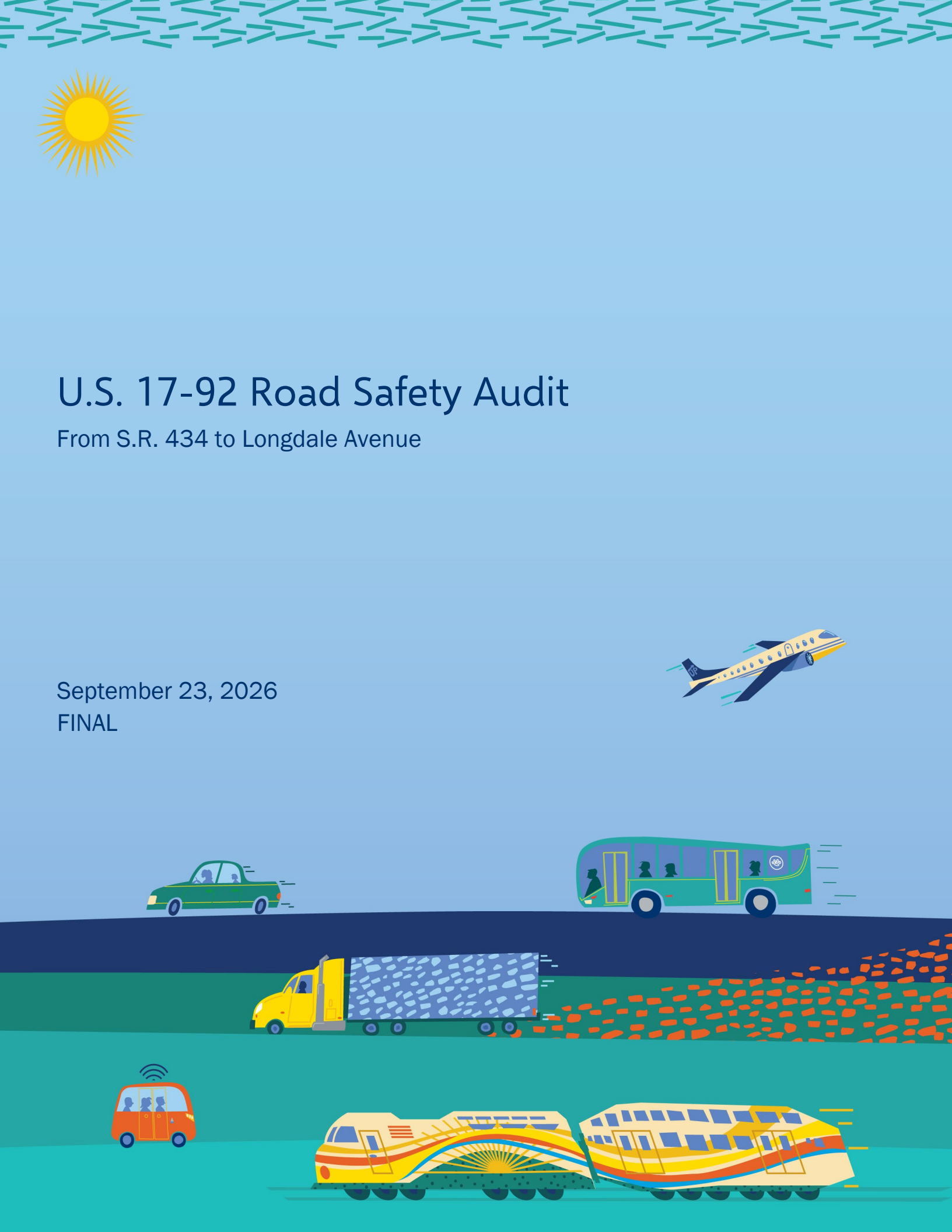
U.S. 17-92 Road Safety Audit

From S.R. 434 to Longdale Avenue

September 23, 2026
FINAL



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LIST OF ACRONYMS

Abbreviation	Acronyms
AADT	Average Annual Daily Traffic
AAM	Active Arterial Management
ADA	Americans with Disabilities Act
ASCT	Adaptive Signal Control Technology
ATMS	Advanced Traffic Management System
CAV	Connected/Automated Vehicles
CEI	Construction Engineering and Inspection
CCTV	Closed-Circuit Television
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
HIN	High Injury Network
ITS	Intelligent Transportation Systems
KSI	Killed or Seriously Injured
MOT	Maintenance of Traffic
MP	Mile Post
MTP	Metropolitan Transportation Plan
RSA	Road Safety Audit
S.R.	State Road
S4	Signal4 Analytics
SCOUT	Seminole County mobility-on-demand provider
TSM&O	Transportation System Management and Operations
U.S.	United States

1 INTRODUCTION

1.1 STUDY PURPOSE

MetroPlan Orlando partnered with the City of Longwood to perform a Road Safety Audit (RSA) for a segment of United States (U.S.) 17-92 in the City of Longwood, Florida. The Federal Highway Administration (FHWA) defines an RSA as a formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for safety improvement for all road users. RSAs identify practical countermeasures to reduce crash risk and severity.

1.2 STUDY AREA

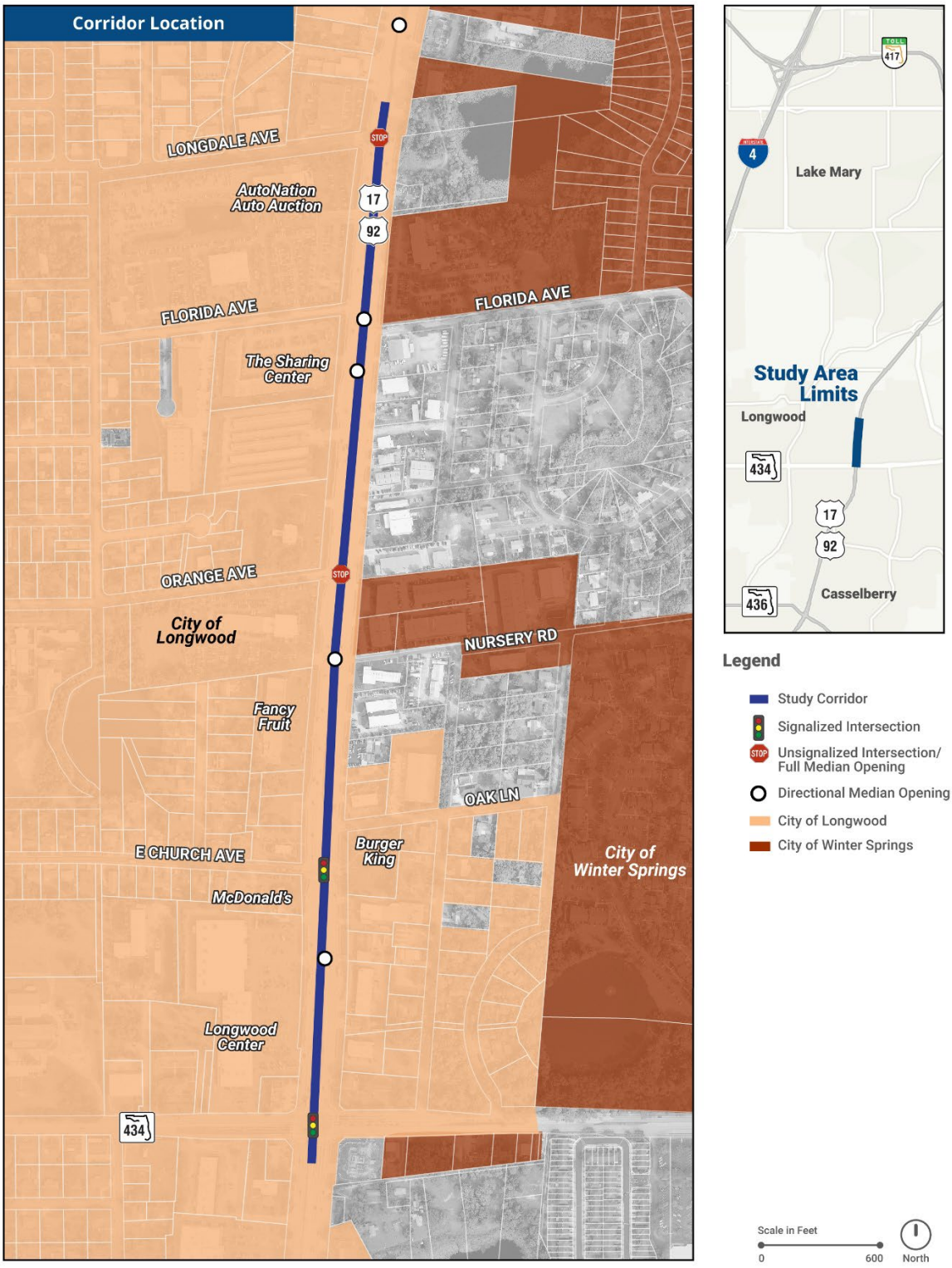
This RSA examines U.S. 17-92/State Road (S.R.) 15 in Longwood, Florida, from approximately 150 feet south of S.R. 434 to approximately 150 feet north of Longdale Avenue [ID 77010000, MP 4.4203–5.291]. U.S. 17-92 is a state roadway functionally classified as an Urban Principal Arterial, with a Suburban Commercial (C3C) context classification. The corridor is characterized by high access density, frequent turning movements, and relatively high operating speeds (posted at 45MPH) due to its arterial function.

Land uses along the corridor are primarily commercial and industrial, with residential parcels located behind the corridor. U.S. 17-92 has a Florida Department of Transportation (FDOT) Access Classification 5, indicating a developed corridor with controlled access (restricted median type) and low probability of major future land use changes. The roadway shares jurisdictional boundaries with the City of Longwood, the City of Winter Springs, and unincorporated Seminole County, and serves as a key north–south route in the area.

The U.S. 17-92 corridor is approximately 0.9 miles long and includes two signalized intersections and six unsignalized intersections (four directional median openings and two full median openings). The longest spacing between signalized intersections is approximately 0.2 miles, between S.R. 434 and E. Church Avenue. The shortest spacing between unsignalized intersections is approximately 380 feet, between the directional median opening at Nursery Road and the full median opening at Orange Avenue. There are no marked midblock crossings along the study corridor.

The map shown in **Figure 1-1** below shows the U.S. 17-92 RSA study area and intersections.

Figure 1-1| U.S. 17-92 – Study Area



Source: Seminole County, City of Winter Springs, City of Longwood, FDOT

2 EXISTING CONDITIONS

2.1 STUDY AREA CHARACTERISTICS

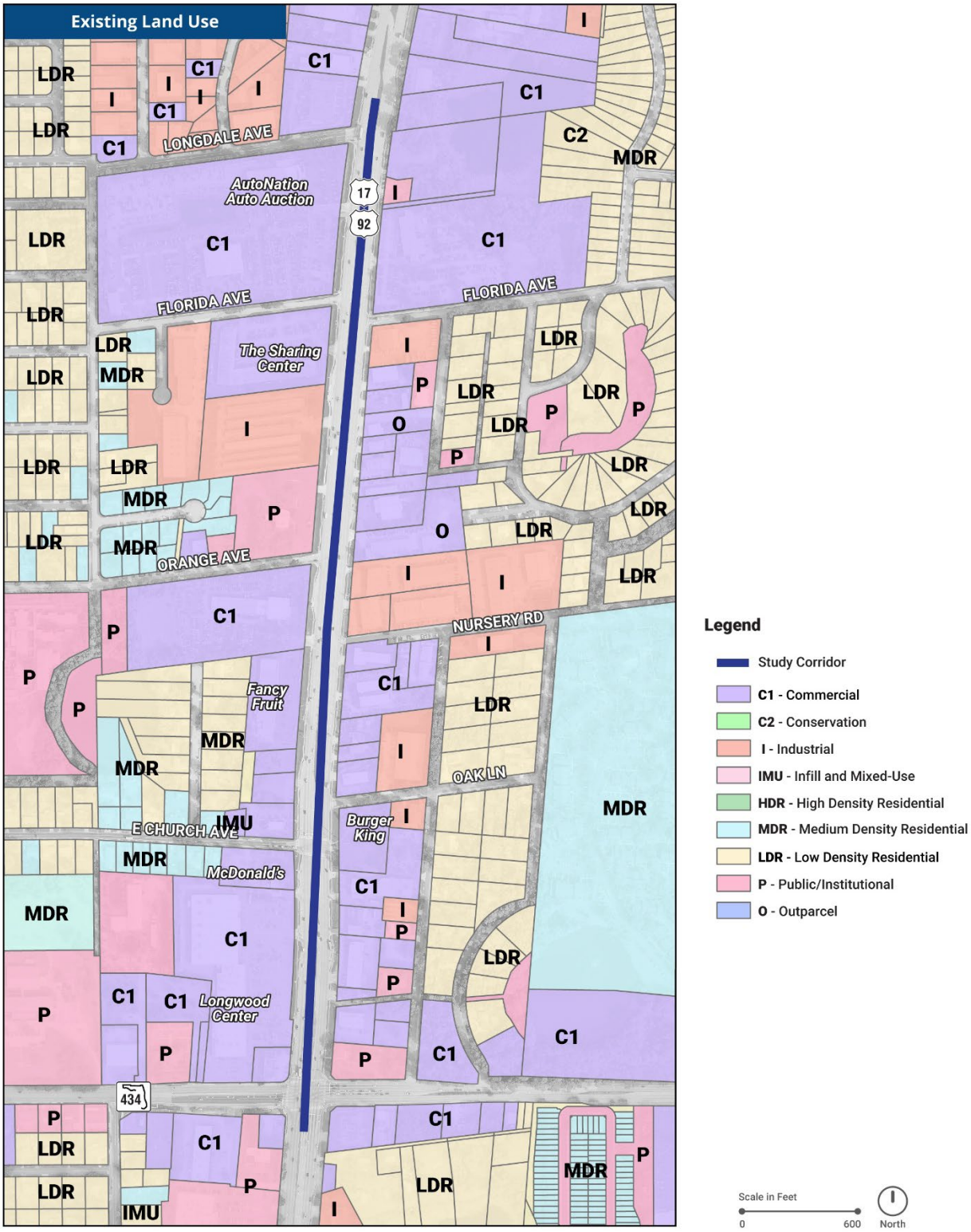
2.1.1 LAND USE

The existing land use map indicates that the most prevalent land use located directly adjacent to U.S. 17-92 along the study corridor is commercial and industrial. Residential parcels are primarily situated behind these commercial and industrial areas. On the northern portion of the corridor, several car dealerships are present, including AutoNation Auto Auction located just south of Longdale Avenue. The dealerships generate a significant amount of truck traffic and truck-turning movements.

Another key landmark that characterizes the corridor is The Sharing Center, located south of Florida Avenue, where higher levels of pedestrian and bicycle activity have been observed. Additionally, Longwood Elementary School is located on Orange Avenue, approximately 0.2 miles west of the U.S. 17-92 corridor. Future land uses along the corridor remain largely the same with an anticipated increase in density for a few of the residential land uses.

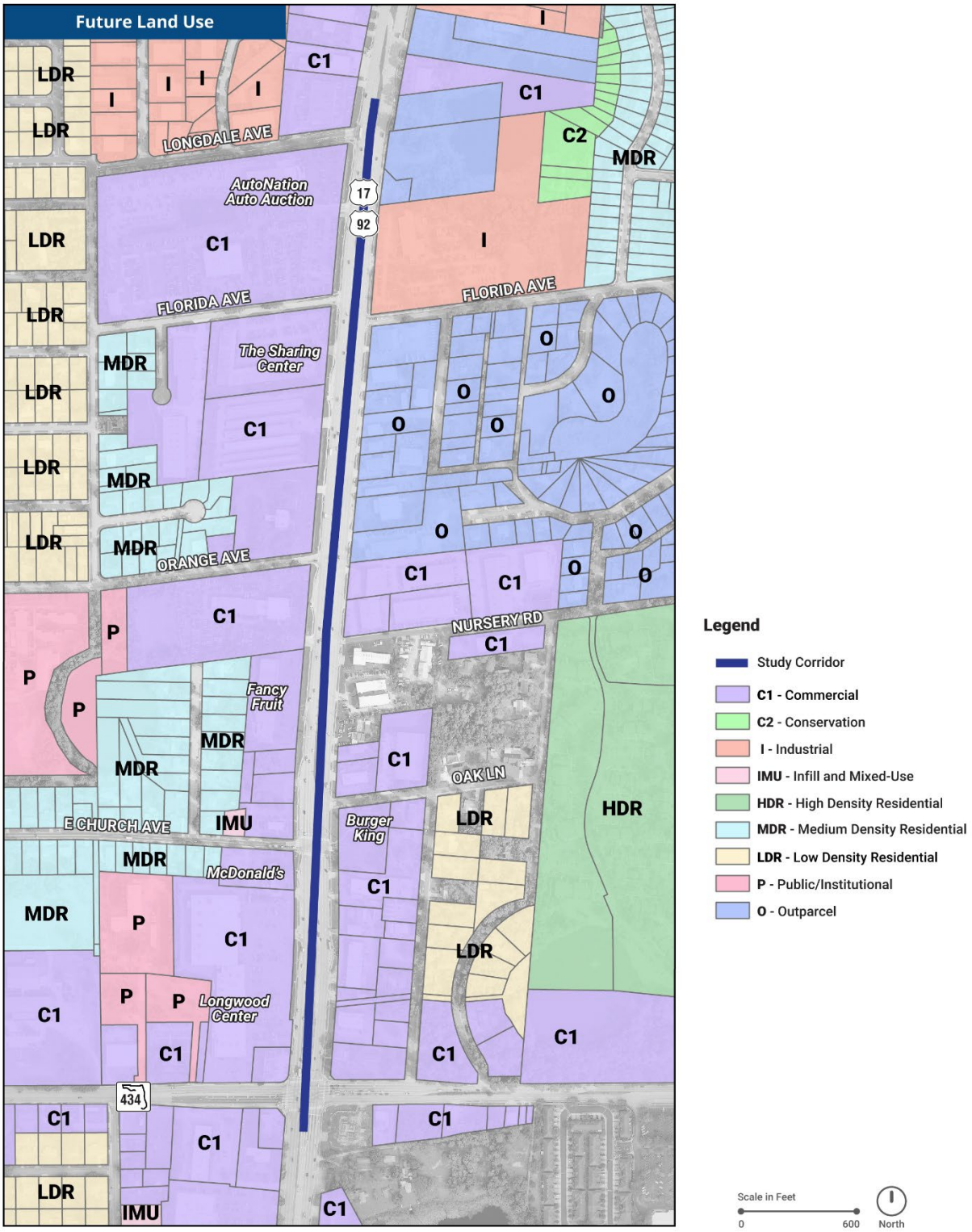
Figure 2-1 and **Figure 2-2** show the existing land use and the future land use along U.S. 17-92, respectively.

Figure 2-1| U.S. 17-92 – Existing Land Use



Source: Seminole County

Figure 2-2| U.S. 17-92 – Future Land Use



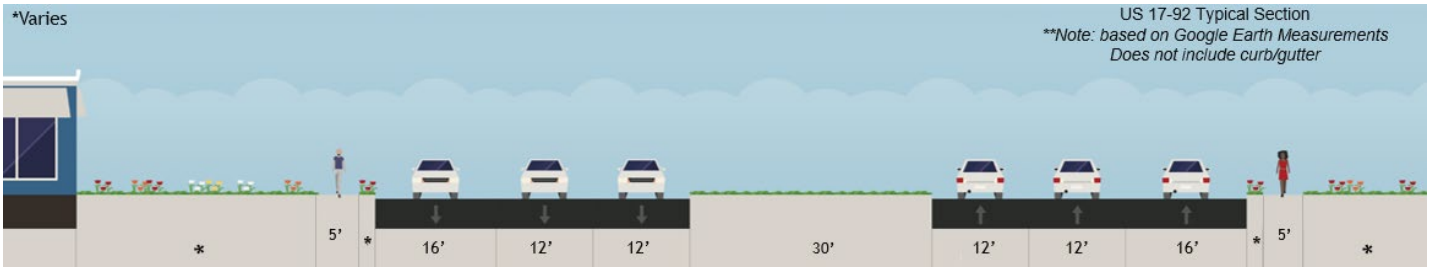
Source: City of Winter Springs, City of Longwood

2.2 CORRIDOR DATA

2.2.1 NUMBER OF LANES AND TYPICAL SECTION

U.S. 17-92 is a six-lane divided roadway throughout the study area. The typical cross section consists of a 30-foot median, two 12-foot inside lanes, and one 16-foot outside lane in each direction, as shown in **Figure 2-3**. The wider outside lane may be a legacy feature of an earlier FDOT design practice that used wide outside lanes to accommodate bicyclists in lieu of dedicated bicycle facilities. Five-foot sidewalks are provided on both sides of the corridor, separated from the roadway by curb and gutter with a narrow-grassed verge. A drainage swale is generally located behind the sidewalk and accommodates roadway drainage, utilities, and roadway lighting infrastructure. There are currently no dedicated bicycle lanes.

Figure 2-3| U.S. 17-92 Typical Section



The corridor includes two signalized intersections and six unsignalized intersections, consisting of four directional median openings and two full median openings. Dual left-turn lanes and right-turn lanes are provided at the intersection of U.S. 17-92 and S.R. 434 on both the northbound and southbound approaches. Right-turn lanes are also present on the southbound approach at the Church Avenue intersection and at the southbound directional median opening near the commercial plaza just south of Church Ave. Additionally, left-turn lanes are provided at all median openings and signalized intersections along the study corridor.

2.2.2 SPEED & VOLUME DATA

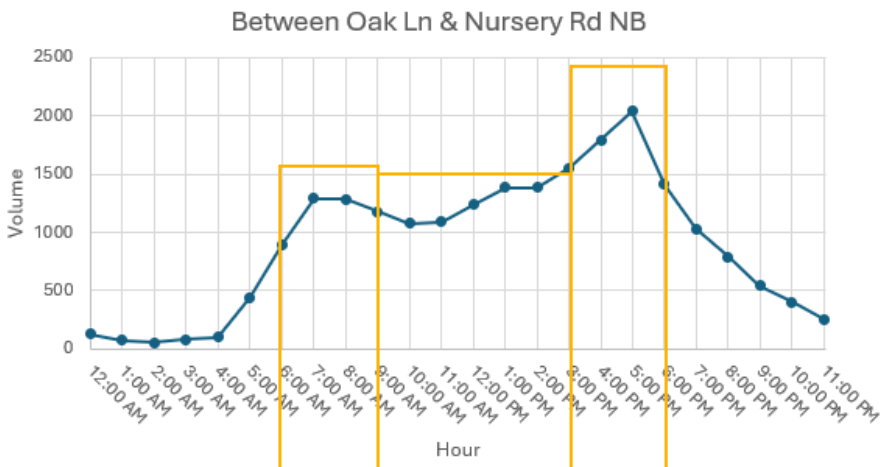
The posted speed limit for U.S. 17-92 is 45 mph throughout the entire corridor. Data obtained from Seminole County traffic counts indicate that the 2025 Annual Average Daily Traffic (AADT) is 40,103 (Traffic Counter ID: 341A), while Florida Traffic Online (FTO) reports a 2025 AADT of 36,000 (Site 770273).

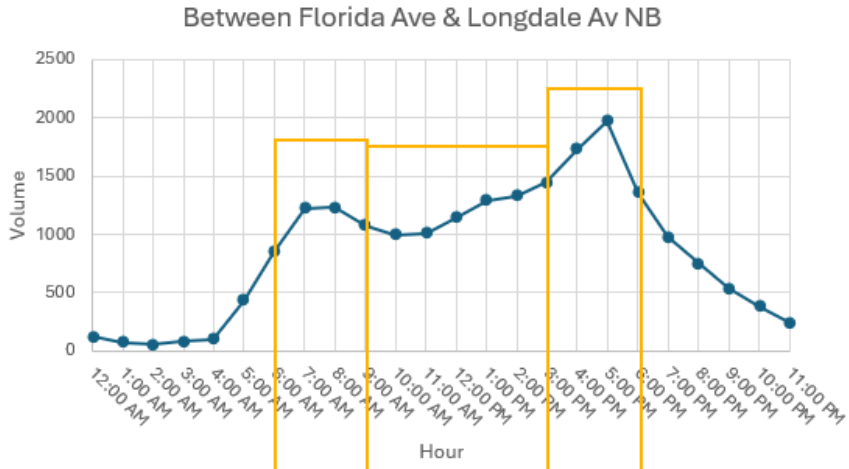
Speed and volume data were collected over a 24-hour period in April 2026 between Oak Lane and Nursery Road and between Florida Avenue and Longdale Avenue. Speed and vehicular/pedestrian volumes can be found in **Appendix A.**

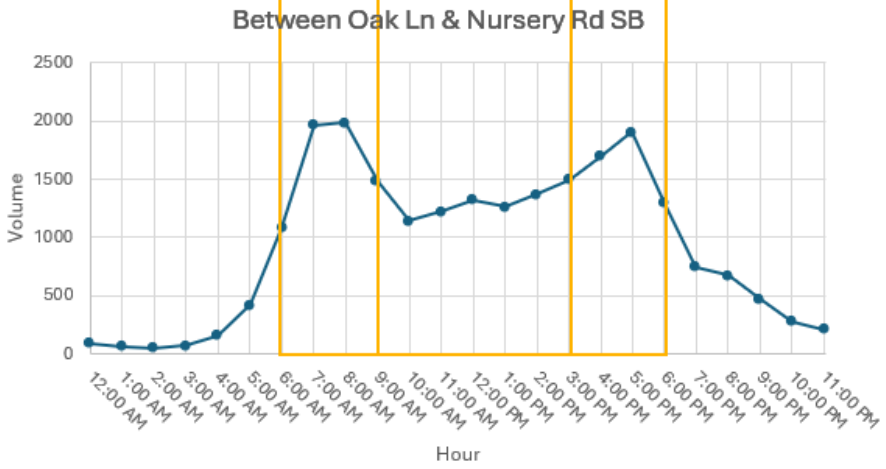
The collected data show an average daily traffic (ADT) of approximately 47,000 vehicles between Oak Lane and Nursery Road, with a PM peak hour volume of approximately 3,900 vehicles. Between Florida Avenue and Longdale Avenue, the ADT is approximately 41,500 vehicles, with approximately 3,800 vehicles during the PM peak hour. Based on the FDOT generalized daily service volume tables for urban arterial roadways, these traffic volumes correspond to operations at Level of Service (LOS) C.

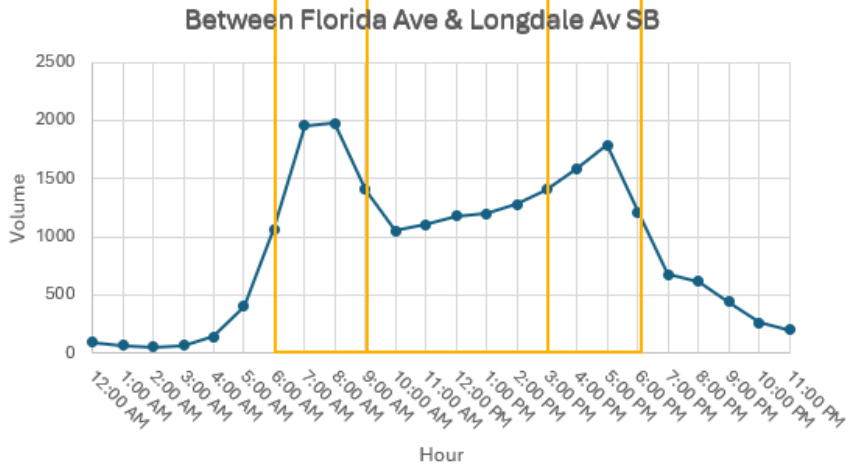
The volume data was further used to identify the AM peak, midday peak, PM peak, and off-peak periods, which were subsequently analyzed for speed conditions. **Figure 2-4** presents the hourly volume distribution by direction.

Figure 2-4| Volume Distribution by Hour and by Direction









As seen in **Figure 2-4,** the analyzed periods were as follows:

- AM: 6:00 AM to 09:00 AM
- Midday: 9:00 AM to 3:00PM
- PM: 3:00 PM to 6:00 PM
- Off Peak: 6:00 PM to 6:00 AM

The 85th and 50th percentiles speeds were calculated for each of the analyzed periods by direction. The following tables summarize the results.

Table 2-1| 50th Percentile Speeds

	Period	Direction	Between Oak Lane and Nursery Road	Florida Ave and Longdale Ave
50th Percentile Speed	Off Peak	NB	43 MPH	43 MPH
		SB	43 MPH	43 MPH
	AM	NB	39 MPH	43 MPH
		SB	39 MPH	43 MPH
	PM / Midday	NB	39 MPH / 39 MPH	43 MPH / 43 MPH
		SB	43 MPH / 39 MPH	43 MPH / 43 MPH
	Daily	NB	39 MPH	43 MPH
		SB	39 MPH	43 MPH

Table 2-2| 85th Percentile Speeds

	Period	Direction	Between Oak Lane and Nursery Road	Florida Ave and Longdale Ave
85th Percentile Speed	Off Peak	NB	43 MPH	49 MPH
		SB	49 MPH	49 MPH
	AM	NB	43 MPH	49 MPH
		SB	49 MPH	49 MPH
	PM / Midday	NB	43 MPH / 43 MPH	43 MPH / 43 MPH
		SB	49 MPH / 49 MPH	49 MPH / 49 MPH
	Daily	NB	43 MPH	49 MPH
		SB	49 MPH	49 MPH

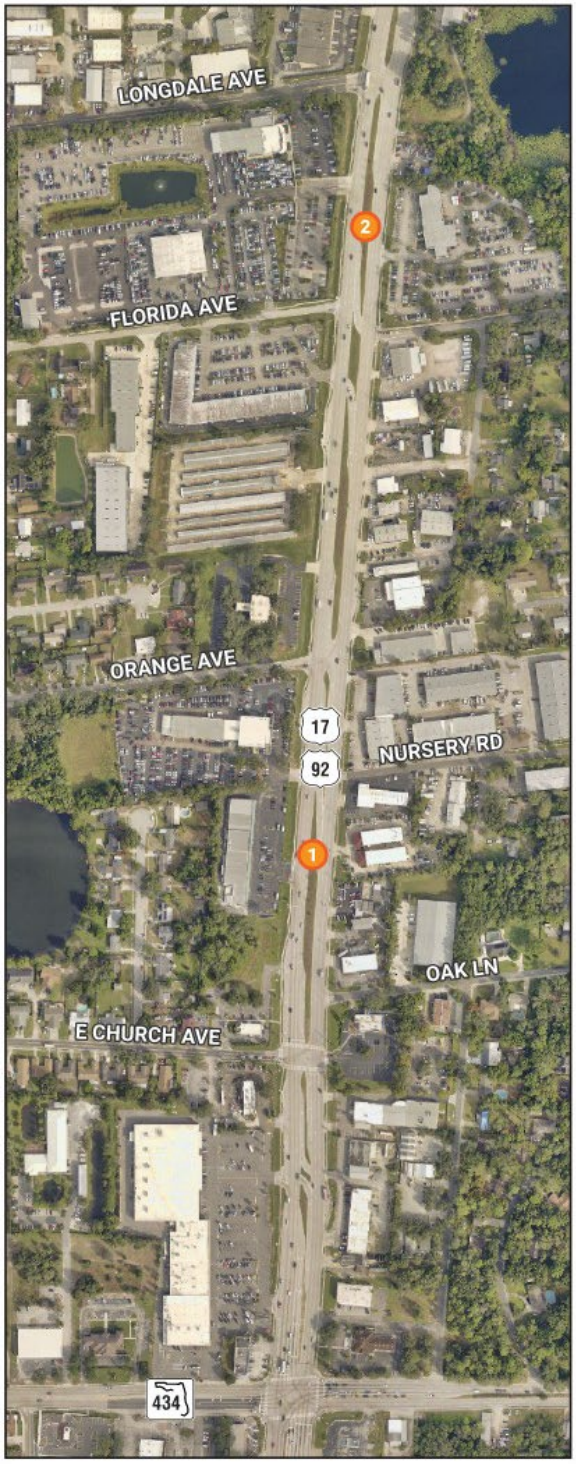
The 50th percentile speeds, which represent the typical operating speed of motorists, ranged from 39 to 43 mph during all analysis periods. These speeds are generally below the posted speed limit of 45 mph, indicating that many drivers travel at or below the posted speed under typical operating conditions.

The higher-end speed distribution, represented by the 85th percentile speeds, ranged from 43 to 49 mph across the study segments. The highest observed 85th percentile speed was 49 mph, which is 4 mph above the posted speed limit. Additionally, the limited variation in speeds between the peak and off-peak periods suggests consistent driver behavior throughout the day.

Figure 2-5 presents the count locations, as well as the summary of daily speed and volume data.

Figure 2-5| U.S. 17-92 Speed and Volume Data Summary

Corridor Speed and Daily Volumes



Corridor Speed

1 Between Oak Ln and Nursery Rd	
Northbound	
85th Percentile	43 MPH
50th Percentile	39 MPH
% Above Speed Limit	10.8 %
Southbound	
85th Percentile	49 MPH
50th Percentile	39 MPH
% Above Speed Limit	20.1 %
2 Between Florida Ave and Longdale Ave	
Northbound	
85th Percentile	49 MPH
50th Percentile	43 MPH
% Above Speed Limit	20.1 %
Southbound	
85th Percentile	49 MPH
50th Percentile	43 MPH
% Above Speed Limit	25.2 %

Daily Volumes

1 Between Oak Ln and Nursery Rd	
Northbound	
Daily Volume	21,521
Southbound	
Daily Volume	22,448
2 Between Florida Ave and Longdale Ave	
Northbound	
Daily Volume	20,371
Southbound	
Daily Volume	21,216

Legend

24-Hour Roadway Speed/Volume Count Location

Scale in Feet: 0 – 600

North

2.2.3 PEDESTRIAN & BICYCLE VOLUMES

In addition to vehicular speed and volume data, pedestrian and bicyclist activity data were also collected along the study corridor (**Appendix A**). The corridor currently provides five-foot sidewalks on both sides of U.S. 17-92, with no marked midblock pedestrian crossings within the study area. There are no dedicated bicycle facilities within the study limits. Marked bicycle lanes begin north of the study corridor, starting near Raven Avenue and continuing north to E Airport Blvd.

Pedestrian/bicycle volume data was collected at nine locations, with four locations situated between the intersections of S.R. 434 and Church Avenue and five locations located between Orange Avenue and a point just north of Florida Avenue. **Figure 2-6** illustrates the data collection locations and summarizes the daily pedestrian and bicycle crossing volumes observed throughout the study area.

It is important to note that these counts only accounted for pedestrians and bicyclists crossing U.S. 17-92 at midblock locations. The crosswalks at S.R. 434 and Church Avenue were not included in the counts. Additionally, pedestrians and bicyclists traveling in the north-south direction were not captured as part of this data collection effort. The reported crossing volumes do not represent the total pedestrian and bicycle activity occurring within the study area.

Figure 2-6| U.S. 17-92 Pedestrian & Bicycle Volumes and Data Collection Locations

Corridor Pedestrian Volumes



	Location	Crossing US 17-92 Daily	
		Peds	Bikes
1	SR 434 to Cash America Pawn Dwy	4	0
2	Cash America Pawn Dwy to Bitters Bait & Tackle Dwy	8	3
3	Bitters Bait & Tackle Dwy to Just Wrap It Dwy	3	17
4	Just Wrap It Dwy to Church Ave	3	1
5	Countertop & Cabinet Concierge Dwy to Milli Mac Motors Dwy	7	8
6	Milli Mac Motors Dwy to All in the Family Dwy	1	1
7	All in the Family Dwy to Enterprise Truck Rental Dwy	3	2
8	Enterprise Truck Rental Dwy to Florida Ave	2	11
9	Florida Ave to Gateway Kia N Dwy	4	0

Legend

24-Hour Pedestrian/Bicycle Count Location

Scale in Feet
0 600
North

2.3 RELEVANT PLANNING DOCUMENTS

2.3.1 LONGWOOD VISION ZERO ACTION PLAN

In September 2024, the City of Longwood adopted their Vision Zero Action Plan to support the goal of eliminating traffic-related fatalities and serious injuries. The plan identifies U.S. 17-92 as one of the priority safety corridors, as the corridor accounts for one of the highest number of fatal and serious injury pedestrian crashes within the City. In addition, the intersection of U.S. 17-92 and S.R. 434 was ranked #5 on Seminole County's All Roads Intersection High Injury Network (HIN).

The Vision Zero Action Plan supports several strategies that are directly applicable to the study corridor. These include reducing operating speeds along U.S. 17-92, installing speed feedback signs, retiming signals to encourage compliance with target speeds, and increasing enforcement on corridors with documented speeding concerns. The plan also recommends partnering with organizations such as Bike/Walk Central Florida through the Best Foot Forward program to improve driver yielding behavior at pedestrian crossings and increase pedestrian safety awareness. Additionally, the City encourages partnership with motorcycle safety organizations to promote the shared responsibility of all roadway users.

2.3.2 SEMINOLE COUNTY VISION ZERO ACTION PLAN

Seminole County adopted the Seminole County Vision Zero Action Plan in August 2024, demonstrating its commitment to eliminating traffic-related fatalities and serious injuries by 2050. As part of the Vision Zero analysis, the intersection of U.S. 17-92 and S.R. 434 was identified as one of the county's highest-crash intersections, ranking fifth among all studied locations.

Additionally, the segment of U.S. 17-92 between Shepard Road and Golden Days Drive was identified as a priority need project in the County's Vision Zero Action Plan. This roadway segment was also included on the County's High Injury Network.

2.3.3 LONGWOOD 2045 MOBILITY PLAN & LONGWOOD BICYCLE AND PEDESTRIAN MASTER PLAN

A review of the Longwood 2045 Mobility Plan and the Longwood Bicycle and Pedestrian Master Plan identified several planned improvements along the U.S. 17-92 corridor. These plans recommend a Complete Streets retrofit along U.S. 17-92 from Shepard Road to Dog Track Road, with the goal of improving safety and mobility for pedestrians, bicyclists, transit users, and motorists. The plans also identify a multimodal intersection improvement at U.S. 17-92 and S.R. 434 and a multimodal intersection improvement at U.S. 17-92 and Church Avenue to enhance pedestrian and bicyclist safety. Additionally, the Bicycle and Pedestrian Master Plan recommends a 12-foot shared-use path along U.S. 17-92 from Triplet Lake Drive to Shepard Road, which would improve bicycle and pedestrian connectivity along the corridor.

2.3.4 METROPLAN ORLANDO'S 2050 METROPOLITAN TRANSPORTATION PLAN & COST FEASIBLE PLAN

The 2050 Metropolitan Transportation Plan (MTP) was developed by MetroPlan Orlando to guide the future of the transportation network in Central Florida. Additionally, the 2050 MTP Cost Feasible Plan (CFP), was adopted in December 2025 and revised in March 2026. A review of both documents revealed multiple transportation needs and planned improvements along the study corridor. These improvements, along with their corresponding Plan Periods (PPs), are summarized in **Table 2-3** below.

Table 2-3| Summary of Identified Improvements

Road	Limits	Project Description	Plan Period
S.R. 15/600/U.S. 17/92	at Florida Ave.	HAWK or Pedestrian Signal through Directional Median Opening.	Unfunded Needs
S.R. 15/600/U.S. 17/92	at Florida Ave.	Add signalized intersection or perform safety improvements for Pedestrians to be able to cross. This signal will help serve the homeless community and low income who utilize lynx transit and the Seminole County Sharing Center.	Unfunded Needs
S.R. 15/600/U.S. 17/92	at S.R. 434	Intersection operational improvements in lieu of widening. Add 3rd WBLT lane.	PP2: 2036-2040
S.R. 15/600/U.S. 17/92	at S.R. 434	Evaluate intersection for more extensive modifications including but not limited to tighter curb radii, adding pedestrian refuge islands, updated curb ramps, etc. in conjunction with signalization strategies and access management.	PP2: 2036-2040
S.R. 15/600/U.S. 17/92	at multiple locations	Safety Improvements.	Unfunded Needs
S.R. 15/600/U.S. 17/92	From U.S. 17 / 1st St. to Orange County Limits	Project aims to address safety and efficiency by implementing Active Arterial Management (AAM) and/or adaptive signal control, traffic incident management, and bicycle/pedestrian safety systems. Deploy fiber optics, Closed-Circuit Television (CCTV), and data collection systems for communication and disaster response, while integrating Signal Advanced Traffic Management System (ATMS) and corridor management for improved traffic flow around multimodal hubs as part of a regional initiative. Provide en-route driver information and route guidance, particularly concerning SunRail stations and crossings, enhancing overall transportation accessibility and safety. Conduct feasibility study and design for operational improvements to improve traffic flow and safety, and identify individual intersection improvements that should be evaluated further to determine traditional traffic operations improvements that can be supported by Intelligent Transportation Systems (ITS) and Connected/Automated Vehicles (CAV).	Unfunded Needs
S.R. 15/600/U.S. 17/92	From Triplet Lake Dr. to Shepard Rd.	Safety improvements to increase active transportation safety/utilization. Include evaluations for pedestrian crossings especially where bus stops or other high crossing locations and improved lighting. Add extended yellow and all red time at S.R. 434 & U.S. 17/92, landscaped buffers, shared-use paths, green conflict striping, co-locate bus stops and pedestrian crossings, and access management.	Unfunded Needs
Church Ave	From Ronald Reagan Blvd. to S.R.15/S.R.600/U.S. 17/92	Complete streets project with lane narrowing and widening of sidewalk, roadway shift and intersection safety improvements. Also, new SunRail railroad crossing to be included.	Committed Funds: 2026 - 2030

2.3.5 FDOT'S CANDIDATE RRR PROJECT (454205-1)

A review of FDOT's candidate RRR project (454205-1), which extends along U.S. 17-92 from Normandy Road to Shepard Road/Raven Avenue and is scheduled for letting in 2029, identified several potential safety improvements within the project limits. Planned bicycle and pedestrian enhancements include reconstructing existing curb ramps that do not meet current ADA requirements and evaluating a signalized pedestrian crossing at Milepost 5.137 near the Sharing Center. The project also includes signing and pavement marking improvements throughout the corridor. In addition, all signalized intersections within the project limits will be evaluated for the implementation of Leading Pedestrian Intervals (LPIs) to improve pedestrian safety at crossings.

3 ANALYSIS

3.1 CRASH DATA ANALYSIS

Crash data were obtained from Signal4 Analytics (S4) for the most recent five-year period, from January 1, 2021, through December 31, 2025. During this period, a total of 354 crashes occurred along U.S. 17-92/S.R. 15 within the study limits. **Figure 3-1** presents the total crashes by year and **Figure 3-2** and **Figure 3-3** illustrate the crash distribution through heat maps by mode and crash type, respectively. As seen in **Figure 3-2** and **Figure 3-3,** most crashes occurred at the corridor's signalized intersections. The intersection of U.S. 17-92 and S.R. 434 experienced the highest crash concentration, accounting for 234 crashes (66% of all corridor crashes). The predominant crash types at this intersection were rear-end, sideswipe, and angle crashes, which are commonly associated with high traffic volumes, signalized operations, and turning movements. Additional crash clusters were observed at several median openings along the corridor, indicating potential conflicts associated with left-turn and crossing maneuvers.

Detailed collision diagrams as well as a summary of the narratives for fatal and serious injury crashes along the corridor are found in **Appendix B.**

Figure 3-1| U.S. 17-92 Crashes by Year

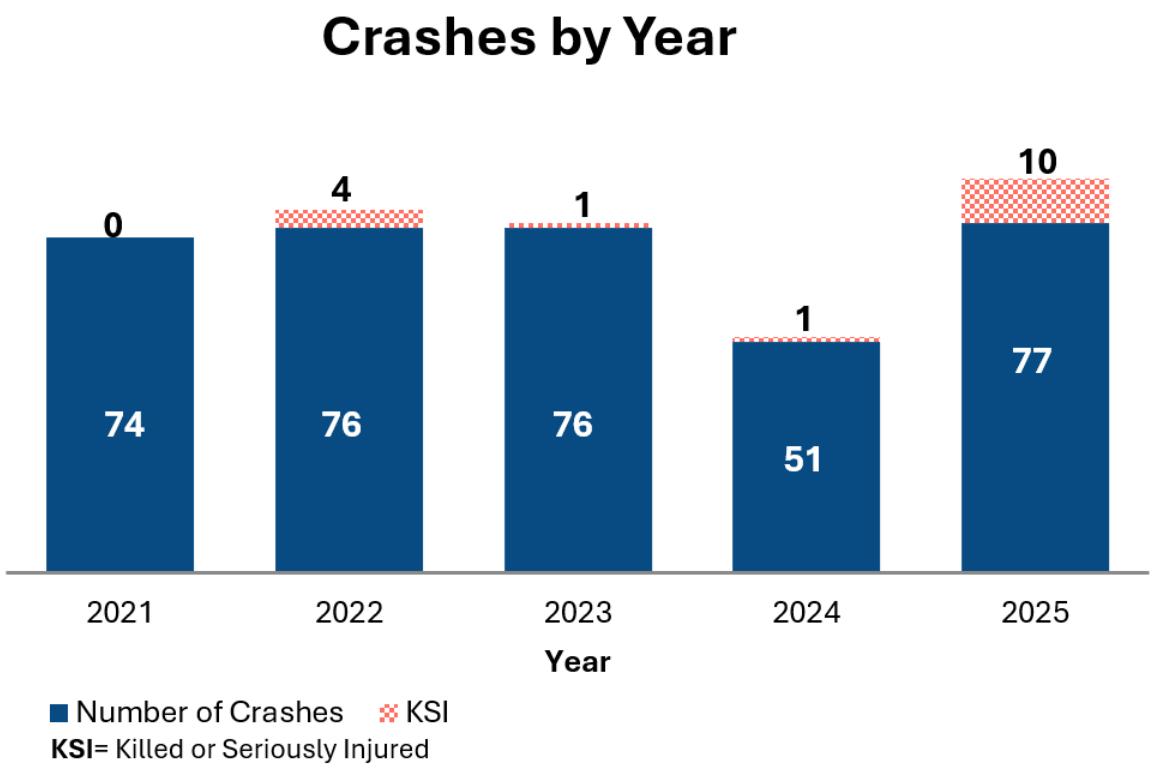


Figure 3-2| U.S. 17-92– All Crashes by Mode Heat Map

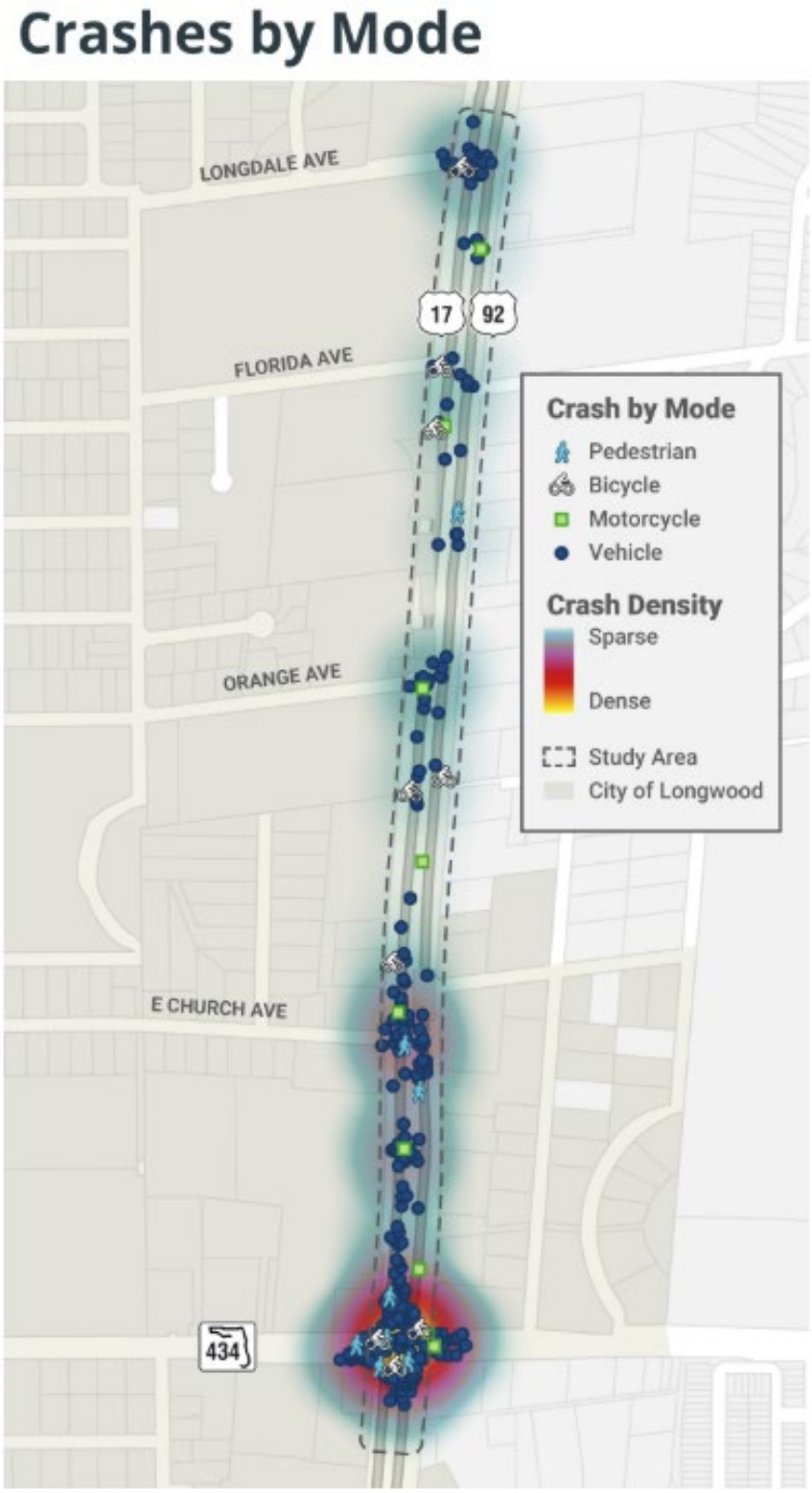
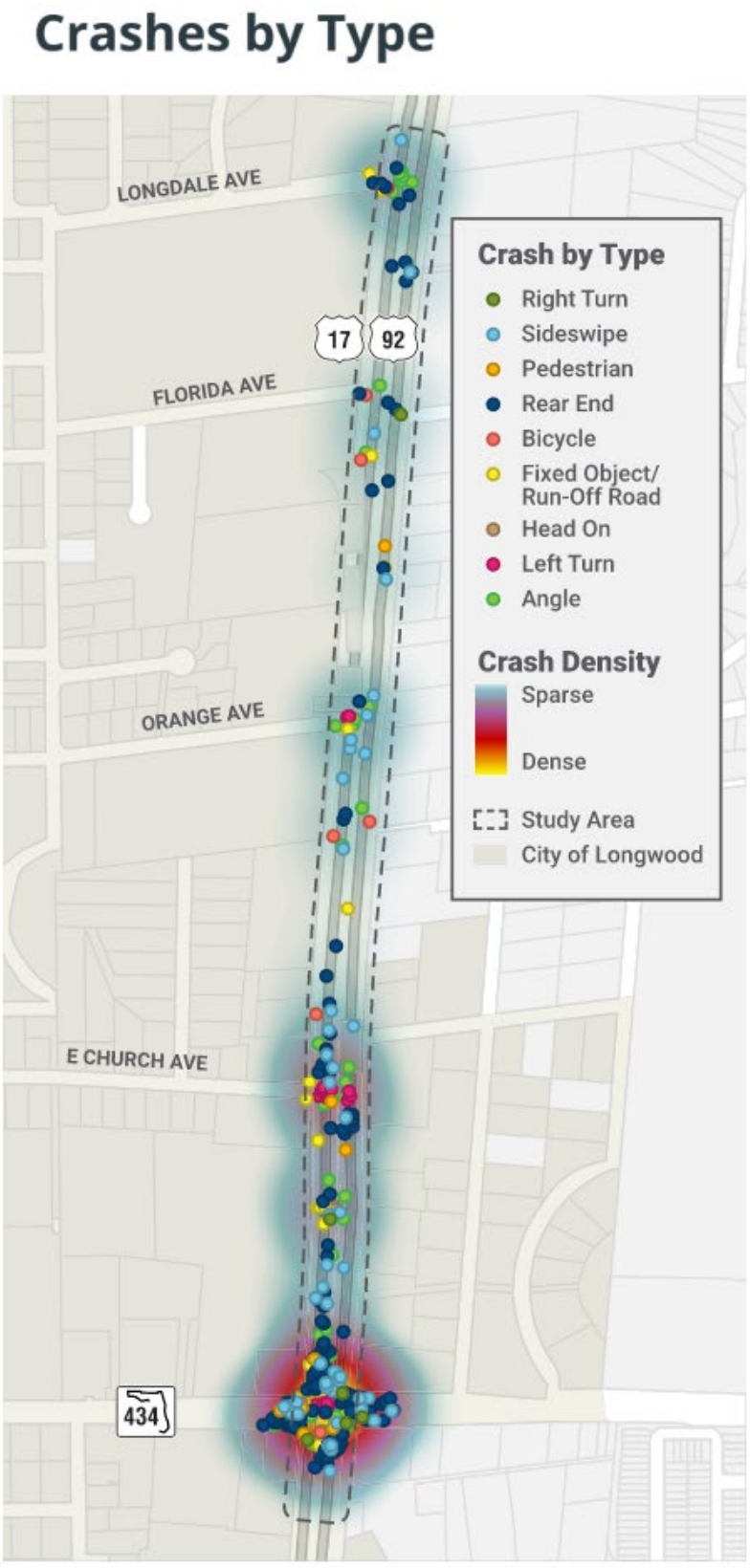


Figure 3-3| U.S. 17-92 All Crashes by Type & Crash Density Map



As seen in **Figure 3-1**, there was a spike in fatal and serious injury crashes in 2025, while the total number of crashes decreased in 2024. Police crash reports were reviewed for all fatal/serious injury, and no clear correlation was found among the crashes. The observed fluctuation of the crashes may be attributable to normal year-to-year variability in crash occurrence.

3.1.1 CRASHES BY MODE/TYPE/ SEVERITY

As seen in **Figure 3-4**, out of the 354 crashes within the analysis period, 256 (72%) resulted in no injury, 35 (10%) resulted in possible injury, 47(13%) resulted in non-incapacitating injuries, 13 (4%) resulted in incapacitating injuries, and 3 (1%) resulted in fatalities

Figure 3-4| Crashes by Severity

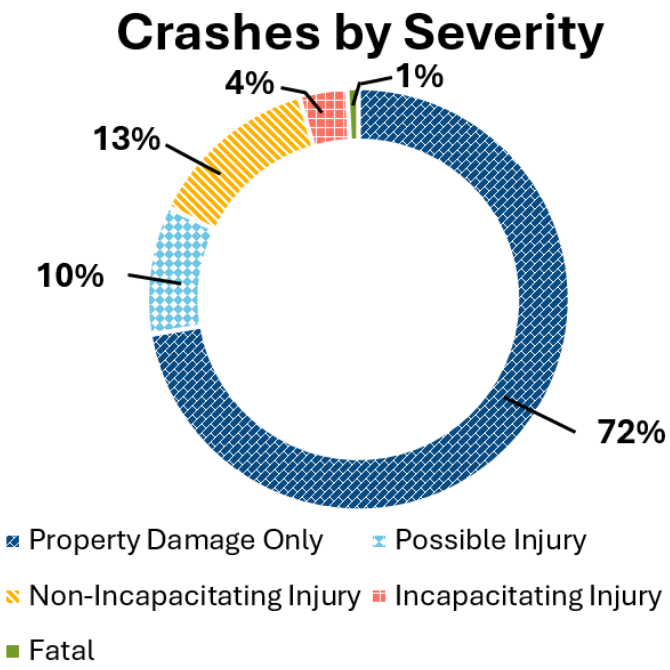


Figure 3-5 below shows the number and percentage of all crashes by mode and by percent of serious injury crashes and by percent of fatal crashes. As seen in **Figure 3-5,** Pedestrian, bicycle, and motorcycle crashes accounted for less than 8% (26) of all crashes within the study corridor; however, these crashes represented 46% (6) of all serious injury crashes and 100% (3) of all fatal crashes. This finding highlights the disproportionate severity of crashes involving vulnerable roadway users. While these crashes occur less frequently than motor vehicle-only crashes, they are more likely to result in severe or fatal injuries.

Figure 3-5| Crashes by Mode

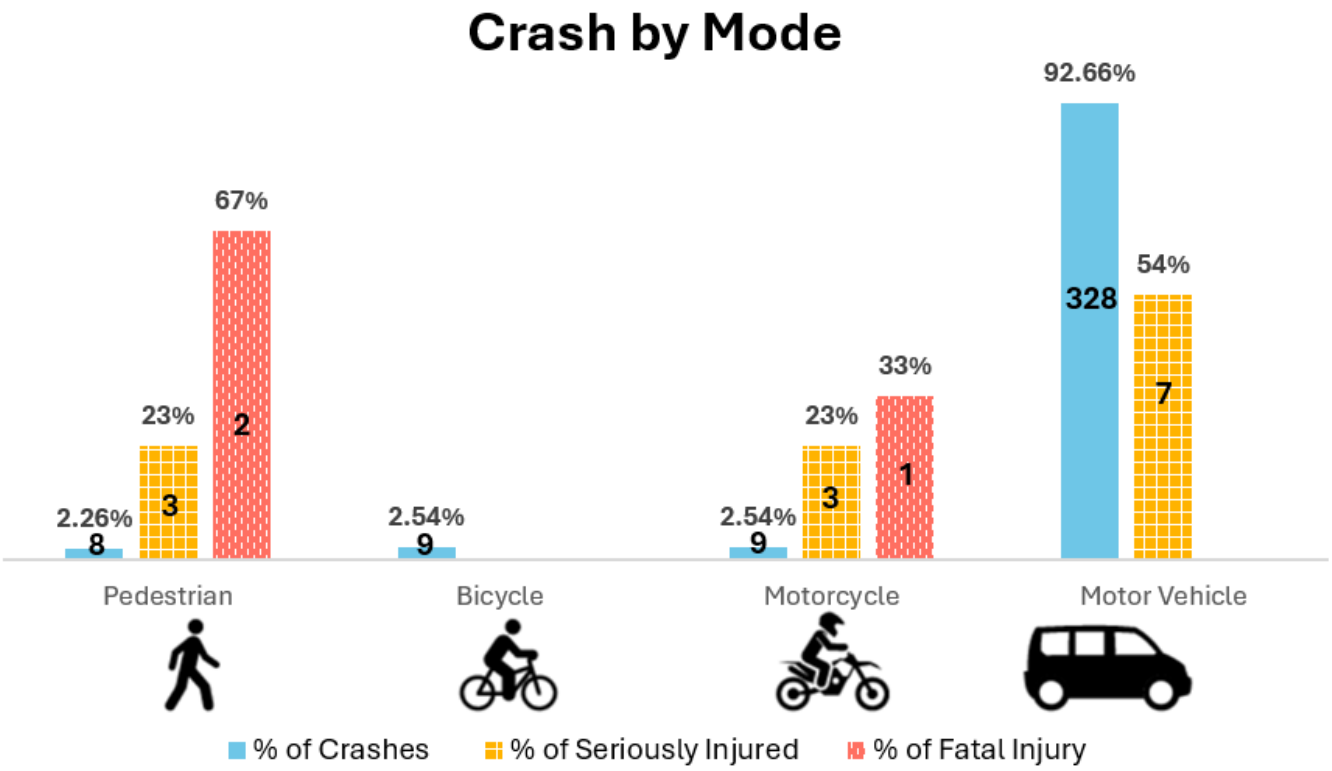


Table 3-1 and **Figure 3-6** present the crash data by crash type and severity. As shown in **Table 3-1**, rear-end crashes were the most prevalent crash type, accounting for 171 crashes (48% of all crashes). Sideswipe crashes were the second most common crash type, with 49 crashes (14 %), followed by angle crashes with 48 crashes (14%). Together, these three crash types accounted for approximately 76 % of all crashes within the study corridor.

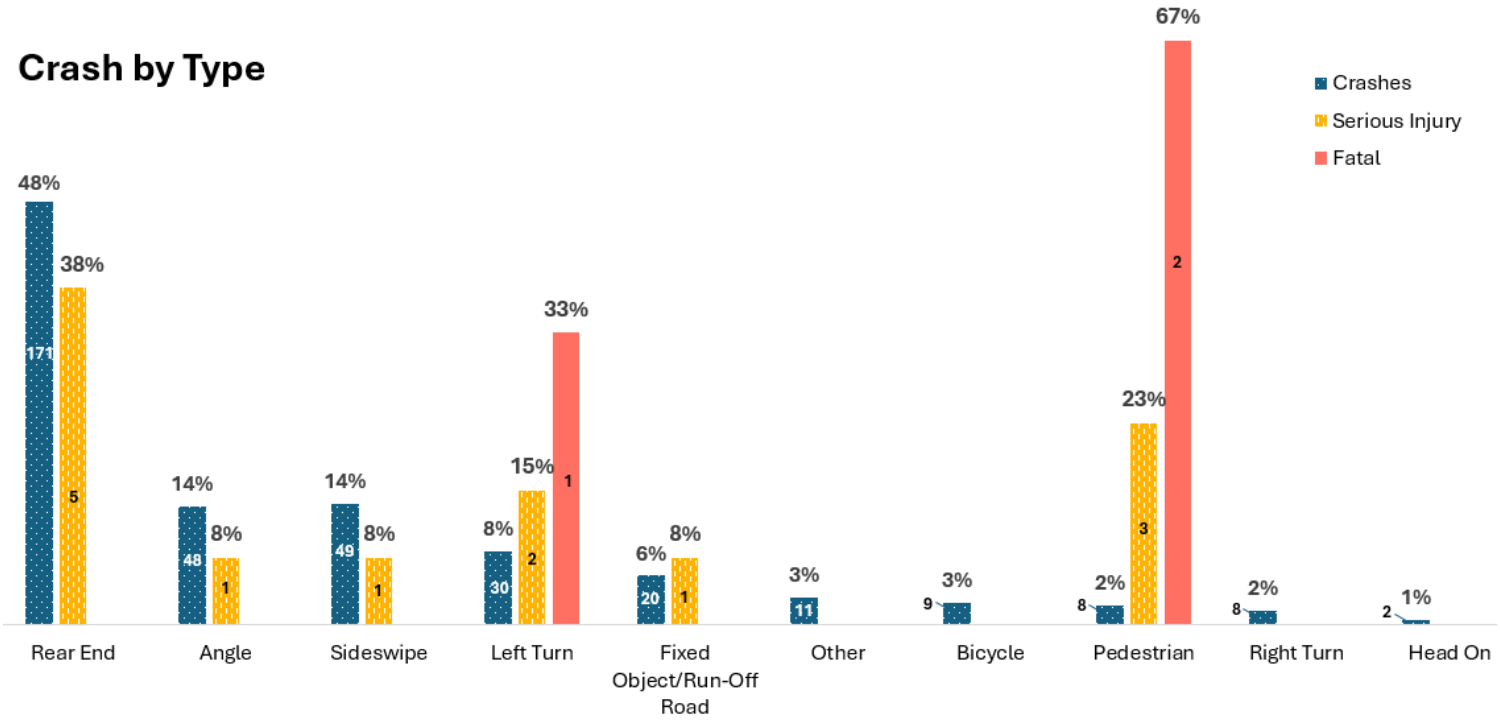
While rear-end crashes accounted for the largest share of total crashes in the corridor, as mentioned above, pedestrian, bicycle, and motorcycle crashes were disproportionately associated with severe outcomes. These crash types represented a relatively small percentage of total crashes but accounted for a significant share of serious injury and fatal crashes within the corridor.

There were 8 total pedestrian crashes and 9 total motorcycle crashes along U.S. 17-92 from 2021 to 2025. Of the 8 pedestrian crashes, 3 resulted in incapacitating injuries and 2 in fatalities, and of the 9 motorcycle crashes, 3 resulted in incapacitating injuries and 1 in fatality.

Table 3-1| U.S. 17-92 Crashes by Type and Severity

Crash By Type	PDO	Possible Injury	Non-Incapacitating Injury	Incapacitating Injury	Fatal	Total	% of Crashes	% of SI	% of Fatal
Rear End	132	17	17	5	0	171	48%	38%	0%
Angle	31	6	10	1	0	48	14%	8%	0%
Sideswipe	45	2	1	1	0	49	14%	8%	0%
Left Turn	17	5	5	2	1	30	8%	15%	33%
Fixed Object/Run-Off Road	14	2	3	1	0	20	6%	8%	0%
Other	9	0	2	0	0	11	3%	0%	0%
Bicycle	2	1	6	0	0	9	3%	0%	0%
Pedestrian	0	1	2	3	2	8	2%	23%	67%
Right Turn	6	0	0	0	0	6	2%	0%	0%
Head On	0	1	1	0	0	2	1%	0%	0%

Figure 3-6| U.S. 17-92 Crash by Type

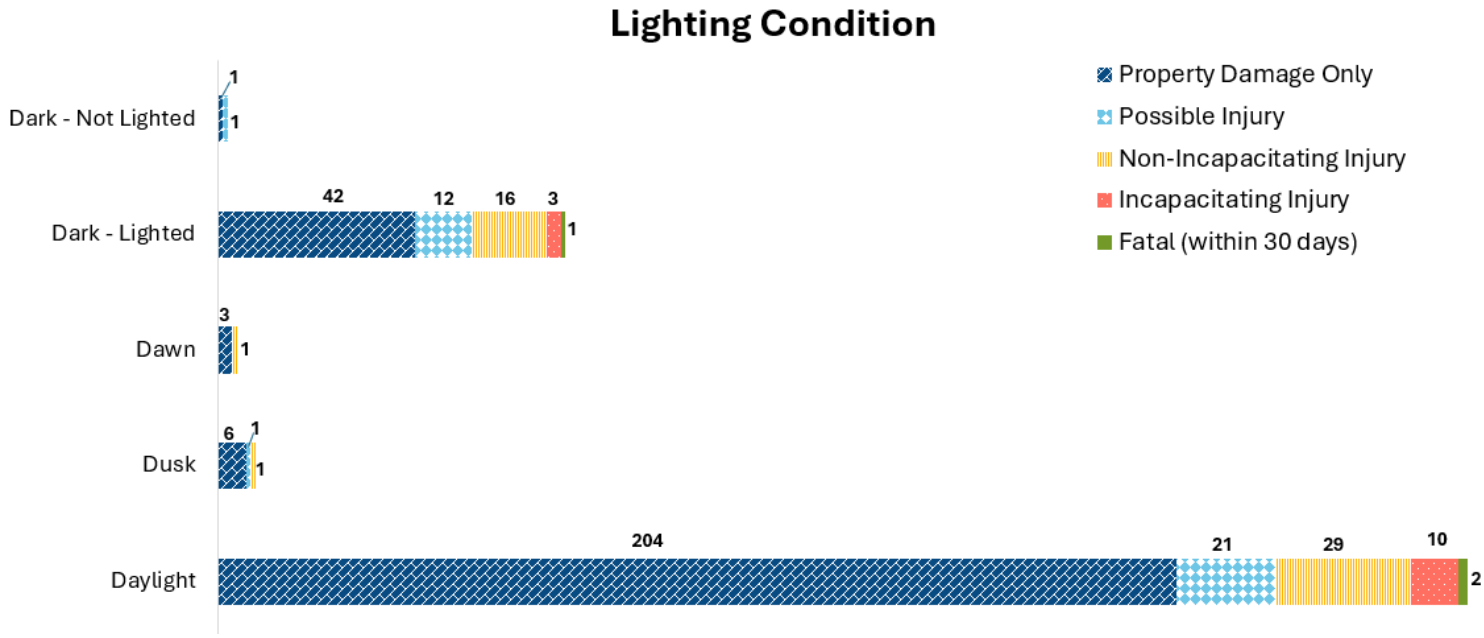


3.1.2 NIGHTTIME CRASHES

Figure 3-7 shows the percentage of crashes that occurred under different lighting conditions, with most of the crashes occurring during daylight or in dark-lighted conditions. Of the total 354 crashes, three-quarters (75%) of

crashes occurred during the day, with 4.5% of daylight crashes resulting in serious injuries or fatalities, and with 5.4% of dark-lighted crashes resulting in serious injuries or fatalities.

Figure 3-7| U.S. 17-92 Crashes by Lighting Condition and by Severity



3.1.3 CRASHES BY TIME OF DAY AND DAY OF THE WEEK

The analysis of the crashes by time of day (**Figure 3-8**) and by day of the week (**Figure 3-9**) revealed that serious injury crashes occurred primarily during the AM and PM peak periods, which coincide with the highest traffic volume conditions along the corridor. This trend suggests that increased traffic demand during peak travel periods may contribute to a greater likelihood of severe crashes due to higher interaction rates between vehicles, pedestrians, bicyclists, and other roadway users. A review of crash patterns by day of the week indicated that crashes were generally distributed throughout the week, with higher crash frequencies occurring on weekdays when commuter and commercial traffic volumes are greatest.

Figure 3-8| U.S. 17-92 Crashes by Time of Day and by Severity

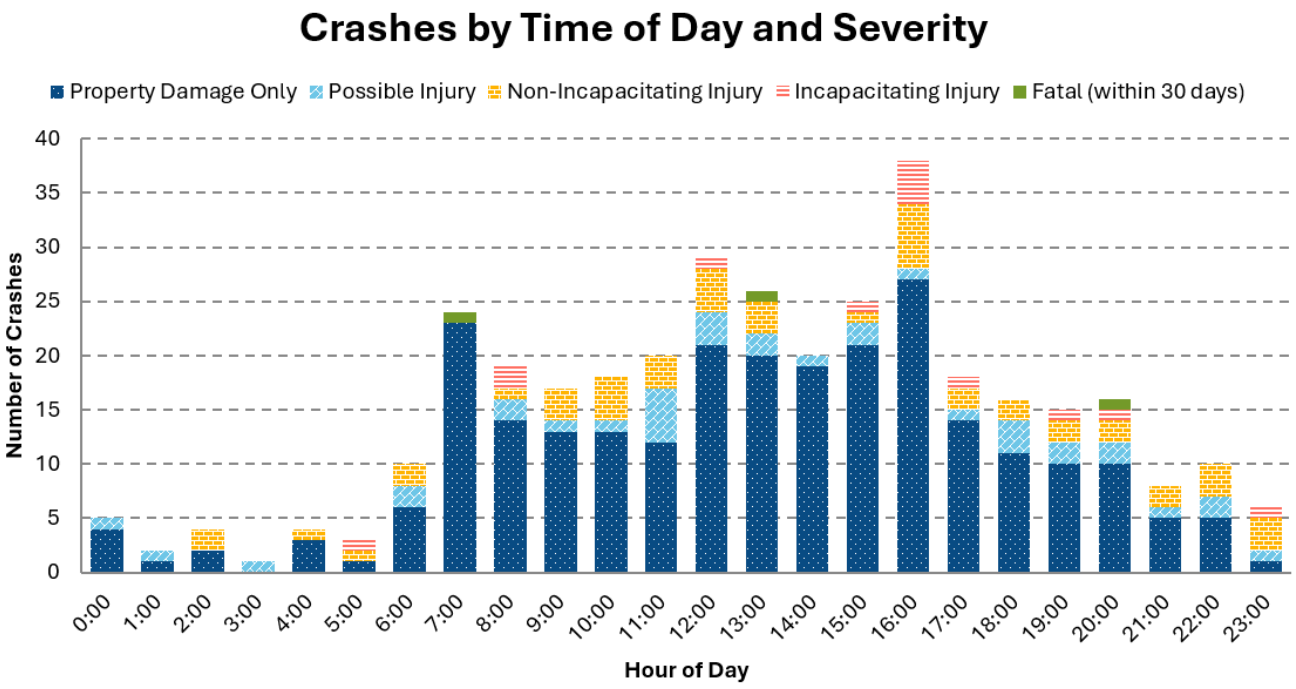
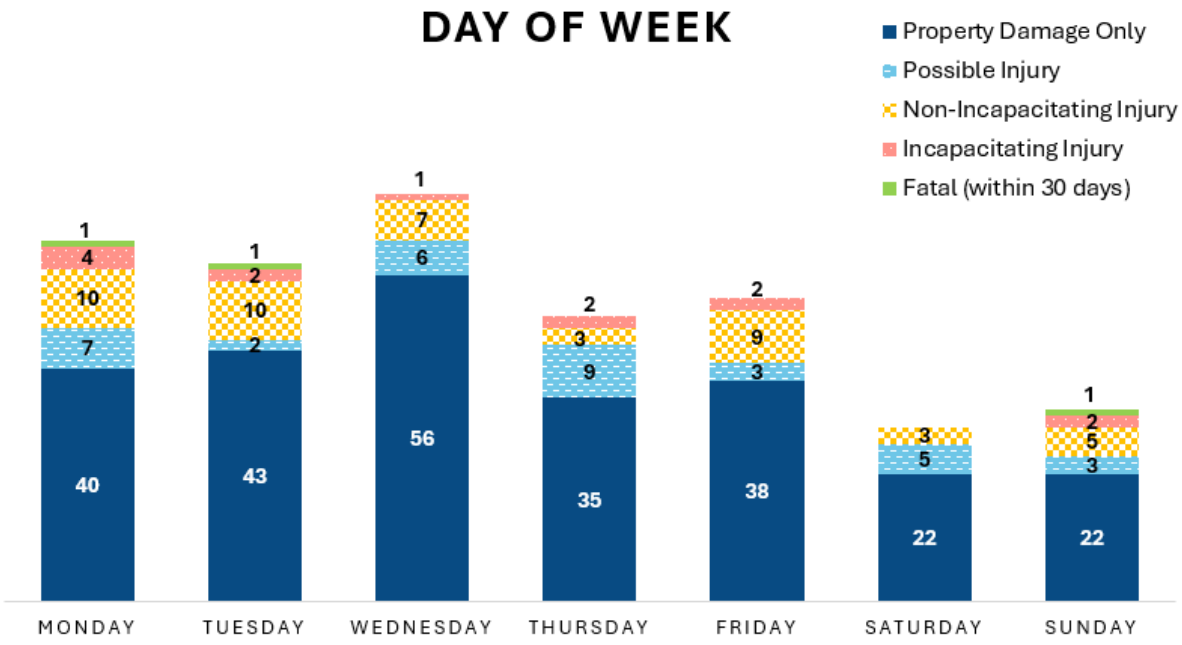


Figure 3-9| U.S. 17-92 Crashes by Day of the Week and by Severity



3.2 TRANSIT

The regional bus service Lynx is no longer operating along the study corridor. No ridership or service area data is currently available from SCOUT, the county's mobility on demand provider. The discontinuation of fixed-route

transit service may influence pedestrian and bicycle travel patterns along the corridor, as SCOUT operates as a point-to-point service rather than a fixed-route system. As a result, pedestrian crossing locations, walking activity, and bicycle usage along U.S. 17-92 may have changed following the transition.

4 OUTREACH

4.1 OUTREACH ACTIVITIES & COMMUNITY FEEDBACK

Public outreach was conducted as part of this study to gather feedback on the U.S. 17-92 study corridor. The City of Longwood shared a social media post requesting input from the public regarding safety concerns and potential improvements along the corridor. In addition, representatives from The Sharing Center and the AutoNation Auto Auction were invited to participate in the Road Safety Audit (RSA) process.

One public comment regarding the study corridor was received during the outreach period. The commenter expressed support for installing a traffic signal at the intersection of U.S. 17-92 and Longdale Avenue. The request is largely due to the high volume of truck traffic associated with the AutoNation auction site.

Two additional comments were received regarding locations in the vicinity of the study corridor, or that globally encompass the area. One comment was received regarding conditions around the intersection of Dog Track Road and U.S. 17-92, south of the study area. The commenter, a frequent pedestrian in the area, expressed concerns about motorized bicycles operating at high speeds on sidewalks. The commenter stated that several near-miss incidents involving pedestrians were observed along the corridor and streets. A third comment was received regarding the intersection of General Hutchison Parkway and U.S. 17-92, north of the study area. The commenter indicated that turning right from General Hutchison Parkway onto U.S. 17-92 can be difficult and potentially unsafe due to restricted sight distance caused by the sidewalk barrier, which limits visibility of approaching traffic.

The comments provided were taken into consideration while developing countermeasures for the corridor. The social media post used to solicit public input is included in **Appendix C.**

5 AUDIT FINDINGS

A field review was conducted on June 2, 2026, to evaluate safety conditions along the U.S. 17-92 study corridor. The RSA included field reviews during the AM peak period (7:00–9:00 AM), PM peak period (3:00–5:00 PM), and nighttime period (8:30–10:00 PM) to observe corridor operations, roadway user behavior, and safety concerns under a variety of traffic and lighting conditions. The field reviews allowed the RSA team to assess conditions for motorists, pedestrians, bicyclists, and other roadway users throughout the day and identify opportunities for safety improvements. The findings from the RSA are summarized below.

5.1 POSITIVE DESIGN FEATURES

During the field review, it was observed that most sidewalks remain level as they cross driveways. Rather than following the driveway grade down to the roadway, the sidewalks curve inward toward adjacent properties and away from U.S. 17-92, allowing them to maintain a consistent elevation across driveway crossings. This design improves accessibility and provides a more comfortable and predictable path for pedestrians, including individuals with mobility impairments. The RSA team noted this as a positive corridor feature that should be preserved as future improvements are implemented.

Figure 5-1| Example of Leveled Sidewalk



It was also noted during the RSA field review that the intersection of U.S. 17-92 and S.R. 434 had been recently resurfaced. As a result, the pavement condition at the intersection was good, with clearly visible pavement markings and a smooth driving surface.

Figure 5-2| U.S. 17-92 and S.R. 434 Intersection Recently Resurfaced



5.2 CORRIDOR CONDITIONS

Site-specific safety concerns were also identified during the field visit:

- At Longdale Avenue intersection:
  - It was observed that trucks exiting Longdale Avenue and turning left to travel northbound on U.S. 17-92 often experienced difficulty finding adequate gaps in traffic. As a result, some trucks would stop within the median opening while waiting to complete the maneuver, temporarily blocking the southbound lanes of U.S. 17-92 as seen in **Figure 5-3**.
  - It was also noted that drivers traveling northbound on U.S. 17-92 and making U-turns at the Longdale Avenue median opening frequently focused their attention on southbound traffic when searching for acceptable gaps. This behavior may reduce their awareness of vehicles turning right from Longdale Avenue onto northbound U.S. 17-92, creating the potential for vehicle conflicts.
- At Florida Avenue Directional Median Opening
  - Vehicles were observed using the southbound left directional median opening, (**Figure 5-4**) to make an eastbound left turn from Florida Avenue.
  - Additionally, during the audit, it was noted that a stop bar is not present along Florida Avenue approaching U.S. 17-92 as seen in **Figure 5-5**.
- At Nursery Road and Oak Lane
  - It was observed that double solid yellow centerline markings were missing or significantly faded on minor roadways approaching U.S. 17-92 as observed in **Figure 5-6**.
- At Church Avenue Intersection
  - As seen in **Figure 5-7**, one of the signal heads on the west leg of the U.S. 17-92 and Church Avenue intersection is missing a backplate.
- At Church Avenue and S.R. 434 Intersections
  - It was noticed that the pedestrian crossing signs were faded at both intersections, as seen in **Figure 5-8**.
- Need for guardrails and handrails
  - At several locations along the study corridor, the RSA team identified areas where guardrails or pedestrian handrails may be warranted due to steep side slopes and significant drop-offs adjacent to sidewalks, particularly near drainage swales. An example is seen in **Figure 5-9**.
- Corridor Wide
  - At several locations throughout the study corridor, curb ramps were observed that may not fully meet current Americans with Disabilities Act (ADA) accessibility standards, as seen in **Figure 5-10**.
  - Worn, faded, or damaged traffic control signs were identified at various locations along the corridor, as seen in **Figure 5-11**.
  - Sidewalk maintenance needs were also identified throughout the corridor. Several sidewalk segments exhibited cracking, deterioration, and other surface deficiencies, as seen in **Figure 5-12**, that may affect pedestrian comfort and accessibility and safety for micromobility users.
  - It was noticed that there is a high number of driveways along the corridor and some of them appear to be excessively wide as seen in **Figure 5-13.**
  - During the nighttime field review, it was observed that the west side of U.S. 17-92 was largely unlit from S.R. 434 to just north of The Sharing Center (**Figure 5-14**), while the east side remained illuminated. North of this location, the lighting pattern reversed, with the east side experiencing lighting outages while the west side was illuminated (**Figure 5-15**).
- The road audit also observed heavy volume of bicyclists along U.S. 17-92, several of which, were riding e-bikes, as seen in **Figure 5-16**.

Figure 5-3| U.S. 17-92 at Longdale Avenue Median Opening, Truck making a WBL-turn



Figure 5-4| Directional median Opening at Florida Avenue



Figure 5-5| Florida Avenue Approaching U.S. 17-92- No Stop Bar Present

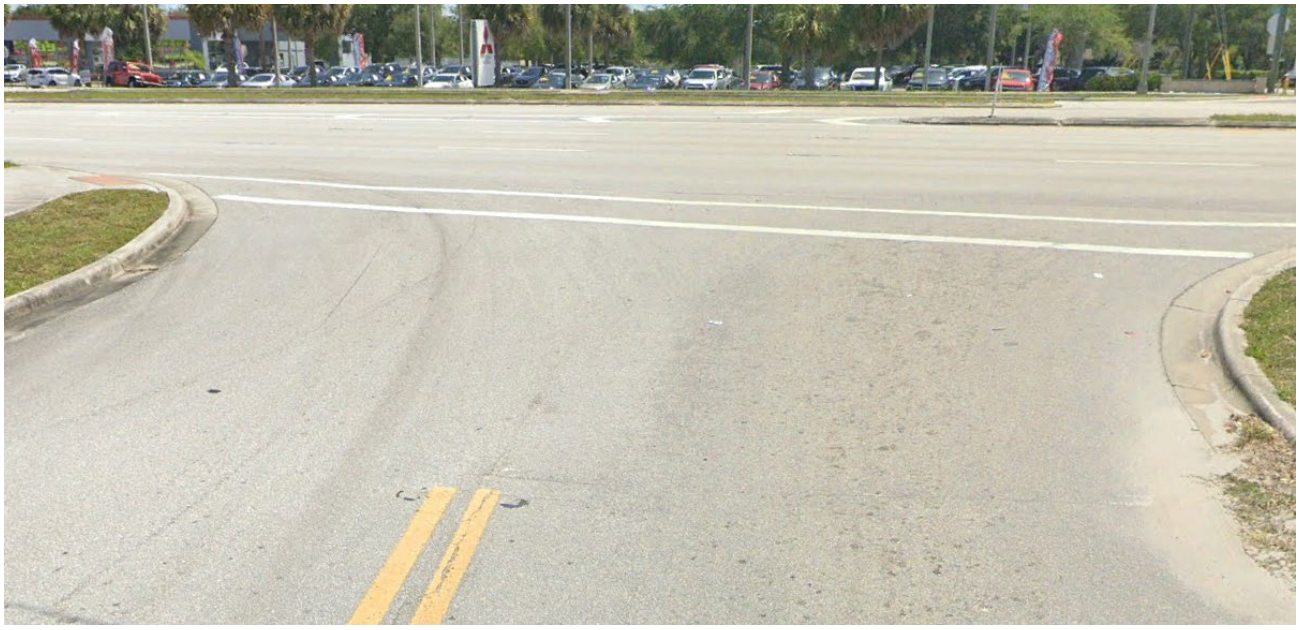


Figure 5-6| At Nursery Road Approaching U.S. 17-92- No double Solid Yellow Lines



Figure 5-7| Signal Head Missing Signal Backplate at U.S. 17-92 and Church Ave Intersection



Figure 5-8| Faded Pedestrian Crossing Sign at U.S. 17-92 and S.R. 434 Intersection



Figure 5-9| Potential Location for Handrail/Guardrail



Figure 5-10| ADA Ramp Not up to Standard



Figure 5-11| Worn Out Signs Along U.S. 17-92



Figure 5-12| Sidewalk Deterioration Identified Along U.S. 17-92



Figure 5-13| Driveway Measuring Approximately 55 feet along U.S. 17-92 North of S.R. 434



Figure 5-14| U.S. 17-92 South of the Sharing Center Corridor Lighting



Figure 5-15| U.S. 17-92 North of the Sharing Center Corridor Lighting



Figure 5-16| U.S. 17-92 Bicyclist Spotted Along the Corridor



6 COUNTERMEASURES

Based on the data collected and the findings from the Road Safety Audit, a series of potential countermeasures were identified for the U.S. 17-92 study corridor. The countermeasures are organized by implementation timeframe, including maintenance, short-term, mid-term, and long-term improvements, and further summarized in a table. The countermeasures are also categorized as either corridor-wide treatments, which address safety concerns throughout the corridor, or location-specific treatments, which target identified issues at intersections, median openings, or roadway segments.

The countermeasures were mapped and are found in **Appendix D .**

6.1 U.S. 17-92 CORRIDOR WIDE COUNTERMEASURES

Maintenance:

- Repair overhead roadway lighting that is currently out.

Short-Term:

- Add yellow center line and stop bar pavement markings on minor roads approaching U.S. 17-92.
- Replace worn-out speed limit signs and install supplemental signs in the median, consider replacing with larger signs such as 36”x48”.
- Install pavement speed markings & speed feedback signs.
- Coordinate targeted speed enforcement, particularly during off-peak periods.
- Update the ADA ramps to meet current standards.
- Repair sidewalks.
- Evaluate the slope of the drop-offs along the backside of the sidewalk, especially toward the drainage swale, and install handrails between the sidewalk and the swale where needed.
    - Evaluate the following locations for guardrails along the east side of the corridor:
        - At Next Auto Repair
        - South of Burger King Entrance
        - Along the Tool Kingdom frontage (pending confirmation of drop-off height)
- Conduct a corridor-wide access management study to assess opportunities for driveway consolidation.

Mid-Term:

- Narrow all six travel lanes to 11 feet and provide a 7-foot buffered bicycle lane in each direction, consisting of a 5-foot lane with a 2-foot striped buffer, to maintain consistency with the typical section of U.S. 17-92 north of Raven Avenue/Shepard Road.
    - If feasible, provide a raised concrete separator within the 2-foot buffer. Given the high driveway density, presence of pedestrians and bicyclists, and lower speeds, prioritize implementing the raised separator between S.R. 434 and Orange Avenue.
- Install small trees and/or shrubs within the median or along the sidewalk to provide enclosure and help reduce speeds, ensuring compliance with clear zone requirements while considering maintenance needs and sightline restrictions.

Long-Term:

- Repair the overhead roadway light poles and wiring to prevent further outages.

6.2 U.S. 17-92 AND S.R. 434 INTERSECTION

Short-Term:

- Implement a leading pedestrian interval (LPI) on all four approaches.
- Install right-turn blank out sign on all four approaches.
- Replace pedestrian signal crossing signs.

Mid-Term:

- Extend the median noses closer to the pedestrian crosswalks.

6.3 U.S. 17-92 AND CHURCH AVENUE INTERSECTION

Short-Term:

- Conduct a study to identify if an additional eastbound lane is needed, and whether it would be configured as a left-through and right-only, or right-through with a left-turn-only lane.
- Conduct a study to evaluate if the existing Flashing Yellow Arrow (FYA) should be restricted to certain times of day, such as the off-peak period, or if implementation of FYA omit is needed.
- Install retroreflective strips to the signal backplates.
- Implement a Leading Pedestrian Interval (LPI) on all four approaches.
- Install a right-turn blank out sign on the southbound approach.
- Replace faded pedestrian signal crossing signs.

6.4 U.S. 17-92 AND ORANGE AVENUE INTERSECTION

Mid-Term:

- Decrease median opening size by extending the north leg median further south.
- Install traffic signal Would require a signal warrant analysis.
    - This countermeasure is consistent with the City of Longwood Mobility Plan. A traffic signal at the Longdale Avenue intersection is preferred; however, if Longdale Avenue is not signalized and a midblock pedestrian crossing is not provided south of Florida Avenue, a traffic signal should be considered at Orange Avenue.

6.5 THE SHARING CENTER

Mid-Term:

- Install a signalized midblock crosswalk along U.S. 17-92 between the northbound directional left turn into the Sharing Center and the southbound directional left turn onto Florida Avenue.
    - This countermeasure is consistent with FDOT's candidate RRR project (454205-1), from Normandy Road to Shepard Road/Raven Avenue, letting in 2029.

6.6 U.S. 17-92 AND FLORIDA AVENUE MEDIAN OPENING

Short-Term:

- Install delineators or extend the median traffic separator to prevent illegal eastbound left turn movements.
- Install R5-1 (DO NOT ENTER) sign at the median opening facing Florida Avenue (West).
- Restripe the crosswalk at KIA entrance.

6.7 U.S. 17-92 AND LONGDALE AVENUE INTERSECTION

Short-Term:

- Install sign identifying Longdale Ave as the entrance for the Auto-Auction.

Mid-Term:

- Install a traffic signal. Would require a signal warrant analysis.

6.8 COUNTERMEASURES SUMMARY

The countermeasures described above are summarized in **Table 6-1** by specific location, and as corridor wide countermeasures. The table includes the responsible party for each countermeasure as well as the determined action and possible implementation timeframe.

Table 6-1| Countermeasures Summary

Location	Countermeasure	Responsible Party	Action/ Possible Timeframe
Corridor Wide	Repair overhead roadway lighting that is currently out	FDOT	Under evaluation by FDOT Maintenance Office. Evaluation/determination for implementation by FY 2027
	Add yellow center line/stop bars on minor roads	City of Longwood	Will Implement – FY 2027
	Replace worn-out speed limit signs and install supplemental signs in the median. Consider replacing with larger signs such as 36”x48”	FDOT	Under evaluation by FDOT Traffic Operations Office and Maintenance Office. Evaluation/determination for implementation by FY 2027
	Install pavement speed markings & speed feedback signs	FDOT	454205-1 RRR – FY 2029
	Conduct targeted speed enforcement	City of Longwood	Will Implement – ongoing
	Update the ADA ramps to meet standards	FDOT	454205-1 RRR – FY 2029
	Repair sidewalks	City of Longwood	Will Implement – portions of sidewalk to be repaired is a current project for this year (2026).
	Install handrails along sidewalk drop-offs as needed	FDOT	454205-1 RRR – FY 2029
	Conduct access management study - consolidate driveways	FDOT	454205-1 RRR – FY 2029
	Narrow all lanes to 11’ and provide 5’ bicycle lane with 2’ buffer	FDOT	454205-1 RRR to consider - FY 2029
	Add small trees / shrubs on median / utility strip	City of Longwood	Will Implement – FY 2027
	Repair/replace overhead light wiring	FDOT	Under evaluation by FDOT Maintenance Office. Evaluation/determination for implementation by FY 2027

Location	Countermeasure	Responsible Party	Action/ Possible Timeframe
S.R. 434	Implement leading pedestrian interval on all four approaches	FDOT / Seminole County	Under evaluation by FDOT Traffic Operations Office. Evaluation/determination for implementation by FY 2027
	Install right-turn blank out sign on all four approaches	FDOT / Seminole County	454205-1 RRR – FY 2029
	Replace pedestrian signal crossing signs	FDOT	454205-1 RRR – FY 2029
	Extend the median noses closer to the pedestrian crosswalks	FDOT	454205-1 RRR – FY 2029
Church Avenue	Conduct study to evaluate need for additional eastbound approach lane	City of Longwood	Will Implement – FY 2027
	Evaluate restriction of FYA during certain periods	FDOT / Seminole County	Under evaluation by FDOT Traffic Operations Office. Evaluation/determination for implementation by FY 2027
	Install retroreflective strips on signal backplates	FDOT / Seminole County	454205-1 RRR – FY 2029
	Implement leading pedestrian interval on all four approaches	FDOT / Seminole County	Under evaluation by FDOT Traffic Operations Office. Evaluation/determination for implementation by FY 2027
	Install right-turn blank out sign on SB approach	FDOT / Seminole County	Consider with 454205-1 RRR – FY 2029
	Replace pedestrian signal crossing signs	FDOT / City of Longwood	Determine if the City of Longwood could add to a current LAP project.
Orange Avenue	Install traffic signal	City of Longwood	Will Implement – FY 2028
	Decrease median opening	FDOT / City of Longwood	Will Implement – FY 2028
The Sharing Center	Install signalized midblock crossing	FDOT	Included in 454205-1 RRR – FY 2029
Florida Ave	Install delineators/extend median	FDOT	Consider with 454205-1 RRR – FY 2029
	Install R5-1 (do not enter) sign facing west	FDOT	Under evaluation by FDOT Maintenance Office. Evaluation/determination for implementation by FY 2027
	Restripe the crosswalk at KIA entrance	FDOT	454205-1 RRR – FY 2029
Longdale Avenue	Install sign identifying Longdale Ave. as the entrance for the auto-auction	City of Longwood	Will Implement – FY 2028
	Install a traffic signal	FDOT / City of Longwood	Will Implement – FY 2029

6.9 COST ESTIMATES

A high-level planning cost estimate was developed for the identified countermeasures. Cost estimates were primarily based on MetroPlan Orlando's Engineering Countermeasures Toolkit Cost Estimates. Additional cost information was obtained from the FDOT State Safety Office and other publicly available sources to supplement and validate the planning-level estimates where necessary.

The countermeasures were grouped by implementation timeframe. In addition, a 10% cost was included for Maintenance of Traffic (MOT) and mobilization. A 50% contingency was applied due to the planning-level nature of the estimates and the associated level of uncertainty with cost escalation and implementation timeframes.

Engineering costs were estimated at 25% of construction costs, and Construction Engineering and Inspection (CEI) costs were estimated at 15%. No right-of-way acquisition costs were included in the estimates.

These cost estimates are intended for planning-level purposes only and are subject to refinement during future project development, design, and engineering phases. Additionally, some of the proposed countermeasures, if implemented, will incur ongoing maintenance costs that were not included in this planning-level estimate. Estimated costs are summarized by implementation timeframe, including maintenance, short-term, mid-term, and long-term improvements. Detailed cost estimates are found in **Appendix E. Table 6-2** summarizes the total planning level cost estimate by term.

Table 6-2| Summary of Planning Level Cost Estimates

Term	Project Cost	
Maintenance	$	228,359.25
Short-Term	$	1,423,395.57
Mid-Term	$	9,317,565.69
Long-Term	$	1,240,282.05

7 APPENDICES

Appendix A. Volume and Speed Data

Appendix A is available upon request. Please send an email to visionzero@metroplanorlando.gov to make your request.

Appendix B. Collision Diagrams

Appendix B is available upon request. Please send an email to visionzero@metroplanorlando.gov to make your request.

Appendix C. Social Media Posts

Historic LONGWOOD Florida

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP



Help Improve Road Safety

The City of Longwood is conducting a Road Safety Audit of U.S. 17-92 from South of S.R. 434 to North of Longdale Ave.

Share your input—scan the QR code!

Appendix D. Mapped Countermeasures

0 100 400
Feet

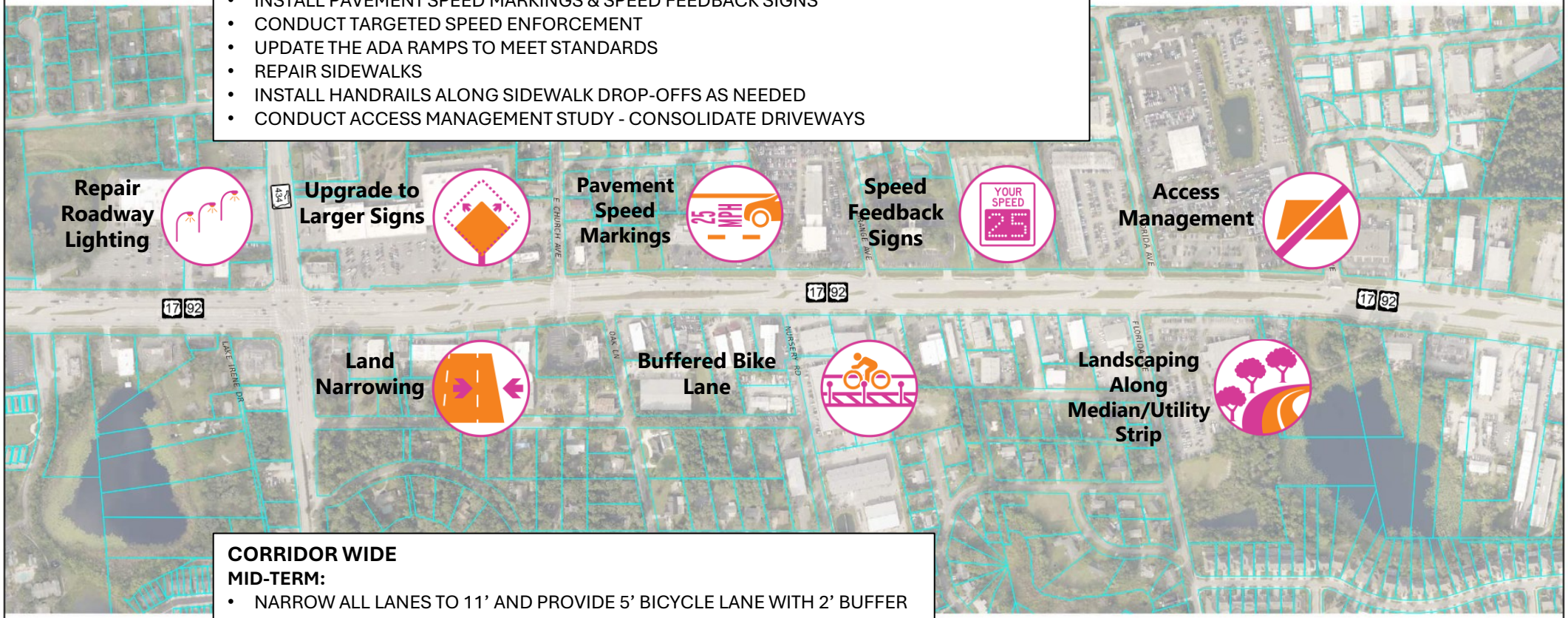
CORRIDOR WIDE

MAINTENANCE:

- REPAIR OVERHEAD ROADWAY LIGHTING THAT IS CURRENTLY OUT

SHORT-TERM:

- ADD YELLOW CENTER LINE/STOP BARS ON MINOR ROADS
- REPLACE WORN-OUT SPEED LIMIT SIGNS AND INSTALL SUPPLEMENTAL SIGNS IN THE MEDIAN. CONSIDER REPLACING WITH LARGER SIGNS SUCH AS 36”X48”
- INSTALL PAVEMENT SPEED MARKINGS & SPEED FEEDBACK SIGNS
- CONDUCT TARGETED SPEED ENFORCEMENT
- UPDATE THE ADA RAMPS TO MEET STANDARDS
- REPAIR SIDEWALKS
- INSTALL HANDRAILS ALONG SIDEWALK DROP-OFFS AS NEEDED
- CONDUCT ACCESS MANAGEMENT STUDY - CONSOLIDATE DRIVEWAYS



CORRIDOR WIDE

MID-TERM:

- NARROW ALL LANES TO 11’ AND PROVIDE 5’ BICYCLE LANE WITH 2’ BUFFER
- ADD SMALL TREES / SHRUBS ON MEDIAN / UTILITY STRIP

LONG-TERM:

- REPAIR/REPLACE OVERHEAD LIGHT WIRING

LEGEND: PARCEL LINE

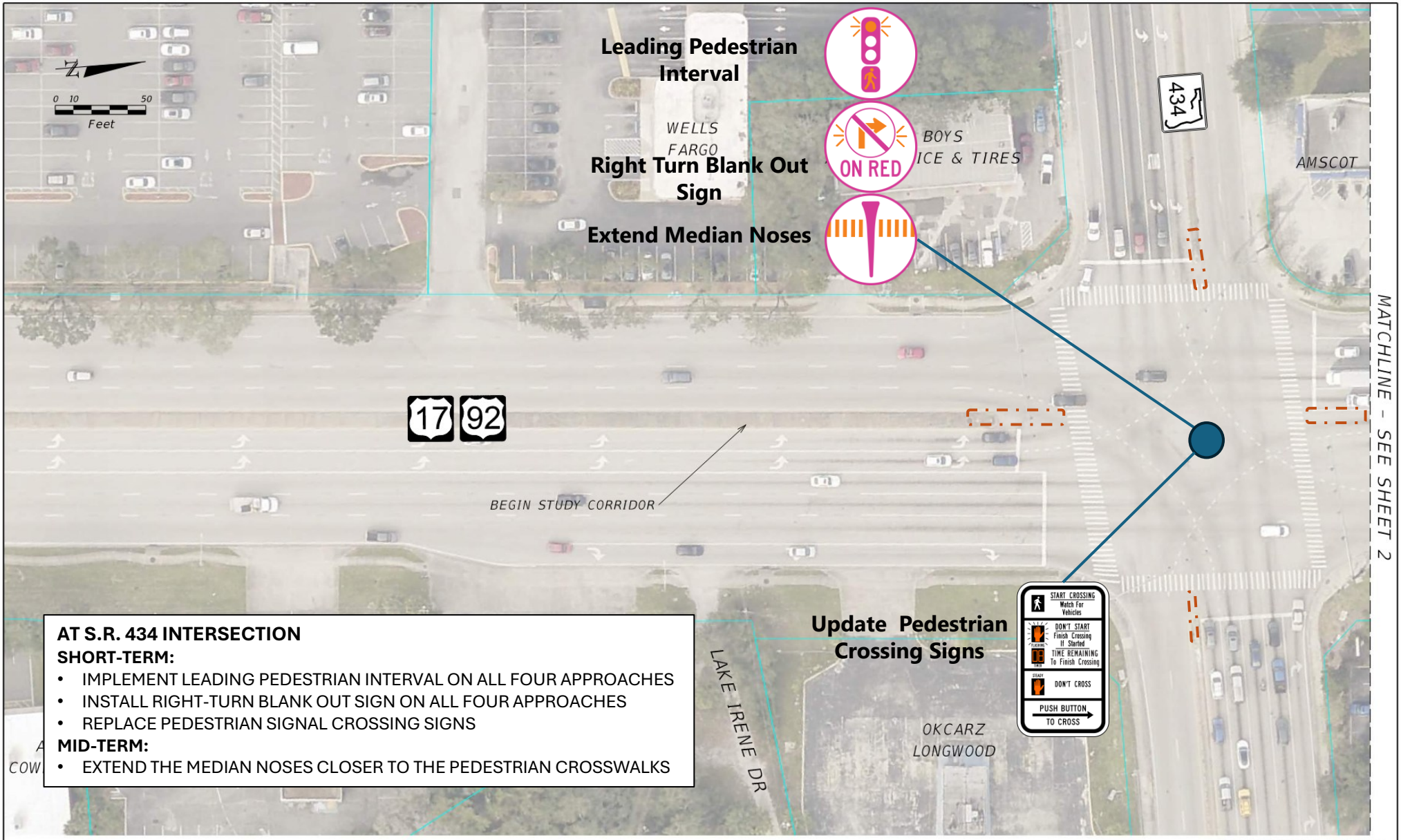
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
77010000	SEMINOLE	N/A

U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO.



AT S.R. 434 INTERSECTION

SHORT-TERM:

- IMPLEMENT LEADING PEDESTRIAN INTERVAL ON ALL FOUR APPROACHES
- INSTALL RIGHT-TURN BLANK OUT SIGN ON ALL FOUR APPROACHES
- REPLACE PEDESTRIAN SIGNAL CROSSING SIGNS

MID-TERM:

- EXTEND THE MEDIAN NOSES CLOSER TO THE PEDESTRIAN CROSSWALKS

LEGEND: PARCEL LINE

FOR ILLUSTRATIVE PUSPOSES
AERIAL PHOTO ACQUIRED 2024

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
77010000	SEMINOLE	N/A

U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO. 1



LEGEND: PARCEL LINE

FOR ILLUSTRATIVE PUSPOSES
AERIAL PHOTO ACQUIRED 2024

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
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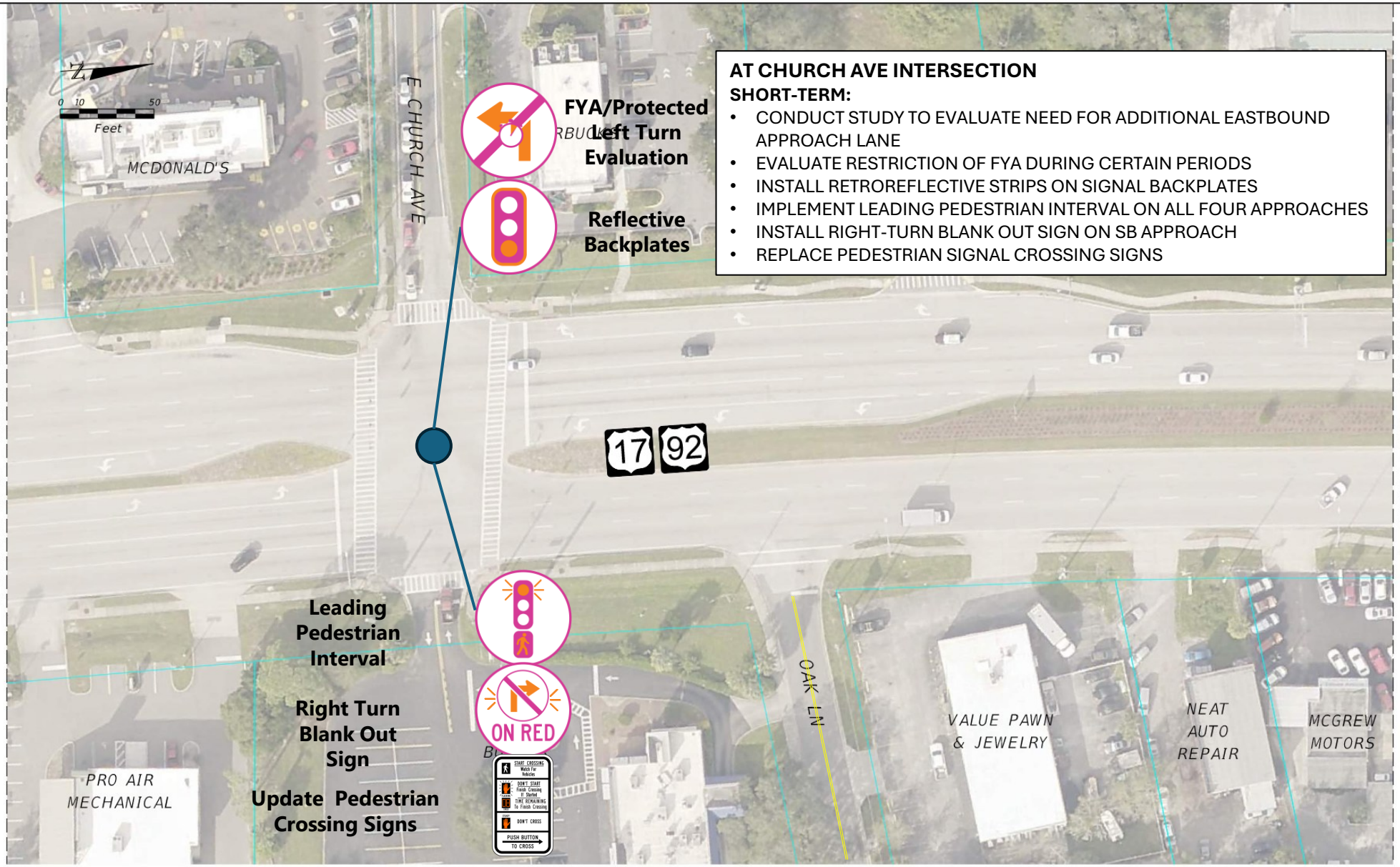
U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO. 2



AT CHURCH AVE INTERSECTION

SHORT-TERM:

- CONDUCT STUDY TO EVALUATE NEED FOR ADDITIONAL EASTBOUND APPROACH LANE
- EVALUATE RESTRICTION OF FYA DURING CERTAIN PERIODS
- INSTALL RETROREFLECTIVE STRIPS ON SIGNAL BACKPLATES
- IMPLEMENT LEADING PEDESTRIAN INTERVAL ON ALL FOUR APPROACHES
- INSTALL RIGHT-TURN BLANK OUT SIGN ON SB APPROACH
- REPLACE PEDESTRIAN SIGNAL CROSSING SIGNS

LEGEND: PARCEL LINE

FOR ILLUSTRATIVE PUSPOSES
AERIAL PHOTO ACQUIRED 2024

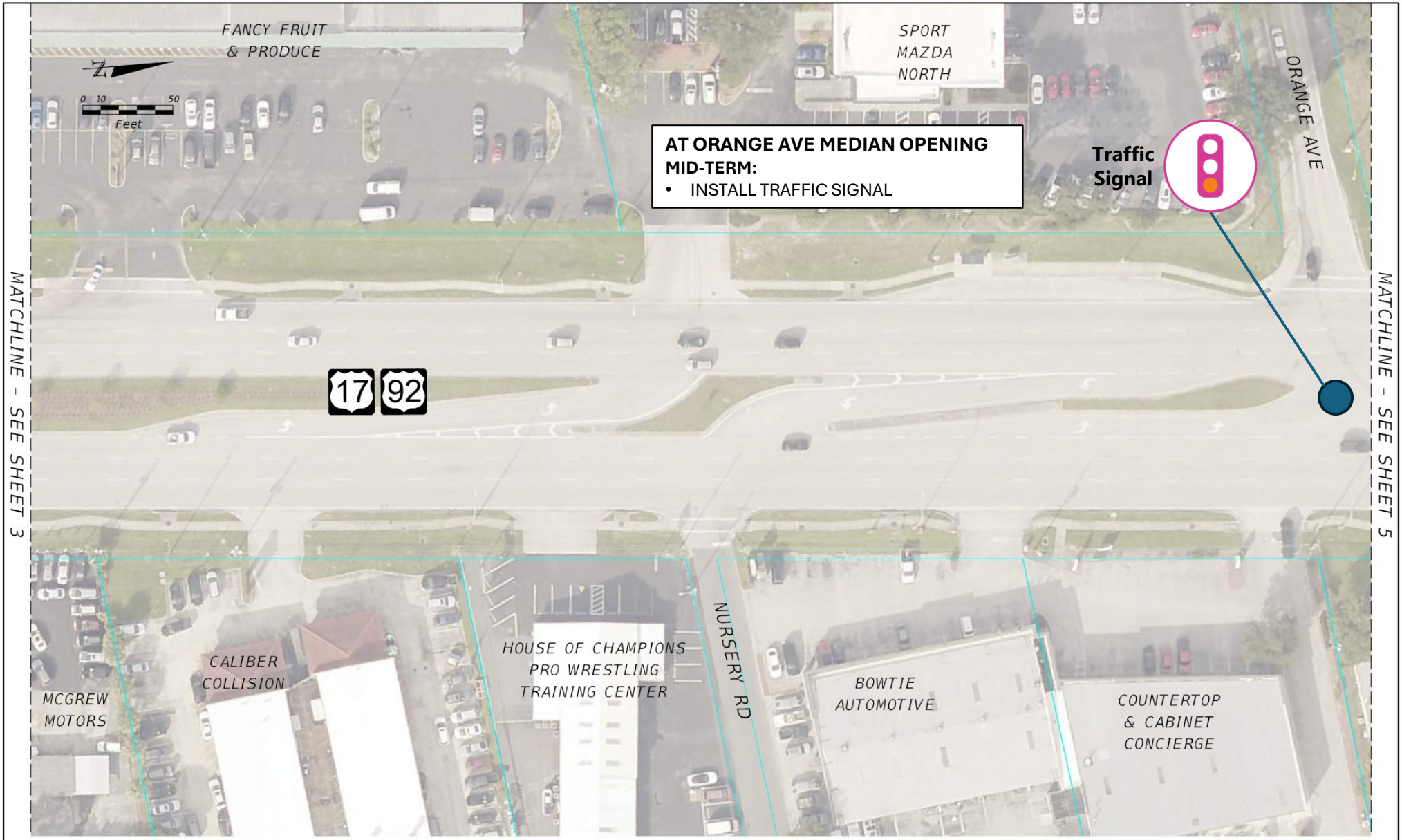
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
77010000	SEMINOLE	N/A

U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO. 3



LEGEND: PARCEL LINE

FOR ILLUSTRATIVE PUSPOSES
AERIAL PHOTO ACQUIRED 2024

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
77010000	SEMINOLE	N/A

U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO. 4



LEGEND: PARCEL LINE

FOR ILLUSTRATIVE PUSPOSES
AERIAL PHOTO ACQUIRED 2024

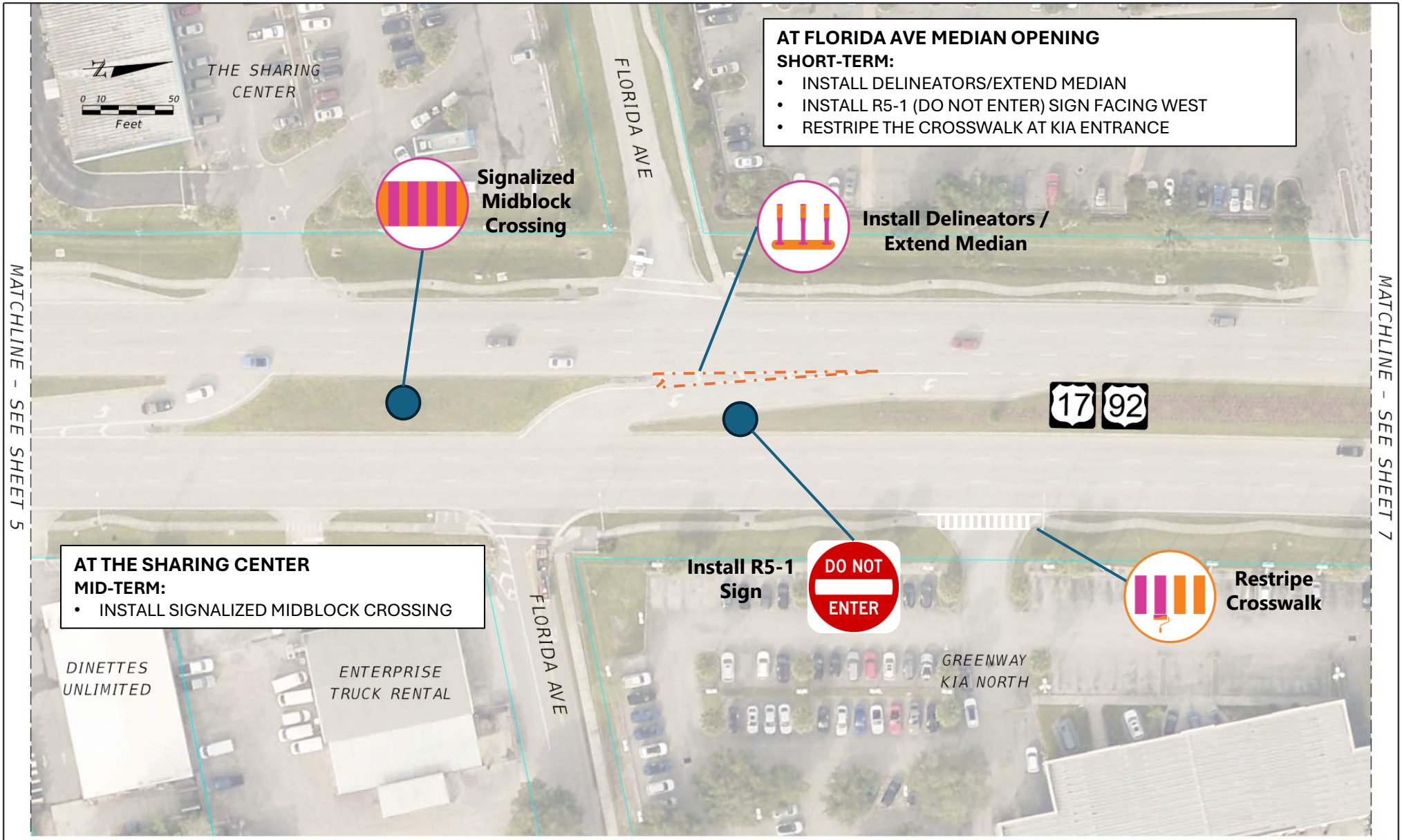
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
77010000	SEMINOLE	N/A

U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO. 5



LEGEND: PARCEL LINE

FOR ILLUSTRATIVE PUSPOSES
AERIAL PHOTO ACQUIRED 2024

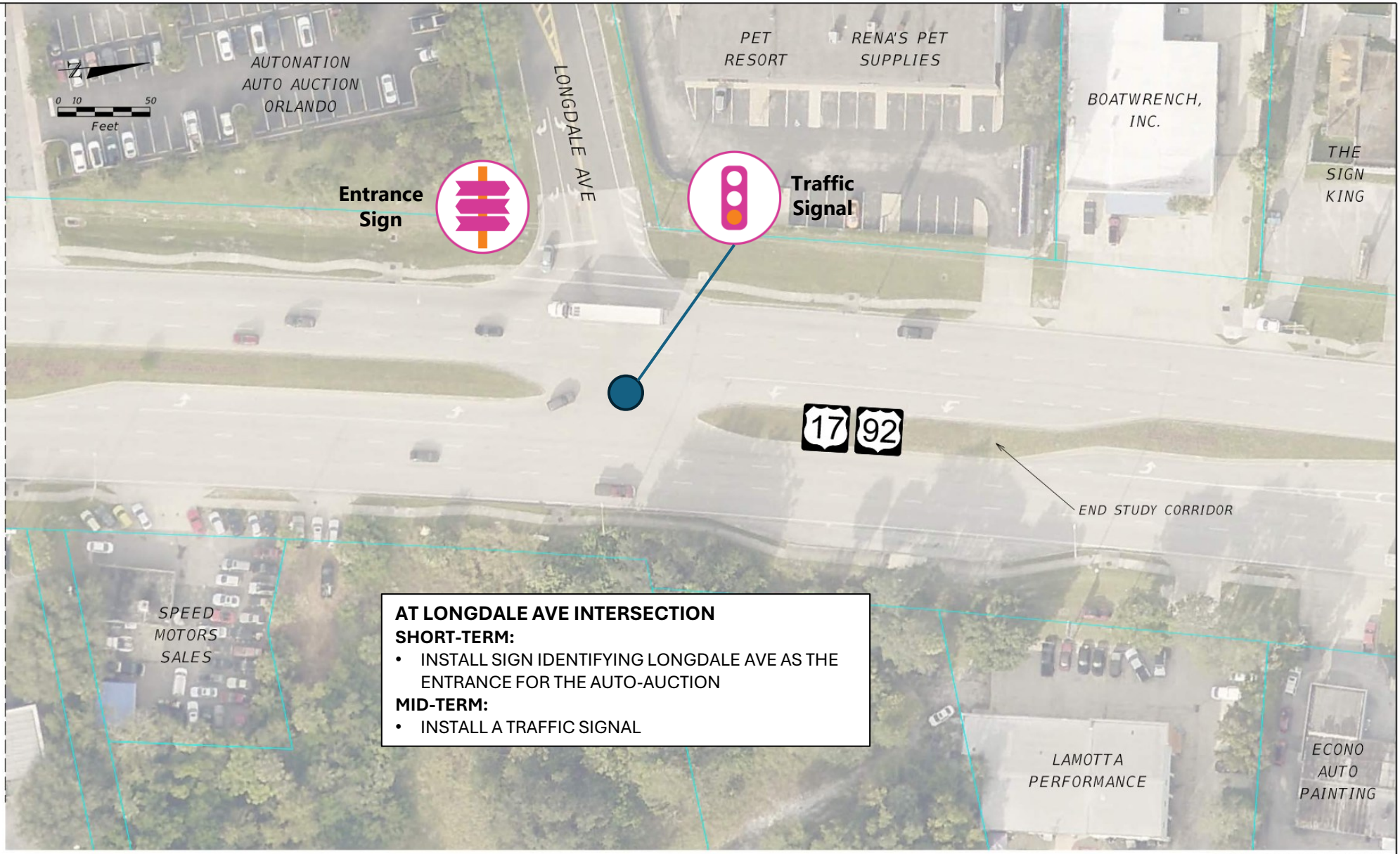
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
77010000	SEMINOLE	N/A

U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO. 6



AT LONGDALE AVE INTERSECTION

SHORT-TERM:

- INSTALL SIGN IDENTIFYING LONGDALE AVE AS THE ENTRANCE FOR THE AUTO-AUCTION

MID-TERM:

- INSTALL A TRAFFIC SIGNAL

LEGEND: PARCEL LINE

FOR ILLUSTRATIVE PUSPOSES
AERIAL PHOTO ACQUIRED 2024

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METROPLAN ORLANDO

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
77010000	SEMINOLE	N/A

U.S. 17-92
S.R. 434 to Longdale Avenue
Road Safety Audit - Countermeasures

SHEET NO. 7

Appendix E. Planning Level Cost Estimates

Planning Level Cost Estimates- Maintenance

Location	Item	Description	Units	Quantity	Unit Price	Total
Corridor Wide	Corridor Lighting	Overhead Roadway Lighting Maintenance	EA	42	$2,174.85	$91,343.70
Subtotal (Base Construction Cost -all improvement items listed above)						**$91,343.70**
Maintenance of Traffic (10% of Base Construction Cost)						$ 9,134.37
Mobilizations (10% Base Construction Cost)						$ 9,134.37
Construction Subtotal (Base Construction Cost + MOT + Mobilization)						**$ 109,612.44**
Contingency (50% of Construction Subtotal)						$ 54,806.22
Subtotal with Contingency (Construction Subtotal + Contingency)						**$ 164,418.66**
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 41,104.67
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 22,835.93
Right-of-Way (ROW)						Right-of-Way Not Included in the Estimate
Project Total Cost						**$ 228,359.25**

Planning Level Cost Estimates- **Short-Term**

Location	Item	Description	Units	Quantity	Unit Price	Total
Corridor Wide	Enhanced Signing and Pavement Markings	Double Yellow Center Line on Minor Approaches	Per Location	1	$ 407.16	$ 407.16
Corridor Wide	Properly Placed Stop Bar/Advance Stop Bar	Stop Bar on Minor Roads Approaching U.S. 17-92	Per Bar	1	$ 122.70	$ 122.70
Corridor Wide	Signage	Speed Limit Signs (36"x48")	Per Sign	6	$ 15,768.30	$ 94,609.80
Corridor Wide	Enhanced Signing and Pavement Markings	Speed Pavement Markings	Per Location	3	$ 1,177.80	$ 3,533.40
Corridor Wide	Mobile Speed Feedback Signs	Speed Feedback Signs	Unit	2	$ 12,500.00	$ 25,000.00
Corridor Wide	ADA Ramps	Update ADA Ramps to meet standards	Each	20	$ 896.70	$ 17,934.00
Corridor Wide	Sidewalk Maintenance	Repair Sidewalk	Miles	0.5	$ 285,000.00	$ 142,500.00
Corridor Wide	Guardrails	Guardrail	Linear Feet	1000	$ 20.59	$ 20,590.00
Corridor Wide	Remove Severe Conflicts	Corridor Access Management	Each	10	$ 8,475.10	$ 84,751.00
S.R. 434/Church Avenue	Leading Pedestrian Interval (LPI)	Implement LPI on all four approaches	-	2	$ 5,400.00	$ 10,800.00
S.R. 434/Church Avenue	Right-Turn Blank Out Signs	Add Right-Turn Blank Out Signs on Church Avenue Intersection SB Approach and all approaches on S.R. 434	Per sign	5	$ 10,185.33	$ 50,926.65
S.R. 434/Church Avenue	Signage	Update Pedestrian Signal Crossing Signs	Per sign	16	$ 633.62	$ 10,137.92
Church Avenue	Study	Study to Evaluate the Need of an Additional EB Lane at Church Avenue Intersection	Per Study	1	$ 50,000.00	$ 50,000.00
Church Avenue	Study	Study to Evaluate Flashing Yellow Arrow Operations at Church Avenue Intersection	Per Study	1	$ 50,000.00	$ 50,000.00
Church Avenue	Retroreflective Strips to the Signal Backplates	Retroreflective Tape	Per Signal Head	12	$ 137.68	$ 1,652.16
Church Avenue	Backplates with Retroreflective Borders	Backplates with Retroreflective Borders for WB signal Head	Per Signal Head	1	$ 653.96	$ 653.96
Florida Avenue Median Opening	Install Delineators/Install Median Traffic Separator	Extend SBL median approximately 80 ft north at directional median opening at Florida Ave	Each	17	$ 254.46	$ 4,325.82
Florida Avenue Median Opening	Signage	Install R5-1 (DO NOT ENTER) sign at the median opening facing Florida Avenue (West).	Each	1	$ 418.30	$ 418.30
Florida Avenue Median Opening	Enhanced Signing and Pavement Markings	Restripe the crosswalk at KIA entrance.	Each	1	$ 577.06	$ 577.06
Longdale Avenue Medina Opening	Signage	Install sign identifying Longdale Ave as the entrance for the Auto-Auction	Each	1	$ 418.30	$ 418.30
Subtotal (Base Construction Cost -all improvement items listed above)						**$ 569,358.23**
Maintenance of Traffic (MOT) (10% of Base Construction Cost)						$ 56,935.82
Mobilizations (10% Base Construction Cost)						$ 56,935.82
Construction Subtotal (Base Construction Cost + MOT + Mobilization)						**$ 683,229.87**
Contingency (50% of Construction Subtotal)						$ 341,614.94
Subtotal with Contingency (Construction Subtotal + Contingency)						**$ 1,024,844.81**
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 256,211.20
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 142,339.56
Right-of-Way (ROW)						Right-of-Way Not Included in the Estimate
Project Total Cost						**$ 1,423,395.57**

Planning Level Cost Estimates- **Mid-Term**

Location	Item	Description	Units	Quantity	Unit Price	Total
Corridor Wide	Lane Narrowing/ Lane Repurposing	Narrow all 6 lanes to 11'	Lane/Mile	5.4	$ 334,500.00	$ 1,806,300.00
Corridor Wide	Buffered/Separated Bike Lanes	Add 5' Bike Lane with 2' Striped Buffer	Square Foot	33,264	$ 11.50	$ 382,536.00
Corridor Wide	Landscape Buffer	Tress/Shrubs on Median and Utility Stripe	Mile	0.9	$ 326,243.75	$293,619.38
S.R. 434	Median Extension	Extend the Median Noses Closer to the Pedestrian Crosswalks	Per Leg	4	$ 10,250.00	$41,000.00
Orange Avenue Median Opening	Median Extension	Extend the North Leg Median Further South at Orange Avenue Median Opening	Per Leg	1	$ 10,250.00	$10,250.00
Orange Avenue Median Opening	Remove Severe Conflicts	Install Traffic Signal	Per Signal	2	$ 422,901.41	$845,802.82
Sharing Center	Midblock Crossing	Midblock Crossing with Pedestrian Hybrid Beacon	Unit	1	$ 330,000.00	$330,000.00
Sharing Center	Midblock Crossing	High Visibility Crosswalk	Each	2	$ 8,759.04	$17,518.08
Subtotal (Base Construction Cost -all improvement items listed above)						**$ 3,727,026.28**
Maintenance of Traffic (MOT) (10% of Base Construction Cost)						$ 372,702.63
Mobilizations (10% Base Construction Cost)						$ 372,702.63
Construction Subtotal (Base Construction Cost + MOT + Mobilization)						**$ 4,472,431.53**
Contingency (50% of Construction Subtotal)						$ 2,236,215.77
Subtotal with Contingency (Construction Subtotal + Contingency)						**$ 6,708,647.30**
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 1,677,161.82
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 931,756.57
Right-of-Way (ROW)						Right-of-Way Not Included in the Estimate
Project Total Cost						**$ 9,317,565.69**

Planning Level Cost Estimates- **Long-Term**

Location	Item	Description	Units	Quantity	Unit Price	Total
Corridor Wide	Corridor Lighting	Repair Overhead Roadway Lighting Wiring	LF	42	$ 11,812.21	$ 496,112.82
Subtotal (Base Construction Cost -all improvement items listed above)						**$ 496,112.82**
Maintenance of Traffic (MOT) (10% of Base Construction Cost)						$ 49,611.28
Mobilizations (10% Base Construction Cost)						$ 49,611.28
Construction Subtotal (Base Construction Cost + MOT + Mobilization)						**$ 595,335.38**
Contingency (50% of Construction Subtotal)						$ 297,667.69
Subtotal with Contingency (Construction Subtotal + Contingency)						**$ 893,003.08**
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 223,250.77
Construction Engineering and Inspection (CEI) (15% of Subtotal with Contingency)						$ 124,028.21
Right-of-Way (ROW)						Right-of-Way Not Included in the Estimate
Project Total Cost						**$ 1,240,282.05**



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