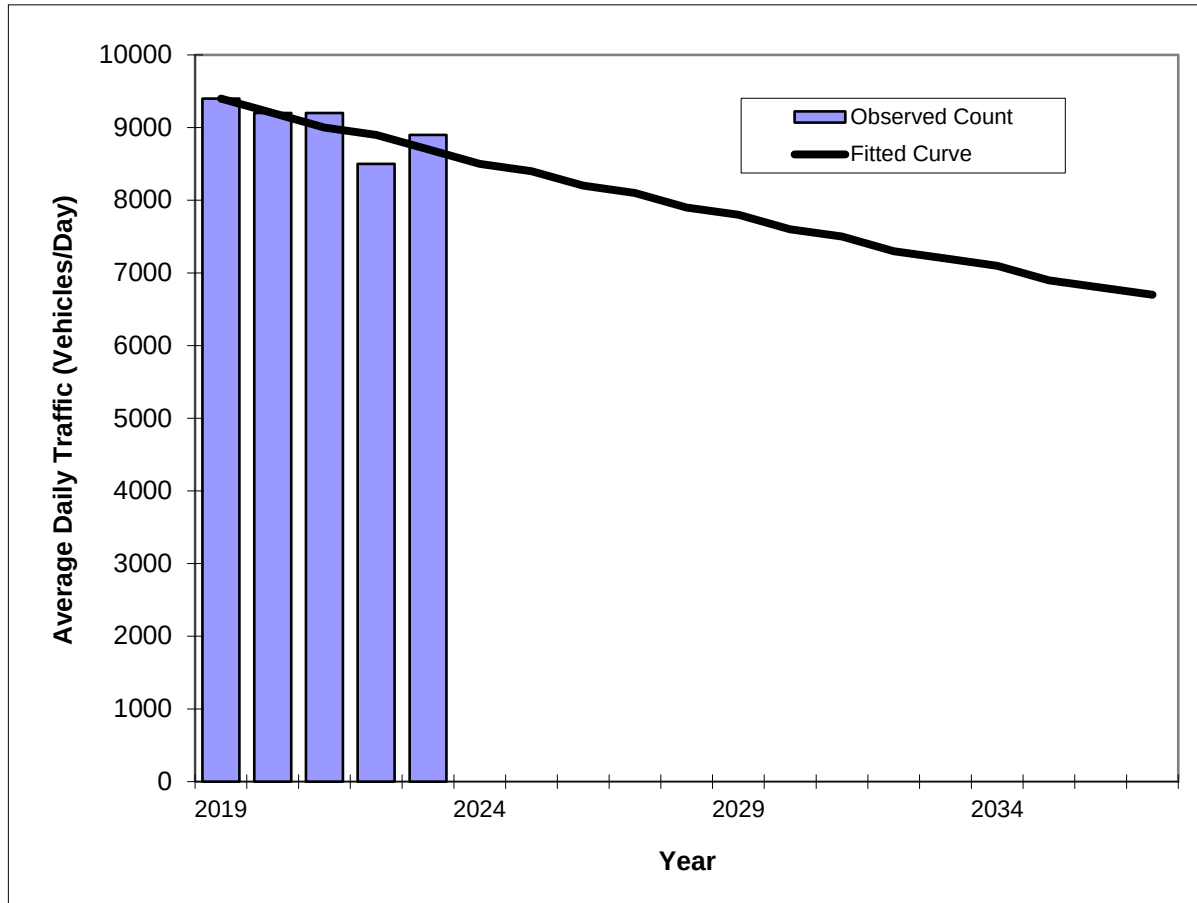
*Axle-Adjusted

Traffic Trends - V03.a

TOMOKA FARMS RD -- Pioneer Tr to Taylor Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7047
Highway:	TOMOKA FARMS RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	9400	9400
2020	9200	9200
2021	9200	9000
2022	8500	8900
2023	8900	8700
2035 Opening Year Trend		
2035	N/A	6900
2036 Mid-Year Trend		
2036	N/A	6800
2037 Design Year Trend		
2037	N/A	6700
TRANPLAN Forecasts/Trends		

Trend R-squared:	57.50%
Compounded Annual Historic Growth Rate:	-1.92%
Compounded Growth Rate (2023 to Design Year):	-1.85%
Printed:	8-Apr-25
Exponential Growth Option	

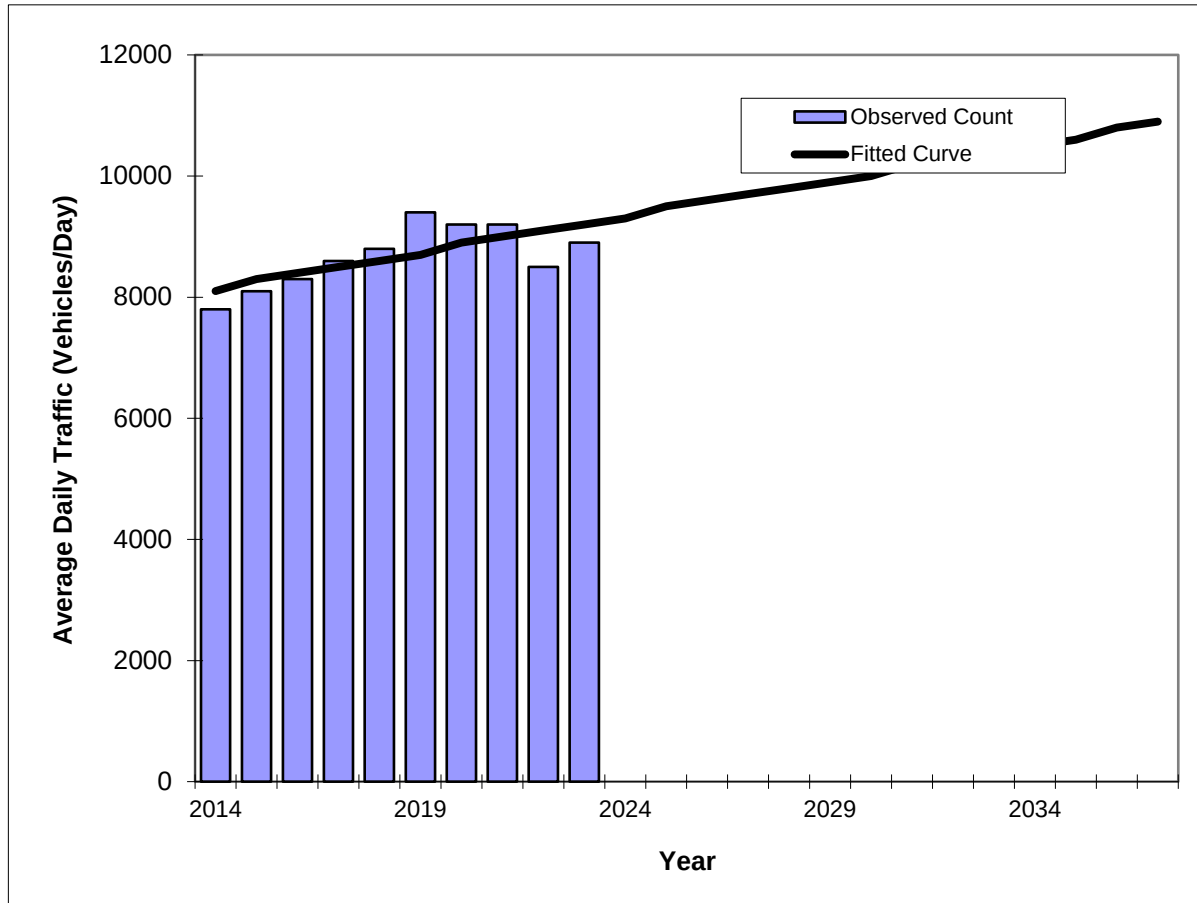
*Axle-Adjusted

Traffic Trends - V03.a

TOMOKA FARMS RD -- Pioneer Tr to Taylor Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7047
Highway:	TOMOKA FARMS RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2014	7800	8100
2015	8100	8300
2016	8300	8400
2017	8600	8500
2018	8800	8600
2019	9400	8700
2020	9200	8900
2021	9200	9000
2022	8500	9100
2023	8900	9200
2035 Opening Year Trend		
2035	N/A	10600
2036 Mid-Year Trend		
2036	N/A	10800
2037 Design Year Trend		
2037	N/A	10900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	119
Trend R-squared:	48.18%
Trend Annual Historic Growth Rate:	1.51%
Trend Growth Rate (2023 to Design Year):	1.32%
Printed:	8-Apr-25
Straight Line Growth Option	

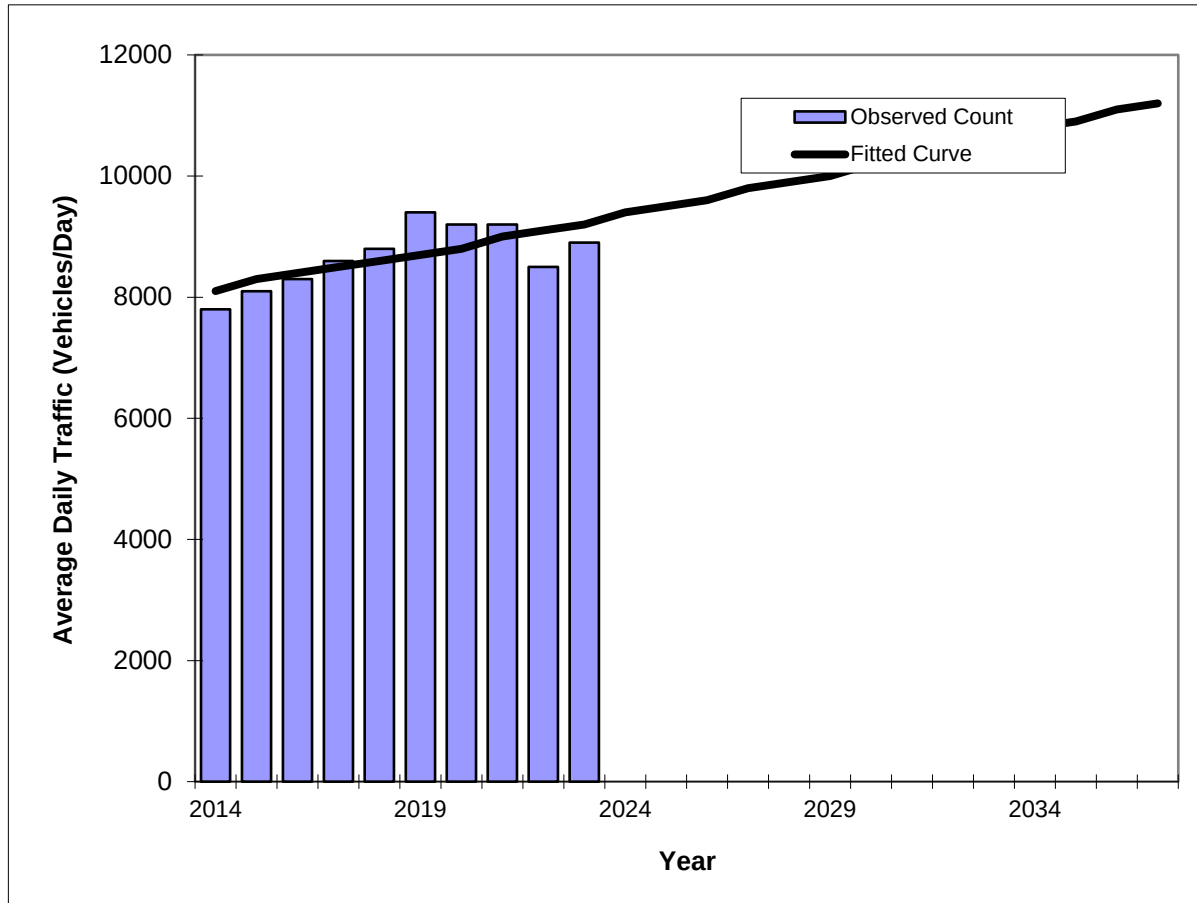
*Axle-Adjusted

Traffic Trends - V03.a

TOMOKA FARMS RD -- Pioneer Tr to Taylor Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7047
Highway:	TOMOKA FARMS RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2014	7800	8100
2015	8100	8300
2016	8300	8400
2017	8600	8500
2018	8800	8600
2019	9400	8700
2020	9200	8800
2021	9200	9000
2022	8500	9100
2023	8900	9200
2035 Opening Year Trend		
2035	N/A	10900
2036 Mid-Year Trend		
2036	N/A	11100
2037 Design Year Trend		
2037	N/A	11200
TRANPLAN Forecasts/Trends		

Trend R-squared:	49.43%
Compounded Annual Historic Growth Rate:	1.42%
Compounded Growth Rate (2023 to Design Year):	1.41%
Printed:	8-Apr-25
Exponential Growth Option	

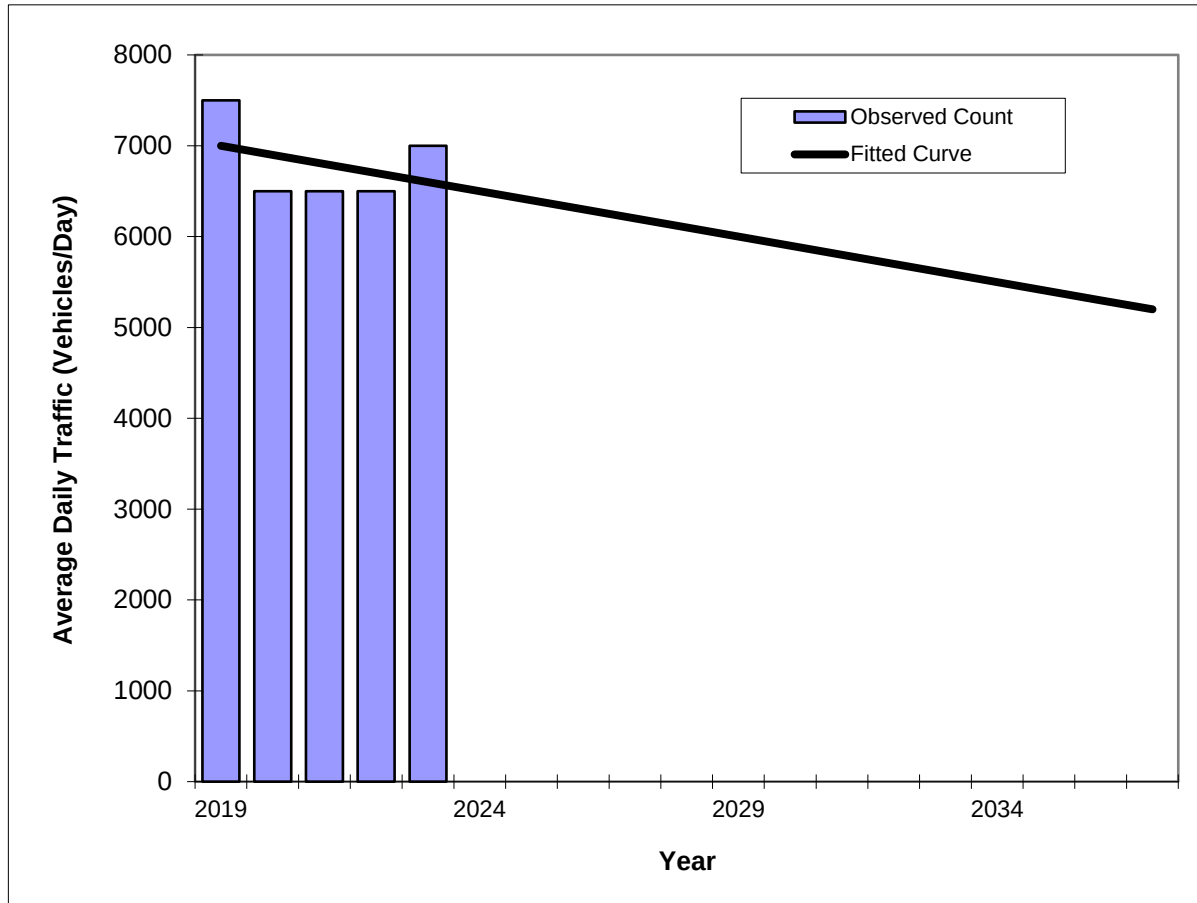
*Axle-Adjusted

Traffic Trends - V03.a

TOMOKA FARMS RD -- SR 44 to Pioneer Tr

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	0498
Highway:	TOMOKA FARMS RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	7500	7000
2020	6500	6900
2021	6500	6800
2022	6500	6700
2023	7000	6600
2035 Opening Year Trend		
2035	N/A	5400
2036 Mid-Year Trend		
2036	N/A	5300
2037 Design Year Trend		
2037	N/A	5200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-100
Trend R-squared:	12.50%
Trend Annual Historic Growth Rate:	-1.43%
Trend Growth Rate (2023 to Design Year):	-1.52%
Printed:	8-Apr-25
Straight Line Growth Option	

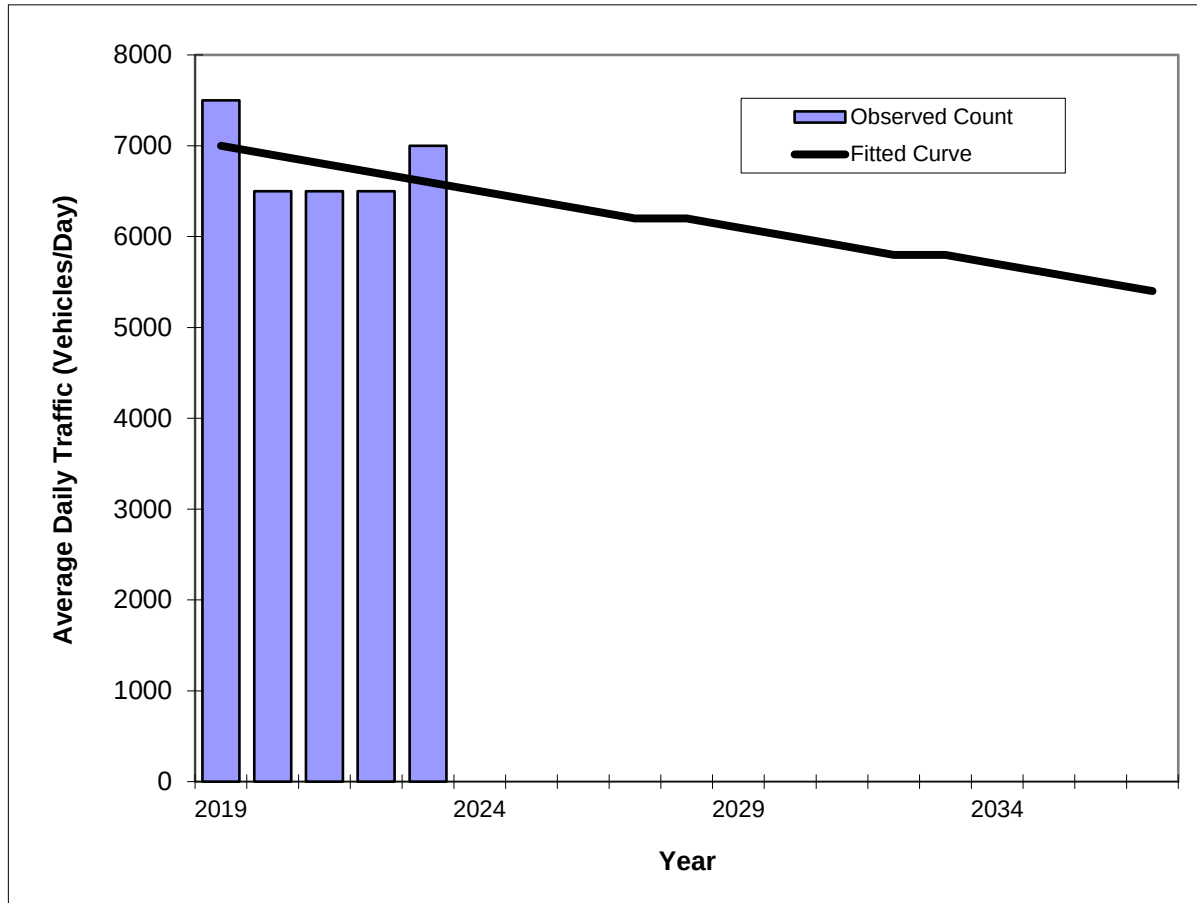
*Axle-Adjusted

Traffic Trends - V03.a

TOMOKA FARMS RD -- SR 44 to Pioneer Tr

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	0498
Highway:	TOMOKA FARMS RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	7500	7000
2020	6500	6900
2021	6500	6800
2022	6500	6700
2023	7000	6600
2035 Opening Year Trend		
2035	N/A	5600
2036 Mid-Year Trend		
2036	N/A	5500
2037 Design Year Trend		
2037	N/A	5400
TRANPLAN Forecasts/Trends		

Trend R-squared:	11.52%
Compounded Annual Historic Growth Rate:	-1.46%
Compounded Growth Rate (2023 to Design Year):	-1.42%
Printed:	8-Apr-25
Exponential Growth Option	

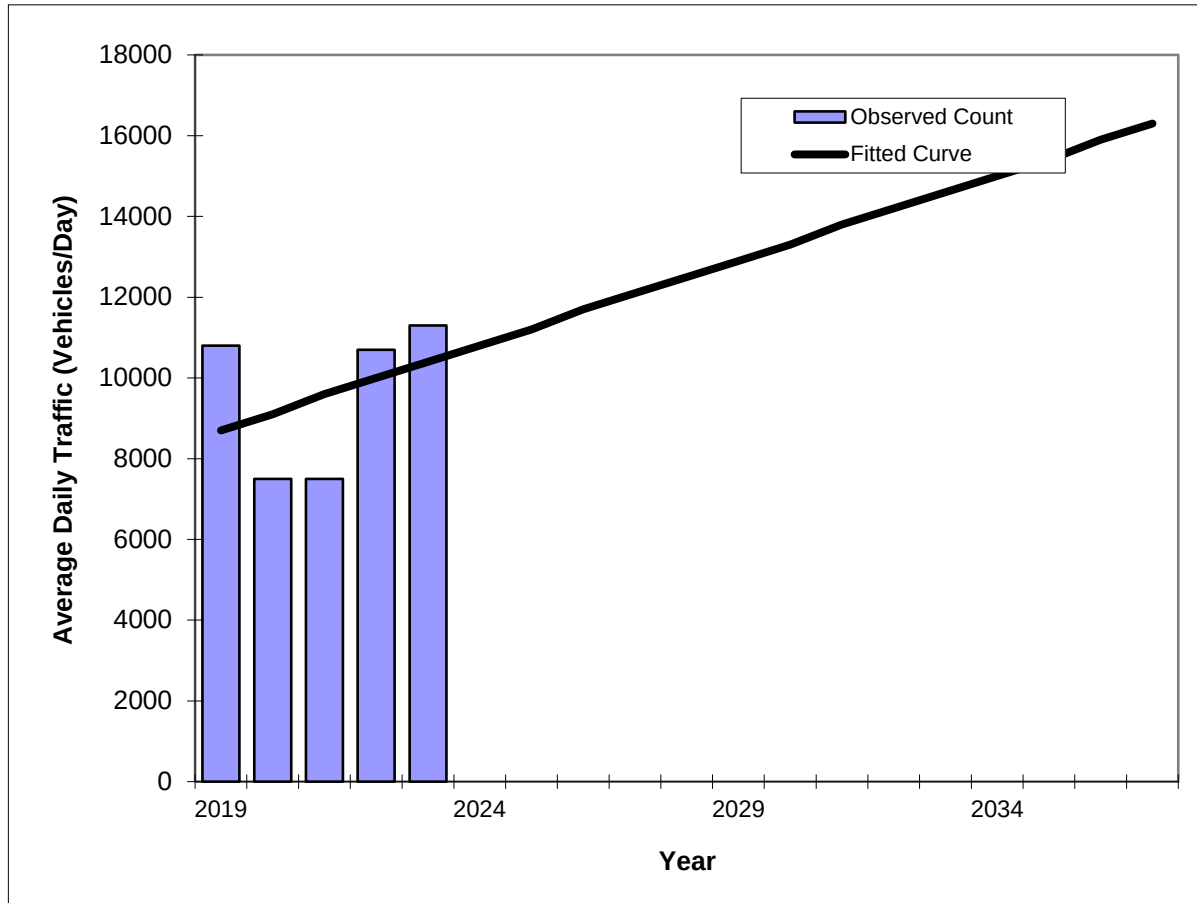
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Spruce Creek Blvd to Crane Lake Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7073
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	10800	8700
2020	7500	9100
2021	7500	9600
2022	10700	10000
2023	11300	10400
2035 Opening Year Trend		
2035	N/A	15400
2036 Mid-Year Trend		
2036	N/A	15900
2037 Design Year Trend		
2037	N/A	16300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	420
Trend R-squared:	12.29%
Trend Annual Historic Growth Rate:	4.89%
Trend Growth Rate (2023 to Design Year):	4.05%
Printed:	8-Apr-25
Straight Line Growth Option	

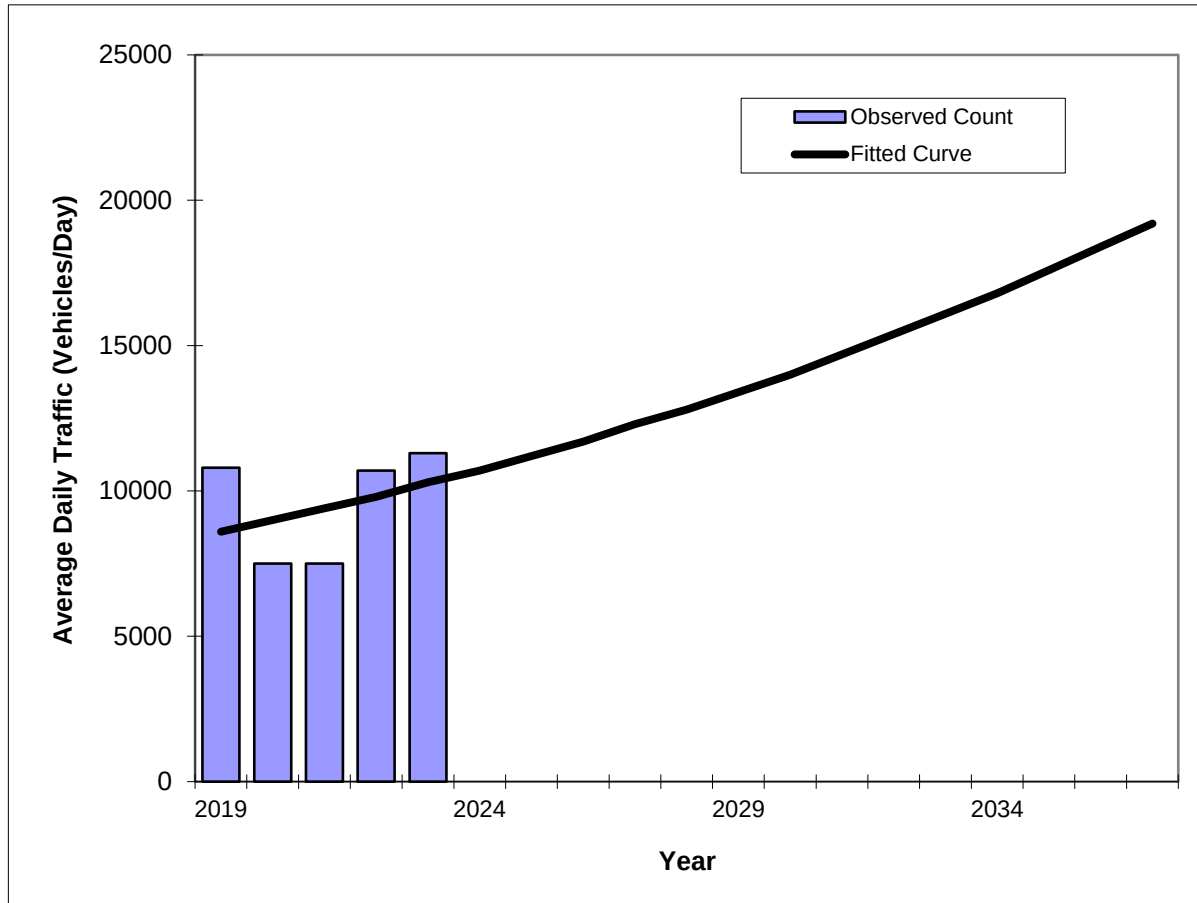
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Spruce Creek Blvd to Crane Lake Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7073
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	10800	8600
2020	7500	9000
2021	7500	9400
2022	10700	9800
2023	11300	10300
2035 Opening Year Trend		
2035	N/A	17600
2036 Mid-Year Trend		
2036	N/A	18400
2037 Design Year Trend		
2037	N/A	19200
TRANPLAN Forecasts/Trends		

Trend R-squared:	11.56%
Compounded Annual Historic Growth Rate:	4.61%
Compounded Growth Rate (2023 to Design Year):	4.55%
Printed:	8-Apr-25
Exponential Growth Option	

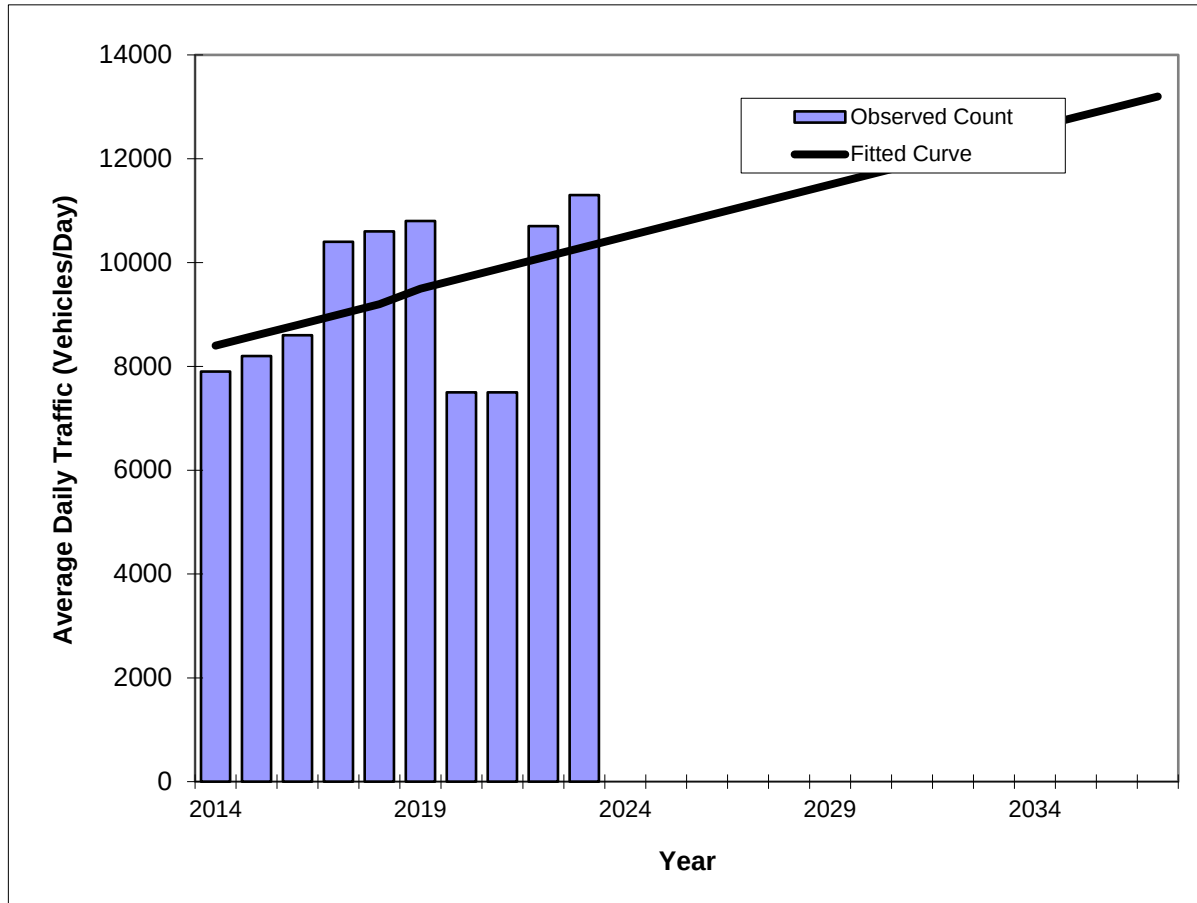
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Spruce Creek Blvd to Crane Lake Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7073
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2014	7900	8400
2015	8200	8600
2016	8600	8800
2017	10400	9000
2018	10600	9200
2019	10800	9500
2020	7500	9700
2021	7500	9900
2022	10700	10100
2023	11300	10300
2035 Opening Year Trend		
2035	N/A	12800
2036 Mid-Year Trend		
2036	N/A	13000
2037 Design Year Trend		
2037	N/A	13200
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	207
Trend R-squared:	16.60%
Trend Annual Historic Growth Rate:	2.51%
Trend Growth Rate (2023 to Design Year):	2.01%
Printed:	8-Apr-25
Straight Line Growth Option	

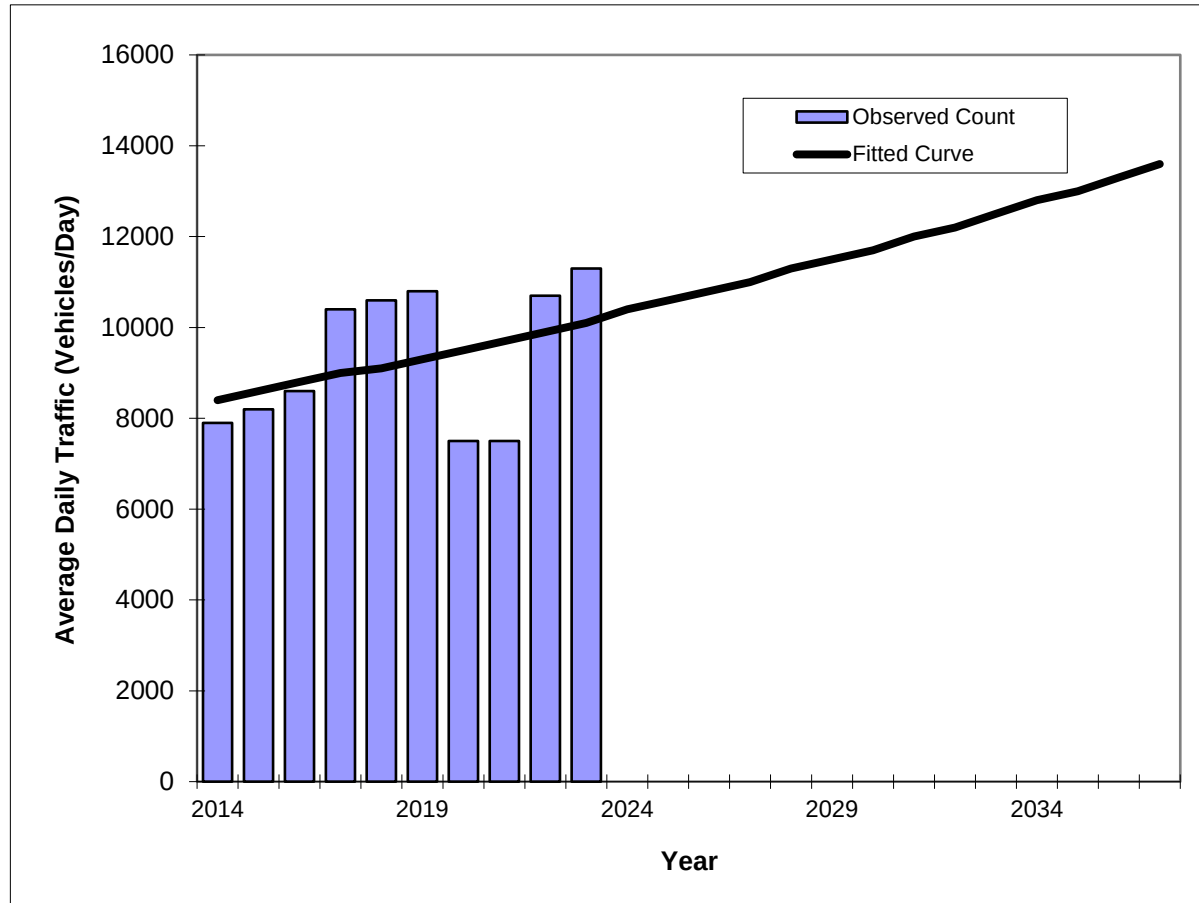
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Spruce Creek Blvd to Crane Lake Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7073
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2014	7900	8400
2015	8200	8600
2016	8600	8800
2017	10400	9000
2018	10600	9100
2019	10800	9300
2020	7500	9500
2021	7500	9700
2022	10700	9900
2023	11300	10100
2035 Opening Year Trend		
2035	N/A	13000
2036 Mid-Year Trend		
2036	N/A	13300
2037 Design Year Trend		
2037	N/A	13600
TRANPLAN Forecasts/Trends		

Trend R-squared:	14.31%
Compounded Annual Historic Growth Rate:	2.07%
Compounded Growth Rate (2023 to Design Year):	2.15%
Printed:	8-Apr-25
Exponential Growth Option	

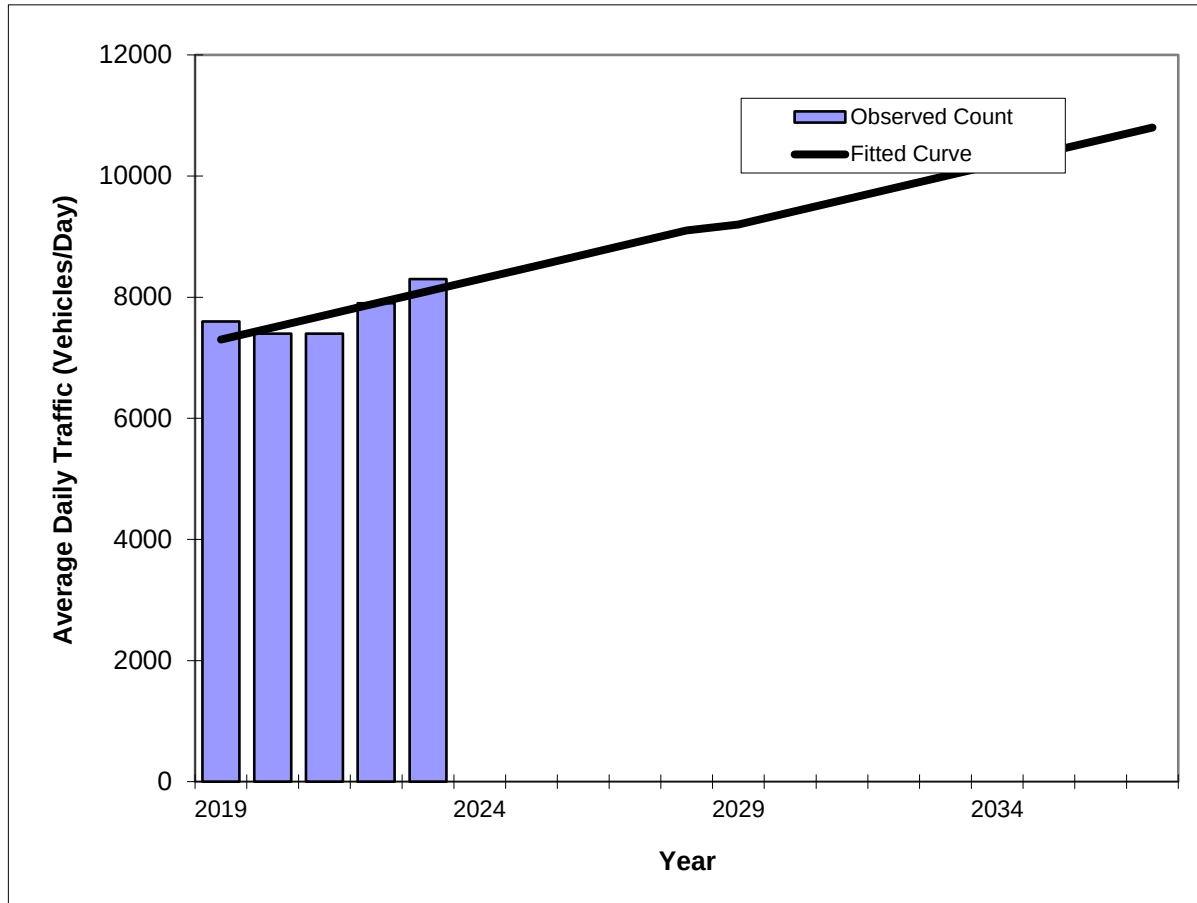
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Tomoka Farms Rd to Spruce Creek Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7072
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	7600	7300
2020	7400	7500
2021	7400	7700
2022	7900	7900
2023	8300	8100
2035 Opening Year Trend		
2035	N/A	10400
2036 Mid-Year Trend		
2036	N/A	10600
2037 Design Year Trend		
2037	N/A	10800
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	190
Trend R-squared:	61.39%
Trend Annual Historic Growth Rate:	2.74%
Trend Growth Rate (2023 to Design Year):	2.38%
Printed:	8-Apr-25
Straight Line Growth Option	

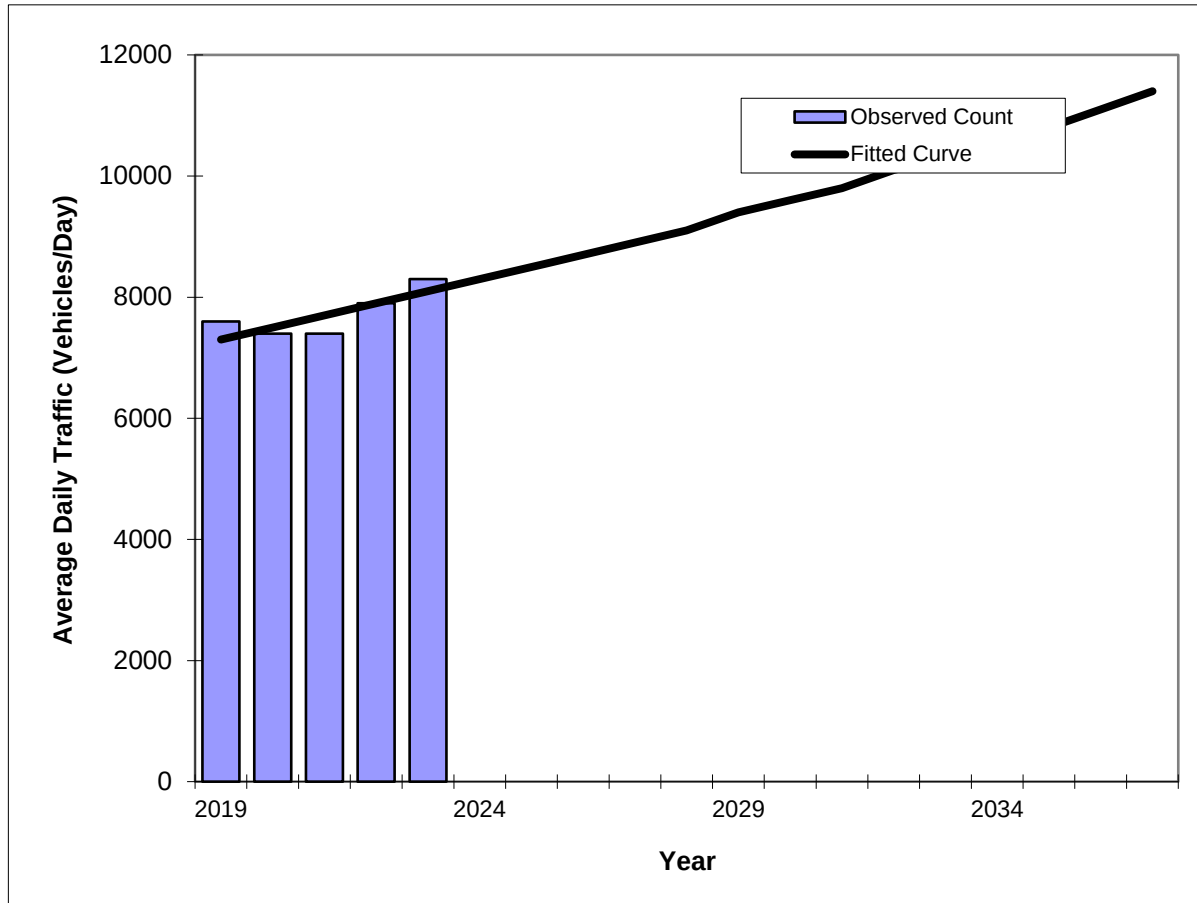
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Tomoka Farms Rd to Spruce Creek Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7072
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	7600	7300
2020	7400	7500
2021	7400	7700
2022	7900	7900
2023	8300	8100
2035 Opening Year Trend		
2035	N/A	10800
2036 Mid-Year Trend		
2036	N/A	11100
2037 Design Year Trend		
2037	N/A	11400
TRANPLAN Forecasts/Trends		

Trend R-squared:	60.78%
Compounded Annual Historic Growth Rate:	2.63%
Compounded Growth Rate (2023 to Design Year):	2.47%
Printed:	8-Apr-25
Exponential Growth Option	

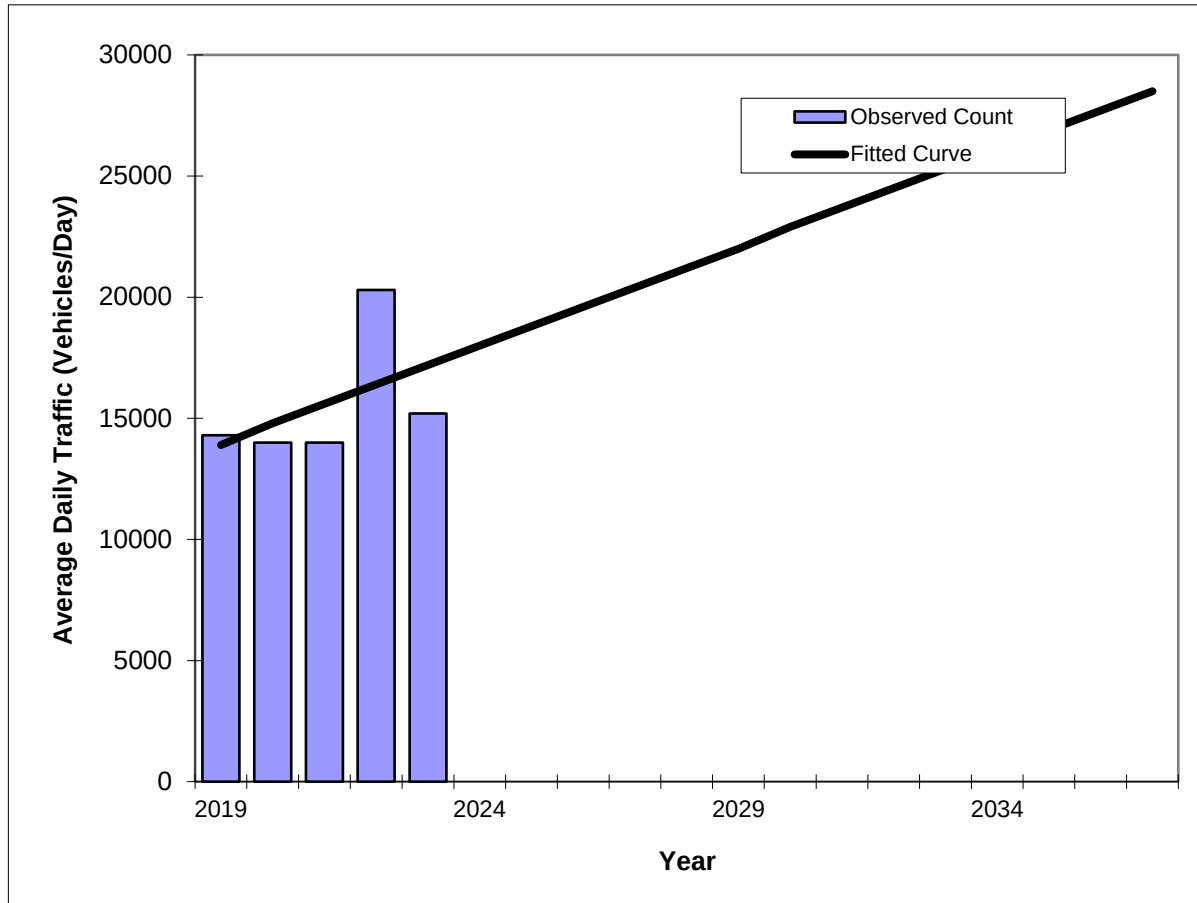
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Crane Lake Blvd to Summertree Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7074
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	14300	13900
2020	14000	14800
2021	14000	15600
2022	20300	16400
2023	15200	17200
2035 Opening Year Trend		
2035	N/A	26900
2036 Mid-Year Trend		
2036	N/A	27700
2037 Design Year Trend		
2037	N/A	28500
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	810
Trend R-squared:	22.58%
Trend Annual Historic Growth Rate:	5.94%
Trend Growth Rate (2023 to Design Year):	4.69%
Printed:	8-Apr-25
Straight Line Growth Option	

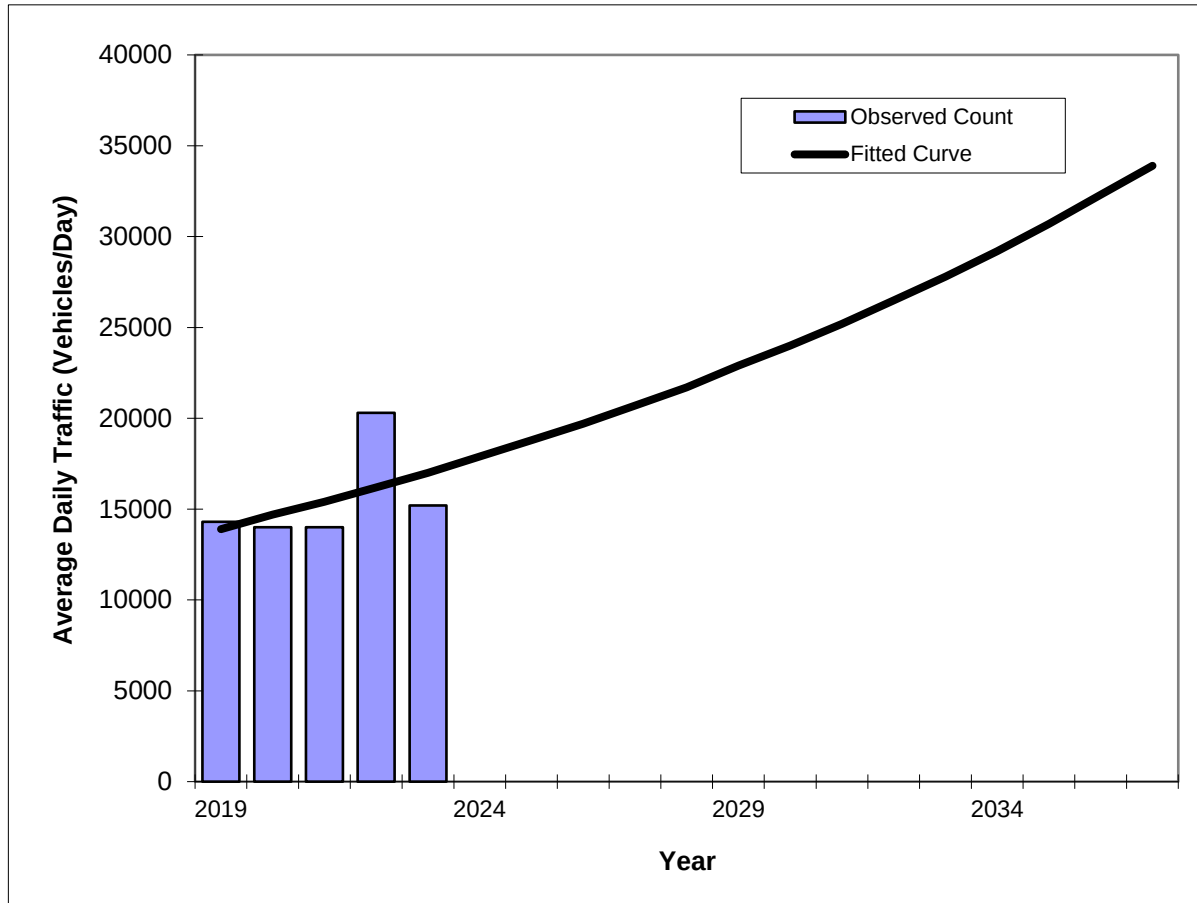
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Crane Lake Blvd to Summertree Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7074
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	14300	13900
2020	14000	14700
2021	14000	15400
2022	20300	16200
2023	15200	17000
2035 Opening Year Trend		
2035	N/A	30700
2036 Mid-Year Trend		
2036	N/A	32300
2037 Design Year Trend		
2037	N/A	33900
TRANPLAN Forecasts/Trends		

Trend R-squared:	24.33%
Compounded Annual Historic Growth Rate:	5.16%
Compounded Growth Rate (2023 to Design Year):	5.05%
Printed:	8-Apr-25
Exponential Growth Option	

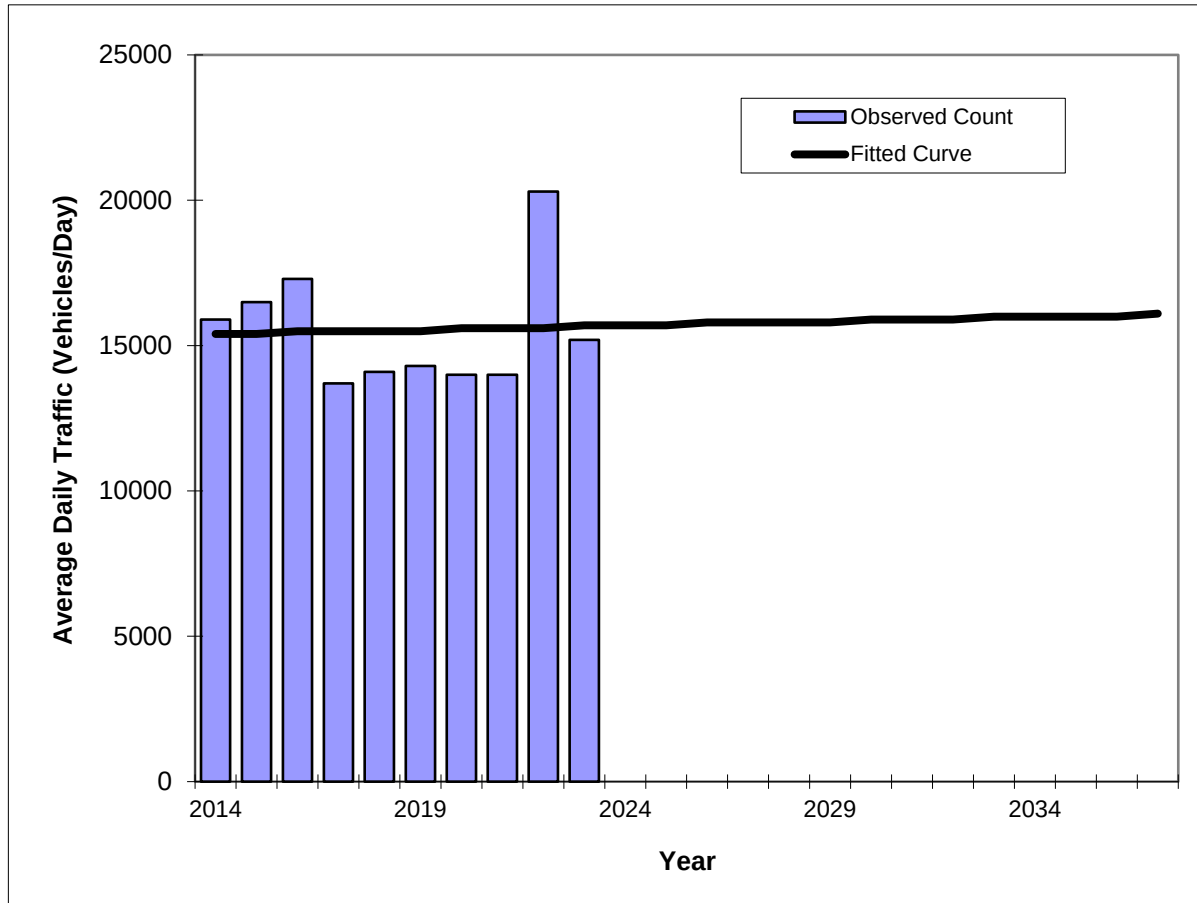
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Crane Lake Blvd to Summertree Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7074
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2014	15900	15400
2015	16500	15400
2016	17300	15500
2017	13700	15500
2018	14100	15500
2019	14300	15500
2020	14000	15600
2021	14000	15600
2022	20300	15600
2023	15200	15700
2035 Opening Year Trend		
2035	N/A	16000
2036 Mid-Year Trend		
2036	N/A	16000
2037 Design Year Trend		
2037	N/A	16100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	30
Trend R-squared:	0.19%
Trend Annual Historic Growth Rate:	0.22%
Trend Growth Rate (2023 to Design Year):	0.18%
Printed:	8-Apr-25
Straight Line Growth Option	

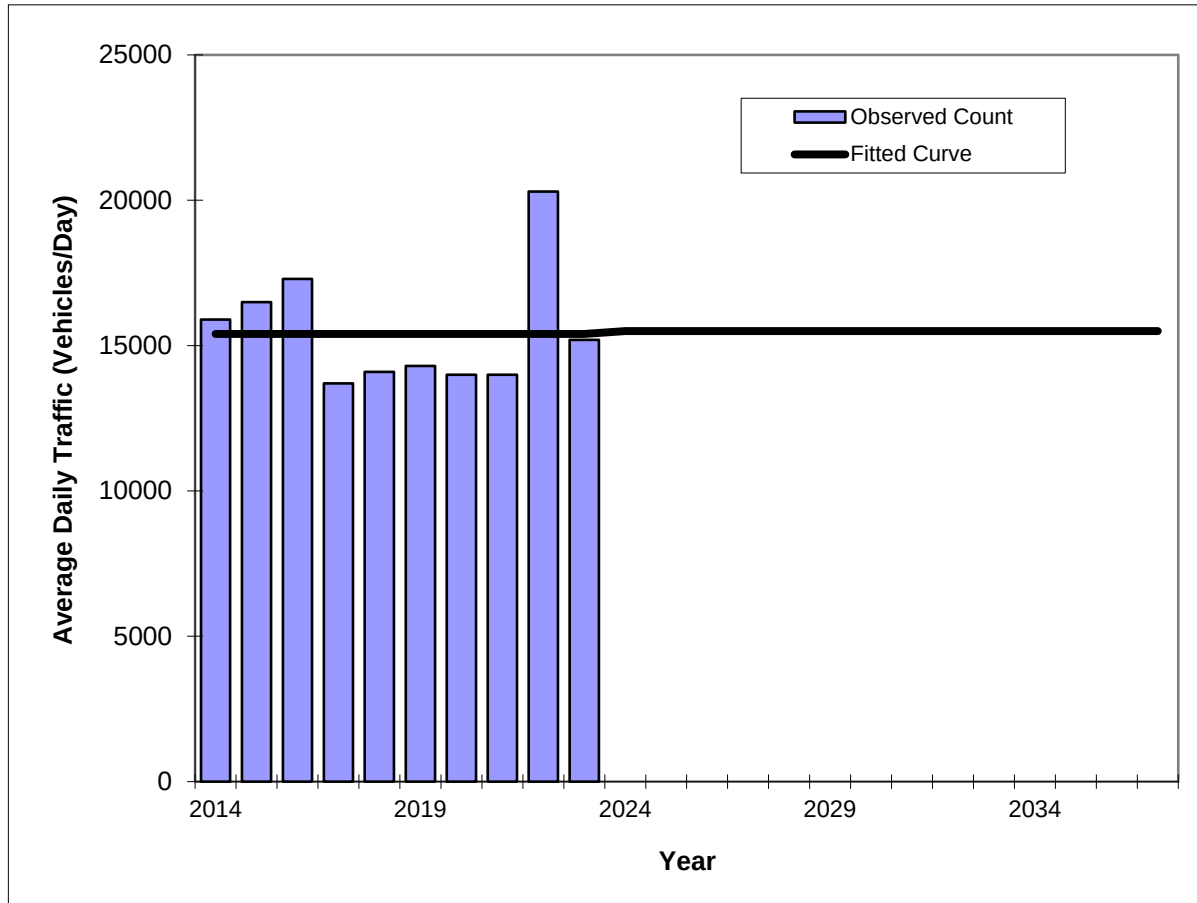
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Crane Lake Blvd to Summertree Rd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7074
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2014	15900	15400
2015	16500	15400
2016	17300	15400
2017	13700	15400
2018	14100	15400
2019	14300	15400
2020	14000	15400
2021	14000	15400
2022	20300	15400
2023	15200	15400
2035 Opening Year Trend		
2035	N/A	15500
2036 Mid-Year Trend		
2036	N/A	15500
2037 Design Year Trend		
2037	N/A	15500
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.01%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2023 to Design Year):	0.05%
Printed:	8-Apr-25
Exponential Growth Option	

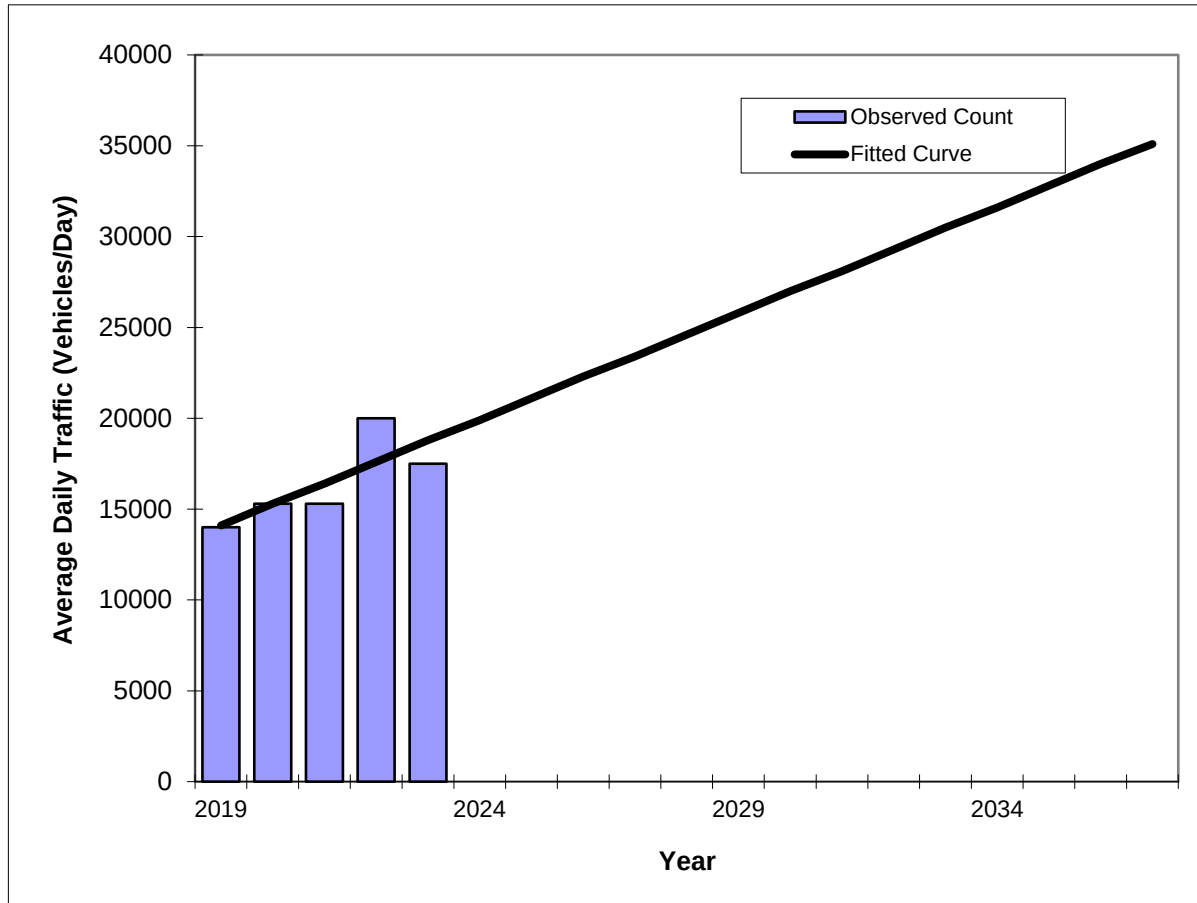
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Summertree Rd to Williamson Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7075
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	14000	14100
2020	15300	15300
2021	15300	16400
2022	20000	17600
2023	17500	18800
2035 Opening Year Trend		
2035	N/A	32800
2036 Mid-Year Trend		
2036	N/A	34000
2037 Design Year Trend		
2037	N/A	35100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,170
Trend R-squared:	61.25%
Trend Annual Historic Growth Rate:	8.33%
Trend Growth Rate (2023 to Design Year):	6.19%
Printed:	8-Apr-25
Straight Line Growth Option	

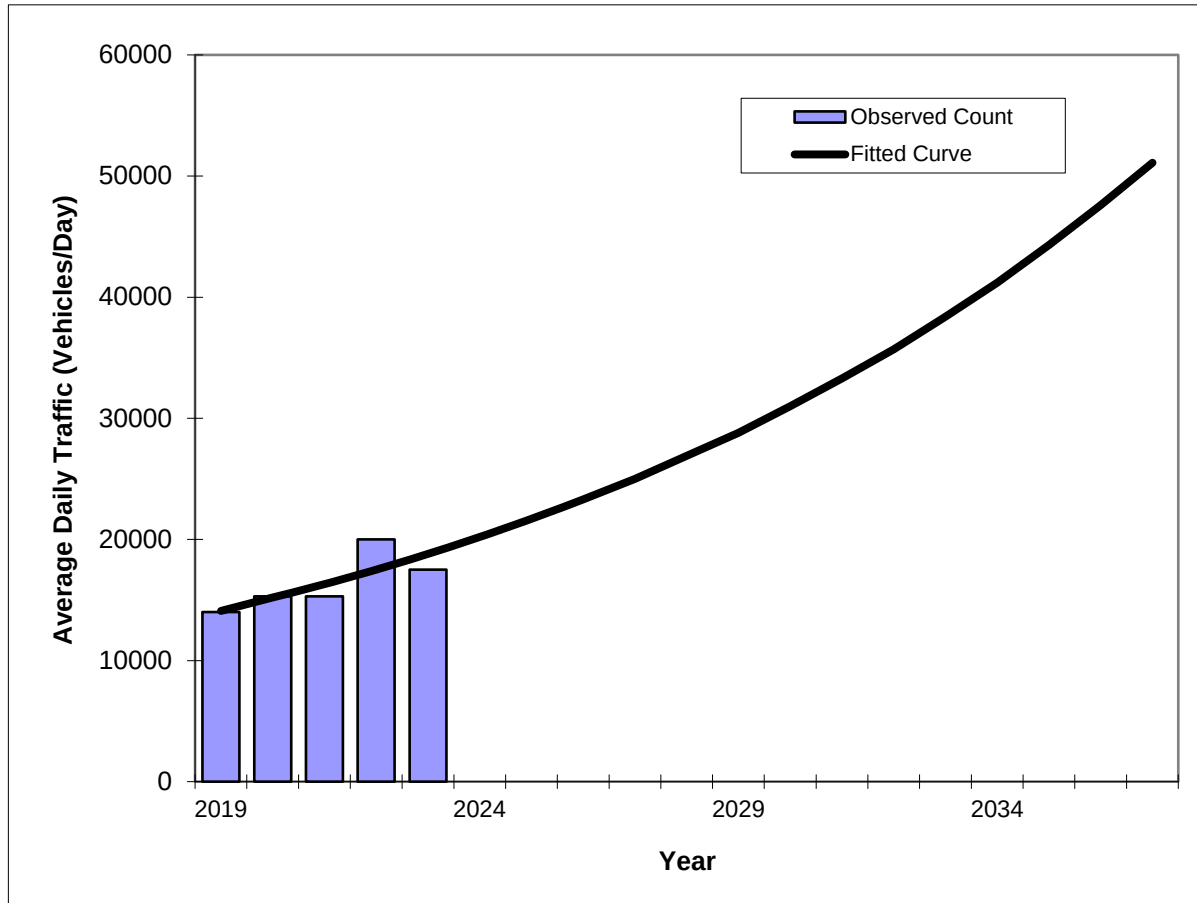
*Axle-Adjusted

Traffic Trends - V03.a

TAYLOR RD -- Summertree Rd to Williamson Blvd

FIN#	1234
Location	1

County:	Volusia (79)
Station #:	7075
Highway:	TAYLOR RD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2019	14000	14100
2020	15300	15200
2021	15300	16300
2022	20000	17500
2023	17500	18800
2035 Opening Year Trend		
2035	N/A	44300
2036 Mid-Year Trend		
2036	N/A	47600
2037 Design Year Trend		
2037	N/A	51100
TRANPLAN Forecasts/Trends		

Trend R-squared:	65.35%
Compounded Annual Historic Growth Rate:	7.46%
Compounded Growth Rate (2023 to Design Year):	7.40%
Printed:	8-Apr-25
Exponential Growth Option	

*Axle-Adjusted

APPENDIX B

Volusia County AADT Spreadsheet

Pine Tree Dr.	Addison Dr. to Old Dixie Hwy	1441	County		1.00	35	UA_NSSRC2_2W_2L_U_0L	Local	1,250	1,300	1,750	1,540	1,750	1,880	1,760	1,870	1,520	1,180	1,410	1,300	E		13,640	0.10	C		80	125	1,020	2	
Pioneer Tr.	SR 44 to Tomoka Farms Rd.	1461	County	Yes	4.00	50	RDA_UFH_2W_2L_U_0L	Major Collector - Rural	3,340	3,480	4,020	4,420	5,220	5,750	4,780	5,090	5,050	4,360	4,730	4,900	C		11,775	0.42	B		400	410	1,120	2	
Pioneer Tr.	Tomoka Farms Rd. Airport Rd.	1464	County	Yes	1.40	45	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	3,700	3,510	3,670	3,960	4,360	4,660	4,830	5,180	4,730	4,930	5,700	5,550	E		13,640	0.41	C		415	490	1,230	2	
Pioneer Tr.	Airport Rd. to Turnbull Bay Rd.	1465	County	Yes	2.50	45	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	2,720	2,610	2,830	3,040	3,730	3,960	5,020	4,960	6,020	6,320	7,380	7,200	E		13,640	0.53	C		480	630	1,230	2	
Pioneer Tr.	Turnbull Bay Rd. to Sugar Mill Dr	1467	County	Yes	1.75	35	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	2,800	2,620	3,040	3,200	3,380	3,580	4,470	5,020	4,810	5,790	6,680	7,050	E		13,640	0.52	D		500	570	1,020	2	
Pioneer Tr.	Sugar Mill Dr. to Williams Rd.	1471	County	Yes	1.45	40	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	4,230	4,280	4,710	4,960	4,970	6,880	8,130	8,300	6,940	8,490	10,090	10,500	E		13,640	0.77	C		735	855	1,230	2	
Pioneer Tr.	Williams Rd. to Enterprise Ave	1473	County	Yes	1.05	40	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	5,240	4,910	5,150	5,570	6,010	7,040	7,810	9,390	8,800	8,800	9,860	9,750	E		13,640	0.71	C		675	780	1,230	2	
Pioneer Tr.	Enterprise Ave. to Enterprise Ave	1474	County	Yes	0.50	35	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	8,220	7,300	7,280	8,100	8,320	7,520	8,190	8,660	7,680	7,800	8,320	8,200	E		13,640	0.60	D		545	665	1,020	2	
Pioneer Tr.	Jungle Rd to Canal St	1475	County	Yes	0.25	35	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	1,940	2,120	2,420	2,130	2,610	2,500	2,300	2,700	2,480	2,250	2,900	2,850	E		13,640	0.21	C		215	245	1,020	2	
Wallace Rd.	Canal St to SR 44	1955	County	Yes	0.25	35	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	7,550	7,540	7,600	7,660	7,350	7,710	7,230	8,180	7,320	7,330	7,680	7,750	E		14,740	0.53	D		520	640	1,330	3	
Mission Dr.	SR 44 to Old Mission Rd.	1261	County	Yes	0.75	40	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	14,180	11,730	11,780	11,910	10,510	13,230	13,300	14,090	12,580	13,050	13,960	15,500	E		37,970	0.41	C		1,325	1,265	3,410	4	
Old Mission Rd./Mission R	Old Mission Rd. to Josephine St.	1354	County	Yes	0.75	40	UA_NSSRC1_2W_4L_D_WL	Major Collector - Urban	11,920	11,390	11,580	11,730	11,020	12,580	13,280	12,790	13,170	13,760	13,080	15,300	E		37,970	0.40	C		1,260	1,280	3,410	4	
Old Mission Rd.	Josephine St. to Park Ave	1353	County	Yes	1.70	35	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	7,230	6,280	6,360	6,420	6,820	6,970	7,070	8,420	8,160	7,660	8,340	8,600	E		14,040	0.61	D		550	680	1,270	2	
Old Mission Rd.	Park Ave. to SR 442	1351	County	Yes	2.00	45	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	4,250	3,920	4,030	3,780	3,850	3,970	4,210	5,050	6,220	5,230	6,000	6,000	E		13,640	0.44	C		425	500	1,230	2	
Plaza Dr. (N. Penin.)	John Anderson Dr. to SR A1A	1481	County		1.00	30	UA_NSSRC2_2W_2L_U_0L	Local	370	230	370	290	250	220	190	190	210	170	180	170	E		13,640	0.01	C		15	20	1,020	2	
Plymouth Ave.	Grand Ave. to Hazen Rd.	1490	County	Yes	1.00	40	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	1,080	1,030	1,020	1,010	-	1,290	1,120	1,180	1,100	1,180	1,180	1,000	E		13,640	0.07	C		85	95	1,230	2	
Plymouth Ave.	Hazen Rd. to SR 15A	1491	County	Yes	0.75	40	UA_NSSRC1_2W_2L_U_0L	Major Collector - Urban	5,760	5,120	5,560	5,990	4,640	5,600	5,380	6,140	6,160	2,830	5,840	5,700	E		13,640	0.42	C		360	530	1,230	2	
Plymouth Ave.	SR 15A to Stone St.	1493	County	Yes	0.50	35	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	10,050	9,380	9,070	9,200	8,060	9,620	9,160	10,330	8,480	7,810	8,370	8,400	E		13,640	0.62	D		565	685	1,020	2	
Plymouth Ave.	Stone St. to Clara Ave	1495	County	Yes	0.50	35	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	10,490	10,040	9,560	9,820	9,510	10,500	10,020	11,310	9,330	8,320	9,250	10,700	E		13,640	0.78	D		840	875	1,020	2	
Plymouth Ave.	Clara Ave. to US 17/92	1497	County	Yes	0.20	35	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	12,110	11,460	10,910	11,250	11,910	13,940	12,020	14,240	11,160	9,510	10,990	10,300	E		14,040	0.73	D		825	850	1,270	2	
Plymouth Ave.	US 17/92 to Amelia Ave	1498	County	Yes	0.20	30	UA_NSSRC2_2W_2L_U_WL	Major Collector - Urban	-	-	-	-	-	10,260	8,730	8,820	9,340	8,220	6,610	7,580	8,300	E		14,040	0.59	D		725	720	1,270	2
Plymouth Ave.	Amelia Ave. to Garfield Ave.	1500	County	Yes	0.20	30	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	6,440	5,850	5,850	5,750	5,070	6,730	6,540	7,910	6,890	5,640	6,290	7,050	E		13,640	0.52	D		720	600	1,020	2	
Plymouth Ave.	Garfield Ave. to Blue Lake Rd./Jacobs	1502	County	Yes	0.75	30	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	5,900	5,270	5,410	5,610	4,200	6,080	5,910	7,300	6,340	5,280	5,880	6,550	E		13,640	0.48	D		730	5,700	1,020	2	
Ponce DeLeon Blvd.	CR 3 to US 17	1511	County	Yes	0.85	35	UA_NSSRC2_2W_2L_U_0L	Local	2,500	2,260	2,350	1,510	-	2,630	1,670	2,110	2,200	1,980	2,650	2,200	E		13,640	0.16	C		110	190	1,020	2	
Providence Blvd.	Doyle Rd. to Anderson Dr.	1530	County	Yes	0.55	35	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	12,270	12,020	11,780	11,720	12,240	13,730	13,130	13,870	14,120	12,110	12,140	12,700	E		13,640	0.93	E		960	1,045	1,020	2	
Providence Blvd.	Anderson Dr. to Normandy Blvd.	1534	County	Yes	0.80	35	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	14,410	13,510	13,150	12,900	11,650	12,860	13,670	13,000	12,570	10,930	11,360	11,800	E		13,640	0.87	E		780	950	1,020	2	
Providence Blvd.	Normandy Blvd to Saxon Blvd.	1535	County	Yes	0.70	35	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	9,860	9,310	8,900	8,990	8,050	8,510	8,270	7,880	8,350	7,290	7,180	8,400	E		13,640	0.62	D		530	730	1,020	2	
Providence Blvd.	Saxon Blvd. to Tivoli Dr.	1538	County	Yes	0.80	35	UA_NSSRC2_2W_2L_D_WL	Minor Arterial - Urban	9,600	9,000	8,510	8,340	7,170	8,740	7,630	7,880	8,560	7,630	7,750	9,000	E		14,740	0.61	D		555	820	1,330	2	
Providence Blvd.	Tivoli Dr. to Ft Smith Blvd.	1539	County	Yes	0.05	35	UA_NSSRC2_2W_4L_D_WL	Minor Arterial - Urban	19,250	17,390	17,020	17,370	17,470	19,140	18,450	16,630	14,120	16,620	16,960	17,300	E		30,420	0.57	D		935	1,500	2,740	4	
Providence Blvd.	Ft Smith Blvd. to Elkcam Blvd.	1541	County	Yes	0.80	35	UA_NSSRC2_2W_2L_U_0L	Minor Arterial - Urban	14,680	13,460	13,070	-	13,420	14,750	13,590	13,640	13,550	12,540	13,360	13,100	E		13,640	0.96	E		900	1,075	1,020	2	
Providence Blvd.	Elkcam Blvd. to Howland Blvd.	1542	County	Yes	1.70	35	UA_NSSRC2_2W_2L_U_WL	Minor Arterial - Urban	11,990	10,790	11,290	11,040	9,110	10,990	10,230	10,160	10,170	9,800	9,500	9,450	E		14,040	0.67	D		760	820	1,270	2	
Raulerson Rd. # 1	US 17 to Brownlee Rd.	1550	County		1.20	35	RUA_UFH_2W_2L_U_0L	Local	250	250	280	330	290	270	310	290	300	410	290	280	C		6,450	0.04	B		35	30	620	2	
Raulerson Rd.	US 17 to Bunnell Rd./CR 305	1552	County		1.70	30	RUA_UFH_2W_2L_U_0L	Local	250	300	300	400	330	390	370	340	440	440	500	430	C		6,450	0.07	B		40	40	620	2	
Reed Canal Rd.	Clyde Morris Blvd. to SR5A/Nova Rd.	1561	County		0.80	35	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	5,810	6,040	5,870	6,050	5,400	6,570	7,050	6,450	6,260	6,350	6,460	7,600	E		13,640	0.56	D		845	700	1,020	2	
Reed Canal Rd.	SR5A/Nova Rd. to Sauls St.	1562	County		0.65	35	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	9,490	9,600	8,960	9,100	8,680	9,920	9,530	9,360	8,630	8,890	10,600	E		13,640	0.78	D		830	905	1,020	2		
Reed Canal Rd.	Sauls St. to US 1	1564	County		0.90	35	UA_NSSRC2_2W_2L_U_0L	Minor Collector - Urban	8,570	8,080	8,000	8,130	7,570	7,060	8,530	8,830	8,590	8,010	8,250	8,700	E		13,640	0.64	D		520	705	1,020	2	
Reed Ellis Rd.	Enterprise-Osteen Rd. to SR 415	1571	County		2.10	45	UA_NSSRC1_2W_2L_U_0L	Minor Collector - Urban	1,510	1,510	1,640	1,630	1,860	2,120	2,380	2,600	2,970	2,670	2,780	3,150	E		13,640	0.23	C		310	375	1,230	2	
Retta St.	Grand Ave. to US 17	1580	County	Yes	0.15	30	UA_NSSRC2_2W_2L_U_0L	Major Collector - Urban	750	730	770	740	-	1,020	820	880	950	760	770	760	E		13,640	0.06	C		70	70	1,020	2	
Reynolds Rd.	US 17 to SR 11	1590	County	Yes	4.40	35	RUA_UFH_2W_2L_U_0L	Minor Collector - Urban/Rural	1,160	1,250	1,240	1,360	-	1,100	1,110	1,160	1,070	1,180	1,070	1,000	C		6,450	0.16	B		95	100	620	2	
Rhode Island Ave.	Westside Connector to Sparkman Ave	1598	County	Yes	0.45	35	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	5,360	5,140	5,780	6,630	2,810	6,810	7,160	8,030	7,930	5,940	6,440	6,650	E		14,740	0.45	C		1,125	860	1,330	2	
Rhode Island Ave.	Sparkman Ave to Carpenter Ave	1599	County	Yes	0.25	35	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	7,000	6,480	6,890	6,720	3,630	3,260	8,510	9,800	9,300	7,360	8,210	8,500	E		14,740	0.58	D		1,165	950	1,330	2	
Rhode Island Ave.	Carpenter Ave to US 17/92	1600	County	Yes	0.25	35	UA_NSSRC2_2W_2L_D_WL	Minor Collector - Urban	7,080	6,280	6,350	7,240	3,670	7,340	7,970	9,900	8,930	7,360	8,030	8,450	E		14,740	0.57	D		995	865	1,330	2	
Rhode Island Ave.	Veteran's Memorial Pkwy. to Norman	Future Rd	County	Yes	1.80		UA_NSSRC2_2W_2L_D_WL	future Minor Collector - Urban	-	-	-	-	-	-	-	-	-	-	-	-	E		14,740	-	A		-	-	1,330	0	
Riley Pridgeon Rd.	Peterson Rd. to SR 40	1610	County		2.55	35	RUA_UFH_2W_2L_U_0L	Local	480	450	450	430	410	520	490	410	400	420	650	360	C		6,450	0.06	B		30	35	620	2	
River Dr.	John Anderson Dr. to SR A1A	1621	County		0.50	30	UA_NSSRC2_2W_2L_U_0L	Local	310	290	340	290	270	340	250	350</															

APPENDIX C

Turning Movement Counts, Signal Timings, and FDOT Seasonal Factor Report

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tomoka Farms Rd/CR 415 & Taylor Rd/CR 421
City: Port Orange
Control: Signalized

Project ID: 25-130160-001
Date: 5/13/2025

Data - Total

NS/EW Streets:	Tomoka Farms Rd/CR 415				Tomoka Farms Rd/CR 415				Taylor Rd/CR 421				Taylor Rd/CR 421				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	74	52	0	9	51	0	0	3	4	2	0	29	2	21	0	247
7:15 AM	0	102	59	0	19	42	1	0	3	10	2	0	39	1	17	0	295
7:30 AM	1	109	59	0	16	49	0	0	3	9	2	0	42	7	25	0	322
7:45 AM	2	74	76	0	13	50	0	1	4	5	5	0	53	5	21	0	309
8:00 AM	0	68	64	0	14	41	1	0	2	9	2	0	46	7	16	0	270
8:15 AM	2	79	44	0	12	52	0	0	2	10	1	0	45	4	15	0	266
8:30 AM	1	64	48	0	12	45	4	0	4	3	1	0	42	2	24	0	250
8:45 AM	1	67	35	0	10	42	0	0	6	8	4	0	33	5	19	0	230
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	7	637	437	0	105	372	6	1	27	58	19	0	329	33	158	0	2189
	0.65%	58.93%	40.43%	0.00%	21.69%	76.86%	1.24%	0.21%	25.96%	55.77%	18.27%	0.00%	63.27%	6.35%	30.38%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	3	353	258	0	62	182	2	1	12	33	11	0	180	20	79	0	1196
PEAK HR FACTOR :	0.375	0.810	0.849	0.000	0.816	0.910	0.500	0.250	0.750	0.825	0.550	0.000	0.849	0.714	0.790	0.000	0.929
	0.908				0.950				0.933				0.883				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	4	57	46	0	27	83	3	0	2	1	1	0	50	5	16	0	295
4:15 PM	3	48	68	0	20	76	2	0	0	2	0	0	75	8	18	0	320
4:30 PM	3	62	35	0	20	71	5	0	3	4	0	0	57	8	20	0	288
4:45 PM	3	45	45	0	22	65	7	0	2	5	2	0	43	4	17	0	260
5:00 PM	6	65	64	0	18	67	3	0	3	4	0	0	75	6	24	0	335
5:15 PM	0	49	58	0	31	82	5	0	3	2	3	0	57	4	20	0	314
5:30 PM	4	71	58	0	25	76	2	0	0	2	5	0	53	10	21	0	327
5:45 PM	3	45	41	0	27	61	5	0	0	3	1	0	58	7	18	0	269
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	26	442	415	0	190	581	32	0	13	23	12	0	468	52	154	0	2408
	2.94%	50.06%	47.00%	0.00%	23.66%	72.35%	3.99%	0.00%	27.08%	47.92%	25.00%	0.00%	69.44%	7.72%	22.85%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	13	230	221	0	101	286	15	0	6	11	9	0	243	27	83	0	1245
PEAK HR FACTOR :	0.542	0.810	0.863	0.000	0.815	0.872	0.750	0.000	0.500	0.688	0.450	0.000	0.810	0.675	0.865	0.000	0.929
	0.859				0.852				0.813				0.840				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tomoka Farms Rd/CR 415 & Taylor Rd/CR 421
City: Port Orange
Control: Signalized

Project ID: 25-130160-001
Date: 5/13/2025

Data - HT

NS/EW Streets:	Tomoka Farms Rd/CR 415				Tomoka Farms Rd/CR 415				Taylor Rd/CR 421				Taylor Rd/CR 421				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	5	0	0	1	5	0	0	0	0	0	0	0	0	0	0	11
7:15 AM	0	9	1	0	1	6	0	0	0	0	0	0	0	0	1	0	18
7:30 AM	0	14	1	0	1	3	0	0	0	0	0	0	3	0	2	0	24
7:45 AM	1	6	4	0	2	11	0	1	1	0	0	0	1	0	0	0	27
8:00 AM	0	9	1	0	2	9	0	0	0	0	0	0	2	0	2	0	25
8:15 AM	0	5	4	0	2	9	0	0	0	0	0	0	6	0	1	0	27
8:30 AM	0	6	3	0	1	14	1	0	1	1	0	0	1	0	3	0	31
8:45 AM	0	8	3	0	0	11	0	0	0	0	0	0	1	0	1	0	24
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	62	17	0	10	68	1	1	2	1	0	0	14	0	10	0	187
	1.25%	77.50%	21.25%	0.00%	12.50%	85.00%	1.25%	1.25%	66.67%	33.33%	0.00%	0.00%	58.33%	0.00%	41.67%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	38	7	0	6	29	0	1	1	0	0	0	6	0	5	0	94
PEAK HR FACTOR :	0.250	0.679	0.438	0.000	0.750	0.659	0.000	0.250	0.250	0.000	0.000	0.000	0.500	0.000	0.625	0.000	0.870
	0.767				0.643				0.250				0.550				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	0	7	4	0	0	6	0	0	0	0	0	0	3	0	0	0	20
4:15 PM	0	5	7	0	1	13	1	0	0	0	0	0	2	1	3	0	33
4:30 PM	0	5	1	0	1	4	0	0	0	0	0	0	3	0	1	0	15
4:45 PM	0	4	1	0	0	9	0	0	0	1	0	0	2	0	1	0	18
5:00 PM	1	5	1	0	0	5	0	0	0	1	0	0	2	0	3	0	18
5:15 PM	0	3	0	0	2	1	1	0	1	0	1	0	2	0	0	0	11
5:30 PM	0	10	0	0	3	5	0	0	0	0	1	0	1	1	0	0	21
5:45 PM	0	2	1	0	0	2	0	0	0	0	0	0	1	0	0	0	6
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	41	15	0	7	45	2	0	1	2	2	0	16	2	8	0	142
	1.75%	71.93%	26.32%	0.00%	12.96%	83.33%	3.70%	0.00%	20.00%	40.00%	40.00%	0.00%	61.54%	7.69%	30.77%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	20	2	0	5	13	1	0	1	1	2	0	6	1	3	0	56
PEAK HR FACTOR :	0.250	0.500	0.500	0.000	0.417	0.650	0.250	0.000	0.250	0.250	0.500	0.000	0.750	0.250	0.250	0.000	0.667
	0.575				0.594				0.500				0.500				



National Data & Surveying Services

Site Code: 25-130160-001
Date: 05/13/2025
Weather: Sunny
City: Port Orange
County: Volusia
Count Times: 07:00 - 09:00
16:00 - 18:00
Control: Signalized

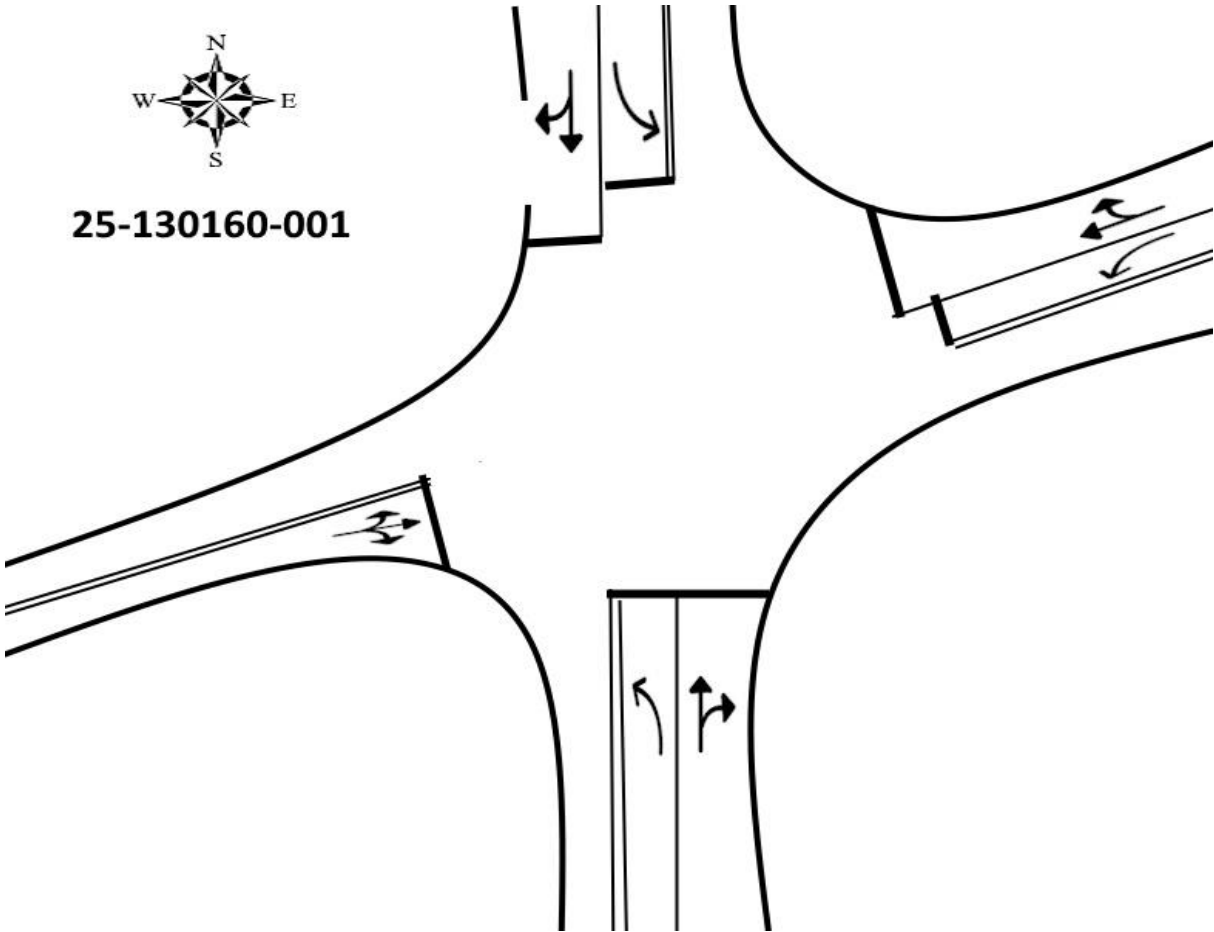


N/S Street: Tomoka Farms Rd/CR 415

Speed: 50 MPH



25-130160-001



E/W Street: Taylor Rd/CR 421

Speed: 30/45 MPH

COUNTY OF VOLUSIA TRAFFIC SIGNAL TIMING SHEET

LOCATION: CR-415 @ Taylor Rd.(CR 421)
Port Orange

FREE: ☒

DATE: 9/1/2019

SIGNAL #: 275

CO-ORD:

Design By: M. Tobin

NETWORK #: Port Orange Area Network # 60



Controller Timing Chart

PHASE	1	2	3	4	5	6	7	8	
DIRECTION		SB		WB	SBL	NB	WBL	EB	
TURN TYPE		-				-		-	
MIN GREEN		15		10	5	15	5	10	
EXTENSION		4		3	3	4	3	3	
YELLOW		5.5		5.0	5.5	5.5	5.0	4.0	
RED CLR		2.5		3.5	2.5	2.5	3.5	3.5	
WALK		7		7		7		7	
PED CLR		20		18		20		18	
MAX 1		45		25	20	45	20	25	
MAX 2									
MAX 3		-				-		-	
DYM MAX		60				60	60		
DYM STP		10				10	5		
RECALL		MIN				MIN		-	
DETECTOR		LOCK		NON-LOCK	NON-LOCK	LOCK		NON-LOCK	
FLASH		YELLOW		RED	-	YELLOW		RED	

COORDINATION TIMINGS

PATTERN	1	2	3	4	5	6	7	8	
CYCLE				-	-	-	-	-	
OFFSET				-	-	-	-	-	

PHASE	1	2	3	4	5	6	7	8	
PATTERN 1									
PATTERN 2									
PATTERN 3									
PATTERN 4	-	-	-	-	-	-	-	-	
PATTERN 5	-	-	-	-	-	-	-	-	
PATTERN 6	-	-	-	-	-	-	-	-	
PATTERN 7	-	-	-	-	-	-	-	-	
Controller IP	10.40.61.20		Switch IP	10.40.60.20		Camera IP	10.40.62.20		
Controller Gateway	10.40.61.1		Switch Gateway	10.40.60.1		Camera Gateway	10.40.60.1		

REMARKS:

24

5678

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tomoka Farms Rd/CR 415 & Country Farms Rd/Country Cir Dr E
City: Port Orange
Control: 2-Way Stop(EB/WB)

Project ID: 25-130160-002
Date: 5/13/2025

Data - Total

NS/EW Streets:	Tomoka Farms Rd/CR 415				Tomoka Farms Rd/CR 415				Country Farms Rd/Country Cir Dr E				Country Farms Rd/Country Cir Dr E				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	124	0	0	0	74	1	0	3	0	2	0	0	0	5	0	209
7:15 AM	0	160	0	0	3	79	0	0	3	0	1	0	1	0	5	0	252
7:30 AM	0	140	1	0	1	87	0	0	2	0	0	0	1	0	10	0	242
7:45 AM	1	136	0	0	4	95	1	1	0	0	2	0	0	0	9	0	249
8:00 AM	0	112	0	0	2	86	0	0	1	0	0	0	1	0	8	0	210
8:15 AM	0	128	0	0	3	82	1	2	1	0	0	0	3	0	3	0	223
8:30 AM	0	88	0	0	4	87	0	0	1	0	1	0	0	0	5	0	186
8:45 AM	0	108	0	0	3	72	1	0	0	1	0	0	1	0	2	0	188
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	996	1	0	20	662	4	3	11	1	6	0	7	0	47	0	1759
	0.10%	99.80%	0.10%	0.00%	2.90%	96.08%	0.58%	0.44%	61.11%	5.56%	33.33%	0.00%	12.96%	0.00%	87.04%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	548	1	0	10	347	1	1	6	0	3	0	3	0	32	0	953
PEAK HR FACTOR :	0.250	0.856	0.250	0.000	0.625	0.913	0.250	0.250	0.500	0.000	0.375	0.000	0.750	0.000	0.800	0.000	0.945
			0.859				0.889				0.563				0.795		
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	0	95	0	0	7	124	0	0	1	0	0	0	0	1	9	0	237
4:15 PM	0	103	1	0	4	134	2	0	2	0	0	0	1	0	5	0	252
4:30 PM	0	93	0	0	9	117	1	0	2	0	0	0	2	0	3	0	227
4:45 PM	1	89	1	0	4	102	0	0	0	0	0	0	0	0	7	0	204
5:00 PM	1	117	2	0	9	128	1	0	1	0	0	0	0	0	4	0	263
5:15 PM	0	100	1	0	9	125	1	0	1	0	0	0	1	0	5	0	243
5:30 PM	0	130	2	0	5	126	0	0	0	0	0	0	0	0	4	0	267
5:45 PM	0	88	0	0	3	110	2	0	0	0	2	0	0	1	2	0	208
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	815	7	0	50	966	7	0	7	0	2	0	4	2	39	0	1901
	0.24%	98.91%	0.85%	0.00%	4.89%	94.43%	0.68%	0.00%	77.78%	0.00%	22.22%	0.00%	8.89%	4.44%	86.67%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	435	5	0	26	489	4	0	2	0	2	0	1	1	15	0	981
PEAK HR FACTOR :	0.250	0.837	0.625	0.000	0.722	0.955	0.500	0.000	0.500	0.000	0.250	0.000	0.250	0.250	0.750	0.000	0.919
			0.835				0.940				0.500				0.708		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Tomoka Farms Rd/CR 415 & Country Farms Rd/Country Cir Dr E
City: Port Orange
Control: 2-Way Stop(EB/WB)

Project ID: 25-130160-002
Date: 5/13/2025

Data - HT

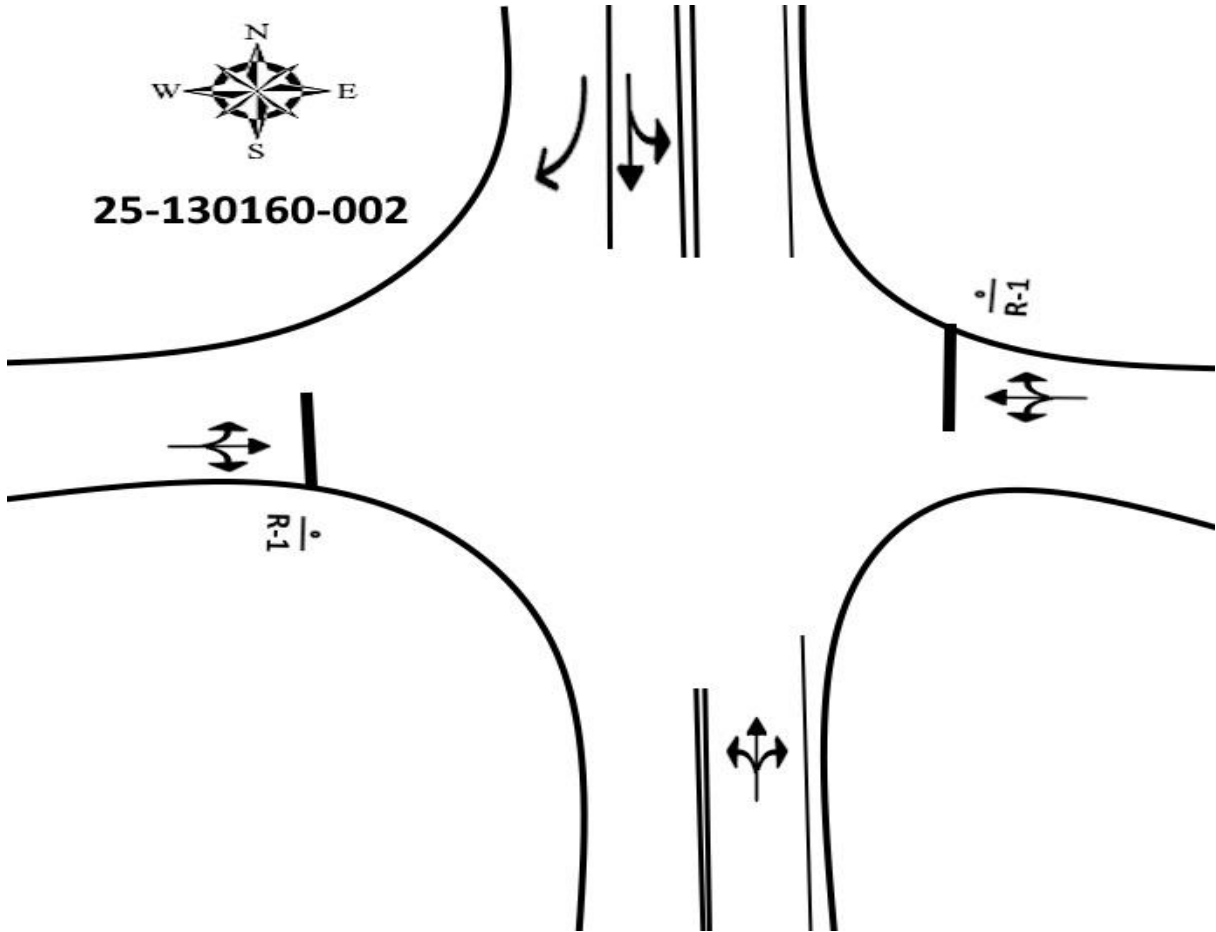
NS/EW Streets:	Tomoka Farms Rd/CR 415				Tomoka Farms Rd/CR 415				Country Farms Rd/Country Cir Dr E				Country Farms Rd/Country Cir Dr E				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7
7:15 AM	0	10	0	0	0	6	0	0	0	0	0	0	0	0	0	0	16
7:30 AM	0	12	0	0	0	7	0	0	0	0	0	0	0	0	1	0	20
7:45 AM	0	10	0	0	0	7	1	0	0	0	0	1	0	0	1	0	20
8:00 AM	0	11	0	0	0	12	0	0	0	0	0	0	0	0	1	0	24
8:15 AM	0	6	0	0	0	12	0	0	0	0	0	0	0	0	0	0	18
8:30 AM	0	9	0	0	0	18	0	0	0	0	0	0	0	0	0	0	27
8:45 AM	0	12	0	0	0	9	0	0	0	0	0	0	0	0	0	0	21
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	73	0	0	0	75	1	0	0	0	1	0	0	0	3	0	153
	0.00%	100.00%	0.00%	0.00%	0.00%	98.68%	1.32%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	43	0	0	0	32	1	0	0	0	1	0	0	0	3	0	80
PEAK HR FACTOR :	0.000	0.896	0.000	0.000	0.000	0.667	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.833
	0.896				0.688				0.250				0.750				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	0	6	0	0	0	10	0	0	1	0	0	0	0	1	0	0	18
4:15 PM	0	12	0	0	0	14	0	0	0	0	0	0	0	0	0	0	26
4:30 PM	0	5	0	0	0	6	1	0	1	0	0	0	0	0	0	0	13
4:45 PM	0	5	0	0	0	10	0	0	0	0	0	0	0	0	1	0	16
5:00 PM	1	6	0	0	1	5	0	0	0	0	0	0	0	0	0	0	13
5:15 PM	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	0	13
5:45 PM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	49	0	0	1	56	1	0	2	0	0	0	0	1	1	0	112
	2.00%	98.00%	0.00%	0.00%	1.72%	96.55%	1.72%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	21	0	0	1	16	0	0	0	0	0	0	0	0	0	0	39
PEAK HR FACTOR :	0.250	0.656	0.000	0.000	0.250	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.688				0.708												



National Data & Surveying Services

Site Code: 25-130160-002
Date: 05/13/2025
Weather: Sunny
City: Port Orange
County: Volusia
Count Times: 07:00 - 09:00
16:00 - 18:00
Control: 2-Way Stop(EB/WB)

N↑	N/S Street: Tomoka Farms Rd/CR 415	Speed: 50 MPH
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E/W Street: Country Farms Rd/Country Cir Dr E	Speed: 30 MPH
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National Data & Surveying Services

Intersection Turning Movement Count

Location: Creek Crossing Rd & Country Cir Dr E
City: Port Orange
Control: 1-Way Stop(SB)

Project ID: 25-130160-003
Date: 5/13/2025

Data - Total

NS/EW Streets:	Creek Crossing Rd				Creek Crossing Rd				Country Cir Dr E				Country Cir Dr E				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	5	0	0	6
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
8:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	3	0	0	5
8:15 AM	0	0	0	0	0	0	3	0	0	1	0	0	0	1	0	0	5
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
TOTAL VOLUMES :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 7	SU 0	EL 0	ET 4	ER 0	EU 0	WL 0	WT 17	WR 0	WU 0	TOTAL 28
APPROACH %'s :	0.00%				0.00% 0.00% 100.00% 0.00%				0.00% 100.00% 0.00% 0.00%				0.00% 100.00% 0.00% 0.00%				
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	5	0	0	2	0	0	0	12	0	0	19
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.000	0.000	0.500	0.000	0.000	0.000	0.600	0.000	0.000	0.792
					0.417				0.500				0.600				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
4:15 PM	0	0	0	0	0	0	1	0	0	2	0	0	0	2	0	0	5
4:30 PM	0	0	0	0	0	0	2	0	2	3	0	0	0	3	0	0	10
4:45 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	3	0	0	7
5:00 PM	0	0	0	0	1	0	1	0	1	2	0	0	0	1	0	0	6
5:15 PM	0	0	0	0	0	0	1	0	2	5	0	0	0	2	0	0	10
5:30 PM	0	0	0	0	0	0	0	0	1	4	0	0	0	2	0	0	7
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
TOTAL VOLUMES :	NL 0	NT 0	NR 0	NU 0	SL 1	ST 0	SR 6	SU 0	EL 7	ET 22	ER 0	EU 0	WL 0	WT 19	WR 0	WU 0	TOTAL 55
APPROACH %'s :					14.29% 0.00% 85.71% 0.00%				24.14% 75.86% 0.00% 0.00%				0.00% 100.00% 0.00% 0.00%				
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	5	0	6	12	0	0	0	9	0	0	33
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.625	0.000	0.750	0.600	0.000	0.000	0.000	0.750	0.000	0.000	0.825
					0.750				0.643				0.750				

Location: Creek Crossing Rd & Country Cir Dr E
City: Port Orange
Control: 1-Way Stop(SB)

Project ID: 25-130160-003
Date: 5/13/2025

NS/EW Streets:	Creek Crossing Rd				Creek Crossing Rd				Country Cir Dr E				Country Cir Dr E				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 100.00%	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 1
PEAK HR :	07:30 AM - 08:30 AM																TOTAL 1
PEAK HR VOL :	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	1 0.250	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0.250
PEAK HR FACTOR :																	
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	0 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0 WL	0 WT	0 WR	0 WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 0
PEAK HR :	04:30 PM - 05:30 PM																TOTAL 0
PEAK HR VOL :	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	
PEAK HR FACTOR :																	



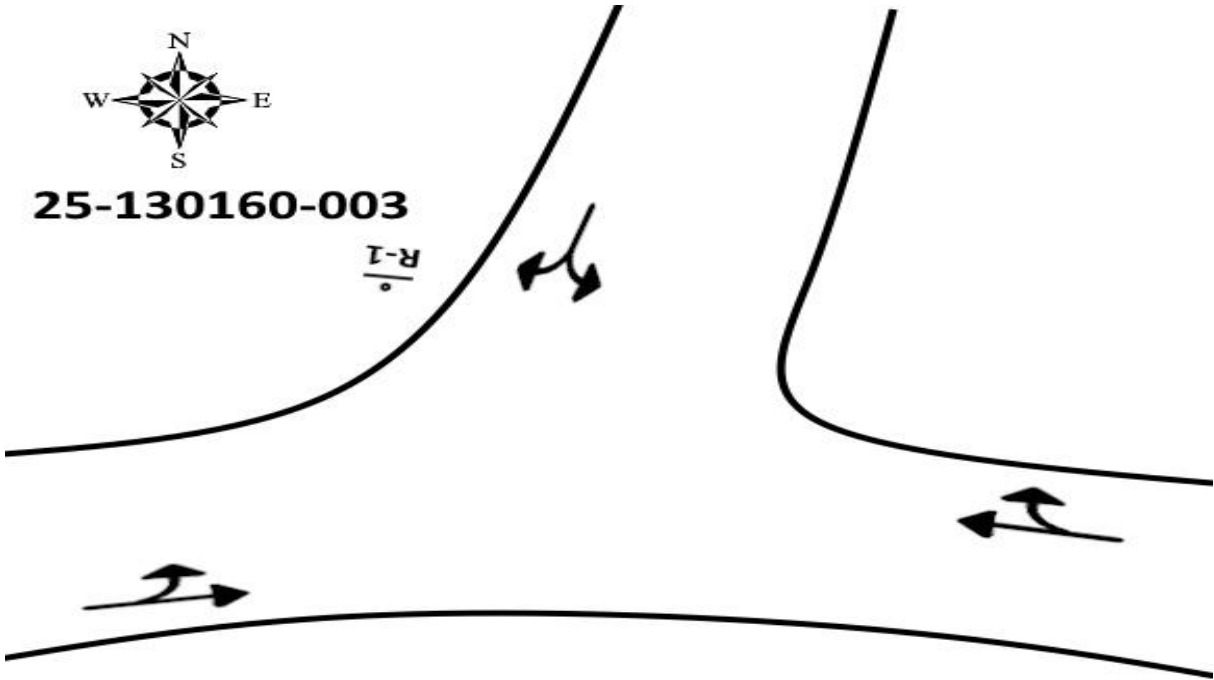
National Data & Surveying Services

Site Code: 25-130160-003
Date: 05/13/2025
Weather: Sunny
City: Port Orange
County: Volusia
Count Times: 07:00 - 09:00
16:00 - 18:00
Control: 1-Way Stop(SB)



N/S Street: Creek Crossing Rd

Speed: N/A



E/W Street: Country Cir Dr E

Speed: 30 MPH

2024 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 7900 VOLUSIA COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2024 - 01/06/2024	1.00	1.03
2	01/07/2024 - 01/13/2024	1.02	1.05
3	01/14/2024 - 01/20/2024	1.04	1.07
4	01/21/2024 - 01/27/2024	1.03	1.06
5	01/28/2024 - 02/03/2024	1.01	1.04
6	02/04/2024 - 02/10/2024	0.99	1.02
* 7	02/11/2024 - 02/17/2024	0.97	1.00
* 8	02/18/2024 - 02/24/2024	0.97	1.00
* 9	02/25/2024 - 03/02/2024	0.97	1.00
*10	03/03/2024 - 03/09/2024	0.96	0.99
*11	03/10/2024 - 03/16/2024	0.96	0.99
*12	03/17/2024 - 03/23/2024	0.96	0.99
*13	03/24/2024 - 03/30/2024	0.96	0.99
*14	03/31/2024 - 04/06/2024	0.96	0.99
*15	04/07/2024 - 04/13/2024	0.97	1.00
*16	04/14/2024 - 04/20/2024	0.97	1.00
*17	04/21/2024 - 04/27/2024	0.97	1.00
*18	04/28/2024 - 05/04/2024	0.98	1.01
*19	05/05/2024 - 05/11/2024	0.98	1.01
20	05/12/2024 - 05/18/2024	0.99	1.02
21	05/19/2024 - 05/25/2024	0.99	1.02
22	05/26/2024 - 06/01/2024	1.00	1.03
23	06/02/2024 - 06/08/2024	1.01	1.04
24	06/09/2024 - 06/15/2024	1.01	1.04
25	06/16/2024 - 06/22/2024	1.02	1.05
26	06/23/2024 - 06/29/2024	1.02	1.05
27	06/30/2024 - 07/06/2024	1.03	1.06
28	07/07/2024 - 07/13/2024	1.03	1.06
29	07/14/2024 - 07/20/2024	1.04	1.07
30	07/21/2024 - 07/27/2024	1.03	1.06
31	07/28/2024 - 08/03/2024	1.02	1.05
32	08/04/2024 - 08/10/2024	1.01	1.04
33	08/11/2024 - 08/17/2024	1.00	1.03
34	08/18/2024 - 08/24/2024	1.01	1.04
35	08/25/2024 - 08/31/2024	1.01	1.04
36	09/01/2024 - 09/07/2024	1.02	1.05
37	09/08/2024 - 09/14/2024	1.02	1.05
38	09/15/2024 - 09/21/2024	1.02	1.05
39	09/22/2024 - 09/28/2024	1.02	1.05
40	09/29/2024 - 10/05/2024	1.01	1.04
41	10/06/2024 - 10/12/2024	1.00	1.03
42	10/13/2024 - 10/19/2024	1.00	1.03
43	10/20/2024 - 10/26/2024	1.01	1.04
44	10/27/2024 - 11/02/2024	1.03	1.06
45	11/03/2024 - 11/09/2024	1.04	1.07
46	11/10/2024 - 11/16/2024	1.05	1.08
47	11/17/2024 - 11/23/2024	1.04	1.07
48	11/24/2024 - 11/30/2024	1.03	1.06
49	12/01/2024 - 12/07/2024	1.02	1.05
50	12/08/2024 - 12/14/2024	1.01	1.04
51	12/15/2024 - 12/21/2024	1.00	1.03
52	12/22/2024 - 12/28/2024	1.02	1.05
53	12/29/2024 - 12/31/2024	1.04	1.07

* PEAK SEASON

04-MAR-2025 16:32:53

830UPD

5_7900_PKSEASON.TXT

VOLUSIA COUNTY

CITY OF PORT ORANGE
CR 415 (TOMOKA FARMS ROAD) AT TAYLOR ROAD
SIGNAL #275

SIGNALIZATION PLANS

VOLUSIA COUNTY PROJECT # 5926

INDEX OF SIGNALIZATION PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	SIGNATURE SHEET
T-3 - T-4	TABULATION OF QUANTITIES
T-5 - T-7	GENERAL NOTES
T-8	TYPICAL SECTION
T-9	ROADWAY PLAN
T-10 - T-11	CROSS SECTIONS
T-12	SIGNING AND PAVEMENT MARKING PLAN
T-13 - T-14	SIGNALIZATION PLAN
T-15	MAST ARM TABULATION
T-16	MAST ARM ASSEMBLIES
T-17	SPLICE DIAGRAM
T-18	GUIDE SIGN WORKSHEET
T-19	REPORT OF SOIL BORINGS
T-20	VOLUSIA COUNTY DRIVEWAY DETAIL

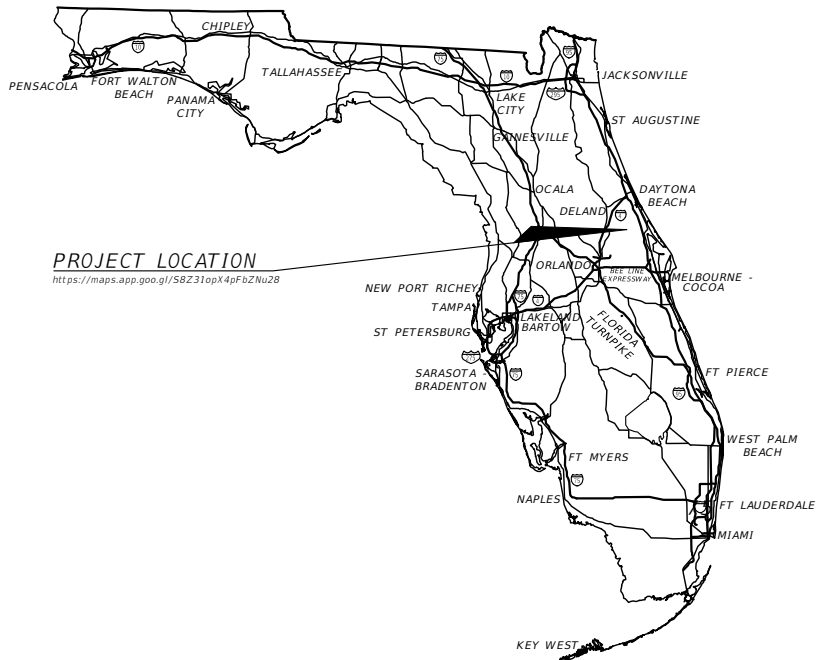
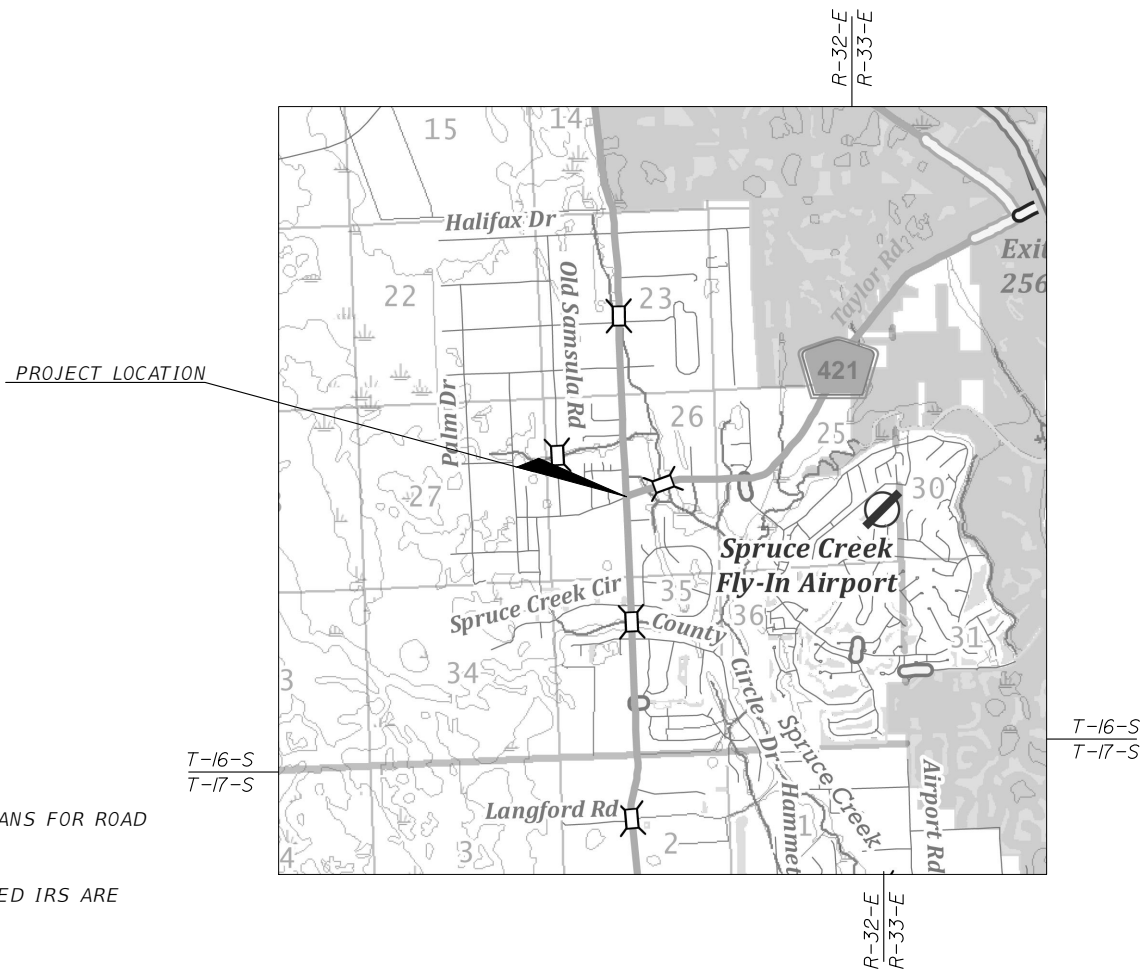
GOVERNING STANDARD PLANS:

FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2024-25 STANDARDS PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE INTERIM REVISIONS (IRS).

STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED IRS ARE AVAILABLE AT THE FOLLOWING WEBSITE:
HTTP://WWW.FDOT.GOV/DESIGN/STANDARDPLANS

GOVERNING STANDARDS SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2024-25 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AVAILABLE AT THE FOLLOWING WEBSITE:
HTTP://WWW.FDOT.GOV/PROGRAMMANAGEMENT/IMPLEMENTED/SPECBOOKS



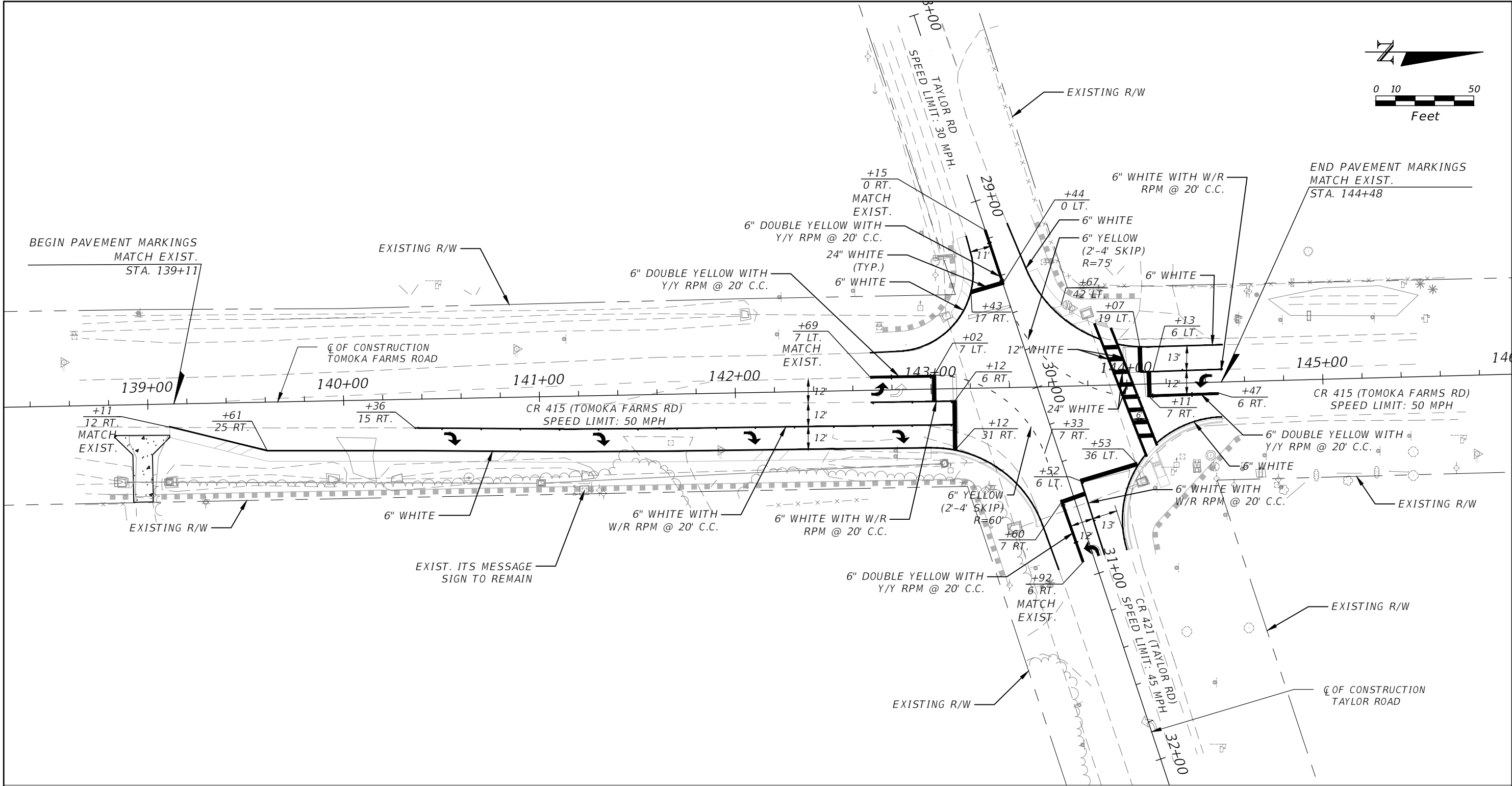
PLANS PREPARED BY:



SIGNALIZATION PLANS
ENGINEER OF RECORD:

JONATHAN M. BRASCH, P.E.
P.E. NO. 94069
1049 EBER BLVD., SUITE 104
MELBOURNE, FLORIDA 32904
PH: 321.499.4679 FAX: 386.257.6996
EMAIL:INFO@LTG-INC.US
VENDOR NO.: F030424608005

LTG JOB NO.	FISCAL YEAR	SHEET NO.
6109	24	T-1



- NOTES:
1.  DENOTES TURN LANES USE ARROW PAVEMENT MARKING TO BE INSTALLED PER INDEX 711-001.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION
----	----		

**LTG** Engineering & Planning

GIL A. RAMIREZ
P.E. No. 62600
1049 EBER BOULEVARD, SUITE 104
MELBOURNE, FL 32904
PH: 321.499.4679 FAX: 321.499.4680
VENDOR No.: F030424608005

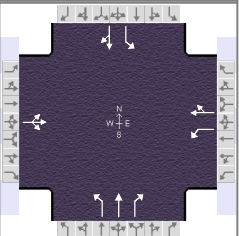
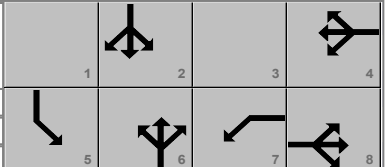
VOLUSIA COUNTY		
ROAD NO.	COUNTY	LTG PROJECT NO.
CR 415	VOLUSIA	6478

SIGNING AND PAVEMENT MARKING PLAN		SHEET NO.
		T-12

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

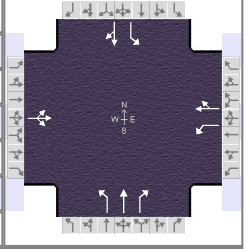
APPENDIX D
Existing Intersection Capacity Analysis Worksheets

HCS Signalized Intersection Results Summary

General Information						Intersection Information													
Agency		TPD, Inc.				Duration, h		0.250											
Analyst		TPD/jd		Analysis Date		Oct 14, 2025		Area Type		Other									
Jurisdiction		Volusia County		Time Period		Existing AM		PHF		0.93									
Urban Street		Tomoka Farms Rd		Analysis Year		2025		Analysis Period		1> 7:00									
Intersection		Taylor Rd		File Name		1. Tomoka Farms Rd & Taylor Rd - Existing AM.xus													
Project Description		6023																	
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h				12	33	11	180	20	79	3	353	258	63	182	2				
Signal Information																			
Cycle, s	78.8	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	Yes	Simult. Gap E/W	On																
Force Mode	Fixed	Simult. Gap N/S	On																
				Green	3.9	23.1	9.4	10.4	0.0	0.0									
				Yellow	5.5	5.5	5.0	4.0	0.0	0.0									
				Red	2.5	2.5	3.5	3.5	0.0	0.0									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase						8		7		4				6		5		2	
Case Number						8.3		1.0		4.0				5.3		1.0		4.0	
Phase Duration, s						17.9		17.9		35.8				31.1		11.9		42.9	
Change Period, (Y+R c), s						8.5		8.5		8.5				8.0		8.0		8.0	
Max Allow Headway (MAH), s						4.2		4.0		4.2				5.0		4.0		5.0	
Queue Clearance Time (g s), s						4.4		9.1		5.5				17.6		4.1		7.9	
Green Extension Time (g e), s						0.2		0.4		0.5				5.4		0.1		5.6	
Phase Call Probability						0.97		0.99		1.00				1.00		0.77		1.00	
Max Out Probability						0.00		0.01		0.00				0.01		0.00		0.00	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				3	8	18	7	4	14	1	6	16	5	2	12				
Adjusted Flow Rate (v), veh/h					60		194	106		3	380	277	68	198					
Adjusted Saturation Flow Rate (s), veh/h/ln					1751		1767	1661		894	1737	1610	1654	1660					
Queue Service Time (g s), s					0.0		7.1	3.5		0.2	15.6	11.6	2.1	5.9					
Cycle Queue Clearance Time (g c), s					2.4		7.1	3.5		0.2	15.6	11.6	2.1	5.9					
Green Ratio (g/C)					0.12		0.26	0.35		0.29	0.29	0.29	0.37	0.44					
Capacity (c), veh/h					265		424	577		353	509	472	262	736					
Volume-to-Capacity Ratio (X)					0.228		0.457	0.185		0.009	0.746	0.588	0.259	0.269					
Back of Queue (Q), ft/ln (95 th percentile)					47		129	56		2	277	186	37	99					
Back of Queue (Q), veh/ln (95 th percentile)					1.9		5.1	2.2		0.1	10.2	7.4	1.3	3.5					
Queue Storage Ratio (RQ) (95 th percentile)					0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00					
Uniform Delay (d 1), s/veh					31.6		24.1	17.9		19.8	25.2	23.8	18.6	13.9					
Incremental Delay (d 2), s/veh					0.4		0.8	0.2		0.0	3.1	1.7	0.5	0.3					
Initial Queue Delay (d 3), s/veh					0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0					
Control Delay (d), s/veh					32.0		24.8	18.1		19.8	28.3	25.5	19.1	14.1					
Level of Service (LOS)					C		C	B		B	C	C	B	B					
Approach Delay, s/veh / LOS				32.0		C	22.4		C	27.1		C	15.4		B				
Intersection Delay, s/veh / LOS				23.8						C									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS				2.12		B	1.91		B	1.92		B	1.67		B				
Bicycle LOS Score / LOS				0.59		A	0.98		A	1.58		B	0.93		A				

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	TPD, Inc.			Duration, h	0.250
Analyst	TPD/jd	Analysis Date	5/21/2025	Area Type	Other
Jurisdiction	Volusia County	Time Period	Existing PM	PHF	0.93
Urban Street	Tomoka Farms Rd	Analysis Year	2025	Analysis Period	1> 17:00
Intersection	Taylor Rd	File Name	1. Tomoka Farms Rd & Taylor Rd - Existing PM.xus		
Project Description	6023				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	6	11	9	243	27	83	13	230	221	101	286	15

Signal Information											
Cycle, s	76.4	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	Yes	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8	7	4		6	5	2
Case Number		8.3	1.0	4.0		5.3	1.0	4.0
Phase Duration, s		17.7	20.2	37.9		25.3	13.1	38.4
Change Period, ($Y+R_c$), s		8.5	8.5	8.5		8.0	8.0	8.0
Max Allow Headway (MAH), s		4.2	4.0	4.2		5.0	4.0	5.0
Queue Clearance Time (g_s), s		3.1	11.2	5.7		12.2	5.5	12.0
Green Extension Time (g_e), s		0.1	0.6	0.4		5.1	0.2	5.1
Phase Call Probability		0.96	1.00	1.00		1.00	0.90	1.00
Max Out Probability		0.00	0.05	0.00		0.01	0.00	0.01

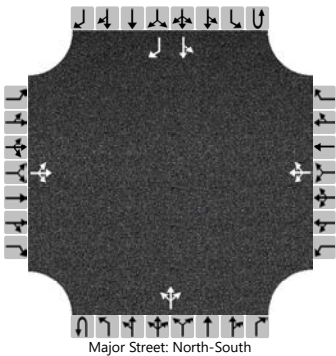
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h	28			261	118		14	247	238	109	324	
Adjusted Saturation Flow Rate (s), veh/h/ln	1587			1781	1621		1006	1767	1610	1739	1810	
Queue Service Time (g_s), s	0.0			9.2	3.7		0.8	9.6	10.2	3.5	10.0	
Cycle Queue Clearance Time (g_c), s	1.1			9.2	3.7		0.8	9.6	10.2	3.5	10.0	
Green Ratio (g/C)	0.12			0.30	0.39		0.23	0.23	0.23	0.32	0.40	
Capacity (c), veh/h	249			514	624		322	401	365	323	722	
Volume-to-Capacity Ratio (X)	0.112			0.508	0.189		0.043	0.617	0.651	0.336	0.449	
Back of Queue (Q), ft/ln (95 th percentile)	22			163	57		9	187	171	60	172	
Back of Queue (Q), veh/ln (95 th percentile)	0.8			6.4	2.2		0.3	7.0	6.8	2.3	6.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	30.1			22.0	15.6		23.2	26.6	26.8	19.8	16.8	
Incremental Delay (d_2), s/veh	0.2			0.8	0.1		0.1	2.2	2.8	0.6	0.6	
Initial Queue Delay (d_3), s/veh	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	30.3			22.8	15.7		23.2	28.8	29.6	20.4	17.4	
Level of Service (LOS)	C			C	B		C	C	C	C	B	
Approach Delay, s/veh / LOS	30.3	C		20.6	C		29.0	C		18.2	B	
Intersection Delay, s/veh / LOS	23.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.12	B	1.90	B	1.92	B	1.68	B
Bicycle LOS Score / LOS	0.53	A	1.11	A	1.31	A	1.20	A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Tomoka Farms Rd & Country Cir Dr E
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E/Country Farms Rd
Analysis Year	2025	North/South Street	Tomoka Farms Rd
Time Analyzed	Existing AM	Peak Hour Factor	0.95
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	1
Configuration			LTR				LTR				LTR			LT		R
Volume (veh/h)		6	0	3		3	0	32		1	548	1		11	347	1
Percent Heavy Vehicles (%)		0	0	33		0	0	9		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.53		7.10	6.50	6.29		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.60		3.50	4.00	3.38		2.20				2.20		

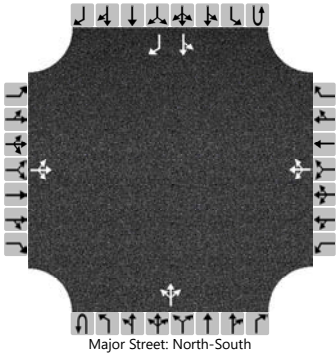
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			9				37			1				12		
Capacity, c (veh/h)			270				457			1203				1006		
v/c Ratio			0.04				0.08			0.00				0.01		
95% Queue Length, Q ₉₅ (veh)			0.1				0.3			0.0				0.0		
95% Queue Length, Q ₉₅ (ft)			2.7				8.0							0.0		
Control Delay (s/veh)			18.8				13.6			8.0	0.0	0.0		8.6	0.1	
Level of Service (LOS)			C				B			A	A	A		A	A	
Approach Delay (s/veh)	18.8				13.6				0.0				0.4			
Approach LOS	C				B				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Tomoka Farms Rd & Country Cir Dr E
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E/Country Farms Rd
Analysis Year	2025	North/South Street	Tomoka Farms Rd
Time Analyzed	Existing PM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	1
Configuration			LTR				LTR				LTR			LT		R
Volume (veh/h)		2	0	2		1	1	15		1	435	5		26	489	4
Percent Heavy Vehicles (%)		0	0	0		0	0	0		100				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		5.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		3.10				2.24		

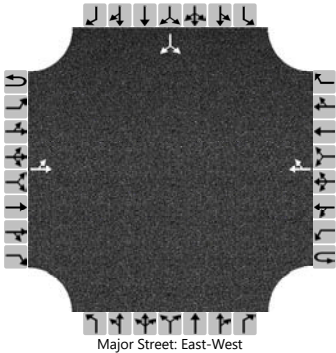
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				18			1				28		
Capacity, c (veh/h)			278				484			679				1074		
v/c Ratio			0.02				0.04			0.00				0.03		
95% Queue Length, Q ₉₅ (veh)			0.0				0.1			0.0				0.1		
95% Queue Length, Q ₉₅ (ft)			0.0				2.5							2.6		
Control Delay (s/veh)			18.2				12.7			10.3	0.0	0.0		8.4	0.2	
Level of Service (LOS)			C				B			B	A	A		A	A	
Approach Delay (s/veh)	18.2				12.7				0.0				0.6			
Approach LOS	C				B				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Country Cir Dr E & Creek Crossing Rd
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E
Analysis Year	2025	North/South Street	Creek Crossing Rd
Time Analyzed	Existing AM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		0	2				12	0						0		5
Percent Heavy Vehicles (%)		0												0		20
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.40
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.48

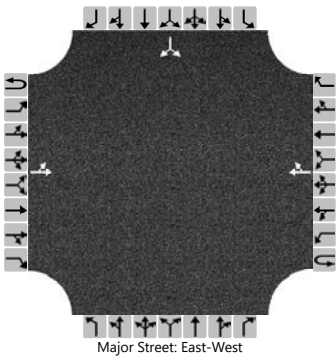
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0													6	
Capacity, c (veh/h)		1616													1014	
v/c Ratio		0.00													0.01	
95% Queue Length, Q ₉₅ (veh)		0.0													0.0	
95% Queue Length, Q ₉₅ (ft)															0.0	
Control Delay (s/veh)		7.2	0.0												8.6	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.0												8.6			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Country Cir Dr E & Creek Crossing Rd
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E
Analysis Year	2025	North/South Street	Creek Crossing Rd
Time Analyzed	Existing PM	Peak Hour Factor	0.83
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		6	12				9	0						1		5
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

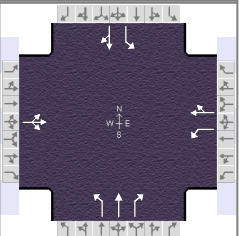
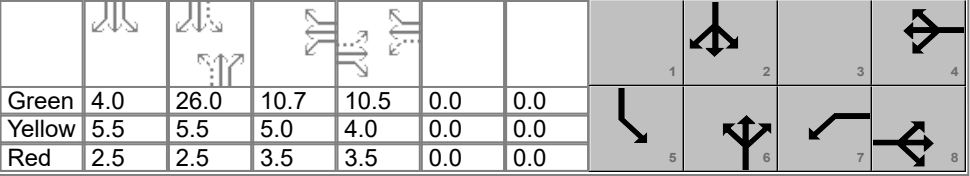
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

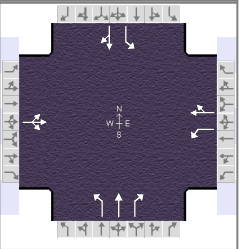
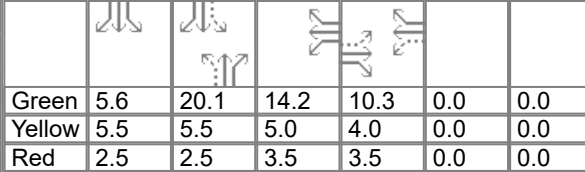
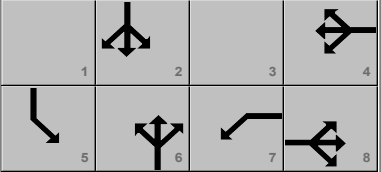
Flow Rate, v (veh/h)		7													7	
Capacity, c (veh/h)		1622													1057	
v/c Ratio		0.00													0.01	
95% Queue Length, Q ₉₅ (veh)		0.0													0.0	
95% Queue Length, Q ₉₅ (ft)		0.0													0.0	
Control Delay (s/veh)		7.2	0.0												8.4	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	2.4												8.4			
Approach LOS	A												A			

APPENDIX E
Projected Intersection Capacity Analysis Worksheets

HCS Signalized Intersection Results Summary

General Information						Intersection Information													
Agency	TPD, Inc.					Duration, h		0.250											
Analyst	TPD/jd		Analysis Date	Oct 14, 2025		Area Type		Other											
Jurisdiction	Volusia County		Time Period	Projected AM		PHF		0.93											
Urban Street	Tomoka Farms Rd		Analysis Year	2027		Analysis Period		1> 7:00											
Intersection	Taylor Rd		File Name	1. Tomoka Farms Rd & Taylor Rd - Projected AM....															
Project Description	6023																		
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h				12	34	11	196	21	82	3	390	294	66	197	2				
Signal Information																			
Cycle, s	83.2	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	Yes	Simult. Gap E/W	On																
Force Mode	Fixed	Simult. Gap N/S	On																
				Green	4.0	26.0	10.7	10.5	0.0	0.0									
				Yellow	5.5	5.5	5.0	4.0	0.0	0.0									
				Red	2.5	2.5	3.5	3.5	0.0	0.0									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase						8		7		4				6		5		2	
Case Number						8.3		1.0		4.0				5.3		1.0		4.0	
Phase Duration, s						18.0		19.2		37.1				34.0		12.0		46.1	
Change Period, (Y+R c), s						8.5		8.5		8.5				8.0		8.0		8.0	
Max Allow Headway (MAH), s						4.2		4.0		4.2				5.0		4.0		5.0	
Queue Clearance Time (g s), s						4.5		10.3		5.9				20.2		4.3		8.7	
Green Extension Time (g e), s						0.2		0.4		0.5				5.8		0.1		6.2	
Phase Call Probability						0.98		0.99		1.00				1.00		0.81		1.00	
Max Out Probability						0.00		0.02		0.00				0.07		0.00		0.01	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				3	8	18	7	4	14	1	6	16	5	2	12				
Adjusted Flow Rate (v), veh/h					61		211	111		3	419	316	71	214					
Adjusted Saturation Flow Rate (s), veh/h/ln					1751		1767	1662		881	1737	1610	1654	1660					
Queue Service Time (g s), s					0.0		8.3	3.9		0.2	18.2	14.0	2.3	6.7					
Cycle Queue Clearance Time (g c), s					2.5		8.3	3.9		0.2	18.2	14.0	2.3	6.7					
Green Ratio (g/C)					0.11		0.27	0.34		0.31	0.31	0.31	0.39	0.46					
Capacity (c), veh/h					252		425	572		362	544	504	252	759					
Volume-to-Capacity Ratio (X)					0.244		0.496	0.194		0.009	0.772	0.627	0.282	0.282					
Back of Queue (Q), ft/ln (95 th percentile)					52		152	63		2	315	217	40	112					
Back of Queue (Q), veh/ln (95 th percentile)					2.1		6.0	2.5		0.1	11.6	8.7	1.5	4.0					
Queue Storage Ratio (RQ) (95 th percentile)					0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00					
Uniform Delay (d 1), s/veh					33.8		25.6	19.2		19.7	25.9	24.4	19.1	14.1					
Incremental Delay (d 2), s/veh					0.5		0.9	0.2		0.0	3.3	1.8	0.6	0.3					
Initial Queue Delay (d 3), s/veh					0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0					
Control Delay (d), s/veh					34.3		26.5	19.3		19.7	29.2	26.3	19.7	14.3					
Level of Service (LOS)					C		C	B		B	C	C	B	B					
Approach Delay, s/veh / LOS				34.3		C	24.0		C	27.9		C	15.7		B				
Intersection Delay, s/veh / LOS				24.8						C									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS				2.13		B	1.91		B	1.92		B	1.67		B				
Bicycle LOS Score / LOS				0.59		A	1.02		A	1.71		B	0.96		A				

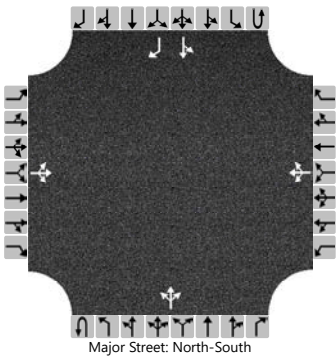
HCS Signalized Intersection Results Summary

General Information						Intersection Information													
Agency	TPD, Inc.					Duration, h	0.250												
Analyst	TPD/jd		Analysis Date	Oct 14, 2025		Area Type	Other												
Jurisdiction	Volusia County		Time Period	Projected PM		PHF	0.93												
Urban Street	Tomoka Farms Rd		Analysis Year	2027		Analysis Period	1> 17:00												
Intersection	Taylor Rd		File Name	1. Tomoka Farms Rd & Taylor Rd - Projected PM....															
Project Description	6023																		
Demand Information				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Demand (v), veh/h				6	11	9	282	28	86	14	255	247	105	323	16				
Signal Information																			
Cycle, s	82.1	Reference Phase	2																
Offset, s	0	Reference Point	End																
Uncoordinated	Yes	Simult. Gap E/W	On			Green	5.6	20.1	14.2	10.3	0.0	0.0							
Force Mode	Fixed	Simult. Gap N/S	On			Yellow	5.5	5.5	5.0	4.0	0.0	0.0							
				Red	2.5	2.5	3.5	3.5	0.0	0.0									
Timer Results				EBL		EBT		WBL		WBT		NBL		NBT		SBL		SBT	
Assigned Phase						8		7		4				6		5		2	
Case Number						8.3		1.0		4.0				5.3		1.0		4.0	
Phase Duration, s						17.8		22.7		40.5				28.1		13.6		41.6	
Change Period, (Y+R c), s						8.5		8.5		8.5				8.0		8.0		8.0	
Max Allow Headway (MAH), s						4.2		4.0		4.2				5.0		4.0		5.0	
Queue Clearance Time (g s), s						3.2		13.6		6.1				14.3		5.8		14.2	
Green Extension Time (g e), s						0.1		0.6		0.4				5.8		0.2		5.8	
Phase Call Probability						0.97		1.00		1.00				1.00		0.92		1.00	
Max Out Probability						0.00		0.26		0.00				0.02		0.00		0.02	
Movement Group Results				EB			WB			NB			SB						
Approach Movement				L	T	R	L	T	R	L	T	R	L	T	R				
Assigned Movement				3	8	18	7	4	14	1	6	16	5	2	12				
Adjusted Flow Rate (v), veh/h					28		303	123		15	274	266	113	365					
Adjusted Saturation Flow Rate (s), veh/h/ln					1586		1781	1621		969	1767	1610	1739	1811					
Queue Service Time (g s), s					0.0		11.6	4.1		1.0	11.4	12.3	3.8	12.2					
Cycle Queue Clearance Time (g c), s					1.2		11.6	4.1		1.0	11.4	12.3	3.8	12.2					
Green Ratio (g/C)					0.11		0.31	0.39		0.24	0.24	0.24	0.34	0.41					
Capacity (c), veh/h					234		532	631		324	432	393	320	742					
Volume-to-Capacity Ratio (X)					0.120		0.570	0.194		0.046	0.635	0.675	0.353	0.492					
Back of Queue (Q), ft/ln (95 th percentile)					24		205	65		10	219	202	67	210					
Back of Queue (Q), veh/ln (95 th percentile)					0.9		8.1	2.5		0.4	8.2	8.1	2.6	8.1					
Queue Storage Ratio (RQ) (95 th percentile)					0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00					
Uniform Delay (d 1), s/veh					32.9		23.6	16.6		23.8	27.8	28.1	20.6	17.9					
Incremental Delay (d 2), s/veh					0.2		1.0	0.1		0.1	2.2	2.9	0.7	0.7					
Initial Queue Delay (d 3), s/veh					0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0					
Control Delay (d), s/veh					33.1		24.6	16.7		23.9	30.0	31.0	21.2	18.7					
Level of Service (LOS)					C		C	B		C	C	C	C	B					
Approach Delay, s/veh / LOS				33.1	C		22.3	C		30.3	C		19.3	B					
Intersection Delay, s/veh / LOS				24.5						C									
Multimodal Results				EB			WB			NB			SB						
Pedestrian LOS Score / LOS				2.13	B		1.91	B		1.92	B		1.68	B					
Bicycle LOS Score / LOS				0.53	A		1.19	A		1.40	A		1.28	A					

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Tomoka Farms Rd & Country Cir Dr E
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	6/17/2025	East/West Street	Country Cir Dr E/Country Farms Rd
Analysis Year	2027	North/South Street	Tomoka Farms Rd
Time Analyzed	Projected AM	Peak Hour Factor	0.95
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	1
Configuration			LTR				LTR				LTR			LT		R
Volume (veh/h)		6	0	3		25	0	82		1	570	8		28	361	1
Percent Heavy Vehicles (%)		0	0	33		0	0	9		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.53		7.10	6.50	6.29		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.60		3.50	4.00	3.38		2.20				2.20		

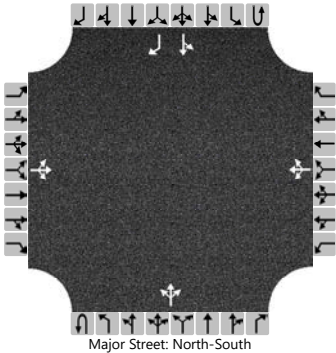
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			9			113				1				29		
Capacity, c (veh/h)			205			364				1188				980		
v/c Ratio			0.05			0.31				0.00				0.03		
95% Queue Length, Q ₉₅ (veh)			0.1			1.3				0.0				0.1		
95% Queue Length, Q ₉₅ (ft)			2.7			34.3								2.5		
Control Delay (s/veh)			23.4			19.3				8.0	0.0	0.0		8.8	0.3	
Level of Service (LOS)			C			C				A	A	A		A	A	
Approach Delay (s/veh)	23.4				19.3				0.0				0.9			
Approach LOS	C				C				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Tomoka Farms Rd & Country Cir Dr E
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	6/17/2025	East/West Street	Country Cir Dr E/Country Farms Rd
Analysis Year	2027	North/South Street	Tomoka Farms Rd
Time Analyzed	Projected PM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	1
Configuration			LTR				LTR				LTR			LT		R
Volume (veh/h)		2	0	2		15	1	49		1	452	30		82	509	4
Percent Heavy Vehicles (%)		0	0	0		0	0	0		100				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		5.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		3.10				2.24		

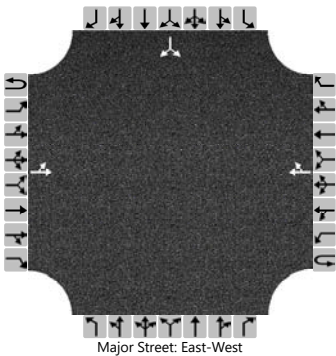
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4			71				1				89		
Capacity, c (veh/h)			193			320				664				1033		
v/c Ratio			0.02			0.22				0.00				0.09		
95% Queue Length, Q ₉₅ (veh)			0.1			0.8				0.0				0.3		
95% Queue Length, Q ₉₅ (ft)			2.5			20.0								7.7		
Control Delay (s/veh)			24.1			19.4				10.4	0.0	0.0		8.8	0.7	
Level of Service (LOS)			C			C				B	A	A		A	A	
Approach Delay (s/veh)	24.1				19.4				0.0				1.8			
Approach LOS	C				C				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Country Cir Dr E & Creek Crossing Rd
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	6/17/2025	East/West Street	Country Cir Dr E
Analysis Year	2027	North/South Street	Creek Crossing Rd (Site Access)
Time Analyzed	Projected AM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		24	2				12	0						0		76
Percent Heavy Vehicles (%)		0												0		20
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.40
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.48

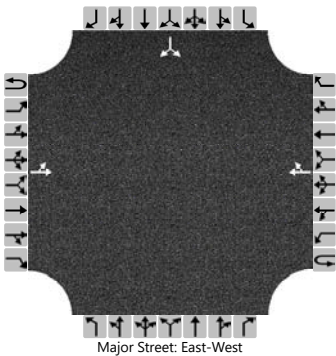
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		30													96	
Capacity, c (veh/h)		1616													1014	
v/c Ratio		0.02													0.09	
95% Queue Length, Q ₉₅ (veh)		0.1													0.3	
95% Queue Length, Q ₉₅ (ft)		2.5													8.7	
Control Delay (s/veh)		7.3	0.1												8.9	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	6.7												8.9			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Country Cir Dr E & Creek Crossing Rd
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	6/17/2025	East/West Street	Country Cir Dr E
Analysis Year	2027	North/South Street	Creek Crossing Rd (Site Access)
Time Analyzed	Projected PM	Peak Hour Factor	0.83
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		86	12				9	0						1		52
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		104													64	
Capacity, c (veh/h)		1622													1066	
v/c Ratio		0.06													0.06	
95% Queue Length, Q ₉₅ (veh)		0.2													0.2	
95% Queue Length, Q ₉₅ (ft)		5.0													5.0	
Control Delay (s/veh)		7.4	0.5												8.6	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	6.5												8.6			
Approach LOS	A												A			

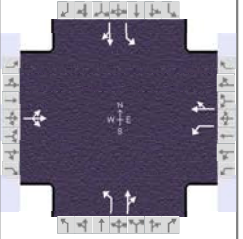
APPENDIX F
Background Intersection Capacity Worksheets

HCS Signalized Intersection Results Summary

General Information

Agency	TPD, Inc.		
Analyst	SS	Analysis Date	5/21/2025
Jurisdiction	Volusia County	Time Period	Bkgd AM
Urban Street	Tomoka Farms Rd	Analysis Year	2027
Intersection	Taylor Rd	File Name	1. Tomoka Farms
Project Description	6023		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	12	34	11	187	21	82	3	367	268	66	189	2

Signal Information

Cycle, s	104.6	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	4.4	45.0	12.6	10.6	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.5	5.5	5.0	4.0	0.0	0.0		
				Red	2.5	2.5	3.5	3.5	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8	7	4		6	5	2
Case Number		8.3	1.0	4.0		6.3	1.0	4.0
Phase Duration, s		18.1	21.1	39.2		53.0	12.4	65.4
Change Period, ($Y+R_c$), s		8.5	8.5	8.5		8.0	8.0	8.0
Max Allow Headway (MAH), s		4.2	4.0	4.2		5.0	4.0	5.0
Queue Clearance Time (g_s), s		5.3	12.3	7.3		45.7	4.4	8.7
Green Extension Time (g_e), s		0.2	0.4	0.5		0.0	0.1	6.5
Phase Call Probability		0.99	1.00	1.00		1.00	0.87	1.00
Max Out Probability		0.00	0.07	0.00		1.00	0.00	0.01

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h		61		201	111		3	683		71	205	
Adjusted Saturation Flow Rate (s), veh/h/ln		1745		1767	1662		888	1614		1654	1660	
Queue Service Time (g_s), s		0.0		10.3	5.3		0.2	43.7		2.4	6.7	
Cycle Queue Clearance Time (g_c), s		3.3		10.3	5.3		0.2	43.7		2.4	6.7	
Green Ratio (g/C)		0.09		0.23	0.29		0.43	0.43		0.49	0.55	
Capacity (c), veh/h		202		364	488		451	694		146	910	
Volume-to-Capacity Ratio (X)		0.304		0.553	0.227		0.007	0.983		0.485	0.226	
Back of Queue (Q), ft/ln (95 th percentile)		69		200	92		2	772		45	113	
Back of Queue (Q), veh/ln (95 th percentile)		2.8		7.8	3.7		0.1	28.4		1.6	4.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh		44.6		35.0	27.9		17.1	29.4		24.6	12.2	
Incremental Delay (d_2), s/veh		0.8		1.3	0.2		0.0	29.9		2.5	0.2	
Initial Queue Delay (d_3), s/veh		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay (d), s/veh		45.5		36.3	28.2		17.1	59.3		27.1	12.4	
Level of Service (LOS)		D		D	C		B	E		C	B	
Approach Delay, s/veh / LOS	45.5		D	33.4		C	59.1		E	16.1		B
Intersection Delay, s/veh / LOS	43.6						D					

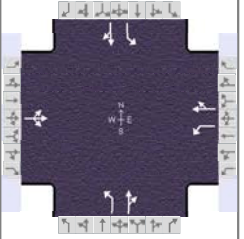
Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.95	B	1.93	B	1.91	B	1.67	B
Bicycle LOS Score / LOS	0.59	A	1.00	A	1.62	B	0.94	A

HCS Signalized Intersection Results Summary

General Information

Agency	TPD, Inc.		
Analyst	SS	Analysis Date	5/21/2025
Jurisdiction	Volusia County	Time Period	Bkgd PM
Urban Street	Tomoka Farms Rd	Analysis Year	2027
Intersection	Taylor Rd	File Name	1. Tomoka Farms
Project Description	6023		



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	6	11	9	253	28	86	14	239	230	105	297	16

Signal Information

Cycle, s	96.9	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	5.8	33.5	15.1	10.5	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.5	5.5	5.0	4.0	0.0	0.0		
				Red	2.5	2.5	3.5	3.5	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8	7	4		6	5	2
Case Number		8.3	1.0	4.0		6.3	1.0	4.0
Phase Duration, s		18.0	23.6	41.6		41.5	13.8	55.4
Change Period, ($Y+R_c$), s		8.5	8.5	8.5		8.0	8.0	8.0
Max Allow Headway (MAH), s		4.2	4.0	4.2		5.0	4.0	5.0
Queue Clearance Time (g_s), s		3.5	14.7	7.2		30.6	5.9	13.3
Green Extension Time (g_e), s		0.1	0.4	0.4		2.7	0.2	5.6
Phase Call Probability		0.98	1.00	1.00		1.00	0.95	1.00
Max Out Probability		0.00	0.46	0.00		0.24	0.00	0.02

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	3	8	18	7	4	14	1	6	16	5	2	12
Adjusted Flow Rate (v), veh/h		28		272	123		15	504		113	337	
Adjusted Saturation Flow Rate (s), veh/h/ln		1586		1781	1621		994	1623		1739	1809	
Queue Service Time (g_s), s		0.0		12.7	5.2		1.0	28.6		3.9	11.3	
Cycle Queue Clearance Time (g_c), s		1.5		12.7	5.2		1.0	28.6		3.9	11.3	
Green Ratio (g/C)		0.10		0.27	0.34		0.35	0.35		0.43	0.49	
Capacity (c), veh/h		200		466	553		418	562		223	884	
Volume-to-Capacity Ratio (X)		0.140		0.583	0.222		0.036	0.898		0.505	0.381	
Back of Queue (Q), ft/ln (95 th percentile)		30		230	89		10	474		71	198	
Back of Queue (Q), veh/ln (95 th percentile)		1.1		9.0	3.4		0.4	17.7		2.7	7.6	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh		40.2		30.2	22.8		21.1	30.1		22.6	15.6	
Incremental Delay (d_2), s/veh		0.3		1.2	0.2		0.0	12.1		1.8	0.4	
Initial Queue Delay (d_3), s/veh		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay (d), s/veh		40.5		31.4	23.0		21.1	42.1		24.4	16.0	
Level of Service (LOS)		D		C	C		C	D		C	B	
Approach Delay, s/veh / LOS	40.5		D	28.8		C	41.5		D	18.1		B
Intersection Delay, s/veh / LOS	30.3						C					

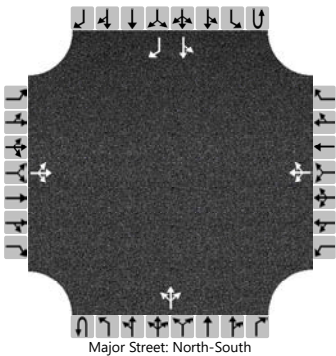
Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.94	B	1.92	B	1.92	B	1.67	B
Bicycle LOS Score / LOS	0.53	A	1.14	A	1.34	A	1.23	A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Tomoka Farms Rd & Country Cir Dr E
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E/Country Farms Rd
Analysis Year	2027	North/South Street	Tomoka Farms Rd
Time Analyzed	Bkgd AM	Peak Hour Factor	0.95
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	1
Configuration			LTR				LTR				LTR			LT		R
Volume (veh/h)		6	0	3		3	0	33		1	570	1		11	361	1
Percent Heavy Vehicles (%)		0	0	33		0	0	9		0				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.53		7.10	6.50	6.29		4.10				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.60		3.50	4.00	3.38		2.20				2.20		

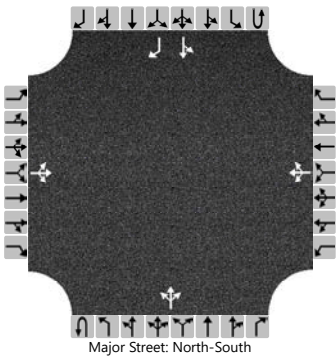
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			9			38				1				12		
Capacity, c (veh/h)			254			442				1188				986		
v/c Ratio			0.04			0.09				0.00				0.01		
95% Queue Length, Q ₉₅ (veh)			0.1			0.3				0.0				0.0		
95% Queue Length, Q ₉₅ (ft)			2.7			8.0								0.0		
Control Delay (s/veh)			19.7			13.9				8.0	0.0	0.0		8.7	0.1	
Level of Service (LOS)			C			B				A	A	A		A	A	
Approach Delay (s/veh)	19.7				13.9				0.0				0.4			
Approach LOS	C				B				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Tomoka Farms Rd & Country Cir Dr E
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E/Country Farms Rd
Analysis Year	2027	North/South Street	Tomoka Farms Rd
Time Analyzed	Bkgd PM	Peak Hour Factor	0.92
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	1
Configuration			LTR				LTR				LTR			LT		R
Volume (veh/h)		2	0	2		1	1	16		1	452	5		27	509	4
Percent Heavy Vehicles (%)		0	0	0		0	0	0		100				4		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.10	6.50	6.20		7.10	6.50	6.20		5.10				4.14		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		3.10				2.24		

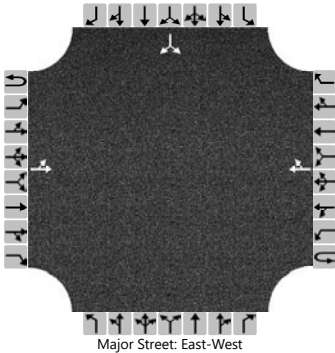
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4			20				1				29		
Capacity, c (veh/h)			261			473				664				1057		
v/c Ratio			0.02			0.04				0.00				0.03		
95% Queue Length, Q ₉₅ (veh)			0.1			0.1				0.0				0.1		
95% Queue Length, Q ₉₅ (ft)			2.5			2.5								2.6		
Control Delay (s/veh)			19.0			12.9				10.4	0.0	0.0		8.5	0.3	
Level of Service (LOS)			C			B				B	A	A		A	A	
Approach Delay (s/veh)	19.0				12.9				0.0				0.7			
Approach LOS	C				B				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Country Cir Dr E & Creek Crossing Rd
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E
Analysis Year	2027	North/South Street	Creek Crossing Rd
Time Analyzed	Bkgd AM	Peak Hour Factor	0.79
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		0	2				12	0						0		5
Percent Heavy Vehicles (%)		0												0		20
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.40
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.48

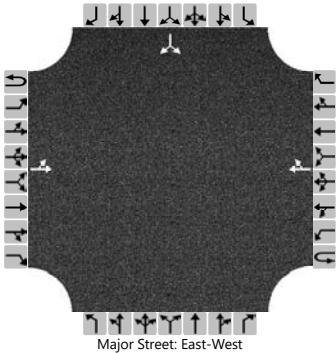
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		0													6	
Capacity, c (veh/h)		1616													1014	
v/c Ratio		0.00													0.01	
95% Queue Length, Q ₉₅ (veh)		0.0													0.0	
95% Queue Length, Q ₉₅ (ft)															0.0	
Control Delay (s/veh)		7.2	0.0												8.6	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	0.0												8.6			
Approach LOS	A												A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	SS	Intersection	Country Cir Dr E & Creek Crossing Rd
Agency/Co.	TPD, Inc.	Jurisdiction	Volusia County
Date Performed	5/21/2025	East/West Street	Country Cir Dr E
Analysis Year	2027	North/South Street	Creek Crossing Rd
Time Analyzed	Bkgd PM	Peak Hour Factor	0.83
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	6023		

Lanes



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	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		6	12				9	0						1		5
Percent Heavy Vehicles (%)		0												0		0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.10												6.40		6.20
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.20												3.50		3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7													7	
Capacity, c (veh/h)		1622													1057	
v/c Ratio		0.00													0.01	
95% Queue Length, Q ₉₅ (veh)		0.0													0.0	
95% Queue Length, Q ₉₅ (ft)		0.0													0.0	
Control Delay (s/veh)		7.2	0.0												8.4	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	2.4												8.4			
Approach LOS	A												A			