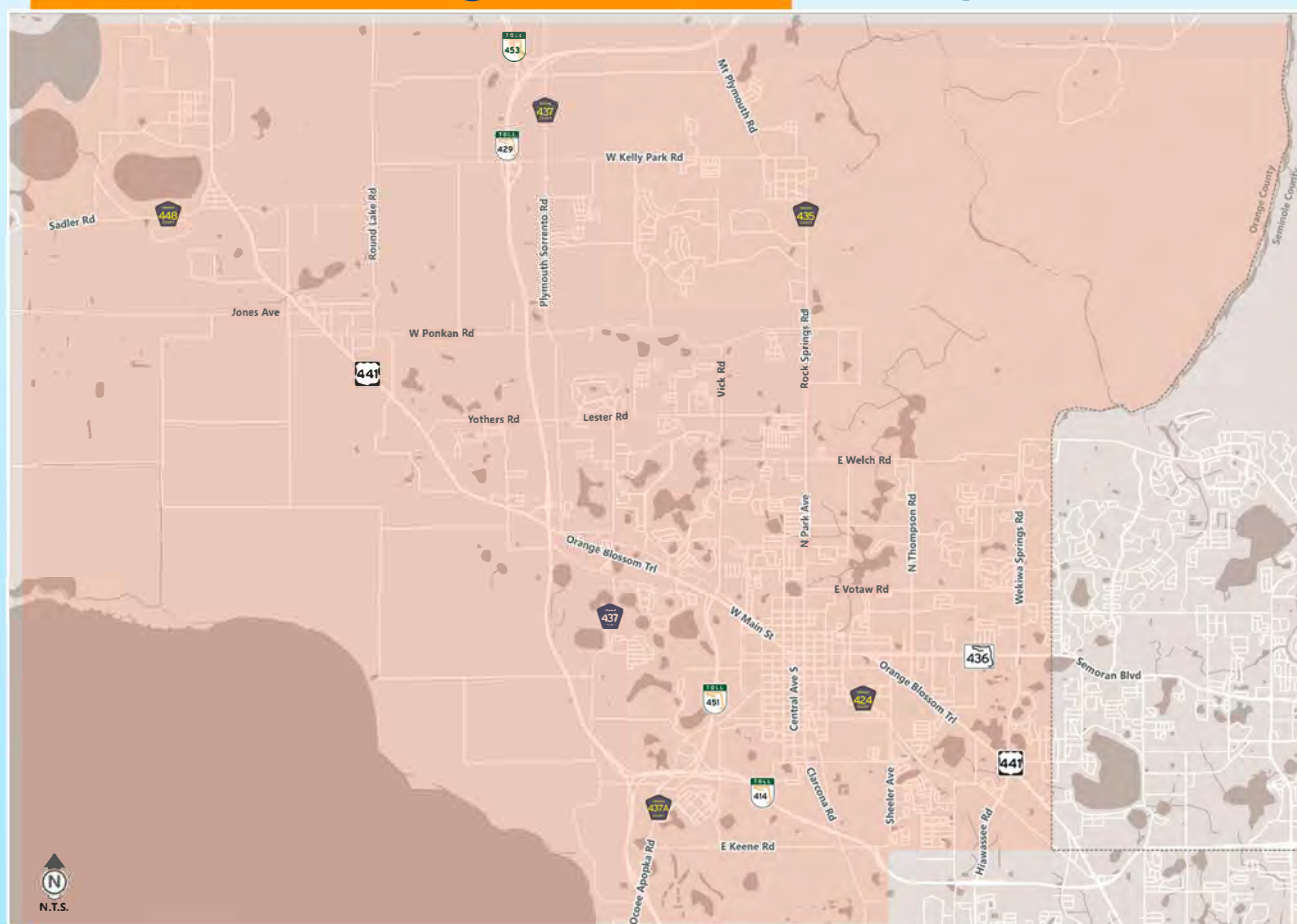


September 2025

Northwest Orange County Areawide Transportation Study (NOWOCATS) Final Existing Conditions Report



CONTENTS

Introduction	1
1 Study Overview	1
1.1 Study Area	4
Existing Conditions	12
2 Planned and Programmed Improvements	12
3 Traffic Data Collection and Existing Operational Analysis	19
3.1 Historic Traffic Count Data and Previous Studies	19
3.2 Field-Collected Traffic Data	20
3.3 Existing Conditions Traffic Development	22
3.4 Traffic Factors Development	28
3.4.1 K and D Factors	28
3.4.2 T and DHT Factors	30
3.4.3 Recommended K, D and T Factors	30
3.5 Existing Multimodal Level of Service (LOS) Analysis	31
3.5.1 Automobile Intersection LOS	32
3.5.2 Roadway Segment LOS	35
3.5.3 Pedestrian, Bicycle, and Transit LOS Analysis	41
3.6 Travel Demand Model	49
3.7 Origin – Destination (OD) Study	49
4 Existing Conditions	50
4.1 Roadway Features	50
4.2 Context Classification	51
4.3 Access Management	54
4.4 Right-of-Way (ROW) Information	55
4.5 Functional Classification	57
4.6 Bicycle and Pedestrian Facilities	59
4.6.1 Bicycle Facilities	59
4.6.2 Pedestrian Facilities	62
4.7 Pavement Conditions	65
4.8 Structures	71
4.9 Transit Services	72
4.10 Lighting	74
4.11 Truck, Freight, Strategic Intermodal System, and Evacuation Routes	78
4.12 Intelligent Transportation Systems Features	78
5 Crash Data	81
5.1 Crash Summary – Study intersections	81
5.2 Crash Summary – Study segments	89
5.3 Fatality Crash Summary	96

LIST OF FIGURES

Figure 1-1: Study Area Map	2
Figure 1-2: Study Approach	3
Figure 1-3: Existing Intersection Geometry	6
Figure 1-4: Study Segments	11
Figure 3-1: Field-Collected Traffic Count Data Locations	21
Figure 3-2: Existing AADT Map	23
Figure 3-3: Existing Conditions Turning Movement Volumes	24
Figure 4-1: Existing Context Classification	53
Figure 4-2: ROW Widths	56
Figure 4-3: Bicycle Facilities	61
Figure 4-4: Pedestrian Facilities	64
Figure 4-5A: Pavement Condition – FDOT	67
Figure 4-5B: Pavement Condition – FDOT	68
Figure 4-6: Pavement Condition – Orange County	69
Figure 4-7: 2025 LYNX Map	73
Figure 4-8: Lighting	77
Figure 4-9: ITS Features	79
Figure 5-1: NOWOCATS Crash Summary	81

LIST OF TABLES

Table 1-1: List of Study Intersections	5
Table 1-2: List of Study ROADWAY SEGMENTS	10
Table 2-1: Programmed Improvement Projects	13
Table 2-2: Prioritized and Planned Improvement Projects	15
Table 2-3: Ongoing Projects	17
Table 3-1: Standard K-Factors	28
Table 3-2: Standard D-Factors	28
Table 3-3: Average Measured K and D-Factors	29
Table 3-4: Recommended K, D, and T Factors	30
Table 3-5: Intersection LOS Analysis	34
Table 3-6: Roadway Segment LOS Analysis	37
Table 3-7: Arterial Roadway Segment LOS Analysis	40
Table 3-8: Multimodal Intersection LOS Analysis	42
Table 3-9: Multimodal Corridor LTS Analysis	45
Table 4-1: Roadway Segment Summary	50
Table 4-2: Context Classification Summary	52

Table 4-3: Access Management Classification	54
Table 4-4: Access ManAgement Standards.....	54
Table 4-5: Existing ROW Widths.....	55
Table 4-6: Existing Roadways Functional Classifications.....	58
Table 4-7: Existing Bicycle Accommodations	60
Table 4-8: Existing Sidewalk Summary.....	63
Table 4-9: Pavement Condition Summary - FDOT Roadways.....	65
Table 4-10: Pavement Condition Summary – Orange County Roadways	70
Table 4-11: Existing Structures.....	71
Table 4-12: Lighting Location Summary.....	75
Table 4-13: Number of Lights at Signalized Intersections.....	76
Table 4-14: ITS Features Summary	80
Table 5-1: Crash Type Summary by Intersection (2022-2024).....	83
Table 5-2: Crash Severity Summary by Intersection (2022-2024).....	85
Table 5-3: Intersection Crash Rates Summary (2022-2024).....	87
Table 5-4: Crash Type Summary by Segments (2022-2024).....	90
Table 5-5: Crash Severity Summary by Segment (2022-2024)	92
Table 5-6: Segment Crash Rates Summary (2022-2024).....	94

LIST OF APPENDICES

Appendix A-0: Response to Comments
Appendix A-1: Metroplan Orlando Metropolitan Transportation Plan (TIP)
Appendix A-2: Metroplan Orlando Transportation Improvement Plan (MTP)
Appendix A-3: Ongoing Projects
Appendix B-1: FDOT Station Data
Appendix B-2: Orange County Station Data
Appendix B-3: Prior Studies Data
Appendix C-1: Raw Multimodal Intersection Turning Movement Counts (TMC)
Appendix C-2: Raw volume Counts
Appendix D: K, D and T Factors
Appendix E: Signal Timing Data
Appendix F-1: Synchro Results – AM
Appendix F-2: Synchro Results – PM
Appendix F-3: 2023 Multimodal Q/LOS Handbook - Pedestrian, Bicyclist, and Transit LOS
Appendix G: 2024 Orange County Context Classification Map
Appendix H: Straight Line Diagrams (SLDs)
Appendix I-1: Orange County Concurrency Management System (CMS) Database
Appendix I-2: City of Apopka Concurrency Management System (CMS) Database
Appendix J-1: State Pavement Condition Inventory
Appendix J-2: County Pavement Condition Inventory
Appendix J-3: City Pavement Condition Inventory



Appendix K: Structures Reports (National Bridge Inventory)
Appendix L: Transit
Appendix M: Evacuation Routes & Freight
Appendix N-1: Orange County Fiberoptics Map
Appendix NA-2: ITS Information Summary
Appendix N-3: Miovision intersections
Appendix N-4: Orange County CCTV Locations
Appendix O-1: Intersection Crash Data Table
Appendix OB-2: Segment Crash Data Table
Appendix O-3: Study Area Crash Rates & Categories

Introduction

1 STUDY OVERVIEW

Orange County is undertaking the Northwest Orange County Areawide Transportation Study (NOWOCATS) to proactively identify future transportation needs that align with the needs of residents and businesses and accommodate future growth in the northwest area of the County. The NOWOCATS study area is approximately 143.8 square miles and encompass the region north of Clarcona-Ocoee Road, south of Orange/Seminole County line, east of Orange/Lake County Line and west of Orange/Seminole County line. The study area limits are shown in **Figure 1-1**. Traffic demand for many of the area roadways currently exceeds the capacity of the facilities. As the region continues its rapid growth, the existing transportation system within the study area will not be able to accommodate the increase in transportation demand.

The study purpose is guided by overarching goals that together work to support future growth while preserving community character. As part of this study, safety, operational, and multimodal analyses were conducted to identify improvements that will improve network connectivity and provide relief to constrained corridors and prioritize improvements for the short-, mid-, and long-term periods. The study will provide information for both the Cost-Feasible Plan – as defined by Orange County based on the planned improvements identified for the study area, and Unfunded Needs Plan – with all the required improvements needed for the study area to accommodate future travel demand. Both transportation plans, Cost Feasible and Needs, will serve in the short term as a guide for capital improvement expenditures and in the long term as a basis for coordination between future land use and the transportation needs within the Orange County City of Apopka joint planning area (JPA).

The purpose of the Existing Conditions Report is to document the data collection, research, and existing conditions analysis completed for the NOWOCATS. The study methodology incorporates thorough analysis and will include iterative review by stakeholders as illustrated in **Figure 1-2**. The existing conditions analysis includes identifying corridor characteristics, travel patterns, operational analysis of all modes, and a safety assessment.

This report is updated based on the comments provided by the Orange County and City of Apopka on the Draft Existing Conditions Report (dated June 2025). The responses to the comments are provided in **Appendix A-0**.

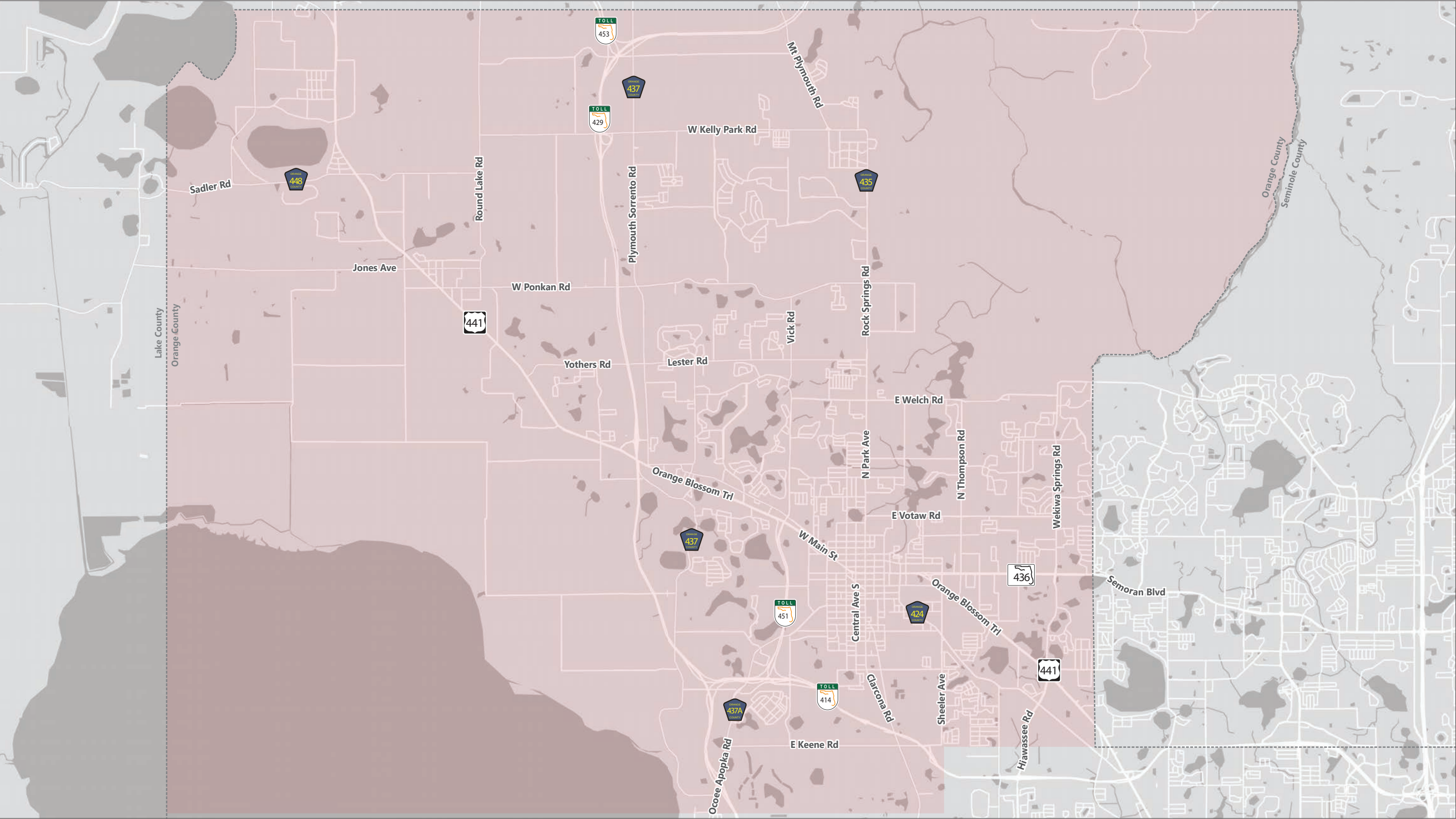
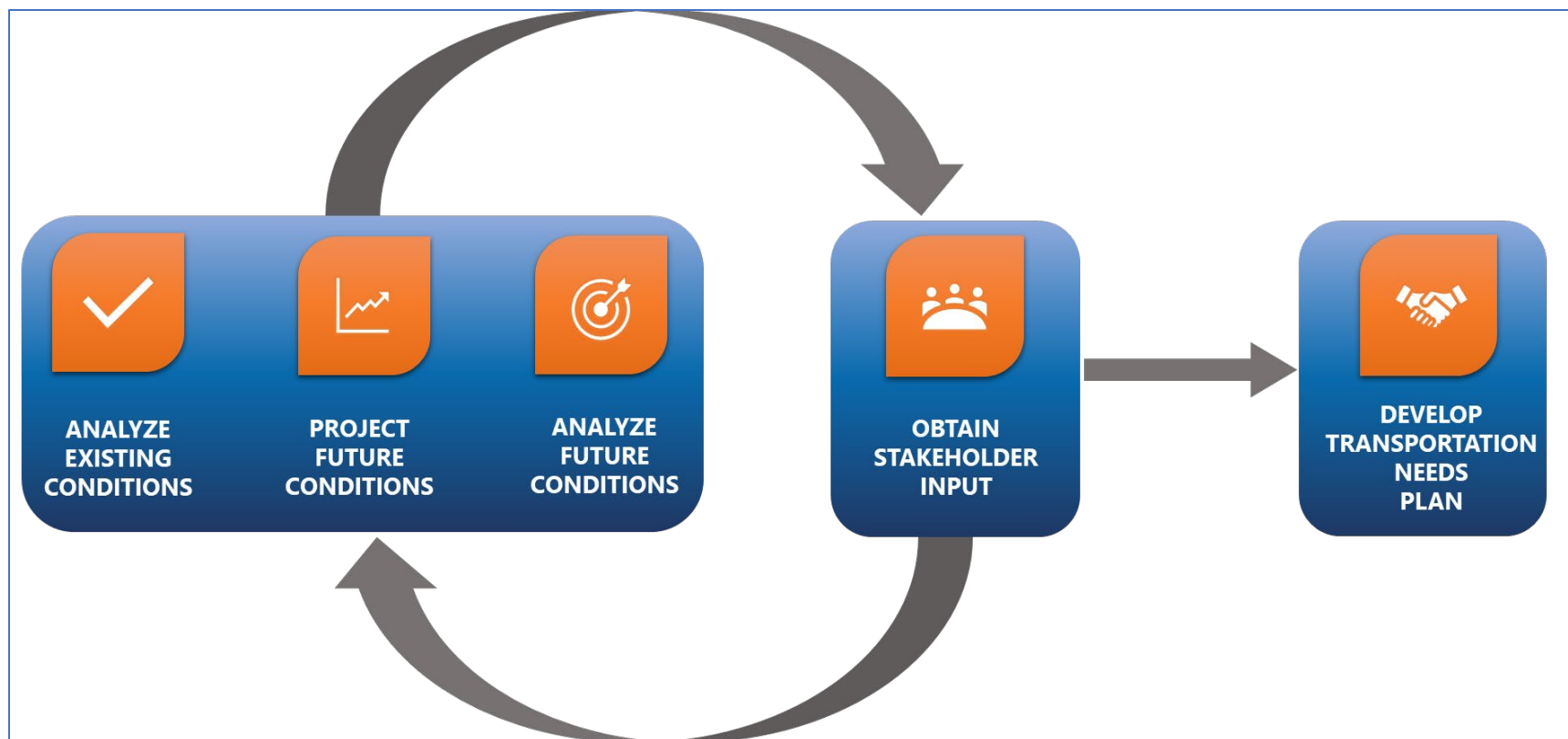


Figure 1-1
Project Area Map
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

FIGURE 1-2: STUDY APPROACH



1.1 STUDY AREA

The northwest area of Orange County, including the City of Apopka, is characterized by a blend of established suburban neighborhoods, agricultural lands, state parks, and expanding commercial corridors. The area has seen steady growth due to its proximity to major highways such as SR 429 (Wekiwa Parkway) and US 441 (Orange Blossom Trail), making it a strategic location for continued industrialization and development. Apopka serves as the region's core urban center, with ongoing investments in downtown revitalization and infrastructure improvements through the efforts of the Apopka Community Redevelopment Agency.

Several planned communities are set to bring thousands of new housing units, schools, and commercial spaces. Notably, the Kelly Park Road Form Based Code Area and other planned developments are anticipated to transform former farmland into residential, commercial, and recreational uses, particularly near the SR 429 - Western Beltway and Kelly Park Road interchange. As with the overall County, the area continues to enjoy growth in key industrial sectors including agricultural-science, aviation, clean tech, construction, eco-tourism, logistics and distribution, and manufacturing. The region is also well known for its state parks, including Wekiva Springs State Park and Kelly Park, which attract recreational and environmental tourism from across the state. Due to this rapid ongoing growth, several major roadways in the study area are already failing to meet demand in existing conditions, and the rapid development and industrialization in the region is anticipated to increase future demand beyond the capacity of the existing transportation system.

Table 1-1 presents the list of study intersections (all signalized) in the NOWOCATS area. Each intersection was reviewed looking at the latest aerial imagery (NearMap) to collect data on lane configuration. **Figure 1-3** illustrates the intersection geometry of the study intersections. **Table 1-2** and **Figure 1-4** present the list of study segments in the NOWOCATS area.

TABLE 1-1: LIST OF STUDY INTERSECTIONS

Intersection	# of Legs	Jurisdiction
1: US 441/Orange Blossom Trail & Benbow Court	4	Apopka
2: US 441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road	4	Orange County
3: US 441/Orange Blossom Trail & Victor Drive & Roger Williams Avenue	5	Orange County
4: US 441/Orange Blossom Trail & SR 436/Semoran Boulevard	3	Apopka
5: US 441/Orange Blossom Trail & McGee Avenue	4	Apopka
6: US 441/Orange Blossom Trail & Midland Avenue/Edgewood Drive	4	Apopka
7: US 441/Orange Blossom Trail & Park Avenue	4	Apopka
8: US 441/Orange Blossom Trail & Central Avenue	4	Apopka
9: US 441/Orange Blossom Trail & Bradshaw Road	4	Apopka
10: US 441/Orange Blossom Trail & SR 451/Vick Road	4	Apopka
11: US 441/Orange Blossom Trail & Driveway/Errol Parkway	4	Apopka
12: US 441/Orange Blossom Trail & Home Depot/Lowes Driveway	4	Apopka
13: US 441/Orange Blossom Trail & Boy Scout Boulevard	4	Orange County
14: US 441/Orange Blossom Trail & Plymouth Sorrento Road	3	Apopka
15: US 441/Orange Blossom Trail & W Orange Avenue	4	Orange County
16: US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road	4	Orange County
17: US 441/Orange Blossom Trail & Hermit Smith Road	4	Orange County
18: US 441/Orange Blossom Trail & Spillman Drive	3	Orange County
19: US 441/Orange Blossom Trail & Wesley Road/Junction Road	4	Apopka
20: US 441/Orange Blossom Trail & Jones Avenue	4	Orange County
21: US 441/Orange Blossom Trail & Sadler Road	4	Orange County
22: US 441/Orange Blossom Trail & Stoneybrook Hills Parkway	3	Orange County
23: Hiawassee Road & Apopka Boulevard	4	Apopka
24: Lakeville Road/Private Driveway & Apopka Boulevard	4	Apopka
25: Sheeler Avenue & Apopka Boulevard	4	Apopka
26: Clarcona Road & Keene Road	4	Orange County
27: SR 414 Ramps & Keene Road	3	CFX
28: Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road	4	Orange County
29: Ocoee Apopka Road & SR 429 SB Ramps	4	Apopka
30: Ocoee Apopka Road & SR 429 NB Ramps	4	Apopka
31: Ocoee Apopka Road & Harmon Road	4	Apopka
32: Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard	4	Orange County
33: Wekiwa Springs Road & Votaw Road	4	Orange County
34: Wekiwa Springs Road & Welch Road	3	Orange County
35: Thompson Road & Votaw Road	4	Orange County
36: Thompson Road & Welch Road	3	Orange County
37: Park Avenue & Votaw Road	3	Apopka
38: Park Avenue/Rock Springs Road & Welch Road	4	Apopka
39: Rock Springs Road & Ponkan Road	4	Orange County
40: Vick Road & Welch Road	3	Apopka
41: Plymouth Sorrento Road & SR 429 Connector	3	Orange County
42: Plymouth Sorrento Road & Yothers Road/Lester Road	4	Apopka
43: Plymouth Sorrento Road & Ponkan Road	4	Orange County
44: Plymouth Sorrento Road & Kelly Park Road	4	Apopka

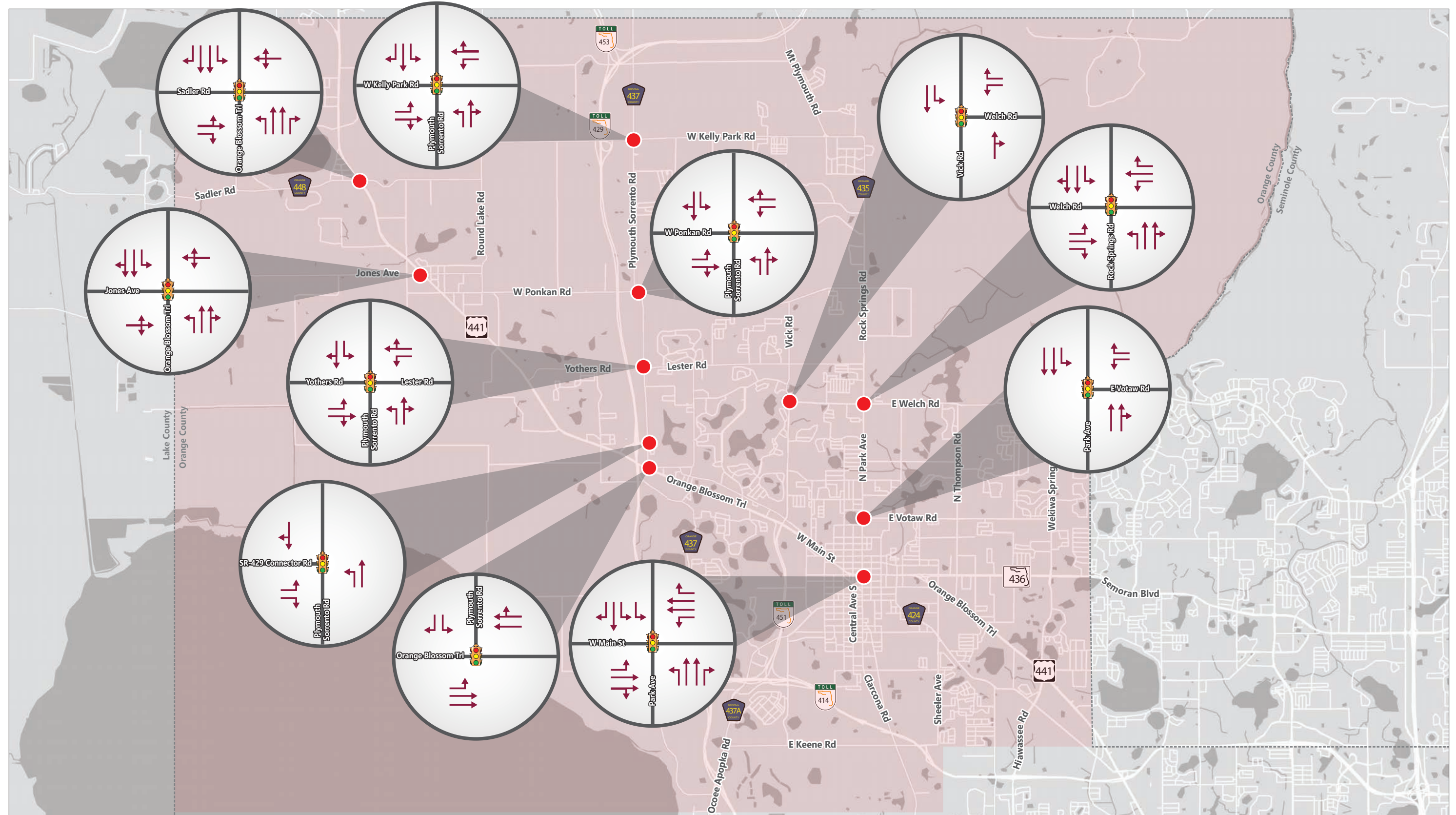
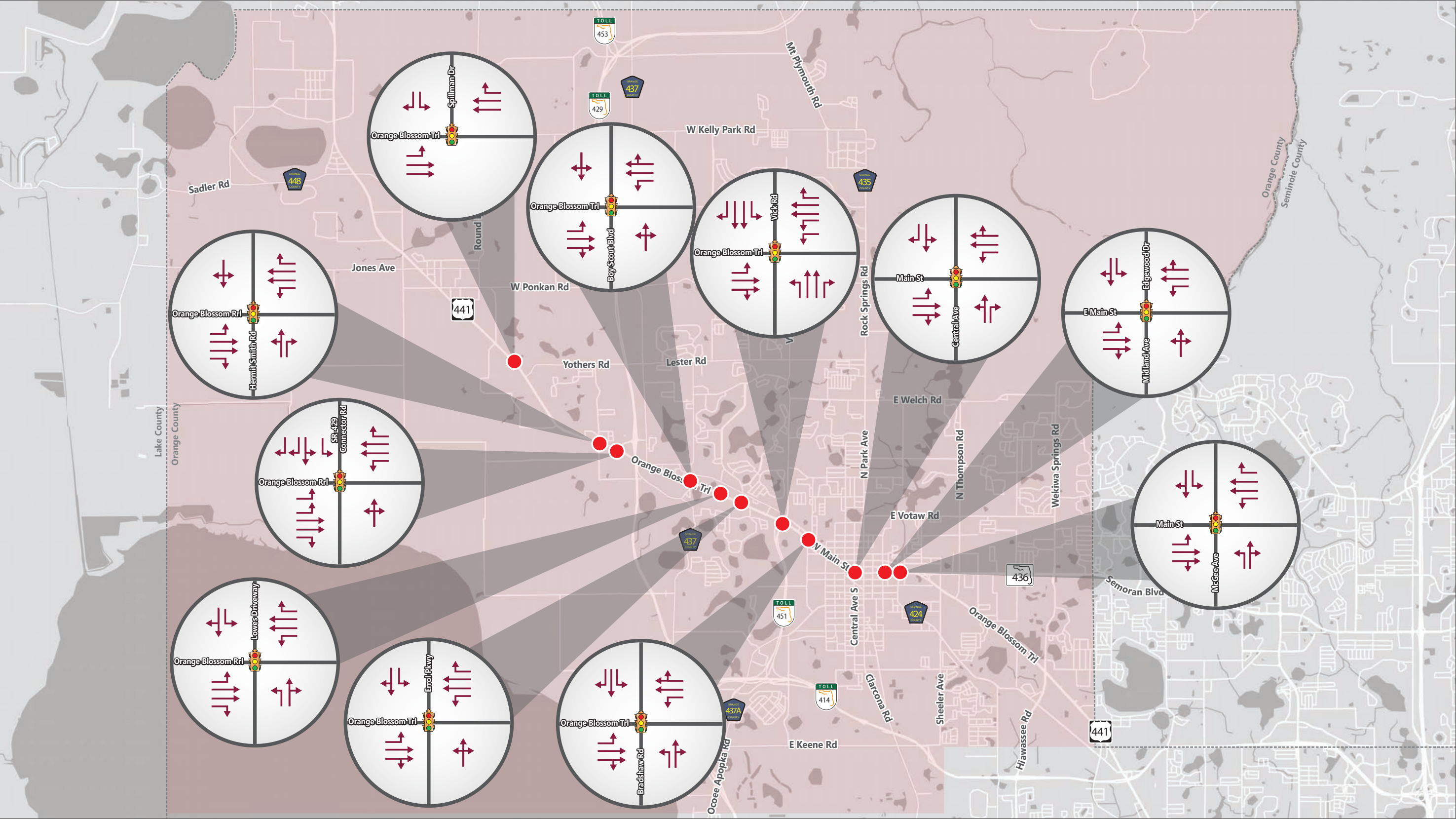


Figure 1-3 (Map A)

Existing Geometry
North West Orange County
Areawide Transportation Study
(NOWOCATS)



ORANGE COUNTY FLORIDA

Figure 1-3 (Map C)

Existing Geometry

Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

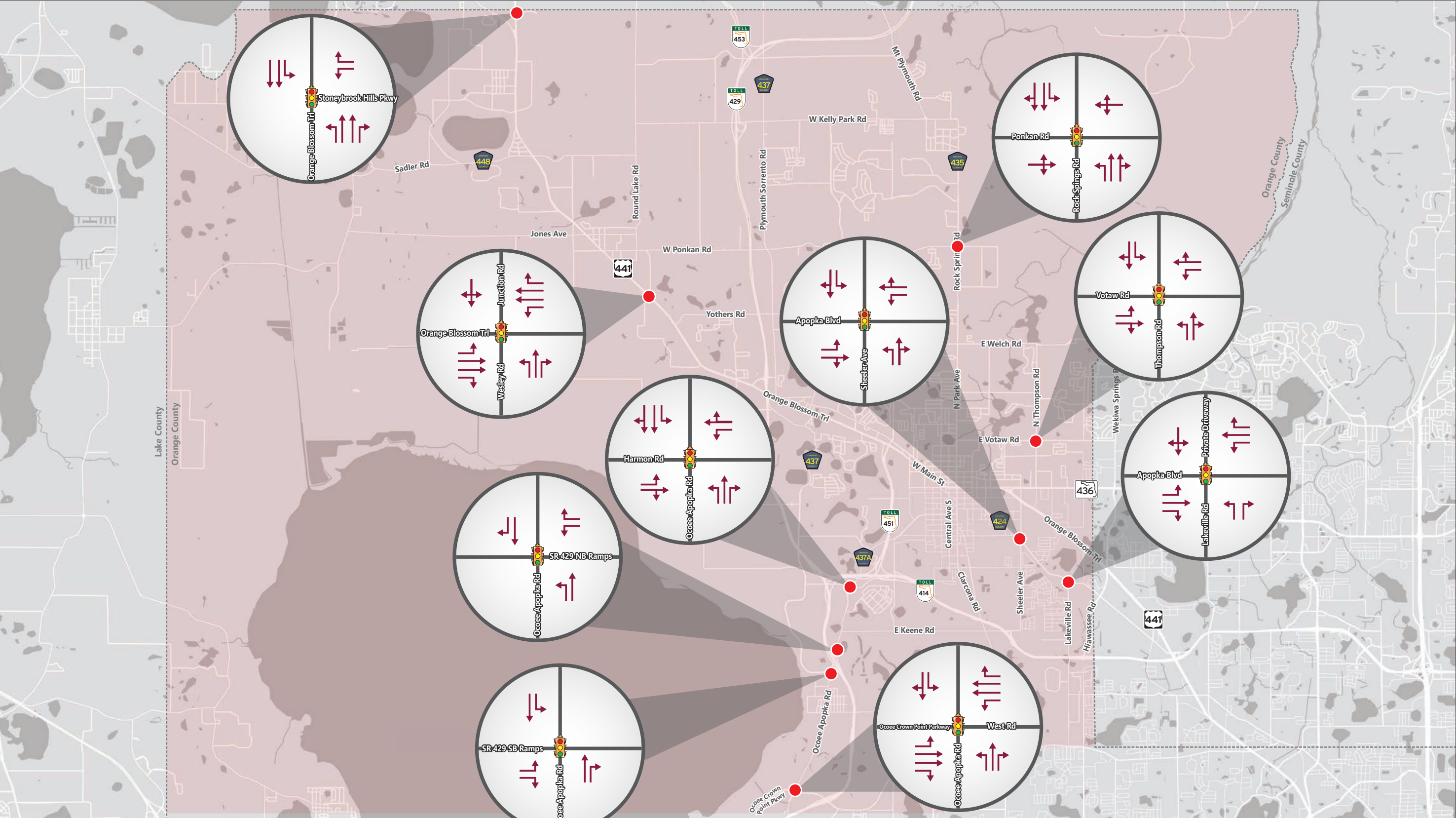
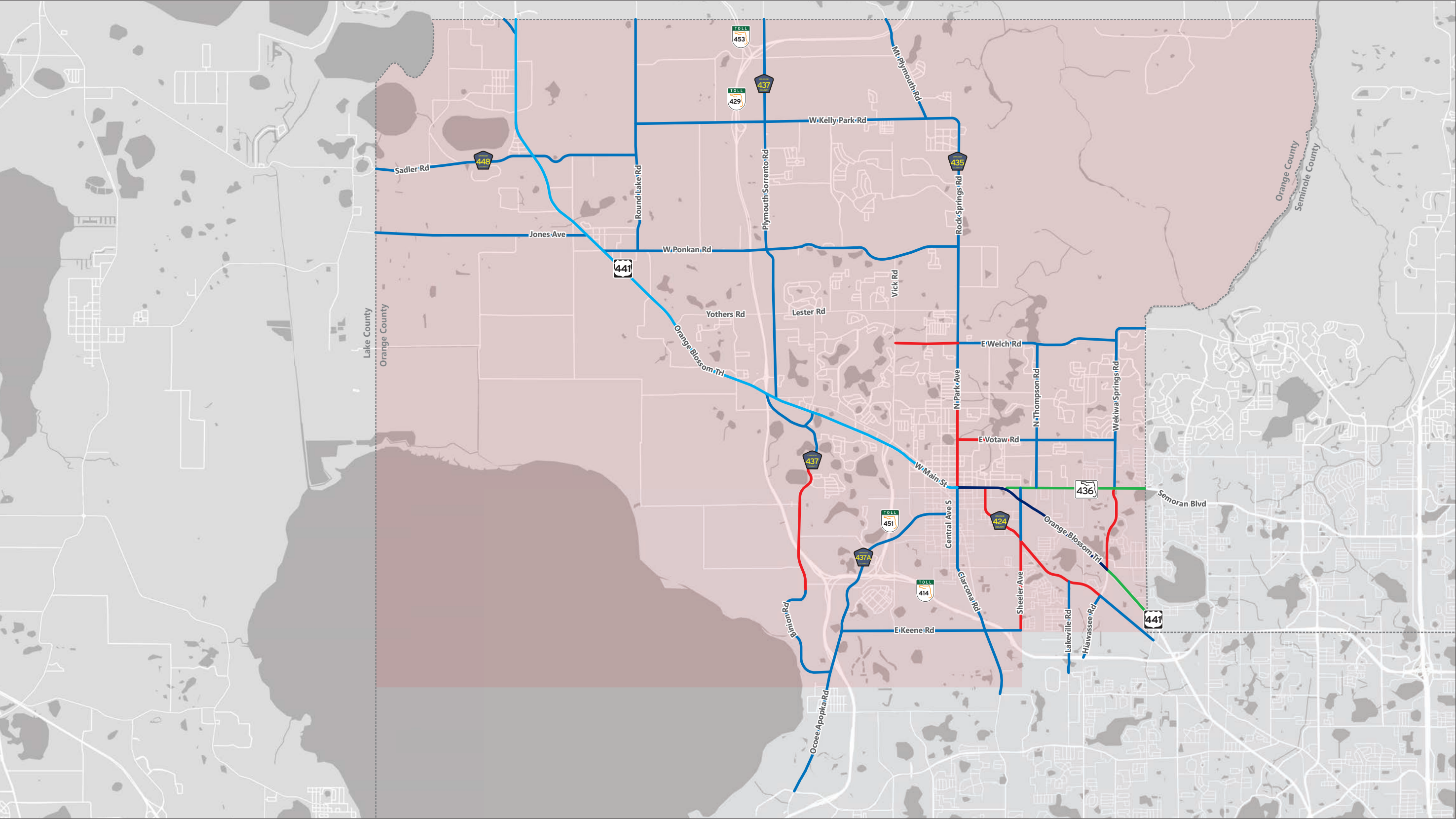


Figure 1-3 (Map D)
Existing Geometry
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

TABLE 1-2: LIST OF STUDY ROADWAY SEGMENTS

#	Roadway Name	From	To	Jurisdiction	Maintenance Agency
1	Sadler Road	Lake County Line	Round Lake Road	Orange County	Orange County
2	Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	Orange County	Orange County
3	Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	Orange County	Orange County
4	Round Lake Road	Ponkan Road	Lake County Line	Orange County	Orange County
5	Mt Plymouth Road	Kelly Park Road	Lake County Line	Orange County	Orange County
6	W Kelly Park Road	Round Lake Road	Rock Springs Road	Orange County	Orange County
7	Plymouth Sorrento Road	Lake County Line	US 441/Orange Blossom Trail	Orange County	Orange County
8	N Park Avenue/Rock Springs Road	US 441/Orange Blossom Trail	Martin Road	Apopka	Orange County
		Martin Road	Kelly Park Road	Orange County	Orange County
9	W Welch Road	Vick Rd	Rock Springs Road	Apopka	Orange County
		Rock Springs Road	Wekiwa Springs Road	Orange County	Orange County
10	Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Apopka	Orange County
11	Wekiwa Springs Road	SR 436/Semoran Boulevard	Seminole County Line	Orange County	Orange County
12	Votaw Road	Park Avenue	Via Florence Road	Apopka	Apopka
		Via Florence Road	Wekiwa Springs Road	Orange County	Orange County
13	SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	FDOT	FDOT
14	Sheeler Avenue	Keene Street	Apopka Boulevard	Apopka	Orange County
		Apopka Boulevard	SR 436/Semoran Boulevard	Orange County	Orange County
15	W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	Orange County	Orange County
16	S Binion Road	Lake View Drive	Hayden Valley Street	Orange County	Orange County
		Hayden Valley Street	Areca Palm Drive	Apopka	Apopka
		Areca Palm Drive	Ocoee Apopka Road	Orange County	Orange County
17	Ocoee Apopka Road/Michael Gladden Boulevard	West Road	South Central Avenue	Orange County	Orange County
18	E Keene Road	Clarcona Road	Sheeler Avenue	Orange County	Orange County
19	Apopka Boulevard/Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	Apopka	Orange County
20	US 441/Orange Blossom Trail	Seminole County Line	Piedmont-Wekiwa Road	State	FDOT
		Piedmont-Wekiwa Road	Western Beltway	FDOT/Apopka*	Apopka
		Western Beltway	Lake County Line	FDOT/Orange County	Orange County
21	Clarcona Road	Gilliam Road	US 441/Orange Blossom Trail/Main Street	Orange County	Orange County
22	Apopka Boulevard	Overland Road	Hiawassee Road	Orange County	Orange County
		Hiawassee Road	Sheeler Avenue	Apopka	Orange County
23	Hiawassee Road	Maitland Blvd Extension	Apopka Boulevard	Orange County	Orange County
24	Lakeville Road	Beggs Road	Apopka Boulevard	Orange County	Orange County
25	Ponkan Road	US 441/Orange Blossom Trail	Rock Springs Road	Orange County	Orange County
26	Lake View Drive	Binion Road	US 441/Orange Blossom Trail	Orange County	Orange County
27	Thompson Road	SR 436/Semoran Boulevard	Welch Road	Orange County	Orange County

*US 441 is a State Road - The City and County have maintenance agreements with the state over these segments





Project Area

City of Apopka

Orange County

State

State/City of Apopka*

State/Orange County*

*US 441 is a State Road - The City and County have maintenance agreements with the state over these segments



Figure 1-4
Study Roadway Segments by Jurisdiction
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

Existing Conditions

2 PLANNED AND PROGRAMMED IMPROVEMENTS

From a review of various transportation plans throughout the study area, ongoing and upcoming planned and programmed (aka committed) transportation projects were identified. Planned and programmed improvements will be assumed to be in place the year after construction is funded during the future condition analysis of the NOWOCATS area.

The latest available local public agency funding plans were obtained in August 2025 from each agency's website. During this exercise, the following documents were reviewed, and relevant pages are included in **Appendices A-1, A-2, and A-3**.

- MetroPlan Orlando FY 2025/26 - 2029/30 Orlando Urban Area Transportation Improvement Program (TIP) – Adopted July 9th, 2025
- MetroPlan Orlando 2045 Metropolitan Transportation Plan – Cost Feasible Plan
- FDOT District Five Projects Website (CFLRoads.com)
- Orange County Transportation Projects Website (orangecountyfl.net)
- City of Apopka Capital Improvement Program
- Central Florida Expressway

Summaries of the programmed and planned projects are included in **Tables 2-1 and 2-2**, respectively. The list of ongoing projects within the NOWOCATS study area obtained from Orange County (online information) is included in **Table 2-3**.

As per the City of Apopka Comprehensive Plan, Capital Improvement Element, the city adopts the 5-year MetroPlan Orlando TIP that identifies funding for county and state roads and multimodal transportation projects to address present or expected deficiencies. The city also participates in the MetroPlan Orlando planning process and in the development of the 5-year MetroPlan Orlando TIP and the 5-year Transit Development Plan (TDP).

TABLE 2-1: PROGRAMMED IMPROVEMENT PROJECTS

Responsible Agency	ID	Description	Project Location	From	To	Funded Phase(s)	Funded Year(s)
Programmed/Funded:							
FDOT	FPN# 239422-1	Widen from 4 to 6 Lanes	SR 434/Forest City Road	SR 424/Edgewater Drive	Seminole County Line	CST	FY 2029
FDOT	FPN# 450640-1	Pavement Only Resurface (Flex)	SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	CST	FY 2026
FDOT	FPN# 450640-2	Traffic Ops Improvement	SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	CST	FY 2026
Orange County	Orange_08	Widen from 2 to 4 Lanes	Kennedy Boulevard	Forest City Road	Wymore Road	ROW/CST	FY 2026 - 2029
Orange County	FPN# 453486-1	Complete Streets / Urban Corridor Improvements	Rock Springs Road	N Publix Entrance	Lester Road	CST	FY 2027
Orange County	Orange_44	Widen from 2 to 4 Lanes	Clarcona-Ocoee Road	Ocoee Apopka Road	US 441/Orange Blossom Trail	PE/ROW/CST	FY 2027 - 2030
Orange County	FPN# 239422-2	Miscellaneous Construction	SR 434/Forest City Road	SR 424/Edgewater Drive	Seminole County Line	CST	FY 2027
Orange County	FPN# 440429-1	Bike Path / Trail	West Orange Trail 4A	Kelly Park / Rock Springs Road	W Lester Road	PE	FY 2028
Apopka	Apopka_01	Widen from 2 to 4 Lanes	Ocoee Apopka Road	Keene Road	Alston Bay Road	PE/CST	FY 2026 – 2028
Apopka	Apopka_02	Widen from 2 to 4 Lanes	Ocoee Apopka Road	Harmon Road	Bradshaw Road	PE/CST	FY 2026 - 2028
Apopka	Apopka_03	Intersection Improvement	Rock Springs Road	At Welch Road		PE	FY 2026 - 2028
Apopka	Apopka_04	Widen from 2 to 4 Lanes	Vick Road	Old Dixie Highway	Martin Street	PE	FY 2026 - 2028
Apopka	Apopka_05	Widen from 2 to 4 Lanes	Vick Road	Martin Street	Sun Bluff Lane	PE	FY 2026 - 2028
Apopka	Apopka_06	Widen from 2 to 4 Lanes	Vick Road	Welch Road	Lester Road	PE	FY 2026 - 2028
Apopka	Apopka_07	Widening with Shared Path and New Signals	W Kelly Park Road	Golden Gem Road	Plymouth Sorrento Road	PE/CST	FY 2026 - 2028
Apopka	Apopka_08	Intersection Improvement	Park Avenue	At Votaw Road	-	PE	FY 2026
Apopka	Apopka_09	Realignment and New Signal	Sandpiper Road	At Park Avenue	-	PE/CST	FY 2026
Apopka	Apopka_10	Safety Improvements	Park Avenue	At E 5 th Street	-	PE/CST	FY 2026
Apopka	Apopka_11	New Sidewalk Design and Construction	-	-	-	PE/CST	FY 2026
Ocoee	Ocoee_07	New 2 Lane Roadway	Crown Point Road Extension	Crown Point Road	Fullers Cross Road	CST	FY 2026
CFX Authority	CFX# 429-183B	Widen from 4 to 6 Lanes	SR 429	Schofield Road	N of Tilden Road	PE/CST	FY 2026 – 2030
CFX Authority	CFX# 429-152	Widen from 4 to 6 Lanes	SR 429	Florida's Turnpike	West Road	CST	FY 2026
CFX Authority	CFX# 429-153	Widen from 4 to 6 Lanes	SR 429	West Road	SR 414	CST	FY 2026
Prioritized/Unfunded:							
Responsible Agency	MTP ID	Description	Project Location	From	To	Priority Phase	Funded Year(s)
Apopka / Orange County	MTP ID# 2164	Complete Streets / Safety / Ops	US 441/Orange Blossom Trail	SR 451	Errol Pkwy	PDE	Prioritized
Apopka / Orange County	MTP ID# 2036	Complete Streets / Safety / Ops	US 441/Orange Blossom Trail	WB SR 436	Alabama Avenue	PDE	Prioritized
Apopka / Orange County	MTP ID# 2058	Complete Streets / Safety / Ops	US 441/Orange Blossom Trail	Alabama Avenue	S Park Avenue	PDE	Prioritized
Orange County	MTP ID# 2022	Operational / Safety	US 441/Orange Blossom Trail	At Plymouth Sorrento Road		PE	Prioritized
Orange County	MTP ID# 2030	Operational / Safety	US 441/Orange Blossom Trail	At Lake View Drive		PE	Prioritized
Apopka / Orange County	MTP ID# 4006	Complete Streets	S Park Avenue / Clarcona Road	US 441/Main Street	Cleveland Street	PE	Prioritized

Responsible Agency	MTP ID	Description	Project Location	From	To	Priority Phase	Funded Year(s)
Apopka / Orange County	MTP ID# 4007	Complete Streets	W Michael Gladden Boulevard	S Park Avenue	Bradshaw Road	PE	Prioritized
Apopka / Orange County	MTP ID# 4024	Complete Streets	Park Avenue	Votaw Road	Welch Road	PE	Prioritized
Apopka / Orange County	MTP ID# 5077	Shared Use Path	West Orange Trail Phase 4A	Kelly Park Road / Rock Springs Road	W Lester Road	CST	Prioritized
Apopka / Orange County	MTP ID# 5085	Shared Use Path	West Orange Trail Phase 4B	Welch Road / Rock Springs Road	Wekiva Springs State Park Entrance	CST	Prioritized
Apopka / Orange County	MTP ID# 5021	Shared Use Path	West Orange Trail Phase 4C	Ponkan Road / Jason Dwelley Parkway	Rock Springs Road	PE	Prioritized
Apopka / Orange County	MTP ID# 5014	Shared Use Path	West Orange Trail Phase 4D	Wekiva Parkway	Kelly Park Road / Rock Springs Road	PE	Prioritized
Apopka / Orange County	MTP ID# SWB7	Critical Sidewalk Gap Bundle	Various			PE	Prioritized
Apopka / Orange County	MTP ID# SWB17	Critical Sidewalk Gap Bundle	Various			PE	Prioritized

Source: MetroPlan Orlando FY 2025/26 - 2029/30 Orlando Urban Area Transportation Improvement Program, Adopted July 9th, 2025, MetroPlan Orlando Prioritized Project List 2030-2040, Adopted July 10, 2024
Phases: PDE – Project Development and Environment, PE – Preliminary Engineering, ENV – Environmental, CST – Construction, CEI – Construction Engineering Inspection

TABLE 2-2: PRIORITIZED AND PLANNED IMPROVEMENT PROJECTS

Location	MTP ID	From	To	Description	Unfunded	2026-30	2031-35	2036-45
Apopka Boulevard	7378	West of Lakeville Road	East of Hiawassee	Complete Streets	✓			
Apopka Enhanced Transit Service Area*	6054	-	-	Transit Service	✓			
Binion Road (CR 437)	7303	Lakeview Drive	Ocoee Apopka Road	Widen from 2 to 4 Lanes	✓			
Clarcona Road	7164	Gilliam Road	Keene Road	Complete Streets/Safety/Ops			PDE to CEI	
	7165	Keene Road	Cleveland Street	Operational	✓			
Hiawassee Road	7120	Maitland Boulevard Extension	Apopka Boulevard	Complete Streets/Safety/Ops	✓			
Jones Avenue	7459	US 441/Orange Blossom Trail	Orange / Lake County Line	Widen from 2 to 4 Lanes			PDE to CEI	
Kelly Park Road	7371#	Golden Gem Road	Jason Dwelley Road	Widen to 4 Lanes with Shared Use Path	✓			
Lakeview Drive	7308	US 441/Orange Blossom Trail	W Orange Avenue	Operational/Safety	✓			
Lakeville Road	7424	Beggs Road	Apopka Boulevard	Widen from 2 to 4 Lanes		PDE to CEI		
Michael Gladden Boulevard	7467	Bradshaw Road	South Central Avenue	Operational/Safety	✓			
Michael Gladden Boulevard/ Ocoee Apopka Road (CR 437A)	7302	Park Avenue	McCormick Road	Safety Improvements	✓			
Mt Plymouth Road	7543	Kelly Park Road	Orange / Lake County Line	Widen from 2 to 4 Lanes	✓			
Ocoee-Apopka Road	7404	West Road	Binion Road	Widen from 2 to 4 Lanes		PDE to CEI		
	7315	At Marden Road		Operational/Safety	✓			
	7304	At Harmon Road		Operational/Safety	✓			
	7314	At Keene Road		Operational/Safety	✓			
	7011	West Road	Binion Road	Widen from 2 to 4 Lanes	✓			
	7599**	Palm Drive	McCormick Road	Change to Urban Section, Widen and Multipurpose Path	✓			
Park Avenue	3113	E Main Street	Welch Road	Operational/Safety	✓			
	4024#	Votaw Road	Welch Road	Complete Streets		PE to ENV	CST to CEI	
Park Avenue/Clarcona Road	7379	US 441/Main Street	Stone Road	Operational/Safety	✓			
Piedmont-Wekiwa Road	7134	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Complete Streets/Safety/Ops	✓			
Plymouth-Sorrento Road	7545	Lake County Line	Kelly Park Road	Widen from 2 to 4 Lanes				PDE to CEI
	7243	Kelly Park Road	Ponkan Road	Operational/Safety				PE to CEI
	7157	Ponkan Road	US 441/Orange Blossom Trail	Widen from 2 to 4 Lanes	✓			
	7374	Kelly Park Road	US 441/Orange Blossom Trail	Complete Streets	✓			

Location	MTP ID	From	To	Description	Unfunded	2026-30	2031-35	2036-45
Ponkan Road	7476	US 441/Orange Blossom Trail	Plymouth-Sorrento Road	Complete Streets			PDE to CEI	
Rock Springs Road	3141	Welch Road	Kelly Park Road	Operational/Safety	✓			
	B1	TSMO Bundle #1		Operational/Safety	✓			
	B2	TSMO Bundle #2		Operational/Safety	✓			
	3127	At Vick Road		Operational/Safety	✓			
	7301	At Welch Road		Safety Improvements	✓			
Round Lake Road	7482	Ponkan Road	Kelly Park Road	Complete Streets/Safety/Ops		PDE to CEI		
	7313	At Kelly Park Road		Operational/Safety				PE to CEI
S Park Avenue / Clarcona Road	4006#	US 441/Main Street	Cleveland Street	Complete Streets		PE to ENV	CST to CEI	
SE Apopka Enhanced Transit Service Area*	6031	-	-	Transit Service	✓			
SR 414 / Maitland Boulevard	1007	US 441/Orange Blossom Trail	SR 434/Forest City Road	Widen from 4 to 6 Lanes		PE to ROW	CST	
Thompson Road	7249	SR 436/Semoran Boulevard	Votaw Road	Operational	✓			
	7484	Votaw Road	Welch Road	Operational/Safety	✓			
US 441 / Orange Blossom Trail	2036#	WB SR 436	Alabama Avenue	Complete Streets/Safety/Ops		PDE to PE	ROW to ENV	CST to CEI
	2058#	Alabama Avenue	S Park Avenue	Complete Streets/Safety/Ops		PDE to PE	ROW to ENV	CST to CEI
	2022#	At Plymouth Sorrento Road		Operational/Safety		PE to ENV	CST to CEI	
	2030#	At Lake View Drive		Operational/Safety		PE to ENV	CST to CEI	
	2164#	SR 451	Errol Pkwy	Complete Streets/Safety/Ops		PDE to ENV	CST to CEI	
	2202	Sadler Road	Orange / Lake County Line	Widen from 4 to 6 Lanes				PDE to CEI
	2023	At Piedmont Wekiva Road		Operational/Safety				PE to CEI
	2092	SR 429	Ponkan Road	Operational/Safety				PE to CEI
US 441 Premium Transit / Commuter Rail*	6023	-	Lake County Line	Premium Transit Service	✓			
W Michael Gladden Boulevard	4007#	S Park Avenue	Bradshaw Road	Complete Streets		PE to ENV	CST to CEI	
W Orange Avenue	7309	US 441/Orange Blossom Trail	Lakeview Drive	Widen from 2 to 4 Lanes	✓			
Wekiwa Springs Road	7527	Canter Club Trail	Orchid Drive	Widen from 2 to 4 Lanes				PDE to CEI
Welch Road	7377	Rock Springs Road	Orange / Seminole County Line	Complete Streets/Safety/Ops		PDE to CEI		
	7548	Thompson Road	Wekiwa Springs Road	Widen from 2 to 4 Lanes		PDE to CEI		
	7547	Rock Springs Road	Thompson Road	Widen from 2 to 4 Lanes				PDE to CEI
	7500	Vick Road	Rock Springs Road	Widen from 2 to 4 Lanes	✓			
West Orange Trail Phase 4A along Rock Springs Road	5077#	W Lester Road	Kelly Park Road / Rock Springs Road	Shared Use Path		ROW to CEI		
West Orange Trail Phase 4B along Welch Road	5085#	Rock Springs Road	Main entrance to Wekiva Springs State Park	Shared Use Path			PE to ROW	ENV to CEI
West Orange Trail Phase 4C along Ponkan Road	5021#	Jason Dwelley Parkway	Rock Springs Road	Shared Use Path	✓			
West Orange Trail Phase 4D	5014#	Kelly Park Road / Rock Springs Road	Wekiva Parkway	Shared Use Path			PE	ROW to CEI

*Extents of Transit improvement are yet to be determined

** PE funding identified in previous TIP (2024-2029) all other phases unfunded

Source: Metroplan Orlando 2045 Metropolitan Transportation Plan, Revised December 11, 2024

Phases: PDE – Project Development and Environment, PE – Preliminary Engineering, ENV – Environmental, CST – Construction, CEI – Construction Engineering Inspection

These projects are prioritized and included in Table 2-1

TABLE 2-3: ONGOING PROJECTS

Project Name	Project Description	Location	Project Type	Phase	Percent Complete - Phase
Welch Road - ATSP Sidewalk	The construction of a 5' sidewalk on the south side of Welch Road from the existing sidewalk at Ustler Road to the existing sidewalk west of the Wellsprings Residence Driveway. The project will also include drainage updates to accommodate the closure of the existing ditches, back of sidewalk and/or offsite drainage.	Ustler Road to existing sidewalk west of Crown Pointe Isle	New sidewalk	Design/ROW	100%
Rock Springs Road Complete Streets	Improvements along Rock Springs Road that include a signalized intersection at the Publix north entrance, a raised median, and restriping at the Rock Springs Road/Lester Road intersection.	From south of the Publix north entrance to north of Lester Road.	Roadway safety	Procurement - Design Services	0%
West Orange Trail Phase 4B	Multi-use trail that connects the West Orange Trail at Rock Springs Road to the Wekiwa Springs State Park.	From Rock Springs Road to Wekiwa Springs State Park Entrance	Recreational Trail - Parks Division	Procurement - Design Services	85% (In negotiations with Consultants)
Lake Apopka Loop Trail	Multiuse trail from Magnolia Park to Clarcona Horseman Park.	Trail design from Lake Apopka Loop Trail to West Orange Trail	Recreational Trail - Parks Division	Construction	40%
Round Lake Road	Design and install 6,200 feet of missing sidewalk from King Avenue to Sadler Road.	Round Lake Road	Sidewalk installation	Design/ROW	92%
North West Orange County Areawide Transportation Study (NOWOCATS)	The main objective is to identify and analyze potential transportation projects that would improve network connectivity and provide relief to constrained corridors. The study shall develop a prioritized list of regional roadway improvements as well as intersection improvements, transit, pedestrian, and bicycle enhancements.	The study limits encompass the region north of Clarcona-Ocoee Road, south of Orange/Seminole County line, east of Orange/Lake County Line and west of Orange/Seminole County line	Areawide Study	Study	10%
Kelly Park Road	Widen to 4-lanes and new signals at Waypointe Boulevard, Golden Gem Road, Effie Drive, and SR 429 NB and SB Ramps.	Waypointe Boulevard to Plymouth Sorrento Road	Roadway widening and signal improvements	Design Note: Construction is funded	60%
SR 429 / Binion Road / Boy Scout Road	New half interchange; roundabout at Binion Road; realignment of Boy Scout Road	SR 429 / Binion Road / Boy Scout Road	New interchange	Design	90%
Ocoee Apopka Road	Widen from 2 to 4 lanes	South of Keene Road to Alston Bay Boulevard	Roadway widening	Design	60%
Ocoee Apopka Road	Widen from 2 to 4 lanes	Harmon Road to Bradshaw Road	Roadway widening	Design	0%
Golden Gem Road	Widen to 3 lanes, install multi-use trail, bike lanes, sidewalk and streetlights	Capital Reef Way to Kelly Park Road	Roadway widening, multimodal improvements	Design Note: Construction funded through a pioneering agreement	60%
Binion Road at Harmon Road	Construct a new roundabout	Binion Road at Harmon Road	Intersection improvement	Design Note: Construction not started	100%
Park Avenue at 5th Street	Rebuild signal with mast arms and install ped signals	Park Avenue at 5th Street	Intersection improvement	Design Note: Construction not started	100%

Project Name	Project Description	Location	Project Type	Phase	Percent Complete - Phase
Rock Springs at Welch Road Intersection Improvement		Rock Springs at Welch Road	Intersection improvement	Design	0%
Vick Road Widening	Widen from 2 to 4 lanes	Martin Street to Sun Bluff Lane	Roadway widening	Design	0%
Vick Road Widening	Widen from 2 to 4 lanes	Welch Road to Lester Road	Roadway widening	Design	0%
Vick Road Widening	Widen from 2 to 4 lanes	Old Dixie Highway to Martin Street	Roadway widening	Design	0%
Park Avenue at Votaw Road Intersection Improvement	Intersection improvement related to school safety	Park Avenue at Votaw Road	Intersection improvement	Construction	0%
Sandpiper Road Realignment and Sandpiper Road at Park Avenue New Signal Construction	Intersection improvement and signal	Sandpiper Road and Park Avenue	Intersection improvement	Design – Road Design – Signal	90% 100%
Binion Road at Lust Road	Construct a new roundabout	Binion Road at Lust Road	Intersection improvement	Design	0%

Notes:
1) Sources: Orange County CIP Project Status Update, Orange County Public Works Projects, City of Apopka CIP (FY 25/26 Draft), CFX Project Update – See **Appendix A-3**

3 TRAFFIC DATA COLLECTION AND EXISTING OPERATIONAL ANALYSIS

3.1 HISTORIC TRAFFIC COUNT DATA AND PREVIOUS STUDIES

Historic count data available online from FDOT's Florida Traffic Online (FTO), Orange County (Interactive Traffic Count Map), City of Apopka Concurrency Management System (CMS), and other recent projects were obtained for the project. The documentation for the historic data collection, including online counts and previous studies, is included in **Appendices B-1, B-2, and B-3**. The sources of relevant count data used for this project are detailed as follows:

Count Programs

- FDOT's FTO – Historical Data through 2024
- Orange County Annual Count Report – Historical Data between 2019 to 2024
- City of Apopka CMS – Data from 2025 (See **Appendix I-2**)

Orange County Previous Studies

- Binion Road at Lake Apopka Loop Trail – 1-Week Bicycle / Pedestrian Count (2022)
- US 441 (Edgewood Dr to Hermit Smith Road) Signal Retiming
- West Road/Clarcona-Ocoee Road (Ocoee-Apopka Road to Rose Avenue) Signal Retiming
- US 441 and SR 436 Timing Report

City of Apopka Previous Studies

- City of Apopka Active Transportation Network Study (2023)
- City of Apopka Vision Zero Safety Action Plan (2024)
- Kelly Park Road Complete Streets Study (2021)
- Ocoee Apopka Road Corridor Study (2022)
- Grow Apopka 2025 Vision (2015)

MetroPlan Orlando

- Rock Springs Road Access Management & Intersection Study (2022)
- West Orange Trail Extension Study (2022)

*City of Apopka Traffic Counts (See **Appendix C**)*

- Kelly Park Road (Plymouth Sorrento Road to Jason Dwelley Parkway) – 24-Hour Count (2025)
- Lester Road (Schopke Lester Road to Plymouth Sorrento Road (CR 437)) – 24-Hour Count (2025)
- Vick Road (Martin Street to Welch Road) – 24-Hour Count (2025)
- US 441 (Yothers Road to SR 429 Connector Road) – 24-Hour Count (2025)
- US 441 (SR 451 to Bradshaw Road) – 24-Hour Count (2025)
- Errol Parkway (Old Dixie Highway to US 441) – 24-Hour Count (2025)
- Plymouth Sorrento Road (Lester Road / SR 429 Connector Road) – 24-Hour Count (2025)

- US 441 (Plymouth Sorrento Rd (CR 437) to Boy Scout Boulevard) – 24-Hour Count (2025)
- Rock Springs Road (US 441 to Michael Gladden Boulevard)– 24-Hour Count (2025)
- Rock Springs Road (Orange Street to US 441) – 24-Hour Count (2025)
- Old Dixie Highway (Plymouth Sorrento Road to Boy Scout Boulevard – 24-Hour Count (2025)
- Hermit Smith Rd (US 441 to General Electric Road) – 24-Hour Count (2025)
- Hermit Smith Rd (Location 951) – 24-Hour Count (2025)
- Hermit Smith Rd (General Electric Road to US 441) – 24-Hour Count (2025)
- US 441 (Highland Avenue to Alabama Avenue – 24-Hour Count (2025)
- Roger Williams Road (US 441 to SR 436) – 24-Hour Count (2025)
- SR 429 Connector (US 441 to Plymouth Sorrento Road) – 24-Hour Count (2025)
- Votaw Road (Park Avenue to Christiana Avenue) – 24-Hour Count (2025)
- Votaw Road (Thompson Road to Wekiva Springs Road) – 24-Hour Count (2025)
- US 441 (SR 436 to Sheeler Avenue) – 24-Hour Count (2025)

3.2 FIELD-COLLECTED TRAFFIC DATA

In addition to the count data collected online and from previous studies, new counts were collected in the field on typical weekdays in April 2025.

For roadway segment volume count data, 48-hour pneumatic tube counts were collected in the field at 23 locations. The field-collected volume counts were supplemented with publicly available online data from FDOT, Orange County, and City of Apopka count stations for a full data set of 27 study segments.

For the intersection turning movement count (TMC) data, four (4)-hour intersection TMCs were collected in the field at all 44 study intersections. The turning movement counts were collected during the AM peak period (7:00 AM-9:00 AM) and PM peak period (4:00 PM - 6:00 PM). The TMC data also includes pedestrian, and bicycle counts at each intersection.

The **Figure 3-1** provides the location and type of counts collected in the field in support of this study. The raw field-collected traffic counts are included in **Appendices C-1** and **C-2**.

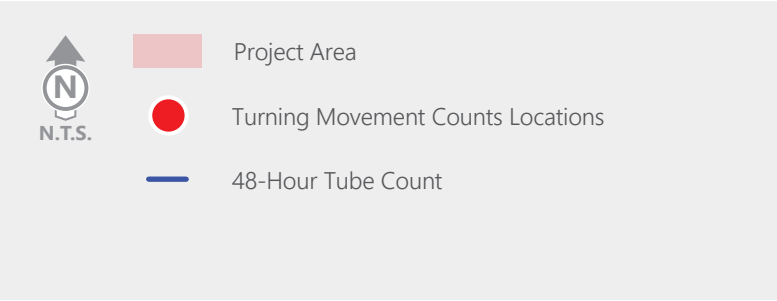
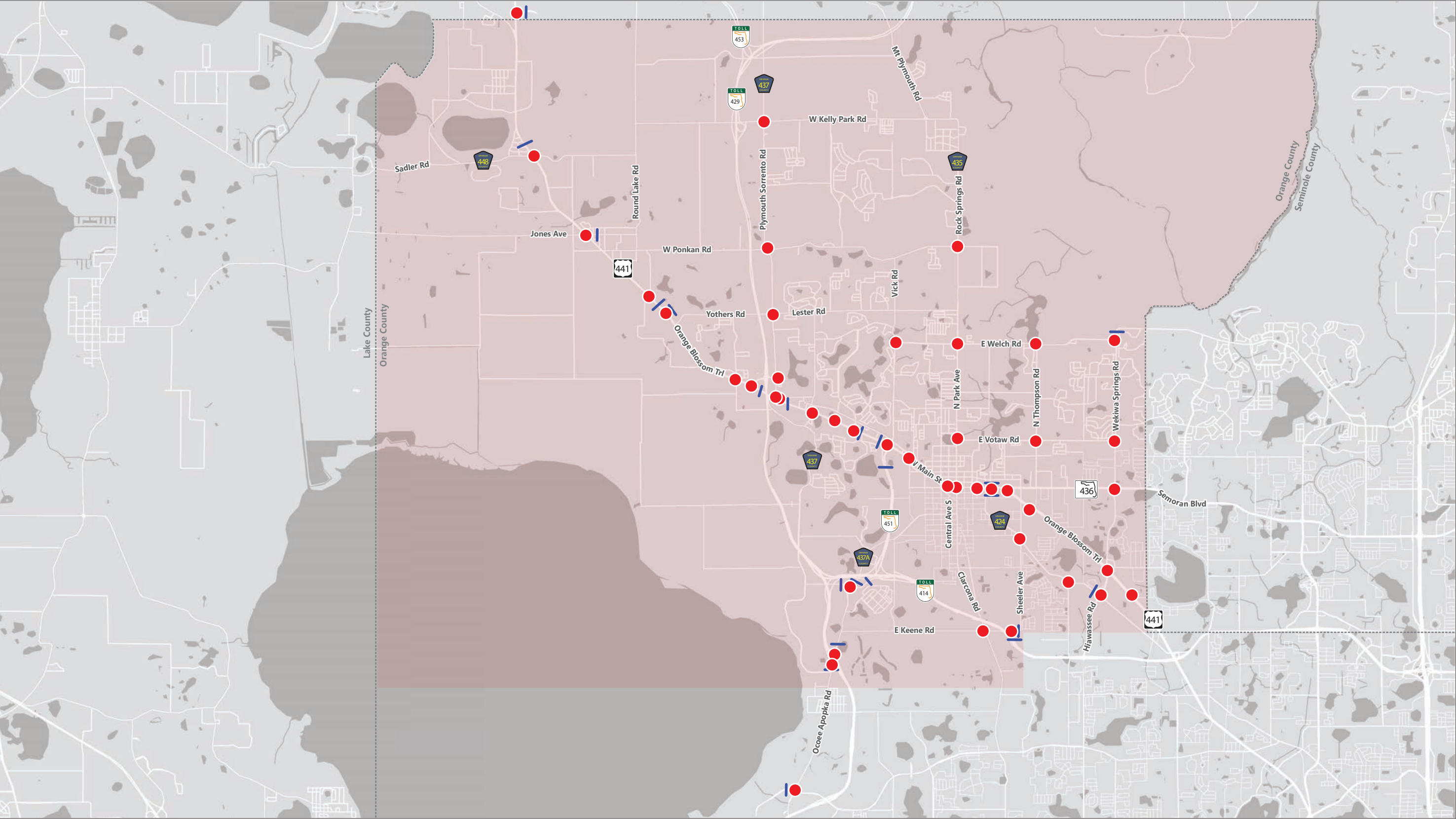


Figure 3-1
Field Collected Traffic Count Locations
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

3.3 EXISTING CONDITIONS TRAFFIC DEVELOPMENT

Traffic volumes for analysis purposes were developed based on comparison of various sources and seasonal adjustments to provide conservative estimates of Annual Average Daily Traffic (AADT) and PM Peak Hour Peak Direction Volumes (PMPHPD) for segments and Turning Movement Counts (TMC) for intersections.

For AADT, the volumes were determined based on comparison between multiple volume sources for each segment (City of Apopka Tube Counts, Orange County CMS, Apopka CMS, Study Tube Counts, and AADT estimates from the Study TMC, using an assumed K factor of 9.0%), selecting the maximum AADT estimate for each segment. Where appropriate, counts were seasonally adjusted based on seasonal factors (SF) from the FDOT Peak Season Factor Category (PSFC) report for Orange County. For PMPHPD volumes, the analyzed peak hour peak directional volumes are specific to the PM Peak Hour for consistency with the Orange County CMS database. Similar to AADTs, the PMPHPD volumes used for analysis were based on comparison of multiple sources and seasonal correction factors were applied where appropriate. Summary tables of the volume comparison for AADT and PMPHPD (showing all estimates from the data sources) and the latest FDOT Peak Season Factor Category Report is provided in **Appendix C**.

For TMC, counts for all study intersections were collected in April 2025 and seasonally adjusted based on the latest FDOT PSFC Report as previously noted.

The AADTs for all the study segments are shown in the **Figure 3-2**. A table with AADTs for study segments (to match the figure 3-2) is included in the **Appendix C-2**. The 2025 AM and PM peak hour turning movement volumes for all study intersections are included in **Figure 3-3**.

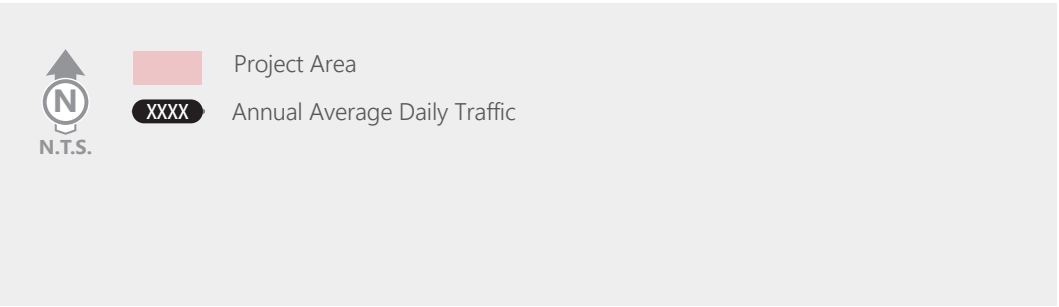
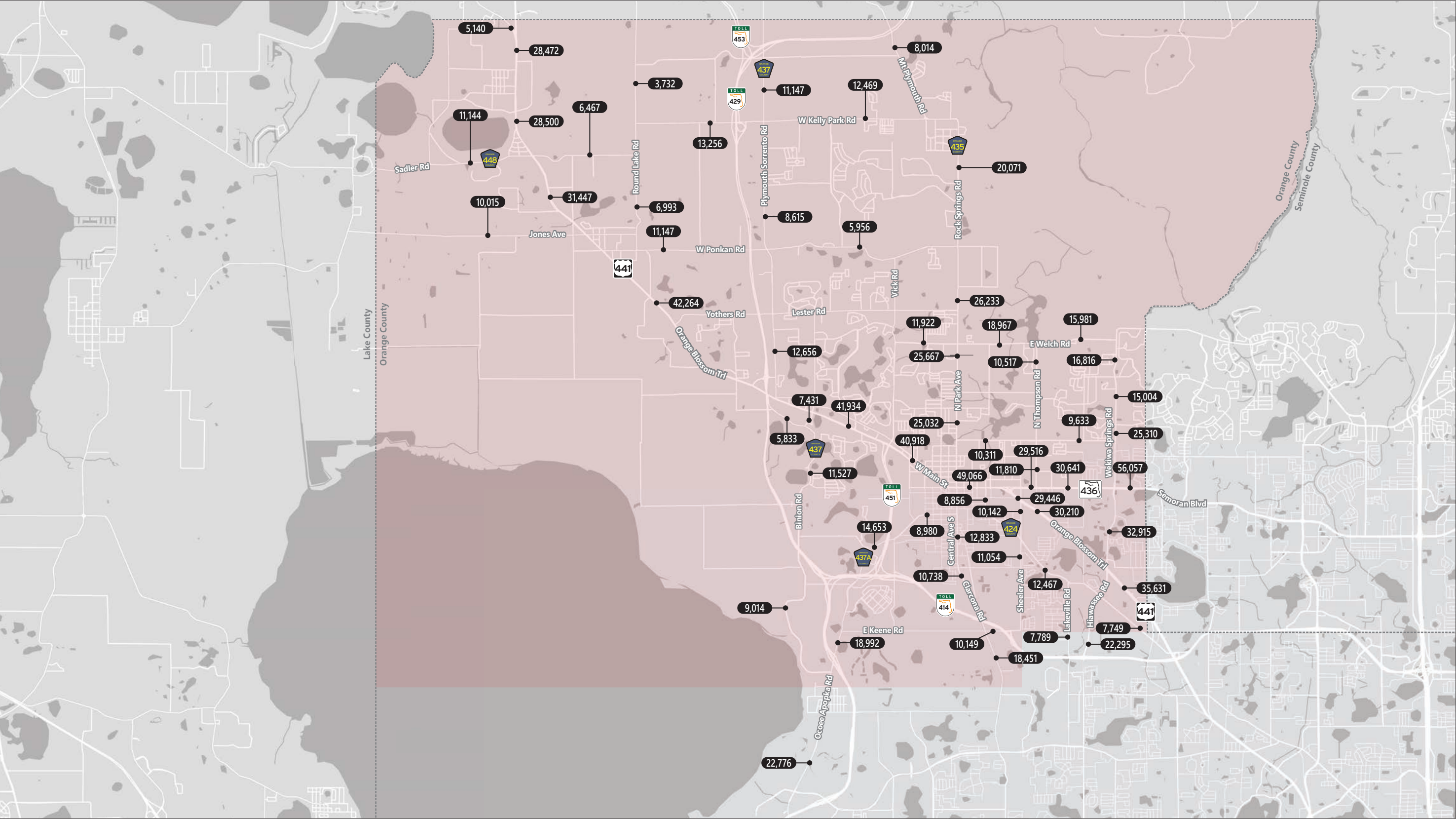




Figure 3-2

Annual Average Daily Traffic
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

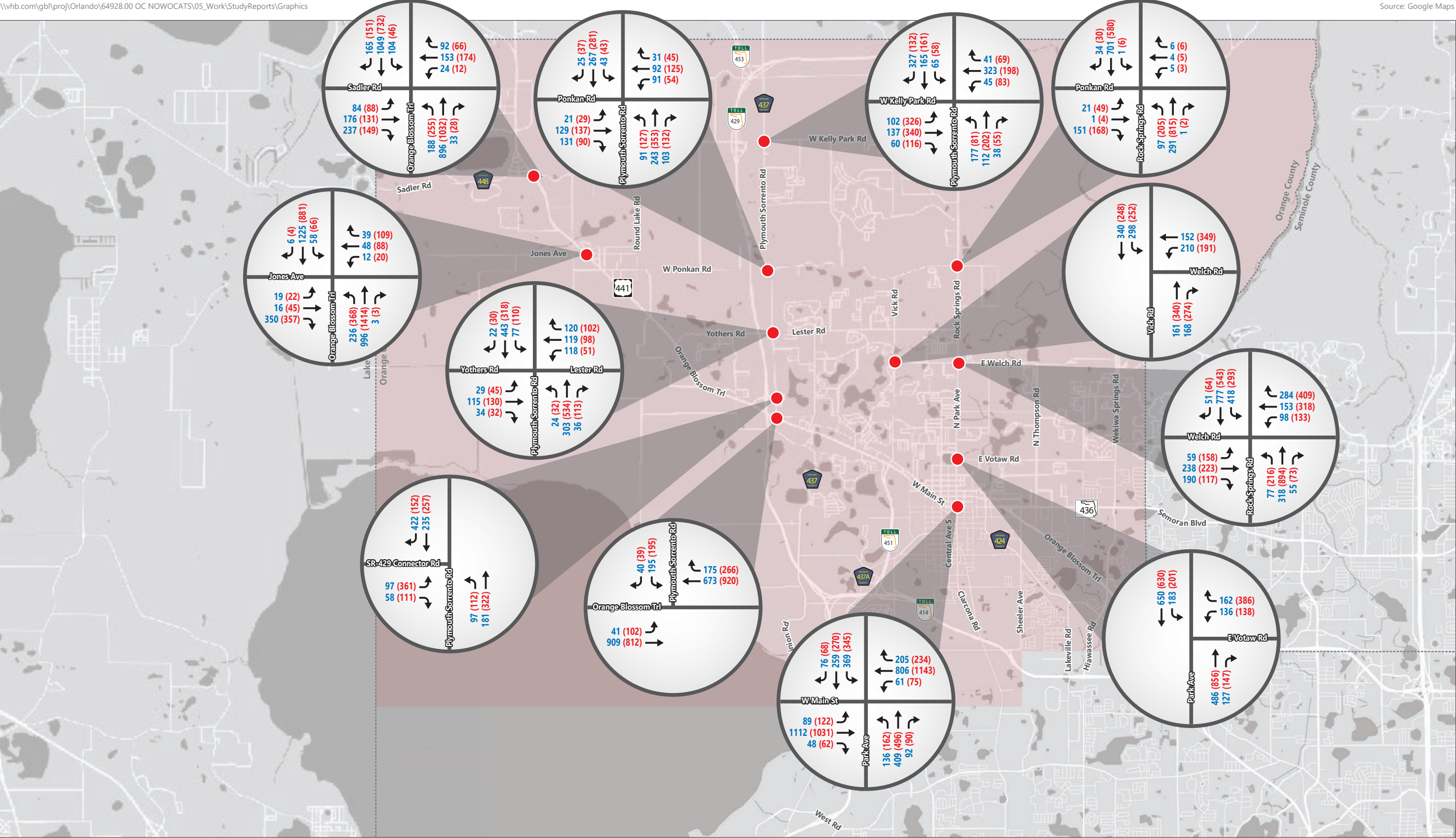


Figure 3-3
Turning Movement Count Map A
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

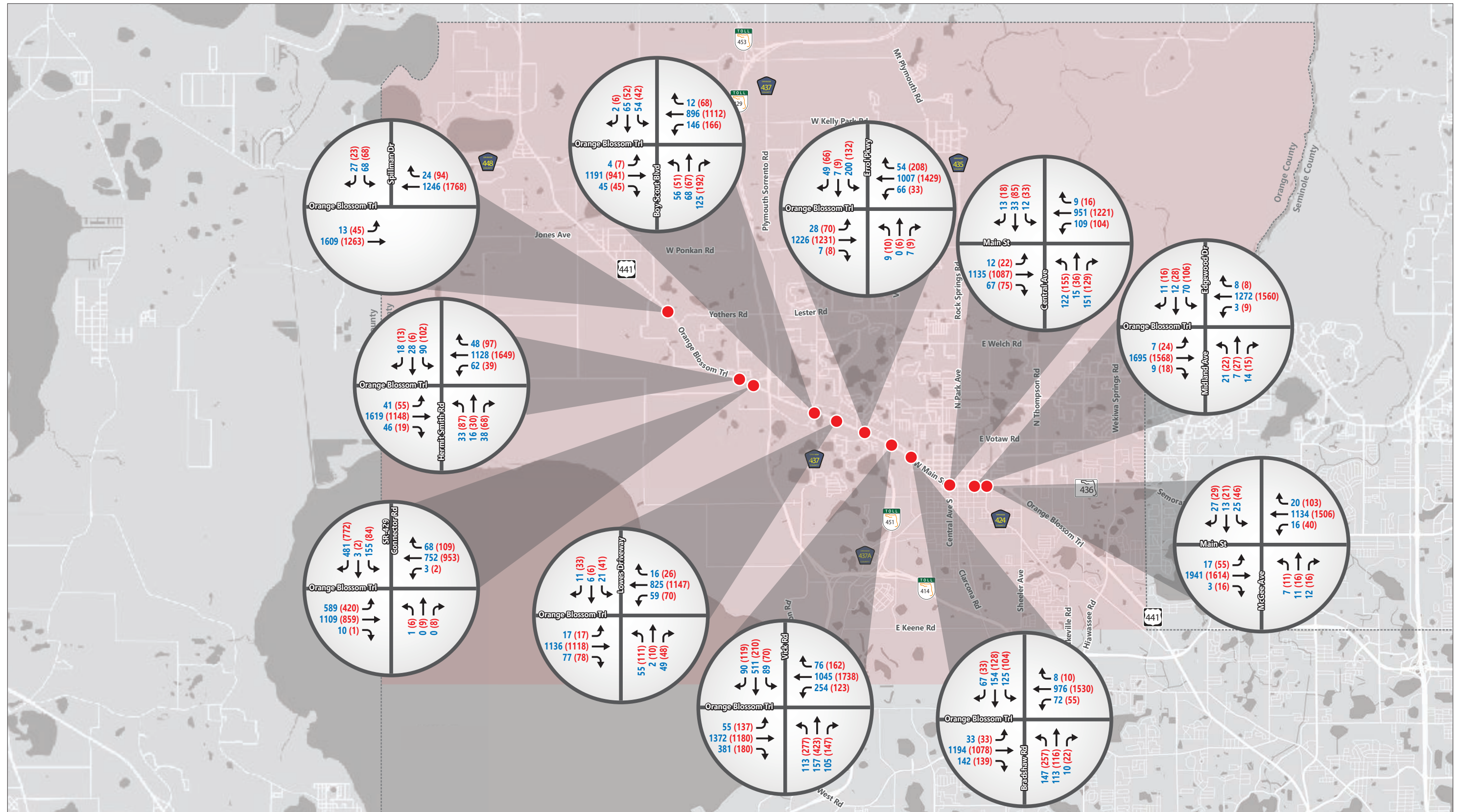
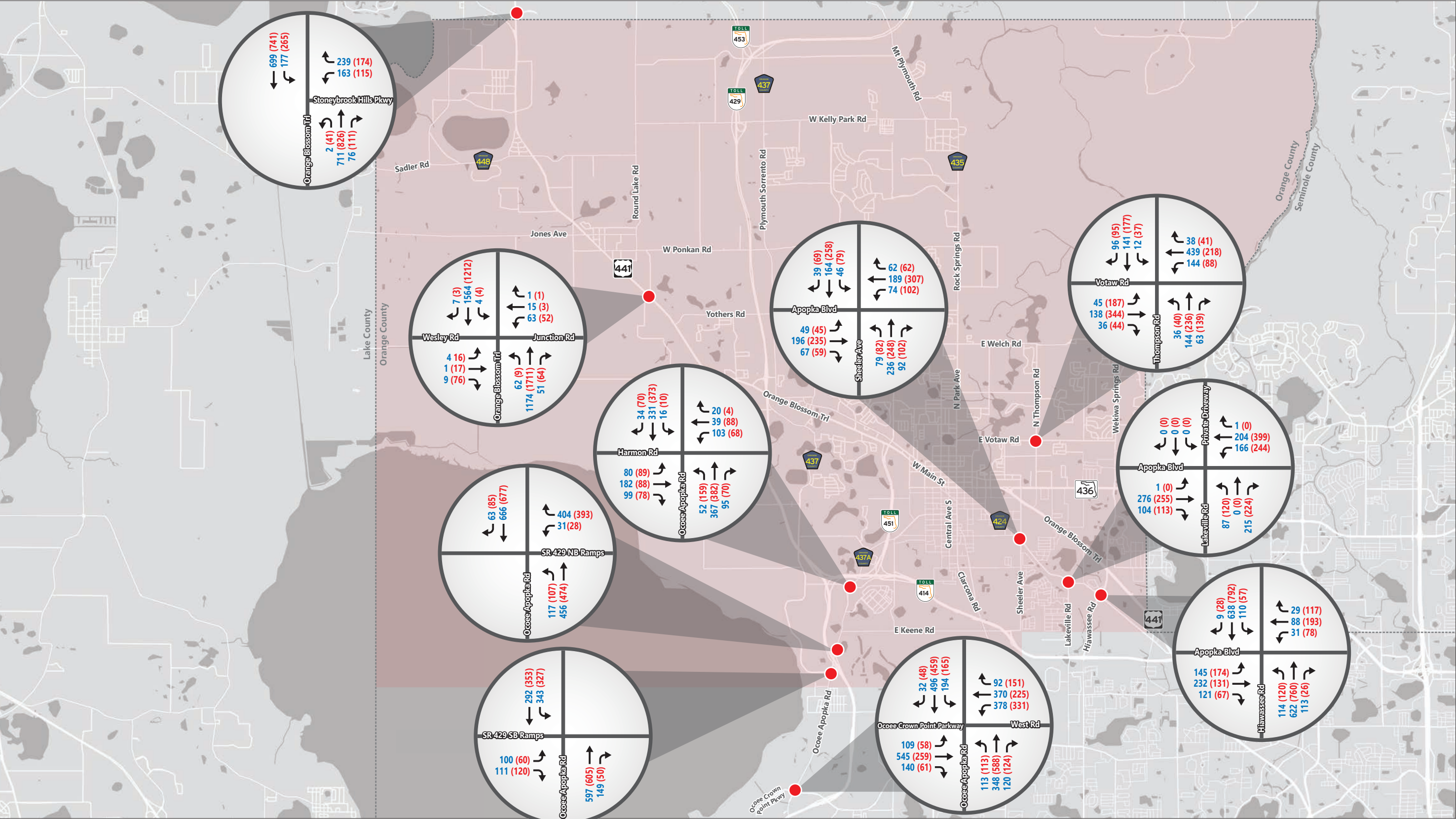


Figure 3-3
Turning Movement Count Map C
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)





3.4 TRAFFIC FACTORS DEVELOPMENT

Traffic factors that will be carried into future year analysis include K factors, Directional Distribution (D) factors, and Design-Hour-Truck (DHT) factors.

3.4.1 K and D Factors

The K factor is the ratio of traffic volume in the study hour to the AADT. The directional distribution factor, D, is based on the median value of the directional factors for the highest 200 hours of volumes for each continuous count station.

In determining these factors for the study corridor and side streets, statewide guidelines (from the *2024 FDOT Project Traffic Forecasting (PTF) Handbook*) for the K and D factors were compared to D factors obtained from the Orange County Annual Count Program and factors obtained from the 2024 FTO database.

The following **Table 3-1** and **Table 3-2** show the range of standard K and D factors per the guidelines in the *2024 FDOT PTF Handbook*.

TABLE 3-1: STANDARD K-FACTORS

Roadway Context Classification	Area Type	Facility Type	Recommended K Factor Range (%)
C1 – Natural C2 – Rural C2T – Rural Town	Rural	Highways and Arterials	8.5 – 10.5
C3C – Suburban Commercial C3R – Suburban Residential C4 – Urban General	Suburban and Urban	Arterials	7.5 – 9.5
C5 – Urban Center C6 – Urban Core	Urban Core	Arterials	7.0 – 9.0
Limited Access (LA)	Rural	Freeways	8.5 – 10.5
	Urban	Freeways	7.5 – 9.5
	Urban Core	Freeways	7.0 – 9.0

Source: FDOT Project Traffic Forecasting Handbook, 2024

TABLE 3-2: STANDARD D-FACTORS

Road Type	D-Factor (%)			Standard Deviation
	Low	Mid	High	
Rural Freeway	52.3	54.8	57.3	1.73
Rural Arterial	51.1	58.1	79.6	6.29
Urban Freeway	50.4	55.8	61.2	4.11
Urban Arterial	50.8	57.9	67.1	4.60

Source: FDOT Project Traffic Forecasting Handbook, 2024

Measured K and D factors were developed using the historical count data (2021 – 2024) provided within the Orange County and City of Apopka traffic count programs. The following **Table 3-3** shows the average measured K and D factor for each study roadway. A full table including factors and sources for each roadway segment is provided in **Appendix D**.

Overall, the K-Factors are found to range between 7.8% and 10.1%, which are comparable to standard factors listed in the *2024 FDOT PTF Handbook* as shown in **Table 3-1**. The D-Factors range from 52.0% to 64.7%, representing a wide range of directional splits, also within the standard ranges.

TABLE 3-3: AVERAGE MEASURED K AND D-FACTORS

Roadway	K-Factor	D-Factor
Sadler Road	9.6%	53.0%
Jones Avenue	8.4%	54.1%
Old Hwy US 441	9.3%	58.1%
Round Lake Road	10.1%	55.8%
Mt Plymouth Road	9.4%	61.0%
W Kelly Park Road	9.3%	61.5%
Plymouth Sorrento Road	9.3%	59.0%
N Park Avenue/Rock Springs Road	8.7%	57.9%
W Welch Road	8.7%	56.4%
Piedmont-Wekiwa Road	8.6%	55.2%
Wekiwa Springs Road	8.7%	55.7%
Votaw Road	9.0%	54.3%
SR 436/Semoran Boulevard	8.2%	52.7%
Sheeler Avenue	8.9%	52.2%
W Orange Avenue	8.4%	64.7%
S Binion Road	9.1%	55.3%
Ocoee Apopka Road/Michael Gladden Boulevard	8.5%	52.8%
E Keene Road	8.6%	52.0%
Alabama Avenue	9.4%	55.6%
US 441/Orange Blossom Trail	7.8%	55.5%
Clarcona Road / Park Avenue	8.0%	53.1%
Apopka Boulevard	8.6%	62.8%
Hiawassee Road	8.2%	52.6%
Lakeville Road	9.5%	54.3%
Ponkan Road	9.7%	58.3%
Lake View Drive	8.5%	58.5%
Thompson Road	9.1%	60.6%

3.4.2 T and DHT Factors

The design hour truck factor, DHT, is the percentage of truck traffic during the peak hour and is recommended as one-half of the T factor in the *2024 FDOT PTF Handbook*.

For analysis purposes, DHT factors were developed from the TMC data for each individual intersection movement. A full table demonstrating the truck counts and percentages at each intersection are provided in **Appendix D**.

3.4.3 Recommended K, D and T Factors

Table 3-4 provides the recommended design K and D factors based on the evaluation of the existing measured characteristics and historical characteristics. The T factors were obtained from available FTO data and field collected TMCs.

TABLE 3-4: RECOMMENDED K, D, AND T FACTORS

Roadway	Recommended Factors		
	K-Factor	D-Factor	T-Factor
Sadler Road	9.50%	55.00%	10.00%
Jones Avenue	8.50%	55.00%	5.50%
Old Hwy US 441	9.50%	58.00%	4.50%
Round Lake Road	10.00%	56.00%	5.50%
Mt Plymouth Road	9.50%	61.00%	5.50%
W Kelly Park Road	9.50%	62.00%	4.50%
Plymouth Sorrento Road	9.50%	59.00%	7.00%
N Park Avenue/Rock Springs Road	9.00%	58.00%	11.50%
W Welch Road	9.00%	57.00%	4.50%
Piedmont-Wekiwa Road	8.50%	55.00%	3.50%
Wekiwa Springs Road	9.00%	56.00%	5.50%
Votaw Road	9.00%	55.00%	5.50%
SR 436/Semoran Boulevard	8.00%	55.00%	6.00%
Sheeler Avenue	9.00%	55.00%	2.00%
W Orange Avenue	8.50%	65.00%	16.50%
S Binion Road	9.00%	55.00%	5.50%
Ocoee Apopka Road/Michael Gladden Boulevard	8.50%	55.00%	5.00%
E Keene Road	8.50%	55.00%	4.50%
Alabama Avenue	9.50%	56.00%	2.00%
US 441/Orange Blossom Trail	8.00%	56.00%	7.00%

Roadway	Recommended Factors		
	K-Factor	D-Factor	T-Factor
Clarcona Road / Park Avenue	8.00%	55.00%	5.00%
Apopka Boulevard	8.50%	63.00%	2.50%
Hiawassee Road	8.00%	55.00%	3.00%
Lakeville Road	9.50%	55.00%	3.50%
Ponkan Road	9.50%	58.00%	7.00%
Lake View Drive	8.50%	59.00%	4.50%
Thompson Road	9.00%	61.00%	4.50%

Note:

1. Recommended K and D factors are based on an average of historical K and D factors from field collected counts, supplemented by Orange County and City of Apopka data, within the recommended range from the 2024 FDOT PTF Handbook based on context class (please see Section 4.2 for the individual context class).

2. Recommended T-factors are based on the average of historical T-factors (2021 to 2024) from FTO or TMCs (Please see **Appendix D** for derivation)

3.5 EXISTING MULTIMODAL LEVEL OF SERVICE (LOS) ANALYSIS

Synchro 12 software was used to perform LOS operational analyses for automobile (auto), pedestrian, and bicycle modes at study intersections. Signal timing data used in the analysis were obtained from the Orange County and City of Apopka and are provided in **Appendix E**.

For most study intersections, auto mode LOS analysis was conducted based on HCM 7th Edition methodology in Synchro 12. Synchro methodology results were used for intersections that were not compatible with HCM methodology due to atypical intersection geometry or non-NEMA phasing. Note that all study area intersections are signalized, and the analysis does not include stop or yield control intersections.

Roadway segment LOS for the auto mode was computed using Orange County CMS roadway capacities (based on Context Classification). Furthermore, arterial LOS analysis was conducted in Synchro for the major arterial in the study area, US 441/Orange Blossom Trail, based on HCM methodology incorporating running speed, travel time, and control delay.

Pedestrian and bicyclist level of traffic stress (LTS) and transit LOS for the study corridor roadway segments were computed based on the criteria outlined in the latest FDOT 2023 Multimodal Quality/Level of Service (Q/LOS) Handbook. Furthermore, pedestrian and bicyclist LOS analysis was conducted in Synchro for all intersection approaches based on HCM methodology incorporating features such as pedestrian control type and bicyclist facilities.

3.5.1 Automobile Intersection LOS

Table 3-5 shows overall delay and LOS information for signalized intersections based on HCM 7th Edition methodology (and Synchro methodology in some cases). The Synchro output reports are provided in **Appendices F-1** and **F-2** for AM and PM peak hour conditions, respectively. Per the Orange County CMS database; the LOS minimum acceptable standards vary from D to E and are specific to each roadway. Minimum LOS is assumed as E for roadways not in the CMS database. The intersections which exceed their LOS standard are highlighted in red in the table.

The overall intersection analysis results show that the following intersections are deficient in the existing conditions of 2025 (exceeding the LOS standard), with all remaining intersections operating within standard:

AM Peak Hour Intersection Deficiencies

- US 441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road, LOS F
- US 441/Orange Blossom Trail & Central Avenue, LOS F
- US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road, LOS F
- US 441/Orange Blossom Trail & Sadler Road, LOS F
- Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard, LOS F

PM Peak Hour Intersection Deficiencies

- US 441/Orange Blossom Trail & Central Avenue, LOS F
- US 441/Orange Blossom Trail & W Orange Avenue, LOS F
- US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road, LOS F
- Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard, LOS F.

The individual movements with volume-to- capacity (v/c) ratios that exceed 1.0 are listed below:

Existing 2025 AM

- US 441/Orange Blossom Trail & Victor Drive/Roger Williams Avenue: SBT (1.12)
- US 441/Orange Blossom Trail & SR 451/Vick Road: SBT (1.23)
- US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road: EBL (1.08); SBR (2.09)
- US 441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road: SBL (1.30)
- US 441/Orange Blossom Trail & Sadler Road: EBL (1.82); EBR (1.02); SBT (1.01); WBL (2.67)
- Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road: SBR (1.08)
- Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard: EBR (1.03); EBT (1.03); SBL (1.65); WBL (1.01)
- US 441/Orange Blossom Trail & Central Avenue: NBL (3.93)

Existing 2025 PM

- US 441/Orange Blossom Trail & SR 451/Vick Road: WBT (1.13)
- US 441/Orange Blossom Trail & W Orange Avenue: NBL (2.61)

- US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road: SBR (2.57)
- US 441/Orange Blossom Trail & Hiawasse Road/Piedmont Wekiwa Road: SBL (1.01)
- Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road: NBT (1.17)
- Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard: SBL (1.07); WBL (1.41); WBR (1.07); WBT (1.07)
- Park Avenue/Rock Springs Road & Welch Road: WBR (1.16)
- US 441/Orange Blossom Trail & Central Avenue: NBL (5.86); SBL (1.65)

TABLE 3-5: INTERSECTION LOS ANALYSIS

Intersection Node and Name	Minimum LOS Standard**	2025 AM		2025 PM	
		Delay (s)	LOS	Delay (s)	LOS
1: US 441/Orange Blossom Trail & Benbow Court	E	16.8	B	29.5	C
2: US 441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road	E	81.1	F	67.9	E
3: US 441/Orange Blossom Trail & Victor Drive & Roger Williams Avenue*	E	38.8	D	24.8	C
4: US 441/Orange Blossom Trail & SR 436/Semoran Boulevard	E	0.9	A	1.1	A
5: US 441/Orange Blossom Trail & McGee Avenue	E	7.1	A	9.2	A
6: US 441/Orange Blossom Trail & Midland Avenue/Edgewood Drive*	E	15.1	B	20.6	C
7: US 441/Orange Blossom Trail & Park Avenue	E	49.5	D	52.4	D
8: US 441/Orange Blossom Trail & Central Avenue	E	95.1	F	180.7	F
9: US 441/Orange Blossom Trail & Bradshaw Road	E	22.1	C	29.1	C
10: US 441/Orange Blossom Trail & SR 451/Vick Road	E	78.3	E	78.8	E
11: US 441/Orange Blossom Trail & Driveway/Errol Parkway	E	49.6	D	45.2	D
12: US 441/Orange Blossom Trail & Home Depot/Lowes Driveway	E	14.8	B	19.9	B
13: US 441/Orange Blossom Trail & Boy Scout Boulevard	E	26.8	C	23.2	C
14: US 441/Orange Blossom Trail & Plymouth Sorrento Road	E	23.0	C	25.9	C
15: US 441/Orange Blossom Trail & W Orange Avenue	E	15.5	B	126.7	F
16: US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road	E	114.8	F	200.7	F
17: US 441/Orange Blossom Trail & Hermit Smith Road	D	16.6	B	13.1	B
18: US 441/Orange Blossom Trail & Spillman Drive	D	9.1	A	10.5	B
19: US 441/Orange Blossom Trail & Wesley Road/Junction Road*	D	21.3	C	15.0	B
20: US 441/Orange Blossom Trail & Jones Avenue	D	36.3	D	36.9	D
21: US 441/Orange Blossom Trail & Sadler Road	D	154.6	F	30.6	C
22: US 441/Orange Blossom Trail & Stoneybrook Hills Parkway	D	19.8	B	17.4	B
23: Hiawassee Road & Apopka Boulevard	E	36.1	D	37.8	D
24: Lakeville Road/Private Driveway & Apopka Boulevard*	E	12.7	B	15.4	B
25: Sheeler Avenue & Apopka Boulevard	E	31.2	C	35.2	D
26: Clarcona Road & Keene Road	E	25.2	C	29.2	C
27: SR 414 Ramps & Keene Road	E	11.1	B	12.7	B
28: Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road	E	54.0	D	65.3	E
29: Ocoee Apopka Road & SR 429 SB Ramps	E	20.2	C	16.0	B
30: Ocoee Apopka Road & SR 429 NB Ramps	E	59.6	E	59.6	E
31: Ocoee Apopka Road & Harmon Road	E	23.0	C	21.5	C
32: Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard	E	120.3	F	111.7	F
33: Wekiwa Springs Road & Votaw Road*	E	15.6	B	12.3	B
34: Wekiwa Springs Road & Welch Road*	E	26.2	C	20.4	C
35: Thompson Road & Votaw Road	E	22.1	C	24.1	C
36: Thompson Road & Welch Road	E	10.8	B	10.8	B
37: Park Avenue & Votaw Road*	E	12.6	B	12.9	B
38: Park Avenue/Rock Springs Road & Welch Road	E	28.0	C	51.1	D
39: Rock Springs Road & Ponkan Road	E	12.0	B	13.4	B
40: Vick Road & Welch Road	E	15.6	B	30.8	C
41: Plymouth Sorrento Road & SR 429 Connector	E	23.7	C	18.8	B
42: Plymouth Sorrento Road & Yothers Road/Lester Road	E	24.3	C	25.2	C
43: Plymouth Sorrento Road & Ponkan Road	E	12.8	B	12.2	B
44: Plymouth Sorrento Road & Kelly Park Road	D	36.2	D	32.8	C

*Indicates intersections that are not compatible with HCM methodology (due to phasing or intersection geometry). Synchro methodology results are shown.

**Minimum LOS standards based on CMS LOS Standard (MinLOS). LOS D is only considered when both intersecting roadways have LOS D standard in CMS.

3.5.2 Roadway Segment LOS

The roadway segment LOS analysis was conducted based on local concurrency CMS LOS thresholds and HCM 7th Edition LOS thresholds.

The roadway segment LOS for the auto mode was computed using roadway segment capacities from Orange County CMS database and the City of Apopka CMS database. As noted in section 3.3, the analyzed peak hour peak directional volumes are specific to the PM Peak Hour for consistency with the Orange County CMS database. The volumes were determined based on comparison between volume sources for each segment (City of Apopka Tube Counts, Orange County CMS, Study Tube Counts, and Study TMC), selecting the maximum PMPHPD volumes. Where appropriate, counts were seasonally adjusted based on the FDOT PSFC report for Orange County. A summary of the volume comparison and the latest FDOT PSFC Report is provided in **Appendix C**.

The roadway segment analysis is provided in **Table 3-6**, which includes the PMPHPD volumes, Maximum Service Volume (MSV) LOS thresholds, the directional capacities, and the minimum acceptable LOS standards per the Orange County / City of Apopka CMS databases.

The analysis shows that all the study segments are performing within the minimum LOS concurrency standard in the existing condition – except the following:

- ❖ Kelly Park Road segment from Round Lake Road to Plymouth Sorrento Road,
- ❖ Welch Road from Rock Springs Road to Wekiwa Springs Road,
- ❖ Ocoee Apoka Road from West Road / Ocoee Crown Point Parkway to Harmon Road,
- ❖ US 441/Orange Blossom Trail from SR 436/Semoran Boulevard to Park Avenue,
- ❖ US 441/Orange Blossom Trail from Western Beltway to Plymouth Sorrento Road,
- ❖ Clarcona Road from Gilliam Road to Keene Road.

Table 3-7 shows the average speeds and HCM 7th Edition-based LOS for the major arterial US 441/Orange Blossom Trail. The HCM based Synchro arterial LOS analysis results (based on US 441/Orange Blossom Trail being classified as Arterial Class II) are provided in **Appendices F-1** and **F-2** for AM and PM peak hour conditions, respectively.

The following roadway segments are shown to operate at LOS E or F in the existing conditions based on HCM arterial standards and are highlighted in **Table 3-7**:

US 441/Orange Blossom Trail

AM Deficiencies

- McGee Avenue to Edgewood Drive/Midland Avenue, SB Direction, LOS E
- Park Avenue to Central Avenue, SB Direction, LOS E

PM Deficiencies

- Edgewood Drive/Midland Avenue to Park Avenue, NB Direction, LOS E
- Park Avenue to Central Avenue, Both Directions, LOS E
- Bradshaw Road to Vick Road/SR 451, NB Direction, LOS F
- West Orange Avenue to SR 429 Connector Road/Kitt Avenue, NB Direction, LOS E

TABLE 3-6: ROADWAY SEGMENT LOS ANALYSIS

Roadway / Segment	Roadway Capacity Analysis									
	# of Lanes	LOS B	LOS C	LOS D	LOS E	Min LOS	Capacity	PMPHPD Volume*	Selected Source	Segment LOS
Sadler Road										
Lake County Line to Orange Blossom Trail	2	0	670	740	740	D	740	589	OC CMS	C
US 441/Orange Blossom Trail to Round Lake Road	2	0	670	740	740	D	740	252	Study TMC	C
Jones Avenue										
US 441/Orange Blossom Trail to Lake County Line	2	0	670	740	740	D	740	460	Study TMC	C
Old Hwy US 441										
US 441/Orange Blossom Trail to Lake County Line	2	0	670	740	740	D	740	266	OC CMS	C
Round Lake Road										
Ponkan Road to Kelly Park Road	2	240	430	740	1,490	D	740	345	OC CMS	C
Kelly Park Road to Lake County Line	2	240	430	740	1,490	D	740	220	OC CMS	B
Mt Plymouth Road										
Kelly Park Road to Lake County Line	2	240	430	740	1,490	D	740	456	OC CMS	D
W Kelly Park Road										
Round Lake Road to Plymouth Sorrento Road	2	240	430	740	1,490	D	740	782	Study TMC	E
Plymouth Sorrento Road to Rock Springs Road	2	240	430	740	1,490	D	740	652	OC CMS	D
Plymouth Sorrento Road										
Lake County Line to Kelly Park Road	2	0	670	740	740	D	740	661	OC CMS	C
Kelly Park Road to Ponkan Road	2	240	430	740	1,490	D	740	445	OC CMS	D
Ponkan Road to US 441/Orange Blossom Trail	2	420	840	1,190	1,640	E	1,640	681	Study TMC	C
N Park Avenue/Rock Springs Road										
Orange Blossom Trail to Martin Street	5	0	950	2,075	2,130	E	2,130	1,242	Study TMC	D
Martin Street to Welch Road	5	0	2,425	2,510	2,510	E	2,510	1,365	OC CMS	C
Lester Road to Ponkan Road	4	0	1,910	2,000	2,000	E	2,000	1,461	Study TMC	C
Ponkan Road to Kelly Park Road	4	0	1,530	1,580	1,580	D	1,580	1,028	OC CMS	C
W Welch Road										
Vick Rd to Rock Springs Road	2	0	370	750	800	E	800	598	Study TMC	D
Rock Springs Road to N Thompson Road	2	0	830	880	880	E	880	970	OC CMS	F
N Thompson Road to Wekiwa Springs Road	2	0	670	740	740	E	740	847	Study TMC	F
Piedmont-Wekiwa Road										
US 441/Orange Blossom Trail to SR 436/Semoran Boulevard	4	0	1,910	2,000	2,000	E	2,000	1,858	Apopka CMS	C
Wekiwa Springs Road										
SR 436/Semoran Boulevard to Canter Club Trail	4	0	1,910	2,000	2,000	E	2,000	1,130	OC CMS	C
Canter Club Trail to Orchard Drive	2	0	830	880	880	E	880	827	OC CMS	C
Orchard Dr to Seminole County Line	2	0	830	880	880	E	880	874	Study TMC	D
Votaw Road										

Roadway / Segment	Roadway Capacity Analysis									
	# of Lanes	LOS B	LOS C	LOS D	LOS E	Min LOS	Capacity	PMPHPD Volume*	Selected Source	Segment LOS
Park Avenue to Christiana Avenue**	2	0	750	790	790	E	790	575	Study TMC	C
Christiana Avenue to Thompson Road**	2	0	750	790	790	E	790	575	Study TMC	C
Thompson Road to Wekiwa Springs Road**	2	0	750	790	790	E	790	520	Study TMC	C
SR 436/Semoran Boulevard										
US 441/Orange Blossom Trail to Seminole County Line	8	0	3,970	4,040	4,040	E	4,040	2,634	Study TMC	C
Sheeler Avenue										
Keene Road to Apopka Boulevard	2	0	830	880	880	E	880	485	OC CMS	C
Apopka Boulevard to SR 436/Semoran Boulevard	2	0	370	750	800	E	800	471	OC CMS	D
W Orange Avenue										
US 441/Orange Blossom Trail to Lake View Drive	2	0	830	880	880	E	880	298	Study TMC	C
S Binion Road										
Lake View Drive to Lust Road	2	420	840	1,190	1,640	E	1,640	579	OC CMS	C
Lust Road to Ocoee-Apopka Road**	2	0	830	880	880	D	880	378	OC CMS	C
Ocoee Apopka Road/Michael Gladden Boulevard										
West Road / Ocoee Crown Point Pkwy to Binion Road	2	240	430	740	1,490	D	740	929	OC CMS	E
Binion Road to Harmon Road	2	240	430	740	1,490	D	740	879	Study Tubes	E
Harmon Road to Bradshaw Road	2	0	370	750	800	E	800	641	OC CMS	D
Bradshaw Road to South Central Avenue	2	0	370	750	800	E	800	415	OC CMS	D
E Keene Road										
Clarcona Road to Sheeler Avenue	2	0	670	740	740	D	740	468	OC CMS	C
Apopka Boulevard/Alabama Avenue										
Sheeler Avenue to US 441/Orange Blossom Trail	2	0	830	880	880	E	880	458	Study TMC	C
US 441/Orange Blossom Trail										
Seminole County Line to Piedmont-Wekiwa Road	4	0	1,910	2,000	2,000	E	2,000	1,970	Study TMC	D
Piedmont-Wekiwa Road to Roger Williams Road**	4	0	1,910	2,000	2,000	E	2,000	1,587	Study TMC	C
Roger Williams Road to SR 436/Semoran Boulevard**	4	0	1,910	2,000	2,000	E	2,000	1,250	OC CMS	C
SR 436/Semoran Boulevard to Park Avenue**	4	2,160	2,160	2,160	2,160	E	2,160	2,417	OC CMS	F
Park Avenue to Western Beltway**	4	2,520	2,600	2,600	2,600	E	2,000	1,748	Apopka Tubes	B
Western Beltway to Plymouth Sorrento Road	4	0	1,910	2,000	2,000	E	2,000	2,134	Study TMC	F
Plymouth Sorrento Road to Ponkan Road	4	0	1,910	2,000	2,000	D	2,000	1,931	OC CMS	D
Ponkan Road to Sadler Road	4	0	1,910	2,000	2,000	D	2,000	1782	Study TMC	C
Sadler Road to Earlwood Avenue	4	0	1,910	2,000	2,000	D	2,000	1,365	OC CMS	C
Earlwood Avenue to Lake County Line	4	0	1,910	2,000	2,000	D	2,000	1,435	OC CMS	C
Clarcona Road / Park Avenue										
Gilliam Road to Keene Road	2	0	670	740	740	D	740	791	OC CMS	F
Keene Road to Cleveland Street	2	0	830	880	880	E	880	474	OC CMS	C
Cleveland Street to US 441/Orange Blossom Trail/Main Street	2	0	370	750	800	E	800	748	Study TMC	D

Roadway / Segment	Roadway Capacity Analysis									
	# of Lanes	LOS B	LOS C	LOS D	LOS E	Min LOS	Capacity	PMPHPD Volume*	Selected Source	Segment LOS
Apopka Boulevard										
Overland Road to Hiawassee Road	2	0	830	880	880	E	880	420	OC CMS	C
Hiawassee Road to Sheeler Avenue	2	0	370	750	800	E	800	667	Apopka CMS	D
Hiawassee Road										
Maitland Blvd Extension to Apopka Boulevard	4	0	1,910	2,000	2,000	E	2,000	937	Study TMC	C
Lakeville Road										
Beggs Road to Apopka Boulevard	2	0	670	740	740	D	740	361	OC CMS	C
Ponkan Road										
US 441/Orange Blossom Trail to Plymouth Sorrento Road	2	240	430	740	1,490	D	740	661	OC CMS	D
Plymouth Sorrento Road to Rock Springs Road	2	0	830	880	880	E	880	377	OC CMS	C
Lake View Drive										
Binion Road to US 441/Orange Blossom Trail	2	0	370	750	800	E	800	320	OC CMS	C
Thompson Road										
SR 436/Semoran Boulevard to Votaw Road	2	0	830	880	880	E	880	653	OC CMS	C
Votaw Road to Welch Road	2	0	830	880	880	E	880	557	OC CMS	C

*The PMPHPD volumes were selected based on the highest available seasonally adjusted count on each segment. Please refer to Appendix C-2 for detailed summary tables including comparison of all volume sources.

** Capacity for roadways sections maintained by City of Apopka obtained from City of Apopka CMS (2025)

TABLE 3-7: ARTERIAL ROADWAY SEGMENT LOS ANALYSIS

Roadway / Segment	2025 AM				2025 PM			
	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS	Speed (mph)	LOS
	NB Direction		SB Direction		NB Direction		SB Direction	
US 441/Orange Blossom Trail								
McGee Avenue to Edgewood Drive/Midland Avenue	24.2	C	15.9	E	22.2	D	18.4	D
Edgewood Drive/Midland Avenue to Park Avenue	21.0	D	22.6	C	19.4	E	20.0	D
Park Avenue to Central Avenue	21.5	D	15.0	E	20.3	E	16.1	E
Central Avenue to Bradshaw Road	30.0	B	33.1	B	30.3	C	32.1	B
Bradshaw Road to Vick Road/SR 451	22.9	C	20.2	D	14.2	F	24.2	C
Vick Road/SR 451 to Errol Parkway/Driveway	31.9	B	21.0	D	36.2	B	23.6	C
Errol Parkway/Driveway to Lowes Driveway/Home Depot Driveway	29.0	B	28.3	B	31.0	C	27.4	C
Lowes Driveway/Home Depot Driveway to Boy Scout Boulevard	29.5	B	21.4	D	27.1	C	30.6	B
Boy Scout Boulevard to Plymouth Sorrento Road	42.9	A	24.1	C	29.6	C	33.0	B
Plymouth Sorrento Road to West Orange Avenue	29.6	B	26.7	C	23.0	D	28.8	B
West Orange Avenue to SR 429 Connector Road/Kitt Avenue	20.5	D	29.4	B	19.1	E	26.2	C
SR 429 Connector Road/Kitt Avenue to Hermit Smith Road	31.1	B	22.8	C	29.1	C	22.4	C
Hermit Smith Road to Spillman Drive	41.8	A	33.3	B	44.1	A	40.8	A
Spillman Drive to Junction Road/Wesley Road	32.9	B	35.3	A	30.0	C	38.9	A
Junction Road/Wesley Road to Jones Avenue	39.0	A	42.6	A	36.6	B	48.6	A
Jones Avenue to Sadler Road	35.0	B	30.9	B	41.6	B	35.9	A
Sadler Road to Stoneybrook Hills Park	42.5	A	30.1	B	45.3	A	39.1	A

3.5.3 Pedestrian, Bicycle, and Transit LOS Analysis

The pedestrian and bicyclist analyses were conducted based on HCM 7th Edition LOS standards for intersections and FDOT level of traffic stress (LTS) standards from the 2023 FDOT Multimodal Quality Level of Service (Q/LOS) Handbook for roadway segments. Transit analysis for roadway segments was only conducted based on the standards from the 2023 FDOT Multimodal Q/LOS Handbook.

For HCM pedestrian and bicycle standards, the pedestrian and bicycle LOS values reported at the signalized study intersections are based on the HCM 7th Edition methodologies as computed in Synchro. A summary of the pedestrian and bicycle LOS analysis at the study signalized intersections is included in **Table 3-8**. Pedestrian LOS at a signalized intersection is based on factors such as number of traffic lanes crossed, disturbance caused by motorized vehicle traffic (traffic volumes, turning types, etc.), and presence of channelized right turns. The bicycle LOS at a signalized intersection is based on factors such as presence of bicycle lanes and/or paved shoulders, separation from motorized vehicle traffic, traffic volumes and speeds, and heavy vehicle percentage. Note that intersections that were incompatible with HCM methodology in Synchro were not included in the analysis as there are no results to report.

It was noted that none of the intersections exhibit LOS F for either the pedestrian or bicyclist modes. LOS values of E are highlighted in this table and require further investigation to achieve a better LOS.

Table 3-9 shows the multimodal LTS for bicyclists (BLTS) and pedestrians (PLTS) and the LOS for transit on the study corridors based on the 2023 FDOT Multimodal Q/LOS Handbook (included in **Appendix F-3**). The bicycle and pedestrian LTS are performance measures that quantify the amount of discomfort that people feel when they bike or walk along a roadway. LTS ranges from Level 1 – Most Comfortable to Level 4 – High Discomfort.

Most of the study corridors are LTS 3 or 4. Also, as shown in table, transit LOS is F for most study corridors due to lack of bus routes and low service frequency in the area.

TABLE 3-8: MULTIMODAL INTERSECTION LOS ANALYSIS

Intersection Node and Name	Approach	Pedestrian Mode LOS		Bicycle Mode LOS	
		AM	PM	AM	PM
1: US 441/Orange Blossom Trail & Benbow Court	EB	B	B	C	D
	WB	B	B	C	C
	NB	C	C	B	C
	SB	C	C	C	C
2: US 441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road	EB	C	C	D	D
	WB	C	C	D	E
	NB	C	C	E	E
	SB	C	C	E	E
4: US 441/Orange Blossom Trail & SR 436/Semoran Boulevard	WB	B	C	B	B
	NW	B	B	B	B
5: US 441/Orange Blossom Trail & McGee Avenue	EB	C	C	C	C
	WB	C	C	C	C
	NB	B	B	C	C
	SB	B	B	C	C
7: US 441/Orange Blossom Trail & Park Avenue	EB	C	C	D	D
	WB	C	C	D	D
	NB	C	C	C	C
	SB	C	C	D	D
8: US 441/Orange Blossom Trail & Central Avenue	EB	C	C	C	B
	WB	C	C	C	C
	NB	B	B	C	C
	SB	B	B	C	C
9: US 441/Orange Blossom Trail & Bradshaw Road	EB	C	C	C	C
	WB	C	C	C	C
	NB	B	B	C	C
	SB	B	B	C	C
10: US 441/Orange Blossom Trail & SR 451/Vick Road	EB	C	C	D	C
	WB	C	C	C	D
	NB	C	C	B	C
	SB	C	C	A	A
11: US 441/Orange Blossom Trail & Driveway/Errol Parkway	EB	C	C	B	B
	WB	C	C	B	C
	NB	B	B	C	C
	SB	B	B	C	C
12: US 441/Orange Blossom Trail & Home Depot/Lowes Driveway	EB	C	C	C	C
	WB	C	C	B	B
	NB	B	B	C	C
	SB	B	B	C	C
13: US 441/Orange Blossom Trail & Boy Scout Boulevard	EB	C	C	B	B
	WB	C	C	B	B
	NB	B	B	C	C
	SB	B	B	C	C
14: US 441/Orange Blossom Trail & Plymouth Sorrento Road	EB	C	C	C	B
	WB	C	C	C	B
	SB	B	B	C	C
15: US 441/Orange Blossom Trail & W Orange Avenue	EB	C	C	C	B
	WB	C	C	B	C
	NB	B	B	C	C
	SB	B	B	C	C
16: US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road	EB	C	C	C	B
	WB	C	C	D	C
	NB	B	B	-	-
	SB	C	C	D	E
17: US 441/Orange Blossom Trail & Hermit Smith Road	EB	C	C	C	B
	WB	C	C	B	C
	NB	B	B	C	C
	SB	B	B	C	C
18: US 441/Orange Blossom Trail & Spillman Drive	WB	B	B	C	C
	NB	D	C	C	D
	SB	D	C	D	D

Intersection Node and Name	Approach	Pedestrian Mode LOS		Bicycle Mode LOS	
		AM	PM	AM	PM
20: US 441/Orange Blossom Trail & Jones Avenue	EB	B	C	D	D
	WB	B	B	C	C
	NB	C	C	B	C
	SB	C	C	C	C
21: US 441/Orange Blossom Trail & Sadler Road	EB	C	B	D	D
	WB	B	B	D	C
	NB	D	C	B	B
	SB	D	C	C	B
22: US 441/Orange Blossom Trail & Stoneybrook Hills Parkway	WB	B	B	D	C
	NB	C	C	B	B
	SB	C	C	C	C
23: Hiawassee Road & Apopka Boulevard	EB	B	B	C	C
	WB	B	B	C	C
	NB	C	C	B	B
	SB	C	C	C	C
25: Sheeler Avenue & Apopka Boulevard	EB	B	B	C	C
	WB	B	B	C	C
	NB	B	B	C	C
	SB	B	B	C	C
26: Clarcona Road & Keene Road	EB	B	B	C	C
	WB	B	B	C	C
	NB	C	C	B	B
	SB	B	B	A	A
27: SR 414 Ramps & Keene Road	EB	B	B	C	C
	WB	B	B	C	C
	NB	B	B	B	C
28: Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road	EB	C	C	C	C
	WB	C	C	C	C
	NB	C	C	D	D
	SB	C	C	D	D
29: Ocoee Apopka Road & SR 429 SB Ramps	EB	B	B	C	C
	NB	C	C	C	C
	SB	C	C	C	C
30: Ocoee Apopka Road & SR 429 NB Ramps	WB	B	B	C	C
	NB	C	C	C	C
	SB	C	C	C	C
31: Ocoee Apopka Road & Harmon Road	EB	B	B	C	C
	WB	B	B	C	C
	NB	C	C	C	C
	SB	B	C	B	C
32: Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard	EB	C	D	C	C
	WB	D	D	B	C
	NB	C	C	D	E
	SB	C	C	E	D
35: Thompson Road & Votaw Road	EB	B	B	B	C
	WB	B	B	C	C
	NB	B	B	C	C
	SB	B	B	C	C
36: Thompson Road & Welch Road	EB	B	C	D	C
	WB	B	B	C	D
	NB	B	B	B	B
38: Park Avenue/Rock Springs Road & Welch Road	EB	B	B	C	C
	WB	C	C	C	D
	NB	C	C	C	C
	SB	C	C	C	C
39: Rock Springs Road & Ponkan Road	EB	B	B	C	C
	WB	B	B	C	C
	NB	C	C	B	C
	SB	C	C	C	B
40: Vick Road & Welch Road	WB	B	B	C	C
	NB	B	B	C	C

Intersection Node and Name	Approach	Pedestrian Mode LOS		Bicycle Mode LOS	
		AM	PM	AM	PM
	SB	B	B	C	C
41: Plymouth Sorrento Road & SR 429 Connector	EB	B	B	B	C
	NB	B	B	B	B
	SB	B	C	C	B
42: Plymouth Sorrento Road & Yothers Road/Lester Road	EB	B	B	B	B
	WB	B	B	B	B
	NB	B	C	C	C
	SB	C	C	C	C
43: Plymouth Sorrento Road & Ponkan Road	EB	B	B	C	C
	WB	B	B	C	C
	NB	B	B	C	C
	SB	B	B	C	C
44: Plymouth Sorrento Road & Kelly Park Road	EB	C	C	B	C
	WB	B	B	B	B
	NB	B	B	B	B
	SB	B	C	B	B

TABLE 3-9: MULTIMODAL CORRIDOR LTS ANALYSIS

Roadway / Segment	# of Lanes	Posted Speed	2025 AADT*	Bicycle LTS**			Pedestrian LTS***			Transit LOS		
				Type	Width	BLTS	Sidewalk Present/ Continuous	Sidewalk Separation/ Vertical Separation****	PLTS	Service Frequency (Veh/Hr)	Headway (Min)	LOS
Sadler Road												
Lake County Line to Orange Blossom Trail	2	40-45	11,144	None	-	4	N / N	-	4	-	-	F
US 441/Orange Blossom Trail to Round Lake Road	2	45	6,467	None	-	4	N / N	-	4	-	-	F
Jones Avenue												
US 441/Orange Blossom Trail to Lake County Line	2	55	10,015	None	-	4	N / N	-	4	-	-	F
Old Hwy US 441												
US 441/Orange Blossom Trail to Lake County Line	2	45	5,140	None	-	4	N / N	-	4	-	-	F
Round Lake Road												
Ponkan Road to Kelly Park Road	2	45	6,993	None	-	4	N / N	-	4	-	-	F
Kelly Park Road to Lake County Line	2	45	3,732	None	-	4	N / N	-	4	-	-	F
Mt Plymouth Road												
Kelly Park Road to Lake County Line	2	45	8,014	None	-	4	N / N	-	4	-	-	F
W Kelly Park Road												
Round Lake Road to Plymouth Sorrento Road	2	55	13,256	None	-	4	N / N	-	4	-	-	F
Plymouth Sorrento Road to Rock Springs Road	2	45	12,469	None	-	4	N / N	-	4	-	-	F
Plymouth Sorrento Road												
Lake County Line to Kelly Park Road	2	45-55	11,147	None	-	4	N / N	-	4	-	-	F
Kelly Park Road to Ponkan Road	2	55	8,615	None	-	4	N / N	-	4	-	-	F
Ponkan Road to US 441/Orange Blossom Trail	2	45	12,656	None	-	4	Y / N	-	4	-	-	F
N Park Avenue/Rock Springs Road												
US 441/Orange Blossom Trail to Lake McCoy Drive	5	35	25,032	None	-	4	Y / Y	Y / Y	2	1	60	E
Lake McCoy Drive to Lester Road	5	45	25,667	Multiuse Path	12-15'	1	Y / Y	Y / Y	3	1	60	E
Lester Road to Ponkan Road	4	45	26,233	None	-	4	Y / Y	Y / Y	3	-	-	F

Roadway / Segment	# of Lanes	Posted Speed	2025 AADT*	Bicycle LTS**			Pedestrian LTS***			Transit LOS		
				Type	Width	BLTS	Sidewalk Present/ Continuous	Sidewalk Separation/ Vertical Separation****	PLTS	Service Frequency (Veh/Hr)	Headway (Min)	LOS
Ponkan Road to Kelly Park Road	4	45	20,071	Marked Bike Lane	4'	4	Y / Y	Y / Y	3	-	-	F
W Welch Road												
Vick Rd to Ustler Road	2	35	11,922	None	-	4	Y / N	-	4	1	60	E
Ustler Road to N Thompson Road	2	35	18,967	Paved Shoulder	-	4	Y / N	-	4	-	-	F
N Thompson Road to Wekiwa Springs Road	2	35	15,981	None	-	4	Y / N	-	4	-	-	F
Piedmont-Wekiwa Road												
US 441/Orange Blossom Trail to SR 436/Semoran Boulevard	4	45	32,915	None	-	4	Y / Y	Y / Y	3	-	-	F
Wekiwa Springs Road												
SR 436/Semoran Boulevard to Canter Club Trail	4	45	25,310	None	-	4	Y / Y	Y / Y	3	-	-	F
Canter Club Trail to Orchard Drive	2	40	15,004	None	-	4	Y / Y	Y / Y	3	-	-	F
Orchard Dr to Seminole County Line	2	40	16,816	None	-	4	Y / Y	Y / Y	3	-	-	F
Votaw Road												
Park Avenue to Thompson Road	2	45	10,311	None	-	4	Y / Y	Y / Y	3	-	-	F
Thompson Road to Wekiwa Springs Road	2	35	9,633	None	-	4	Y / Y	Y / Y	2	-	-	F
SR 436/Semoran Boulevard												
US 441/Orange Blossom Trail to Seminole County Line	8	45	56,057	Marked Bike Lane	4-6'	4	Y / Y	Y / Y	3	2	30	D
Sheeler Avenue												
Keene Road to Apopka Boulevard	2	35	11,054	None	-	4	Y / Y	Y / Y	2	-	-	F
Apopka Boulevard to SR 436/Semoran Boulevard	2	35	10,142	None	-	4	Y / N	-	4	-	-	F
W Orange Avenue												
US 441/Orange Blossom Trail to Lake View Drive	2	40	5,833	Paved Shoulder	4-7'	4	Y / N	-	4	-	-	F
S Binion Road												
Lake View Drive to Lust Road	2	45	11,527	None	-	4	Y / N	Y / Y	4	-	-	F
Lust Road to Ocoee-Apopka Road	2	45	9,014	None	-	4	N / N	-	4	-	-	F

Roadway / Segment	# of Lanes	Posted Speed	2025 AADT*	Bicycle LTS**			Pedestrian LTS***			Transit LOS		
				Type	Width	BLTS	Sidewalk Present/ Continuous	Sidewalk Separation/ Vertical Separation****	PLTS	Service Frequency (Veh/Hr)	Headway (Min)	LOS
Ocoee Apopka Road/Michael Gladden Boulevard												
West Road / Ocoee Crown Pointe Pkwy to Binion Road	2	40-45	22,776	None	-	4	Y / N	-	4	-	-	F
Binion Road to Harmon Road	2	35-45	18,992	None	-	4	Y / N	-	4	-	-	F
Harmon Road to Bradshaw Road	2	35-45	14,653	Paved Shoulder	6'	4	Y / N	-	4	1	60	E
Bradshaw Road to South Central Avenue	2	30	8,980	None	-	3	Y / N	-	4	-	-	F
E Keene Road												
Clarcona Road to Sheeler Avenue	2	35	10,149	None	-	4	Y / Y	Y / Y	2	-	-	F
Apopka Boulevard/Alabama Avenue												
Sheeler Avenue to US 441/Orange Blossom Trail	2	30-40	8,856	None	-	4	Y / N	-	4	-	-	F
US 441/Orange Blossom Trail												
Seminole County Line to Piedmont-Wekiwa Road	4	45-55	35,631	Paved Shoulder	4'	4	Y / Y	Y / Y	3	2	30	D
Piedmont-Wekiwa Road to Roger Williams Road	4	55	30,210	Paved Shoulder	4-5'	4	Y / N	-	4	2	30	D
Roger Williams Road to SR 436/Semoran Boulevard	4	45	29,446	Paved Shoulder	4-5'	4	Y / N	-	4	2	30	D
SR 436/Semoran Boulevard to Park Avenue	4	35	49,066	Marked Bike Lane	5'	3	Y / Y	N / N	3	2	30	D
Park Avenue to Western Beltway	4	35-45	40,918	Marked Bike Lane	4'	4	Y / Y	N / N	3	-	-	F
Western Beltway to Plymouth Sorrento Road	4	35-45	41,934	Marked Bike Lane	4'	4	Y / Y	Y / Y	3	1	60	E
Plymouth Sorrento Road to Ponkan Road	4	55	42,264	Marked Bike Lane	4'	4	Y / N	-	4	1	60	E
Ponkan Road to Sadler Road	4	45-55	31,447	Marked Bike Lane	4-5'	4	Y / N	-	4	1	60	E
Sadler Road to Earlwood Avenue	4	55	28,500	Marked Bike Lane	4-5'	4	N / N	-	4	1	60	F
Earlwood Avenue to Lake County Line	4	55	28,472	Paved Shoulder	4'	4	N / N	-	4	-	-	F
Clarcona Road / Park Avenue												
Gilliam Road to Keene Road	2	40-50	18,451	Multiuse Path	12-15'	1	Y / N	-	4	-	-	F
Keene Road to Cleveland Street	2	40	10,738	Multiuse Path	12-15'	1	Y / Y	Y / Y	3	-	-	F
Cleveland Street to US 441/Orange Blossom Trial/Main Street	2	30	12,833	None	-	3	Y / Y	Y / Y	2	1	60	E

Roadway / Segment	# of Lanes	Posted Speed	2025 AADT*	Bicycle LTS**			Pedestrian LTS***			Transit LOS		
				Type	Width	BLTS	Sidewalk Present/ Continuous	Sidewalk Separation/ Vertical Separation****	PLTS	Service Frequency (Veh/Hr)	Headway (Min)	LOS
Apopka Boulevard												
Overland Road to Hiawassee Road	2	35-45	7,749	None	-	4	N / N	-	4	1	60	E
Hiawassee Road to Sheeler Avenue	2	35-40	12,467	None	-	4	Y / N	-	4	1	60	E
Hiawassee Road												
Maitland Blvd Extension to Apopka Boulevard	4	45	22,295	None	-	4	Y / Y	Y / Y	3	1	60	E
Lakeville Road												
Beggs Road to Apopka Boulevard	2	35	7,789	None	-	4	Y / N	-	4	-	-	F
Ponkan Road												
US 441/Orange Blossom Trail to Plymouth Sorrento Road	2	35-45	11,147	None	-	4	Y / N	-	4	-	-	F
Plymouth Sorrento Road to Rock Springs Road	2	35-50	5,956	None	-	4	N / N	-	4	-	-	F
Lake View Drive												
Binion Road to US 441/Orange Blossom Trail	2	40	7,431	None	-	4	N / N	-	4	-	-	F
Thompson Road												
SR 436/Semoran Boulevard to Votaw Road	2	35	11,810	None	-	4	Y / Y	Y / Y	2	-	-	F
Votaw Road to Welch Road	2	35	10,517	None	-	4	Y / N	-	4	-	-	F

Source:

*The AADT volumes were selected based on the highest available seasonally adjusted count on each segment. Please refer to Appendix C-2 for detailed summary tables including comparison of all volume sources.

**No sharrows, buffered bike lanes, or full segments with bicycle facilities next to on-street parking are present on the study corridors

***This analysis is conducted for each side of the road and the worst side PLTS is applied for each segment. If the sidewalk width is less than or equal to 5 feet, the PLTS deteriorates by 1.

****Separation is defined by space between the outside vehicular travel lane and sidewalk and can include bicycle lanes, unmarked shoulders, street furniture, vertical separation, landscaping, or utility strips. Vertical separation in the separation includes tubular markers, islands, on-street parking, rigid barriers, and landscaping.

3.6 TRAVEL DEMAND MODEL

The Central Florida Regional Planning Model (CFPRM) Version 7 will be used for this study. The model is an evaluation tool that represents land use and transportation interaction to assess the capability of the region's highway and transit networks to support anticipated growth. The subarea model validation will be discussed in a separate memorandum.

3.7 ORIGIN – DESTINATION (OD) STUDY

StreetLight Data will be used to understand travel patterns between origins and destinations within the study area. StreetLight Data uses location-based service data from cell phones and navigation devices to give insights into vehicle, bicyclist, and pedestrian travel patterns. StreetLight uses machine learning algorithms to process and validate the data using traffic counters and sensors. The OD analysis results will be discussed along with the subarea model validation in a separate memorandum.

4 EXISTING CONDITIONS

4.1 ROADWAY FEATURES

Table 4-1 provides a summary of the posted speed, median type, and median width along the study segments based on 2025 Google Earth aerial data.

TABLE 4-1: ROADWAY SEGMENT SUMMARY

Roadway	From	To	Median Type	Typical Median Width	Lanes	Speed
Sadler Road	Lake County Line	Round Lake Road	None	-	2	40-45
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	None	-	2	55
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	None	-	2	45
Round Lake Road	Ponkan Road	Lake County Line	None	-	2	45
Mt Plymouth Road	Kelly Park Road	Lake County Line	None	-	2	45
W Kelly Park Road	Round Lake Road	Rock Springs Road	None		2	45-55
Plymouth Sorrento Road	Lake County Line	US 441/Orange Blossom Trail	None		2	45-55
N Park Avenue/ Rock Springs Road	US 441/Orange Blossom Trail	Kelly Park Road	Raised + TWLT	12'	5	35-45
W Welch Road	Vick Road	Wekiwa Springs Road	None*	12'	3	35
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	TWLT	14'	5	45
Wekiwa Springs Road	SR 436/Semoran Boulevard	Canter Club Trail	TWLT	14'	5	45
Wekiwa Springs Road	Canter Club Trail	Seminole County Line	TWLT	14'	3	40
Votaw Road	Park Avenue	Wekiwa Springs Road	None	-	2	35-45
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	Raised	17-30'	8	45
Sheeler Avenue	Keene Road	SR 436/Semoran Boulevard	None	-	2	35
W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	None	-	2	40
S Binion Road	Lake View Drive	Ocoee-Apopka Road	None	-	2	45
Ocoee Apopka Road/ Michael Gladden Boulevard	West Road	South Central Avenue	None	-	2	35-45
E Keene Road	Clarcona Road	Sheeler Avenue	None	-	2	35
Apopka Boulevard/ Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	None	-	2	30-40
US 441/Orange Blossom Trail	Seminole County Line	SR 436/Semoran Boulevard	Raised	17-45'	4	45-55
US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Park Avenue	TWLT	12'	4	35
US 441/Orange Blossom Trail	Park Avenue	Lake County Line	Raised + TWLT	12-54'	4	45-55
Clarcona Road/ Park Avenue	Gilliam Road	US 441/Orange Blossom Trail/ Main Street	None	-	2	30-50
Apopka Boulevard	Overland Road	Sheeler Avenue	None	-	2	35-45
Hiawasse Road	John Land Expressway/ Maitland Blvd Extension	Apopka Boulevard	Raised	18-20'	4	45
Lakeville Road	Beggs Road	Apopka Boulevard	None	-	2	35
Ponkan Road	US 441/Orange Blossom Trail	Rock Springs Road	None	-	2	35-45
Lake View Drive	Binion Road	US 441/Orange Blossom Trail	None	-	2	30
Thompson Road	SR 436/Semoran Boulevard	Welch Road	None	-	2	35

*Short section of roadway includes a TWLT (Two Way Left Turn)

4.2 CONTEXT CLASSIFICATION

The context classification of a road refers broadly to the characteristics of the land use and built environment around it and helps determine the roadway design components that are supportive of the land uses and the vision for how the corridor might evolve. The roadways in the NOWOCATS study area are primarily within the Urban Service Area Boundary (USAB), with the exception of sections of Sadler Road and Jones Avenue on the western extents of the study area. Other roadways in the northern extents of the study area, such as Round Lake Road and Kelly Park Road, reflect rural context classification characteristics.

Context classifications for the roadways within the NOWOCATS study area were obtained from the "Context Classification of Non-State Roadway – Orange County - dated February 2025", with the exception of Votaw Road, which was classified based on the guidance provided in the FDOT Context Classification Guide. The 2024 Orange County Context Classification Map can be found in **Appendix "G"**.

Of the eight (8) context classifications established by FDOT, six (6) exist currently along the study roadways.

- **Rural (C2)** reflects sparsely settled lands which may include agricultural land, grassland, woodland, and wetlands.
- **Rural Town (C2T)** includes small concentrations of developed areas within rural land.
- **Suburban Residential (C3R)** refers to areas with mostly residential land uses grouped in large blocks with a disconnected or sparse roadway network.
- **Suburban Commercial (C3C)** refers to areas with mostly non-residential land uses and buildings and tends to have large footprints, may have large parking lots, and are grouped in large blocks with a disconnected or sparse roadway network.
- **Urban General (C4)** Areas that have a mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway.
- **Urban Center (C5)** includes areas that Mix of uses set within small blocks with a well-connected roadway network. Typically concentrated around a few blocks and identified as part of a civic or economic center of a community, town, or city.

The existing context classification for the project corridors is summarized in **Table 4-2** and illustrated in **Figure 4-1**.

TABLE 4-2: CONTEXT CLASSIFICATION SUMMARY

Roadway	From	To	Existing Context Class
Sadler Road	Lake County Line	Round Lake Road	C2T
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	C2
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	C3R
Round Lake Road	Ponkan Road	Lake County Line	C2T
Mt Plymouth Road	Kelly Park Road	Lake County Line	C3R
W Kelly Park Road	Round Lake Road	Plymouth Sorrento Road	C2
W Kelly Park Road	Plymouth Sorrento Road	Rock Springs Road	C3C
Plymouth Sorrento Road	Lake County Line	US 441/Orange Blossom Trail	C3R
N Park Avenue	US 441/Orange Blossom Trail	Welch Road	C4
Rock Springs Road	Welch Road	Kelly Park Road	C3R
W Welch Road	Vick Rd	Wekiwa Springs Road	C3R
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	C3R
Wekiwa Springs Road	SR 436/Semoran Boulevard	Seminole County Line	C3R
Votaw Road*	Park Avenue	Wekiwa Springs Road	C3R
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	C3C
Sheeler Avenue	Keene Road	SR 436/Semoran Boulevard	C3R
W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	C3C
S Binion Road	Lake View Drive	Lust Road	C3R
S Binion Road	Lust Road	Ocoee-Apopka Road	C3C
Ocoee Apopka Road	West Road	Binion Road	C3R
Ocoee Apopka Road/ Michael Gladden Boulevard	Binion Road	South Central Avenue	C3C
E Keene Road	Clarcona Road	Sheeler Avenue	C3C
Apopka Boulevard/ Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	C3R
US 441/Orange Blossom Trail	Seminole County Line	SR 436/Semoran Boulevard	C3C
US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Park Avenue	C5
US 441/Orange Blossom Trail	Park Avenue	Sadler Road	C3C
US 441/Orange Blossom Trail	Sadler Road	Lake County Line	C3R
Clarcona Road	Gilliam Road	Keene Road	C3C
Clarcona Road	Keene Road	Cleveland Street	C3R
Park Avenue	Cleveland Street	US 441/Orange Blossom Trail	C4
Apopka Boulevard	Overland Road	N Hiawassee Road	C3C
Apopka Boulevard	N Hiawassee Road	Sheeler Avenue	C3R
Hiawassee Road	Maitland Blvd Extension	Apopka Boulevard	C3C
Lakeville Road	Beggs Road	Apopka Boulevard	C3R
Ponkan Road	US 441/Orange Blossom Trail	Rock Springs Road	C3R
Lake View Drive	Binion Road	US 441/Orange Blossom Trail	C3C
Thompson Road	SR 436/Semoran Boulevard	Welch Road	C3R

Sources: Context Classification of Non-State Roadway – Orange County - dated February 2025

* Based on FDOT Context Classification Guide

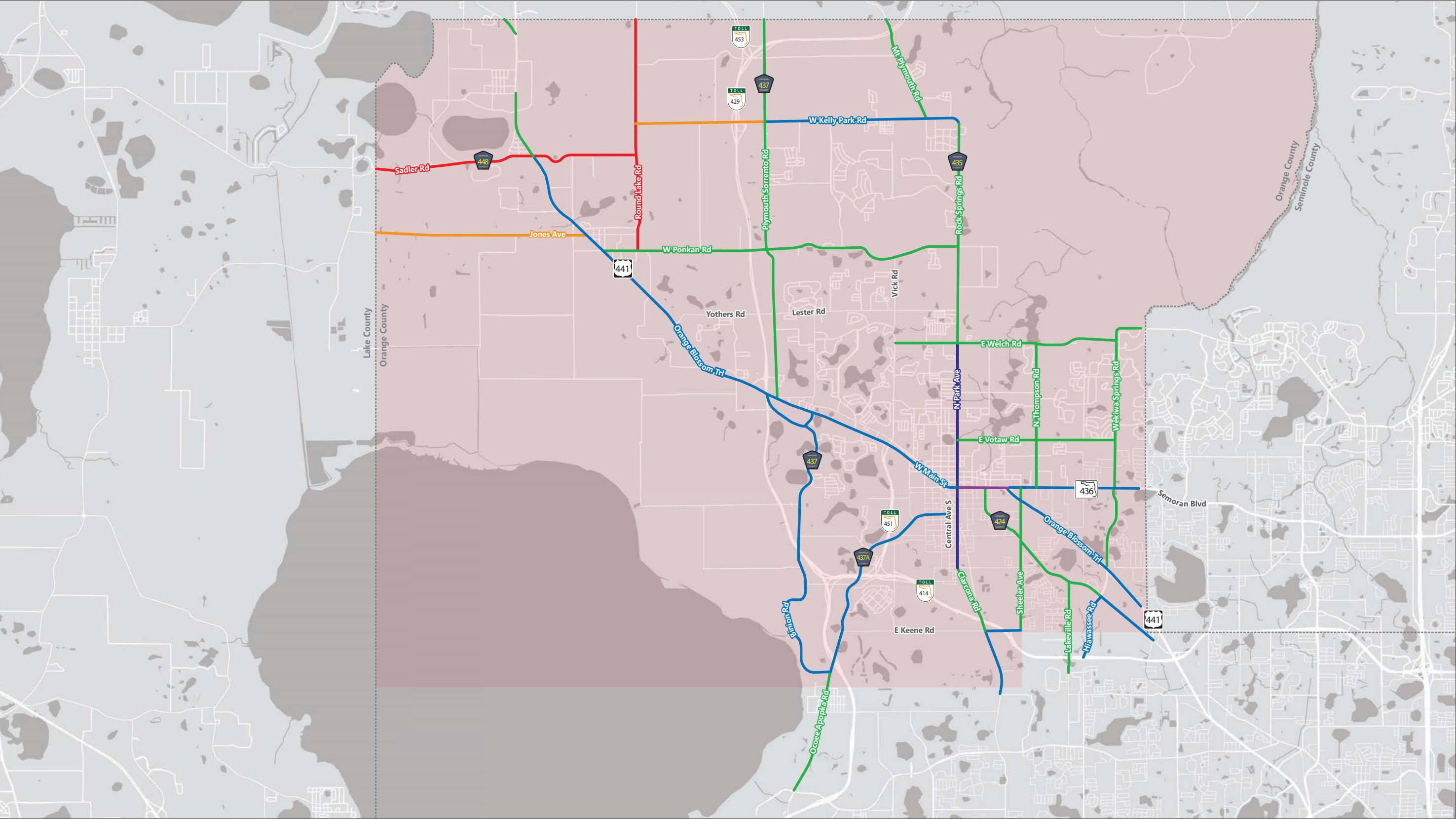


Figure 4-1
Existing Context Classification
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

4.3 ACCESS MANAGEMENT

The access management classification obtained from the FDOT Straight Line Diagrams (provided in **Appendix H**) is summarized in **Table 4-3** for US 441/Orange Blossom Trail and SR 436/Semoran Boulevard. The required minimum distances (based on access management standards) between median openings as required by Florida Administrative Code Rule 14-97 and the Orange County Land Development Code for the access management classes on the project corridor are summarized in **Table 4-4**.

TABLE 4-3: ACCESS MANAGEMENT CLASSIFICATION

Roadway	From	To	Access Class
US 441/Orange Blossom Trail	Seminole County Line	SR 436/Semoran Boulevard	5
US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Bradshaw Road	7
US 441/Orange Blossom Trail	Bradshaw Road	Citrus Avenue (M.P. 12.96)	5
US 441/Orange Blossom Trail	Citrus Avenue (M.P. 12.96)	Lake County Line	3
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	5

Source: FDOT Straight Line Diagrams

TABLE 4-4: ACCESS MANAGEMENT STANDARDS

Roadway Access Class	FDOT Context Classification	Median Type	Connection Spacing (ft)		Median Opening Spacing (ft)		Minimum Signal Spacing (ft) ***
			<45mph Posted	>45mph Posted	Dir.	Full	
2	C1 Natural C2 Rural	Restrictive w/Service Roads	660	1,320	1,320	2,640	2,640
3	C1 Natural C2 Rural C2T Rural Town C3R Suburban Residential C3C Suburban Commercial	Restrictive	440	660	1,320	2,640	2,640
4	C2T Rural Town	Non-Restrictive **	440	660	-	-	2,640
5	C4 Urban General	Restrictive	245	440	660	2,640/ 1,320 *	2,640/ 1,320 **
6	C5 Urban Center	Non-Restrictive **	245	440	-	-	1,320
7	C6 Urban Core	Both Median Types **	125		330	660	1,320

*Spacing 1,320 feet when roadway speed limit is 45 mph or below.

**It is recommended that additional safety/operational analysis is completed for non-restrictive medians.

***Traffic signals proposed at intervals closer than the access management standard for the designated access class, will only be approved where the need for such signal(s) is clearly demonstrated for the safety and operation of the roadway through the signal warrant process.

4.4 RIGHT-OF-WAY (ROW) INFORMATION

ROW information was obtained using the data from the Orange County Property Appraiser (ocpaweb.ocpafl.org) for the NOWOCATS study roadways. The obtained ROW widths are summarized in the following **Table 4-5** and the typical sections are illustrated in **Figure 4-2**.

TABLE 4-5: EXISTING ROW WIDTHS

Roadway	From	To	ROW (ft)
Sadler Road	Lake County Line	Round Lake Road	60-80
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	50-70
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	100-130
Round Lake Road	Ponkan Road	Lake County Line	60-80
Mt Plymouth Road	Kelly Park Road	Lake County Line	60-125
W Kelly Park Road	Round Lake Road	Plymouth Sorrento Road	60-135
W Kelly Park Road	Plymouth Sorrento Road	Rock Springs Road	60-145
Plymouth Sorrento Road	Lake County Line	US 441/Orange Blossom Trail	60-120
N Park Avenue/N Rock Springs Road	US 441/Orange Blossom Trail	Welch Road	70-145
Rock Springs Road	Welch Road	Kelly Park Road	100-130
W Welch Road	Vick Rd	Wekiwa Springs Road	60-170
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	100-190
Wekiwa Springs Road	SR 436/Semoran Boulevard	Seminole County Line	90-190
Votaw Road	Park Avenue	Wekiwa Springs Road	60-70
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	185-230
Sheeler Avenue	Keene Road	SR 436/Semoran Boulevard	50-85
W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	80-135
S Binion Road	Lake View Drive	Lust Road	80-85
S Binion Road	Lust Road	Ocoee-Apopka Road	80-125
Ocoee Apopka Road	West Road	Binion Road	45-125
Ocoee Apopka Road/ Michael Gladden Boulevard	Binion Road	South Central Avenue	60-270
E Keene Road	Clarcona Road	Sheeler Avenue	65-85
Apopka Boulevard/ Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	65-75
US 441/Orange Blossom Trail	Seminole County Line	SR 436/Semoran Boulevard	155-190
US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Park Avenue	80-135
US 441/Orange Blossom Trail	Park Avenue	Sadler Road	80-225
US 441/Orange Blossom Trail	Sadler Road	Lake County Line	175-225
Clarcona Road	Gilliam Road	Keene Road	60-125
Clarcona Road	Keene Road	Cleveland Street	60-100
Park Avenue	Cleveland Street	US 441/Orange Blossom Trail	60-80
Apopka Boulevard	Overland Road	Piedmont-Wekiwa Road	60-110
Apopka Boulevard	Piedmont-Wekiwa Road	Sheeler Avenue	60-105
Hiawassee Road	Maitland Blvd Extension	Apopka Boulevard	100-250
Lakeville Road	Beggs Road	Apopka Boulevard	60-120
Ponkan Road	US 441/Orange Blossom Trail	Rock Springs Road	50-115
Lake View Drive	Binion Road	US 441/Orange Blossom Trail	75-85
Thompson Road	SR 436/Semoran Boulevard	Welch Road	60-70

Source: Orange County Property Appraiser (2025)

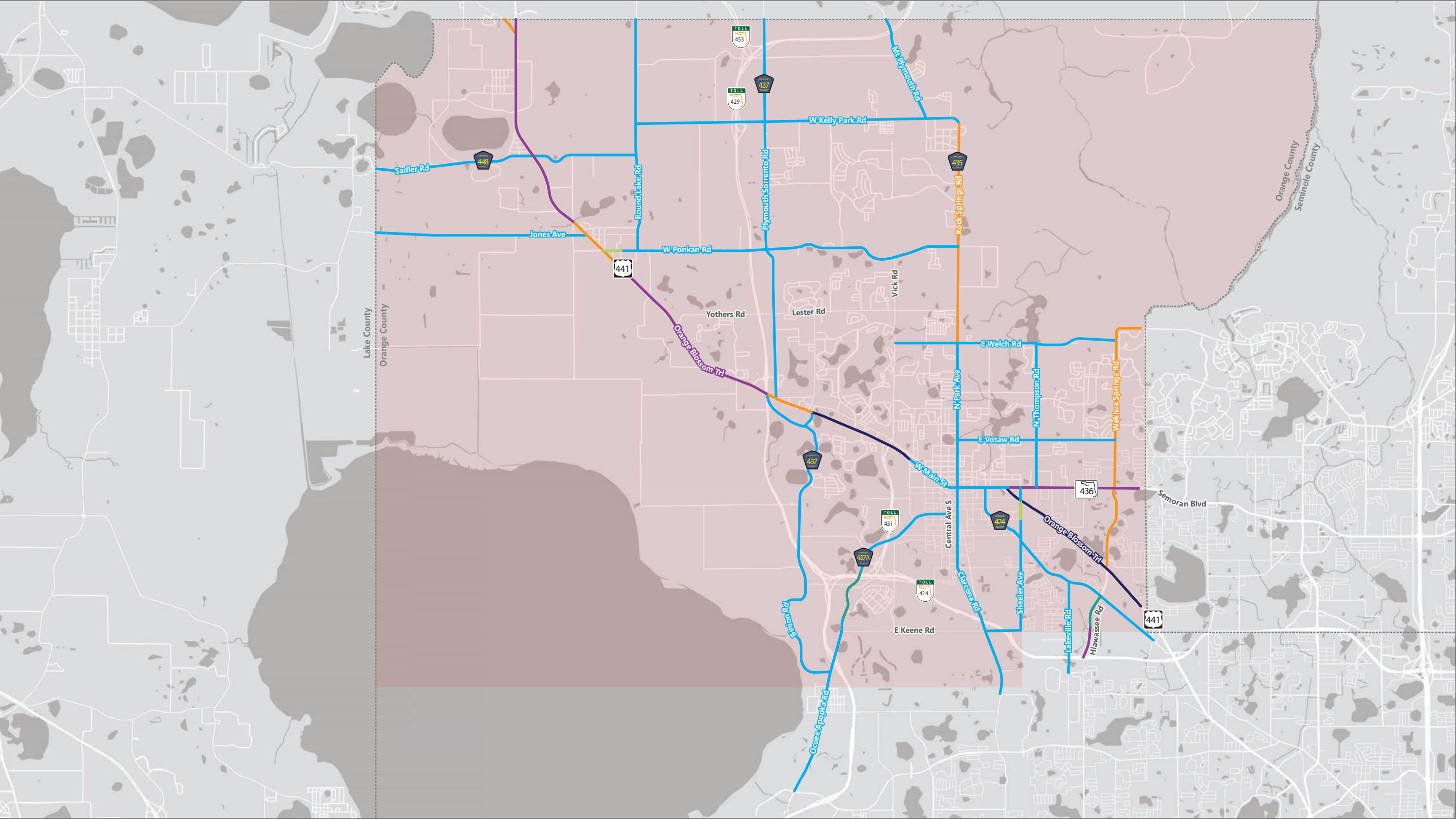


Figure 4-2
Right-of-Way Widths
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

4.5 FUNCTIONAL CLASSIFICATION

The functional classification of all the study corridors along with the jurisdiction and maintenance agency information, obtained from the Orange County's CMS and City of Apopka CMS (provided in **Appendices I-1 and I-2**) is summarized in **Table 4-6**.

TABLE 4-6: EXISTING ROADWAYS FUNCTIONAL CLASSIFICATIONS

Road Name	From	To	Jurisdiction	Maintenance Agency	Functional Classification
Sadler Road	Lake County Line	Round Lake Road	Orange County	Orange County	Major Collector
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	Orange County	Orange County	Minor Collector
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	Orange County	Orange County	Minor Arterial
Round Lake Road	Ponkan Road	Lake County Line	Orange County	Orange County	Major Collector
Mt Plymouth Road	Kelly Park Road	Lake County Line	Orange County	Orange County	Major Collector
W Kelly Park Road	Round Lake Road	Rock Springs Road	Orange County	Orange County	Major Collector
Plymouth Sorrento Road	Lake County Line	US 441/Orange Blossom Trail	Orange County	Orange County	Major Collector
N Park Avenue/Rock Springs Road	US 441/Orange Blossom Trail	Martin Road	Apopka	Orange County	Major Collector
	Martin Road	Kelly Park Road	Orange County	Orange County	Major Collector
W Welch Road	Vick Rd	Rock Springs Road	Apopka	Orange County	No Classification
	Rock Springs Road	Wekiwa Springs Road	Orange County	Orange County	Major Collector
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Apopka	Orange County	Minor Arterial
Wekiwa Springs Road	SR 436/Semoran Boulevard	Seminole County Line	Orange County	Orange County	Minor Arterial
Votaw Road	Park Avenue	Via Florence Road	Apopka	Apopka	Minor Collector*
	Via Florence Road	Wekiwa Springs Road	Orange County	Orange County	Minor Collector*
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	FDOT	FDOT	Principal Arterial - Other
Sheeler Avenue	Keene Street	Apopka Boulevard	Apopka	Orange County	Major Collector
	Apopka Boulevard	SR 436/Semoran Boulevard	Orange County	Orange County	Major Collector
W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	Orange County	Orange County	Major Collector
S Binion Road	Lake View Drive	Hayden Valley Street	Orange County	Orange County	Major Collector
	Hayden Valley Street	Areca Palm Drive	Apopka	Apopka	Major Collector*
	Areca Palm Drive	Ocoee-Apopka Road	Orange County	Orange County	Major Collector
Ocoee Apopka Road/Michael Gladden Boulevard	West Road	South Central Avenue	Orange County	Orange County	Major Collector
E Keene Road	Clarcona Road	Sheeler Avenue	Orange County	Orange County	Major Collector
Apopka Boulevard/Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	Apopka	Orange County	Major Collector
US 441/Orange Blossom Trail	Seminole County Line	Piedmont-Wekiwa Road	FDOT	FDOT	Principal Arterial - Other
	Piedmont-Wekiwa Road	Western Beltway	FDOT/Apopka	Apopka	Principal Arterial - Other
	Western Beltway	Lake County Line	FDOT/Orange County	Orange County	Principal Arterial - Other
Clarcona Road	Gilliam Road	US 441/Orange Blossom Trail/Main Street	Orange County	Orange County	Major Collector
Apopka Boulevard	Overland Road	Hiawassee Road	Orange County	Orange County	Major Collector
	Hiawassee Road	Sheeler Avenue	Apopka	Orange County	Major Collector
Hiawassee Road	Maitland Blvd Extension	Apopka Boulevard	Orange County	Orange County	Minor Arterial
Lakeville Road	Beggs Road	Apopka Boulevard	Orange County	Orange County	Major Collector
Ponkan Road	US 441/Orange Blossom Trail	Rock Springs Road	Orange County	Orange County	Major Collector
Lake View Drive	Binion Road	US 441/Orange Blossom Trail	Orange County	Orange County	Major Collector
Thompson Road	SR 436/Semoran Boulevard	Welch Road	Orange County	Orange County	Major Collector

Sources: Orange County 2024 CMS Update, City of Apopka 2025 CMS
 *Functional Classification for roadways sections maintained by City of Apopka obtained from City of Apopka CMS (2025) with the exception of Binion Road (Hayden Valley Street to Areca Palm Drive) for consistency with adjacent County roadway sections.

4.6 BICYCLE AND PEDESTRIAN FACILITIES

4.6.1 Bicycle Facilities

Three types of bicycle facilities are present in the study area: bicycle lanes, paved shoulders, and multi-use paths.

- ❖ Bicycle lanes are a portion of a curbed roadway designated by a bicycle symbol pavement marking for the exclusive use of bicyclists.
- ❖ Paved shoulders are the portion of flush shoulder roadways contiguous with the travel lanes for accommodation of errant vehicles, stopped vehicles, bicycle traffic, and emergency use.
- ❖ A multi-use path, or shared-use path, is physically separated from motor vehicle traffic, and is designed to serve pedestrians and cyclists by providing a wider pathway that can accommodate both at once.

There are no sharrows, buffered bike lanes, or full segments with bike lanes adjacent to on-street parking in the study area.

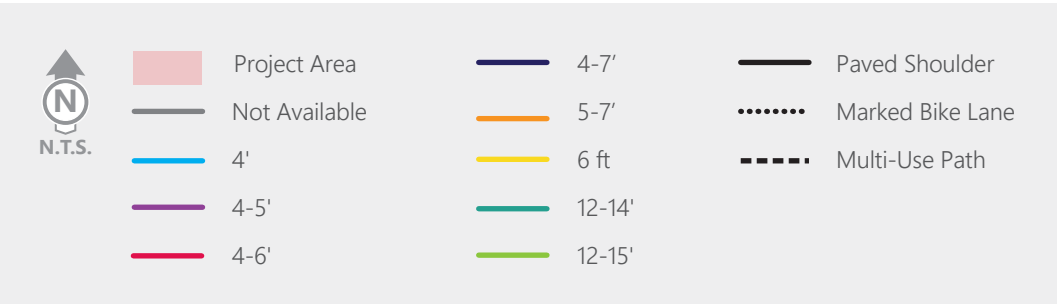
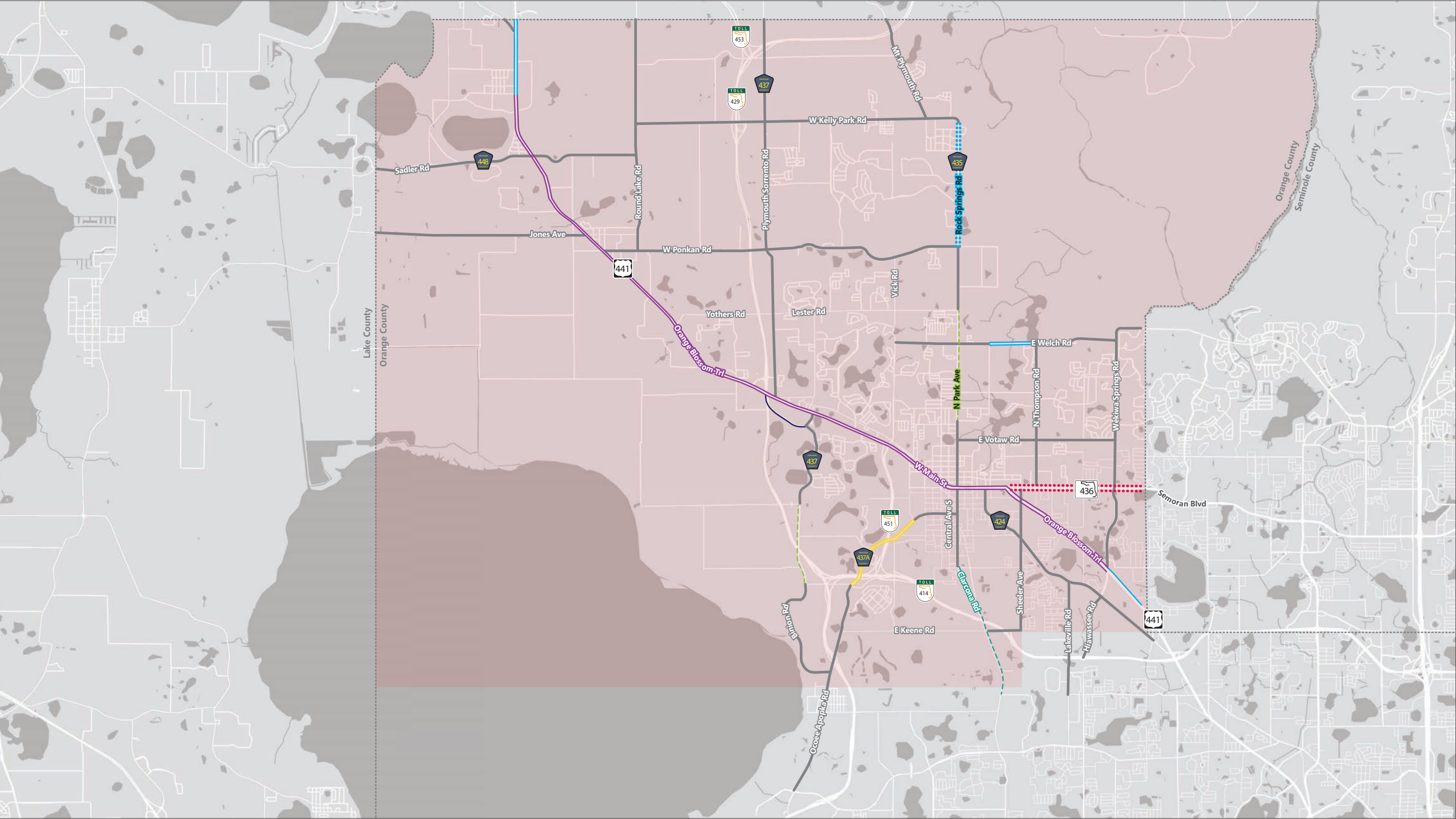
According to the FDOT Design Manual (FDM) Section 223, the minimum width for paved shoulders to be considered as bicycle facilities is four (4) feet. In addition, pavement markings and signage should be based on the criteria presented in FDM 223.2.1.2. The presence of bicycle facilities within the study area is shown in **Table 4-7** and **Figure 4-3**.

TABLE 4-7: EXISTING BICYCLE ACCOMMODATIONS

Roadway	From	To	Location	Width	Type
Sadler Road	Lake County Line	Round Lake Road	None		
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	None		
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	None		
Round Lake Road	Ponkan Road	Lake County Line	None		
Mt Plymouth Road	Kelly Park Road	Lake County Line	None		
W Kelly Park Road	Round Lake Road	Rock Springs Road	None*		
Plymouth Sorrento Road	Lake County Line	Yothers Road	None*		
Plymouth Sorrento Road	Yothers Road	US 441/Orange Blossom Trail	None*		
N Park Avenue	US 441/Orange Blossom Trail	Lake McCoy Drive	None		
N Park Avenue/ Rock Springs Road	Lake McCoy Drive	Lester Road	East Side	12-15'	Multiuse Path
Rock Springs Road	Lester Road	Ponkan Road	None		
Rock Springs Road	Ponkan Road	Kelly Park Road	Both Sides	4'	Marked Bike Lane
W Welch Road	Vick Rd	Ustler Road	None		
W Welch Road	Ustler Road	Thompson Road	Both Sides	4'	Paved Shoulder
W Welch Road	Thompson Road	Wekiwa Springs Road	None		
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	None		
Wekiwa Springs Road	SR 436/Semoran Boulevard	Seminole County Line	None		
Votaw Road	Park Avenue	Wekiwa Springs Road	None*		
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	Both Sides	4-6'	Marked Bike Lane
Sheeler Avenue	Keene Road	SR 436/Semoran Boulevard	None		
W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	South Side	4-7'	Paved Shoulder
S Binion Road	Lake View Drive	Lust Road	None*		
S Binion Road	Lust Road	S of Verde View Drive	West Side*	12-15'	Multiuse Path
S Binion Road	S of Verde View Drive	Ocoee Apopka Road	None		
Ocoee Apopka Road	West Road	Harmon Road	None		
Ocoee Apopka Road	Harmon Road	Bradshaw Road	None*		
Ocoee Apopka Road/ Michael Gladden Boulevard	Bradshaw Road	South Central Avenue	None		
E Keene Road	Clarcona Road	Sheeler Avenue	None		
Apopka Boulevard/ Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	None		
US 441/Orange Blossom Trail	Seminole County Line	Piedmont-Wekiwa Road	North Side	4'	Paved Shoulder
US 441/Orange Blossom Trail	Piedmont-Wekiwa Road	SR 436/Semoran Boulevard	Both Sides	4-5'	Paved Shoulder
US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Earlwood Avenue	Both Sides	4-5'	Marked Bike Lane
US 441/Orange Blossom Trail	Earlwood Avenue	Lake County Line	Both Sides	4'	Paved Shoulder
Clarcona Road	Gilliam Road	Cleveland Street	East Side*	12-15'	Multiuse Path
Park Avenue	Cleveland Street	US 441/Orange Blossom Trail	None		
Apopka Boulevard	Overland Road	Sheeler Avenue	None		
Hiawassee Road	Maitland Blvd Extension	Apopka Boulevard	None		
Lakeville Road	Beggs Road	Apopka Boulevard	None		
Ponkan Road	US 441/Orange Blossom Trail	Rock Springs Road	None		
Lake View Drive	Binion Road	US 441/Orange Blossom Trail	None		
Thompson Road	SR 436/Semoran Boulevard	Welch Road	None		

Source: Google Earth Aerial Images (2025)

*Not continuous



**Figure 4-3**
Bicycle Facilities
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

4.6.2 Pedestrian Facilities

Pedestrian facilities are typically paved paths available for use by people traveling on foot or in a wheelchair. The FDM also considers the following to be pedestrian facilities:

- Sidewalks
- Curb ramps and blended transitions
- Crosswalks
- At-grade railroad crossings
- Refuge islands
- Curb extensions
- Pedestrian signals
- Public transit loading zones
- Pedestrian bridges
- Shared use paths
- Street furniture

The primary pedestrian facilities located in the corridor study area are sidewalks. Per FDOT standards, sidewalks are to be provided on both flush shoulder and high-speed curbed roadways within C2T, C3C, C4, C5, or C6 context classifications and within C1, C2, or C3R where demand is demonstrated. Context classifications are described in **Section 4.2** of this report. In order of desirability, the location of sidewalks is to be as near the ROW line as possible, outside of the clear zone, five feet beyond the limits of the full width shoulder or at the limits of the full width shoulder.

A summary of the locations and separation from the roadway of the sidewalks along study area roadways is shown in **Table 4-8** and illustrated in **Figure 4-4**.

At intersections and side streets, curb ramps are provided on curbed roadways where sidewalks meet the roadway. Pedestrian crossings designated by pavement markings are generally located on all legs of signalized intersections and where the sidewalks cross stop-controlled side streets.

TABLE 4-8: EXISTING SIDEWALK SUMMARY

Roadway	From	To	Location	Sidewalk Width	Separation from Roadway
Sadler Road	Lake County Line	Round Lake Road	None*		
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	None		
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	None*		
Round Lake Road	Ponkan Road	Lake County Line	None*		
Mt Plymouth Road	Kelly Park Road	Lake County Line	None		
W Kelly Park Road	Round Lake Road	Rock Springs Road	None*		
Plymouth Sorrento Road	Lake County Line	Ponkan Road	None*		
Plymouth Sorrento Road	Ponkan Road	Yothers Road	Both Sides**	5'	Grass
Plymouth Sorrento Road	Yothers Road	US 441/Orange Blossom Trail	None		
N Park Avenue	US 441/Orange Blossom Trail	Lake McCoy Drive	Both Sides	5 -7 '	Curb/Grass
N Park Avenue/ Rock Springs Road	Lake McCoy Drive	Ponkan Road	Both Sides	5' W / 5-15' E	Curb/Grass
Rock Springs Road	Ponkan Road	Kelly Park Road	Both Sides	5'	Curb/Grass
W Welch Road	Vick Rd	Rock Springs Road	Both Sides**	5'	Curb/Grass
W Welch Road	Rock Springs Road	Ustler Road	North Side	5'	Curb/Grass
W Welch Road	Ustler Road	Thompson Road	South Side*	5'	Curb/Grass
W Welch Road	Thompson Road	Wekiwa Springs Road	South Side	5'	Curb/Grass
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Both Sides	5'	Curb/Grass
Wekiwa Springs Road	SR 436/Semoran Boulevard	Seminole County Line	Both Sides	5' S / 5-8' N	Curb/Grass
Votaw Road	Park Avenue	N Thompson Road	Both Sides	5' N / 5-15' S	Curb/Grass
Votaw Road	N Thompson Road	Wekiwa Springs Road	Both Sides	5'	Curb/Grass
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Seminole County Line	Both Sides	5'	Curb/Grass
Sheeler Avenue	Keene Road	Perlite Place	Both Sides	4-6'	Curb/Grass
Sheeler Avenue	Perlite Place	Apopka Boulevard	Both Sides*	4-6'	Curb/Grass
Sheeler Avenue	Apopka Boulevard	SR 436/Semoran Boulevard	Both Sides**	4-6'	Grass
W Orange Avenue	US 441/Orange Blossom Trail	Superior Commerce Boulevard	None		
W Orange Avenue	Superior Commerce Boulevard	Lake View Drive	Both Sides*	5-6'	Grass
S Binion Road	Lake View Drive	Lust Road	Both Sides*	5'	Grass
S Binion Road	Lust Road	S of Verde View Drive	Both Sides*	5-15'	Grass
S Binion Road	S of Verde View Drive	Ocoee Apopka Road	None		
Ocoee Apopka Road	West Road	Harmon Road	Both Sides*	5-15'	Curb/Grass
Ocoee Apopka Road	Harmon Road	Bradshaw Road	Both Sides*	5'	Curb/Grass
Ocoee Apopka Road/ Michael Gladden Boulevard	Bradshaw Road	South Central Avenue	North Side	4-5'	Grass
E Keene Road	Clarcona Road	Sheeler Avenue	Both Sides**	5'	Curb/Grass
Apopka Boulevard/ Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	Both Sides*	5'	Curb/Grass
US 441/Orange Blossom Trail	Seminole County Line	Piedmont-Wekiwa Road	Both Sides*	5'	Grass
US 441/Orange Blossom Trail	Piedmont-Wekiwa Road	SR 436/Semoran Boulevard	Both Sides*	4-5'	Curb/Grass
US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Plymouth Sorrento Road	Both Sides	5-11'	Curb/Grass
US 441/Orange Blossom Trail	Plymouth Sorrento Road	Laughlin Road	Both Sides*	5'	Curb/Grass
US 441/Orange Blossom Trail	Laughlin Road	Lake County Line	None*		
Clarcona Road	Gilliam Road	Keene Road	Both Sides**	5-15'	Curb/Grass
Clarcona Road	Keene Road	Cleveland Street	Both Sides	5'-15'	Curb/Grass
Park Avenue	Cleveland Street	US 441/Orange Blossom Trail	Both Sides	5'	Curb/Grass
Apopka Boulevard	Overland Road	Sheeler Avenue	Both Sides*	4-5'	Curb/Grass
Hiawassee Road	Maitland Blvd Extension	Apopka Boulevard	Both Sides	5'	Curb/Grass
Lakeville Road	Beggs Road	Apopka Boulevard	Both Sides**	5'	Grass
Ponkan Road	US 441/Orange Blossom Trail	Rock Springs Road	Both Sides*	4-5'	Grass
Lake View Drive	Binion Road	US 441/Orange Blossom Trail	None		
Thompson Road	SR 436/Semoran Boulevard	Votaw Road	Both Sides	4-5'	Grass
Thompson Road	Votaw Road	Welch Road	Both Sides**	4-5'	Grass

Source: Google Earth Aerial Images (2025); *Not continuous; **Only continuous on one side of the roadway

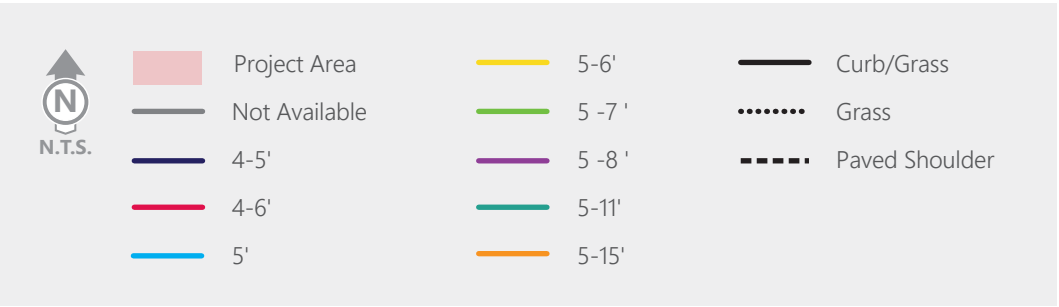
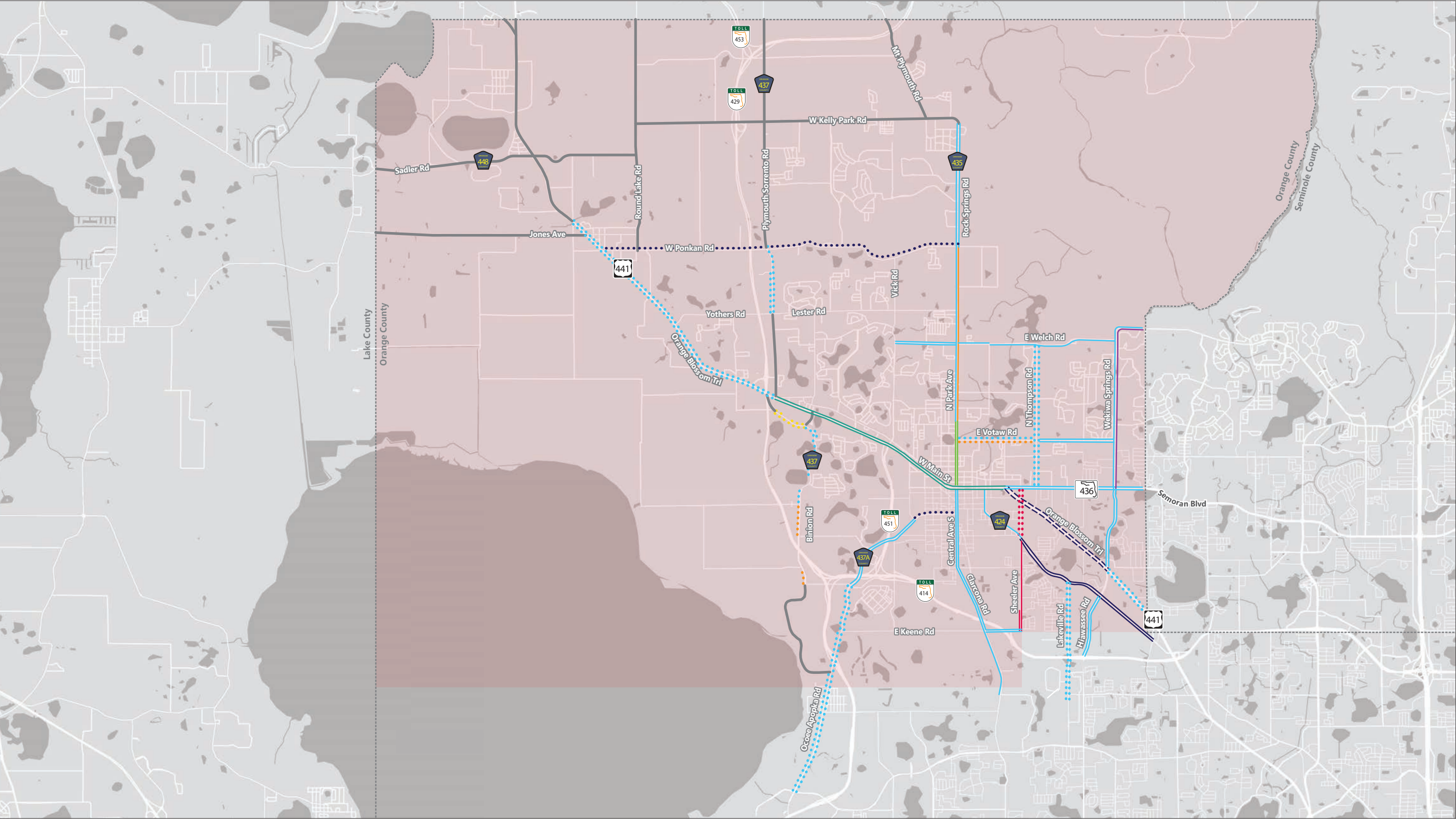


Figure 4-4
Pedestrian Facilities
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

4.7 PAVEMENT CONDITIONS

Table 4-9 and **Figure 4-5A and 4-5B** provide summary of the existing and projected 2030 distress ratings, respectively for the FDOT owned roadways within the NOWOCATS area according to the FDOT All System Pavement Condition Forecast Report downloaded on 4/14/2025 (included in **Appendix J-1**). The two distress types measured for the area are Cracking and Ride. Cracking is a subjective rating determined visually through a field review. Ride is determined using an automated vehicle-mounted system capable of measuring the longitudinal profile of the roadway, it produces an estimate of the roadway users' perceived ride quality.

Both distress types are rated on a scale of 0 to 10, with 10 indicating a section in excellent condition. Any section with a rating of 6.0 or less is automatically considered deficient and becomes a candidate for rehabilitation. As can be seen in the tables, there is one existing cracking deficiency on US 441/Orange Blossom Trail, and six projected deficiencies (five on US 441/Orange Blossom Trail and one on SR 436/Semoran Boulevard in the Year 2030. The Ride distress ratings are projected to remain within the acceptable range through the Year 2030. These results are based on the latest FDOT reports and do not consider the programmed resurfacing projects identified in this report.

TABLE 4-9: PAVEMENT CONDITION SUMMARY - FDOT ROADWAYS

Roadway	Dir	From	To	Cracking		Ride	
				2025	2030	2025	2030
US 441/Orange Blossom Trail	NB	Seminole County Line	SR 436/Semoran Boulevard	8.6	6.5	8.1	7.9
	NB	SR 436/Semoran Boulevard	Alabama Avenue	9.0	8.0	7.1	6.8
	NB	Alabama Avenue	Central Avenue	8.0	6.5	7.8	7.5
	NB	Central Avenue	Vick Road	10.0	9.0	7.7	7.4
	NB	Vick Road	Errol Parkway	8.1	2.5*	7.9	7.7
	NB	Errol Parkway	SR 429	9.6	8.0	8.4	8.2
	NB	SR 429	Jones Avenue	10.0	9.0	8.0	7.8
	NB	Jones Avenue	Wadsworth Road	8.8	7.0	8.2	8.0
	NB	Wadsworth Road	Lake County Line	6.5	2.5*	7.8	7.6
	SB	Seminole County Line	SR 436/Semoran Boulevard	7.7	5.5*	8.0	7.8
	SB	SR 436/Semoran Boulevard	Alabama Avenue	8.1	6.5	7.2	6.9
	SB	Alabama Avenue	Central Avenue	8.1	6.5	7.2	6.9
	SB	Central Avenue	Vick Road	10.0	9.0	8.1	7.8
	SB	Vick Road	Errol Parkway	7.8	4.5*	7.6	7.3

Roadway	Dir	From	To	Cracking		Ride	
				2025	2030	2025	2030
	SB	Errol Parkway	SR 429	9.1	7.5	8.3	8.1
	SB	SR 429	Jones Avenue	8.6	8.0	8.1	7.9
	SB	Jones Avenue	Wadsworth Road	4.4*	3.5*	6.8	6.6
	SB	Wadsworth Road	Lake County Line	4.5*	0.5*	8.1	7.9
SR 436/Semorán Boulevard	EB	US 441/Orange Blossom Trail	Seminole County Line	7.0	4.0*	7.7	7.4
	WB	US 441/Orange Blossom Trail	Seminole County Line	7.0	4.0*	7.7	7.4

Source: FDOT All System Pavement Condition Forecast Report downloaded on 02/27/2025

* Indicates pavement deficient (Any rating ≤ 6)

Pavement condition data on county roadways was extracted from the latest available inspection from either the Orange County Pavement Inventory Summary (2024) or the City of Apopka Pavement Management Report (2021). Orange County and the City of Apopka both rate the roadways using the Pavement Condition Index (PCI), which rates the pavement condition on a scale of 1 to 100.

The PCI calculation method is based on a visual survey of the number and types of distresses in pavement, by recording distress types, extents, and severity levels. These factors are used to compute a PCI based on a set of curves proposed by the *American Society for Testing and Materials*. Sections that have a rating less than 90 include costs for rehabilitation in the Pavement Inventory Summaries which are included in **Appendices J-2** and **J-3**. **Table 4-10** and **Figure 4-6** summarize the results for the study roadways in terms of PCI.

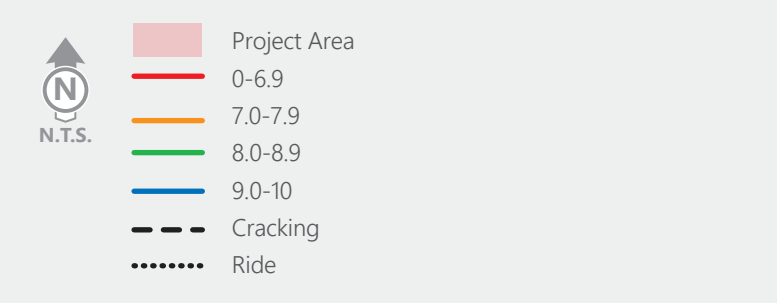
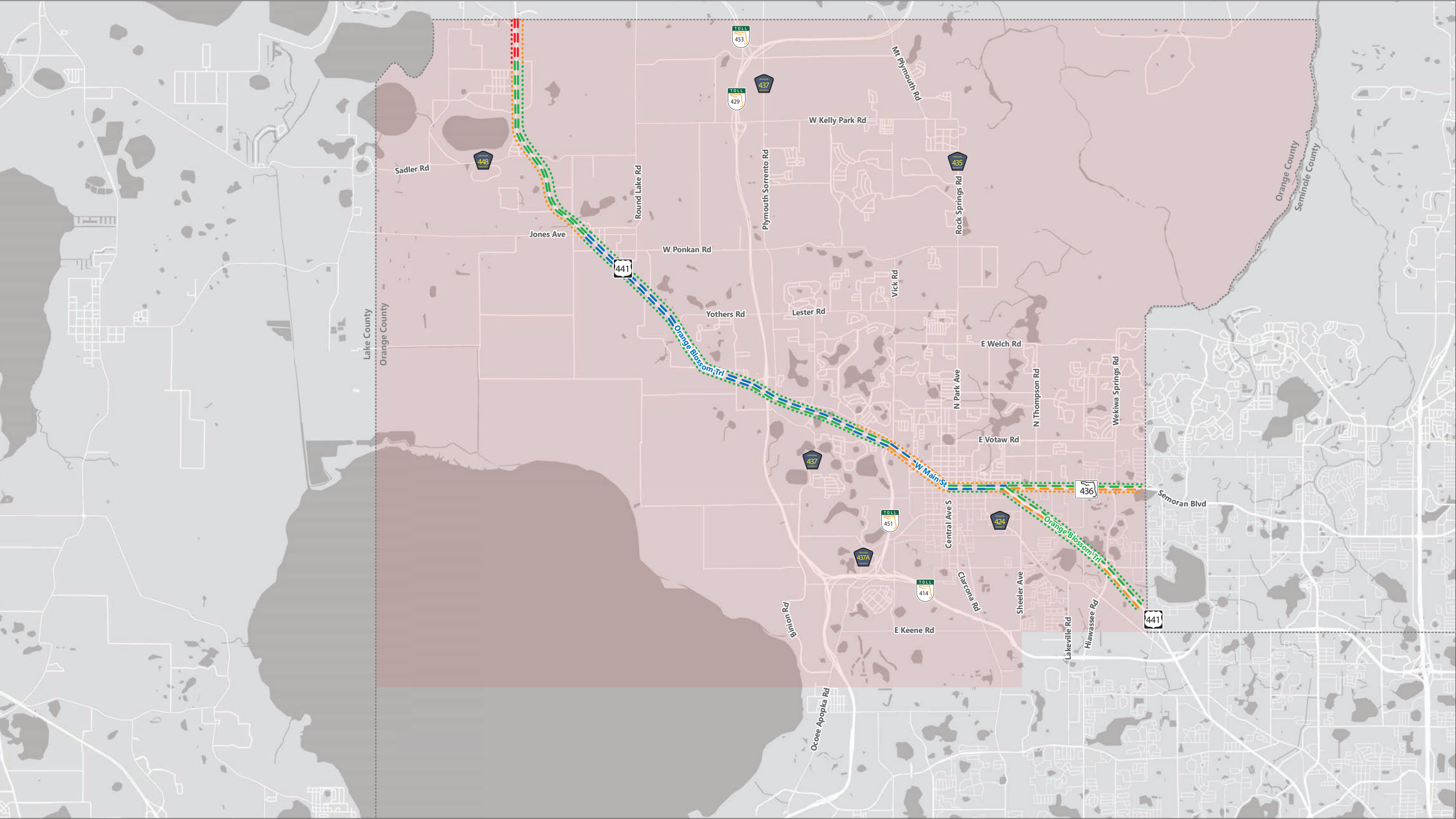


Figure 4-5A

2025 Pavement Condition – FDOT
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

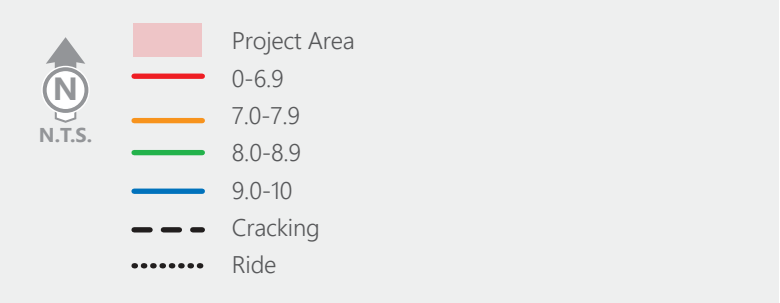
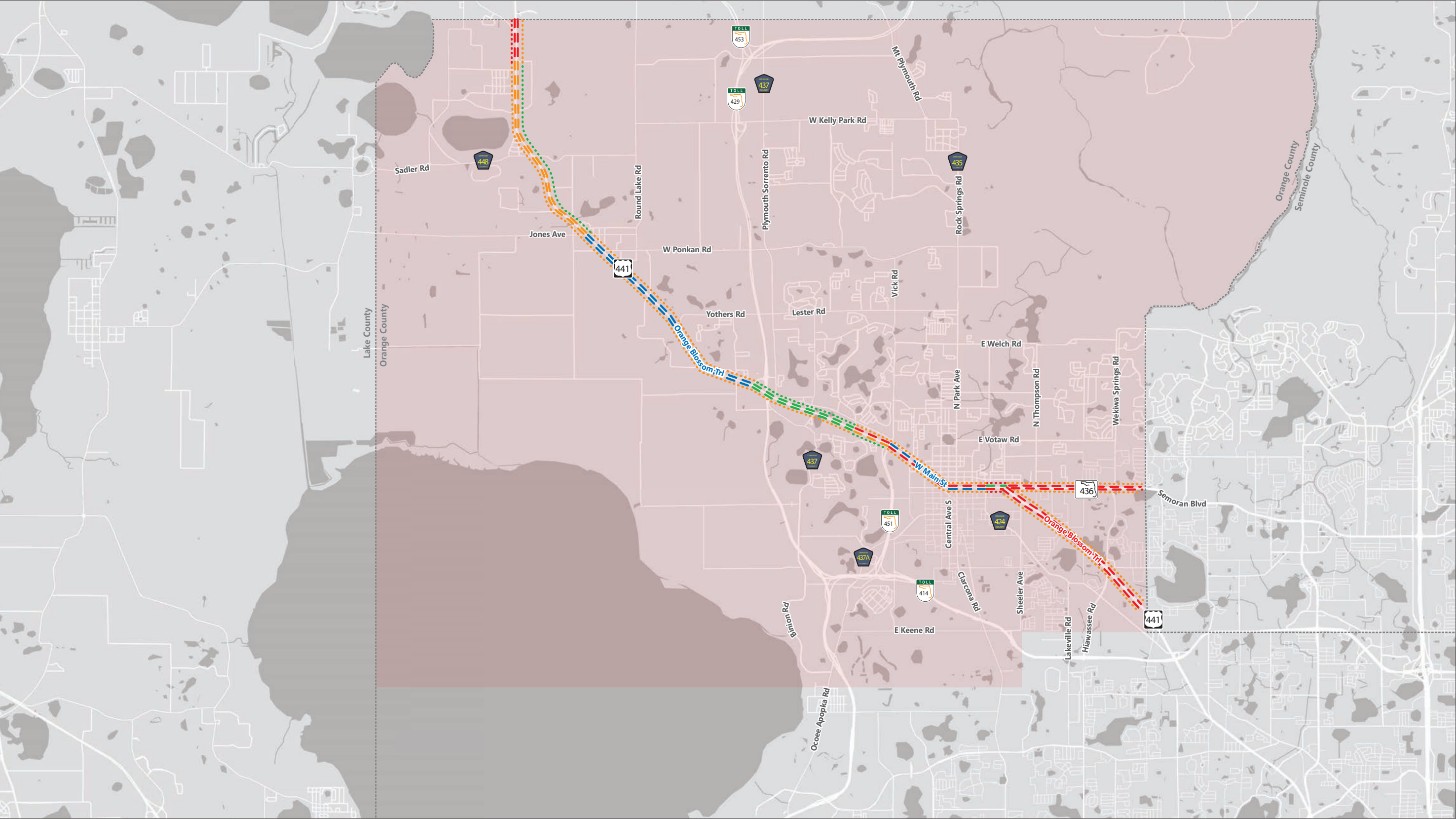


Figure 4-5B
2030 Pavement Condition – FDOT
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

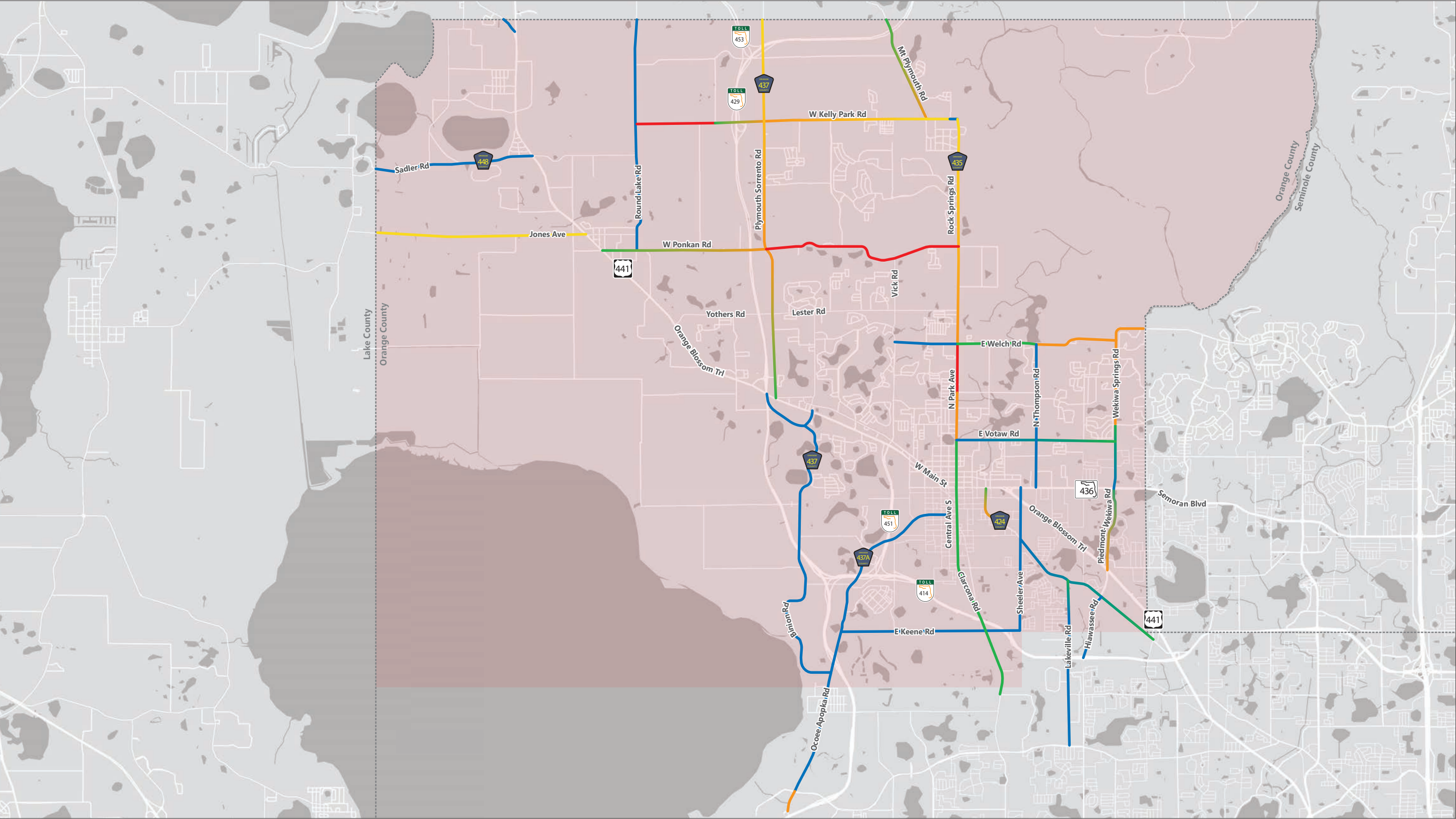


Figure 4-6

2025 Pavement Condition – Orange County Roadways

Northwest Orange County Areawide Transportation Study (NOWOCATS)

TABLE 4-10: PAVEMENT CONDITION SUMMARY – ORANGE COUNTY ROADWAYS

Roadway Name	From	To	PCI
Sadler Road	Lake County Line	Round Lake Road	100.0
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	61.0-66.0
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	100.0
Round Lake Road	Ponkan Road	Lake County Line	100.0
Mt Plymouth Road	Kelly Park Road	Lake County Line	74.0-83.0
W Kelly Park Road*	Round Lake Road	Effie Drive	55.0-59.0
	Effie Drive	Plymouth Sorrento Road	79.0-87.0
	Plymouth Sorrento Road	Mt Plymouth Road	65.0-79.0
W Kelly Park Road	Mt Plymouth Road	Holstein Road	65.0
	Holstein Road	Rock Springs Road	91.0
Plymouth Sorrento Road	Lake County Line	Ponkan Road	66.0-73.0
	Ponkan Road	US 441/Orange Blossom Trail	78.0-82.0
N Park Avenue/ Rock Springs Road	US 441/Orange Blossom Trail	Votaw Road	86.0
	Votaw Road	E Laurel Street	70.0
	E Laurel Street	Welch Road	54.0
	Welch Road	Kelly Park Road	60.0-73.0
Welch Road*	Vick Road	Rock Springs Road	92.0-100.0
Welch Road	Rock Springs Road	Thompson Road	73.0
	Thompson Road	Wekiwa Springs Road	83.0
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	79.0-89.0
Wekiwa Springs Road	SR 436/Semoran Boulevard	Canter Club Trail	88.0-91.0
	Canter Club Trail	Seminole County Line	73.0-77.0
Votaw Road*	Park Avenue	Wekiwa Springs Road	85.0-91.0
Sheeler Avenue	Keene Road	SR 436/Semoran Boulevard	100.0
W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	100.0
S Binion Road	Lake View Drive	Ocoee-Apopka Road	94.0-97.0
Ocoee Apopka Road/ Michael Gladden Boulevard	West Road	SR 429	100.0
	SR 429	Regal River Circle	73.0-77.0
	Regal River Court	South Central Avenue	100.0
E Keene Road	Clarcona Road	Sheeler Avenue	100.0
Alabama Avenue*	S Apopka Boulevard	E 9th Street	79.0-89.0
Clarcona Road/Park Avenue	Gilliam Road	US 441/Orange Blossom Trail	83.0-87.0
Apopka Boulevard	Overland Road	Sheeler Avenue	84.0-91.0
Hiawassee Road	Maitland Blvd Extension	Apopka Boulevard	100.0
Lakeville Road	Beggs Road	Wildwood Street	100.0
	Wildwood Street	Apopka Boulevard	86.0-96.0*
Ponkan Road	US 441/Orange Blossom Trail	Plymouth Sorrento Road	76.0-80.0
	Plymouth Sorrento Road	Rock Springs Road	53.0-57.0
Lake View Drive	Binion Road	US 441/Orange Blossom Trail	100.0
Thompson Road	SR 436/Semoran Boulevard	Welch Road	100.0

Sources:
Orange County Pavement Inventory Summary (2024)
*Apopka Pavement Management Report October 2021

4.8 STRUCTURES

Bridge and structure information was obtained from the Federal Highway Administration's (FHWA) National Bridge Inventory (NBI) and Florida Bridge Information (dated 6-28-24) and is provided in **Appendix K**. This data provides information regarding the existing structures along Study Area roadway corridors that can be used during development of alternatives to identify potential impacts to the structures. The details of the existing structures are summarized in **Table 4-11**.

TABLE 4-11: EXISTING STRUCTURES

Structure Type	Bridge ID	Carries	Crosses	Year Built	Year Recons.	Last Inspection	Sufficiency Rating
Girder	750496	SR 429 SB	CR 437A/Ocoee Apopka Road	2000	n/a	Sep-22	75.0
Girder	750497	SR 429 NB		2000	n/a	Sep-22	94.5
Girder	750502	SR 451 SB	CR 437A/Ocoee Apopka Road	2000	n/a	Sep-22	99.7
Girder	750503	SR 451 NB		2000	n/a	Sep-22	99.7
Girder	750703	SR 414	CR 435	2009	n/a	Dec-23	94.6
Girder	750705	SR 414	Keene Road	2009	n/a	Feb-23	94.9
Girder	750709	SR 414	Lakeville Road	2008	n/a	Feb-23	100.0
Girder	750710	SR 414 WB Ramp	Lakeville Road	2009	n/a	Feb-23	99.6
Girder	750711	SR 414 EB Ramp		2008	n/a	Feb-23	99.6
Girder	750712	SR 414	Hiawassee Road	2009	n/a	Mar-23	100.0
Girder	750720	SR 414 WB	CR 437A/Ocoee Apopka Road	2012	n/a	Feb-24	99.2
Girder	750721	SR 414 EB		2012	n/a	Sep-22	99.2
Girder	750722	SR 429 NB Ramp EG	CR 437A/Ocoee Apopka Road	2012	n/a	Feb-24	97.7
Girder	750738	SR 429 SB	US 441 & Fla Cent RR	2012	n/a	Jan-23	99.2
Girder	750739	SR 429 NB		2012	n/a	May-24	99.2
Girder	750843	SR 429 NB	Parcel 197	2017	n/a	May-24	98.6
Girder	750844	SR 429 SB	W Kelly Park Road	2017	n/a	May-23	98.6
Girder	750845	SR 429 NB		2017	n/a	May-23	98.6
Girder	750861	SR 429 SB	Ponkan Road	2016	n/a	Apr-23	99.5
Girder	750862	SR 429 NB		2016	n/a	Apr-23	99.5
Girder	750865	SR 429 SB	Plymouth Sorrento Road	2018	n/a	Feb-24	92.1
Girder	750866	SR 429 NB		2018	n/a	Feb-24	92.1
Girder	750869	SR 429 SB		2018	n/a	Feb-24	100.0
Girder	750870	SR 453 SB	Plymouth Sorrento Road	2018	n/a	Feb-24	100.0
Girder	750877	SR 429 SB	CR 435/Mt. Plymouth Road	2017	n/a	Mar-24	99.6
Girder	750878	SR 429 NB		2017	n/a	Mar-24	99.6
Girder	754112	Hiawassee Road	Fla Cent RR	2002	n/a	Jul-23	94.9

Source: FHWA National Bridge Inventory, Florida Bridge Information 6-28-24

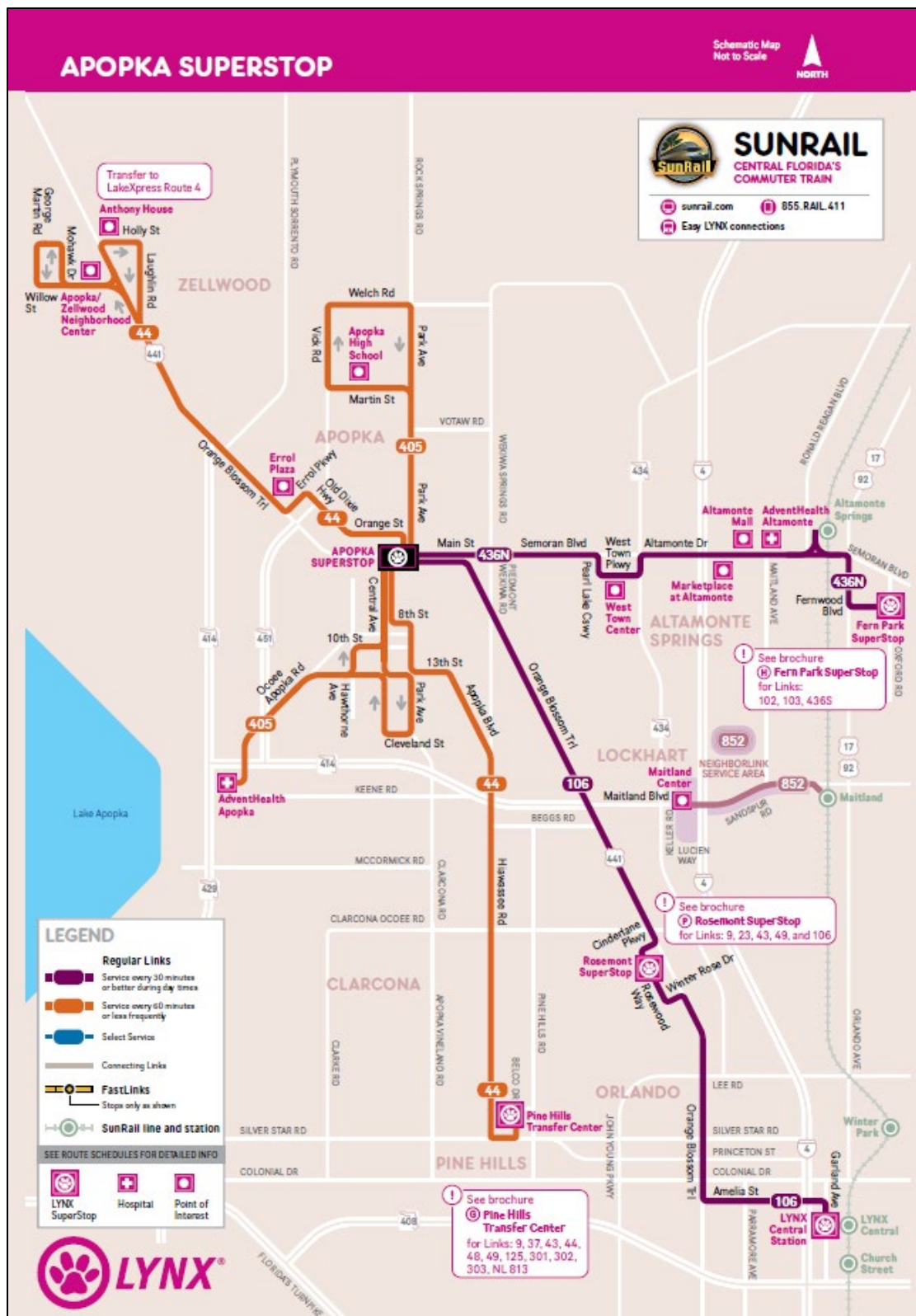
Sufficiency Ratings: 0.0 to 50.0 - Possible Replacement; 50.0 to 80.0 - Possible Rehabilitation; 80.0 to 100.0 - No Action needed.

4.9 TRANSIT SERVICES

Information on transit services was obtained directly from the LYNX website (golynx.com). The NOWOCATS area is served by four LYNX routes, as shown in **Figure 4-7**. The ridership data provided by LYNX (GIS shapefile) is provided in figures in **Appendix L**.

- ❖ Route 44 provides 60-minute service connecting the Pine Hills Transfer Center to Holly Street and North US 441/Orange Blossom Trail, passing through key areas such as Hiawasse Road, Apopka, and Zellwood.
- ❖ Route 106, also known as the US 441/ Apopka Line, provides 30-minute service connecting downtown Orlando to Apopka, primarily traveling along North and South US 441/Orange Blossom Trail.
- ❖ Route 405 provides 60-minute service with connections between residential neighborhoods, key community destinations, and the Apopka SuperStop, facilitating transfers to other LYNX routes such as 44, 106, 436N, and NeighborLink 652.
- ❖ Route 436N provides 30-minute service with connections between Altamonte Springs to South Central Avenue and M.A. Broad Street in Apopka, primarily traveling along SR 436.

FIGURE 4-8: 2025 LYNX MAP



4.10 LIGHTING

The location of the lighting along the project corridor was determined based on desktop reviews of the area from Google Earth Aerials (2025). A summary of the existing lighting locations along the project roadway segments is shown in **Table 4-12**.

Based on FDM Table 231.2.1, conventional lighting along a minor arterial is required to produce 1.0 horizontal foot candles (HFC). New reconstruction lighting at signalized intersections is required to produce 3.0 HFC and 2.3 vertical foot candles (VFC) and retrofit lighting at signalized intersections is required to produce 1.5 HFC and 1.5 VFC. The mounting height of the luminaires should be between 30 feet and 50 feet per FDOT Design Standard 715-002. As the lumens and mounting height of the corridor lighting are not known, it is not known whether the existing lighting meets current FDM standards.

To provide adequate lighting at each signalized intersection, each crosswalk should have two lights, one on each end of the crosswalk. This generally means eight lights should be provided at each signalized intersection. **Table 4-13** and **Figure 4-8** summarizes the number of lights at each signalized intersection.

TABLE 4-12: LIGHTING LOCATION SUMMARY

Roadway	From	To	Location	Spacing (ft)
Sadler Road	Lake County Line	US 441/Orange Blossom Trail	Both	230-370
Sadler Road	US 441/Orange Blossom Trail	Round Lake Road	None	N/A
Jones Avenue	US 441/Orange Blossom Trail	Lake County Line	None	N/A
Old Hwy US 441	US 441/Orange Blossom Trail	Lake County Line	None	N/A
Round Lake Road	Ponkan Road	Kelly Park Road	East	540
Round Lake Road	Kelly Park Road	Lake County Line	None	N/A
Mt Plymouth Road	Kelly Park Road	Lake County Line	Both	170-330
W Kelly Park Road	Round Lake Road	Rock Springs Road	Both	230
Plymouth Sorrento Road	Lake County Line	Kelly Park Road	East	70-200
Plymouth Sorrento Road	Kelly Park Road	Ponkan Road	Both	90-380
Plymouth Sorrento Road	Ponkan Road	US 441/Orange Blossom Trail	None	N/A
Park Avenue	US 441/Orange Blossom Trail	Lake McCoy Dr	Both	75-260
N Park Avenue	Lake McCoy Dr	Welch Road	Both	170-775
Rock Springs Road	Welch Road	Ponkan Road	Both	180-380
Rock Springs Road	Ponkan Road	Kelly Park Road	Both	200-450
W Welch Road	Vick Rd	Rock Springs Road	Both	160-400
W Welch Road	Rock Springs Road	Ustler Road	North	120-415
W Welch Road	Ustler Road	N Thompson Road	Both	220-630
W Welch Road	N Thompson Road	Wekiwa Springs Road	South	210-350
Piedmont-Wekiwa Road	US 441/Orange Blossom Trail	SR 436/Semoran Boulevard	Both	100-210
Wekiwa Springs Road	SR 436/Semoran Boulevard	Seminole County Line	Both	180-380
Votaw Road	Park Avenue	Wekiwa Springs Road	South	140-260
SR 436/Semoran Boulevard	US 441/Orange Blossom Trail	Thompson Road	Both	175-450
Sheeler Avenue	Keene Road	Apopka Boulevard	Both	70-295
Sheeler Avenue	Apopka Boulevard	SR 436/Semoran Boulevard	Both	85-460
W Orange Avenue	US 441/Orange Blossom Trail	Lake View Drive	None	N/A
S Binion Road	Lake View Drive	Lust Road	None	N/A
S Binion Road	Lust Road	Ocoee-Apopka Road	West	130-300
Ocoee Apopka Road	West Road/ Ocoee Crown Pointe Pkwy	Bradshaw Road	None	N/A
W Michael Gladden Boulevard	Bradshaw Road	South Central Avenue	Both	300-540
E Keene Road	Clarcona Road	Sheeler Avenue	None	N/A
Apopka Boulevard/ Alabama Avenue	Sheeler Avenue	US 441/Orange Blossom Trail	West	155-515
US 441/Orange Blossom Trail	Seminole County Line	Roger Williams Road	None	N/A
US 441/Orange Blossom Trail	Roger Williams Road	Plymouth Sorrento Road	Both	200-370
US 441/Orange Blossom Trail	Plymouth Sorrento Road	Ponkan Road	Both	65-140
US 441/Orange Blossom Trail	Ponkan Road	Lake County Line	None	N/A
Clarcona Road	Gilliam Road	Keene Road	Both	65-605

Source: Google Earth Aerial Images (2025)

TABLE 4-13: NUMBER OF LIGHTS AT SIGNALIZED INTERSECTIONS

Intersections	# Lights
Sadler Road at US 441/Orange Blossom Trail	1
Jones Avenue at US 441/Orange Blossom Trail	4
W Kelly Park Road at Plymouth Sorrento Road	6
Plymouth Sorrento Road at Ponkan Road	1
Plymouth Sorrento Road at Yothers Road/W Lester Road	4
N Park Avenue/Rock Springs Road at US 441/Orange Blossom Trail	7
N Park Avenue/Rock Springs Road at Welch Road	7
Plymouth Sorrento Road at SR 429 Connector Road	1
N Park Avenue/Rock Springs Road at Votaw Road E	3
Plymouth Sorrento Road at US 441/Orange Blossom Trail	0
W Welch Road at Vick Road	2
W Welch Road at N Thompson Road	2
W Welch Road at Wekiwa Springs Road	1
Piedmont-Wekiwa Road at US 441/Orange Blossom Trail	4
Piedmont-Wekiwa Road at SR 436/Semoran Boulevard	6
Wekiwa Springs Road at Votaw Road E	2
SR 436/Semoran Boulevard at US 441/Orange Blossom Trail	2
W Orange Avenue at US 441/Orange Blossom Trail	0
E Keene Road at Clarcona Road S	1
E Keene Road at John Land SR 414 Expressway Ramps	2
US 441/Orange Blossom Trail at Benbow Court	1
US 441/Orange Blossom Trail at Roger Williams Road	1
US 441/Orange Blossom Trail at McGee Avenue	9
US 441/Orange Blossom Trail at Central Avenue S	6
US 441/Orange Blossom Trail at Errol Parkway	3
US 441/Orange Blossom Trail at SR 429 Connector Road	7
US 441/Orange Blossom Trail at Edgewood Drive/Midland Avenue	4
US 441/Orange Blossom Trail at Bradshaw Road	4
US 441/Orange Blossom Trail at Lowes Driveway	0
US 441/Orange Blossom Trail at Hermit Smith Road	5
US 441/Orange Blossom Trail at SR 451/Vick Road	6
US 441/Orange Blossom Trail at Boy Scout Boulevard	0
US 441/Orange Blossom Trail at Spillman Drive	5
US 441/Orange Blossom Trail at Junction Road/Wesley Road	8
US 441/Orange Blossom Trail at Stoneybrook Hills Parkway	0
Rock Springs Road at Ponkan Road	4
Thompson Road at Votaw Road	1
Ocoee Apopka Road at West Road	4
Ocoee Apopka Road at SR 429 SB Ramps	4
Ocoee Apopka Road at SR 429 NB Ramps	3
Ocoee Apopka Road at Harmon Road	6
Apopka Boulevard at Hiawassee Road	5
Apopka Boulevard at Lakeville Road	3
Apopka Boulevard at Sheeler Avenue	5
Sadler Road at US 441/Orange Blossom Trail	0
Jones Avenue at US 441/Orange Blossom Trail	4

Source: Google Earth Aerial Images (2025)

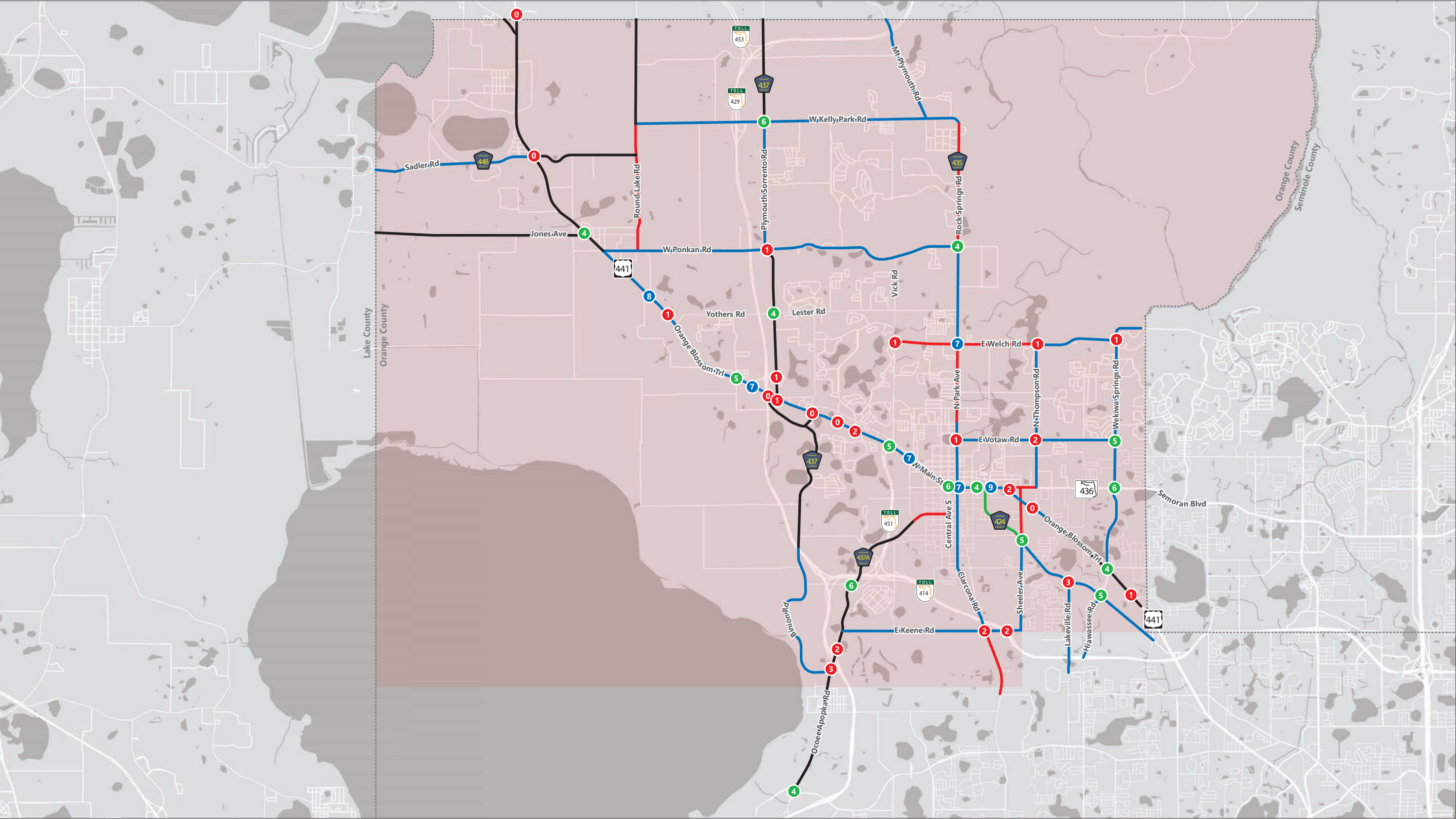


Figure 4-8
Lighting
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

4.11 TRUCK, FREIGHT, STRATEGIC INTERMODAL SYSTEM, AND EVACUATION ROUTES

Two study area roadways are identified as evacuation routes, US 441/Orange Blossom Trail (SR 436/Semoran Boulevard to Lake County Line) and SR 436/Semoran Boulevard (US 441/Orange Blossom Trail to Seminole County Line). The purpose of an evacuation route is to funnel traffic from the coast inward. None of the roadways within the study area are part of the Strategic Intermodal System (SIS) or major freight routes, however the Florida Central Railroad does run adjacent to US 441/Orange Blossom Trail throughout the majority of the Study Area. The Orange County evacuation route map and freight infrastructure map are included in **Appendix M**.

4.12 INTELLIGENT TRANSPORTATION SYSTEMS FEATURES

The traffic signals within the study area are managed by a central Traffic Management Center that provides video monitoring, signal timing control, and emergency monitoring throughout the Orlando region. The majority of the signals with ITS features are connected to the Traffic Management Center via a Miovision cell-based connection.

Figure 4-9 and **Table 4-14** provide a summary of the Intelligent Transportation Systems (ITS) features like Miovision cameras and CCTV cameras available at study intersections. There are no Master Huts located at any study intersection. The fiber optics are present along the north/south stretch or roadway that covers Hiawasse Road, Piedmont Wekiwa Road, and Wekiwa Springs within the study area. There are also small sections of coverage on US 441/Orange Blossom Trail and SR 436/Semoran Boulevard. The County wide details on ITS features retrieved from Orange County including information on fiber placement, Miovision locations, Rhythm, and Intelight Adaptive Intersection locations, PedSafe and CCTV locations, and Master Hut locations are included in **Appendices N-1, N-2, N-3, and N-4**.

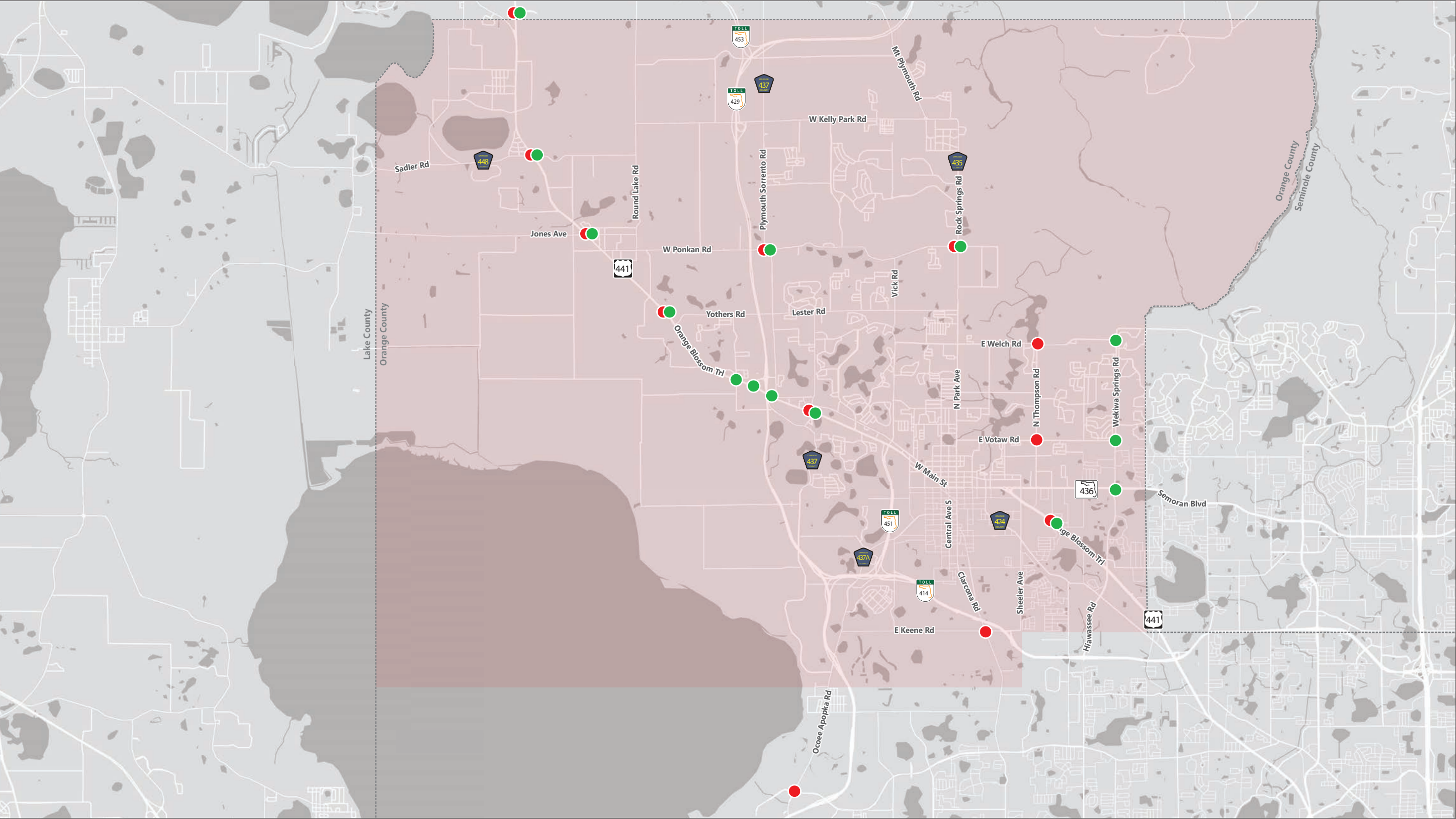


Figure 4-9
ITS Features
Northwest Orange County
Areawide Transportation Study
(NOWOCATS)

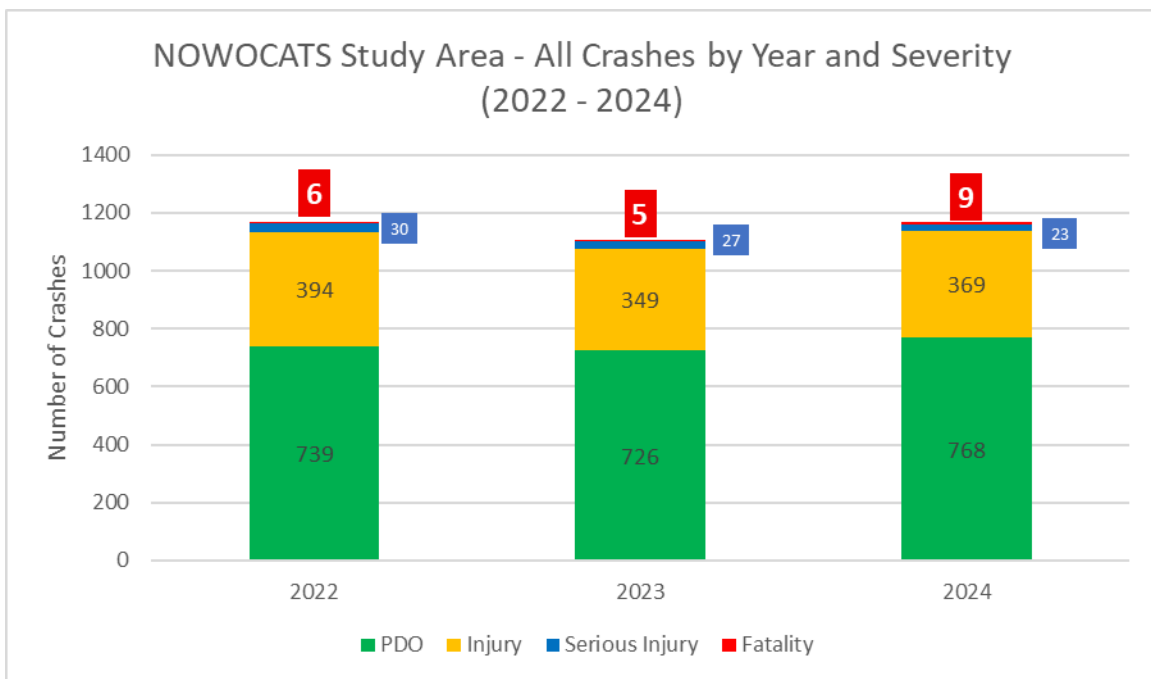
TABLE 4-14: ITS FEATURES SUMMARY

Intersections	Master Hut	Miovision Camera	CCTV Cameras
Sadler Road at US 441/Orange Blossom Trail		✓	✓
Jones Avenue at US 441/Orange Blossom Trail		✓	✓
Plymouth Sorrento Road at Ponkan Road		✓	✓
W Welch Road at N Thompson Road		✓	
W Welch Road at Wekiwa Springs Road			✓
Piedmont-Wekiwa Road at SR 436/Semorán Boulevard			✓
Wekiwa Springs Road at Votaw Road E			✓
W Orange Avenue at US 441/Orange Blossom Trail			✓
E Keene Road at Clarcona Road S		✓	
US 441/Orange Blossom Trail at Roger Williams Road		✓	✓
US 441/Orange Blossom Trail at SR 429 Connector Road			✓
US 441/Orange Blossom Trail at Hermit Smith Road			✓
US 441/Orange Blossom Trail at Boy Scout Boulevard		✓	✓
US 441/Orange Blossom Trail at Spillman Drive		✓	✓
US 441/Orange Blossom Trail at Stoneybrook Hills Parkway		✓	✓
Rock Springs Road at Ponkan Road		✓	✓
Thompson Road at Votaw Road		✓	
Ocoee Apopka Road at West Road		✓	

5 CRASH DATA

The latest available three years of crash data within the study area, from January 1st, 2022, to December 31st, 2024, were extracted from the Signal 4 Analytics system. Based on the crash data obtained, a total of **3,445** crashes occurred within the entire study area in this time period. As shown in **Figure 5-1**, out of 3,445 crashes, 2,233 crashes were reported as property damage, 1,112 resulted in injuries, 80 resulted in serious injuries, and 20 resulted in fatalities. The total number of crashes per year was observed to be equal in 2022 and 2024, with a slight decrease in 2023. The raw crash data for intersections and roadway segments are provided in **Appendices O-1** and **O-2**, respectively.

FIGURE 5-1: NOWOCATS CRASH SUMMARY



5.1 CRASH SUMMARY – STUDY INTERSECTIONS

A detailed review of crashes was performed for study intersections. The Signal 4 Analytics system generally uses a 250-foot radius from the center of the intersection as the intersection area of influence. Out of the 3,445 crashes in the study area, 770 were found to have occurred within the influence areas of the 44 study intersections. **Table 5-1** below summarizes the crash types and **Table 5-2** summarizes the crash conditions and severities for each intersection. Please note that there are no crashes reported at the intersection of SR 414 Ramps & Keene Road during the study time period and the four crashes that occurred at the intersection of Plymouth Sorrento Road & SR 429 Connector were considered in the segment analysis.

Out of 770 intersection crashes, left-turn (33.5%), rear-end (27.5%), sideswipe (10.5%), and angle (10.5%) crashes represent the great majority. Out of the 770 crashes, there were a total of 5 fatal crashes (0.65%), 299 injury crashes (38.8%), and 466 property damage only crashes (60.5%). A total of 493 crashes occurred during the daylight hours (64.0%), and 695 crashes occurred during dry roadway conditions (90.3%). Pedestrian and cyclist collisions accounted for 24 crashes (3.1%).

As shown in **Table 5-3**, the crash rates of each intersection were compared to the latest available statewide average crash rates for each intersection category, as shown in the table. Crash rates were computed using the following equation:

$$\text{Intersection Crash Rate} = \frac{\text{Number of Crashes} * 1,000,000}{\text{Daily Entering Volume} * 365 \text{ days} * 3 \text{ years}}$$

The equations for both intersection and segment crash rates (later referenced in the following sections) are based on references from the FDOT State Safety Office (specifically materials from the FDOT Crash Data Academy), which provides average crash rate data in terms of Crash Rate per Million Entering Vehicles (MEV) for intersections, and Crash Rate per Million Vehicle Miles (MVM) for segments.

The Daily Entering Volumes (DEV) were estimated based on the analysis TMC, which are seasonally adjusted. For each intersection leg, the peak 2-way volumes were divided by an assumed K-factor of 0.09 to determine AADT estimates for both AM and PM peak hours. Next, the highest estimated AADT (between AM and PM) for each intersection leg was summed for each intersection and divided by 2 to estimate DEV.

The crash rate for each study intersection was compared to crash rate averages for similar intersections within the study area (included in **Appendix O-3**). This approach was taken to provide a relative assessment of study area intersections and to identify the higher crash locations per intersection type. The study area crash rate for each intersection type is included in **Table 5-3**. Crash rates that exceed the study area average are highlighted in the table. Based on the assessment, 17 of 44 intersections were identified to have a crash rate higher than the study area average crash rate for similar facilities. These intersections are identified with red text in **Table 5-3**.

TABLE 5-1: CRASH TYPE SUMMARY BY INTERSECTION (2022-2024)

Intersections	Total	Rear End	Head On	Sideswipe	Roll Over	Angle	Left Turn	Right Turn	Off Road	Ped/Bike	Animal	Other/Unknown
1: US 441/Orange Blossom Trail & Benbow Court	15	4	1	2	0	1	3	1	0	1	0	2
2: US 441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road	46	29	0	8	0	0	1	2	1	1	0	4
3: US 441/Orange Blossom Trail & Victor Drive & Roger Williams Avenue	2	1	0	0	0	0	0	0	0	1	0	0
4: US 441/Orange Blossom Trail & SR 436/Semoran Boulevard*	11	3	0	8	0	0	0	0	0	0	0	0
5: US 441/Orange Blossom Trail & McGee Avenue	16	7	0	0	0	1	5	2	0	0	0	1
6: US 441/Orange Blossom Trail & Midland Avenue/Edgewood Drive	21	7	0	0	0	4	7	1	0	1	0	1
7: US 441/Orange Blossom Trail & Park Avenue	54	16	1	11	0	4	8	3	0	4	0	7
8: US 441/Orange Blossom Trail & Central Avenue	24	8	1	3	0	1	4	0	0	3	0	4
9: US 441/Orange Blossom Trail & Bradshaw Road	29	9	0	3	0	3	10	0	1	0	1	2
10: US 441/Orange Blossom Trail & SR 451/Vick Road	33	14	1	6	0	5	4	0	0	2	0	1
11: US 441/Orange Blossom Trail & Driveway/Errol Parkway	23	3	1	2	0	0	12	0	0	1	0	4
12: US 441/Orange Blossom Trail & Home Depot/Lowes Driveway	19	4	0	1	0	0	11	0	0	0	0	3
13: US 441/Orange Blossom Trail & Boy Scout Boulevard	30	5	0	2	0	7	13	3	0	0	0	0
14: US 441/Orange Blossom Trail & Plymouth Sorrento Road	1	0	0	0	0	0	1	0	0	0	0	0
15: US 441/Orange Blossom Trail & W Orange Avenue	10	2	0	1	0	1	5	0	0	0	0	1
16: US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road	21	12	0	3	0	0	1	4	1	0	0	0
17: US 441/Orange Blossom Trail & Hermit Smith Road	24	0	0	2	0	4	13	2	0	0	0	3
18: US 441/Orange Blossom Trail & Spillman Drive	2	0	0	0	0	0	2	0	0	0	0	0
19: US 441/Orange Blossom Trail & Wesley Road/Junction Road	5	0	0	0	0	2	3	0	0	0	0	0
20: US 441/Orange Blossom Trail & Jones Avenue	23	4	2	1	0	1	15	0	0	0	0	0
21: US 441/Orange Blossom Trail & Sadler Road	22	6	0	0	0	4	9	1	0	0	0	2
22: US 441/Orange Blossom Trail & Stoneybrook Hills Parkway	6	1	0	1	0	1	2	1	0	0	0	0
23: Hiawassee Road & Apopka Boulevard	33	10	0	3	0	2	14	1	0	1	0	2
24: Lakeville Road/Private Driveway & Apopka Boulevard	1	1	0	0	0	0	0	0	0	0	0	0
25: Sheeler Avenue & Apopka Boulevard	18	4	0	1	0	2	11	0	0	0	0	0
26: Clarcona Road & Keene Road	7	0	0	1	0	3	3	0	0	0	0	0
28: Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road	50	17	0	1	0	6	15	3	1	0	0	7
29: Ocoee Apopka Road & SR 429 SB Ramps	16	1	1	1	0	0	12	0	0	0	0	1
30: Ocoee Apopka Road & SR 429 NB Ramps	24	11	0	0	1	0	12	0	0	0	0	0
31: Ocoee Apopka Road & Harmon Road	23	3	0	3	0	9	4	0	1	0	0	3
32: Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard	29	5	0	10	0	1	5	1	0	4	0	3
33: Wekiwa Springs Road & Votaw Road	5	1	0	0	0	1	3	0	0	0	0	0
34: Wekiwa Springs Road & Welch Road	5	0	0	0	0	0	5	0	0	0	0	0
35: Thompson Road & Votaw Road	12	0	0	0	0	6	4	0	0	0	0	2
36: Thompson Road & Welch Road	6	0	0	2	0	1	2	0	1	0	0	0
37: Park Avenue & Votaw Road	13	3	1	2	0	0	5	1	1	0	0	0
38: Park Avenue/Rock Springs Road & Welch Road	43	12	0	2	0	0	18	1	0	4	0	6
39: Rock Springs Road & Ponkan Road	7	1	0	0	0	2	1	0	1	1	0	1

Intersections	Total	Rear End	Head On	Sideswipe	Roll Over	Angle	Left Turn	Right Turn	Off Road	Ped/Bike	Animal	Other/ Unknown
40: Vick Road & Welch Road	8	2	0	0	0	1	1	0	2	0	0	2
42: Plymouth Sorrento Road & Yothers Road/Lester Road	14	3	0	1	0	5	3	2	0	0	0	0
43: Plymouth Sorrento Road & Ponkan Road	11	0	0	0	0	2	9	0	0	0	0	0
44: Plymouth Sorrento Road & Kelly Park Road	8	3	0	0	1	1	2	1	0	0	0	0
Totals	770	212	9	81	2	81	258	30	10	24	1	62
Percent of Total	-	28%	1%	11%	0%	11%	34%	4%	1%	3%	0%	8%

**Analysis considers the intersection influence area of the interchange signal.*

TABLE 5-2: CRASH SEVERITY SUMMARY BY INTERSECTION (2022-2024)

Intersections	Total Crashes	Crash Severity			Surface Condition		Lighting Condition				
		Fatal	Injury	PDO	Wet	Dry	Daylight	Dusk	Dawn	Dark – Lighted	Dark
1: US 441/Orange Blossom Trail & Benbow Court	15	0	4	11	1	14	13	0	0	2	0
2: US 441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road	46	0	15	31	8	38	31	1	0	14	0
3: US 441/Orange Blossom Trail & Victor Drive & Roger Williams Avenue	2	0	1	1	0	2	2	0	0	0	0
4: US 441/Orange Blossom Trail & SR 436/Semoran Boulevard*	11	0	0	11	0	11	9	0	0	2	0
5: US 441/Orange Blossom Trail & McGee Avenue	16	0	2	14	0	16	11	0	1	4	0
6: US 441/Orange Blossom Trail & Midland Avenue/Edgewood Drive	21	0	6	15	1	20	18	0	0	3	0
7: US 441/Orange Blossom Trail & Park Avenue	54	1	16	37	8	46	38	1	2	13	0
8: US 441/Orange Blossom Trail & Central Avenue	24	0	6	18	2	22	21	0	0	3	0
9: US 441/Orange Blossom Trail & Bradshaw Road	29	0	12	17	0	29	21	0	0	8	0
10: US 441/Orange Blossom Trail & SR 451/Vick Road	33	0	9	24	6	27	19	1	0	12	1
11: US 441/Orange Blossom Trail & Driveway/Errol Parkway	23	0	11	12	0	23	16	1	0	5	1
12: US 441/Orange Blossom Trail & Home Depot/Lowes Driveway	19	0	12	7	5	14	12	0	1	5	1
13: US 441/Orange Blossom Trail & Boy Scout Boulevard	30	1	20	9	2	28	17	1	0	7	5
14: US 441/Orange Blossom Trail & Plymouth Sorrento Road	1	0	1	0	0	1	0	0	0	1	0
15: US 441/Orange Blossom Trail & W Orange Avenue	10	0	6	4	0	10	7	0	0	1	2
16: US 441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road	21	0	6	15	0	21	11	0	1	6	3
17: US 441/Orange Blossom Trail & Hermit Smith Road	24	0	13	11	2	22	20	1	1	1	1
18: US 441/Orange Blossom Trail & Spillman Drive	2	0	1	1	0	2	2	0	0	0	0
19: US 441/Orange Blossom Trail & Wesley Road/Junction Road	5	0	4	1	0	5	4	0	0	0	1
20: US 441/Orange Blossom Trail & Jones Avenue	23	1	10	12	0	23	9	1	3	9	1
21: US 441/Orange Blossom Trail & Sadler Road	22	0	8	14	3	19	14	1	1	3	3
22: US 441/Orange Blossom Trail & Stoneybrook Hills Parkway	6	0	4	2	1	5	3	1	0	1	1
23: Hiawassee Road & Apopka Boulevard	33	0	19	14	2	31	21	1	0	10	1
24: Lakeville Road/Private Driveway & Apopka Boulevard	1	0	0	1	0	1	0	1	0	0	0
25: Sheeler Avenue & Apopka Boulevard	18	0	5	13	1	17	9	0	1	8	0
26: Clarcona Road & Keene Road	7	0	3	4	0	7	4	0	0	3	0
28: Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road	50	0	19	31	4	46	30	2	4	13	1
29: Ocoee Apopka Road & SR 429 SB Ramps	16	0	5	11	0	16	7	1	0	7	1
30: Ocoee Apopka Road & SR 429 NB Ramps	24	0	8	16	3	21	17	1	0	6	0
31: Ocoee Apopka Road & Harmon Road	23	0	10	13	3	20	14	0	0	5	4
32: Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard	29	0	10	19	5	24	21	0	0	8	0
33: Wekiwa Springs Road & Votaw Road	5	0	2	3	1	4	4	0	0	1	0
34: Wekiwa Springs Road & Welch Road	5	0	5	0	0	5	4	0	0	1	0
35: Thompson Road & Votaw Road	12	0	8	4	1	11	6	0	2	3	1
36: Thompson Road & Welch Road	6	0	3	3	1	5	3	0	0	1	2
37: Park Avenue & Votaw Road	13	0	3	10	1	12	7	0	0	5	1

Intersections	Total Crashes	Crash Severity			Surface Condition		Lighting Condition				
		Fatal	Injury	PDO	Wet	Dry	Daylight	Dusk	Dawn	Dark – Lighted	Dark
38: Park Avenue/Rock Springs Road & Welch Road	43	2	11	30	7	36	23	1	1	18	0
39: Rock Springs Road & Ponkan Road	7	0	4	3	0	7	4	0	0	2	1
40: Vick Road & Welch Road	8	0	0	8	2	6	2	0	1	4	1
42: Plymouth Sorrento Road & Yothers Road/Lester Road	14	0	6	8	1	13	7	2	0	4	1
43: Plymouth Sorrento Road & Ponkan Road	11	0	8	3	2	9	9	0	1	1	0
44: Plymouth Sorrento Road & Kelly Park Road	8	0	3	5	2	6	3	1	0	4	0
Totals	770	5	299	466	75	695	493	19	20	204	34
Percent of Total	-	1%	39%	61%	10%	90%	64%	2%	3%	26%	4%

**Analysis considers the intersection influence area of the interchange signal.*

TABLE 5-3: INTERSECTION CRASH RATES SUMMARY (2022-2024)

Intersections	Category (Urban)	Study Area Average Crash Rate	Crash Severity			2025 Daily Entering Volume*	Crash Frequency	Crash Rate
			Total Crashes	Fatality / Injury	PDO			
1: US 441/Orange Blossom Trail & Benbow Court	2 Lane, Divided, 4 Leg	0.676	15	4	11	32,695	5.0	0.419
2: US441/Orange Blossom Trail & Hiawassee Road/Piedmont Wekiwa Road	2 Lane, Divided, 4 Leg	0.676	46	15	31	56,889	15.3	0.738
3: US 441/Orange Blossom Trail & Victor Drive & Roger Williams Avenue	2 Lane, Divided, 5 Leg	0.070	2	1	1	26,211	0.7	0.070
4: US 441/Orange Blossom Trail & SR 436/Semoran Boulevard**	2 Lane, Divided, 3 Leg	0.242	11	0	11	18,656	3.7	0.538
5: US441/Orange Blossom Trail & McGee Avenue	2 Lane, Divided, 4 Leg	0.676	16	2	14	38,589	5.3	0.379
6: US441/Orange Blossom Trail & Midland Avenue/Edgewood Drive	2 Lane, Undivided, 4 Leg	0.720	21	6	15	37,789	7.0	0.508
7: US441/Orange Blossom Trail & Park Avenue	2 Lane, Undivided, 4 Leg	0.720	54	17	37	45,534	18.0	1.083
8: US441/Orange Blossom Trail & Central Avenue	2 Lane, Divided, 4 Leg	0.676	24	6	18	33,122	8.0	0.662
9: US441/Orange Blossom Trail & Bradshaw Road	2 Lane, Undivided, 4 Leg	0.720	29	12	17	39,367	9.7	0.673
10: US441/Orange Blossom Trail & SR 451/Vick Road	2 Lane, Divided, 4 Leg	0.676	33	9	24	53,850	11.0	0.560
11: US441/Orange Blossom Trail & Driveway/Errol Parkway	2 Lane, Divided, 4 Leg	0.676	23	11	12	35,795	7.7	0.587
12: US441/Orange Blossom Trail & Home Depot/Lowes Driveway	2 Lane, Divided, 4 Leg	0.676	19	12	7	30,056	6.3	0.577
13: US441/Orange Blossom Trail & Boy Scout Boulevard	2 Lane, Divided, 4 Leg	0.676	30	21	9	30,723	10.0	0.892
14: US 441/Orange Blossom Trail & Plymouth Sorrento Road	2 Lane, Divided, 3 Leg	0.242	1	1	0	25,934	0.3	0.035
15: US441/Orange Blossom Trail & W Orange Avenue	2 Lane, Divided, 3 Leg	0.242	10	6	4	25,039	3.3	0.365
16: US441/Orange Blossom Trail & Kitt Avenue/SR 429 Connector Road	2 Lane, Divided, 4 Leg	0.676	21	6	15	36,234	7.0	0.529
17: US441/Orange Blossom Trail & Hermit Smith Road	2 Lane, Divided, 4 Leg	0.676	24	13	11	36,812	8.0	0.595
18: US 441/Orange Blossom Trail & Spillman Drive	2 Lane, Divided, 3 Leg	0.242	2	1	1	36,234	0.7	0.050
19: US 441/Orange Blossom Trail & Wesley Road/Junction Road	2 Lane, Divided, 4 Leg	0.676	5	4	1	35,200	1.7	0.130
20: US 441/Orange Blossom Trail & Jones Avenue	2 Lane, Divided, 4 Leg	0.676	23	11	12	37,522	7.7	0.560
21: US 441/Orange Blossom Trail & Sadler Road	2 Lane, Divided, 4 Leg	0.676	22	8	14	35,567	7.3	0.565
22: US 441/Orange Blossom Trail & Stoneybrook Hills Parkway	2 Lane, Divided, 3 Leg	0.242	6	4	2	25,028	2.0	0.219
23: Hiawassee Road & Apopka Boulevard	2 Lane, Divided, 4 Leg	0.676	33	19	14	28,261	11.0	1.066
24: Lakeville Road/Private Driveway & Apopka Boulevard	1 Lane, Undivided, 3 Leg	0.248	1	0	1	15,067	0.3	0.061
25: Sheeler Avenue & Apopka Boulevard	1 Lane, Undivided, 4 Leg	0.590	18	5	13	18,312	6.0	0.898
26: Clarcona Road & Keene Road	1 Lane, Undivided, 4 Leg	0.590	7	3	4	18,911	2.3	0.338
28: Ocoee Apopka Road & Ocoee Crown Point Parkway/West Road	2 Lane, Divided, 4 Leg	0.676	50	19	31	34,183	16.7	1.336
29: Ocoee Apopka Road & SR 429 SB Ramps	Interchange, 4 Leg	0.972	16	5	11	16,200	5.3	0.902
30: Ocoee Apopka Road & SR 429 NB Ramps	Interchange, 4 Leg	0.972	24	8	16	21,028	8.0	1.042
31: Ocoee Apopka Road & Harmon Road	2 Lane, Divided, 4 Leg	0.676	23	10	13	17,140	7.7	1.225
32: Piedmont Wekiwa Road/Wekiwa Springs Road & SR 436/Semoran Boulevard	4 Lane, Divided, 4 Leg	0.344	29	10	19	77,067	9.7	0.344
33: Wekiwa Springs Road & Votaw Road	2 Lane, Undivided, 3 Leg	0.330	5	2	3	22,006	1.7	0.207
34: Wekiwa Springs Road & Welch Road	1 Lane, Undivided, 3 Leg	0.248	5	5	0	20,734	1.7	0.220
35: Thompson Road & Votaw Road	1 Lane, Undivided, 4 Leg	0.590	12	8	4	18,289	4.0	0.599
36: Thompson Road & Welch Road	1 Lane, Undivided, 3 Leg	0.248	6	3	3	17,545	2.0	0.312
37: Park Avenue & Votaw Road	2 Lane, Undivided, 3 Leg	0.330	13	3	10	26,200	4.3	0.453
38: Park Avenue/Rock Springs Road & Welch Road	2 Lane, Undivided, 4 Leg	0.720	43	13	30	38,234	14.3	1.027

Intersections	Category (Urban)	Study Area Average Crash Rate	Crash Severity			2025 Daily Entering Volume*	Crash Frequency	Crash Rate
			Total Crashes	Fatality / Injury	PDO			
39: Rock Springs Road & Ponkan Road	2 Lane, Undivided, 4 Leg	0.720	7	4	3	20,811	2.3	0.307
40: Vick Road & Welch Road	1 Lane, Undivided, 3 Leg	0.248	8	0	8	18,378	2.7	0.398
42: Plymouth Sorrento Road & Yothers Road/Lester Road	1 Lane, Undivided, 4 Leg	0.590	14	6	8	17,723	4.7	0.721
43: Plymouth Sorrento Road & Ponkan Road	1 Lane, Undivided, 4 Leg	0.590	11	8	3	16,145	3.7	0.622
44: Plymouth Sorrento Road & Kelly Park Road	1 Lane, Undivided, 4 Leg	0.590	8	3	5	20,234	2.7	0.361

*Daily Entering Volume (DEV) is calculated based on peak hour TMC-based AADT estimates for each study intersection, assuming a K-factor of 9%. In general DEV = (Sum of AADT for each intersection leg)/2

**Analysis considers the intersection influence area of the interchange signal.

5.2 CRASH SUMMARY – STUDY SEGMENTS

A detailed review of crashes was performed for study segments. Out of the 3,445 crashes in the study area, 2,675 were found to have occurred within the segments, excluding the influence areas of the 44 study intersections. **Table 5-4** below summarizes the crash types and **Table 5-5** summarizes the crash conditions and severities for each segment.

Out of 2,675 segment crashes, rear-end (50.7%), sideswipe (16.0%), and other (9.8%) represent the great majority. Out of the 2,675 crashes, there were a total of 15 fatal crashes (0.6%), 893 injury crashes (33.4%), and 1,767 property damage only crashes (66.0%). A total of 1,965 crashes occurred during daylight hours (73.5%), and 2,384 crashes occurred during dry roadway conditions (89.1%). Pedestrian and cyclist collisions account for 46 crashes (1.7%).

Similarly with the intersection crash rate analysis, the crash rate for each study segment was compared to crash rate averages for similar segments within the study area (included in **Appendix O-3**). This approach was taken to provide a relative assessment of study area segments and to identify the higher crash locations per segment type. The study area average crash rate for each segment type is included in **Table 5-6**. Crash rates were computed per the following equation:

$$\text{Segment Crash Rate} = \frac{\text{Number of Crashes} * 1,000,000}{\text{AADT} * 365 \text{ days} * 3 \text{ years} * \text{Segment Length (miles)}}$$

The segment crash rate equation is based on guidance from the FDOT Safety Office as previously noted in Section 5.2.

The AADTs used in the crash rate analysis are consistent with the AADTs identified in **Appendix C-2** and described in Chapter 3.3, based on the methodology of comparing multiple AADT sources and selecting the highest value.

Based on the assessment, 22 of 59 segments were identified to have a crash rate higher than the study area average crash rate for similar facilities. These segments are identified with red text in **Table 5-6**.

TABLE 5-4: CRASH TYPE SUMMARY BY SEGMENTS (2022-2024)

Segments	Total	Rear End	Head On	Sideswipe	Roll Over	Angle	Left Turn	Right Turn	Off Road	Ped/Bike	Animal	Other/Unknown
Sadler Road (Lake County Line to US 441/Orange Blossom Trail)	29	10	1	1	0	2	5	3	3	0	0	4
Sadler Road (US 441/Orange Blossom Trail to Round Lake Road)	15	2	1	0	0	1	0	0	10	1	0	0
Jones Avenue (US 441/Orange Blossom Trail to Lake County Line)	32	17	1	3	0	1	0	0	6	0	1	3
Old Hwy US 441 (US 441/Orange Blossom Trail to Lake County Line)	3	3	0	0	0	0	0	0	0	0	0	0
Round Lake Road (Ponkan Road to Kelly Park Road)	11	2	0	0	0	1	1	0	3	0	0	4
Round Lake Road (Kelly Park Road to Lake County Line)	6	1	1	1	0	0	0	0	3	0	0	0
Mt Plymouth Road (Kelly Park Road to Lake County Line)	30	6	1	2	1	0	0	0	12	0	0	8
W Kelly Park Road (Round Lake Road to Plymouth Sorrento Road)	21	10	0	5	0	1	1	0	1	0	0	3
W Kelly Park Road (Plymouth Sorrento Road to Rock Springs Road)	34	8	1	2	0	0	3	0	10	2	1	7
Plymouth Sorrento Road (Lake County Line to Kelly Park Road)	11	3	0	1	0	0	3	0	1	0	0	3
Plymouth Sorrento Road (Kelly Park Road to Ponkan Road)	17	7	1	2	0	0	3	0	1	0	0	3
Plymouth Sorrento Road (Ponkan Road to US 441/Orange Blossom Trail)	28	14	1	4	0	0	5	0	1	1	0	2
N Park Avenue/Rock Springs Road (Orange Blossom Trail to Martin Street)	76	36	1	14	0	3	6	1	5	1	0	9
N Park Avenue/Rock Springs Road (Martin Street to Welch Road)	49	22	1	8	0	2	9	0	2	0	0	5
N Park Avenue/Rock Springs Road (Lester Road to Ponkan Road)	91	43	1	21	0	0	7	6	6	4	0	3
N Park Avenue/Rock Springs Road (Ponkan Road to Kelly Park Road)	22	5	0	3	0	0	2	1	8	0	1	2
W Welch Road (Vick Rd to Rock Springs Road)	32	24	0	3	0	0	1	0	2	0	0	2
W Welch Road (Rock Springs Road to N Thompson Road)	72	38	1	6	1	0	10	0	9	0	1	6
W Welch Road (N Thompson Road to Wekiwa Springs Road)	24	16	4	2	0	0	1	0	0	0	0	1
Piedmont-Wekiwa Road (US 441/Orange Blossom Trail to SR 436/Semoran Boulevard)	93	36	5	24	0	1	6	3	0	2	1	15
Wekiwa Springs Road (SR 436/Semoran Boulevard to Canter Club Trail)	32	13	0	5	0	0	10	1	2	1	0	0
Wekiwa Springs Road (Canter Club Trail to Orchard Drive)	14	10	0	1	1	0	1	0	0	0	0	1
Wekiwa Springs Road (Orchard Dr to Seminole County Line)	28	10	1	3	1	1	2	0	7	0	0	3
Votaw Road (Park Avenue to Thompson Road)	9	3	0	0	0	0	1	0	3	0	0	2
Votaw Road (Thompson Road to Wekiwa Springs Road)	11	6	0	0	0	0	2	0	2	0	0	1
SR 436/Semoran Boulevard (US 441/Orange Blossom Trail to Seminole County Line)	288	149	3	70	1	6	16	5	9	6	0	23
Sheeler Avenue (Keene Road to Apopka Boulevard)	20	3	0	1	0	1	2	0	5	1	0	7
Sheeler Avenue (Apopka Boulevard to SR 436/Semoran Boulevard)	47	18	0	4	0	5	11	1	0	2	0	6
W Orange Avenue (US 441/Orange Blossom Trail to Lake View Drive)	6	3	0	0	0	0	1	1	0	0	0	1
S Binion Road (Lake View Drive to Lust Road)	12	2	0	1	1	0	0	0	5	0	0	3
S Binion Road (Lust Road to Ocoee-Apopka Road)	23	8	2	2	1	0	1	0	4	1	0	4
Ocoee Apopka Road/Michael Gladden Boulevard (West Road / Ocoee Crown Pointe Pkwy to Binion Road)	67	41	2	4	0	0	9	0	4	2	0	5
Ocoee Apopka Road/Michael Gladden Boulevard (Binion Road to Harmon Road)	42	20	0	8	1	0	2	0	10	0	0	1
Ocoee Apopka Road/Michael Gladden Boulevard (Harmon Road to Bradshaw Road)	26	9	2	3	0	0	4	0	5	0	0	3
Ocoee Apopka Road/Michael Gladden Boulevard (Bradshaw Road to South Central Avenue)	5	1	0	1	1	1	0	0	0	1	0	0
E Keene Road (Clarcona Road to Sheeler Avenue)	8	7	0	0	0	1	0	0	0	0	0	0
Apopka Boulevard/Alabama Avenue (Sheeler Avenue to US 441/Orange Blossom Trail)	10	2	0	3	0	1	0	0	2	1	0	1
US 441/Orange Blossom Trail (Seminole County Line to Piedmont-Wekiwa Road)	84	44	0	17	0	4	1	1	3	2	0	12



Segments	Total	Rear End	Head On	Sideswipe	Roll Over	Angle	Left Turn	Right Turn	Off Road	Ped/Bike	Animal	Other/ Unknown
US 441/Orange Blossom Trail (Piedmont-Wekiwa Road to Roger Williams Road)	69	51	2	11	0	1	0	0	0	1	0	3
US 441/Orange Blossom Trail (Roger Williams Road to SR 436/Semoran Boulevard)	94	51	1	17	0	5	5	0	5	0	0	10
US 441/Orange Blossom Trail (SR 436/Semoran Boulevard to Park Avenue)	207	130	2	34	0	8	13	1	7	2	0	10
US 441/Orange Blossom Trail (Park Avenue to Western Beltway)	216	128	2	37	1	7	11	2	4	4	0	20
US 441/Orange Blossom Trail (Western Beltway to Plymouth Sorrento Road)	166	85	1	29	0	5	12	3	7	3	0	21
US 441/Orange Blossom Trail (Plymouth Sorrento Road to Ponkan Road)	122	77	3	23	2	0	1	0	6	1	1	8
US 441/Orange Blossom Trail (Ponkan Road to Sadler Road)	47	29	1	9	0	1	0	0	4	0	0	3
US 441/Orange Blossom Trail (Sadler Road to Earwood Avenue)	24	8	0	7	2	0	0	0	3	0	0	4
US 441/Orange Blossom Trail (Earwood Avenue to Lake County Line)	35	14	1	8	2	1	1	0	0	2	1	5
Clarcona Road / Park Avenue (Gilliam Road to Keene Road)	23	13	0	1	0	0	2	0	3	1	0	3
Clarcona Road / Park Avenue (Keene Road to Cleveland Street)	22	8	1	1	0	2	2	0	5	0	0	3
Clarcona Road / Park Avenue (Cleveland Street to US 441/Orange Blossom Trail/Main Street)	34	23	0	7	0	0	2	0	0	0	0	2
Apopka Boulevard (Overland Road to Hiawassee Road)	18	6	0	2	0	0	1	0	4	2	0	3
Apopka Boulevard (Hiawassee Road to Sheeler Avenue)	33	13	2	4	0	1	5	0	6	0	0	2
Hiawassee Road (Maitland Blvd Extension to Apopka Boulevard)	54	34	0	7	0	0	2	0	6	1	0	4
Lakeville Road (Beggs Road to Apopka Boulevard)	13	5	0	2	0	0	1	0	3	0	0	2
Ponkan Road (US 441/Orange Blossom Trail to Plymouth Sorrento Road)	8	7	0	0	0	0	0	0	1	0	0	0
Ponkan Road (Plymouth Sorrento Road to Rock Springs Road)	21	3	0	1	0	0	0	0	13	0	0	4
Lake View Drive (Binion Road to US 441/Orange Blossom Trail)	5	1	0	1	0	0	1	1	0	0	0	1
Thompson Road (SR 436/Semoran Boulevard to Votaw Road)	22	9	1	2	0	3	6	0	0	1	0	0
Thompson Road (Votaw Road to Welch Road)	14	8	1	1	0	0	0	0	3	0	0	1
Totals	2,675	1,355	49	429	16	66	191	30	224	46	7	262
Percent of Total	-	51%	2%	16%	1%	2%	7%	1%	8%	2%	0%	10%

TABLE 5-5: CRASH SEVERITY SUMMARY BY SEGMENT (2022-2024)

Segments	Total Crashes	Crash Severity			Surface Condition		Lighting Condition				
		Fatal	Injury	PDO	Wet	Dry	Daylight	Dusk	Dawn	Dark - Lighted	Dark
Sadler Road (Lake County Line to US 441/Orange Blossom Trail)	29	0	6	23	1	28	24	1	0	1	3
Sadler Road (US 441/Orange Blossom Trail to Round Lake Road)	15	0	9	6	2	13	6	0	0	0	9
Jones Avenue (US 441/Orange Blossom Trail to Lake County Line)	32	2	11	19	2	30	19	2	0	4	7
Old Hwy US 441 (US 441/Orange Blossom Trail to Lake County Line)	3	0	1	2	0	3	1	0	0	0	2
Round Lake Road (Ponkan Road to Kelly Park Road)	11	1	2	8	1	10	3	1	0	3	4
Round Lake Road (Kelly Park Road to Lake County Line)	6	0	4	2	1	5	3	1	1	0	1
Mt Plymouth Road (Kelly Park Road to Lake County Line)	30	0	16	14	5	25	16	2	0	9	3
W Kelly Park Road (Round Lake Road to Plymouth Sorrento Road)	21	0	8	13	1	20	14	1	1	5	0
W Kelly Park Road (Plymouth Sorrento Road to Rock Springs Road)	34	1	17	16	2	32	26	0	1	5	2
Plymouth Sorrento Road (Lake County Line to Kelly Park Road)	11	0	8	3	2	9	8	1	0	0	2
Plymouth Sorrento Road (Kelly Park Road to Ponkan Road)	17	0	6	11	1	16	10	2	0	2	3
Plymouth Sorrento Road (Ponkan Road to US 441/Orange Blossom Trail)	28	0	7	21	6	22	18	1	0	6	3
N Park Avenue/Rock Springs Road (Orange Blossom Trail to Martin Street)	76	0	14	62	6	70	58	3	0	14	1
N Park Avenue/Rock Springs Road (Martin Street to Welch Road)	49	0	15	34	7	42	39	1	2	4	3
N Park Avenue/Rock Springs Road (Lester Road to Ponkan Road)	91	1	26	64	7	84	66	3	3	18	1
N Park Avenue/Rock Springs Road (Ponkan Road to Kelly Park Road)	22	0	9	13	1	21	13	2	0	7	0
W Welch Road (Vick Rd to Rock Springs Road)	32	0	9	23	5	27	24	2	0	5	1
W Welch Road (Rock Springs Road to N Thompson Road)	72	0	22	50	9	63	47	4	1	10	10
W Welch Road (N Thompson Road to Wekiwa Springs Road)	24	0	8	16	1	23	20	0	0	2	2
Piedmont-Wekiwa Road (US 441/Orange Blossom Trail to SR 436/Semoran Boulevard)	93	0	26	67	10	83	82	3	0	8	0
Wekiwa Springs Road (SR 436/Semoran Boulevard to Canter Club Trail)	32	0	12	20	4	28	24	2	0	5	1
Wekiwa Springs Road (Canter Club Trail to Orchard Drive)	14	0	10	4	0	14	13	0	0	1	0
Wekiwa Springs Road (Orchard Dr to Seminole County Line)	28	0	15	13	6	22	19	0	2	5	2
Votaw Road (Park Avenue to Thompson Road)	9	0	5	4	0	9	6	0	0	3	0
Votaw Road (Thompson Road to Wekiwa Springs Road)	11	0	5	6	3	8	11	0	0	0	0
SR 436/Semoran Boulevard (US 441/Orange Blossom Trail to Seminole County Line)	288	1	102	185	24	264	205	8	2	68	5
Sheeler Avenue (Keene Road to Apopka Boulevard)	20	0	6	14	4	16	13	0	0	2	5
Sheeler Avenue (Apopka Boulevard to SR 436/Semoran Boulevard)	47	0	15	32	4	43	38	0	1	7	1
W Orange Avenue (US 441/Orange Blossom Trail to Lake View Drive)	6	0	1	5	0	6	6	0	0	0	0
S Binion Road (Lake View Drive to Lust Road)	12	0	3	9	2	10	4	1	0	1	6
S Binion Road (Lust Road to Ocoee-Apopka Road)	23	1	11	11	3	20	16	1	0	0	6
Ocoee Apopka Road/Michael Gladden Boulevard (West Road / Ocoee Crown Pointe Pkwy to Binion Road)	67	1	20	46	4	63	44	3	2	6	12
Ocoee Apopka Road/Michael Gladden Boulevard (Binion Road to Harmon Road)	42	0	14	28	1	41	24	0	3	6	9
Ocoee Apopka Road/Michael Gladden Boulevard (Harmon Road to Bradshaw Road)	26	0	10	16	4	22	16	0	2	3	5
Ocoee Apopka Road/Michael Gladden Boulevard (Bradshaw Road to South Central Avenue)	5	0	1	4	2	3	5	0	0	0	0
E Keene Road (Clarcona Road to Sheeler Avenue)	8	0	4	4	2	6	8	0	0	0	0

Segments	Total Crashes	Crash Severity			Surface Condition		Lighting Condition				
		Fatal	Injury	PDO	Wet	Dry	Daylight	Dusk	Dawn	Dark - Lighted	Dark
Apopka Boulevard/Alabama Avenue (Sheeler Avenue to US 441/Orange Blossom Trail)	10	0	3	7	0	10	6	0	2	2	0
US 441/Orange Blossom Trail (Seminole County Line to Piedmont-Wekiwa Road)	84	0	26	58	17	67	62	1	0	16	5
US 441/Orange Blossom Trail (Piedmont-Wekiwa Road to Roger Williams Road)	69	0	27	42	8	61	51	2	0	8	8
US 441/Orange Blossom Trail (Roger Williams Road to SR 436/Semoran Boulevard)	94	0	23	71	9	85	76	0	1	14	3
US 441/Orange Blossom Trail (SR 436/Semoran Boulevard to Park Avenue)	207	0	50	157	20	187	167	4	3	32	1
US 441/Orange Blossom Trail (Park Avenue to Western Beltway)	216	0	60	156	28	188	158	6	1	48	3
US 441/Orange Blossom Trail (Western Beltway to Plymouth Sorrento Road)	166	2	51	113	19	147	126	3	6	27	4
US 441/Orange Blossom Trail (Plymouth Sorrento Road to Ponkan Road)	122	0	45	77	11	111	92	2	2	11	15
US 441/Orange Blossom Trail (Ponkan Road to Sadler Road)	47	1	23	23	5	42	35	1	1	4	6
US 441/Orange Blossom Trail (Sadler Road to Earlwood Avenue)	24	0	9	15	3	21	16	1	0	3	4
US 441/Orange Blossom Trail (Earlwood Avenue to Lake County Line)	35	2	12	21	6	29	24	0	0	3	8
Clarcona Road / Park Avenue (Gilliam Road to Keene Road)	23	0	11	12	3	20	17	2	0	2	2
Clarcona Road / Park Avenue (Keene Road to Cleveland Street)	22	1	8	13	2	20	15	0	0	7	0
Clarcona Road / Park Avenue (Cleveland Street to US 441/Orange Blossom Trail/Main Street)	34	0	13	21	1	33	30	0	1	3	0
Apopka Boulevard (Overland Road to Hiawassee Road)	18	0	9	9	2	16	12	1	1	3	1
Apopka Boulevard (Hiawassee Road to Sheeler Avenue)	33	0	15	18	5	28	25	0	1	7	0
Hiawassee Road (Maitland Blvd Extension to Apopka Boulevard)	54	1	12	41	5	49	41	0	2	9	2
Lakeville Road (Beggs Road to Apopka Boulevard)	13	0	6	7	0	13	9	0	0	3	1
Ponkan Road (US 441/Orange Blossom Trail to Plymouth Sorrento Road)	8	0	2	6	0	8	8	0	0	0	0
Ponkan Road (Plymouth Sorrento Road to Rock Springs Road)	21	0	11	10	11	10	12	0	1	1	7
Lake View Drive (Binion Road to US 441/Orange Blossom Trail)	5	0	2	3	0	5	4	0	0	0	1
Thompson Road (SR 436/Semoran Boulevard to Votaw Road)	22	0	8	14	2	20	20	0	0	1	1
Thompson Road (Votaw Road to Welch Road)	14	0	9	5	1	13	10	0	0	4	0
Totals	2,675	15	893	1,767	291	2,384	1,965	68	43	418	181
Percent of Total	-	1%	33%	66%	11%	89%	73%	3%	2%	16%	7%

TABLE 5-6: SEGMENT CRASH RATES SUMMARY (2022-2024)

Intersections	Category	Study Area Average Crash Rate	Crash Severity			2025 AADT*	Length (mi)	Crash Frequency	Crash Rate
			Total Crashes	Fatality/ Injury	PDO				
Sadler Road (Lake County Line to US 441/Orange Blossom Trail)	Rural, 2 Lanes, Undivided	0.960	29	6	23	11,144	2.37	9.7	1.00
Sadler Road (US 441/Orange Blossom Trail to Round Lake Road)	Urban, 2 Lanes, Undivided	1.276	15	9	6	6,467	1.69	5.0	1.25
Jones Avenue (US 441/Orange Blossom Trail to Lake County Line)	Rural, 2 Lanes, Undivided	0.960	32	13	19	10,015	3.18	10.7	0.92
Old Hwy US 441 (US 441/Orange Blossom Trail to Lake County Line)	Urban, 2 Lanes, Undivided	1.276	3	1	2	5,140	1.12	1.0	0.48
Round Lake Road (Ponkan Road to Kelly Park Road)	Urban, 2 Lanes, Undivided	1.276	11	3	8	6,993	2.04	3.7	0.70
Round Lake Road (Kelly Park Road to Lake County Line)	Urban, 2 Lanes, Undivided	1.276	6	4	2	3,732	2.04	2.0	0.72
Mt Plymouth Road (Kelly Park Road to Lake County Line)	Urban, 2 Lanes, Undivided	1.276	30	16	14	8,014	2.29	10.0	1.49
W Kelly Park Road (Round Lake Road to Plymouth Sorrento Road)	Urban, 2 Lanes, Undivided	1.276	21	8	13	13,256	2.03	7.0	0.71
W Kelly Park Road (Plymouth Sorrento Road to Rock Springs Road)	Urban, 2 Lanes, Undivided	1.276	34	18	16	12,469	3.09	11.3	0.81
Plymouth Sorrento Road (Lake County Line to Kelly Park Road)	Urban, 2 Lanes, Undivided	1.276	11	8	3	11,147	2.01	3.7	0.45
Plymouth Sorrento Road (Kelly Park Road to Ponkan Road)	Urban, 2 Lanes, Undivided	1.276	17	6	11	8,615	2.03	5.7	0.89
Plymouth Sorrento Road (Ponkan Road to US 441/Orange Blossom Trail)	Urban, 2 Lanes, Undivided	1.276	28	7	21	12,656	2.37	9.3	0.85
N Park Avenue/Rock Springs Road (Orange Blossom Trail to Martin Street)	Urban, 5 Lanes, Undivided	1.972	76	14	62	25,032	1.25	25.3	2.22
N Park Avenue/Rock Springs Road (Martin Street to Welch Road)	Urban, 5 Lanes, Undivided	1.972	49	15	34	25,667	1.01	16.3	1.73
N Park Avenue/Rock Springs Road (Lester Road to Ponkan Road)	Urban, 4 Lanes, Undivided	2.821	91	27	64	26,233	1.54	30.3	2.06
N Park Avenue/Rock Springs Road (Ponkan Road to Kelly Park Road)	Urban, 4 Lanes, Divided	1.638	22	9	13	20,071	2.01	7.3	0.50
W Welch Road (Vick Rd to Rock Springs Road)	Urban, 2 Lanes, Undivided	1.276	32	9	23	11,922	0.99	10.7	2.48
W Welch Road (Rock Springs Road to N Thompson Road)	Urban, 2 Lanes, Undivided	1.276	72	22	50	18,967	1.26	24.0	2.75
W Welch Road (N Thompson Road to Wekiwa Springs Road)	Urban, 2 Lanes, Undivided	1.276	24	8	16	15,981	1.29	8.0	1.06
Piedmont-Wekiwa Road (US 441/Orange Blossom Trail to SR 436/Semoran Boulevard)	Urban, 4 Lanes, Undivided	2.821	93	26	67	32,915	1.31	31.0	1.97
Wekiwa Springs Road (SR 436/Semoran Boulevard to Canter Club Trail)	Urban, 4 Lanes, Undivided	2.821	32	12	20	25,310	1.01	10.7	1.14
Wekiwa Springs Road (Canter Club Trail to Orchard Drive)	Urban, 2 Lanes, Undivided	1.276	14	10	4	15,004	0.75	4.7	1.14
Wekiwa Springs Road (Orchard Dr to Seminole County Line)	Urban, 2 Lanes, Undivided	1.276	28	15	13	16,816	1.25	9.3	1.22
Votaw Road (Park Avenue to Thompson Road)	Urban, 2 Lanes, Undivided	1.276	9	5	4	10,311	1.25	3.0	0.64
Votaw Road (Thompson Road to Wekiwa Springs Road)	Urban, 2 Lanes, Undivided	1.276	11	5	6	9,633	1.25	3.7	0.83
SR 436/Semoran Boulevard (US 441/Orange Blossom Trail to Seminole County Line)	Urban, 8 Lanes, Divided	1.955	288	103	185	56,057	2.4	96.0	1.95
Sheeler Avenue (Keene Road to Apopka Boulevard)	Urban, 2 Lanes, Undivided	1.276	20	6	14	11,054	1.44	6.7	1.15
Sheeler Avenue (Apopka Boulevard to SR 436/Semoran Boulevard)	Urban, 2 Lanes, Undivided	1.276	47	15	32	10,142	0.81	15.7	5.22
W Orange Avenue (US 441/Orange Blossom Trail to Lake View Drive)	Urban, 2 Lanes, Undivided	1.276	6	1	5	5,833	0.85	2.0	1.11
S Binion Road (Lake View Drive to Lust Road)	Urban, 2 Lanes, Undivided	1.276	12	3	9	11,527	1.45	4.0	0.66
S Binion Road (Lust Road to Ocoee-Apopka Road)	Urban, 2 Lanes, Undivided	1.276	23	12	11	9,014	3.37	7.7	0.69
Ocoee Apopka Road/Michael Gladden Boulevard (West Road / Ocoee Crown Pointe Pkwy to Binion Road)	Urban, 2 Lanes, Undivided	1.276	67	21	46	22,776	2.04	22.3	1.32
Ocoee Apopka Road/Michael Gladden Boulevard (Binion Road to Harmon Road)	Urban, 2 Lanes, Undivided	1.276	42	14	28	18,992	1.42	14.0	1.42
Ocoee Apopka Road/Michael Gladden Boulevard (Harmon Road to Bradshaw Road)	Urban, 2 Lanes, Undivided	1.276	26	10	16	14,653	1.54	8.7	1.05
Ocoee Apopka Road/Michael Gladden Boulevard (Bradshaw Road to South Central Avenue)	Urban, 2 Lanes, Undivided	1.276	5	1	4	8,980	0.6	1.7	0.85
E Keene Road (Clarcona Road to Sheeler Avenue)	Urban, 2 Lanes, Undivided	1.276	8	4	4	10,149	0.56	2.7	1.29



Intersections	Category	Study Area Average Crash Rate	Crash Severity			2025 AADT*	Length (mi)	Crash Frequency	Crash Rate
			Total Crashes	Fatality/ Injury	PDO				
Apopka Boulevard/Alabama Avenue (Sheeler Avenue to US 441/Orange Blossom Trail)	Urban, 2 Lanes, Undivided	1.276	10	3	7	8,856	1.1	3.3	0.94
US 441/Orange Blossom Trail (Seminole County Line to Piedmont-Wekiwa Road)	Urban, 4 Lanes, Divided	1.638	84	26	58	35,631	0.92	28.0	2.34
US 441/Orange Blossom Trail (Piedmont-Wekiwa Road to Roger Williams Road)	Urban, 4 Lanes, Divided	1.638	69	27	42	30,210	1.16	23.0	1.80
US 441/Orange Blossom Trail (Roger Williams Road to SR 436/Semoran Boulevard)	Urban, 4 Lanes, Divided	1.638	94	23	71	29,446	1.04	31.3	2.80
US 441/Orange Blossom Trail (SR 436/Semoran Boulevard to Park Avenue)	Urban, 4 Lanes, Undivided	2.821	207	50	157	49,066	0.63	69.0	6.12
US 441/Orange Blossom Trail (Park Avenue to Western Beltway)	Urban, 4 Lanes, Divided	1.638	216	60	156	40,918	1.33	72.0	3.62
US 441/Orange Blossom Trail (Western Beltway to Plymouth Sorrento Road)	Urban, 4 Lanes, Divided	1.638	166	53	113	41,934	1.9	55.3	1.90
US 441/Orange Blossom Trail (Plymouth Sorrento Road to Ponkan Road)	Urban, 4 Lanes, Divided	1.638	122	45	77	42,264	3.71	40.7	0.71
US 441/Orange Blossom Trail (Ponkan Road to Sadler Road)	Urban, 4 Lanes, Divided	1.638	47	24	23	31,447	1.91	15.7	0.71
US 441/Orange Blossom Trail (Sadler Road to Earlwood Avenue)	Urban, 4 Lanes, Divided	1.638	24	9	15	28,500	1.06	8.0	0.73
US 441/Orange Blossom Trail (Earlwood Avenue to Lake County Line)	Urban, 4 Lanes, Divided	1.638	35	14	21	28,472	1.57	11.7	0.72
Clarcona Road / Park Avenue (Gilliam Road to Keene Road)	Urban, 2 Lanes, Undivided	1.276	23	11	12	18,451	1.06	7.7	1.07
Clarcona Road / Park Avenue (Keene Road to Cleveland Street)	Urban, 2 Lanes, Undivided	1.276	22	9	13	10,738	1.09	7.3	1.72
Clarcona Road / Park Avenue (Cleveland Street to US 441/Orange Blossom Trial/Main Street)	Urban, 2 Lanes, Undivided	1.276	34	13	21	12,833	1.27	11.3	1.91
Apopka Boulevard (Overland Road to Hiawassee Road)	Urban, 2 Lanes, Undivided	1.276	18	9	9	7,749	1.21	6.0	1.75
Apopka Boulevard (Hiawassee Road to Sheeler Avenue)	Urban, 2 Lanes, Undivided	1.276	33	15	18	12,467	1.51	11.0	1.60
Hiawassee Road (Maitland Blvd Extension to Apopka Boulevard)	Urban, 4 Lanes, Divided	1.638	54	13	41	22,295	1.01	18.0	2.19
Lakeville Road (Beggs Road to Apopka Boulevard)	Urban, 2 Lanes, Undivided	1.276	13	6	7	7,789	1.79	4.3	0.85
Ponkan Road (US 441/Orange Blossom Trail to Plymouth Sorrento Road)	Urban, 2 Lanes, Undivided	1.276	8	2	6	11,147	2.61	2.7	0.25
Ponkan Road (Plymouth Sorrento Road to Rock Springs Road)	Urban, 2 Lanes, Undivided	1.276	21	11	10	5,956	3.18	7.0	1.01
Lake View Drive (Binion Road to US 441/Orange Blossom Trail)	Urban, 2 Lanes, Undivided	1.276	5	2	3	7,431	0.26	1.7	2.36
Thompson Road (SR 436/Semoran Boulevard to Votaw Road)	Urban, 2 Lanes, Undivided	1.276	22	8	14	11,810	0.75	7.3	2.27
Thompson Road (Votaw Road to Welch Road)	Urban, 2 Lanes, Undivided	1.276	14	9	5	10,517	1.53	4.7	0.79

* The AADT volumes were selected based on the highest available seasonally adjusted count on each segment. Please refer to Appendix C-2 for detailed summary tables including comparison of all volume sources.

5.3 FATALITY CRASH SUMMARY

Out of the 21 fatalities which occurred in 20 crashes, there were a total of 7 off road crashes, 4 head on crashes, 3 left turn crashes, 2 rear end crashes, 2 pedestrian related crashes, 1 angle crash, and 1 other crash. 5 out of 20 crashes occurred under Driving under the influence (DUI). The 20 fatality crashes are discussed in detail below:

- **Fatal Crash #88552142 - 8:49 PM January 8, 2022:** In this crash, a vehicle (vehicle 1) traveling northbound on US 441/Orange Blossom Trail, attempted to make a left turn onto Jones Avenue, but failed to yield to a vehicle (vehicle 2) coming southbound. This resulted in a left turn / angle crash between the two vehicles. Due to the impact, the operator of vehicle 2 was propelled up and over vehicle 1 and was pronounced deceased on the scene. An autopsy revealed that the deceased driver had a BAC of 0.34, well over the legal limit.
- **Fatal Crash #24737283 - 8:57 PM January 22, 2022:** In this crash, a vehicle (vehicle 1) traveling southbound on CR 435, attempted to make a left turn onto Welch Road, but turned into the path of a vehicle (vehicle 2), which resulted in a left turn / angle crash. Vehicle 2 was speeding (74 mph in a 45-mph speed limit). The impact caused both vehicles to spin counterclockwise, and the driver of vehicle 2 was pronounced deceased on the scene. Neither of the drivers were wearing seatbelts at the time of the crash and both drivers tested for a BAC over the legal limit.
- **Fatal Crash #88505217 - 12:40 AM April 20, 2022:** A motorcyclist was traveling south in the left lane of Hiawasse Road, north of Sandy Lane Drive and failed to maintain a single lane, resulting in an off-road crash. The vehicle traveled off the roadway to the right, onto the paved shoulder and struck the concrete wall and its tubular railing and continued to travel in a southwest direction, maintaining contact with the barrier wall. The driver failed to negotiate the curve ahead and the vehicle struck a traffic warning sign before landing on the sidewalk. Witnesses noted that the deceased driver was reckless, and drug tests were positive.
- **Fatal Crash #25033852 - 1:04 PM November 12, 2022:** A motorcyclist was traveling southbound on Round Lake Road, north of King Avenue. The motorcyclist lost control as it negotiated a right curve and entered the northbound lanes of Round Lake Road. The motorcyclist proceeded onto the east shoulder of Round Lake Road causing an off-road crash with a standing tree. The driver was transported to the hospital, where he was pronounced deceased. The toxicology screening came back negative for the presence of alcohol or drugs.
- **Fatal Crash #25039590 - 1:04 PM November 19, 2022:** A vehicle (vehicle 1) that was traveling eastbound on County Road 437 (S Binion Road) collided with the front driver side of a vehicle (vehicle 2) driving westbound on CR 437 (S Binion Road) resulting in a head on crash. The driver of vehicle 1 stated that he swerved into the westbound lane because he believed vehicle 2 was coming into the eastbound lane but was not able to negotiate the curve and therefore created the impact. The driver of vehicle 2 was

transported to the hospital where he was pronounced deceased. The toxicology screening came back negative for the presence of alcohol or drugs.

- **Fatal Crash #24738612 – 6:18 AM December 30, 2022:** A cyclist attempting to cross US 441/Orange Blossom Trail was struck by a vehicle traveling eastbound within the outside lane of US 441/Orange Blossom Trail, approaching CR 435. The cyclist was pronounced deceased at the scene. The cyclist was tested to have a blood alcohol level of 0.107 and also tested positive for drugs.
- **Fatal Crash #25063152 - 6:08 AM February 16, 2023:** A vehicle was traveling southbound on County Road 435 approaching Old Apopka Road. The vehicle crossed over the solid painted double yellow lines to pass another vehicle but struck the curb in the northbound lane, resulting in an off-road crash. After the collision, the vehicle collided with a tree and a power pole before coming to the final rest. The driver was transported to the hospital where they were pronounced deceased. There were no contributing circumstances or suspected drug or alcohol use by any of the drivers involved in this crash.
- **Fatal Crash #24738898 – 6:54 PM March 6, 2023:** A vehicle (vehicle 1) was traveling south on County Road 435 approaching Welch Road to make a left turn when it collided with a motorcycle in a front-to-front angle crash. As a result of this collision, the driver of the motorcycle was ejected approximately 70 feet away from where the point of initial impact was at. The driver of the motorcycle suffered severe injuries and was transported to the hospital and was later pronounced deceased.
- **Fatal Crash #89647667 – 11:25 PM May 9, 2023:** A pedestrian attempting to cross US 441/Orange Blossom Trail was struck by a vehicle traveling northbound within the outside lane of US 441/Orange Blossom Trail, approaching Stoneybrook Hills Parkway. The pedestrian was pronounced deceased at the scene. The pedestrian was crossing at an unmarked crosswalk in dark-not lighted conditions.
- **Fatal Crash #89676797 - 6:15 AM July 21, 2023:** A vehicle (vehicle 1) was traveling eastbound on US 441/Orange Blossom Trail, in the inside lane, approaching Boy Scout Boulevard when it failed to stop for the red light as a semi-truck (vehicle 2) was making a left turn on the green left turn arrow, resulting in a left turn crash. The driver of vehicle 1 was transported to the hospital where they later died from their injuries.
- **Fatal Crash #89756941 - 1:00 AM December 14, 2023:** A vehicle (vehicle 1) was traveling eastbound in the westbound travel lane of SR 436 (E Semoran Blvd), east of Otter Ln. when it struck the front of a vehicle (vehicle 2), in a head on collision. As a result of the impact, vehicle 2 traveled off the roadway and overturned. The driver of vehicle 1 was transported to the hospital, where he was pronounced deceased shortly after. A blood test revealed that the driver had a BAC of 0.11, which is over the legal limit.
- **Fatal Crash #26318974 - 3:10 AM March 10, 2024:** A vehicle was traveling north in the inside travel lane of US 441/Orange Blossom Trail, south of Boy Scout Boulevard, when the driver veered off the roadway and collided with a standing concrete utility pole. The driver

was pronounced deceased on the scene. There were no contributing circumstances or suspected drug or alcohol use associated with this crash.

- **Fatal Crash #26684015 - 11:10 AM April 24, 2024:** In this crash, according to witnesses, a vehicle travelling east on W. Kelly Park Rd ran off the road and struck an electric pole. The vehicle was identified as a stolen vehicle. The driver of the vehicle was transported to the hospital where he was pronounced deceased.
- **Fatal Crash #26344168 - 2:29 AM May 26, 2024:** A vehicle (vehicle 1) was traveling northbound on US 441/Orange Blossom Trail, in the southbound left lane, just south of Jones Avenue when it collided with the front of another vehicle (vehicle 2). The driver of vehicle 1 was found to be under the Influence of medications/drugs/alcohol. The driver of vehicle 1 was pronounced deceased.
- **Fatal Crash #26632832 - 2:21 AM June 15, 2024:** A vehicle was traveling northbound on Ocoee Apopka Road, approaching Summershade Drive when it ran off the roadway to the left and made impact with a tree and a brick wall. Both the driver and the passenger of the vehicle were pronounced deceased. A blood test revealed that the driver had a BAC of 0.17, well over the legal limit.
- **Fatal Crash #26354461 – 5:36 AM June 28, 2024:** A vehicle (vehicle 1) was traveling westbound on Jones Avenue, west of Jewel Foliage Road when it failed to stop, resulting in a rear end crash with truck (vehicle 2). The driver of vehicle 1 was transported to the hospital where they were later pronounced deceased. There were no contributing circumstances or suspected drug, or alcohol use associated with this crash.
- **Fatal Crash #26433824 – 3:15 AM September 28, 2024:** A vehicle (vehicle 1) was traveling east on Jones Avenue, east of Laughlin Road when it failed to maintain the lane and traveled off the roadway to the right and struck the left side of a semi-truck (vehicle 2), which was stopped in the driveway, facing north. The driver of vehicle 1 was transported to the hospital and pronounced deceased. There were no contributing circumstances and drug, or alcohol use is unknown.
- **Fatal Crash #26432837 – 10:20 PM November 18, 2024:** A vehicle traveling south on County Road 435 (Rock Springs Road) departing Pebble Lane in the inside travel lane, when it drove too fast for the conditions of the roadway, swerved right, and veered off the roadway. The vehicle collided with a mailbox, a telephone switch box, and a utility pole. The driver was transported to the hospital and was pronounced deceased, shortly after.
- **Fatal Crash # 26475096 – 5:17 PM December 12, 2024:** A vehicle (vehicle 1) was traveling northbound on North US 441/Orange Blossom Trail, approaching the intersection of Albrecht Avenue, when it failed to observe a vehicle (vehicle 2) slowing down, and caused a rear end collision. Due to the rear end collision, vehicle 1 ran off the roadway and collided with a telephone/utility pole. The driver of vehicle 1 was pronounced deceased at the hospital. The possible cause of the accident may have been a medical event experienced by the driver of vehicle 1.

Fatal Crash #26428602 - 10:28 PM December 24, 2024: A vehicle (vehicle 1) was traveling the wrong way (northbound on the southbound lanes of US 441/Orange Blossom Trail) approaching Old Hwy 441 when it collided head on with a vehicle (vehicle 2) traveling southbound in the inside lane of US 441/Orange Blossom Trail south of Old Hwy 441. The driver of vehicle 2 was pronounced deceased at the scene. The results of the drug and alcohol testing for the driver of vehicle 1 are pending.