ORANGE COUNTY GOVERNMENT
FLORIDA

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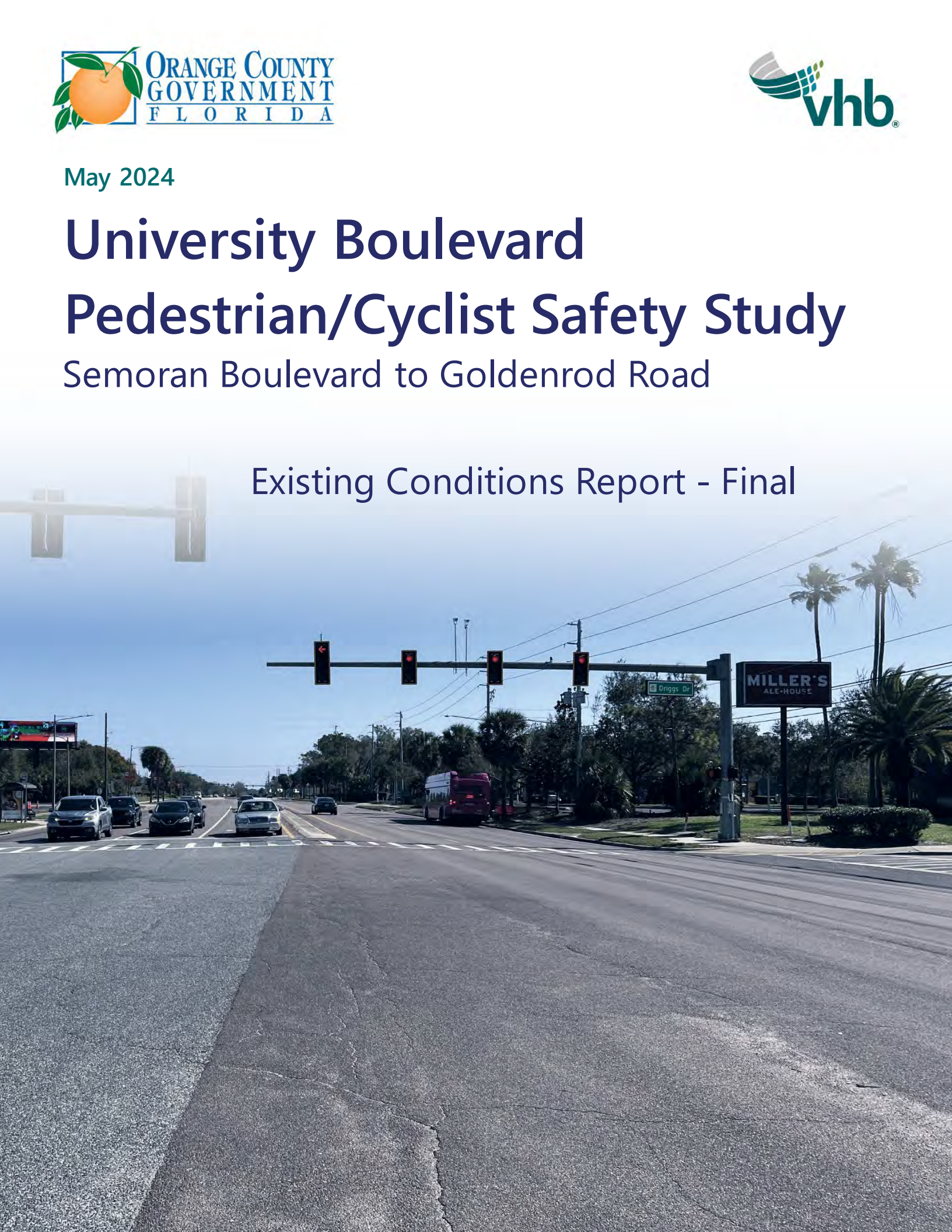
May 2024

University Boulevard Pedestrian/Cyclist Safety Study

Semoran Boulevard to Goldenrod Road

Existing Conditions Report - Final



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1 Introduction

Orange County is conducting a pedestrian and cyclist safety study on University Boulevard between State Road (SR) 436 (Semoran Boulevard) and SR 551 (Goldenrod Road), approximately 1.25 miles long. **Figure 1-1** illustrates the project limits for this study.

University Boulevard in the study area is a six-lane minor arterial roadway and a critical east-west roadway that connects the University of Central Florida to major north-south roadways such as Semoran Boulevard, Goldenrod Road, and SR 417, and provides an entrance to Full Sail University. University Boulevard is also surrounded by residential and commercial land uses, which have been growing in the past years and are projected to continue to grow. As such, the provision of multi-modal access for residents, visitors, and workers along University Boulevard is key to the continued healthy growth of this corridor.

The current document is updated based on the comments provided by the County during April 2024. The responses and comments are provided in **Appendix A1**.

1.1 Project Purpose

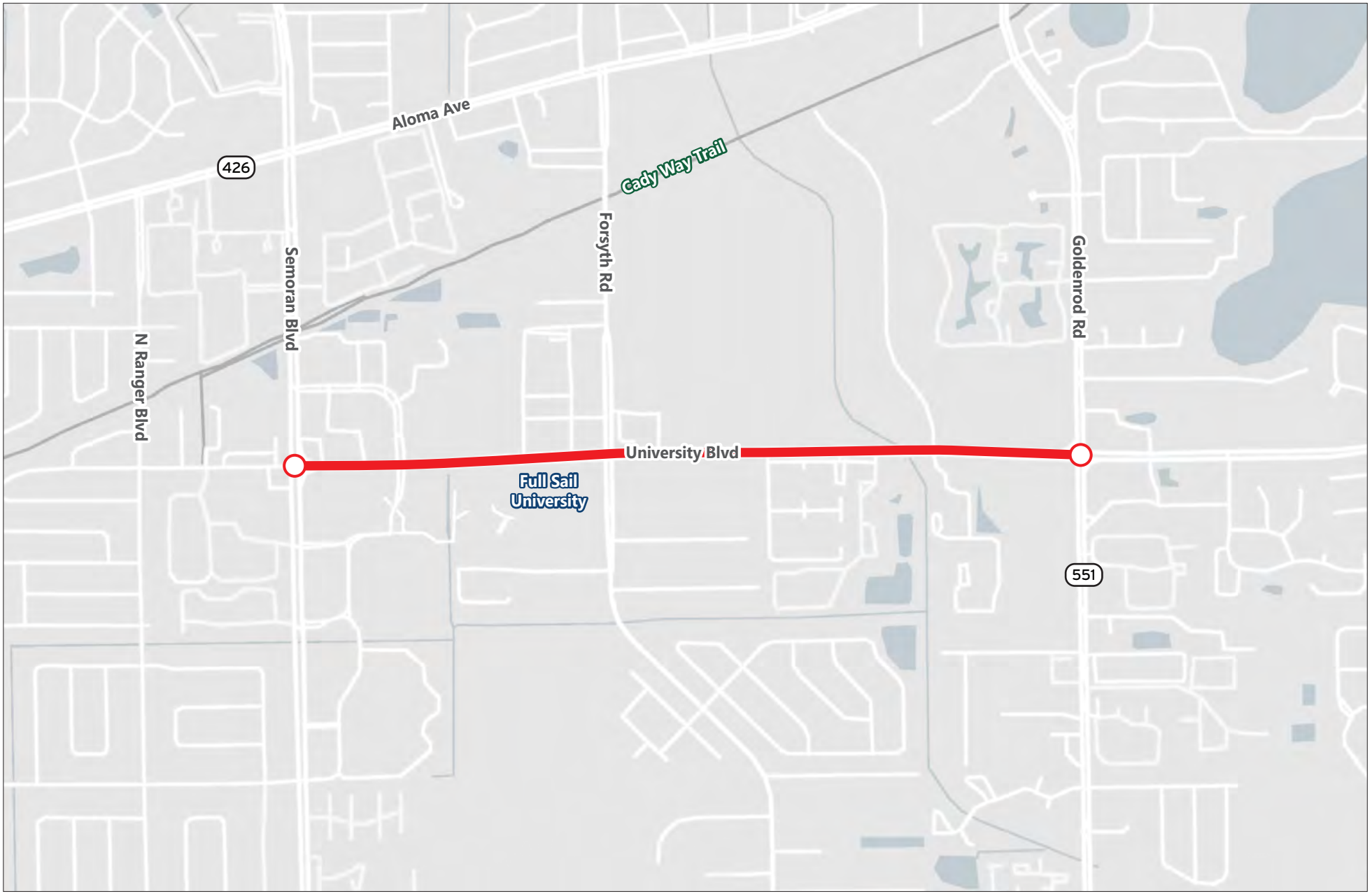
The purpose of this pedestrian and cyclist safety study project is to apply a comprehensive interdisciplinary approach, combining the strengths of the engineering and transportation planning disciplines in the initial development phases of Orange County's safety and roadway improvement projects. The interdisciplinary approach also seeks to assure early and systematic coordination with all affected County Departments and Divisions, the appropriate state and local entities and the citizenry. The resulting coordination effort is intended to accurately gather and convey information pertinent to the development of the project, thereby identifying viable opportunities to expedite or advance pertinent project phases.

This study will provide a technical evaluation of University Boulevard within the study limits to review the need for additional bicycle, pedestrian, and transit enhancements, and will take into consideration both existing and future development, including Full Sail University's Master Plan. An evaluation of the existing traffic signal operations, signage, and additional accommodations to facilitate the crossing of University Boulevard by bicyclists, pedestrians, and transit users will be conducted.

1.2 Purpose of this Report

This Existing Conditions Report documents existing transportation plans, along with the existing corridor conditions to provide the most appropriate strategies and effective implementation program for the corridor.

Source: Google Maps



Project Limits

N.T.S.

Figure 1-1

Project Location Map
University Boulevard
Pedestrian/Cyclist Safety Study

2 Study Area Overview

This section describes the existing features along the corridor as identified via a desktop review.

2.1 Civic/Cultural/Recreational Activity Centers

Cady Way Trail is a 12-foot-wide urban trail that connects Fashion Square Mall to the Cross Seminole Trail. At its closest point to the corridor, it is approximately 1,000 feet north of the intersection of University Boulevard and Semoran Boulevard. Approximately 3,000 feet west of the intersection of University Boulevard and Semoran Boulevard, Cady Way Trail leads to Ward Park, which contains baseball fields, a football stadium, tennis courts, pickleball courts, a playground, a pool, and several general-purpose fields.

There are two schools within 1,000 feet of the University Boulevard study corridor. **Table 2-1** provides a summary of the locations and age groups served by each school.

Table 2-1: Schools near Study Corridor

School	Location	Age Group
Aloma Elementary School	2949 Scarlet Road, Winter Park, Florida, 32792	Kindergarten – 5th Grade
Full Sail University	3300 University Boulevard, Winter Park, Florida, 32792	Post-Secondary

2.2 Business/Commercial Activity Centers

AutoNation Toyota Winter Park is located on the north side of University Boulevard at the western end of the project corridor. Across the street from AutoNation Toyota Winter Park are restaurant establishments including Taco Bell, McDonald's, and Miller's Ale House.

Costco is located at the northwest quadrant of the intersection of University Boulevard and Forsyth Road. At the southwest corner of this intersection is Full Sail University, one of the largest employers in Orange County. Near the northeast corner of this intersection is American Freight, which is a large warehouse owned by Costco. Currently, the site is undergoing redevelopment and under construction to include four warehouses. Just east of this intersection is University Corporate Center, which contains multiple small businesses and shops. Additionally, near this intersection are restaurant establishments including Chick-fil-A, Sonny's BBQ, Perkin's Restaurant, and Zaxby's.

At the northwest quadrant of the intersection of University Boulevard and Goldenrod Road is a shopping center with a Publix (one of the largest employers in Orange County) along with several restaurants and businesses. At the southeast corner of this intersection

is a shopping center which includes Ross, Regions Bank, several restaurants, and small businesses. At the southwest corner of this intersection is a shopping center with a Target and CVS.

Other notable businesses located on or near the project corridor include Lexus of Winter Park, CubeSmart Self Storage, United States Postal Service, Orange County Fire HQ, and several medical offices.

2.3 Residential

The largest residential complex along the study corridor is Central Place at Winter Park Apartments, a 304-unit apartment complex. Central Place at Winter Park Apartments has its only two access points on University Boulevard, approximately halfway between Forsyth Road and Metric Drive.

Additionally, just east of Central Place at Winter Park Apartments is Alvista Winter Park, a 288-unit apartment complex. Alvista Winter Park has its only access point on University Boulevard, and is located just east of Central Place at Winter Park Apartments.

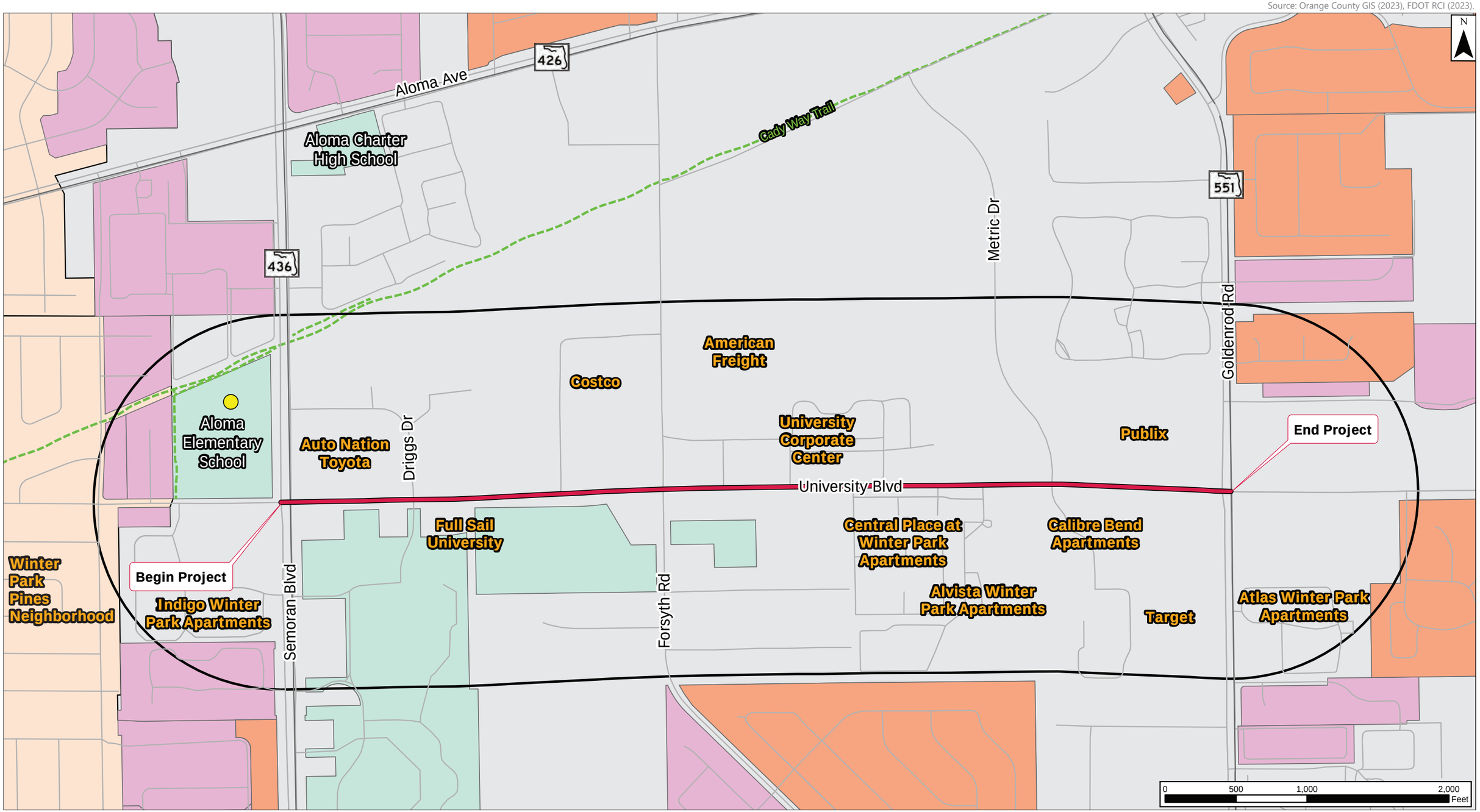
Just east of Alvista Winter Park is Calibre Bend Apartments, a 212-unit apartment complex. Calibre Bend Apartments has its only access point on University Boulevard, located at the intersection of University Boulevard and Metric Drive.

Just west of the study corridor, at the southwest corner of the intersection between University Boulevard and Semoran Boulevard, is Indigo at Winter Park, a 319-unit apartment complex. Indigo at Winter Park has an access point along Semoran Boulevard and on Scarlet Road.

Just east of the study corridor, near the southeast corner of the intersection between University Boulevard and Goldenrod Road, is Atlas Winter Park, a 319-unit apartment complex. Atlas Winter Park has its only access point along Goldenrod Road, just south of Unigold Shopping Center.

The study corridor also serves as the eastern access point for the Winter Park Pines Neighborhood subdivision at the intersection of University Boulevard and Semoran Boulevard. See **Figure 2-1** for the Sociocultural Resources Map of the study corridor.

Source: Orange County GIS (2023), FDOT RCI (2023).



Head Start Center
Schools (2023)
Community Organizations
Neighborhood Organizations
Residential Subdivisions
Cady Way Trail
Study Corridor
University Boulevard Safety Study - 1/4 Mile Buffer

Figure 2-1

Sociocultural Resources Map
University Boulevard
Pedestrian/Cyclist Safety Study

2.4 Transportation

LYNX operates the Link 13 bus route along University Boulevard for the entire length of the study corridor. Link 13 has a frequency of approximately one bus per hour from Monday through Sunday. Additionally, LYNX operates the Link 29 bus route, which intersects University Boulevard at the intersections with Forsyth Road and Goldenrod Road. From Monday through Friday, Link 29 has a frequency of twice per hour during the day, and once per hour at night. On Saturday and Sunday, Link 29 has a frequency of once per hour. Furthermore, LYNX operates the Link 436S bus route, which intersects University Boulevard at the intersection with Semoran Boulevard. Link 436S has a frequency of twice per hour from Monday through Saturday, and once per hour on Sunday. The LYNX system map, along with the route maps for LYNX Links 13, 29, and 436S are included in **Appendix A**. The available transit services near the study corridor are illustrated in **Figure 7-5**.

Approximately 3.8 miles south of University Boulevard is SR 408, an east-west expressway connecting to downtown Orlando. Approximately two miles east of Goldenrod Road is SR 417, a north-south expressway acting as the limited-access beltway of Orlando. Additionally, at the western edge of the study corridor is Semoran Boulevard, a principal arterial which directly leads to Orlando International Airport. As such, both expressways and Semoran Boulevard carry high volumes of both commuter and freight traffic.

3 Transportation Plans and Studies

The below sections describe the local transportation plans and transportation studies close to the University Boulevard study corridor. See **Figure 3-1** for a map of proposed transportation projects adjacent to the study corridor.

3.1 MetroPlan Orlando 2045 Metropolitan Transportation Plan

The MetroPlan Orlando 2045 Metropolitan Transportation Plan (MTP) is the MPO's Long Range Transportation Plan (LRTP). The MTP was adopted on December 9, 2020, and revised on February 14, 2024.

A roadway widening project for Goldenrod Road between SR 50 (Colonial Drive) and University Boulevard (MTP ID#2201) is included in the Cost Feasible Plan. The project is scheduled for Planning Period I (2026-2030) and Planning Period II (2031-2035) with an estimated total project cost of $25.85 million (includes Project Development & Environment [PD&E]; design; right-of-way [ROW]; environmental; construction; and Construction Engineering and Inspection [CEI] costs in 2020 dollars). PD&E, design, ROW, and environmental are scheduled for Planning Period I, and construction and CEI scheduled for Planning Period II.

An operational/safety project for Semoran Boulevard between Colonial Drive and University Boulevard (MTP ID#2035) is included in the MTP. The project is currently unfunded. The estimated total project cost is $13.326 million (includes design, ROW, environmental, construction, and CEI costs in 2020 dollars).

An operational/safety project for Semoran Boulevard between University Boulevard and SR 426 (Aloma Avenue) (MTP ID#2046) is included in the MTP. The project is currently unfunded. The estimated total project cost is $2.39 million (includes design, ROW, environmental, construction, and CEI costs in 2020 dollars).

An operational/safety project for Forsyth Road between Colonial Drive and University Boulevard (MTP ID#3249) is included in the MTP. The project is currently unfunded. The estimated total project cost is $10.45 million (includes design, ROW, environmental, construction, and CEI costs in 2020 dollars).

An operational project for Forsyth Road between Hanging Moss Road and University Boulevard (MTP ID#7214) is included in the MTP Cost Feasible Plan. The project is scheduled for Planning Period II (2031-2035). The estimated total project cost is $1.68 million (includes design, ROW, environmental, construction, and CEI costs in 2020 dollars).

Source: Google Maps

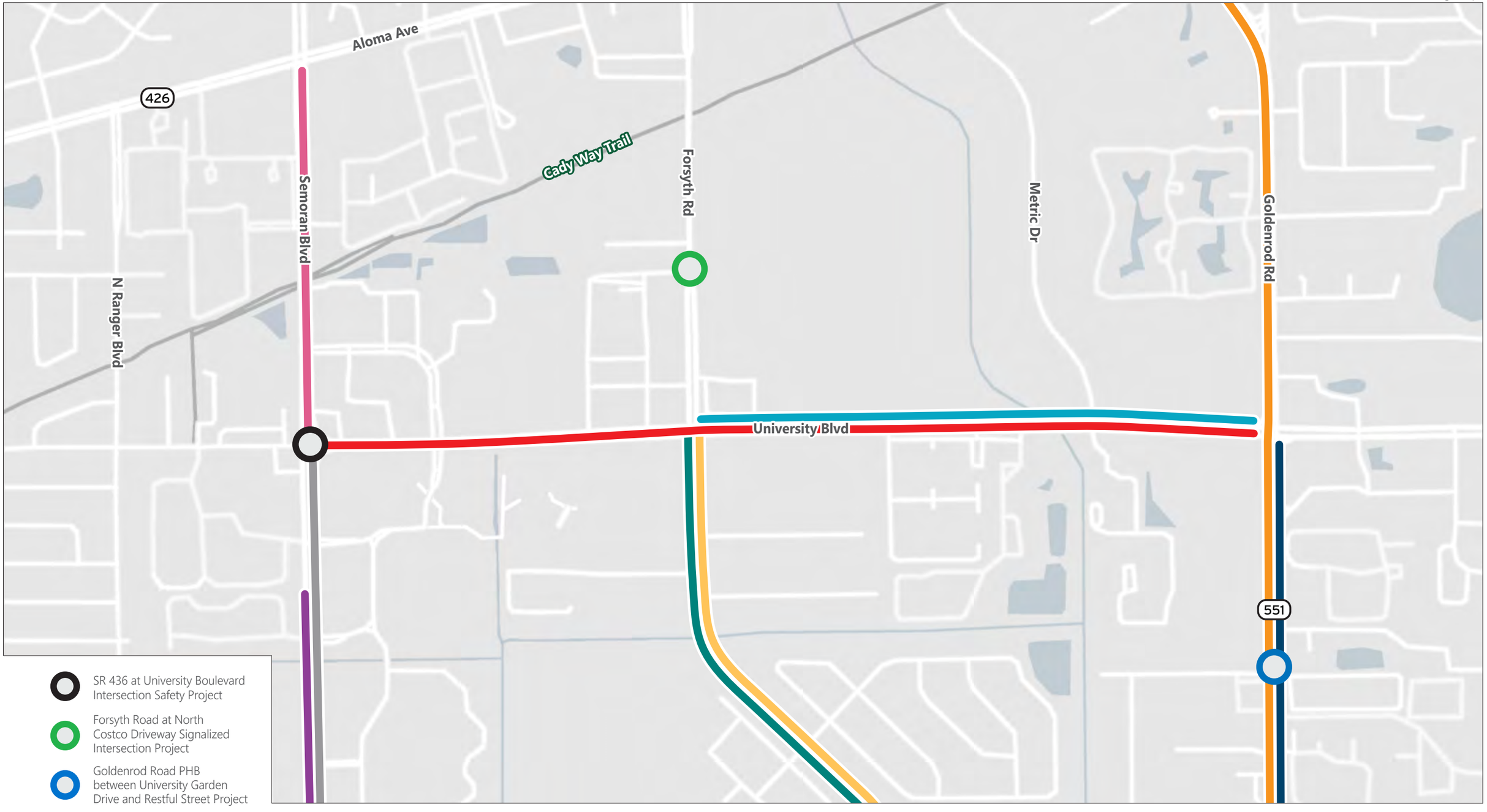


Figure 3-1

Adjacent Projects
University Boulevard
Pedestrian/Cyclist Safety Study

An operational project for University Boulevard between Forsyth Road and Goldenrod Road (MTP ID#7256) is included in the MTP Cost Feasible Plan. The project is scheduled for Planning Period III (2036-2045). The estimated total project cost is $1.51 million (includes design, ROW, environmental, construction, and CEI costs in 2020 dollars).

A resurfacing project for Goldenrod Road between SR 408 and SR 426 (MTP ID#EC47) is included in the MTP Cost Feasible Plan for the Existing Transportation Improvement Program (TIP) (as of 9/13/2023), with Preliminary Engineering and Construction being funded. The total project cost is expected to be $0.037 million (in 2020 dollars).

Relevant pages from the MetroPlan MTP are included in **Appendix B**.

3.2 MetroPlan Orlando Transportation Improvement Program

The purpose of MetroPlan Orlando's TIP is to identify all federal and state funded transportation projects that have been scheduled for implementation in the Orlando Urban Area (Orange, Seminole and Osceola Counties) during the Fiscal Year (FY) 2023/24-2027/28 time period. The TIP was adopted on July 12, 2023, and amended on March 13, 2024.

A safety project (FPN 451256-1) is proposed at the intersection of University Boulevard and Semoran Boulevard and is included in the TIP. The project involves improving signal head visibility, reconstructing the diagonal span traffic signal with a box span and concrete strain pole supports, improving the visibility of the crosswalk pavement markings, and potential signalization of the free flow right turn lanes and the addition of blank-out signs. The TIP indicates that the preliminary engineering will be completed in FY 2024/2025, with the construction phase to be completed in FY 2026/2027. The project is fully funded, with the preliminary engineering phase costing $460,000, and the construction phase costing $785,000, for a total project cost of $1,245,000. Florida Department of Transportation (FDOT) is identified as the responsible agency.

A bike lane/sidewalk project (FPN 445303-1) is proposed on Semoran Boulevard between north of Old Cheney Highway and north of University Park Drive/Antique Oaks Circle, and is included in the TIP. This project involves repaving the roadway and implementing strategies to increase safety for all users along the project corridor. This includes narrowing lane widths, placing a barrier curb, changing right turn movements in some areas, modifying driveways, installing traffic calming landscaping, and signing and pavement marking improvements. A midblock crossing with a Pedestrian Hybrid Beacon (PHB) will also be installed at University Park Drive as part of this project. The TIP indicates that the preliminary engineering and construction phases will be completed in FY

2023/2024. The project is fully funded for a total project cost (including construction phase) of $624,000. The project is estimated to be completed in Spring 2025. FDOT is identified as the responsible agency.

The development of University Crossing at Winter Park includes a new driveway and the construction of a signalized intersection on Forsyth Road at the north Costco access road and the future industrial center driveway. Plans for the signalized intersection were approved in June 2023 and include median modifications, pavement markings, and curb ramps.

A PHB along Goldenrod Road south of University Boulevard between Restful Street and University Garden Drive is currently under design and is programmed for construction in FY 2026.

The relevant pages from the MetroPlan TIP are included in **Appendix B**.

3.3 MetroPlan Orlando Complete Streets Policy

The MetroPlan Orlando Complete Streets Policy was adopted in March 2020. The policy states that MetroPlan Orlando shall fund and support the planning, design, and construction of Complete Streets that consider the needs of everyone within the MetroPlan Orlando planning area and authority. Complete Streets are planned, designed, constructed, operated, and maintained to safely and comfortably accommodate people of all ages and abilities. This includes but is not limited to pedestrians, bicyclists, transit users, motorists, micromobility users, rideshare users and freight and service operators. The Complete Streets program recognizes that depending on context, streets may serve diverse activities, functions, and intensity of uses.

The goals of the MetroPlan Orlando Complete Streets Policy are:

1. Create a complete, connected network of streets, roads, and trails that safely and comfortably serves every type of system user
2. Provide safe and comfortable transportation options for vulnerable users of all ages and abilities
3. Support redevelopment of and connectivity to activity centers, and
4. Provide safe, comfortable, and effective access to transit through walking and bicycling

The relevant pages from the MetroPlan Complete Streets Policy are included in **Appendix B**.

3.4 FDOT Five Year Work Program

Each year, FDOT develops the Five-Year Work Program in accordance with Section 339.135, Florida Statutes. The Five-Year Work Program is an ongoing process that is used to forecast the funds needed for upcoming transportation system improvements scheduled for the next five years. The development of this Work Program involves extensive coordination with local governments, including Metropolitan Planning Organizations (MPOs) and other city and county officials. The current FDOT Five-Year Work Program is from FY 2024-2028.

The FDOT Five-Year Work Program includes two projects near the study corridor including, the safety project at Semoran Boulevard and University Boulevard/Scarlet Road (FM #451256-1) and the bike lane/sidewalk project (FPN 445303-1) proposed on Semoran Boulevard between north of Old Cheney Highway and north of University Park Drive/Antique Oaks Circle. The details of these two projects are included in above section 3.2.

See **Appendix C** for the signing and pavement marking plans from this project.

The relevant pages from the FDOT Five-Year Work Program are included in **Appendix B**.

3.5 Orange County Comprehensive Plan: Vision 2050

The Orange County Comprehensive Plan serves as a means to guide and direct development within Orange County. In the latest update to the Comprehensive Plan, Orange County initiated a major overhaul of the plan, titled Vision 2050, with more focus on sustainable transportation systems and development planning. Vision 2050 is currently in draft form, and is subject to change until adoption by Orange County Board of County Commissioners (BCC), with the draft document most recently amended in August 2023. The following transportation policies, based on Vision 2050 Chapter 7: Transportation, support the objectives of this Pedestrian and Cyclist Safety study:

<u>Vision 2050 Chapter 7: Transportation – Relevant Policy Objectives:</u>

OBJ T 1.4: MULTIMODAL INFRASTRUCTURE; The County will support the infrastructure and service improvements necessary to increase mobility options for all users, address costs associated with usage, promote safety for all modes of the transportation system, and promote the use of transit, bicycle, and pedestrian facilities, including multi-use trails. (Amended 11/16, Ord. 2016-28) (OBJ T3.3)

OBJ T 1.5: TRANSIT; The County will partner with LYNX, SunRail and other established transit providers to implement a comprehensive multimodal transit system that offers

efficient, convenient, and reliable travel options to residents, employees, and visitors throughout Orange County.

OBJ T 3.2: MULTIMODAL CORRIDORS; The County will coordinate infrastructure planning for next-generation transportation corridors that include multiple transportation modes and emerging technologies with all appropriate local, regional, and state agencies.

OBJ T 3.3: MULTIMODAL SYSTEM; The County will coordinate land use and infrastructure planning to support multiple modes and emerging technologies, in order to facilitate the safe and efficient movement of goods and people.

OBJ T 4.1: VISION ZERO; The County shall continue to develop polices, construct multimodal improvements, and implement safety countermeasures on the transportation network to achieve its Vision Zero goal of preventing serious injuries and all traffic-related fatalities while ensuring the safety of all roadway users.

OBJ T 4.2: SAFETY AND EQUITY; Orange County shall continue to provide and promote a safe integrated network of transportation options for all roadway users, including roadway and transit users, pedestrians, and bicyclists, underserved populations and the transportation disadvantaged, with adjacent municipalities and other transportation providers to enhance transportation equity and environmental justice.

Note, there are numerous sub-policies which fall under each of the above, which further details the specific methods, technologies, and measures-of-effectiveness (MOEs) to achieve each objective, and also how the objectives tie in with other Orange County plans. The relevant pages from the Draft Vision 2050 Document are included in **Appendix B**.

3.6 Orange County Pedestrian & Bicycle Safety Action Plan

Orange County's Walk-Ride-Thrive! Pedestrian safety program includes Orange County's first Pedestrian and Bicycle Safety Action Plan (PBSAP). The first phase of the PBSAP, completed in 2018, accomplished the following:

- Documented the County's extensive pedestrian and bicycle safety efforts to date.
- Analyzed crash data and crash typing to identify location and behavioral factors that contribute to crashes.
- Reviewed the engineering design features that Orange County currently uses or could adopt to decrease crashes on County roadways.
- Coordinated with regional partners, including MetroPlan Orlando, Best Foot Forward, Orange County Public Schools, and LYNX.

The next phase of the PBSAP includes public outreach to Orange County residents and organizations to present findings and obtain their input and recommendations on improving bicycle and pedestrian safety in Orange County.

3.7 Orange County Trails Master Plan

Orange County adopted their Trails Master Plan in July 2022. The Orange County Trails Master Plan focuses on the County's mainline trails, a network of wide, paved, multi-purposed trails that form the primary network of Orange County's bikeways and trails system.

The Orange County Trails Master Plan reviews the existing conditions and recent changes to the trail network. Additionally, the Master Plan provides conceptual plans for eight mainline trails. None of the proposed eight trails intersect or approach the University Boulevard study corridor. While Cady Way Trail is identified as an existing trail within the plan, no proposed improvements or concepts are proposed for Cady Way Trail within the Orange County Trails Master Plan. This study will evaluate ways to provide pedestrian and bicycle connections to Cady Way Trail.

The relevant pages from the Master Plan are included in **Appendix B**.

3.8 LYNX Transit Development Plan

The LYNX Transit Development Plan (TDP) documents future transit improvements throughout the LYNX service area on a ten-year planning horizon. Transit improvements may include new routes, expanded hours of operation, or increased frequencies. The LYNX TDP identifies Semoran Boulevard between Orlando International Airport and University Boulevard as a high-capacity corridor. The LYNX TDP states the need to increase high frequency service on Semoran Boulevard on proposed Route 201 to a headway between 15-20 minutes with an increase in average stop spacing. Additionally potential infrastructure improvements on proposed Route 201 include walk-up stations, community stations, enhanced facilities connections and access, signal timing and coordination, transit signal priority, dedicated lanes, and park and ride facilities. Additionally, the LYNX TDP identifies Full Sail University as a needed transfer center that is required to support the 10-year TDP service plan.

3.9 LYNX SR 436 Transit Corridor Study

The LYNX SR 436 Transit Corridor Study was completed in 2019. The study was conducted to identify and advance solutions to improve transit service along the Semoran Boulevard corridor between Orlando International Airport and SR 434. This transit route would

intersect University Boulevard at the western intersection of the study area. As a short-term solution, the study recommended limited-stop bus service from Orlando International Airport to the Altamonte Springs SunRail station. As a long-term solution, the study recommends the implementation of bus rapid transit (BRT) between Orlando International Airport and the Altamonte Springs SunRail station. This would involve using dedicated bus stations (as opposed to bus stops), decreased headway, and dedicated BRT and/or business access and transit (BAT) lanes. The relevant pages from the Transit Corridor Study are included in **Appendix B**.

3.10 Potential LYNX Transit Routes

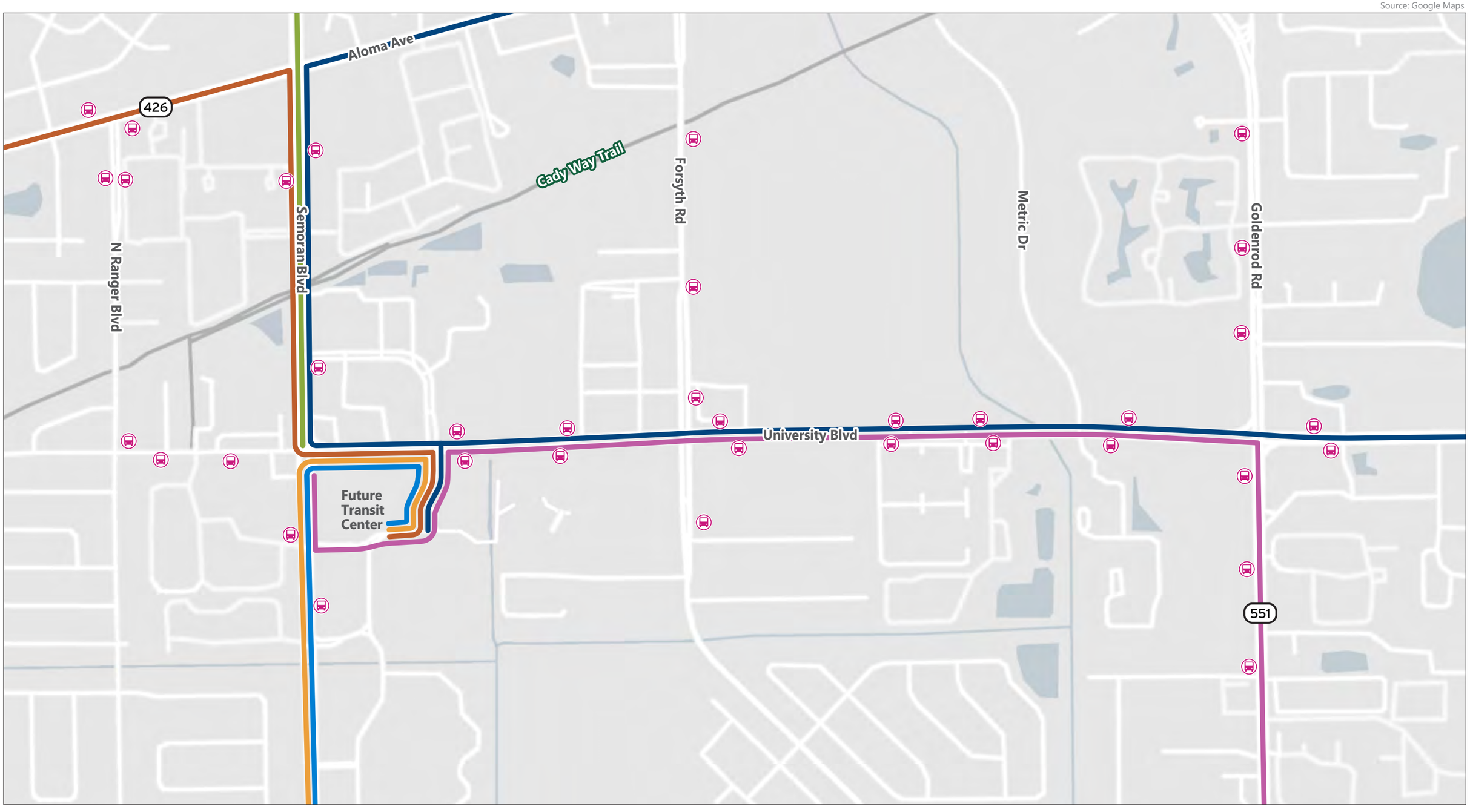
Based on coordination with LYNX, it was determined that there are 85 potential LYNX routes and five phased NeighborLink Zones within Orange County. Six of these potential transit routes and one NeighborLink Zone are near the University Boulevard study area.

LYNX Link 101A is a future potential transit route that is proposed to operate north-south service along Semoran Boulevard between Full Sail University and Orlando International Airport Terminal C. The route would intersect the study corridor at the intersection of University Boulevard and Semoran Boulevard. Service for this route would run Monday through Sunday. LYNX Link 201 is a future potential transit route that is proposed to operate north-south service along Semoran Boulevard between Full Sail University and Nemours Children's Hospital. The route would intersect the study corridor at the intersection of University Boulevard and Semoran Boulevard. Service for this route would run Monday through Sunday. LYNX Link 436N Extended is a future potential transit route that is proposed to operate north-south service along Semoran Boulevard between University Boulevard and the Apopka SuperStop. The route would intersect the study corridor at the intersection of University Boulevard and Semoran Boulevard. Service for this route would run Monday through Sunday. LYNX Link 501 is a future potential transit route that is proposed to operate north-south service primarily along Goldenrod Road between University Boulevard and the Lee Vista Transfer Station. The route would operate along the entire length of the study corridor. Service for this route would run Monday through Sunday. LYNX Link 503 is a future potential transit route that is proposed to operate east-west service primarily along Aloma Avenue between Full Sail University and Rosewood Plaza. The route would intersect the study corridor at the intersection of University Boulevard and Semoran Boulevard. Service for this route would run Monday through Sunday. LYNX Link 522 is a future potential transit route that is proposed to operate east-west service primarily along Aloma Avenue and University Boulevard between Clayton Crossing Way and the University of Central Florida (UCF) Campus Superstop. The route would operate along the entire length of the study corridor. Service

for this route would run Monday through Sunday. See **Figure 3-2** for a map of the future LYNX transit service.

In addition to the fixed transit routes listed above, the Orange County Transit Plan includes several phased NeighborLink Zones. NeighborLink Zone Phase 3 intersects the western half of the study area, and includes the areas surrounding Full Sail University, Baldwin Park, Orlando Fashion Square, Colonial Plaza, Winter Park High School, and Ward Park.

Source: Google Maps



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- LYNX 101A
- LYNX 201
- LYNX Link 436N Extended
- LYNX 501
- LYNX 503
- LYNX 522

Figure 3-2

Future Transit Service
University Boulevard
Pedestrian/Cyclist Safety Study

4 Best Practices Review

Below are the summarized versions of several common transportation guides, along with potential treatments that can be used to improve pedestrian and bicycle safety along the University Boulevard corridor.

4.1 AASHTO Guidance

4.1.1 AASHTO's Highway Safety Manual

American Association of State Highway and Transportation Officials (AASHTO's) Highway Safety Manual (HSM) is a resource that provides safety knowledge and tools in a useful form to facilitate improved decision-making based on safety performance. The HSM assembles currently available information and methodologies on measuring, estimating, and evaluating roadways in terms of crash frequency and crash severity.

The HSM states crashes involving bicyclists and pedestrians can be due to a variety of possible contributing factors. These include, but are not limited to, sidewalks too close to travel way, inadequate signals/signs, inadequate pavement markings, excessive speed, lack of crossing opportunities, and long distance to nearest crosswalk. According to the HSM, potential countermeasures such as signalized midblock crossings, providing a raised median or refuge island at marked crosswalks, and providing dedicated bicycle lanes, are likely to decrease the amount of pedestrian and bicycle related crashes.

4.1.2 AASHTO's Guide for the Planning, Design, and Operation of Pedestrian Facilities

AASHTO's Guide for the Planning, Design, and Operation of Pedestrian Facilities provides guidance on the planning, design, and operation of pedestrian facilities along streets and highways. The guide focuses on identifying effective measures for accommodating pedestrians on public ROW, as well as describing appropriate methods for accommodating pedestrians among varying roadway and facility types.

Section 2.4.4 of the guide discusses methods to ensure slower turning speeds at driveways to improve pedestrian and bicyclist safety, such as continuing the sidewalk material across the driveway, providing a relatively flat cross slope for pedestrians, reducing the radius of the curb returns, minimizing the driveway widths, and providing right turn channelization. Section 3 of the guide documents methods that the roadway can be modified to better accommodate pedestrians, such as lane reduction, lane width reduction, speed management, use of curb treatments at pedestrian crossings, providing a buffer width between roadway and sidewalk, removal of physical obstacles, and midblock crossings.

4.1.3 AASHTO's Guide for the Development of Bicycle Facilities

AASHTO's Guide for the Development of Bicycle Facilities provides information on the physical infrastructure needed to accommodate bicycle travel and operations in most riding environments. It is intended to present sound guidelines that result in facilities that meet the needs of bicyclists and other highway users.

Sections 4.6 through 4.8 of the guide documents the use of dedicated bicycle lanes, which is a likely treatment for the corridor, as University Boulevard currently does not have any dedicated facilities for bicyclists. Additionally, Section 4.9.2 of the guide discusses adding bicycle facilities in urban areas without physically widening the existing typical section. Section 5 of the guide discusses the design of shared-use paths, which could be a potential treatment that would replace the existing sidewalks along the University Boulevard corridor.

4.2 ITE's Designing Walkable Urban Thoroughfares

The Institute of Transportation Engineers' (ITE) Designing Walkable Urban Thoroughfares describes the relationship, compatibility, and trade-offs that may be appropriate when balancing the needs of all users, adjoining land uses, environment, and community interests when making decisions in the project development process. Additionally, the report provides criteria for specific thoroughfare elements, along with guidance on balancing stakeholder, community and environmental needs, and constraints in planning and designing walkable urban thoroughfare projects.

Table 6.1 in the report defines roadway design characteristics that make a walkable thoroughfare. These include curb returns radius between 10-30 feet, high visibility crosswalks, pedestrian crossing frequency under 600 feet, driveway widths less than 24 feet, and use of pedestrian refuges within the median at crosswalks. Table 6.4 identifies more design parameters, including a target speed between 25-35 mph, lane width of 10 or 11 feet, bike lanes between 5-6 feet wide, an 8-foot-wide planting strip, and median widths between 4 and 18 feet.

4.3 FHWA Guidance

4.3.1 FHWA's Pedestrian Road Safety Audit Guidelines and Prompt List

The Federal Highway Administration's (FHWA) Pedestrian Road Safety Audit Guidelines and Prompt List is intended to support agencies that are interested in conducting pedestrian and bicycle focused Road Safety Audits (RSAs), and includes information on safety risks for both modes, the RSA process, necessary data, and the roles and responsibilities of the RSA team.

Section 2.3.2 identifies that based on a 1995 FHWA study, nearly 33% of pedestrian crashes studied occur within 50 feet of an intersection. Additionally, midblock crossing related crashes make up nearly 27% of pedestrian related crashes. Section 5 describes potential issues on streets, street crossings, parking areas/adjacent developments, and transit areas, including presence and placement, quality and obstructions, connectivity, lighting, visibility, access management, traffic characteristics, signs and pavement markings, and signals.

4.3.2 FHWA's CMF Clearinghouse

FHWA's Crash Modification Factor (CMF) Clearinghouse is a safety tool developed that predicts the expected increase or decrease in number of crashes based on changing a design feature of a particular intersection or roadway segment. CMFs with a value greater than 1.0 are expected to result in an increase in the number of crashes, while CMFs with a value lower than 1.0 are expected to result in a decrease in the number of crashes. Crash Reduction Factors (CRFs) are the percentage that a countermeasure is expected to reduce the number of crashes, and are equal to 100*(1 – CMF). A CRF greater than 0 is expected to result in a decrease in the number of crashes, while a CRF lower than 0 is expected to result in an increase in the number of crashes.

Potential treatments on the corridor, along with their CMF and CRF values, are summarized below in **Table 4-1**.

Table 4-1: CMF Clearinghouse Potential Treatments

Potential Treatment	CMF	CRF	CMF ID
Implement a Leading Pedestrian Interval	0.81	19	9903
Adding an exclusive pedestrian phase	0.65	35	5244
Increase length of signal phases to allow pedestrians more crossing time	0.49	51	5252
Implement Safe Routes to School Program	0.861	13.9	2202
Install High-Visibility Crosswalk	0.6	40	4123

4.3.3 FHWA's Achieving Multimodal Networks: Applying Design Flexibility & Reducing Conflicts

The Federal Highway Administration's (FHWA) Achieving Multimodal Networks: Applying Design Flexibility & Reducing Conflicts is intended to support agencies that are interested in building or improving multimodal transportation networks. It includes information on methods that planners and designers can apply the design flexibility found in current national design guidance to address common roadway design challenges and barriers. It focuses on reducing multimodal conflicts and achieving connected networks so that

walking and bicycling are safe, comfortable, and attractive options for people of all ages and abilities.

Part 1 identifies that lowering the design speed of a roadway decreases the risk of pedestrian fatalities and serious injury risk. Part 1 also states that an accessible route, whether a sidewalk, path, or shoulder, must connect a bus stop to the roadway. Part 2 states that a minimum shared use path width of 10 feet is recommended, although greater widths are recommended in areas with higher user volumes and a high percentage of pedestrians. Part 2 also details principles to reduce conflicts at midblock path intersections, such as pedestrian island crossings, signage, and pavement markings.

4.3.4 FHWA's Bikeway Selection Guide

The Federal Highway Administration's (FHWA) Bikeway Selection Guide is a resource to help transportation practitioners consider and make informed decisions about trade-offs relating to the selection of bikeway types. The report highlights linkages between the bikeway selection process and the transportation planning process. The guide focuses on safety, but it also emphasizes the importance of comfort to appeal to a broad spectrum of bicyclists.

Section 3 emphasizes that bikeway type selection should not be done in isolation. The core of the planning process should be a vision for a future bicycle network, typically documented in a local, regional, or state plan, and not disjointed segments of bicycle paths. Section 3 also discusses the importance of the user type in relation to choosing the proper bikeway treatment for a roadway. In general, as the AADT and design speed increases, the greater the preference for a separated bike lane or shared use path as compared to a non-separated bike lane.

4.3.5 FHWA's Manual on Uniform Traffic Control Devices (MUTCD)

The 11th edition of Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), adopted December 2023, is intended to establish uniform national criteria for the use of traffic control devices that meet the needs and expectancy of road users on all streets, highways, pedestrian and bicycle facilities, and site roadways open to public travel.

Section 3H.06 discusses the use of green-colored pavement for bicycle facilities, and is used to enhance the visibility of bicyclists and other traffic might have potentially conflicting, weaving, or crossing movements. Section 4H discusses the use of bicycle signals, used to provide separate control of a bicyclist movement, such as to provide a protected bicycle signal phase.

Section 4J contains information regarding pedestrian hybrid beacons, which are used to facilitate pedestrian crossings at locations that do not meet traffic signal warrants.

Sections 9B, 9C, and 9D cover signs specifically related to bicycle operation on roadways, separated bikeways, and shared use paths, while Section 9E covers pavement markings for bicycle facilities.

4.4 U.S. Access Board's Public Right-of-Way Accessibility Guidelines (PROWAG)

The U.S. Access Board's Public Right-of-Way Accessibility Guidelines (PROWAG), published August 2023, provides accessibility guidelines for the design, construction, and alteration of pedestrian facilities in the public ROW. The guidelines ensure that sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use constructed or altered in the public ROW by state and local governments are readily accessible to and usable by pedestrians with disabilities.

Chapters R3 and R4 discuss the technical requirements for pedestrian facilities, including street crossings, curb ramps, detectable warning surfaces, pedestrian pushbuttons, signs, transit stops, handrails, and more.

4.5 NACTO Guidance

4.5.1 NACTO's Urban Bikeway Design Guide

National Association of City Transportation Officials' (NACTO) Urban Bikeway Design Guide provides cities with state-of-the-practice solutions that can help create complete streets that are safe and enjoyable for bicyclists. The guide integrates the most up to date bicycle infrastructure guidance into a document that addresses pedestrian, bicycle, transit, and motorist design issues.

The guide discusses the use of conventional bicycle lanes, buffered bicycle lanes, and cycle tracks, which could be viable bicycle solutions along the University Boulevard corridor. Additionally, the guide discusses intersection crossing markings, median refuge islands, and combined bike lane/turn lanes as bicycle related intersection treatments that could be implemented.

4.5.2 NACTO's Don't Give Up at the Intersection: Designing All Ages and Abilities Bicycle Crossings

National Association of City Transportation Officials' (NACTO) Don't Give Up at the Intersection: Designing All Ages and Abilities Bicycle Crossings expands the NACTO Urban Bikeway Design Guide, adding detailed guidance on intersection design treatments that reduce vehicle-bike and vehicle-pedestrian conflicts. The guidance covers protected bike

intersections, dedicated bike intersections, and minor street crossings, as well as signalization strategies to reduce conflicts and increase comfort and safety.

The guide discusses methods to increase bicycle safety at major intersections, including setting back the bikeway crossing, installing recessed stop lines for motor vehicles, signage, and implementing bike-friendly signal strategies such a leading bike signal phase. Additionally, at minor street crossings, the guide suggests implementing safety measures such as providing a clear sight distance, crosswalk markings, small turn radii, and detectable warning surfaces.

4.6 FDOT Guidance

4.6.1 FDOT's Design Manual

The 2024 FDOT Design Manual (FDM), effective January 1, 2024, sets forth geometric and other design criteria, as well as procedures, for all new construction, reconstruction, and resurfacing projects on the State Highway System (SHS) and the National Highway System (NHS).

Chapters 222 (pedestrian facilities), 223 (bicycle facilities), and 224 (shared-used paths) contain relevant information that could be applied to improve pedestrian and bicycle safety along the University Boulevard corridor. Specifically, sidewalks, midblock crossings, median refuge islands, dedicated bicycle lanes, buffered bicycle lanes, keyhole lanes, green-colored pavement markings, and shared used paths are potential treatments for the corridor.

4.6.2 FDOT's Traffic Engineering Manual

FDOT's Traffic Engineering Manual (TEM) provides traffic engineering standards and guidelines to be used on the SHS.

The TEM provides details about signalized intersections, pedestrian signals, Intersection Control Evaluations, crosswalk markings, and midblock crossings.

4.6.3 FDOT's Multimodal Access Management Guidebook

FDOT's Multimodal Access Management Guidebook explains the FDOT rules and standards developed in various FDOT documents and manuals related to access management which are to be followed in developing and designing access to state transportation facilities. It also provides background by defining access management, how it is applied on Florida's transportation facilities, and some best practices.

According to the guidebook, increasing sidewalk widths, curb extensions, separated bicycle lanes, raised midblock crossings, restricting right turns on red, providing pedestrian lead interval signal timing, positioning stop bar for through vehicles to be farther from the crosswalk, and providing alternative intersections are treatments that can be implemented to manage the conflict between pedestrians and motor vehicles.

4.6.4 FDOT's Florida Greenbook

FDOT's Florida Greenbook provides uniform minimum standards and criteria for the design, construction, and maintenance of all transportation facilities off the SHS, roads, highways, bridges, sidewalk, curbs and curb ramps, crosswalks, bicycle facilities, underpasses, and overpasses used by the public for vehicular and pedestrian traffic.

Chapters 8 and 9 discuss the design of pedestrian and bicycle facilities. Sidewalks, shared-use paths, marked crosswalks, pedestrian median refuges with curb extensions, raised midblock crossings, pedestrian hybrid beacons, Rectangular Rapid Flashing Beacons, are examples of potential pedestrian treatments within the Greenbook that can be used on the corridor. Dedicated bicycle lanes, buffered bicycle lanes, bicycle lanes with bus bay, and green colored bicycle lanes are examples of potential bicyclist treatments within the Greenbook that can be used on the corridor.

4.6.5 FDOT's Context Classification Guide and Complete Streets Policies

FDOT's Context Classification Guide and Complete Streets Policies is a guide that uses eight context classifications to planning, designing, and operating the state transportation network. The guide provides guidance on how context classification can be used, describes the measures used to determine the context classification of a roadway, and describes the relationship of context classification with the FDM and other FDOT guidance.

As University Boulevard is not on the FDOT SHS, the road does not have an officially designated context classification. As of the writing of this report (Q1 2024), Orange County is working on updating the Concurrency Management System (CMS) roadway database based on the latest context-based service volumes outlined in the 2023 FDOT Multimodal Q/LOS Handbook Generalized Service Volumes (GSV) Tables. As part of this effort, Orange County is working to assign Context Classifications for all CMS roadways based on FDOT's Context Classification Guide (July 2020).

The study corridor of University Boulevard from Semoran Boulevard to Goldenrod Road is currently recommended a Context Classification of C3C – Suburban Commercial. The recommendation is based on the following roadway and land-use characteristics:

Roadway Context Features:

- Low to mid-rise buildings with large footprints
- Majority non-residential uses (commercial/office/institutional uses)
- Large parking lots
- Large building setbacks
- Long block lengths and disconnected roadway network
- Higher pedestrian and bicycle activity relative to C3R environments

5 Population & Demographics

Demographics data within one (1) mile of the University Boulevard Pedestrian/Cyclist Safety Study area were compiled from US Census Bureau American Community Survey (ACS) Five-Year Estimates, Environmental Systems Research Institute, Inc. (ESRI's) Tapestry, and the Florida Department of Health.

ESRI's Tapestry classifies neighborhoods and zip codes into 67 different types of segments based on socioeconomic characteristics as well as standard demographics data. According to the ESRI Tapestry profile for the study area, the top three "Tapestry Segments", and their description, are described below:

1. Midtown Singles, Set to Impress (29.5%) – Depicted by medium to large multiunit apartments with lower than average rents. These apartments are often nestled into neighborhoods with other businesses or single-family housing. Nearly one in three residents is 20 to 34 years old, and a large portion are single-person nonfamily households" … "Many work in food service while they are attending college."
2. Scholars and Patriots, College Towns (27.6%) – "About half the residents of College Towns are enrolled in college, while the rest work for a college or the services that support it" … "This digitally engaged group uses computers and cell phones for all aspects of life including shopping, schoolwork, news, social media, and entertainment" … "These are nonfamily households with many students living alone or with roommates for the first time."
3. Senior Styles, Retirement Communities (17.6%) – "Combine single-family homes and independent living with apartments, assisted living, and continuous care nursing facilities. Over half of the housing units are in multiunit structures, and the majority of residents have a lease." … "Although income and net worth are below national averages, residents enjoy going to the movies, fishing, and taking vacations.

Table 5-1 provides an overview of the demographics within one mile of the study area, at the block group level. These demographics are discussed in greater detail below.

Table 5-1: Orange County Demographics Overview

Category	Measure	Percent
Population		
Total Population	50,760	-
Population Density (Persons per Acre)	6.43	-
Households		
Total Households	20,287	-
Average Household Size	2.32	-
Household Density (Households per Acre)	2.57	-
Age		
Median Age	36.2	-
Population 17 years old and under	9,615	18.9%
Population between 18 and 64 years old	33,883	66.8%
Population 65 years old and over	7,262	14.3%
Sex		
Male	26,408	52.0%
Female	24,352	48.0%
Race/Ethnicity		
White	30,723	60.5%
Hispanic or Latino	6,244	12.3%
Not Hispanic or Latino	24,479	48.2%
Black or African American	6,780	13.4%
Hispanic or Latino	711	1.4%
Not Hispanic or Latino	6,069	12.0%
American Indian or Alaska Native	107	0.2%
Asian	2,995	5.9%
Native Hawaiian and Other Pacific Islander	40	0.1%
Some Other Race	3,377	6.7%
Two or More Races	6,738	13.3%
Income		
Median Household Income	$75,953.68	-
Persons Below Poverty	7,534	15.0%
Housing		
Total Housing Units	22,100	-
Occupied Housing Units (Households)	20,287	91.8%
Owner-Occupied	9,700	47.8%
Renter-Occupied	10,587	52.2%
Vacant	1,813	8.2%
Vehicle Ownership		
Households with No Vehicles	1,469	7.2%

5.1 Age

The median age within the study area is 36.2 years old; approximately 67% of the population fall within the ages of 18 to 64 years old. The population 65 years and older represent approximately 14.3% of the population.

5.2 Race/Ethnicity

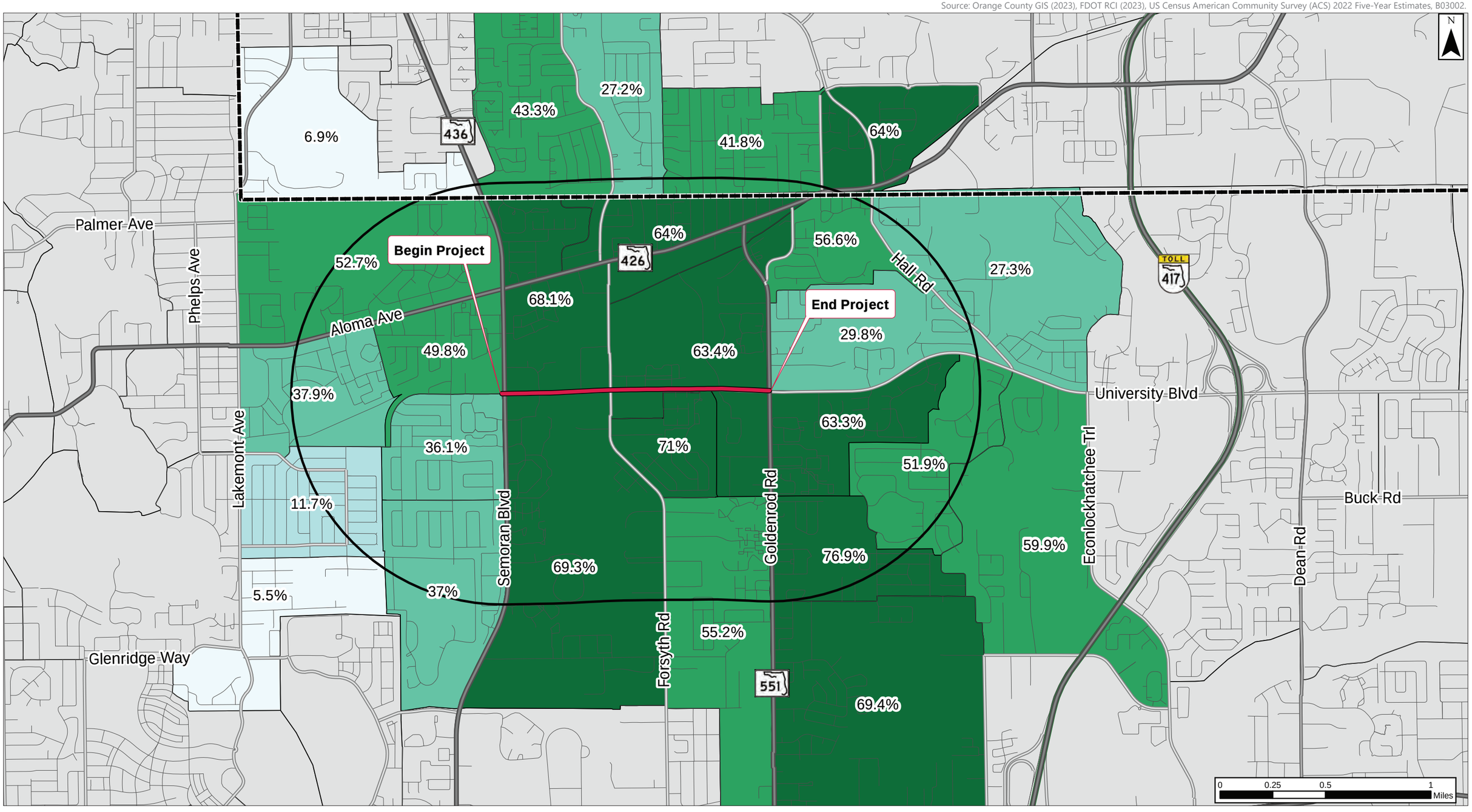
The majority race within the study area is White (60.5%), followed by Black or African American (13.4%), and Two or More Races (13.3%). In total, 29.0% of the population are Hispanic, with 12.3% identifying as White Hispanic and 1.4% identifying as Black Hispanic. The distribution of individuals identifying as something other than *White, Not Hispanic or Latino* is illustrated in **Figure 5-1** (as percent minority).

5.3 Income

The median household income for the study area is $75,953.68. The distribution of median household income levels within the study area are shown in **Figure 5-2**. Approximately 15.0% of the population fall under the federal poverty line; the percent of block groups within the study area that fall under the federal poverty line are illustrated in **Figure 5-3**. The block groups with the highest proportion of individuals falling under the poverty level were located near the Aloma Avenue at Semoran Boulevard intersection (30.45%) immediately north of the University Boulevard corridor and at the Aloma Avenue at Lakemont Avenue intersection (38.84%) west of the University Boulevard corridor.

Of the 20,287 households within the study area, approximately 7.2% have no vehicle available. The percent of households within block groups having no vehicle available is illustrated in **Figure 5-4**. Among the 26 study area block groups, five block groups reported at least 15% of their households with no vehicle available, including Block Group 120950164061 (18.05%) immediately south of University Boulevard along Semoran Boulevard.

Source: Orange County GIS (2023), FDOT RCI (2023), US Census American Community Survey (ACS) 2022 Five-Year Estimates, B03002.



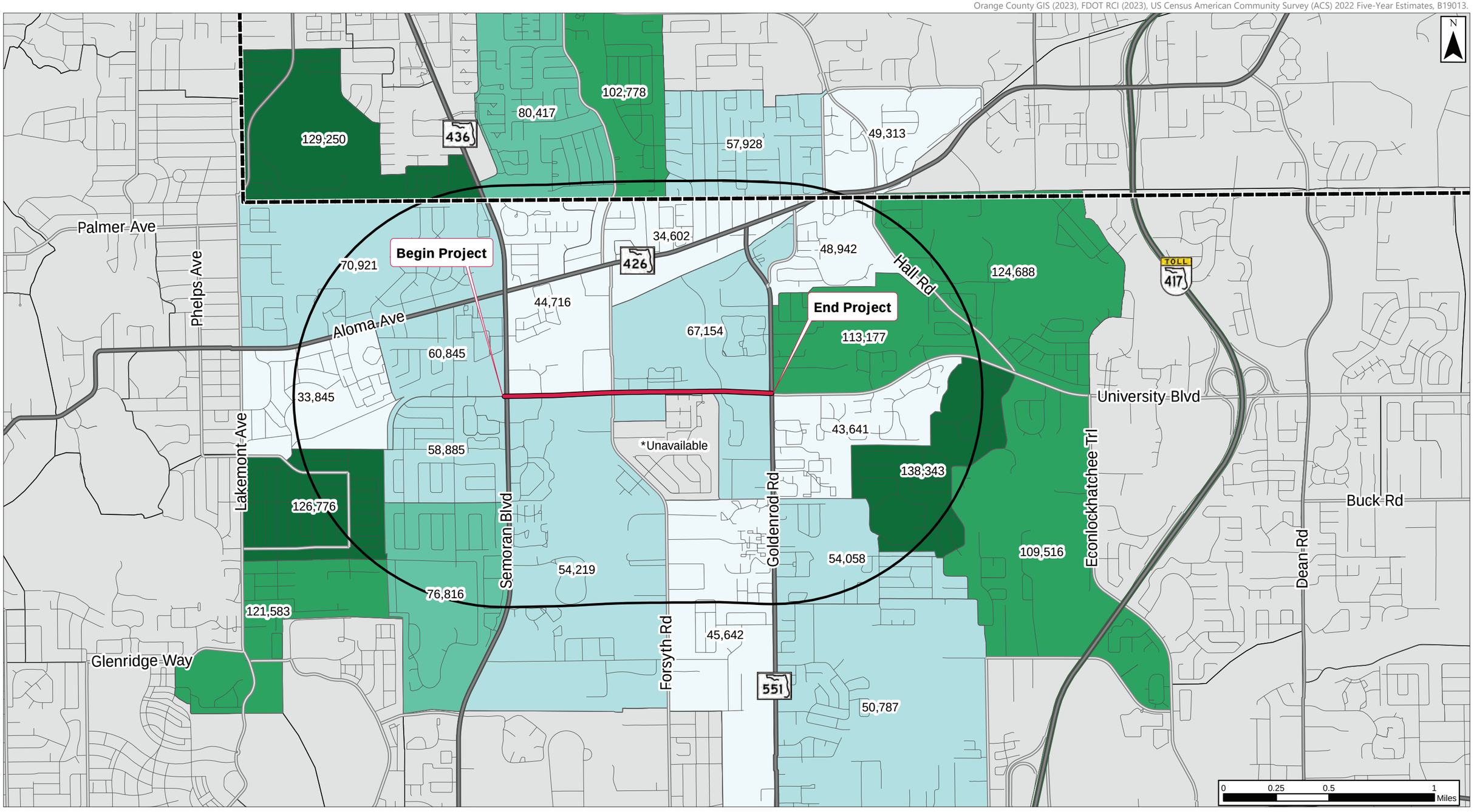
Study Area Block Groups
Percent Minority

- 5.54% - 10.00%
- 10.01% - 20.00%
- 20.01% - 40.00%
- 40.01% - 60.00%
- 60.01% - 77.00%
- Other Block Groups
- One-Mile Buffer
- Study Corridor

Figure 5-1

Demographics - Percent Minority
University Boulevard
Pedestrian/Cyclist Safety Study

Orange County GIS (2023), FDOT RCI (2023), US Census American Community Survey (ACS) 2022 Five-Year Estimates, B19013.



Study Area Block Groups
Percent Minority

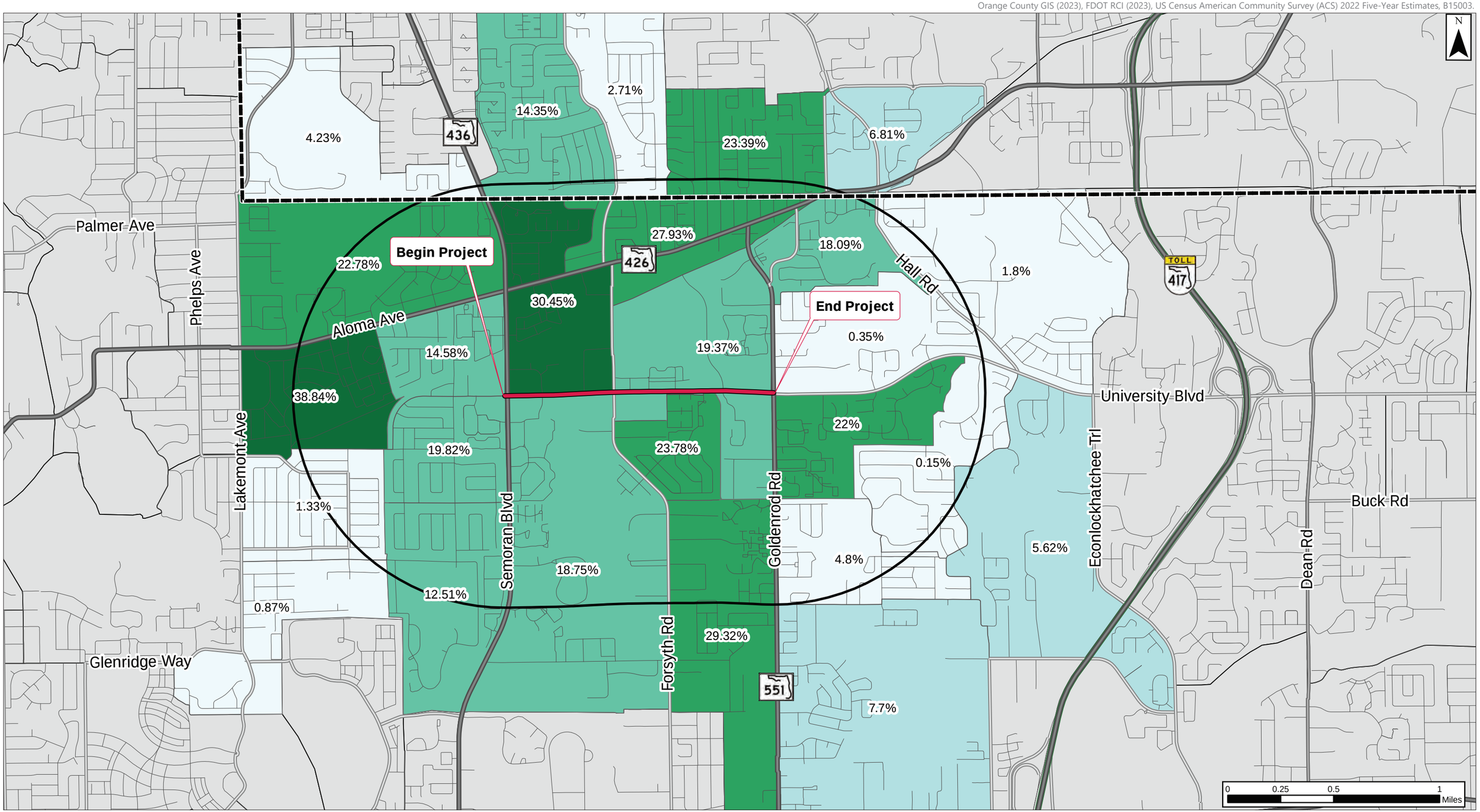
- $33,845 - $50,000
- $50,001 - $75,000
- $75,001 - $100,000
- $100,001 - $125,000
- $125,001 - $139,000
- Other Block Groups
- One-Mile Buffer
- Study Corridor

*Unavailable - Median Household Income was not reported for Block Group 120950164072.

Figure 5-2

Demographics - Median Household Income
University Boulevard
Pedestrian/Cyclist Safety Study

Orange County GIS (2023), FDOT RCI (2023), US Census American Community Survey (ACS) 2022 Five-Year Estimates, B15003.



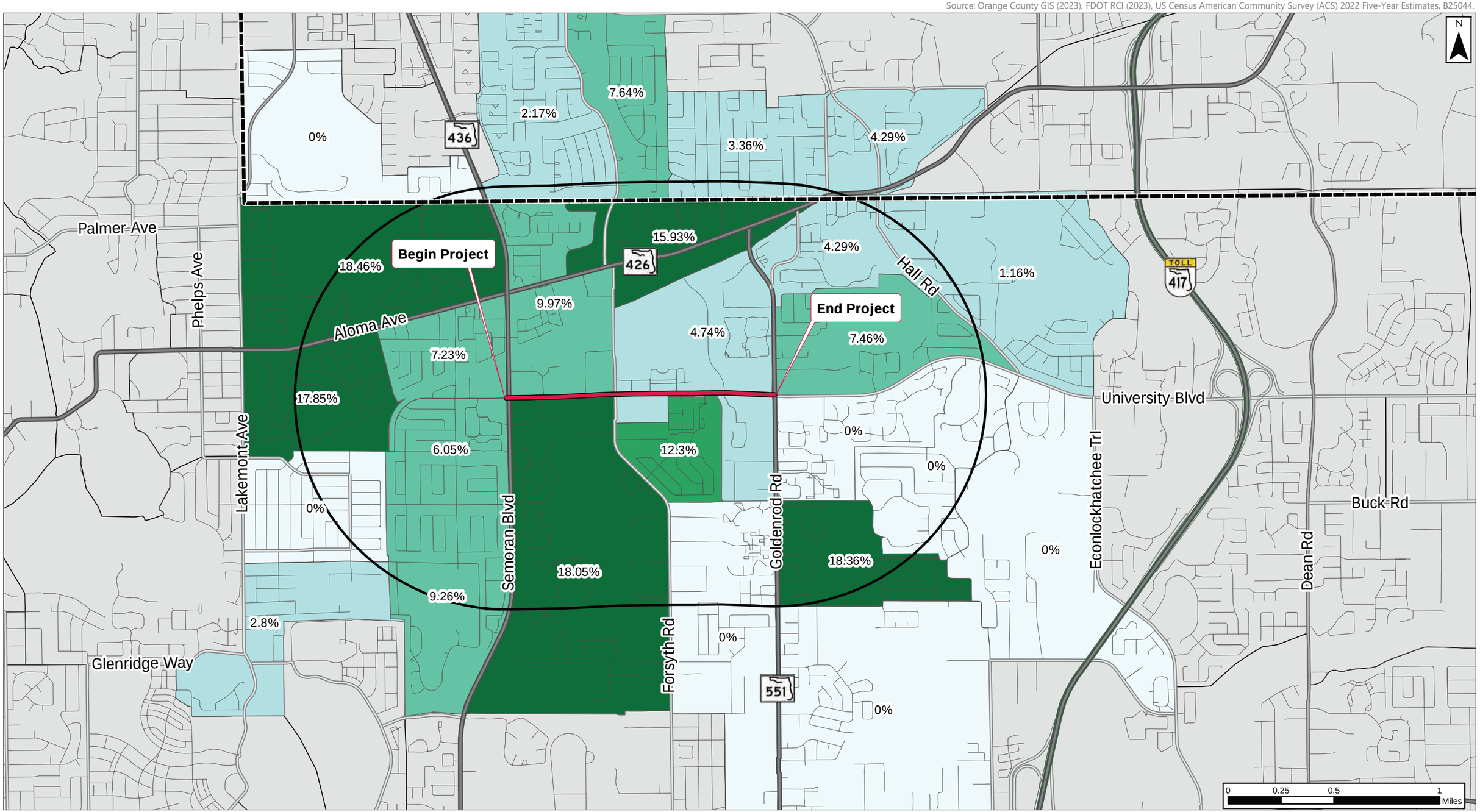
Study Area Block Groups
Percent of Individuals Below Poverty Level

- 0.15% - 5.00%
- 5.01% - 10.00%
- 10.01% - 20.00%
- 20.01% - 30.00%
- 30.01% - 40.00%
- Other Block Groups
- One-Mile Buffer
- Study Corridor

Figure 5-3

Demographics - Individuals Below Poverty Level
University Boulevard
Pedestrian/Cyclist Safety Study

Source: Orange County GIS (2023), FDOT RCI (2023), US Census American Community Survey (ACS) 2022 Five-Year Estimates, B25044.



Study Area Block Groups
Percent of Households with No Vehicle Available

- 0.00%
- 0.01% - 5.00%
- 5.01% - 10.00%
- 10.01% - 15.00%
- 15.01% - 19.00%
- Other Block Groups
- One-Mile Buffer
- Study Corridor

Figure 5-4

Demographics - Households with No Vehicle Available
University Boulevard
Pedestrian/Cyclist Safety Study

5.4 Education

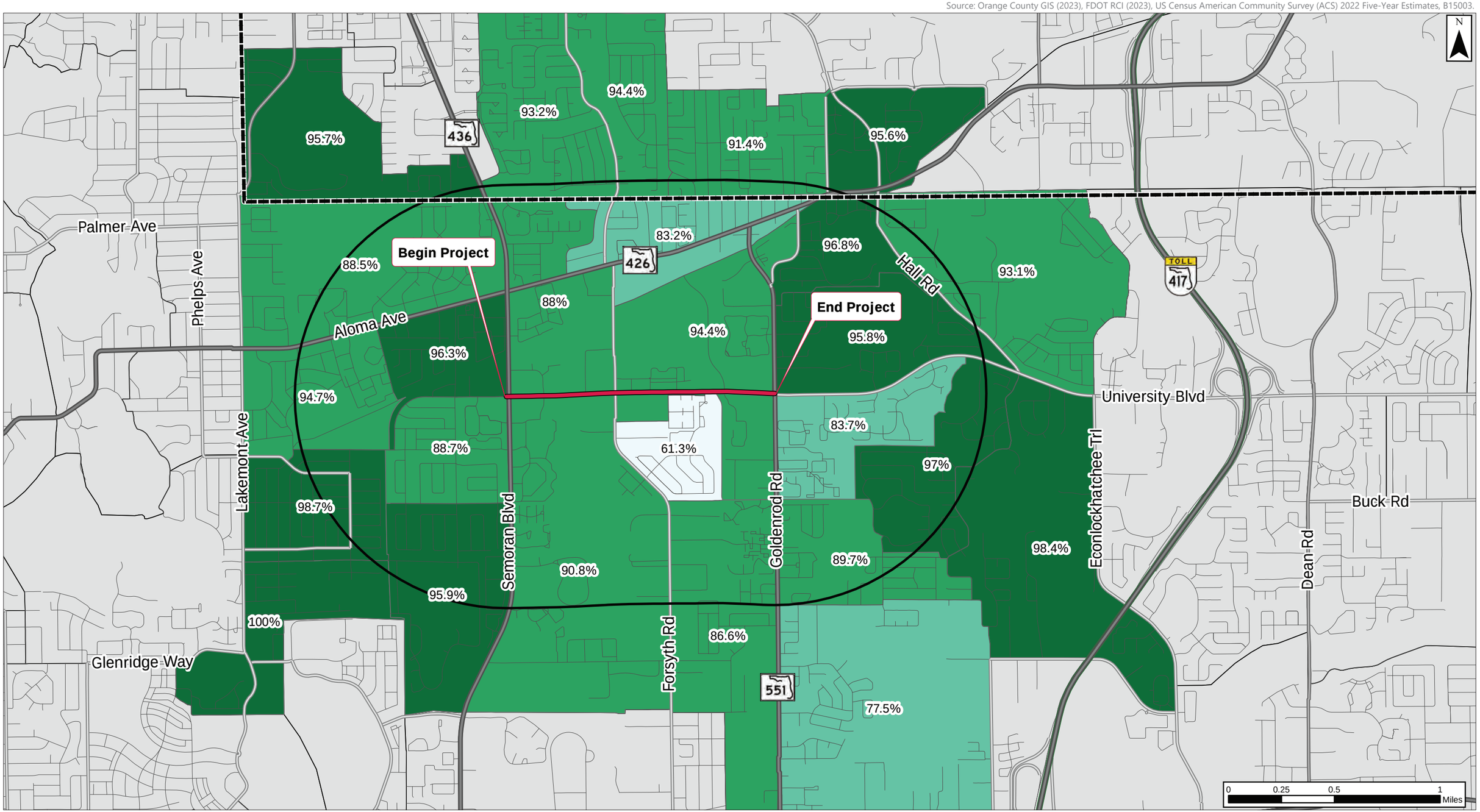
Educational attainment for the population 25 years old and over was identified. Approximately 1.6% of this population had no formal schooling, while nearly 9.0% of the population did not complete 12th grade or obtain a General Equivalency Degree (GED) or equivalent diploma. Approximately 19% of the population received their High School Diploma and an additional 2.0% received their GED or equivalent diploma. Nearly 7.7% of the population attended some college without earning a degree. More than half of the population received a college degree; either an Associate's Degree (11.3%), Bachelor's Degree (23.8%), Master's Degree (12.6%), Professional School Degree (2.9%), or a Doctorate's Degree (1.7%).

The distribution of individuals within the study area with an educational attainment of High School diploma, GED, or higher is shown in **Figure 5-5**.

5.5 Limited English Proficiency

Limited English Proficiency was identified to determine the need for additional translations of public materials. Among the block groups within one mile of the University Boulevard Pedestrian/Cyclist Safety Study corridor, 897 households (4.4%) are considered Spanish-speaking households with Limited English Proficiency. Limited English Proficiency distribution within the study area is illustrated in **Figure 5-6**.

Source: Orange County GIS (2023), FDOT RCI (2023), US Census American Community Survey (ACS) 2022 Five-Year Estimates, B15003.



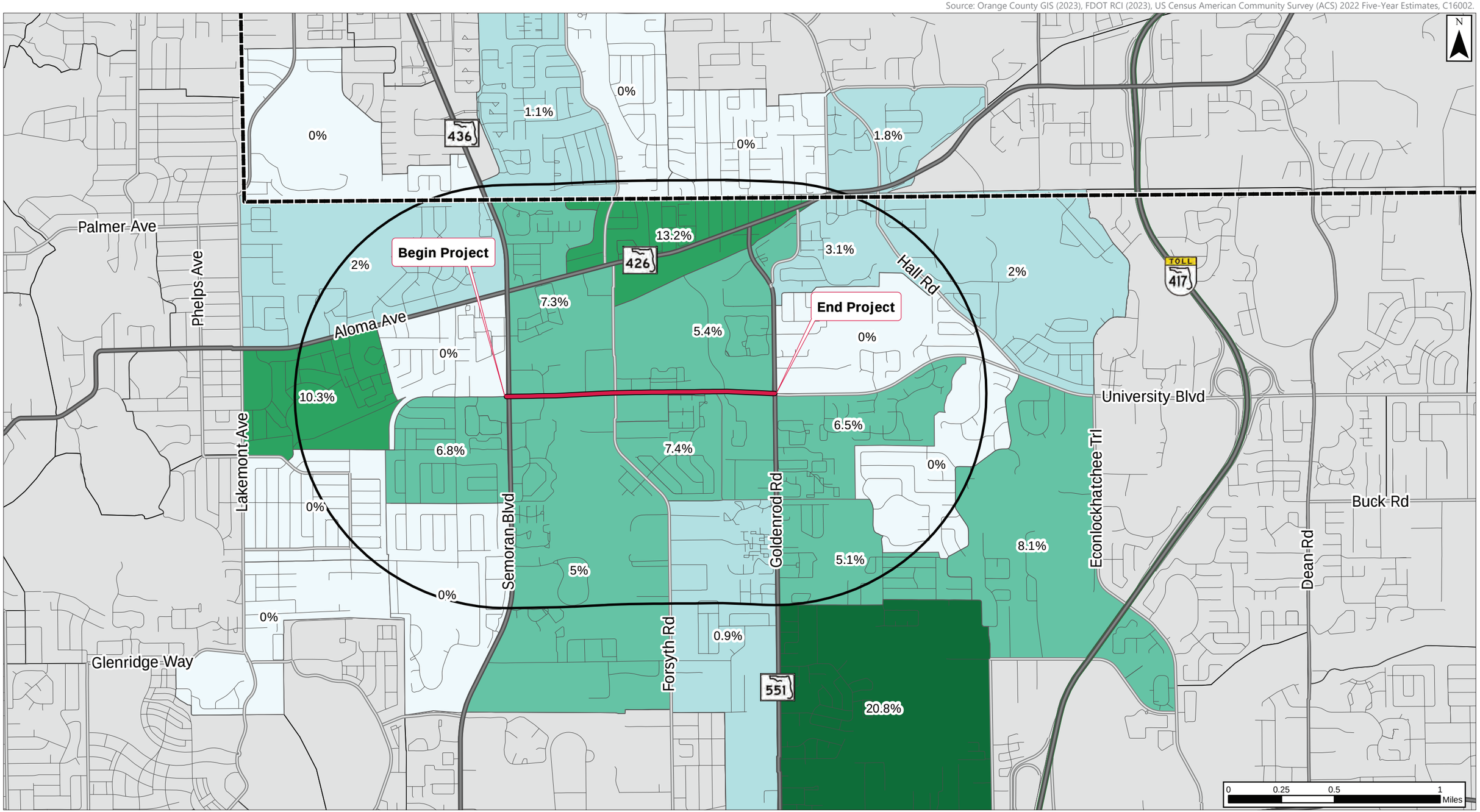
Study Area Block Groups
Percent HS Diploma, GED, or Higher

- 61.3% - 65.0%
- 65.1% - 75.0%
- 75.1% - 85.0%
- 85.1% - 95.0%
- 95.1% - 100.0%
- Other Block Groups
- One-Mile Buffer
- Study Corridor

Figure 5-5

Demographics - Educational Attainment
High School Diploma, GED, or Higher
University Boulevard
Pedestrian/Cyclist Safety Study

Source: Orange County GIS (2023), FDOT RCI (2023), US Census American Community Survey (ACS) 2022 Five-Year Estimates, C16002.



Study Area Block Groups
Percent of Households with Limited English Proficiency

- 0.00%
- 0.01% - 5.00%
- 5.01% - 10.00%
- 10.01% - 15.00%
- 15.01% - 21.00%
- Other Block Groups
- One-Mile Buffer
- Study Corridor

Figure 5-6

Demographics - Households with Limited English Proficiency - Spanish
University Boulevard
Pedestrian/Cyclist Safety Study

5.6 Health

According to the Florida Department of Health's *Life Expectancy Report,*[1] for 2020 through 2022, the life expectancy for Orange County residents is 79.1 years, slightly higher than the statewide life expectancy of 78.0 years. The death rates for the most common illness-related causes of death in Orange County in 2022, as determined in the Florida Department of Health's *Leading Causes of Death Profile*, are summarized in **Table 5-2** below.

Table 5-2: Orange County Death Rates

Cause of Death	Age-Adjusted Death Rate per 100,000 (2022)	
	Orange County	Florida
Cancer	130.5	138.8
Heart Disease	136.5	146.9
Stroke	53.8	47.6
COVID-19	36.2	35.8
Chronic Lower Respiratory Disease	24.7	31.8
Diabetes	21.8	22.8

5.7 Employment

In order to determine business characteristics of the University Boulevard study corridor and surrounding area, ESRI's Business Analyst was utilized. A roughly one-mile buffer was manually drawn on the Business Analyst platform to establish an analysis area. The following section describes the business characteristics within the analysis area, derived from Business Analyst's various reports: *Business Locator*, *Business Summary*, *Civilian Labor Force Profile*, and *Tapestry Segmentation Area Profile*.

Based on the *Business Locator* report, **Table 5-3** indicates the top ten largest employers within the analysis area. The analysis area is approximately 6.44 square miles. Approximately 14,526 employees and 1,675 businesses were identified within the area (2023). The largest employer in the area is Full Sail University.

The Business Summary report indicates that the sectors with the most businesses are the Services Industry (39.0%), Retail Trade Industry (17.8%), and Unclassified Establishments (12.9%). The sectors with the largest number of employees are Health Care & Social

[1] https://www.flhealthcharts.gov/ChartsDashboards/rdPage.aspx?rdReport=LifeExpectancy.Report

Assistance (16.8%), Retail Trade (15.3%), Educational Services (13.2%), and Accommodation & Food Services (11.2%).

According to the Civilian Labor Force Profile report, the study area has an estimated labor force of 50,121 with an unemployment rate of approximately 2.25%.

Table 5-3: Number of Employees for Study Area's Largest Employers (2023)

Employer	2023		
	# of Employees	Rank	% of Total Study Area Employment
Full Sail University	1,400	1	9.64%
Costco Wholesale	224	2	1.54%
Full Sail LLC	200	3	1.38%
Full Sail Real World Education	200	4	1.38%
Zel Tech Training Solutions, LLC	101	5	0.7%
Chick-Fil-A	100	6	0.69%
Miller's Ale House	70	7	0.48%
Doudney Sheet Metal Works	50	8	0.34%
University Surgical Center Inc	50	9	0.34%
Sonny's BBQ	40	10	0.28%

5.8 Equity Priority Areas

Equity Priority Areas were identified in the Orange County Title VI Nondiscrimination Policy and Plan, published April 2022, in order to define underserved or disadvantaged communities within their jurisdictions for prioritization in projects and funding decisions. A composite criterion, County Equity Priority Area (CEPA), is the recommended basis for Orange County's required data collection and analysis for environmental justice compliance. The County's CEPA-based analysis will determine where potential disproportionate high or adverse impacts would result from County programs and investments to avoid, minimize, or mitigate these impacts. The CEPA composite indicator is comprised of data from six indicators, with a CEPA score of 5 or 6 identified as having the highest risk of environmental justice impacts.

Adjacent to the University Boulevard Pedestrian/Cyclist Safety Study corridor, the CEPA score varies between "less than 3" to 4. South of the corridor, the CEPA score is "less than 3" west of Semoran Boulevard (SR 436), and 3 between Semoran Boulevard (SR 436) and east of Goldenrod Road (SR 551). North of the corridor, the CEPA score is 4 between west of Semoran Boulevard (SR 436) and Forsyth Road, 3 between Forsyth Road and Goldenrod Road (SR 551), and "less than 3" between Goldenrod Road (SR 551) and east of Goldenrod

Road (SR 551). A map of the Equity Priority Area scoring within Orange County is illustrated in **Appendix B**.

6 Land Use/Development Plans

Land use data was collected and analyzed within the project study area to determine the nature and intensity of development. To compile this data, a variety of sources were used, including Orange County's InfoMap Geographic Information Systems (GIS) application, Orange County's GIS Data Hub, the FastTrack Online system, Comprehensive Plan 2010-2030, Florida Land Use Land Cover Classification System (FLUCCS), proposed development plans, and desktop reviews.

6.1 Zoning

Orange County's GIS Data Hub and InfoMap were used to determine the zoning districts located within the study area. **Table 6-1** provides a breakdown of the different zoning districts found along the project corridor. The predominant zoning district within the project area is Industrial (IND-2/IND-3), followed by Planned Development (P-D) and Retail Commercial (C-1).

Table 6-1: Zoning Districts in the Project Area

Map Unit Symbol	Zoning Description	Acres	Percent
C-1	Retail Commercial District	10.31	11%
C-2	General Commercial District	6.03	6%
C-3	Wholesale Commercial District	7.66	8%
IND-2/IND-3	Industrial District (General)	16.26	17%
IND-4	Industrial District (Heavy)	4.51	5%
P-D	Planned Development (PD-RP and PD-UNP)	16.00	16%
R-1A	Single Family Dwelling District	0.05	0%
R-3	Multiple Family Dwelling District	9.16	9%
RW	Roads and Highways	27.94	28%
Total of Project Area		97.92	100%

Figure 6-1, the zoning district map, illustrates the location of each zoning district within the study area boundary.

Source: Orange County - InfoMap GIS, GIS Data Hub, 2023

Legend

- Project Buffer 300 ft
- Cady Way Trail

Zoning Description

- C-1, Retail Commercial District
- C-2, General Commercial District
- C-3, Wholesale Commercial District
- IND-2/IND-3, Industrial District (General)
- IND-4, Industrial District (Heavy)
- P-D, Planned Development (PD-RP and PD-UNP)
- R-1A, Single Familty Dwelling District
- R-3, Multiple Family Dwelling District
- RW, Roads and Highways

ORANGE COUNTY FLORIDA

Figure 6-1

Existing Zoning Map
University Boulevard
Pedestrian/Cyclist Safety Study

6.2 Existing Land Use

The FLUCCS was used to ascertain existing land uses within the project area. **Table 6-2** provides a summary of the different land use classifications found along the project corridor. Commercial and Services make up a majority of the existing land uses, followed by High-Density Residential and Upland Mixed. Notably, the remaining vacant parcel along the corridor with an Upland Mixed classification is expected to be developed by Full Sail University.

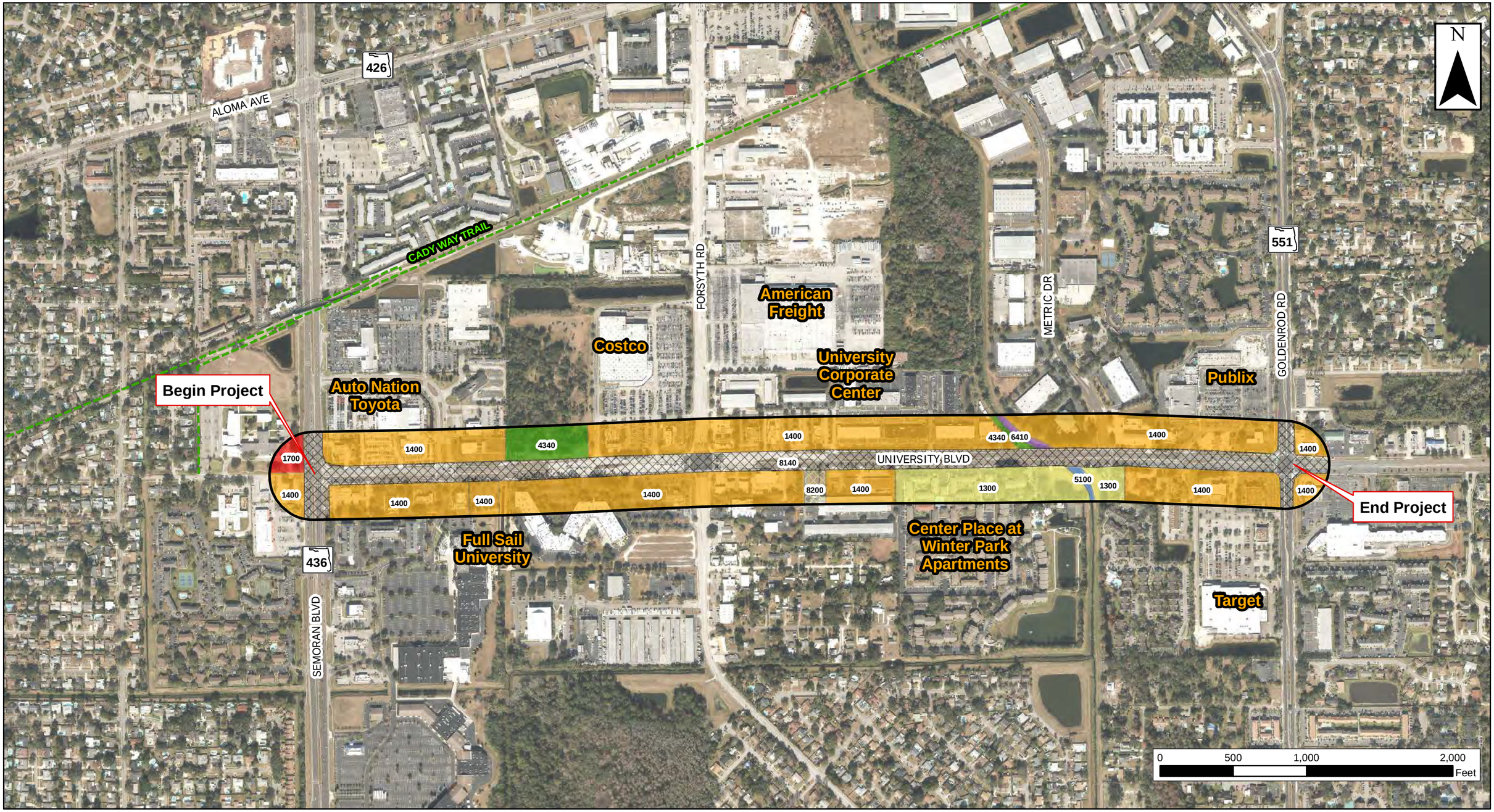
It is worth noting that parcel ID #10-22-30-0000-00-081 was originally classified as land use 8830 (Water Supply Plants) on FLUCCS and was manually changed to 1400 (Commercial and Services) as field verification confirmed it exists as a parking lot to the adjacent Miller's Ale House.

Table 6-2: Existing Land Use in the Project Area

Map Unit Symbol	Land Use Description	Acres	Percent
1300	High Density, 6 or more dwelling units/acre	8.18	8%
1400	Commercial and Services	60.19	61%
1700	Institutional	1.05	1%
4340	Upland Mixed – Coniferous / Hardwood	3.20	3%
5100	Streams and Waterways	0.81	1%
6410	Freshwater Marshes	0.62	1%
8200	Communications	0.79	1%
8140	Roads and Highways	23.08	24%
Total of Project Area		97.92	100%

Figure 6-2, the existing land use map, shows the layout of each land use classification within the study area boundary.

Source: Florida Land Use Land Cover Classification System, 2018



Legend

- Project Buffer 300 ft
- Cady Way Trail

LAND USE

- 1300: High Density, 6 or more dwelling units/acre
- 1400: Commercial and Services
- 1700: Institutional
- 4340: Upland Mixed - Coniferous / Hardwood
- 5100: Streams and Waterways
- 6410: Freshwater Marshes
- 8140: Roads and Highways
- 8200: Communications

Figure 6-2

Existing Land Use Map
University Boulevard
Pedestrian/Cyclist Safety Study

6.3 Future Land Use

The County's GIS Data Hub, InfoMap, and Orange County's Comprehensive Plan 2010-2030 were used to determine the planned future land uses found within the study area. **Table 6-3** provides a breakdown of the various future land use designations found along the project corridor. The project area is primarily made up of Commercial (C), followed by Industrial (I) and Medium Density Residential (MD).

Table 6-3: Future Land Use in the Project Area

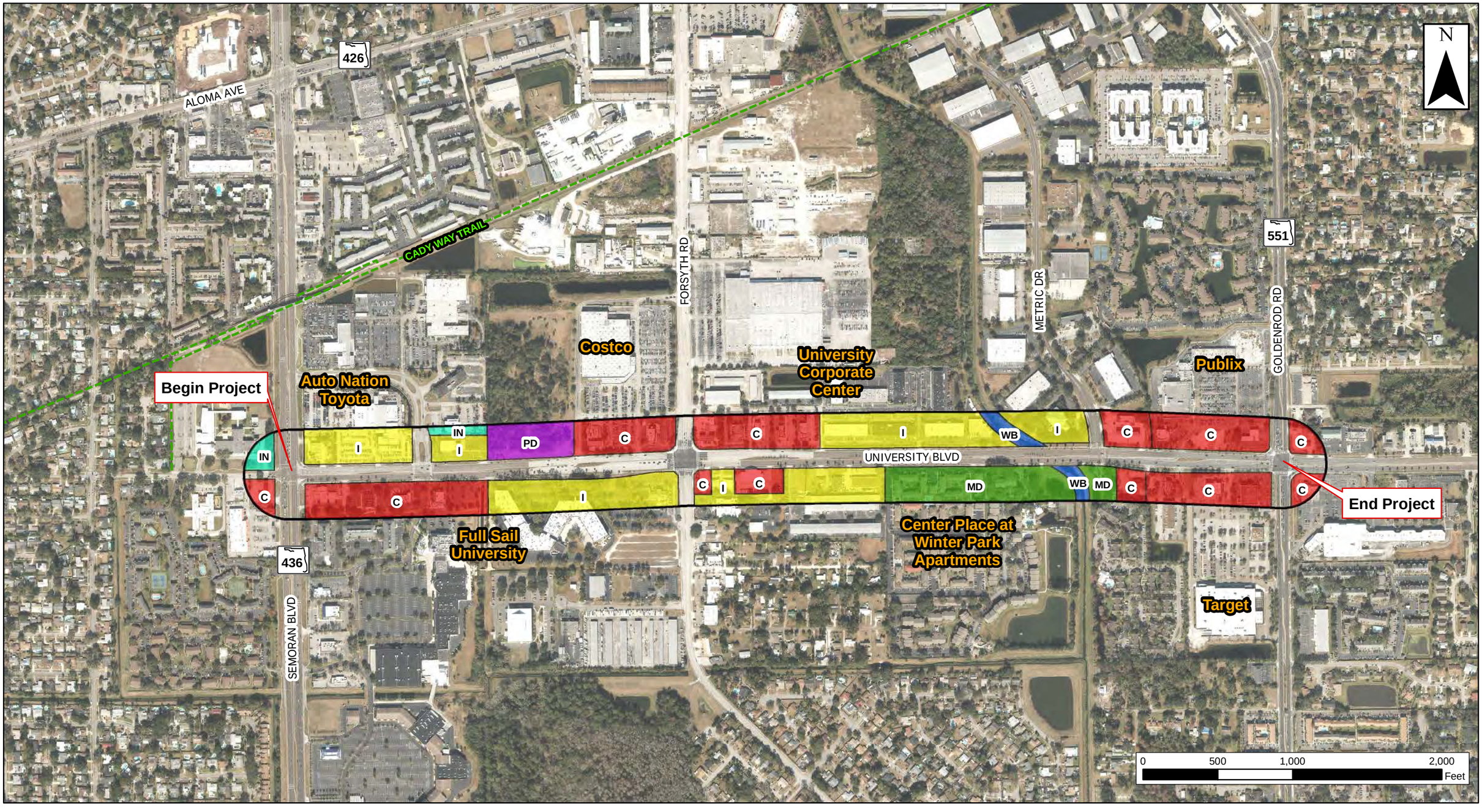
Map Unit Symbol	Future Land Use Description	Acres	Percent
C	Commercial	30.11	31%
I	Industrial	25.43	26%
IN	Institutional	1.48	1%
MD	Medium Density Residential	7.76	8%
PD	Planned Development	3.35	3%
WB	Water Body	1.51	2%
RW	Roads and Highways	28.28	29%
Total of Project Area		97.92	100%

Figure 6-3, the future land use map, shows the location of each future land use within the study area boundary.

6.4 Developments

Developments along University Boulevard between Semoran Boulevard (SR 436) and Goldenrod Road (SR 551) were researched and are described in this section. Information regarding the developments was obtained from Orange County GIS subdivision layer, Orange County FastTrack Online, the Orange County Property Appraiser website, and County Planning staff.

Source: Orange County - GIS Data Hub (2023), InfoMap GIS (2023), Comprehensive Plan 2010-2030



Legend

- Project Buffer 300 ft
- Cady Way Trail

Future Land Use

- C - Commercial
- I - Industriall
- IN - Institutional
- MD - Medium Density Residential
- PD - Planned Development
- WB - Water Body

Figure 6-3

Future Land Use Map
University Boulevard
Pedestrian/Cyclist Safety Study

6.4.1 Commercial Subdivisions

Commercial subdivision developments were obtained from the Orange County GIS subdivision layer. **Table 6-4** provides a summary of the commercial developments within the study area, including the total acreage of each subdivision and the acreage contained within the study area. If there was a discrepancy between the acreage found in documents submitted to the County and the acreage found on the County's GIS subdivision layer, the latter was used. The largest commercial subdivisions within the study area boundary are University Park Plaza, followed by Commerce Square PH1 and Perimeter Park. The locations of the commercial subdivisions are displayed in **Figure 6-4** and are further described in their respective sections below.

Table 6-4: Commercial Subdivisions in the Project Area

Map Unit Symbol	Subdivision/Development Name	Acres	Acres within Study Area
1	Perimeter Park	30.97	5.59
2	Silver City	22.41	3.58
3	A C I University Corner	10.67	4.43
4	Commerce Square PH 1	49.23	10.85
5	K Mart	16.49	4.29
6	Harlem Park	11.77	0.94
7	University Park Plaza	69.97	5.33
8	University Place OFC Park	18.07	6.47
Total		229.58	41.48

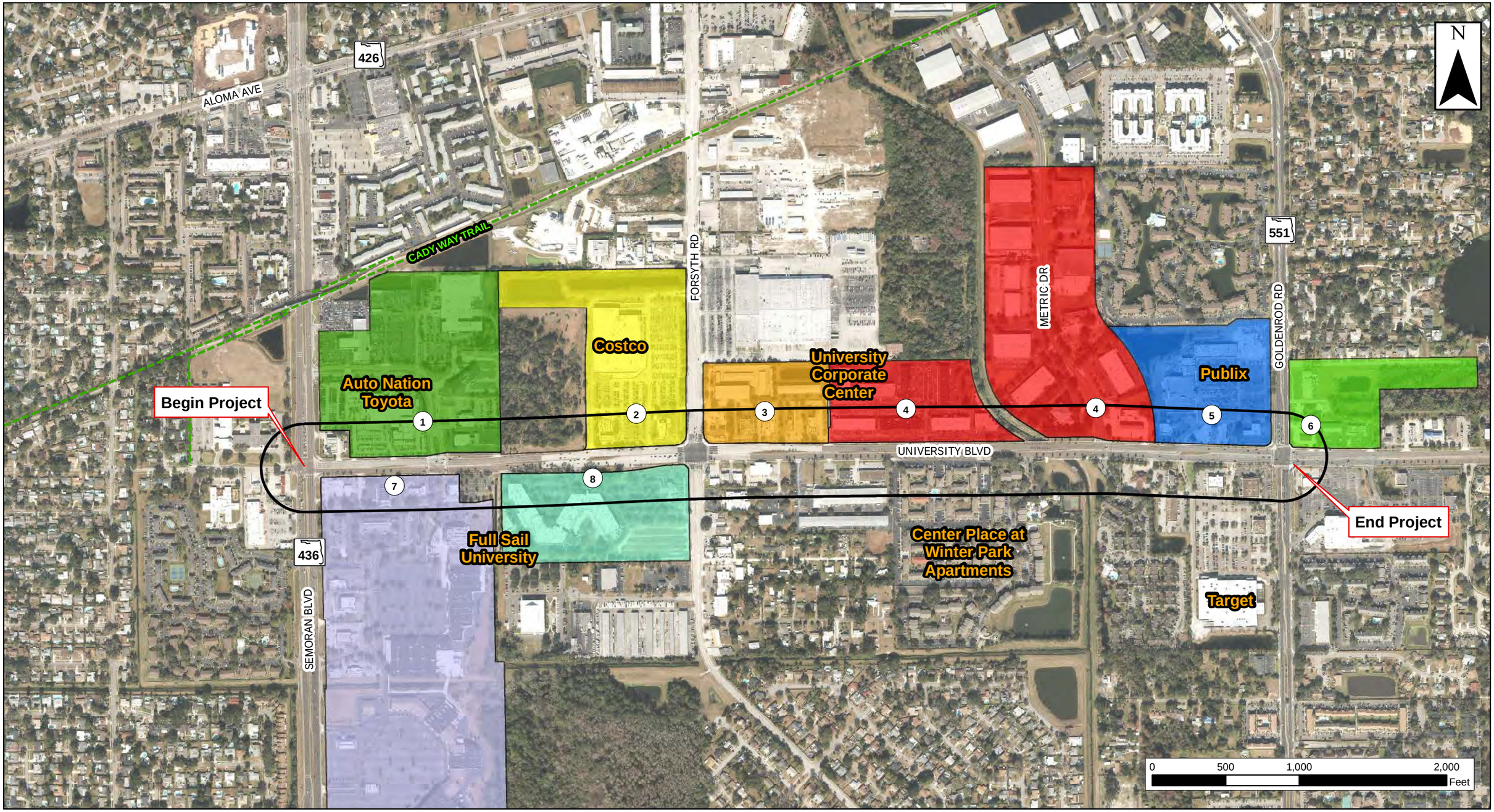
Perimeter Park (1)

Perimeter Park is a 30.97-acre (ac) commercial subdivision located in the northeast quadrant of the Semoran Boulevard and University Boulevard intersection, with 5.59 ac located within the 300-ft buffer study area. The major development within this subdivision adjacent to University Boulevard includes AutoNation Toyota Winter Park, a 68,614 square-foot (sq-ft) car dealership offering car sales and car service and maintenance.

Silver City (2)

Located in the northwest quadrant of the Forsyth Road and University Boulevard intersection is Silver City, a 22.41-ac commercial subdivision approved in 1998, with 3.58 ac located within the study area. This subdivision is currently developed as a Costco and Chick-fil-A. Costco is a 163,057 sq-ft big box supermarket, with an 8,045 sq-ft expansion nearing completion after plans were approved in 2019 (DRC Case #CDR-19-02-071). The Chick-fil-A currently exists as a 4,652 sq-ft fast-food restaurant, with plans approved in January 2024 for the demolition of the existing building and reconstruction of a new 4,927 sq-ft Chick-fil-A (DRC Case #CDR-23-07-221).

Source: Orange County - GIS Data Hub (2023), Fast Track Online (2023)



Legend

- Project Buffer 300 ft
- Cady Way Trail

Subdivision

- PERIMETER PARK
- SILVER CITY
- A C I UNIVERSITY CORNERS
- COMMERCE SQUARE PH 1
- K MART
- HARLEM PARK
- UNIVERSITY PARK PLAZA
- UNIVERSITY PLACE OFC PARK

Figure 6-4

Commerical Subdivisions
University Boulevard
Pedestrian/Cyclist Safety Study

ACI University Corners (3)

Located northeast of the Forsyth Road and University Boulevard intersection, ACI University Corners was approved in 1994 as a 10.67-ac commercial subdivision, with 4.43 ac located within the study area. In the parcels adjacent to University Boulevard, the land use is predominantly fast-food restaurants and retail uses.

Commerce Square PH1 (4)

Commerce Square Phase 1 was approved in 1974 as a 49.23-ac commercial subdivision located between the ACI University Corners and K-mart subdivisions, stretching along University Boulevard and Metric Drive. The Crane Strand Drainage Canal cuts through the subdivision. Included in the 10.85 ac located within the study limits is the University Medical Center, a 36,389 sq-ft medical office building, as well as other medical and commercial office buildings.

K-Mart (5)

Originally developed as a K-Mart shopping center in 1982, the K-Mart commercial subdivision consists of 16.49 ac, with 4.29 ac located within the study area. Located at the northwest corner of the Goldenrod Road and University Boulevard intersection, and redeveloped as the Goldenrod Shopping Center, the location includes a 56,919 sq-ft Publix grocery store and other retail shops and restaurants.

Harlem Park (6)

Harlem Park was initially developed for residential uses and included a park in 1926, but is now a 11.77-ac commercial subdivision that includes strip malls for retail and restaurants. Located northeast of the Goldenrod Road and University Boulevard intersection, 0.94 ac of this subdivision is included within the study area.

University Park Plaza (7)

University Park Plaza is a 69.97-ac commercial subdivision located at the southeast corner of the Semoran Boulevard and University Boulevard intersection, with 5.33 ac included within the study area. This subdivision includes 19 private institutional buildings used for Full Sail University with a combined square footage of 935,993 square-feet. These buildings include those as part of 2.2-ac Full Sail Studios, including the Full Sail Live Venue, a recording studio, and a game production studio. Additionally, fast-food and retail restaurants are included within this subdivision. Buildings within this subdivision are currently leased to Full Sail University.

University Place Office Park (8)

The University Place Office Park was originally approved in 1989 as a commercial subdivision located on the southwest corner of the Forsyth Road and University Boulevard

intersection. This 18.07-ac subdivision (with 6.47 ac within the study area) was originally proposed to include three office and warehouse buildings. This subdivision includes two buildings as part of Full Sail University, including the Full Sail University Fortress Arena, which is a venue built for Esports competitions, and the University's admissions office. The third western-most building was never developed and remains an unpaved lot used for overflow parking for Full Sail University. Buildings within this subdivision are currently leased to Full Sail University.

6.4.2 Corridor Development

Individual land uses and developments within the study area were identified and are displayed in **Figure 6-5**. Although not within the study area, the future industrial center called University Crossing at Winter Park located north of the study area on Forsyth Road was also included due to the increase in expected truck traffic the development will generate within the study area.

Some of the more noteworthy developments not previously discussed are further described in their respective sections below and correspond to the numbered parcels in **Figure 6-5** and **Table 6-5**.

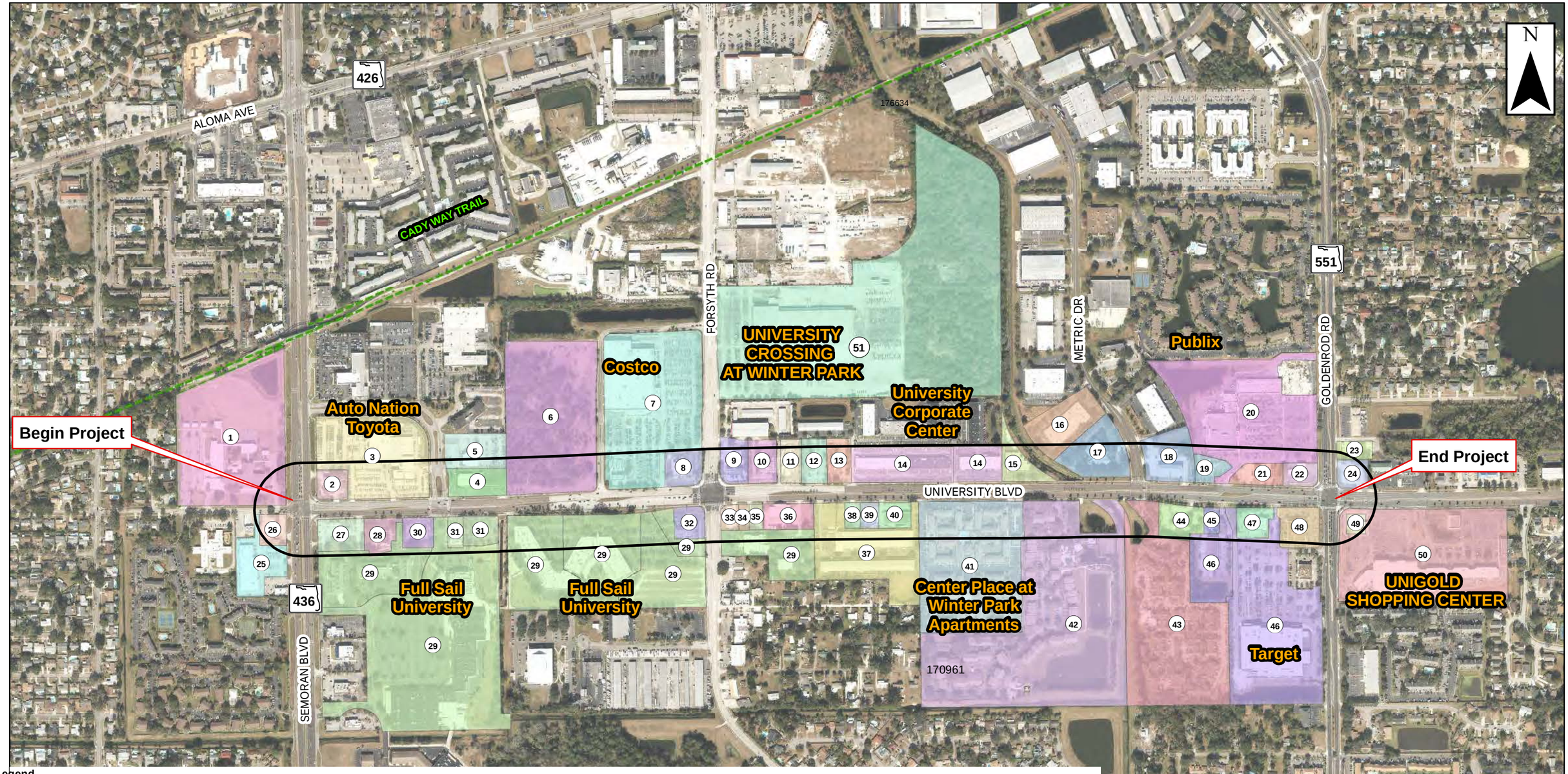
Table 6-5: Major Corridor Development in the Project Area

Map Unit Symbol	Subdivision/Development Name	Acres	Acres within Study Area
1	Aloma Elementary School	13.91	0.85
2	Mobil Gas Station/Chipotle	0.87	0.87
6	Future Full Sail Student Housing	13.14	3.16
25	University Shoppes	4.00	0.12
37	University Business Park	6.84	2.01
41	Central Place at Winter Park Apartments	13.90	3.69
42	Alvista Winter Park Apartment Homes	26.50	2.57
43	Calibre Bend Apartment Homes	14.75	0.82
46	University Square Shopping Center	19.55	1.03
50	Unigold Shopping Center	14.30	0.46
51	University Crossing at Winter Park	43.43	0.00
Total of Project Area		172.19	15.58

Aloma Elementary School (1)

At the northwest corner of the Semoran Boulevard and University Boulevard intersection is Aloma Elementary School, with a student population of 499 students as of January 2024. The school is located on 13.91 ac and includes 76,805 square-feet of institutional space.

Source: Orange County - GIS Data Hub (2023), Fast Track Online (2023)



Legend

Project Buffer 300 ft

Cady Way Trail

PROP_NAME

1 - ALOMA ELEMENTARY
2 - MOBIL GAS STATION
3 - AUTONATION TOYOTA
4 - SUNTRUST BANK
5 - US POST OFFICE
6 - FUTURE FULL SAIL STUDENT HOUSING
7 - COSTCO
8 - CHICK-FIL-A
9 - 7-ELEVEN
10 - PERKINS
11 - ZAXBY'S
12 - DUNKIN DONUTS/BASKIN ROBBINS
13 - BURGER KING
14 - UNIVERSITY CORPORATE CENTER
15 - STRIP SHOPPING CENTER
16 - METRIC PARK SOUTH
17 - UNIVERSITY MEDICAL CENTER
18 - CITGO
19 - CHASE BANK
20 - GOLDENROD SHOPPING CENTER
21 - CIRCLE K GAS STATION
22 - WELLS FARGO BANK
23 - KINDERCARE LEARNING CENTER
24 - VACANT
25 - UNIVERSITY SHOPPES
26 - VACANT
27 - TACO BELL
28 - FULL SAIL LIVE
29 - FULL SAIL UNIVERSITY
30 - MCDONALD'S
31 - MILLER'S ALE HOUSE
32 -SONNY'S BBQ
33 - AMSCOT
34 -TAKE 5 OIL CHANGE
35 - CLIMAX SMOKESHOP
36 - TIBBITTS AUTO REPAIR & TOWING
37 -UNIVERSITY BUSINESS PARK
38 - WINTER PARK DENTAL
39 - VACANT BUILDING
40 - UNIVERSITY COMMERCE CENTER
41 - CENTRAL PLACE AT WINTER PARK APARTMENT
42 - ALVISTA WINTER PARK APARTMENT HOMES
43 - CALIBRE BEND APARTMENT HOMES
44 - FIFTH THIRD BANK
45 - STARBUCKS COFFEE
46 - UNIVERSITY SQUARE SHOPPING CENTER (TARGET)
47 - CARE NOW URGENT CARE / ATT
48 - CVS PHARMACY
49 - REGIONS BANK
50 - UNIGOLD SHOPPING CENTER
51 - UNIVERSITY CROSSING AT WINTER PARK

ORANGE COUNTY FLORIDA

Figure 6-5

Corridor Development Map
University Boulevard
Pedestrian/Cyclist Safety Study

Mobil Gas Station (2)

There are plans to demolish the Mobil gas station and convenience store on the 0.87-ac parcel in the northeast corner of the Semoran Boulevard and University Boulevard intersection and replace it with a Chipotle restaurant and drive-thru. The permit (B22906434) associated with this development is currently under review.

Future Full Sail Student Housing (6)

The parcel located west of the Costco (parcel ID# 03-22-30-0000-00-029) was initially proposed to be included as Phase 2 of the Silver City subdivision. Currently, this parcel is undeveloped and not platted, but does include three on-site billboards. This 13.14-ac parcel is planned for future student housing (1,500 student dormitory units) and 30,000 square-feet of retail. The Land Use Plan submitted for this P-D shows this parcel as Commercial C-1 uses, but the future land use is designated as P-D C-HDR Student Housing. The P-D will have to be amended to change the designation before any student housing is permitted.

University Shoppes (25)

University Shoppes was a shopping center located southwest of the Semoran Boulevard and University Boulevard intersection that was recently demolished. It consisted of 173,825 square-feet of combined retail building space on 4.00 ac. Plans for the shopping center to be demolished and rebuilt to accommodate new restaurants and retailers were announced on GrowthSpotter in 2022. County records indicate that plans for the new University Hill development include a 3,850 sq-ft City BBQ Restaurant (Building Permit #B23905394), a 950 sq-ft Dutch Bros Coffee shop with drive-thru (Building Permit #B23903383), and a 3,444 sq-ft Raising Cane's Restaurant with outdoor seating patio, and drive-thru (Building Permit #B23905116).

University Business Park (37)

University Business Park is located along the south side of University Boulevard on a 6.84-ac parcel. This business park includes a combined total of 83,996 square-feet of industrial warehouse space.

Central Place at Winter Park Apartments (41)

Located along the south side of University Boulevard between the Forsyth Road and Goldenrod Road intersections, the Central Place at Winter Park Apartments is a multifamily residential complex with a total acreage of 13.90 ac and 304 dwelling units. It was originally constructed in 1974.

Alvista Winter Park Apartment Homes (42)

Alvista Winter Park Apartment homes is a multifamily residential complex constructed in 1986 with 288 dwelling units and a total acreage of 26.50 ac. It is located along the south side of University Boulevard between the Forsyth Road and Metric Drive intersections.

Calibre Bend Apartment Homes (43)

Calibre Bend Apartment Homes is a multifamily residential complex with 212 dwelling units located along the south side of University Boulevard between the Metric Drive and Goldenrod Road intersections. Originally constructed in 1987, the property has a total acreage of 14.75 ac.

University Square Shopping Center (46)

Located in the southwest corner of the Goldenrod Road and University Boulevard intersection is the University Square Shopping Center which includes a total acreage of 19.55 ac. The shopping center includes a Target as an anchor store located on 19.55 ac with a building area of 200,000 square-feet for big box retail space and a garden center. Additional outparcels within the shopping center include various retail and restaurants, as well as a CVS and an MD Now Urgent Care medical office.

Unigold Shopping Center (50)

The Unigold Shopping Center is located at the southeast corner of the Goldenrod Road and University Boulevard intersection. The shopping center includes 14.30 ac and 174,231 square-feet of combined retail space. Major retailers at the shopping center include a Ross Dress for Less retail clothing store, and a vacant anchor space that was formerly Lucky's Market, a big box supermarket that went out of business.

University Crossing at Winter Park (51)

University Crossing at Winter Park is a 43.43-ac industrial distribution center located on Forsyth Road, north of the Forsyth Road and University Boulevard intersection. The industrial center includes four warehouses with a combined 506,837 square-feet (Permit #B20906134). Initially planned for a completion date within the fourth quarter of 2023, the site and the warehouses are still under construction as of January 2024.

Two buildings (Building 100 and Building 200) are located on the land previously occupied by a Sears warehouse, which was issued a permit (B22022478) for demolition in January 2023. Electrical and fire system permits for Building 100 and Building 200 were issued in early January 2024, and observation of the construction site indicate the structural aspects of the buildings were completed, with interiors, windows, and the exterior aesthetic features still under construction.

Buildings 300 and 400 are located east of Buildings 100 and 200, on what was previously undeveloped land. Electrical, plumbing, and fire system permits were issued for Buildings 300 and 400 from August 2022 to August 2023 and are indicated as being completed. In September 2023, AutoNation Toyota Winter Park submitted a commercial permit application for the interior remodel and build-out of Building 300 for Toyota car-services, including service bays for cars and a carwash. This commercial permit has a 'ready to issue' status with an expiration date of May 15, 2024.

The development of University Crossing at Winter Park includes a new driveway and the construction of a signalized intersection on Forsyth Road at the north Costco access road and the future industrial center driveway. Plans for the signalized intersection were approved in June 2023 and include median modifications, pavement markings, and curb ramps.

7 Existing Roadway Characteristics

7.1 Roadway Functional Classification, Jurisdiction, and Posted Speed

University Boulevard from Semoran Boulevard to Goldenrod Road is classified as a minor arterial and is owned and maintained by Orange County. The posted speed is 45 miles per hour (mph) along the entire length of the study corridor. Based on the 1986 As-Builts for the Improvements to University Boulevard between Semoran Boulevard and Goldenrod Road project, the design speed for University Boulevard between Semoran Boulevard and Goldenrod Road is 50 mph.

7.2 Context Classification

University Boulevard does not have an official FDOT designated context classification as it is not a state roadway. However, as discussed in section 4.6.5, based on the ongoing classification effort by Orange County, a C3C context classification is recommended for the entire University Boulevard study corridor from Semoran Boulevard to Goldenrod Road.

7.3 Right-of-Way

The roadway ROW was collected utilizing the Orange County Property Appraiser's website. The ROW along University Boulevard along the study corridor ranges between 128 and 162 feet. See **Table 7-1** below for the existing ROW between each segment along the study corridor.

Table 7-1: Existing Right-of-Way

Begin Location	End Location	Existing ROW Width (feet)
Semoran Boulevard	Driggs Drive / University Park Drive	128′
Driggs Drive / University Park Drive	Forsyth Road	128′-162′
Forsyth Road	Metric Drive / Calibre Bend Trail	128′-152′
Metric Drive / Calibre Bend Trail	Goldenrod Road	131′-159′

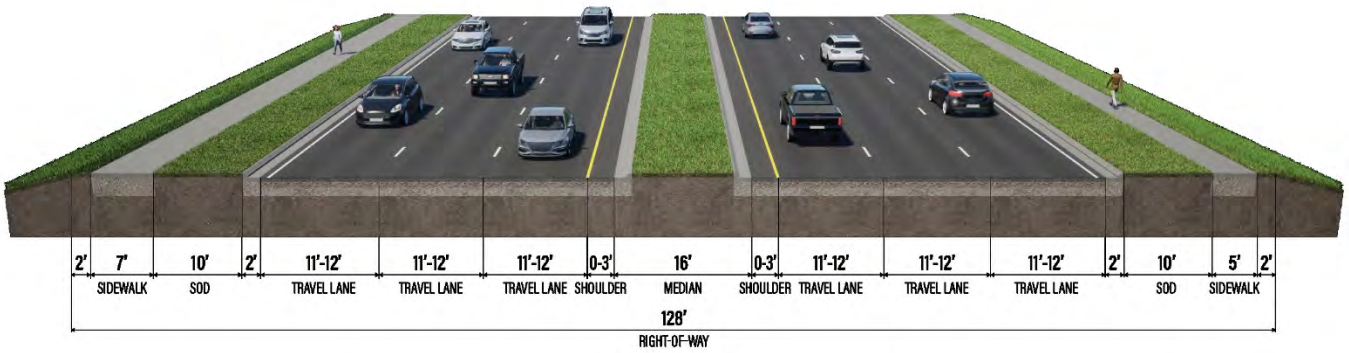
7.4 Typical Section

University Boulevard is a six-lane facility providing three travel lanes in each direction with a variable 11-foot to 12-foot lane width, a variable 0-foot to 3-foot inside paved shoulder, a 7-foot-wide sidewalk along the north side of the road, and a 5-foot-wide sidewalk along the south side of the road. For the entire length of the corridor except for the 800 feet west of Goldenrod Road, the sidewalk on the south side of the roadway is separated from the roadway by a sodded strip up to approximately 10 feet wide. For the entire length of the corridor besides a 1,350-foot-long segment between 700 feet west of Forsyth Road

and 650 feet east of Forsyth Road, the sidewalk on the north side of the roadway is separated from the roadway by a sodded strip up to approximately 10 feet wide.

Curb and gutter is present along the entire corridor, along with a 16-foot-wide raised sod median. **Figure 7-1** depicts the existing typical section.

Figure 7-1: Existing Typical Section of University Boulevard



7.5 Pavement Conditions

In 2014, University Boulevard had a Pavement Condition Index (PCI) of 74 (Fair condition). Since then, it has further deteriorated due to heavy traffic. In 2013, there was some base repair work that was completed. The road is currently on Orange County's paving list, and coordination is occurring to repave it in FY 2024.

7.6 Utilities

To better evaluate the various corridor alternatives and potential impacts with existing utilities, available information on the existing utilities was researched and compiled for the study area using a variety of sources. First, a Sunshine 811 Design Ticket was made to identify the utility providers and operators registered with the locate service. Additionally, utility information was compiled through research of available GIS information and the National Pipeline Mapping System. Second, a utility contact was made to all identified utility agency providers and operators during the coordination process of the project. A depiction of the utilities in the area is identified in **Figure 7-2**. Existing Utility/Agency Owners (UAOs) and utility facilities are identified in **Table 7-2**.

Source: Google Maps

Project Buffer 300 ft

Cady Way Trail

TECO Peoples Gas

Gas Main

S Seminole & N Orange Wastewater Transmission

Sanitary Sewer

Duke Energy - Distribution

Buried Electric

De-Energized Electric

Overhead Electric

City of Winter Park - Water & Wastewater

Force Main

Water Main

ORANGE COUNTY FLORIDA

Figure 7-2

Existing Utilities Map

University Boulevard

Pedestrian/Cyclist Safety Study

Table 7-2: Utility Owners

Utility Owner	Description
AT&T Distribution	• 12 CT, 24 CT, 144 CT, 216 CT, and 360 CT Buried Fiber along the project area. • Handholes along the project area. • 12 CT, 48 CT, and 72 CT Overhead Fiber along the project area.
CenturyLink / Lumen – Local	• Underground fiber along the project area. • Aerial copper along the project area.
CenturyLink / Lumen – National	• Aerial facilities along the project area.
Charter Communications	• Underground and Aerial facilities along the project area.
City of Winter Park – Water & Wastewater*	• 4" UNK, 6" PVC 6" UNK, 8" AC, UNK, and UNK PVC Force Main along the project area. • 6" PVC, 8" PVC, 8" UNK, 12" CI, 16" AC, 16" CI Water Main along the project area. • Fire hydrants along the project area.
City of Winter Park – Electric *	• Awaiting on response from UAO.
Comcast Communications	• Comcast UG FOC along the south side of the project area.
Crown Castle	• Aerial 216 CT and 228 CT along the south side of University Boulevard. • Aerial 432 CT & 216 CT fiber at the west side of the intersection of Goldenrod Road and University Boulevard. • 1.5" HDPE Ducts with 72 CT and 228 CT buried fiber along the south side of the project area. • 7 Handholes along the south side of the project area.
Duke Energy – Distribution *	• Underground cable located on the north side of University Boulevard. • Overhead electric and poles located on the south side of University Boulevard. • De-energized wire located at the intersection of N Forsyth Road and University Boulevard, and Metric Drive and University Boulevard.
Duke Energy - Fiber	• Received a No Facilities Letter.
Full Sail University	• Received a No Facilities Letter.
Verizon / MCI	• 2" HDPE buried fiber cable starting at Driggs Drive to Goldenrod Road, located on the south side of University Boulevard. • Aerial Fiber located at the east side of the intersection of Goldenrod Road and University Boulevard.
Orange County Public Works	• They provide traffic signal and interconnect facilities within the project limits.
S Seminole & N Orange Wastewater Transmission Authority *	• 14" DIP Sanitary FM located on the eastern side of the intersection of University Boulevard and Goldenrod Road.
Seminole County - Engineering	• Received a No Facilities Letter.

Utility Owner	Description
Summit Broadband	• Buried 48 CT FOC in 1.25" Conduits on the north side of University Boulevard and Driggs Drive. • Buried 12 CT FOC in 1.25" Conduits on the south side of University Boulevard. • Buried 144 CT FOC in 1.25" Conduits on the south side of University Boulevard. • Buried 288 CT FOC in 1.25" Conduits on the south side of University Boulevard. • Buried 24 CT FOC in 1.25" Conduits crossing north near the intersection of Goldenrod Road and University Boulevard.
TECO Peoples Gas *	• 2" CS and 6" CS (Gas Main) along the project area.
Uniti Fiber	• Underground 1.5" Ducs with ¾" Fiber cable along the project area, near the intersection of University Boulevard and Driggs Drive.
Zayo Group	• Underground facilities located on the south side of University Boulevard.

***** Indicates a Major Utility

Nineteen UAOs have been identified within the project limits from the Sunshine 811 Design Ticket and preliminary research. Five of these UAOs have facilities that are identified as major utilities, which may require special consideration with the evaluation of potential corridor alternatives.

7.6.1 Utility Avoidance and Mitigation

Due to the nature of the existing conditions throughout the study area, there is a potential for impacts of major utility facilities on the project. Major utility facilities potentially impacted include large diameter water and wastewater mains owned by City of Winter Park, Duke Energy Electric Distribution Lines and TECO gas lines.

Mitigation measures will be taken during the study phase of the project to minimize impacts to the existing utilities to the fullest extent possible. If impacts are unavoidable, design concept alternatives will be reviewed to allow for relocation of impacted facilities in a manner that minimizes cost to the UAO and disruption to their customers.

Since relocations of facilities located in easements and on private property would likely be eligible for reimbursement, all measures will be taken to avoid impacting the existing utility facilities identified in easements or privately owned parcels. Though relocation of other facilities within the existing ROW are anticipated, all efforts will be made during the study to minimize impacts to existing pipelines, and other utility facilities, to the greatest extent possible.

7.7 Lighting

Conventional High-Pressure Sodium (HPS) street lighting is present along both sides of University Boulevard throughout the study corridor, from Semoran Boulevard to Goldenrod Road. A field review was conducted to determine the location of light poles, stop signs, pedestrian signs, and transit stops, and used to create a web-based GIS map. **Table 7-3** summarizes the existing lighting along the corridor. Using the existing lighting data, luminosity collection points were developed that would provide the best representation of the lighting along the corridor, shown in **Figure 7-3**.

Table 7-3: Existing Lighting along the Study Area

Corridor Inventory	North Side	South Side	Total
Light Poles	50	37	87
Stop Signs	9	4	13
Pedestrian Signs	6	5	11
Transit Stops	6	6	12

7.7.1 Luminosity Measurements – Signalized Intersections

At each signalized intersection, the standard illumination level average initial horizontal foot candle (H.F.C) value is 3.0. The lighting at all the signalized intersection crosswalks is below standard, with the brightest areas being the north leg (6.66 H.F.C) of Goldenrod Road and west leg (5.65 H.F.C) of University Park Drive. The east and north legs of Forsyth Road and east and west legs of Goldenrod Road have a lumen reading higher than the standard H.F.C., but the average of the crossing leg was below average. See **Table 7-4** for further details of the Luminosity measurements at signalized intersections.

Table 7-4: Summary of Luminosity Measurements at Signalized Intersections

Signalized Intersections	Measured H.F.C.				Standard H.F.C.
	North Leg	South Leg	East Leg	West Leg	
Semoran Boulevard	0.58 – 2.68	0.25 – 2.37	1.23 – 2.68	0.24 – 1.88	3.0
University Park Drive	0.13 – 1.94	0.20 – 2.81	0.13 – 2.13	0.23 – 5.65	3.0
Forsyth Road	0.25 – 3.51	0.15 – 0.87	0.80 – 3.19	0.25 – 1.08	3.0
Metric Drive / Calibre Bend Trail	0.15 – 0.69	0.04 – 1.93	0.26 – 1.93	0.04 – 1.45	3.0
Goldenrod Road	0.44 – 6.66	0.92 – 2.88	0.62 – 3.45	1.03 – 4.39	3.0

Note: Standard H.F.C is obtained from 2024 FDOT FDM.

Source: Google Maps

N

- Light Pole
- Pedestrian Sign
- Stop Sign
- Transit Stop

Figure 7-3

Existing Lighting
University Boulevard
Pedestrian/Cyclist Safety Study

7.7.2 Luminosity Measurements – Transit Stops

In terms of transit, the FDM does not provide minimum standards for lighting; therefore, a standard H.F.C. value of 2.0 was assumed. There are six transit stops on eastbound and westbound University Boulevard, respectively. None of the six transit stops on both eastbound and westbound University Boulevard were found to have sufficient lighting conditions. See **Table 7-5** for further details of the Luminosity measurements at transit stops.

Table 7-5: Summary of Luminosity Measurements at Transit Stops

Eastbound (Southside of the Corridor)				
Transit Stop #	**Transit Name**	**Location**	**Measured H.F.C.**	**Standard H.F.C.**
3789	LYNX 13	at University Park Drive	0.43	2.0
6538	LYNX 13	at Forsyth Road	0.44	2.0
3363	LYNX 13	At Forsyth Road	0.83	2.0
3364	LYNX 13	at Summerwalk Square	1.20	2.0
3365	LYNX 13	at Sutton Place Boulevard	0.93	2.0
3366	LYNX 13	at Metric Drive	1.57	2.0
Westbound (Northside of the Corridor)				
Transit Stop #	**Transit Name**	**Location**	**Measured H.F.C.**	**Standard H.F.C.**
3355	LYNX 13	at Driggs Drive	1.95	2.0
6539	LYNX 13	at Forsyth Road	0.44	2.0
3354	LYNX 13	at Forsyth Road	0.69	2.0
3353	LYNX 13	at Summerwalk Square	0.61	2.0
3352	LYNX 13	at Summerwalk Square	0.07	2.0
3351	LYNX 13	at Calibre Bend Trail	0.14	2.0

Note: Standard H.F.C is obtained from 2024 FDOT FDM.

7.7.3 Luminosity Measurements – Segments

In terms of the lighting along the corridor, the FDM illustrates that the average H.F.C. for a major arterial should be 1.5. Based on the illumination collected along the corridor, Semoran Boulevard to University Park Drive, Full Sail University Campus Entrance to Forsyth Road, and Calibre Bend Trail to Goldenrod Road had an average H.F.C value greater than the standard on the northside of the corridor. On the southside of the corridor, Calibre Bend Trail to Goldenrod Road was the only section that had a H.F.C, greater than the standard. See **Table 7-6** for further details on the summary of Luminosity measurements.

Table 7-6: Summary of Luminosity Measurements

Street Name Segment	Measured H.F.C.	Average H.F.C.	Standard H.F.C.
Westbound (Northside of the Corridor)			
Semoran Boulevard to University Park Drive	1.09 – 5.41	3.30	1.5
University Park Drive to Full Sail Campus Entrance	0.02 – 1.94	0.75	1.5
Full Sail Campus Entrance to Forsyth Road	0.25 – 2.65	1.54	1.5
Forsyth Road to Summerwalk Square	0.10 – 2.54	0.83	1.5
Summerwalk Square to Calibre Bend Trail	0.56 – 2.65	1.16	1.5
Calibre Bend Trail to Goldenrod Road	0.25 – 5.21	2.26	1.5
Eastbound (Southside of the Corridor)			
Semoran Boulevard to University Park Drive	0.21 – 3.65	1.48	1.5
University Park Drive to Full Sail Campus Entrance	0.06 – 6.80	1.43	1.5
Full Sail Campus Entrance to Forsyth Road	0.03 – 0.97	0.49	1.5
Forsyth Road to Summerwalk Square	0.00 – 2.35	0.50	1.5
Summerwalk Square to Calibre Bend Trail	0.00 – 3.41	0.93	1.5
Calibre Bend Trail to Goldenrod Road	0.01 – 4.46	1.64	1.5

Note: Standard H.F.C is obtained from 2024 FDOT FDM.

7.8 Parking

No on-street parking or public parking facilities exist on University Boulevard within the study corridor. Multiple private parking lots exist immediately off the corridor, owned by the businesses located along University Boulevard.

7.9 Bridges, Structures, and Pedestrian Overpasses

One structure exists on University Boulevard within the study corridor. Bridge and structure information was obtained from the FHWA National Bridge Inventory (NBI) and FDOT's Bridge Information Report. The structure is a 74.1-foot-long culvert located approximately 300 feet west of the intersection of University Boulevard and Metric Drive, located above Canal E-13. It is registered as structure #754081 in the NBI.

The culvert was built in 1987. According to the latest available inspection from the FHWA NBI, dated November 2021, the culvert was evaluated and found to be in good condition. The culvert is 74.1 feet long (along roadway) and consists of three 12-foot x 8-foot concrete boxes with each barrel of the box, 245 feet in length. The culvert provides for six 11-foot-wide traffic lanes, two six-foot-wide sidewalks, and a raised median. The culvert is located on a tangent section of University Boulevard. See **Figure 7-4** for an image of structure #754081.

Figure 7-4: Existing Structure

Drainage is accommodated by sheet flow off the roadway into the curb inlets before discharging into Canal E-13.

The bridge sufficiency rating is used by FDOT, and is derived by evaluating factors indicative of the structure's ability to remain in service. A rating of 100 percent would represent an entirely sufficient bridge and a rating of zero percent would represent an entirely deficient bridge. FDOT standards indicate structures with a sufficiency rating of 80 percent or less require some rehabilitation and those less than 60 percent require replacement. According to the latest available Florida Bridge Information Report, dated July 11th, 2023, the latest above water bridge inspection was completed on November 12, 2021. The bridge inspection reports indicate the bridge is in good condition with a sufficiency rating of 77.3 and health index of 63.71. The existing load rating was performed via Load Test. The Minimum Inventory Rating Factor calculated is 0.85. No load posting is required. Based on the existing bridge inspection reports, sufficiency rating, health index, and Load Factor Road (LFR), widening or reuse of the existing culvert is a viable option.

7.10 Transit

7.10.1 LYNX

LYNX Link 13 operates east-west service along University Boulevard for the entire length of the study corridor. Service for this route runs Monday through Sunday. The following is a list of the 12 stops, along with accommodations:

- LYNX stop #3789 (eastbound) – University Boulevard and University Park Drive – sign, bench, trash receptacle, and shelter
- LYNX stop #6538 (eastbound) – University Boulevard and Forsyth Road – sign only
- LYNX stop #3363 (eastbound) – University Boulevard and Forsyth Road – sign and bench
- LYNX stop #3364 (eastbound) – University Boulevard and Summerwalk Square – sign, bench, and trash receptacle
- LYNX stop #3365 (eastbound) – University Boulevard and Sutton Place Boulevard– sign, bench, trash receptacle, and shelter
- LYNX stop #3366 (eastbound) – University Boulevard and Metric Drive – sign and bench
- LYNX stop #3355 (westbound) – University Boulevard and Driggs Drive – sign, bench, trash receptacle, and shelter
- LYNX stop #6539 (westbound) – University Boulevard and Forsyth Road – sign and bench
- LYNX stop #3354 (westbound) – University Boulevard and Forsyth Road – sign and bench
- LYNX stop #3353 (westbound) – University Boulevard and Summerwalk Square – sign, bench, trash receptacle, and shelter
- LYNX stop #3352 (westbound) – University Boulevard and Summerwalk Square – sign and bench
- LYNX stop #3351 (westbound) – University Boulevard and Calibre Bend Trail – sign, bench, trash receptacle, and shelter

Additionally, LYNX Link 29 operates north-south service along Forsyth Road (northbound only) and Goldenrod Road (southbound only), with several stops close to the University Boulevard study corridor. Service for this route runs Monday through Sunday. The following is a list of the four stops close to the study corridor, along with accommodations:

- LYNX stop #3566 (northbound) – Forsyth Road and Easter Street – sign and trash receptacle
- LYNX stop #3567 (northbound) – Forsyth Road and University Boulevard – sign and bench
- LYNX stop #3350 (southbound) – Goldenrod Road and Georgeann Street – sign and bench
- LYNX stop #3571 (southbound) – Goldenrod Road and University Boulevard – sign, bench, trash receptacle, and shelter

Additionally, LYNX Link 436S operates north-south service along Semoran Road, with several stops close to the University Boulevard study corridor. Service for this route runs Monday through Sunday. The following is a list of the two stops close to the study corridor, along with accommodations:

- LYNX stop #3553 (northbound) – Semoran Boulevard and Driggs Drive – sign and bench
- LYNX stop #3420 (southbound) – Semoran Boulevard and University Center Drive– sign, bench, trash receptacle, and shelter

See **Figure 7-5** for a map of the existing LYNX service in the study area.

Ridership data for FY 2022 (October 2021 to September 2022) was obtained from LYNX. The total annual ridership recorded for LYNX Link 13 is 149,254.

Table 7-7 shows a breakdown of ridership by month for each of the three LYNX Links. Note that FY 2022 data was not available for Link 436S, so FY 2021 data was used for this route.

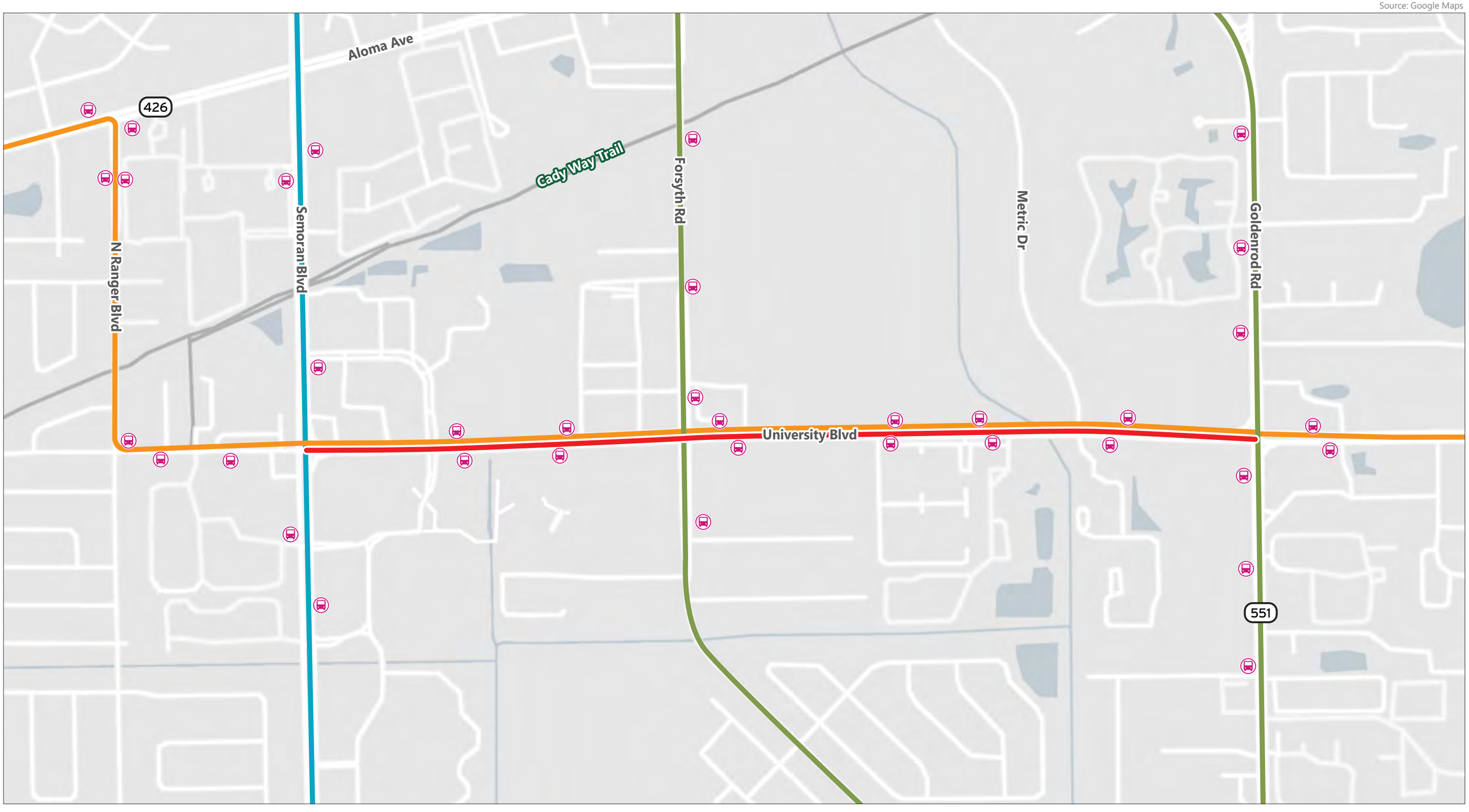
Table 7-7: LYNX Ridership by Month

Month	LYNX Link 13	LYNX Link 29	LYNX Link 436S[1]
October 2021	11,997	21,175	49,782
November 2021	10,960	19,386	45,105
December 2021	10,904	21,011	48,877
January 2022	11,885	20,626	48,530
February 2022	12,105	19,661	45,746
March 2022	13,498	22,021	54,009
April 2022	12,452	20,751	52,120
May 2022	12,691	19,720	51,778
June 2022	12,471	19,001	50,086
July 2022	12,366	20,027	52,095
August 2022	14,569	20,420	53,403
September 2022	13,356	17,495	52,878
Total FY 2022 Ridership	**149,254**	**241,294**	**604,410**

Notes:

1. FY 2021 Ridership Data used for LYNX Link 436S
2. Data obtained between 2021 and 2022 was collected during a national pandemic, and may not represent typical ridership values

Source: Google Maps



Study Corridor
LYNX Link 13
LYNX Link 29
LYNX Link 436S
LYNX Bus Stops

Figure 7-5

Existing Transit Service
University Boulevard
Pedestrian/Cyclist Safety Study

The following is a list of the average daily boarding and alighting for FY 2022 ridership data specific to each LYNX Link 13 stop location:

- LYNX stop #3789 (eastbound) – University Boulevard and University Park Drive – 14 boarding and 3 alighting
- LYNX stop #6538 (eastbound) – University Boulevard and N Forsyth Road – 0 boarding and 1 alighting
- LYNX stop #3363 (eastbound) – University Boulevard and N Forsyth Road – 5 boarding and 4 alighting
- LYNX stop #3364 (eastbound) – University Boulevard and Summerwalk Square – 1 boarding and 1 alighting
- LYNX stop #3365 (eastbound) – University Boulevard and Sutton Place Boulevard– 1 boarding and 1 alighting
- LYNX stop #3366 (eastbound) – University Boulevard and Metric Drive – 4 boarding and 9 alighting
- LYNX stop #3355 (westbound) – University Boulevard and Driggs Drive – 5 boarding and 14 alighting
- LYNX stop #6539 (westbound) – University Boulevard and N Forsyth Road – 0 boarding and 1 alighting
- LYNX stop #3354 (westbound) – University Boulevard and N Forsyth Road – 5 boarding and 6 alighting
- LYNX stop #3353 (westbound) – University Boulevard and Summerwalk Square – 1 boarding and 1 alighting
- LYNX stop #3352 (westbound) – University Boulevard and Summerwalk Square – 0 boarding and 0 alighting
- LYNX stop #3351 (westbound) – University Boulevard and Calibre bend Trail – 11 boarding and 8 alighting

The following is a list of the average daily boarding and alighting for FY 2022 ridership data specific to each LYNX Link 29 stop location:

- LYNX stop #3566 (northbound) – Forsyth Road and Easter Street – 2 boarding and 11 alighting
- LYNX stop #3567 (northbound) – Forsyth Road and University Boulevard – 9 boarding and 12 alighting
- LYNX stop #3350 (southbound) – Goldenrod Road and Georgeann Street – 6 boarding and 8 alighting

- LYNX stop #3571 (southbound) – Goldenrod Road and University Boulevard – 14 boarding and 8 alighting

The following is a list of the average daily boarding and alighting for FY 2022 ridership data specific to each LYNX Link 436S stop location:

- LYNX stop #3553 (northbound) – Semoran Boulevard and Driggs Drive – 17 boarding and 14 alighting
- LYNX stop #3420 (southbound) – Semoran Boulevard and University Center Drive – 34 boarding and 31 alighting

7.11 Bicycle & Pedestrian

7.11.1 Bicycle Facilities

There are no existing bicycle lanes or separate paths for bicycles along University Boulevard within the study corridor. Additionally, there are no designated bicycle parking areas or separated pedestrian signals (other than those located at traffic signals) along University Boulevard. Adjacent to the study corridor, bicycle lanes are present along Goldenrod Road. The Goldenrod Road bicycle lanes are five feet wide delineated with white pavement markings, as depicted in **Figure 7-6**. There are no bicycle lanes along Semoran Boulevard, Driggs Drive, Forsyth Road, or Metric Drive.

Figure 7-6: Existing Bicycle Facilities on Goldenrod Road north of University Boulevard

7.11.2 Pedestrian Facilities

An Americans with Disabilities Act (ADA) Compliance field review was conducted on February 7th, 2024, in order to observe the existing pedestrian facilities, and to verify that the existing pedestrian and bicycle facilities were meeting ADA minimum standards. This involved items such as measuring the width of curb ramps, the cross slope of cross walks, the presence of detectable warnings, and the height of pedestrian push buttons. **Appendix D** includes a writeup and annotated base map from this field review.

Sidewalks are present along both the south and north side of University Boulevard along the entire length of the study corridor. The sidewalk along the north side of the road is seven feet wide, while the sidewalk along the south side of the road is five feet wide. The sidewalk is generally separated from the roadway with a 10-foot-wide sodded strip. Mast arm columns are located within the sidewalk at the southeast and southwest corners of the intersection of University Boulevard and Driggs Drive, along with the southeast and northeast corners of the intersection of University Boulevard and Goldenrod Road. These mast arm columns reduce the effective width of the sidewalk at these locations.

Crosswalks exist along the corridor at all four legs of each of the signalized intersections, except for the west leg of the intersection of University Boulevard and Metric Drive. Right-turn channelization islands exist at the southeast and northeast corners of the intersection of University Boulevard and Semoran Boulevard, along with southeast and northwest corners of the intersection of University Boulevard and Goldenrod Road. These channelization islands provide refuge for pedestrians, along with reducing the length of the crosswalk. The pedestrian features at the intersection of University Boulevard and Goldenrod Road are shown in **Figure 7-7**. Additionally, the crosswalk at the west leg of the intersection of University Boulevard and SR 436 is worn, making it difficult to see, and needs to be restriped.

All of the curb ramps at all the signalized intersections within the study corridor are equipped with detectable warning strips, with the exception of the northwest, northeast, and southeast corners of the intersection of University Boulevard and Metric Drive. However, the vast majority of the unsignalized intersections along the corridor lack detectable warning strips.

Sidewalks are present along both the north and south side of Scarlet Road west of the study corridor. Sidewalks continue along the north and south sides of University Boulevard east of Goldenrod Road. Additionally, sidewalks are present along both sides of Semoran Boulevard, Forsyth Road, Metric Drive, and Goldenrod Road leading into the study corridor, along with the west side of Driggs Drive.

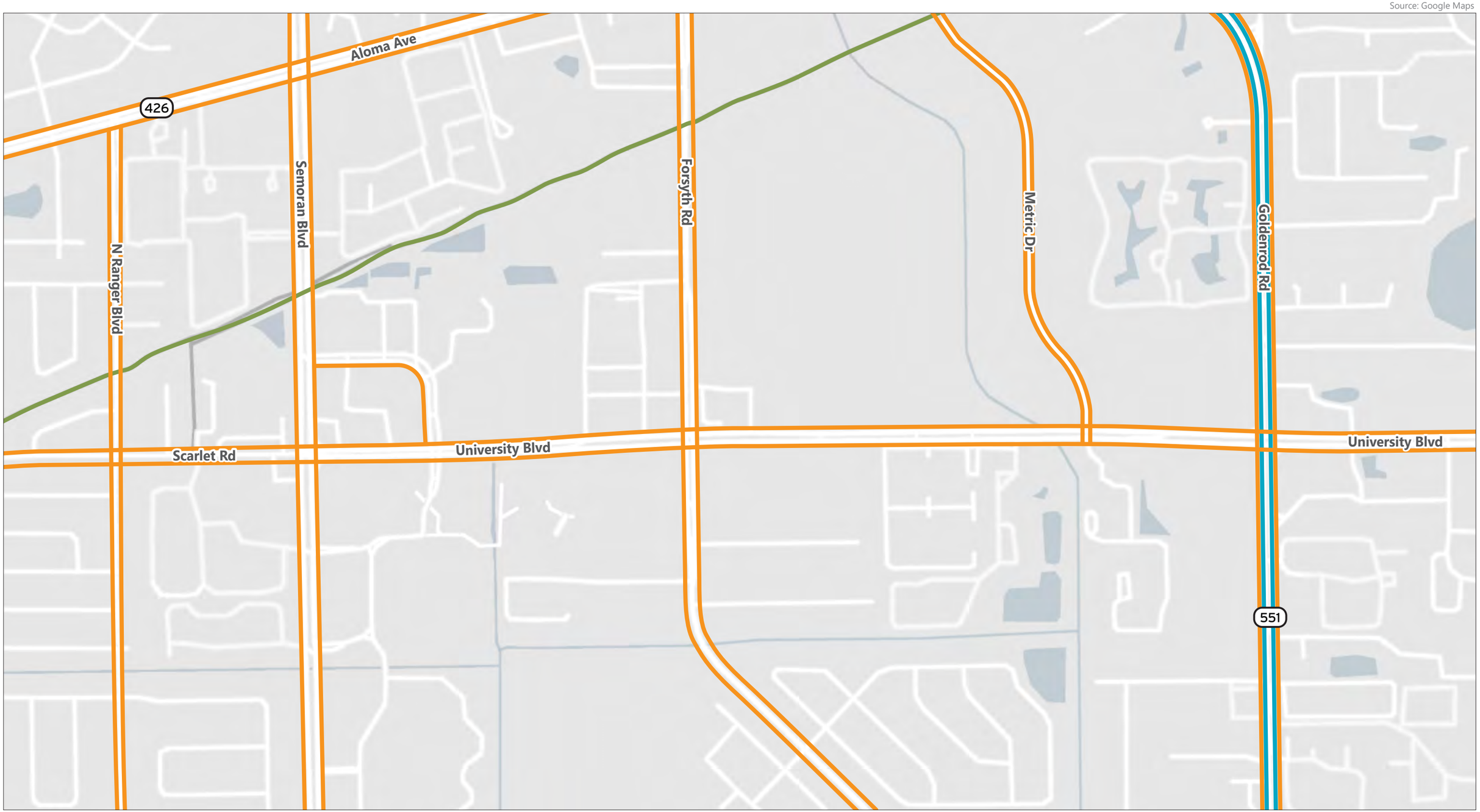
Figure 7-7: Existing Pedestrian Facilities at Goldenrod Road

7.11.3 Cady Way Trail

Cady Way Trail is a 12-foot-wide urban trail that connects Fashion Square Mall to the Cross Seminole Trail, and includes a trail loop around Lake Baldwin in addition to a trail spur around Lake Susannah. Cady Way Trail is one section of a larger regional trail network throughout Orange and Seminole Counties. Cady Way Trail connects various restaurants, retail, and employment centers, such as Fashion Square Mall, Downtown Baldwin Park, and the Executive Drive offices. At its closest point to the corridor, it is located approximately 1,000 feet north of the intersection of University Boulevard and Semoran Boulevard. Approximately 3,000 feet west of the intersection of University Boulevard and South Semoran Boulevard, Cady Way Trail leads to Ward Park, which contains baseball fields, a football stadium, tennis courts, pickleball courts, a playground, a pool, and several general-purpose fields. See **Figure 7-8** for an image of Cady Way trail near Ward Park. See **Figure 7-9** for a figure of the location of the bicycle and pedestrian facilities adjacent to the University Boulevard study corridor.

Figure 7-8: Cady Way Trail near Ward Park

Source: Google Maps



N

- Sidewalks
- Bike Lanes
- Cady Way Trail

Figure 7-9

Existing Bicycle/Pedestrian Facilities
University Boulevard
Pedestrian/Cyclist Safety Study

7.12 Truck, Freight, Strategic Intermodal System (SIS), and Evacuation Routes

Semoran Boulevard (Truck AADT of 2,320) is a designated freight mobility corridor, and University Boulevard (Truck AADT of 1,587) and Forsyth Road (Truck AADT of 1,034) are designated Freight distribution routes by MetroPlan Orlando. No roadways within the immediate vicinity of the University Boulevard study corridor are considered Strategic Intermodal System (SIS) or Evacuation Routes by FDOT. The nearest SIS and Evacuation Routes to the study corridor are SR 408 (Truck AADT of 4,690) and SR 417 (Truck AADT of 7,004).

7.13 Intelligent Transportation Systems (ITS) Features

Traffic signals within the study area are managed by a central Traffic Management Center (TMC) that provides video monitoring, signal timing control, and emergency monitoring and coordination throughout Orange County. **Table 7-8** and **Figure 7-10** summarize the Intelligent Transportation Systems (ITS) features within the immediate study area. Fiber optic cable, which enables improved connection with the TMC and increased data transmission, is present along University Boulevard from Semoran Boulevard to SR 434 (Alafaya Trail). Nearby Semoran Boulevard and Alafaya Trail are also outfitted with fiber, as well as Dean Road south of University Boulevard.

Orange County operates its own Advanced Traffic Management System (ATMS), which provides improved control, operation, and awareness of the transportation network and the ITS equipment deployed within Orange County.

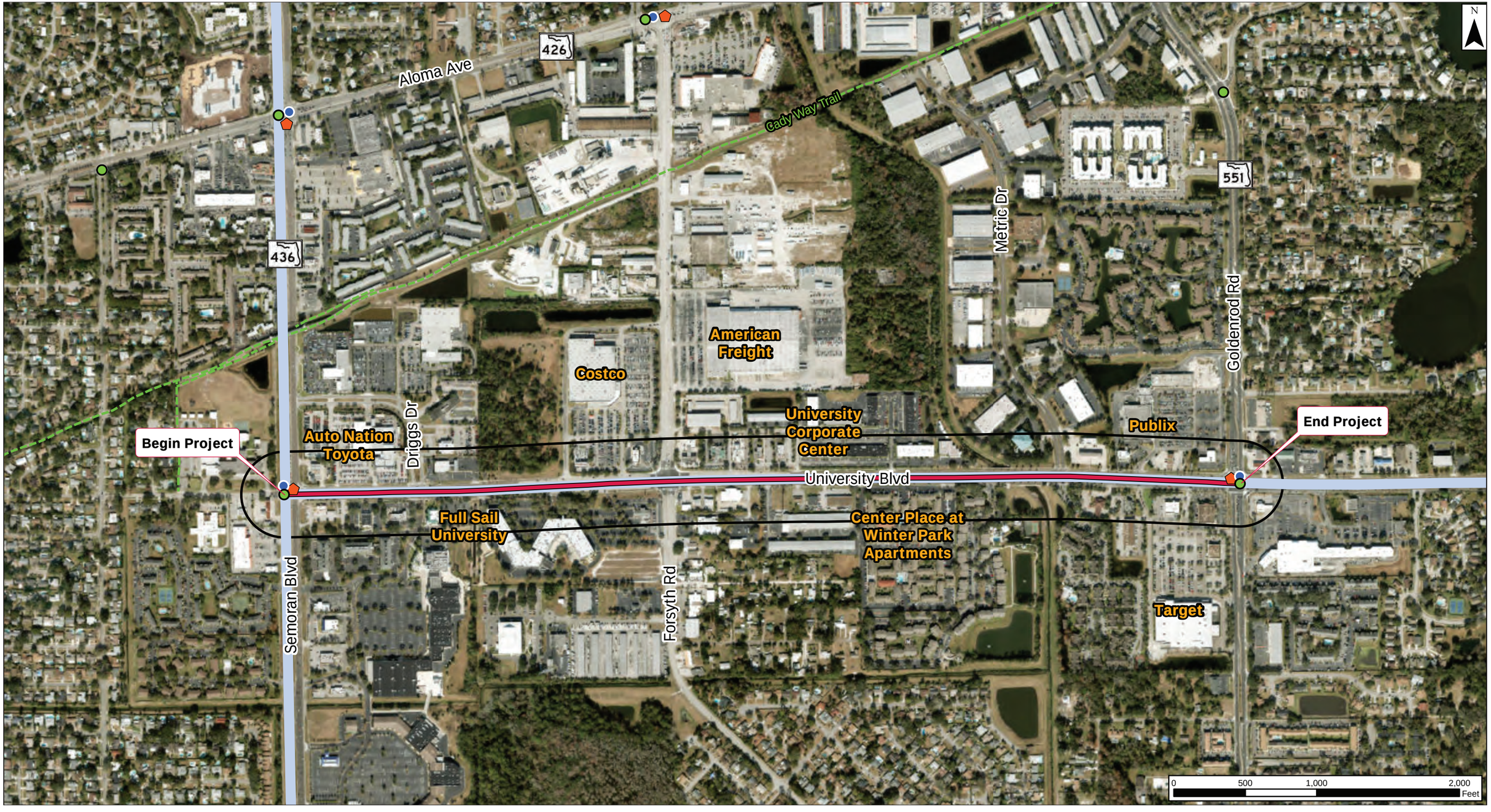
Interconnected and Monitored Traffic Signals (IMTS) are traffic signals that are connected to and accessible through Orange County's ATMS. These IMTS systems are located at the signalized intersections along University Boulevard at Semoran Boulevard and Goldenrod Road. IMTS intersections are also located at nearby intersections along Semoran Boulevard, Goldenrod Road, and Aloma Avenue. Travel-time devices are available along University Boulevard at Semoran Boulevard and at Goldenrod Road. There are no blank out signs (LED signs that minimize undesirable motorist movements during only a portion of the intersection cycle, such as "No-Right Turns") along University Boulevard, but there are several along Aloma avenue and Semoran Boulevard. There are no leading pedestrian phases along the University Boulevard corridor.

Existing conditions for ITS infrastructure were determined using FDOT's *Internal eTraffic* and *Normalized Operational Equipment Management Initiative* websites.

Table 7-8: ITS Equipment near Study Area

ITS Equipment	Roadway	From	To
Fiber Optic Cable	University Boulevard	Semoran Boulevard	Alafaya Trail
Fiber Optic Cable	Semoran Boulevard	Seminole County Line	Colonial Drive
Fiber Optic Cable	Dean Road	University Boulevard	Colonial Drive
Fiber Optic Cable	Alafaya Trail	University Boulevard	Colonial Drive
IMTS	University Boulevard	at Semoran Boulevard	
IMTS	University Boulevard	at Goldenrod Road	
IMTS	Semoran Boulevard	at Aloma Avenue	
IMTS	Semoran Boulevard	at Banchory Road	
IMTS	Goldenrod Road	at Palmetto Avenue	
IMTS	Goldenrod Road	at Bates Road	
IMTS	Aloma Avenue	at Semoran Boulevard	
IMTS	Aloma Avenue	at Forsyth Road	
Travel-Time Device	University Boulevard	at Semoran Boulevard	
Travel-Time Device	University Boulevard	at Goldenrod Road	
Travel-Time Device	Aloma Avenue	at Semoran Boulevard	
Travel-Time Device	Aloma Avenue	at Forsyth Road	
Wrong-Way Beacon	University Boulevard	at SR 417 SB Off-Ramp	
Blank Out Sign	Aloma Avenue	at Semoran Boulevard	
Blank Out Sign	Aloma Avenue	at Goldenrod Road	
Blank Out Sign	Aloma Avenue	at Hall Road	

Source: Orange County GIS (2023), FDOT RCI (2023), FDOT District Five NOEMI Smart Signal View (2024).



Study Corridor
Cady Way Trail
University Blvd Safety Study - 300' Buffer
Fiber Optic Cable
Interconnected & Monitored Traffic Signal
Travel Time Devices
Vehicle Preemption Device

Figure 7-10

Intelligent Transportation Systems (ITS) Infrastructure Map
University Boulevard
Pedestrian/Cyclist Safety Study

8 Connected/Automated Vehicles (CAV)

Through the use of Automated Vehicles (AV) and Connected Vehicles (CV) applications, safety and mobility for all road users on the study corridor can be improved. The University Boulevard study corridor currently does not employ all the technologies to support CAV applications including Wireless Communications, Signal Phase and Timing (SpaT), Roadside Units, On-Board Units, Freight Signal Priority, Transit Signal Priority, Emergency Vehicle Preemption, Vehicle Sensors, among others. However, Orange County in collaboration with FDOT and local agencies, is in the process of enhancing Connected/Automated Vehicles (CAV) readiness of important roadway corridors within the County. Specifically for the study corridor, PedSafe and Connected Vehicle Priority and Preemption (CVPP) technologies hold promise. PedSafe, an innovative pedestrian and bicycle collision avoidance system which operates via CV technologies, is currently being tested on Alafaya Trail near the UCF Campus. CVPP, which is being tested on several corridors in Hillsborough County, Florida, aims to increase mobility for transit and emergency vehicles and all road users.

8.1 MUTCD and CAV

Part 5 of FHWA's 11th edition of the Manual on Uniform Traffic Control Devices (MUTCD), released December 2023, provides an overview of traffic control devices specifically designed to accommodate automated vehicles. The following summarizes Part 5 of the MUTCD.

Signs (Section 5B.01) – Agencies seeking to better accommodate driving automation systems to support AVs, while also potentially benefitting human drivers should consider:

1. Clearly associating the sign location and application with the displayed message to the specific lane or road to which it applies, such as in the case of parallel roads or lanes with different speed limits or restrictions.
2. The practice of sign and information spreading (see Section 2A.20) to limit the amount of information displayed in one location or on one sign to minimize sign clutter.
3. Signs with designs that are otherwise not provided for in this Manual or the "Standard Highway Signs" publication (see Section 1A.05) are designed based on the standardized sign design practices and features as provided for in this Manual for the type of sign, the location, and the characteristics of the roadway on which it is used.
4. The refresh rate of LEDs in the illuminated portion of electronic-display signs to provide for greater consistency in driving automation system detection.

Markings (Section 5B.02) – Agencies seeking to better accommodate driving automation system to support AVs, while also potentially benefitting human drivers, should consider:

1. Normal width longitudinal lines of at least 6 inches in width (see Section 3A.04).
2. Edge lines of at least 6 inches in width (see Sections 3A.04 and 3B.09).
3. Dotted edge line extensions along all entrance and exit ramps, all auxiliary lanes, and all tapers where a deceleration or auxiliary lane is added (see Section 3B.11).
4. Chevron markings in the neutral areas of exit gores to distinguish them from travel lanes (see Section 3B.25).
5. Raised pavement markers only as a supplement to, rather than as a substitute for, pavement markings (see Sections 3B.16 and 3B.17).
6. Uniform contrast markings on light-colored pavements to create greater contrast.
7. Broken lines with uniform marking and gap length (see Section 3A.04).

Temporary Traffic Control (Section 5B.04) – Agencies seeking to better accommodate driving automation system to support AVs, while also potentially benefitting human drivers, in and through temporary traffic control (TTC) zones, should consider:

1. Consistent type, spacing, and mounting height of signs (see Sections 6B.04 and 6F.02).
2. Use of the END ROAD WORK (G20-2) sign to establish the end of the TTC zone (see Section 6H.36).
3. Wider retroreflective material on, or reduced spacing of, channelizing devices to better accommodate driving automation system sensors in nighttime and adverse weather conditions (see Chapter 6K).
4. Continuous markings at the beginning of TTC zones and in lane transitions.
5. Temporary raised pavement markers only as a supplement to, rather than as a substitute for, pavement markings.
6. Removal or obliteration of pavement markings that are no longer applicable as soon as practicable, for long-term stationary operations in the temporary traveled way (see Section 6J.01).

Traffic Control for Bicycle Facilities (Section 5B.06) – Agencies seeking to better accommodate driving automation system to support AVs, while also potentially benefitting human drivers, should consider:

1. Use of an END (R3-9dP) plaque with a BIKE LANE (R3-17) sign to indicate the end of a bicycle lane that is merging with other traffic (see Sections 2B.33 and 9B.04).

2. Use of Bicycle Lane Ends (W9-5) and Bicycle Merging (W9-5a) warning signs in advance of the end of a bicycle lane and where a merging maneuver might occur (see Section 9C.07).

9 Next Steps

The next step for the University Boulevard Pedestrian/Cyclist Safety Study is to analyze future conditions, develop the guiding principles, and identify the issues and opportunities. Alternatives will then be defined and analyzed using the guiding principles and issues and opportunities. Last, a recommended alternative will be selected, and a concept plan will be developed.

Appendix A: LYNX Route Map

LYNX SYSTEM MAP

Schematic Map
Not to Scale

NORTH

FARE OPTIONS

ONE RIDE	ALL-DAY	7-DAY PASS	30-DAY PASS
$2.00 Regular	**$4.50** Regular	**$16.00** Regular	**$50.00** Regular
$1.00 with LYNX discount fare ID	**$2.25** with LYNX discount fare ID	**$8.00** with LYNX discount fare ID	**$25.00** with LYNX discount fare ID
FREE one-way transfer good for 90 minutes upon request. No round trips.	Tell the Operator that you want an all-day pass **before** you put money into the farebox.	Buy your 7-day and 30-day passes online, at the LYNX Central Station ticket window, or from your local vendor. Visit www.golynx.com or call 407-841-LYNX (5969) for more information.	

Special Fares	Regular	with LYNX discount fare ID
Xpress Link 208	**$3.50** one ride **$6.50** all-day **$23.00** 7-day pass **$70.00** 30-day pass	**$1.75** one ride **$3.25** all-day **$11.50** 7-day pass **$35.00** 30-day pass
Polk County Links 416 and 427	**$1.50** one ride	Students **$1.25** Senior/disabled **$0.75**

EXACT FARE REQUIRED No change given. Please have your fare ready.

LYNX Discount Fare IDs are available to Youth riders (between ages 7 and 18 or high school students) and AdvantAge riders (age 65 and older or any person with a certified disability). IDs are available at the Lost and Found department in LYNX Central Station.

FIND YOUR LINK

Link	
1	Winter Park / Altamonte Springs
3	Lake Margaret Drive
6	Dixie Belle Drive
7	S Orange Avenue / Florida Mall
8	W Oak Ridge Road / International Drive
9	Winter Park / Rosemont
10	East US 192 / St. Cloud
11	S Orange Ave / Orlando International Airport
13	University of Central Florida
14	Calvary Towers / Winter Park Village
15	Curry Ford Road / Valencia College East
18	S Orange Avenue / Kissimmee
20	Malibu Street / Pine Hills
21	Universal Studios
23	Winter Park / Springs Village
24	Millenia
25	Mercy Drive / Shader Road
26	Pleasant Hill Road / Poinciana
28	E Colonial Drive / Azalea Park
29	E Colonial Drive / Goldenrod
34	Sanford / Goldsboro
36	Lake Richmond
37	Pine Hills / Florida Mall
38	Downtown Orlando / SeaWorld
40	Americana Boulevard / Universal Orlando
42	International Drive / Orlando Int'l Airport
44	Hiawassee Road / Zellwood
45	Lake Mary
46E	Central FL Regional Hospital / Sanford
46W	West SR 46 / Seminole Towne Center
48	W Colonial Drive / Pine Hills
49	W Colonial Drive / Pine Hills Road
50	Downtown Orlando / Magic Kingdom
51	Conway Road / Orlando International Airport
54	Old Winter Garden Road
55	West US 192 / Crosstown
56	West US 192 / Magic Kingdom
57	John Young Parkway
58	Shingle Creek Circulator
102	Orange Avenue / South 17-92
103	North 17-92 / Sanford
104	East Colonial
105	West Colonial
106	North US 441 / Apopka
107	US 441 / Orlando Florida Mall
108	South US 441 / Kissimmee
111	SeaWorld / Orlando International Airport
125	Silver Star Road Crosstown
313	Winter Park
319	Richmond Heights
405	Apopka Circulator
416	Poinciana / Haines City
426	Poinciana Circulator
427	US 27 / Haines City
434	SR 434 Crosstown / University of Central FL
436N	Fern Park / Apopka
436S	Fern Park / Orlando International Airport
443	Lee Road Crosstown
445	Apopka / West Oaks Mall
Xpress	
208	Sand Lake Road / Downtown Kissimmee
KnightLYNX	
210	Blue / UCF–Waterford Lakes Circulator
211	Green / UCF Campus Area Circulator
212	Red / UCF–Downtown Orlando
Downtown Disney Direct	
300	Downtown Orlando / Hotel Plaza
301	Pine Hills / Animal Kingdom
302	Rosemont / Magic Kingdom
303	Wash. Shores / Disney Hollywood Studios
304	Rio Grande / Vistana Resort
305	Metrowest / All Star Resorts
306	Poinciana / Disney West Side Transfer Cntr.
FastLink	
17-92	Sanford / Downtown Orlando
418	Florida Mall / Meadow Woods / Lake Nona
441	Kissimmee / Downtown Orlando
LYMMO *Free Downtown Orlando Circulator*	
Orange Line	LYNX Central Station / City Hall
Grapefruit Line	Amway Center / Lake Eola
NeighborLink	
Call 407-244-0808 at least 2 hours in advance to request a ride.	
601	Poinciana
603	Southwest Poinciana
604	Intercession City / Campbell City
611	Ocoee
612	Winter Garden
613	Pine Hills
621	East Colonial Drive / Bithlo
622	Oviedo
631	Buena Ventura Lakes
632	North Kissimmee
641	Williamsburg
651	Goldsboro
652	Maitland Center

All Links are wheelchair accessible.

Notice of Title VI Rights:

LYNX operates its programs and services without regard to race, color, religion, gender, age, national origin, disability, or family status in accordance with Title VI of the Civil Rights Act.

Any person who believes he or she has been aggrieved by any unlawful discriminatory practice related to Title VI may file a complaint in writing to LYNX Title VI Officer Desna Hunte, 455 N. Garland Avenue, Orlando, Florida 32801 or by calling 407-254-6117, email dhunte@golynx.com or www.golynx.com.

Information in other languages or accessible formats available upon request.

LEGEND

- **Regular Links**
- Service every 30 minutes or better during day times
- Service every 60 minutes or less frequently
- Select service
- Nonstop express service
- Some trips only
- **FastLinks**
- Stops only as shown
- **NeighborLink Service Area**
- **SunRail line and station**

SEE ROUTE SCHEDULES FOR DETAILED INFO

LYNX SuperStop · Hospital · Point of Interest

WELCOME ABOARD!

LYNX operates 79 Links to great places throughout Central Florida. If you don't see your destination here, **CONTACT US** and we can connect you to the right Link for your trip.

Riding LYNX is also easy on your wallet.
You can pay for your trip as you board the bus:

ONE RIDE	ALL-DAY
$2.00 Regular	**$4.50** Regular
$1.00 with LYNX discount fare ID	**$2.25** with LYNX discount fare ID

LYMMO is currently Fare Free.

Please see individual Link schedules for more information.

EXACT FARE REQUIRED
No change given.

Ready to roll? Look inside for more info...

Public Notice of Title VI Rights
The Central Florida Regional Transportation Authority d/b/a LYNX:

- LYNX operates its programs and services without regard to race, color, and national origin in accordance with Title VI of the Civil Rights Act. Any person who believes they have been aggrieved by any unlawful discriminatory practice under Title VI may file a complaint with LYNX.
- For more information on LYNX' Civil Rights Program, and the procedures to file a complaint, contact, 407-841-2279 ext. 6171, email Title6officer@golynx.com, or visit our administrative office at 455 N. Garland Avenue, Orlando, Florida 32801. For more information, visit www.golynx.com.
- Inquiries or complaints related to Title VI may be sent in writing to LYNX Title VI Officer, 455 N. Garland Avenue, Orlando, Florida 32801.
- A complainant may file a complaint directly with the Federal Transit Administration by filing a complaint with the Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- If information is needed in another language, contact 407-841-2279.

LYNX®

LYNX is the public transit provider for Orange, Osceola and Seminole counties. Additional connectivity with Lake and Polk counties.

CONTACT US for information on fares, bus stops, schedules and trip planning:

407-841-5969 *phone*

golynx.com *web*

THANK YOU FOR RIDING LYNX!

BROCHURE

Ⓢ UCF AREA

Links 13, 15, 104, 434, NL621, NL822

DIRECT SERVICE TO:

- Bithlo
- Downtown Orlando
- Oviedo Seminole State College Altamonte and Oviedo Campuses
- University of Central Florida
- Orlando VA Medical Center
- Waterford Lakes Town Center

LYNX®

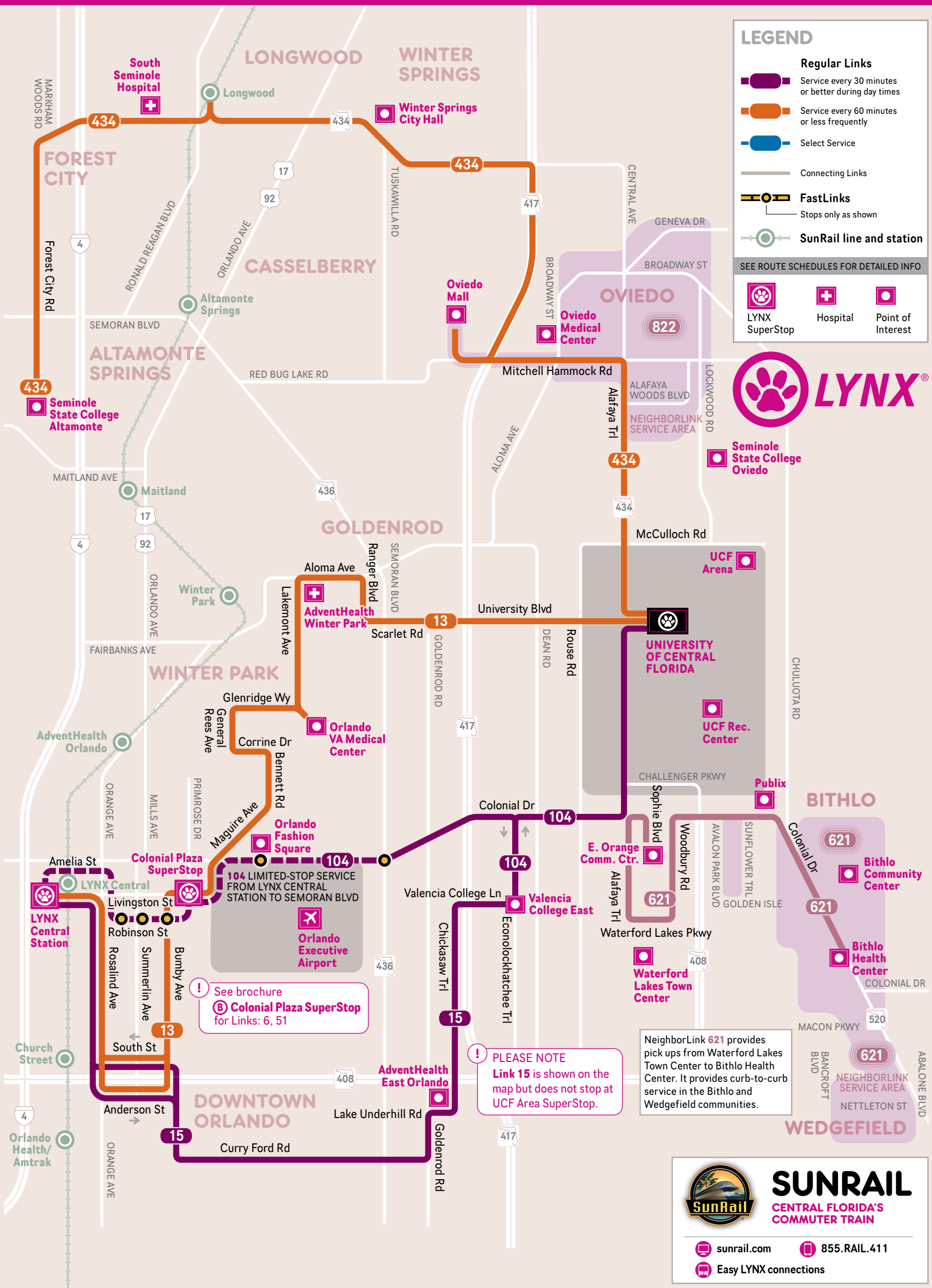
Effective: AUGUST 2023

Other accessible formats available upon request

UCF AREA

Schematic Map Not to Scale

NORTH



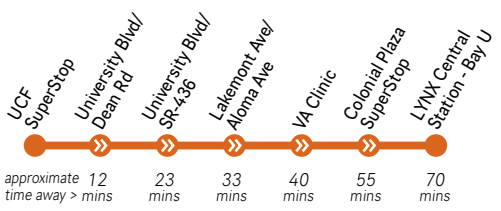
BUS SERVICE FREQUENCY

To plan your trip or view full bus schedule visit **golynx.com**

EFFECTIVE AUGUST 2023 - ALL BUS SERVICE FREQUENCIES ARE APPROXIMATE AND SUBJECT TO CHANGE

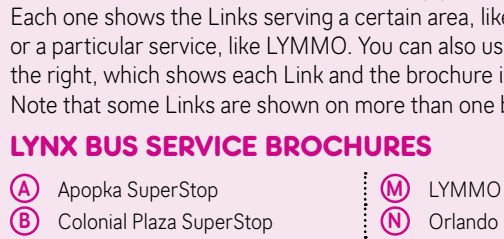
Times indicate departures from the BEGINNING of the route. Diagrams show major points on each Link – buses make additional local stops along the way.

13 INBOUND
to LYNX Central Station



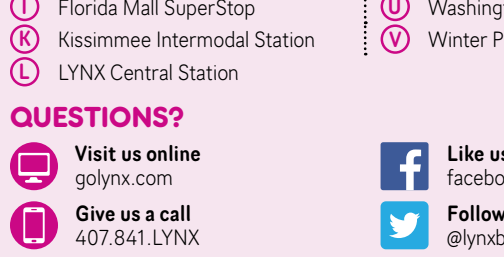
MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		6:00 am	6:05 am	6:10 am
DAY	*6–7 am*	:50	:55	--
	7–8 am			:05
	8 am–1 pm			:00
	1–2 pm	--		
	2–6 pm	:00		
EVE	*6–7 pm*		--	
	7–9 pm		:00	
NIGHT	*9–11 pm*			--
LAST TRIP		11:00 pm	11:00 pm	9:00 pm

13 OUTBOUND
to University of Central Florida



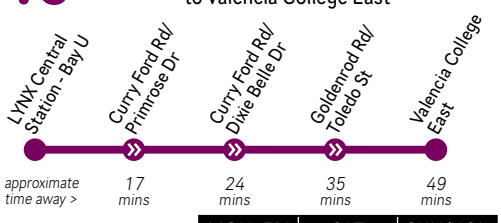
MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:30 am	5:30 am	6:45 am
DAY	*6 am–7 pm*	:30	:30	:45
NIGHT	*7–11 pm*	:45	:45	:45
LAST TRIP		10:45 pm	10:45 pm	7:45 pm

15 INBOUND
to LYNX Central Station



MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:25 am	5:30 am	5:25 am
DAY	*5–6 am*	:25, :55	:30	:25
	6–7 am	:20, :50	:00 :25 :55	:20
	7–8 am	:15, :45	:25, :55	
	8 am–5 pm		:20, :50	
EVE	*5–6 pm*	:15, :50		
	6–7 pm	:20, :50		
	7–8 pm	:25, :55		
NIGHT	*8–11 pm*	:25	:20	
LAST TRIP		11:25 pm	10:20 pm	9:20 pm

15 OUTBOUND
to Valencia College East

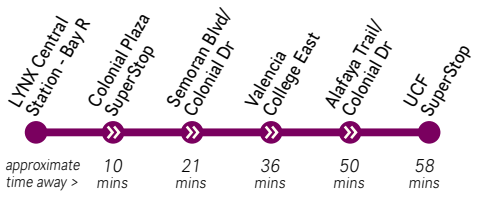


MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:45 am	4:45 am	5:15 am
DAY	*5 am–6 pm*	:15, :45	:45	:15
EVE	*6–7 pm*		:15, :45	
NIGHT	*7–11 pm*	:15	:15	
LAST TRIP		11:15 pm	9:15 pm	8:15 pm

104 INBOUND
to LYNX Central Station

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:35 am	5:10 am	5:10 am
DAY	*5–6 am*	:05, :30,	:40	:10
	6–7 am	:25, :55	:10, :40	:05
	7–8 am		:05, :30	:00
	8–9 am		:00, :30	
	9 am–5pm			
	5–6 pm	:30		
	6–7 pm	:00, :30	:10	
	7–8 pm	:00		
NIGHT	*8–9 pm*	:05		
	9–10 pm	:15		--
LAST TRIP		10:15 pm	10:10 pm	8:00 pm

104 OUTBOUND
to University of Central Florida

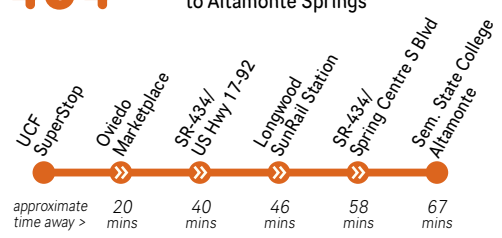


MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:20 am	5:15 am	5:45 am
DAY	*5–6 am*	:45	:45	:45
	6 am–7 pm	:15, :45	:15, :45	
NIGHT	*7–10 pm*	:15	:15	
LAST TRIP		10:15 pm	10:15 pm	7:45 pm

434 EASTBOUND
to University of Central Florida

MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:20 am	5:30 am	NO SERVICE
6–9 am	:15	:30	
9 am–8 pm	:15	:25	
LAST TRIP	8:15 pm	8:25 pm	

434 WESTBOUND
to Altamonte Springs

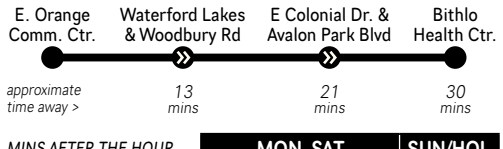


MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:50 am	6:00 am	NO SERVICE
ALL-DAY	:45	:55	
LAST TRIP	7:45 pm	7:55 pm	

621 WESTBOUND
to Alafaya Trl & Colonial Dr

MINS AFTER THE HOUR	MON–SAT	SUN/HOL
FIRST TRIP	5:10 am	NO SERVICE
DAY	:05	
LAST TRIP	6:05 pm	

621 EASTBOUND
to Bithlo Health Center



MINS AFTER THE HOUR	MON–SAT	SUN/HOL
FIRST TRIP	5:45 am	NO SERVICE
DAY	:45	
LAST TRIP	6:45 pm	

NeighborLink 621 *is based at Colonial Drive and Sophie Boulevard It provides pick ups along Colonial Drive between Alafaya Trail and the Bithlo Health Center. It operates as a curb-to-curb service within Bithlo, Avalon Park and Wedgefield.*

Passengers must call 407-244-0808 at least two hours in advance to arrange a pickup in the curb-to-curb service areas of Bithlo and Wedgefield or use the NeighborLink app.

822 NEIGHBORLINK
Oviedo

NeighborLink 822 *is based out of the Oviedo Medical Center and operates a service area primarily within the City of Oviedo. It also provides service to Seminole State College - Oviedo Campus.*

Passengers must call 407-244-0808 at least two hours in advance to arrange a pickup or use the NeighborLink app.

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		6:10 am	6:20 am	NO SERVICE
DAY	*6 am–7 pm*	:10	:20	
LAST TRIP		7:10 pm	7:20 pm	

LYNX PawPass · LYNX See & Say · NeighborLink

Download our apps to help you pay your fare, report safety and security concerns and schedule your NeighborLink ride.

Download on the App Store · GET IT ON Google Play

CAN'T FIND YOUR LINK?

LYNX has 21 brochures, listed below, to help you find your bus. Each one shows the Links serving a certain area, like Fern Park, or a particular service, like LYMMO. You can also use the table to the right, which shows each Link and the brochure it appears on. Note that some Links are shown on more than one brochure.

LYNX BUS SERVICE BROCHURES

- (A) Apopka SuperStop
- (B) Colonial Plaza SuperStop
- (C) Colonial Dr East/West
- (D) Colonial Dr West/West Oaks Mall
- (E) Destination Parkway
- (F) Dixie Belle Dr & Gatlin Ave
- (G) FastLink Services
- (H) Fern Park SuperStop
- (I) Florida Mall SuperStop
- (K) Kissimmee Intermodal Station
- (L) LYNX Central Station
- (M) LYMMO
- (N) Orlando International Airport
- (O) Poinciana Walmart Center
- (P) Rosemont SuperStop
- (Q) Sanford Seminole Centre
- (R) SunRail Connections
- (S) UCF Area
- (T) Disney Area
- (U) Washington Shores SuperStop
- (V) Winter Park Village Area

QUESTIONS?

Visit us online
golynx.com

Give us a call
407.841.LYNX

Like us on Facebook
facebook.com/golynx

Follow us on Twitter
@lynxbusorlando

Link	Brochure
1	(R)(V)
3	(F)(L)
6	(B)(F)
7	(I)(L)
8	(E)(L)
9	(P)(R)(V)
10	(K)
11	(L)(N)(R)
13	(B)(L)(S)
15	(L)(S)
18	(K)(L)(R)
19	(L)(U)
20	(L)(U)
21	(L)(U)
23	(P)(R)(V)
24	(U)
25	(L)(U)
26	(K)(O)
28	(C)(L)
29	(C)(L)
34	(Q)(R)
36	(L)(U)
37	(I)
38	(E)(L)

Link	Brochure
40	(L)(R)(U)
42	(E)(I)(N)(R)
44	(A)
45	(Q)(R)
46E	(Q)(R)
46W	(Q)(R)
48	(C)(L)
49	(C)(L)
51	(B)(L)(N)
54	(D)(L)
55	(K)
56	(K)(T)
57	(K)(U)
102	(H)(L)(R)(V)
103	(H)(Q)
104	(B)(C)(L)(S)
105	(C)(D)(L)
106	(A)(L)(P)
107	(I)(L)
108	(I)(K)
111	(E)(I)(N)(R)
125	(D)(L)(R)
155	(K)(R)
300	(L)(T)

Link	Brochure
301	(T)
302	(P)(T)
303	(T)(U)
304	(T)
306	(O)(R)(T)
350	(E)(L)(T)
405	(A)
416	(O)
426	(O)
434	(R)(S)
436N	(A)(H)(R)
436S	(F)(H)(N)
443	(P)(R)(V)
612	(K)

Link	Brochure
FastLink	
407	(G)(K)(N)
418	(G)(I)(R)
441	(G)(I)(K)(L)
LYMMO	
(L)(M)	Orange Line
(L)(M)	Lime Line
(M)	Grapefruit Line
NeighborLink	
601	(O)
603	(O)
604	(O)(R)
621	(S)
641	(E)
652	(A)(H)(R)(V)
811	(D)
812	(C)(D)
813	(D)
822	(S)
831	(K)(R)
851	(Q)(R)

WELCOME ABOARD!

LYNX operates 79 Links to great places throughout Central Florida. If you don't see your destination here, **CONTACT US** and we can connect you to the right Link for your trip.

Riding LYNX is also easy on your wallet. You can pay for your trip as you board the bus:

ONE RIDE	ALL-DAY
$2.00 Regular	**$4.50** Regular
$1.00 with LYNX discount fare ID	**$2.25** with LYNX discount fare ID

LYMMO is currently Fare Free.

Please see individual Link schedules for more information.

EXACT FARE REQUIRED
No change given.

Ready to roll? Look inside for more info...

Public Notice of Title VI Rights
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407-841-5969 *phone*

golynx.com *web*

THANK YOU FOR RIDING LYNX!

BROCHURE

C COLONIAL DRIVE EAST/WEST

Links 28, 29, 48, 49, 104, 105, NeighborLink 812

DIRECT SERVICE TO:

- Azalea Park
- Downtown Orlando
- Orlando Fashion Square
- Pine Hills
- University of Central Florida
- Valencia College
- West Oaks Mall
- Winter Garden

LYNX®

Effective: AUGUST 2023

Other accessible formats available upon request

EAST COLONIAL DRIVE

Schematic Map Not to Scale

NORTH

LYNX PawPass · LYNX See & Say · NeighborLink

Download our apps to help you pay your fare, report safety and security concerns and schedule your NeighborLink ride.

Download on the App Store · GET IT ON Google Play

436S TO FERN PARK SUPERSTOP

Aloma Ave · 29 · Forsyth Rd · GOLDENROD

See brochure Ⓢ UCF Area for Links: 13, 434, NL621, NL822

University of Central Florida SuperStop

UNIVERSITY BLVD · 104 · Alafaya Trl · DEAN RD · ROUSE RD · 417 · 551 · 436 · 436S · BATES RD · Goldenrod Rd · Hanging Moss Rd

AdventHealth Orlando

125 TO WEST OAKS MALL · Princeton St · 4 · 17 · 92 · CORRINE DR · VIRGINIA DR · Edgewater Dr · Mills Ave · BUMBY AVE · PRIMROSE DR · MAGUIRE BLVD

See brochure Ⓑ Colonial Plaza SuperStop for Links: 6, 13, 51, 313

29 · Semoran Blvd · Colonial Dr · 104 · Econlockhatchee Trl · 50 · UNION PARK

Orlando Fashion Square

Garland Ave · Colonial Dr · 28 · 29 · LYNX Central Amelia St · Colonial Plaza SuperStop · 104 · 104 LIMITED-STOP SERVICE FROM LYNX CENTRAL STATION TO SEMORAN BLVD

Colonial High School · OLEANDER DR · VALENCIA COLLEGE LN · Valencia College East

LYNX Central Station · Robinson St · Livingston St · Orlando Executive Airport · ORLANDO · Church Street · Rosalind Ave · Summerlin Ave · CRYSTAL LAKE DR · Semoran Blvd · 28 · Dahlia Dr · Bamboo Dr · Alder Dr · Oxalis Ave · 408 · AZALEA PARK · CURRY FORD RD · Orlando Health/ Amtrak · 436S TO ORLANDO INT'L AIRPORT · Grant St

LEGEND

- Regular Links — Service every 30 minutes or better during day times
- Service every 60 minutes or less frequently
- Select Service
- Connecting Links
- FastLinks — Stops only as shown
- SunRail line and station

SEE ROUTE SCHEDULES FOR DETAILED INFO

LYNX SuperStop · Hospital · Point of Interest

WEST COLONIAL DRIVE

Lake Apopka · FULLER CROSS RD · 429 · CREST AVE · MAIN ST · PARK AVE · PLANT ST · CROWN POINT RD · OAKLAND AVE · OAKLAND · 812 NEIGHBORLINK SERVICE AREA

See brochure Ⓓ Colonial Dr West/West Oaks Mall for Links: 54, 125, 312, NL811, NL812, NL813

North Ln · Powers Dr · Indian Hill Rd · PINE HILLS · Belco Dr · Silver Hills Center · Evans High School · Shader Rd · 25 · 441 · Silver Star Rd · Maury Rd · Edgewater Dr · 125 TO LYNX CENTRAL STATION · Princeton St · Walmart · 48 · 49 · SILVER STAR RD · Clarke Rd · OCOEE · 37 · APOPKA-VINELAND RD · BALBOA DR · Hiawassee Rd · Powers Dr · KIRKMAN RD · Pine Hills Rd · Mercy Dr · Ferguson Ave · John Young Pkwy · ORANGE BLOSSOM TRL · 4

Winter Garden Shopping Center · Westside Tech · 9th St · Carter Rd · Story Rd · Bluford Ave · Blackwood Ave · 125 · West Oaks Mall SuperStop · 54 · 105 · 50 · Colonial Dr · Health Center Hospital · Old Winter Garden Rd · Lake Sherwood · Florida Dept of Children & Families · Pine Hills Shopping Center · Central Florida Fairgrounds · 105 LIMITED-STOP SERVICE FROM LYNX CENTRAL STN. TO POWERS DR · Greyhound · Amelia St · LYNX Central Station · Hughey Ave

Connect with LakeXpress 50 to Lake County at Park Ave

FLORIDA'S TURNPIKE · WINTER GARDEN · West Orange High School · BEULAH RD · 429 · 408 · Old Winter Garden Rd · Washington St · ORLANDO · Church Street

Winter Garden Village · 812 NEIGHBORLINK SERVICE AREA · STONEBROOK WEST PKWY · AVALON RD

SUNRAIL — CENTRAL FLORIDA'S COMMUTER TRAIN

sunrail.com · 855.RAIL.411 · Easy LYNX connections

Westgate Dr · Kirkman Rd · Lake Hiawassee · HIAWASSEE RD · APOPKA-VINELAND RD · Valencia College Dr · Valencia College West · 37 TO FLORIDA MALL · JOHN YOUNG PKWY · WESTMORELAND DR · 441 · Orlando Health/ Amtrak

BUS SERVICE FREQUENCY

To plan your trip or view full bus schedule visit **golynx.com**

EFFECTIVE AUGUST 2023 - ALL BUS SERVICE FREQUENCIES ARE APPROXIMATE AND SUBJECT TO CHANGE

Times indicate departures from the BEGINNING of the route. Diagrams show major points on each Link – buses make additional local stops along the way.

28 INBOUND to LYNX Central Station

Semoran Blvd/ Curry Ford Rd → Semoran Blvd/ Colonial Dr → Orlando Fashion Square → LYNX Central Station - Bay L

approximate time away > 15 mins 22 mins 40 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:55 am	5:35 am	5:41 am
DAY	5–6 am	:25, :49	:35	:41
	6–7 am	:19, :45		
	7–8 am	:12, :40		:40
	8–9 am	:09, :41		
	9 am–1 pm	:10, :40	:31	:38
	1–2pm	:10, :35		:37
	2–4 pm	:05, :35		
	4–5 pm	:08, :40		:36
	5–6 pm	:11, :42		
EVE	6–7 pm	:14, :44		:40
	7–8 pm	:14, :45	:36	:39
NIGHT	8–9 pm	:30		--
	9–11 pm	:36		
LAST TRIP		11:38 pm	9:36 pm	7:39 pm

28 OUTBOUND to Azalea Park

LYNX Central Station - Bay L → Orlando Fashion Square → Semoran Blvd/ Colonial Dr → Bamboo Dr/ Alder Dr → Semoran Blvd/ Curry Ford Rd

approximate time away > 15 mins 22* mins 28 mins 40 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:15 am	4:45 am	4:45 am
DAY	5 am–7 pm	:15, :45	:45	:45
NIGHT	7–11 pm	:45		--
LAST TRIP		11:45 pm	8:45 pm	6:45 pm

** Weekday 5:05 am trip departs from Semoran Blvd & Colonial Dr*

29 INBOUND to LYNX Central Station

Aloma Ave/ Forsyth Rd → Goldenrod Rd/ Bates Rd → Semoran Blvd/ Colonial Dr → Orlando Fashion Square → LYNX Central Station - Bay L

approximate time away > 8 mins 17 mins 24 mins 42 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:28 am	5:59 am	6:06 am
DAY	5–6 am	:28, :56	:59	--
	6–8 am	:20, :48		:06
	8–9 am	:18, :48	:56	
	9–10 am	:18, :50	:54	:02
	10 am–1 pm	:20, :50	:54	:00
	1–2 pm	:15, :45	:55	
	2–3 pm			:00, :57
	3–4 pm			:58
	4–5 pm	:18, :48		
	5–6 pm	:17, :52		--
EVE	6–7 pm	:23, :52		:02
	7–8 pm	:22, :52	:59	:03
NIGHT	8–9 pm	:55		:01
	9–10 pm	:59	--	--
	10–11 pm	--	--	--
	11 pm–12 am	:01, :45	--	--
LAST TRIP		12:45 am	10:03 pm	8:01 pm

29 OUTBOUND to Goldenrod

LYNX Central Station - Bay L → Orlando Fashion Square → Semoran Blvd/ Colonial Dr → Aloma Ave/ Forsyth Rd

approximate time away > 15 mins 22 mins 35 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:35 am	5:15 am	5:15 am
DAY	5–6 am	:05, :30	:15	:15
	6 am–7 pm	:00, :30		
NIGHT	7 pm–12 am	:15		--
LAST TRIP		12:15 am	9:15 pm	7:15 pm

48 INBOUND to LYNX Central Station

Silver Star Rd/ Hiawassee Rd → Colonial Dr/ Pine Hills Rd → Colonial Dr/ John Young Pkwy → LYNX Central Station - Bay N

approximate time away > 18 mins 24 mins 37 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		3:50 am	4:35 am	4:35 am
DAY	4–5 am	:20, :50	:35	:35
	5–6 am	:15, :45	:30	:30
	6–7 am	:15, :40		
	7 am–5 pm	:10, :40		
	5–6 pm	:10, :45		
EVE	6–7 pm	:15, :45		
NIGHT	7–11 pm	:30		
LAST TRIP		11:30 pm	9:30 pm	7:30 pm

48 OUTBOUND to Pine Hills

LYNX Central Station - Bay N → Colonial Dr/ John Young Pkwy → Colonial Dr/ Pine Hills Rd → Silver Star Rd/ Hiawassee Rd

approximate time away > 12 mins 18 mins 35 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:15 am	4:45 am	4:50 am
DAY	5 am–7 pm	:15, :45	:45	:45
EVE	7–11 pm	:45		
LAST TRIP		11:45 pm	9:45 pm	9:45 pm

49 INBOUND to LYNX Central Station

Silver Hills Center → Colonial Dr/ Pine Hills Rd → Colonial Dr/ John Young Pkwy → LYNX Central Station - Bay N

approximate time away > 13 mins 19 mins 32 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:40 am	5:10 am	5:05 am
DAY	5–7 am	:05, :35	:10	:05
	7 am–6 pm	:00, :30	:05	
EVE	6–7 pm	:05, :35		
NIGHT	7–9 pm	:05		
	9 pm–12 am		:10	--
LAST TRIP		12:05 am	10:10 pm	8:05 pm

49 OUTBOUND to Silver Hills Center

LYNX Central Station - Bay N → Colonial Dr/ John Young Pkwy → Colonial Dr/ Pine Hills Rd → North Ln/ Pine Hills Rd → Silver Hills Center

approximate time away > 12 mins 18 mins 37 mins 42 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:30 am*	6:15 am*	6:15 am*
DAY	5–6 am	:30*	--	--
EVE	6–7 pm	:00, :30	:15	:15
NIGHT	7 pm–12 am	:15		
LAST TRIP		12:15 am	10:15 pm	9:15 pm

** Trips Depart from Silver Hills Center and serve North Ln/Pine Hills Rd at 4:23 & 5:18 am (Mon-Fri), 4:50 & 5:50 am (Sat), 4:45 & 5:45 am (Sun).*

812 NEIGHBORLINK Winter Garden

NeighborLink 812 *is based out of the Winter Garden Regional Shopping Center at SR 50 and Park Avenue. The service area includes the communities of Winter Garden and Oakland.*

Passengers must call 407-244-0808 at least two hours in advance to arrange a pickup or use the NeighborLink app.

MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	6:00 am	6:30 am	NO SERVICE
ALL-DAY	:00*	:30	
LAST TRIP	7:25 pm	7:30 pm	

** 90 minute service after 6:00 pm Monday to Friday*

104 INBOUND to LYNX Central Station

UCF SuperStop → Alafaya Trail/ Colonial Dr → Valencia College East → Semoran Blvd/ Colonial Dr → Colonial Plaza SuperStop → LYNX Central Station - Bay R

approximate time away > 13 mins 28 mins 45 mins 54 mins 65 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		4:35 am	5:10 am	5:10 am
DAY	5–6 am	:05, :30,	:40	:10
	6–7 am	:25, :55	:10, :40	:05
	7–8 am		:05, :30	:00
	8–9 am			
	9 am–5pm		:00, :30	
	5–6 pm	:30		
	6–7 pm	:00, :30	:10	
	7–8 pm	:00		
NIGHT	8–9 pm	:05		
	9–10 pm	:15		--
LAST TRIP		10:15 pm	10:10 pm	8:00 pm

104 OUTBOUND to University of Central Florida

LYNX Central Station - Bay R → Colonial Plaza SuperStop → Semoran Blvd/ Colonial Dr → Valencia College East → Alafaya Trail/ Colonial Dr → UCF SuperStop

approximate time away > 10 mins 21 mins 36 mins 50 mins 58 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:20 am	5:15 am	5:45 am
DAY	5–6 am	:45	:45	:45
	6 am–7 pm	:15, :45	:15, :45	
NIGHT	7–10 pm	:15	:15	
LAST TRIP		10:15 pm	10:15 pm	7:45 pm

105 INBOUND to LYNX Central Station

Colonial Dr/* Park Ave^ → Blackwood Ave/ Old Winter Gdn. Rd. → West Oaks Mall• SuperStop → Colonial Dr/ Hiawassee Rd → Colonial Dr/ John Young Pkwy → LYNX Central Station - Bay Q

approximate time away > 26 mins 29 mins 41 mins 54 mins 65 mins

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:02 am*	5:08 am*	5:00 am*
DAY	5–6 am	:30•, :32*,	:33	:00
	6–7 am	:00, :30	:03, :33 :35•	
	7–8 am		:29, :35	
	9–10 am	:25, :55	:29, :30	
	10 am–12 pm			
	12–2pm			
	2–4 pm		:31, :35	
	4–5 pm	:30		
EVE	5–6 pm	:00, :30	:34, :35	
	6–7 pm		:34, :40	
	7–9 pm	:05	:15	--
EVE	9–10 pm	:35	:38	
LAST TRIP		10:35 pm*	10:43 pm*	7:00 pm

** Trips start from West Oaks Mall SuperStop to LYNX Central Station*

• Trips shown in purple start from Winter Garden Shopping Center and serve West Oaks Mall SuperStop to LYNX Central Station. All trips start from Winter Garden Shopping Center 5:30 am to 8:05 pm (Mon-Fri) and Hourly (Sat)

^ All Sunday trips starts from West Oaks Mall

105 OUTBOUND to Winter Garden

LYNX Central Station - Bay Q → Colonial Dr/ John Young Pkwy → Colonial Dr/ Hiawassee Rd → West Oaks Mall• SuperStop → Blackwood Ave/ Old Winter Gdn. Rd. → Colonial Dr/* Park Ave^

approximate time away > 13 mins 28 mins 40 (33) mins Sat 43 (36) mins Sat 65 (54) mins Sat

MINS AFTER THE HOUR		MON–FRI	SAT	SUN/HOL
FIRST TRIP		5:15 am*	5:20 am*	6:15 am•
DAY	5–6 am	:15*, :45*	:45•	:15•
	6 am–7 pm		:15*, :45•	
EVE	7–9 pm	:15*	:15*	
NIGHT	9–11 pm	:15•	:15•	
LAST TRIP		11:15 pm•	11:15 pm•	9:15 pm•

• Trips end at West Oaks Mall SuperStop. Early morning trip starts from West Oaks Mall SuperStop to Park Ave at 5:04 am (Mon-Fri)

** Trips end at Colonial Dr/Park Ave*

^ All Sunday trips serve Blackwood Ave/Old Winter Garden Rd

CAN'T FIND YOUR LINK?

LYNX has 21 brochures, listed below, to help you find your bus. Each one shows the Links serving a certain area, like Fern Park, or a particular service, like LYMMO. You can also use the table to the right, which shows each Link and the brochure it appears on. Note that some Links are shown on more than one brochure.

LYNX BUS SERVICE BROCHURES

- (A) Apopka SuperStop
- (B) Colonial Plaza SuperStop
- (C) Colonial Dr East/West
- (D) Colonial Dr West/West Oaks Mall
- (E) Destination Parkway
- (F) Dixie Belle Dr & Gatlin Ave
- (G) FastLink Services
- (H) Fern Park SuperStop
- (I) Florida Mall SuperStop
- (K) Kissimmee Intermodal Station
- (L) LYNX Central Station
- (M) LYMMO
- (N) Orlando International Airport
- (O) Poinciana Walmart Center
- (P) Rosemont SuperStop
- (Q) Sanford Seminole Centre
- (R) SunRail Connections
- (S) UCF Area
- (T) Disney Area
- (U) Washington Shores SuperStop
- (V) Winter Park Village Area

QUESTIONS?

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Give us a call
407.841.LYNX

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facebook.com/golynx

Follow us on Twitter
@lynxbusorlando

Link	Brochure
1	(R)(V)
3	(F)(L)
6	(B)(F)
7	(I)(L)
8	(E)(L)
9	(P)(R)(V)
10	(K)
11	(L)(N)(R)
13	(B)(L)(S)
15	(L)(S)
18	(K)(L)(R)
19	(L)(U)
20	(L)(U)
21	(L)(U)
23	(P)(R)(V)
24	(U)
25	(L)(U)
26	(K)(O)
28	(C)(L)
29	(C)(L)
34	(Q)(R)
36	(L)(U)
37	(I)
38	(E)(L)
40	(L)(R)(U)
42	(E)(I)(N)(R)
44	(A)
45	(Q)(R)
46E	(Q)(R)
46W	(Q)(R)
48	(C)(L)
49	(C)(L)
51	(B)(L)(N)
54	(D)(L)
55	(K)
56	(K)(T)
57	(K)(U)
102	(H)(L)(R)(V)
103	(H)(Q)
104	(B)(C)(L)(S)
105	(C)(D)(L)
106	(A)(L)(P)
107	(I)(L)
108	(I)(K)
111	(E)(I)(N)(R)
125	(D)(L)(R)
155	(K)(R)
300	(L)(T)
301	(T)
302	(P)(T)
303	(T)(U)
304	(T)
306	(O)(R)(T)
350	(E)(L)(T)
405	(A)
416	(O)
426	(O)
434	(R)(S)
436N	(A)(H)(R)
436S	(F)(H)(N)
443	(P)(R)(V)
612	(K)

Link	Brochure
FastLink	
407	(G)(K)(N)
418	(G)(I)(R)
441	(G)(I)(K)(L)
LYMMO	
(L)(M)	Orange Line
(L)(M)	Lime Line
(M)	Grapefruit Line
NeighborLink	
601	(O)
603	(O)
604	(O)(R)
621	(S)
641	(E)
652	(A)(H)(R)(V)
811	(D)
812	(C)(D)
813	(D)
822	(S)
831	(K)(R)
851	(Q)(R)

WELCOME ABOARD!

LYNX operates 79 Links to great places throughout Central Florida. If you don't see your destination here, **CONTACT US** and we can connect you to the right Link for your trip.

Riding LYNX is also easy on your wallet.
You can pay for your trip as you board the bus:

ONE RIDE	ALL-DAY
$2.00 Regular	**$4.50** Regular
$1.00 with LYNX discount fare ID	**$2.25** with LYNX discount fare ID

LYMMO is currently Fare Free.

Please see individual Link schedules for more information.

EXACT FARE REQUIRED
No change given.

Ready to roll? Look inside for more info...

Public Notice of Title VI Rights
The Central Florida Regional Transportation Authority d/b/a LYNX:

- LYNX operates its programs and services without regard to race, color, and national origin in accordance with Title VI of the Civil Rights Act. Any person who believes they have been aggrieved by any unlawful discriminatory practice under Title VI may file a complaint with LYNX.
- For more information on LYNX' Civil Rights Program, and the procedures to file a complaint, contact, 407-841-2279 ext. 6171, email Title6officer@golynx.com, or visit our administrative office at 455 N. Garland Avenue, Orlando, Florida 32801. For more information, visit www.golynx.com.
- Inquiries or complaints related to Title VI may be sent in writing to LYNX Title VI Officer, 455 N. Garland Avenue, Orlando, Florida 32801.
- A complainant may file a complaint directly with the Federal Transit Administration by filing a complaint with the Office of Civil Rights, Attention: Title VI Program Coordinator, East Building, 5th Floor-TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- If information is needed in another language, contact 407-841-2279.

LYNX®

LYNX is the public transit provider for Orange, Osceola and Seminole counties. Additional connectivity with Lake and Polk counties.

CONTACT US for information on fares, bus stops, schedules and trip planning:

407-841-5969 *phone*
golynx.com *web*

THANK YOU FOR RIDING LYNX!

BROCHURE

N ORLANDO INT'L AIRPORT

Links 11, 42, 51, 111, 436S, FastLink 407

DIRECT SERVICE TO:

- Destination Parkway
- Downtown Orlando
- Florida Mall
- Orange County Convention Center
- Premium Outlets
- Sand Lake Road SunRail Station
- SeaWorld

LYNX®

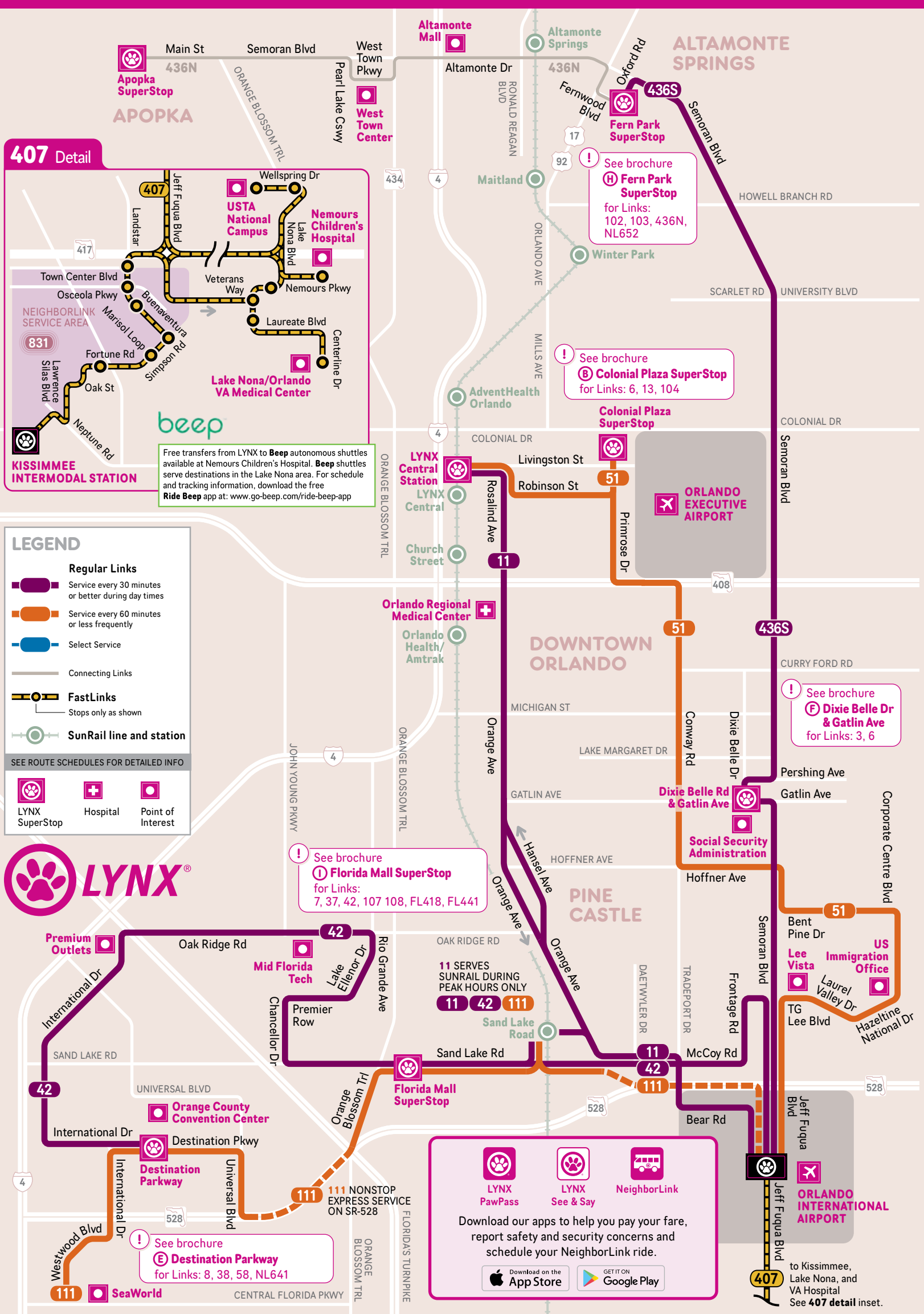
Effective: AUGUST 2023

Other accessible formats available upon request

ORLANDO INT'L AIRPORT

Schematic Map
Not to Scale

NORTH



BUS SERVICE FREQUENCY

To plan your trip or view full bus schedule visit **golynx.com**

EFFECTIVE AUGUST 2023 - ALL BUS SERVICE FREQUENCIES ARE APPROXIMATE AND SUBJECT TO CHANGE

Times indicate departures from the BEGINNING of the route. Diagrams show major points on each Link – buses make additional local stops along the way.

11 INBOUND
to LYNX Central Station

MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:10 am	5:10 am	6:25 am
DAY 5–6 am	:10, :40	:10, :40	--
6–9 am	:05, :35		:25
9–10 am	:10, :40		
10 am–1 pm	:05, :35		
1–2 pm	:05, :40		
2–5 pm	:10, :40		
5–7 pm	:15, :45		
EVE 7–8 pm	:10, :40	:30	:30
NIGHT 8–11 pm	:30		
LAST TRIP	11:30 pm	10:30 pm	10:30 pm

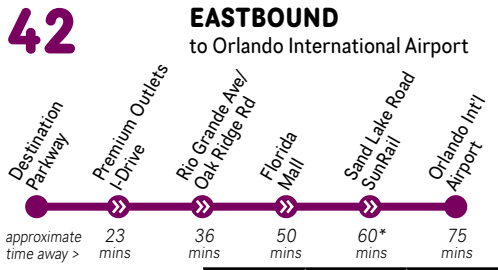
** Orlando Int'l Airport, Mon-Fri trips 5:10-8:35 am and 4:40-11:30 pm, and Saturday 7:30-10:30 pm trips serve Sand Lake Road SunRail station. All other trips operate via Orange Ave. and do not enter the station.*

11 OUTBOUND
to Orlando International Airport

MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	4:20 am	4:20 am	5:45 am
DAY 4–5 am	:20, :48	:20, :50	--
5–6 am	:15, :46	:15, :45	:45
6 am–7 pm	:15, :45		
NIGHT 7–10 pm	:45	:45	
LAST TRIP	10:45 pm	9:45 pm	9:45 pm

*** LYNX Central Station, Mon-Fri trips 4:20-8:45 am and 4:15-6:45 pm serve Sand Lake Road SunRail station. All other trips operate via Orange Ave. and do not enter the station.*

42 EASTBOUND
to Orlando International Airport



	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:35 am•	5:40 am•	5:10 am
THEN SERVICE EVERY	**30 mins**	**30 mins**	**60 mins**
LAST TRIP	11:20 pm	11:10 pm	11:00 pm

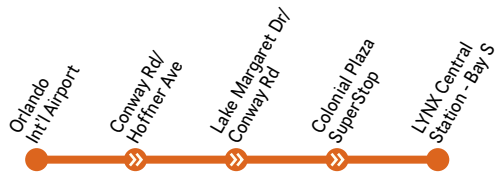
• First trips from Orlando Premium Outlets at 4:40 am, 5:10 am and 5:40 am (Mon-Fri), 5:05 am and 5:35 am (Sat)

42 WESTBOUND
to Destination Parkway

	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:35 am ¤	5:35 am ¤	6:25 am ¤
DAY 5 am–10 pm	30 mins	30 mins	60 mins
NIGHT 10 pm–12 am	60 mins	60 mins	60 mins
LAST TRIP	12:05 am	12:05 am	12:25 am

¤ First trip from Florida Mall at 5:05 am and 5:35 am (Mon-Fri), 4:55 am and 5:25 am (Sat) and 5:55 am (Sun)

51 INBOUND
to LYNX Central Station

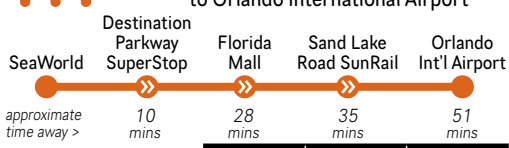


MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:20 am	5:20 am	5:20 am
DAY 6 am–6 pm	:15	:15	:15
EVE 6–7 pm	:20		
7–9 pm	:15		
NIGHT 9–10 pm		:20	--
LAST TRIP	10:15 pm	10:20 pm	8:15 pm

51 OUTBOUND
to Orlando International Airport

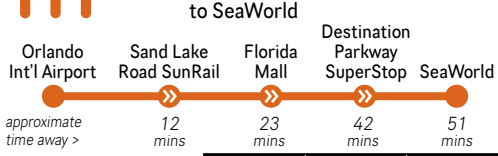
MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:15 am	5:15 am	5:15 am
ALL DAY 6 am–9 pm	:15	:15	:15
LAST TRIP	9:15 pm	9:15 pm	7:15 pm

111 EASTBOUND
to Orlando International Airport



MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:20 am	5:35 am	5:40 am
DAY 5–6 am	:20, :45	:35	:40
6–9 am	:15, :45		:30
9–11 am	:45		
11 am–3 pm	:15		
3–4 pm	:15, :45		
4–5 pm	:25		
5–6 pm	:00, :30		
6–7 pm	:00, :35		:35
NIGHT 7–11 pm	:35		
LAST TRIP	10:35 pm	10:35 pm	10:35 pm

111 WESTBOUND
to SeaWorld

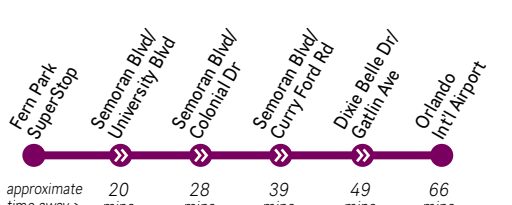


MINS AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:15 am	5:30 am	5:30 am
DAY 5–9 am	:15, :45	:30	:30
9–11 am	:45		
11 am–4 pm	:15		
4–5 pm	:20, :50		
5–6 pm	:30		
6–8 pm	:05, :35		
NIGHT 8–11 pm	:35		
LAST TRIP	10:35 pm	10:30 pm	10:30 pm

436S NORTHBOUND
to Fern Park

MINS AFTER THE HOUR	MON–FRI	SAT	SUN
FIRST TRIP	4:30 am	4:30 am	5:25 am
DAY 5 am–6 pm	:00, :30	:00, :30	:25
EVE 6–7 pm		:00, :35	
NIGHT 7–11 pm		:00, :30	
11 pm–12 am	:00	:00	
LAST TRIP	12:00 am	12:00 am	12:25 am

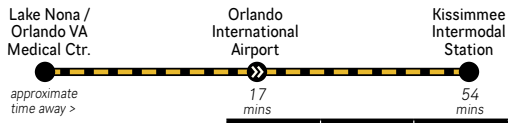
436S SOUTHBOUND
to Orlando International Airport



MINS AFTER THE HOUR	MON–FRI	SAT	SUN
FIRST TRIP	4:45 am ¤	4:35 am ¤	6:00 am ¤
DAY 5–6 am	:15, :45	:05, :45	:00
6 am–12 pm		:15, :45	
12–1 pm	:10, :35		
1–6 pm	:05, :35		
EVE 6–7 pm	:05, :40		
NIGHT 7–8 pm	:15, :45	:20	
8–9 pm		:00, :30	
9–11 pm			
LAST TRIP	10:45 pm	10:30 pm	10:00 pm

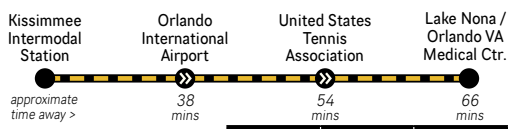
¤ First bus from Semoran Blvd/Colonial Dr at 4:00 am and 4:30 am (Mon–Sat) and 5:30 am (Sun)

407 WESTBOUND
to Kissimmee Intermodal Station



MINUTES AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	6:30 am	6:25 am	NO SERVICE
DAY 7–9 am	:35	:25	
1–3 pm	:45	:35	
EVE 5–7 pm		:40	
LAST TRIP	7:45 pm	7:40 pm	

407 EASTBOUND
to Lake Nona/VA Medical Ctr



MINUTES AFTER THE HOUR	MON–FRI	SAT	SUN/HOL
FIRST TRIP	5:30 am	5:30 am	NO SERVICE
DAY 6–8 am	:30	:30	
12–2 pm			
4–6 pm			
LAST TRIP	6:30 pm	6:30 pm	

CAN'T FIND YOUR LINK?

LYNX has 21 brochures, listed below, to help you find your bus. Each one shows the Links serving a certain area, like Fern Park, or a particular service, like LYMMO. You can also use the table to the right, which shows each Link and the brochure it appears on. Note that some Links are shown on more than one brochure.

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- (G) FastLink Services
- (H) Fern Park SuperStop
- (I) Florida Mall SuperStop
- (K) Kissimmee Intermodal Station
- (L) LYNX Central Station
- (M) LYMMO
- (N) Orlando International Airport
- (O) Poinciana Walmart Center
- (P) Rosemont SuperStop
- (Q) Sanford Seminole Centre
- (R) SunRail Connections
- (S) UCF Area
- (T) Disney Area
- (U) Washington Shores SuperStop
- (V) Winter Park Village Area

QUESTIONS?

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Link	Brochure
1	(R)(V)
3	(F)(L)
6	(B)(F)
7	(I)(L)
8	(E)(L)
9	(P)(R)(V)
10	(K)
11	(L)(N)(R)
13	(B)(L)(S)
15	(L)(S)
18	(K)(L)(R)
19	(L)(U)
20	(L)(U)
21	(L)(U)
23	(P)(R)(V)
24	(U)
25	(L)(U)
26	(K)(O)
28	(C)(L)
29	(C)(L)
34	(Q)(R)
36	(L)(U)
37	(I)
38	(E)(L)

Link	Brochure
40	(L)(R)(U)
42	(E)(I)(N)(R)
44	(A)
45	(Q)(R)
46E	(Q)(R)
46W	(Q)(R)
48	(C)(L)
49	(C)(L)
51	(B)(L)(N)
54	(D)(L)
55	(K)
56	(K)(T)
57	(K)(U)
102	(H)(L)(R)(V)
103	(H)(Q)
104	(B)(C)(L)(S)
105	(C)(D)(L)
106	(A)(L)(P)
107	(I)(L)
108	(I)(K)
111	(E)(I)(N)(R)
125	(D)(L)(R)
155	(K)(R)
300	(L)(T)

Link	Brochure
301	(T)
302	(P)(T)
303	(T)(U)
304	(T)
306	(O)(R)(T)
350	(E)(L)(T)
405	(A)
416	(O)
426	(O)
434	(R)(S)
436N	(A)(H)(R)
436S	(F)(H)(N)
443	(P)(R)(V)
612	(K)

Link	Brochure
FastLink	
407	(G)(K)(N)
418	(G)(I)(R)
441	(G)(I)(K)(L)
LYMMO	
(L)(M)	Orange Line
(L)(M)	Lime Line
(M)	Grapefruit Line
NeighborLink	
601	(O)
603	(O)
604	(O)(R)
621	(S)
641	(E)
652	(A)(H)(R)(V)
811	(D)
812	(C)(D)
813	(D)
822	(S)
831	(K)(R)
851	(Q)(R)

Appendix A1: Orange County Comments and Responses

1st Series Report Comments

Name of Project: University Boulevard Pedestrian/Bicyclist Safety Study
Documents in Series: Right-of-Way Survey, Environmental Conditions, CSER, Existing Conditions Report, DTTM, Drainage Technical Memorandum
OC Project Manager: Krista Taraszewski, Transportation Planning

Name of Report	Section	PDF Page	Text Selected	Comment	People to provide response to	Response
DTTM/ Existing Conditions Report	Context Classification	EC 21-22	*The study corridor of University Boulevard from Semoran Boulevard to Goldenrod Road is currently recommended a Context Classification of C3C – Suburban Commercial. The recommendation is based on the following roadway and land-use characteristics: Roadway Context Features:*	Context Classification C3C is listed, what FDOT methodology was this derived from? Need more then features listed in section 4.6.5	Hatem	The FDOT Context Classification Guide (2020) methodology includes two types of criteria for context classifications: qualitative criteria and quantitative criteria (based on a flowchart). As part of the OC Context Class (CC) update, both sets of criteria were considered. First, the flowchart was used to determine a classification for every segment in the county, based on quantitative measures such as intersection density, population density, building setbacks, etc. To validate the outputs, they were compared with FDOT's current CC data (from the FDOT TDA). It was found that the flowchart methodology outputs only matched FDOT's classification for 10-20% of segments. Therefore, the final classifications focused mostly on 1) the qualitative characteristics listed in the report, and 2) FDOT's classifications for nearby segments. For instance, SR 551, SR 434, SR 50, and SR 436 with similar development patterns are all classified C3C in the area. Discussion of the flowchart outputs and nearby roadway classifications and further discussion of the listed qualitative criteria will be provided in Section 4.6.5.
Existing Conditions	3.1			Please use MetroPlan's MTP Cost Feasible Plan revised in Feb. 2024 & verify information in most recent document	Alissa & Blanche	We will utilize and updated as needed
Existing Conditions	3.5			Please add language that the Vision 2050 document is in draft form and subject to change until adoption by BCC	Alissa & Blanche	Language will be added
Existing Conditions	3.6		*The first phase of the PBSAP, currently underway*	The first phase of PBSAP was completed in 2018, please update	Alissa & Blanche	Text will be updated
Existing Conditions	4.6.1			Add the date published or version of the FDM used for this section	Alissa & Blanche	Date will be added
Existing Conditions	4.0			Add FHWA's Achieving Multimodal Networks: Applying Design Flexibility & Reducing Conflicts, FHWA's Bikeway Selection Guide, and NACTO's Don't Give Up at the Intersection: Designing All Ages and Abilities Bicycle Crossings	Alissa & Blanche	These documents will be added to this section
Existing Conditions	4.0			Add the MUTCD, 11th Ed., adopted Dec. 2023. It has several key changes that promote ped/bike safety, including that several of the report's recommended safety treatments would no longer require Interim Approval.	Alissa & Blanche	This documents will be added to this section
Existing Conditions	4.4		*The FHWA's Public Right-of-Way Accessibility Guidelines (PROWAG)*	Should be the U.S. Access Board, not FHWA. Also, the description should reflect the U.S. Access Board's Final Rule adopted in August 2023	Alissa & Blanche	Will be updated as noted
Existing Conditions	5.0			The BCC designated County Equity Priority Areas as part of the County's 2022 Title VI Nondiscrimination Policy and Plan. Please include maps from this policy into the report (can be an appendicle) & remove any other title VI references (document references vision zero title VI which is a regional effort)	Alissa & Blanche	Equity Priority Areas will be referenced. Maps will be included and Title VI references will be removed
Existing Conditions	Table 7-7		*Transit ridership data from 2021*	Please add a disclaimer on any data that was obtained between 2021-2022 that the data was collected during a national pandemic and may not represent typical conditions.	Alissa & Blanche	Disclaimer will be added
Existing Conditions	7.11.1			Add any bicycle parking & pedestrian signals to the report	Alissa & Blanche	There are no designated bicycle parking areas or separated pedestrian signals (other than at traffic signals) along University Blvd. We will note this in the report
Existing Conditions	7.12			Add truck AADT for these facilities. The information can be found on FDOT's Florida Traffic Online website for state roads and a number of County roads, including University.	Alissa & Blanche	Truck AADT will be added
Existing Conditions	7.13			Add any information on leading ped phases along corridor	Alissa & Blanche	Info will be added

1st Series Report Comments

Name of Project: University Boulevard Pedestrian/Bicyclist Safety Study
Documents in Series: Right-of-Way Survey, Environmental Conditions, CSER, Existing Conditions Report, DTTM, Drainage Technical Memorandum
OC Project Manager: Krista Taraszewski, Transportation Planning

Name of Report	Section	PDF Page	Text Selected	Comment	People to provide response to	Response
Existing Conditions	8.0			Note that the MUTCD, 11th Ed., Part 5 offers guidance on traffic control devices for automated vehicles, including signs, marking, temporary traffic control, and traffic control for bicycle facilities.	Alissa & Blanche	Relevant text based on MUTCD 11th Edition will be added to this section.
Existing Conditions	Appendix B			Update Metroplan TIP to latest version (March 13, 2024)	Alissa & Blanche	We will update as noted
Existing Conditions	Appendix B			Revise the page for the PBSAP to reference the information from the website instead of a screenshot itself. 1. remove the "contact us" portion from the appendix. 2. rewrite the project Schedule section to reflect the first phase of the PBSAP was completed in 2018. 3. rewrite the url link so that it is readable for any one who would like to go to the actual website	Alissa & Blanche	We will update as noted
All Reports	All Appendices			Make all reference to the appendices in the table of contents an electronic link to the document. It is very difficult to locate the items in the document with no page number or link	Alissa & Blanche	We will update as noted

Appendix B: Planning Documents

MetroPlan Orlando 2045 Metropolitan Transportation Plan

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

2045

Metropolitan Transportation Plan

Cost Feasible Plan

Strategies, Programs and Projects

Adopted: December 9, 2020

Revised: February 14, 2024

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) *Shown in Millions*	Existing TIP as of 9/13/2023		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
EC46	Orange	SR 520 From: E of SR 50 ramps To: W of SR 528	Resurfacing	8.21	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.48	PE	$ 0.48		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 7.36	CST	$ 7.36		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC47	Orange	SR 551/Goldenrod Rd. From: S of SR 408 off-ramp To: SR 426/Aloma Ave.	Resurfacing	2.51	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.01	PE	$ 0.01		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV			$ -		$ -		$ -		$ -		$ -
					CST	$ 0.027	CST	$ 0.027		$ -		$ -		$ -		$ -
					CEI			$ -		$ -		$ -		$ -		$ -
EC48	Orange	SR 50 From: Tampa Ave. To: SR 500/US 441	Resurfacing	0.62	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.47	PE	$ 0.47		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 1.53	CST	$ 1.53		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC49	Orange	SR 535 From: N of Lake Bryan Beach Blvd. To: Lake Bryan Dr.	Resurfacing	0.78	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.29	PE	$ 1.29		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 7.189	CST	$ 7.189		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC50	Orange	Buck Rd. From: over Little Econ River	Bridge Repair/Rehabilitation	0.06	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.00	PE	$ 1.00		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 9.88	CST	$ 9.88		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC51	Orange	SR 414/Maitland Blvd. From: over US 17/92	Bridge Repair/Rehabilitation	0.14	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.08	PE	$ 0.08		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.597	CST	$ 0.597		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC52	Orange	Wilshire Rd. From: Over retention pond	Bridge Repair/Rehabilitation	0.19	PD&E			$ -		$ -		$ -		$ -		$ -
					PE			$ -		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV			$ -		$ -		$ -		$ -		$ -
					CST	$ 0.06	CST	$ 0.06		$ -		$ -		$ -		$ -
					CEI			$ -		$ -		$ -		$ -		$ -
EC53	Orange	Orange Co. Pedestrian Lighting - Bundle B	Lighting at 82 Intersections	28.42	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.00	PE	$ 0.00		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV			$ -		$ -		$ -		$ -		$ -
					CST	$ 0.011	CST	$ 0.011		$ -		$ -		$ -		$ -
					CEI			$ -		$ -		$ -		$ -		$ -

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) *Shown in Millions*	Existing TIP as of 9/13/2023		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
EC542	Seminole	Expansion of Field Crew Building From: - To: -	Fixed Capital Outlay	-	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ -		$ -		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.19	CST	$ 0.19		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC541	Seminole	Equipment Storage Building W/Enclosed Bays From: - To: -	Fixed Capital Outlay	-	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ -		$ -		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.950	CST	$ 0.950		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC539	Orange	SR 438 From: Lake Stanley Rd. To: Hiawassee Rd.	Safety Project	1.46	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.38	PE	$ 1.38		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 4.12	CST	$ 4.12		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC536	Orange	SR 426 (Fairbanks Rd.) From: S Park Ave. To: N Lakemont Ave.	Resurfacing	1.65	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.71	PE	$ 1.71		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 9.582	CST	$ 9.582		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC535	Orange	Orange-Orlando Intl. Construct Taxiway G&H From: - To: -	Aviation Preservation Project	-	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ -		$ -		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ -		$ -		$ -		$ -		$ -		$ -
					CAPITAL	$ 48.00	CAPITAL	$ 48.00		$ -		$ -		$ -		$ -
EC534	Orange	SR 436 (Semoran Blvd.) From: University Blvd./Scarlet Rd. To: -	Safety Project	0.10	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.46	PE	$ 0.46		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.785	CST	$ 0.785		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC533	Orange	SR 482 (Sand Lake Rd./Mccoy Rd./Beachline Expy.) From: Presidents Dr. To: -	Safety Project	0.10	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.40	PE	$ 0.40		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.50	CST	$ 0.50		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC532	Orange	SR 435 From: CR 526 (Old Winter Garden Rd.) To: -	Safety Project	0.10	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.46	PE	$ 0.46		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.833	CST	$ 0.833		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) *Shown in Millions*	Existing TIP as of 9/13/2023		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
2144	Orange	SR 434 From: Research Pkwy To: McCulloch Rd	Complete Streets / Safety / Ops	1.68	PD&E	$ 0.84		$ -	PD&E	$ 1.11		$ -		$ -		$ -
					PE	$ 2.52		$ -	PE	$ 3.33		$ -		$ -		$ -
					ROW	$ 3.78		$ -	ROW	$ 4.99		$ -		$ -		$ -
					ENV	$ 1.26		$ -	ENV	$ 1.66		$ -		$ -		$ -
					CST	$ 8.40		$ -		$ -	CST	$ 13.02		$ -		$ -
					CEI	$ 0.84		$ -		$ -	CEI	$ 1.30		$ -		$ -
2185	Orange	SR 552 / Curry Ford Rd From: SR 15 / Conway Rd To: SR 436 / Semoran Blvd	Complete Streets / Safety / Ops	1.26	PD&E	$ 0.63		$ -	PD&E	$ 0.83		$ -		$ -		$ -
					PE	$ 1.89		$ -	PE	$ 2.50		$ -		$ -		$ -
					ROW	$ 2.84		$ -	ROW	$ 3.74		$ -		$ -		$ -
					ENV	$ 0.95		$ -	ENV	$ 1.25		$ -		$ -		$ -
					CST	$ 6.305		$ -		$ -	CST	$ 9.77		$ -		$ -
					CEI	$ 0.63		$ -		$ -	CEI	$ 0.98		$ -		$ -
2201	Orange	SR 551 / Goldenrod Rd From: SR 50 / Colonial Dr To: University Blvd	Widen from 4 to 6 lanes	2.00	PD&E	$ 1.23		$ -	PD&E	$ 1.63		$ -		$ -		$ -
					PE	$ 3.69		$ -	PE	$ 4.88		$ -		$ -		$ -
					ROW	$ 5.54		$ -	ROW	$ 7.31		$ -		$ -		$ -
					ENV	$ 1.85		$ -	ENV	$ 2.44		$ -		$ -		$ -
					CST	$ 12.31		$ -		$ -	CST	$ 19.08		$ -		$ -
					CEI	$ 1.23		$ -		$ -	CEI	$ 1.91		$ -		$ -
2115	Orange	SR 527 / Orange Ave From: South St To: SR 50 / Colonial Dr	Safety Improvements	1.02	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.38		$ -	PE	$ 0.50		$ -		$ -		$ -
					ROW	$ 0.57		$ -	ROW	$ 0.75		$ -		$ -		$ -
					ENV	$ 0.19		$ -	ENV	$ 0.25		$ -		$ -		$ -
					CST	$ 1.271		$ -	CST	$ 1.68		$ -		$ -		$ -
					CEI	$ 0.13		$ -	CEI	$ 0.17		$ -		$ -		$ -
2038	Orange	SR 414 / Maitland Blvd From: Maitland Ave To: US 17/92	Operational / Safety	0.57	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.41		$ -	PE	$ 0.54		$ -		$ -		$ -
					ROW	$ 0.61		$ -	ROW	$ 0.81		$ -		$ -		$ -
					ENV	$ 0.20		$ -	ENV	$ 0.27		$ -		$ -		$ -
					CST	$ 1.36		$ -	CST	$ 1.79		$ -		$ -		$ -
					CEI	$ 0.14		$ -	CEI	$ 0.18		$ -		$ -		$ -
2170	Orange	SR 15 / Lake Underhill Rd From: SR 15 / Conway Rd To: SR 15 / Anderson St	Complete Streets / Safety / Ops	0.84	PD&E	$ 0.42		$ -	PD&E	$ 0.56		$ -		$ -		$ -
					PE	$ 1.27		$ -	PE	$ 1.67		$ -		$ -		$ -
					ROW	$ 1.90		$ -	ROW	$ 2.51		$ -		$ -		$ -
					ENV	$ 0.63		$ -	ENV	$ 0.84		$ -		$ -		$ -
					CST	$ 4.225		$ -		$ -	CST	$ 6.55		$ -		$ -
					CEI	$ 0.42		$ -		$ -	CEI	$ 0.65		$ -		$ -
2118	Osceola	US 17/92 / John Young Pkwy From: Palmetto Ave To: US 17/92	Operational / Safety (Freight Bottleneck)	1.46	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.66		$ -	PE	$ 0.87		$ -		$ -		$ -
					ROW	$ 0.99		$ -	ROW	$ 1.30		$ -		$ -		$ -
					ENV	$ 0.33		$ -	ENV	$ 0.43		$ -		$ -		$ -
					CST	$ 2.19		$ -		$ -	CST	$ 3.40		$ -		$ -
					CEI	$ 0.22		$ -		$ -	CEI	$ 0.34		$ -		$ -
2175	Orange	SR 15 / Mills Ave From: SR 526 / Robinson St To: SR 50 / Colonial Dr	Complete Streets / Safety / Ops	0.50	PD&E	$ 0.25		$ -	PD&E	$ 0.33		$ -		$ -		$ -
					PE	$ 0.76		$ -	PE	$ 1.00		$ -		$ -		$ -
					ROW	$ 1.13		$ -	ROW	$ 1.50		$ -		$ -		$ -
					ENV	$ 0.38		$ -	ENV	$ 0.50		$ -		$ -		$ -
					CST	$ 2.520		$ -	CST	$ 3.33		$ -		$ -		$ -
					CEI	$ 0.25		$ -	CEI	$ 0.33		$ -		$ -		$ -

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) *Shown in Millions*	Existing TIP as of 9/13/2023		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
2003	Orange	Narcoossee Rd From: SR 528 / Beachline Expy To: Lee Vista Blvd	ITS/Technology	1.39	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.31		$ -		$ -		$ -		$ -	PE	$ 0.64
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 1.04		$ -		$ -		$ -		$ -	CST	$ 2.13
					CEI	$ 0.10		$ -		$ -		$ -		$ -	CEI	$ 0.21
2063	Orange	SR 482 / Sand Lake Rd From: SR 423 / John Young Pkwy To: US 17/92/441 / Orange Blossom Trl	Operational / Safety	1.64	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.17		$ -		$ -		$ -		$ -	PE	$ 2.39
					ROW	$ 1.75		$ -		$ -		$ -		$ -	ROW	$ 3.59
					ENV	$ 0.58		$ -		$ -		$ -		$ -	ENV	$ 1.20
					CST	$ 3.889		$ -		$ -		$ -		$ -	CST	$ 7.97
					CEI	$ 0.39		$ -		$ -		$ -		$ -	CEI	$ 0.80
2116	Osceola	US 192 From: Old Canoe Creek Rd To: S Narcoossee Rd	Safety Improvements	4.45	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 1.67		$ -		$ -		$ -		$ -	PE	$ 3.42
					ROW	$ 2.50		$ -		$ -		$ -		$ -	ROW	$ 5.13
					ENV	$ 0.83		$ -		$ -		$ -		$ -	ENV	$ 1.71
					CST	$ 5.56		$ -		$ -		$ -		$ -	CST	$ 11.39
					CEI	$ 0.56		$ -		$ -		$ -		$ -	CEI	$ 1.14
2035	Orange	SR 436 From: SR 50 / Colonial Dr To: University Blvd	Operational / Safety	2.80	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 2.00		$ -		$ -		$ -		$ -	PE	$ 4.09
					ROW	$ 3.00		$ -		$ -		$ -		$ -	ROW	$ 6.14
					ENV	$ 1.00		$ -		$ -		$ -		$ -	ENV	$ 2.05
					CST	$ 6.656		$ -		$ -		$ -		$ -	CST	$ 13.64
					CEI	$ 0.67		$ -		$ -		$ -		$ -	CEI	$ 1.36
2046	Orange	SR 436 From: University Blvd To: SR 426 / Aloma Ave	Operational / Safety	0.50	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.36		$ -		$ -		$ -		$ -	PE	$ 0.73
					ROW	$ 0.54		$ -		$ -		$ -		$ -	ROW	$ 1.10
					ENV	$ 0.18		$ -		$ -		$ -		$ -	ENV	$ 0.37
					CST	$ 1.19		$ -		$ -		$ -		$ -	CST	$ 2.44
					CEI	$ 0.12		$ -		$ -		$ -		$ -	CEI	$ 0.24
2024	Orange	SR 424 / Edgewater Dr From: at SR 423 / Lee Rd	Operational / Safety	0.40	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.28		$ -		$ -		$ -		$ -	PE	$ 0.58
					ROW	$ 0.42		$ -		$ -		$ -		$ -	ROW	$ 0.87
					ENV	$ 0.14		$ -		$ -		$ -		$ -	ENV	$ 0.29
					CST	$ 0.941		$ -		$ -		$ -		$ -	CST	$ 1.93
					CEI	$ 0.09		$ -		$ -		$ -		$ -	CEI	$ 0.19
2101	Orange	SR 15 / Conway Rd From: Lancashire Ln To: Lake Underhill Rd	Safety Improvements	1.14	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.43		$ -		$ -		$ -		$ -	PE	$ 0.87
					ROW	$ 0.64		$ -		$ -		$ -		$ -	ROW	$ 1.31
					ENV	$ 0.21		$ -		$ -		$ -		$ -	ENV	$ 0.44
					CST	$ 1.42		$ -		$ -		$ -		$ -	CST	$ 2.91
					CEI	$ 0.14		$ -		$ -		$ -		$ -	CEI	$ 0.29
2208	Seminole	SR 434 From: SR 436 To: Montgomery Rd	Widen from 4 to 6 lanes	2.34	PD&E	$ 1.44		$ -		$ -		$ -		$ -		$ -
					PE	$ 4.32		$ -		$ -		$ -		$ -	PE	$ 8.86
					ROW	$ 6.48		$ -		$ -		$ -		$ -	ROW	$ 13.29
					ENV	$ 2.16		$ -		$ -		$ -		$ -	ENV	$ 4.43
					CST	$ 14.404		$ -		$ -		$ -		$ -	CST	$ 29.53
					CEI	$ 1.44		$ -		$ -		$ -		$ -	CEI	$ 2.95

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) Shown in Millions	Existing TIP as of 9/13/2023		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	YOE $'s	Phase	YOE $'s	Phase	YOE $'s	Phase	YOE $'s	Phase	YOE $'s
3055	Orange	Westmoreland Dr From: W Washington St To: W Colonial Dr	ITS/Technology	0.63	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.14		$ -		$ -		$ -		$ -	PE	$ 0.29
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.47		$ -		$ -		$ -		$ -	CST	$ 0.97
					CEI	$ 0.05		$ -		$ -		$ -		$ -	CEI	$ 0.10
3213	Osceola	Armstrong Blvd From: Dyer Blvd To: Vine St	Operational / Safety	0.65	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.46		$ -		$ -		$ -		$ -	PE	$ 0.95
					ROW	$ 0.69		$ -		$ -		$ -		$ -	ROW	$ 1.42
					ENV	$ 0.23		$ -		$ -		$ -		$ -	ENV	$ 0.47
					CST	$ 1.54		$ -		$ -		$ -		$ -	CST	$ 3.17
					CEI	$ 0.15		$ -		$ -		$ -		$ -	CEI	$ 0.32
3215	Osceola	Armstrong Blvd From: West Vine St To: W Columbia Ave	Operational / Safety	0.30	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.22		$ -		$ -		$ -		$ -	PE	$ 0.44
					ROW	$ 0.33		$ -		$ -		$ -		$ -	ROW	$ 0.67
					ENV	$ 0.11		$ -		$ -		$ -		$ -	ENV	$ 0.22
					CST	$ 0.72		$ -		$ -		$ -		$ -	CST	$ 1.48
					CEI	$ 0.07		$ -		$ -		$ -		$ -	CEI	$ 0.15
B4	Orange	TSM&O Improvements Bundle # B4	Operational / Safety improvements on Apopka Vineland Rd from at McCormick Rd to ; Operational / Safety improvements on Ocoee Apopka Rd from at McCormick Rd to	0.79	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.56		$ -		$ -		$ -		$ -	PE	$ 1.16
					ROW	$ 0.85		$ -		$ -		$ -		$ -	ROW	$ 1.74
					ENV	$ 0.28		$ -		$ -		$ -		$ -	ENV	$ 0.58
					CST	$ 1.88		$ -		$ -		$ -		$ -	CST	$ 3.86
					CEI	$ 0.19		$ -		$ -		$ -		$ -	CEI	$ 0.39
3149	Osceola	CR 532 From: East of I-4 To: S Lake Wilson Rd	Operational / Safety	1.25	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.89		$ -		$ -		$ -		$ -	PE	$ 1.82
					ROW	$ 1.33		$ -		$ -		$ -		$ -	ROW	$ 2.74
					ENV	$ 0.44		$ -		$ -		$ -		$ -	ENV	$ 0.91
					CST	$ 2.97		$ -		$ -		$ -		$ -	CST	$ 6.08
					CEI	$ 0.30		$ -		$ -		$ -		$ -	CEI	$ 0.61
3160	Orange	Wymore Rd From: Lee Rd To: W Maitland Blvd	Operational / Safety	1.76	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 1.25		$ -		$ -		$ -		$ -	PE	$ 2.56
					ROW	$ 1.88		$ -		$ -		$ -		$ -	ROW	$ 3.85
					ENV	$ 0.63		$ -		$ -		$ -		$ -	ENV	$ 1.28
					CST	$ 4.17		$ -		$ -		$ -		$ -	CST	$ 8.55
					CEI	$ 0.42		$ -		$ -		$ -		$ -	CEI	$ 0.85
B38	Orange	TSM&O Improvements Bundle # B38	ITS/Technology improvements on Buena Vista Dr from World Dr to Victory Way; ITS/Technology improvements on Buena Vista Dr from Victory Way to Epcot Center Dr	1.77	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 0.40		$ -		$ -		$ -		$ -	PE	$ 0.82
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 1.33		$ -		$ -		$ -		$ -	CST	$ 2.73
					CEI	$ 0.13		$ -		$ -		$ -		$ -	CEI	$ 0.27
3249	Orange	Forsyth Rd From: Colonial Rd To: University Blvd	Operational / Safety	2.20	PD&E			$ -		$ -		$ -		$ -		$ -
					PE	$ 1.57		$ -		$ -		$ -		$ -	PE	$ 3.22
					ROW	$ 2.35		$ -		$ -		$ -		$ -	ROW	$ 4.83
					ENV	$ 0.78		$ -		$ -		$ -		$ -	ENV	$ 1.61
					CST	$ 5.23		$ -		$ -		$ -		$ -	CST	$ 10.73
					CEI	$ 0.52		$ -		$ -		$ -		$ -	CEI	$ 1.07

MTP ID#	County	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) *Shown in Millions*	Existing TIP as of 9/13/2023		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
							Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
EC226	Seminole	Town Center Sidewalks From: Various Streets in Winter Springs	Sidewalk	-	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.05	PE	$ 0.05		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.28	CST	$ 0.28		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC227	Seminole	North Village Connectivity From: Various Sidewalks in Winter Springs	Sidewalk	-	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.05	PE	$ 0.05		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 0.28	CST	$ 0.28		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC228	Seminole	Altamonte Springs SunRail Bike & Ped Connectivity	Multimodal Flexible Pathway	-	PD&E			$ -		$ -		$ -		$ -		$ -
					PE			$ -		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV			$ -		$ -		$ -		$ -		$ -
					CST	$ 5.00	CST	$ 5.00		$ -		$ -		$ -		$ -
					CEI			$ -		$ -		$ -		$ -		$ -
5081	Orange	Windermere Ward Trail / Windermere Pedestrian Trail Phase 1 From: Park Ave To: W 1st Ave	Shared Use Path	0.65	PD&E			$ -		$ -		$ -		$ -		$ -
					PE			$ -		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV			$ -		$ -		$ -		$ -		$ -
					CST	$ 0.76	CST	$ 0.76		$ -		$ -		$ -	Local	$ 0.15
					CEI			$ -		$ -		$ -		$ -		$ -
EC288	Orange	Windermere Pedestrian/Multimodal Bridge Project From: Lake Butler Blvd To: Canal between Lake Butler and Lake Down	Replace Existing Bridge	0.10	PD&E			$ -		$ -		$ -		$ -		$ -
					PE			$ -		$ -		$ -		$ -		$ -
					ROW			$ -		$ -		$ -		$ -		$ -
					ENV			$ -		$ -		$ -		$ -		$ -
					CST	$ 0.60	CST	$ 0.60		$ -		$ -		$ -	Local	$ 0.13
					CEI			$ -		$ -		$ -		$ -		$ -
EC255	Orange	SR 436 From: N of Old Cheney Hwy. To: S of University Park Dr.	Bike Lane/Sidewalk	2.00	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 2.14	PE	$ 2.14		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ 12.12	CST	$ 12.12		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC372	Orange	Shingle Creek Trail From: Orange/Osceola Co. Line To: Sand Lake Rd.	Bike Path/Trail	-	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.00	PE	$ 0.00		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ -		$ -		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -
EC406	Orange	SR 50/E. Colonial Dr. From: SR 417 SB Ramps To: Constantine St.	Sidewalk	0.42	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
					PE	$ 0.22	PE	$ 0.22		$ -		$ -		$ -		$ -
					ROW	$ -		$ -		$ -		$ -		$ -		$ -
					ENV	$ -		$ -		$ -		$ -		$ -		$ -
					CST	$ -		$ -		$ -		$ -		$ -		$ -
					CEI	$ -		$ -		$ -		$ -		$ -		$ -

MTP ID#	Facility Name & Limits	Project Description	Length (miles)	Project Phase	Total Project Cost (2020 $'s) Shown in Millions	Existing TIP as of 9/13/2023		Plan Period I: 2026-2030		Plan Period II: 2031-2035		Plan Period III: 2036-2045		Unfunded Needs	
						Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
7392	Clarke Rd From: Hackney-Prairie Rd To: Clarcona-Ocoee Rd	Complete Streets	0.66	PD&E	$ 0.26		$ -	PD&E	$ 0.35		$ -		$ -		$ -
				PE	$ 0.79		$ -	PE	$ 1.05		$ -		$ -		$ -
				ROW	$ 1.19		$ -	ROW	$ 1.57		$ -		$ -		$ -
				ENV	$ 0.40		$ -	ENV	$ 0.52		$ -		$ -		$ -
				CST	$ 2.65		$ -	CST	$ 3.50		$ -		$ -		$ -
				CEI	$ 0.26		$ -	CEI	$ 0.35		$ -		$ -		$ -
7492	Boggy Creek Rd From: S Access Rd To: SR 417	Complete Streets / Safety / Ops	0.81	PD&E	$ 0.40		$ -		$ -	PD&E	$ 0.63		$ -		$ -
				PE	$ 1.21		$ -		$ -	PE	$ 1.88		$ -		$ -
				ROW	$ 1.82		$ -		$ -	ROW	$ 2.82		$ -		$ -
				ENV	$ 0.61		$ -		$ -	ENV	$ 0.94		$ -		$ -
				CST	$ 4.04		$ -		$ -	CST	$ 6.26		$ -		$ -
				CEI	$ 0.40		$ -		$ -	CEI	$ 0.63		$ -		$ -
7205	Chickasaw Trl From: Lake Underhill Rd To: Valencia College Ln	Operational	1.03	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.31		$ -		$ -	PE	$ 0.48		$ -		$ -
				ROW	$ 0.46		$ -		$ -	ROW	$ 0.72		$ -		$ -
				ENV	$ 0.15		$ -		$ -	ENV	$ 0.24		$ -		$ -
				CST	$ 1.03		$ -		$ -	CST	$ 1.59		$ -		$ -
				CEI	$ 0.10		$ -		$ -	CEI	$ 0.16		$ -		$ -
7371	Kelly Park Rd From: Golden Gem Rd To: Jason Dwelley Rd	Widen to 4 Lanes with Shared Use Path	2.08	PD&E			$ -		$ -		$ -		$ -		$ -
				PE			$ -		$ -		$ -		$ -		$ -
				ROW			$ -		$ -		$ -		$ -		$ -
				ENV			$ -		$ -		$ -		$ -		$ -
				CST	$ 10.92		$ -		$ -		$ -		$ -	CST	$ 22.38
				CEI	$ 1.09		$ -		$ -		$ -		$ -	CEI	$ 2.24
7476	Ponkan Rd From: Orange Blossom Trl To: Plymouth-Sorrento Rd	Complete Streets	2.61	PD&E	$ 1.04		$ -		$ -	PD&E	$ 1.62		$ -		$ -
				PE	$ 3.13		$ -		$ -	PE	$ 4.86		$ -		$ -
				ROW	$ 4.70		$ -		$ -	ROW	$ 7.29		$ -		$ -
				ENV	$ 1.57		$ -		$ -	ENV	$ 2.43		$ -		$ -
				CST	$ 10.45		$ -		$ -	CST	$ 16.20		$ -		$ -
				CEI	$ 1.04		$ -		$ -	CEI	$ 1.62		$ -		$ -
7233	Narcoossee Rd From: SR 417 To: Tyson Rd	Operational	1.60	PD&E	$ -		$ -		$ -	PD&E	$ -		$ -		$ -
				PE	$ 0.48		$ -		$ -	PE	$ 0.74		$ -		$ -
				ROW	$ 0.72		$ -		$ -	ROW	$ 1.11		$ -		$ -
				ENV	$ 0.24		$ -		$ -	ENV	$ 0.37		$ -		$ -
				CST	$ 1.60		$ -		$ -	CST	$ 2.47		$ -		$ -
				CEI	$ 0.16		$ -		$ -	CEI	$ 0.25		$ -		$ -
7164	Clarcona Rd From: Gilliam Rd To: Keene Rd	Complete Streets / Safety / Ops	1.06	PD&E	$ 0.53		$ -		$ -	PD&E	$ 0.82		$ -		$ -
				PE	$ 1.59		$ -		$ -	PE	$ 2.46		$ -		$ -
				ROW	$ 2.38		$ -		$ -	ROW	$ 3.70		$ -		$ -
				ENV	$ 0.79		$ -		$ -	ENV	$ 1.23		$ -		$ -
				CST	$ 5.30		$ -		$ -	CST	$ 8.21		$ -		$ -
				CEI	$ 0.53		$ -		$ -	CEI	$ 0.82		$ -		$ -
7214	Forsyth Rd From: Hanging Moss Rd To: University Blvd	Operational	0.84	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.25		$ -		$ -	PE	$ 0.39		$ -		$ -
				ROW	$ 0.38		$ -		$ -	ROW	$ 0.59		$ -		$ -
				ENV	$ 0.13		$ -		$ -	ENV	$ 0.20		$ -		$ -
				CST	$ 0.84		$ -		$ -	CST	$ 1.30		$ -		$ -
				CEI	$ 0.08		$ -		$ -	CEI	$ 0.13		$ -		$ -

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						Phase	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*	*Phase*	*YOE $'s*
7222	Hiawassee Rd From: Old Winter Garden Rd To: SR 50 / Colonial Dr	Operational	0.89	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.27		$ -		$ -		$ -	PE	$ 0.55		$ -
				ROW	$ 0.40		$ -		$ -		$ -	ROW	$ 0.83		$ -
				ENV	$ 0.13		$ -		$ -		$ -	ENV	$ 0.28		$ -
				CST	$ 0.89		$ -		$ -		$ -	CST	$ 1.83		$ -
				CEI	$ 0.09		$ -		$ -		$ -	CEI	$ 0.18		$ -
7167	Dixie Belle Dr From: Gatlin Ave To: Lake Margaret Dr	Operational	0.75	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.23		$ -		$ -		$ -	PE	$ 0.46		$ -
				ROW	$ 0.34		$ -		$ -		$ -	ROW	$ 0.69		$ -
				ENV	$ 0.11		$ -		$ -		$ -	ENV	$ 0.23		$ -
				CST	$ 0.75		$ -		$ -		$ -	CST	$ 1.54		$ -
				CEI	$ 0.08		$ -		$ -		$ -	CEI	$ 0.15		$ -
7178	N. Hiawassee Rd From: Apopka Blvd To: Orange Blossom Trl	Complete Streets / Safety / Ops	0.45	PD&E	$ 0.22		$ -		$ -		$ -	PD&E	$ 0.46		$ -
				PE	$ 0.67		$ -		$ -		$ -	PE	$ 1.38		$ -
				ROW	$ 1.01		$ -		$ -		$ -	ROW	$ 2.07		$ -
				ENV	$ 0.34		$ -		$ -		$ -	ENV	$ 0.69		$ -
				CST	$ 2.24		$ -		$ -		$ -	CST	$ 4.60		$ -
				CEI	$ 0.22		$ -		$ -		$ -	CEI	$ 0.46		$ -
7244	Powers Dr From: Old Winter Garden Rd To: SR 50 / Colonial Dr	Operational	0.96	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.29		$ -		$ -		$ -	PE	$ 0.59		$ -
				ROW	$ 0.43		$ -		$ -		$ -	ROW	$ 0.88		$ -
				ENV	$ 0.14		$ -		$ -		$ -	ENV	$ 0.29		$ -
				CST	$ 0.96		$ -		$ -		$ -	CST	$ 1.97		$ -
				CEI	$ 0.10		$ -		$ -		$ -	CEI	$ 0.20		$ -
7256	University Blvd From: Forsyth Rd To: Goldenrod Rd	Operational	0.75	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.23		$ -		$ -		$ -	PE	$ 0.46		$ -
				ROW	$ 0.34		$ -		$ -		$ -	ROW	$ 0.70		$ -
				ENV	$ 0.11		$ -		$ -		$ -	ENV	$ 0.23		$ -
				CST	$ 0.75		$ -		$ -		$ -	CST	$ 1.55		$ -
				CEI	$ 0.08		$ -		$ -		$ -	CEI	$ 0.15		$ -
7542	Lake Pickett Rd From: South Tanner Rd To: Chuluota Rd	Widen from 2 to 4 lanes	2.41	PD&E	$ 1.29		$ -		$ -		$ -	PD&E	$ 2.65		$ -
				PE	$ 3.88		$ -		$ -		$ -	PE	$ 7.95		$ -
				ROW	$ 5.82		$ -		$ -		$ -		$ -	ROW	$ 11.93
				ENV	$ 1.94		$ -		$ -		$ -		$ -	ENV	$ 3.98
				CST	$ 12.93		$ -		$ -		$ -		$ -	CST	$ 26.52
				CEI	$ 1.29		$ -		$ -		$ -		$ -	CEI	$ 2.65
7235	Old Winter Garden Rd From: Hiawassee Rd To: Kirkman Rd	Operational	1.08	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.32		$ -		$ -		$ -		$ -	PE	$ 0.66
				ROW	$ 0.49		$ -		$ -		$ -		$ -	ROW	$ 1.00
				ENV	$ 0.16		$ -		$ -		$ -		$ -	ENV	$ 0.33
				CST	$ 1.08		$ -		$ -		$ -		$ -	CST	$ 2.21
				CEI	$ 0.11		$ -		$ -		$ -		$ -	CEI	$ 0.22
7212	Rhode Islands Woods Circle From: Landstar Blvd To: Wyndham Lakes Blvd	Operational	2.20	PD&E	$ -		$ -		$ -		$ -		$ -		$ -
				PE	$ 0.66		$ -		$ -		$ -		$ -	PE	$ 1.35
				ROW	$ 0.99		$ -		$ -		$ -		$ -	ROW	$ 2.03
				ENV	$ 0.33		$ -		$ -		$ -		$ -	ENV	$ 0.68
				CST	$ 2.20		$ -		$ -		$ -		$ -	CST	$ 4.51
				CEI	$ 0.22		$ -		$ -		$ -		$ -	CEI	$ 0.45

MetroPlan Orlando Transportation Improvement Program

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP
250 South Orange Avenue, Suite 200
Orlando, Florida 32801

FY 2023/2024 – FY 2027/28
Transportation Improvement Program

for Orange, Osceola, and Seminole Counties, Florida

Adopted by the MetroPlan Orlando Board on July 12, 2023

Amended March 13, 2024

FPN: 451246-1 **From:** CR 526 (Old Winter Garden Rd.) **MTP Ref.:** EC532

Project Name: SR 435 **To:** - **Managed by:** FDOT

Description: Safety Project **Length:** 0.1 miles

Historic Costs Prior to FY 2023/24	Fund	Phase	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Estimated Future Costs After FY 2027/28	Total Cost
	ACSS	PE	$ -	$ 450	$ -	$ -	$ -		$ 450
	DIH	PE	$ -	$ 10	$ -	$ -	$ -		$ 10
	ACSS	CST	$ -	$ -	$ -	$ 822	$ -		$ 822
	DIH	CST	$ -	$ -	$ -	$ 11	$ -		$ 11
$ -			**$ -**	**$ 460**	**$ -**	**$ 833**	**$ -**	**$ -**	**$ 1,293**

FPN: 451255-1 **From:** Presidents Dr. **MTP Ref.:** EC533

Project Name: SR 482 (Sand Lake Rd./Mccoy Rd./Beachline Expy.) **To:** - **Managed by:** FDOT

Description: Safety Project **Length:** 0.1 miles

Historic Costs Prior to FY 2023/24	Fund	Phase	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Estimated Future Costs After FY 2027/28	Total Cost
	ACSS	PE	$ 195	$ -	$ -	$ -	$ -		$ 195
	DIH	PE	$ 10	$ -	$ -	$ -	$ -		$ 10
	TALT	PE	$ 195	$ -	$ -	$ -	$ -		$ 195
	ACSS	CST	$ -	$ -	$ 244	$ -	$ -		$ 244
	DIH	CST	$ -	$ -	$ 11	$ -	$ -		$ 11
	TALT	CST	$ -	$ -	$ 244	$ -	$ -		$ 244
$ -			**$ 400**	**$ -**	**$ 498**	**$ -**	**$ -**	**$ -**	**$ 898**

FPN: 451256-1 **From:** University Blvd./Scarlet Rd. **MTP Ref.:** EC534

Project Name: SR 436 (Semoran Blvd.) **To:** - **Managed by:** FDOT

Description: Safety Project **Length:** 0.1 miles

Historic Costs Prior to FY 2023/24	Fund	Phase	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Estimated Future Costs After FY 2027/28	Total Cost
	ACSS	PE	$ -	$ 450	$ -	$ -	$ -		$ 450
	DIH	PE	$ -	$ 10	$ -	$ -	$ -		$ 10
	ACSS	CST	$ -	$ -	$ -	$ 774	$ -		$ 774
	DIH	CST	$ -	$ -	$ -	$ 11	$ -		$ 11
$ -			**$ -**	**$ 460**	**$ -**	**$ 785**	**$ -**	**$ -**	**$ 1,245**

FPN: 444993-1 **From:** Baldwin Park St. **MTP Ref.:** 5078

Project Name: Little Econ Trail Phase 3 **To:** Richard Crotty Pkwy. **Managed by:** Orange Co.

Description: Bike Path/Trail **Length:** - *Roll Forward Amendment*

Historic Costs Prior to FY 2023/24	Fund	Phase	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Estimated Future Costs After FY 2027/28	Total Cost
	SU	PE	$ 5	$ -	$ -	$ -	$ -		$ 5
	TALU	ROW	$ 176	$ -	$ -	$ -	$ -		$ 176
	LF	CST	$ -	$ -	$ 6,000	$ -	$ -		$ 6,000
	SU	CST	$ -	$ -	$ 2,958	$ -	$ -		$ 2,958
	TALU	CST	$ -	$ -	$ 1,962	$ -	$ -		$ 1,962
$ 750			**$ 181**	**$ -**	**$ 10,920**	**$ -**	**$ -**	**$ -**	**$ 11,851**

FPN: 445303-1 **From:** North of Old Cheney Hwy. **MTP Ref.:** EC255

Project Name: SR 436 **To:** North of University Park Dr. **Managed by:** FDOT

Description: Bike Lane/Sidewalk **Length:** 2.02 miles *Roll Forward Amendment*

Historic Costs Prior to FY 2023/24	Fund	Phase	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Estimated Future Costs After FY 2027/28	Total Cost
	DIH	PE	$ 8	$ -	$ -	$ -	$ -		$ 8
	DDR	CST	$ 356	$ -	$ -	$ -	$ -		$ 356
	DIH	CST	$ 260	$ -	$ -	$ -	$ -		$ 260
$ 13,632			**$ 623**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 14,256**

FPN: 448756-1 **From:** Old Winter Garden Rd. **MTP Ref.:** 5018

Project Name: Shingle Creek Kirkman Trail **To:** Raleigh St. **Managed by:** Orlando

Description: Bike Path/Trail **Length:** -

Historic Costs Prior to FY 2023/24	Fund	Phase	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	FY 2027/28	Estimated Future Costs After FY 2027/28	Total Cost
	SU	CST	$ -	$ 582	$ -	$ -	$ -		$ 582
	TALU	CST	$ -	$ 1,630	$ -	$ -	$ -		$ 1,630
$ -			**$ -**	**$ 2,211**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,211**

FLORIDA DEPARTMENT OF TRANSPORTATION
OFFICE OF WORK PROGRAM
MPO ROLLFORWARD REPORT

HIGHWAYS

ITEM NUMBER:445211 1 PROJECT DESCRIPTION:SR 426 FROM EAST OF SR 424 (EDGEWATER DR) TO WEST OF I-4 *NON-SIS*
DISTRICT:05 COUNTY:ORANGE TYPE OF WORK:RESURFACING
ROADWAY ID:75006001 PROJECT LENGTH: .963MI LANES EXIST/IMPROVED/ADDED: 2/ 2/ 0

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	2028	GREATER THAN 2028	ALL YEARS
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	534,634	0	0	0	0	0	0	534,634
DIH	31,203	8,797	0	0	0	0	0	40,000
DS	23,279	0	0	0	0	0	0	23,279
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT								
DDR	263,465	25,675	0	0	0	0	0	289,140
DIH	1,449	8,821	0	0	0	0	0	10,270
DS	3,392,953	0	0	0	0	0	0	3,392,953
TOTAL 445211 1	**4,246,983**	**43,293**	**0**	**0**	**0**	**0**	**0**	**4,290,276**
TOTAL PROJECT:	**4,246,983**	**43,293**	**0**	**0**	**0**	**0**	**0**	**4,290,276**

ITEM NUMBER:445303 1 PROJECT DESCRIPTION:SR 436 FROM NORTH OF OLD CHENEY HWY TO NORTH OF UNIVERSITY PARK DR *NON-SIS*
DISTRICT:05 COUNTY:ORANGE TYPE OF WORK:BIKE LANE/SIDEWALK
ROADWAY ID:75003000 PROJECT LENGTH: 2.022MI LANES EXIST/IMPROVED/ADDED: 3/ 3/ 0

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	2028	GREATER THAN 2028	ALL YEARS
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ARPA	1,142,034	0	0	0	0	0	0	1,142,034
DDR	703,371	0	0	0	0	0	0	703,371
DIH	23,206	7,641	0	0	0	0	0	30,847
DS	262,565	0	0	0	0	0	0	262,565
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT								
ARPA	11,501,085	0	0	0	0	0	0	11,501,085
DDR	0	355,903	0	0	0	0	0	355,903
DIH	0	259,908	0	0	0	0	0	259,908
TOTAL 445303 1	**13,632,261**	**623,452**	**0**	**0**	**0**	**0**	**0**	**14,255,713**
TOTAL PROJECT:	**13,632,261**	**623,452**	**0**	**0**	**0**	**0**	**0**	**14,255,713**

ITEM NUMBER:445397 1 PROJECT DESCRIPTION:SR 50 OVER CREEK BRIDGE# 750012 *NON-SIS*
DISTRICT:05 COUNTY:ORANGE TYPE OF WORK:BRIDGE-REPAIR/REHABILITATION
ROADWAY ID:75060000 PROJECT LENGTH: .006MI LANES EXIST/IMPROVED/ADDED: 2/ 2/ 0

FUND CODE	LESS THAN 2024	2024	2025	2026	2027	2028	GREATER THAN 2028	ALL YEARS
PHASE: PRELIMINARY ENGINEERING / RESPONSIBLE AGENCY: MANAGED BY FDOT								
BRRP	37,885	0	0	0	0	0	0	37,885
DIH	2,040	9,960	0	0	0	0	0	12,000
DS	510	0	0	0	0	0	0	510
PHASE: CONSTRUCTION / RESPONSIBLE AGENCY: MANAGED BY FDOT								
BRRP	196,498	0	0	0	0	0	0	196,498
DIH	2,439	9,613	0	0	0	0	0	12,052
DS	16,891	0	0	0	0	0	0	16,891
TOTAL 445397 1	**256,263**	**19,573**	**0**	**0**	**0**	**0**	**0**	**275,836**
TOTAL PROJECT:	**256,263**	**19,573**	**0**	**0**	**0**	**0**	**0**	**275,836**

MetroPlan Orlando Complete Streets Policy

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

RESOLUTION NO. 20-04

SUBJECT:

Regional Complete Streets Policy

WHEREAS, the Orlando Urbanized Area Metropolitan Planning Organization (MPO), d.b.a. MetroPlan Orlando, is the duly designated and constituted body responsible for carrying out the urban transportation planning and programming process for the Orlando Urbanized Area, including the Transportation Improvement Program; and

WHEREAS, The term "Complete Streets" is defined as a comprehensive, connected, and context sensitive transportation network with infrastructure that is designed to allow safe and convenient travel along and across streets for all users, including pedestrians, bicyclists, users of micromobility vehicles, motorists, movers of commercial goods, users and operators of public transportation, regardless of age or ability; and

WHEREAS, the ability to travel safely within the public way is of the utmost importance; and

WHEREAS, MetroPlan Orlando recognizes that all residents of and visitors to our region, regardless of ability, age, gender, race, ethnicity, or income, have a right to a safe, reliable, and comprehensive transportation network; and

WHEREAS, MetroPlan Orlando recognizes that elements in the design of Complete Streets can improve poor user behaviors such as excessive speeding and failing to yield; and

WHEREAS, inadequate infrastructure is dangerous for pedestrians, bicyclists, micromobility users, and public transit riders, particularly children, older adults, and persons with disabilities; and

WHEREAS, Complete Streets encourage an active lifestyle by creating opportunities to integrate exercise into daily activities, thereby helping to reduce the risk of obesity and its associated health problems, thereby improving overall public health; and

WHEREAS, MetroPlan Orlando recognizes that when implementing the Complete Streets Policy, there must be consideration towards the impacts proposed projects may have on traditionally underserved communities, with assurance that this policy is implemented in a manner that fosters equity across the region; and

WHEREAS, MetroPlan Orlando shall coordinate between various agencies such as public health, housing, planning, engineering, transportation, public works, city council, and/or mayor or executive office; and

NOW, THEREFORE, BE IT RESOLVED THAT:

Section 1. MetroPlan Orlando hereby adopts the Complete Streets Policy attached hereto as Exhibit A.

Section 2. The policy will take effect immediately upon its adoption.

Resolution approved by MetroPlan Orlando Board on 3/11/20 - copy of signed resolution available upon request

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

Regional Complete Streets Policy

EXHIBIT A

1.0 Purpose

MetroPlan Orlando shall fund and support the planning, design, and construction of Complete Streets that consider the needs of everyone within the MetroPlan Orlando planning area and authority. The Complete Streets Policy will require special care is taken when evaluating the impacts of proposed projects on traditionally underserved communities in a manner that fosters equity across the region. Additionally, this policy seeks to ensure all projects are sensitive to the context and characteristics of the corridor in coordination with our local government partners. This policy aligns MetroPlan Orlando with local, regional, and state efforts to ensure that officials, planners, and engineers consistently plan, design, and fund streets for all people.

2.0 Background

Today's changing environmental, social, and economic realities are requiring regions throughout the country to rethink previous approaches to transportation planning and decision-making. Increasingly, communities want solutions that grow the local economy, improve mobility, and promote health in equitable and sustainable ways. These goals can be achieved through policies that foster change in the surrounding environment. MetroPlan Orlando recognizes this new challenge and seeks to incorporate a "Complete Streets" way of thinking throughout the region's transportation investments.

Complete Streets play an important role in implementing MetroPlan Orlando's long range vision for a safe and accessible multimodal transportation system. Complete Streets support vibrant, healthy, and sustainable communities. The intent of the Complete Streets policy is to enhance safety and improve how people walk, bike, drive, use transit, use micromobility vehicles, use rideshare, and get items from point A to point B.

Improved safety is a motivating factor as the Central Florida region has consistently ranked in the top five for most dangerous places to walk in the nation according to Smart Growth America's Dangerous By Design Reports. Our area continues to attract millions of tourists annually, with 75 million visitors in 2018, more than anywhere else in the country. Our region is also one of the fastest growing in the nation in terms of population growth. With this in mind, all those who come to Central Florida should know that they will be safe and secure, regardless of how they travel throughout our area.

Complete Streets offer shaded and safe access to local recreational opportunities and essential services, which can also improve mental health and encourage increased economic and physical activity. As a tourism-based economy, the Central Florida region has a high concentration of low or minimum wage jobs, which pushes median income below national averages. At the same time, our region is facing a housing affordability crisis. Complete Streets will improve safety for vulnerable users, including those who cannot afford a vehicle, and will allow for greater economic opportunities through improved connectivity to the region's activity centers.

This Complete Streets policy will help MetroPlan Orlando achieve the following overarching goals of the existing 2040 Long Range Transportation Plan and the forthcoming 2045 Metropolitan Transportation Plan:

- Safety
- Balanced Multi-Modal System
- Integrated Regional System
- Quality of Life
- Efficient and Cost Effective
- Energy and Environmental Stewardship
- Economic Vitality

MetroPlan Orlando's Complete Streets policy implements part of its Strategic Business Plan calling for more context sensitive and multi-modal solutions.

3.0 Definition

Complete Streets are planned, designed, constructed, operated, and maintained to safely and comfortably accommodate people of all ages and abilities. This includes but is not limited to pedestrians, bicyclists, transit users, motorists, micromobility users, rideshare users and freight and service operators. The Complete Streets program recognizes that depending on context, streets may serve diverse activities, functions, and intensity of uses.

4.0 Vision

MetroPlan Orlando's overarching transportation vision is adopted as the Complete Streets program's vision: "A regional transportation system that safely and efficiently moves people and goods through a variety of options that support the region's vitality."

5.0 Goals

The goals of this Complete Street Policy are:

1) Create a complete, connected network of streets, roads, and trails that safely and comfortably serves every type of system user,
2) Provide safe and comfortable transportation options for vulnerable users of all ages and abilities,
3) Support redevelopment of and connectivity to activity centers, and
4) Provide safe, comfortable, and effective access to transit through walking and bicycling.

6.0 Applicability

This policy applies to the programming of MetroPlan Orlando's Transportation Management Area (TMA) funds on roadway improvements. The policy is recommended for any new construction and the reconstruction of local and state roads. Improvements that fall within Complete Streets include but are not limited to intersection projects, capacity projects, safety projects, bridges, and other facilities that receive federal and state funding. All phases of implementation will be governed by this policy including planning, design, right-of-way acquisition, and construction. MetroPlan Orlando recognizes the need for interdisciplinary and cross-jurisdictional coordination to effectively develop, operate, and maintain the region's transportation system. Local partners include the Florida Department of Transportation (FDOT), the Central Florida Expressway Authority, Orange County, Osceola County, Seminole County, the

City of Altamonte Springs, the City of Apopka, the City of Kissimmee, the City of Orlando, the City of Sanford, other municipal governments, LYNX, and others.

This policy furthers MetroPlan Orlando's role as a leader in transportation planning in the region and the state. As a regional transportation partnership, the organization plans for the development of interdisciplinary and regionally significant bicycle, pedestrian, transit, freight, and roadway facilities. These mobility options are critical for ensuring safe, comfortable, and reliable transportation to schools, parks, medical facilities, grocery stores, and other necessary community services.

MetroPlan Orlando is not directly responsible for maintenance and operations of roads and transportation systems, but encourages local and state government partners to consider maintenance and operations activities as opportunities for providing safer, more comfortable, and accessible transportation options for everyone. While not taking a direct role in its implementation, MetroPlan Orlando also supports land use design that encourages walking, bicycling, and use of public transportation.

MetroPlan Orlando encourages all local government partners to adopt Complete Streets policies. MetroPlan Orlando shall assist participating jurisdictions through an implementation program that aids in the development and adoption of local Complete Streets policies.

7.0 Design

Designs shall include accommodations for everyone and be sensitive to the project's context. Complete Streets may incorporate different elements for every project and road type.

Facilities will be designed and constructed in accordance with current applicable laws and regulations, using best practices and guidance from a variety of organizations absent conflict with the Complete Streets policy. The best practices and guidance can include, but are not limited to the following:

- FDOT guidelines and manuals,
- American Association of State Highway and Transportation Officials (AASHTO) publications,
- Manual on Uniform Traffic Control Devices (MUTCD),
- Americans with Disabilities Act Accessibility Guidelines (ADAAG),
- FHWA Bikeway Selection Guide
- Public Rights-of-Way Accessibility Guidelines (PROWAG),
- Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: An ITE Recommended Practice, and
- Transit Street Design Guide, Urban Bikeway Design Guide, and the Urban Streets Design Guide by the National Association of City Transportation Officials (NACTO).

The agency or government with ownership or maintenance responsibility for the road shall retain the design decision authority over its projects.

Lighting

When planning Complete Streets improvements for the corridor, street lighting needs to be considered in the design phase. Poorly designed street lighting can be dangerous for pedestrians, bicyclists, and motorists traveling at night. Ideal lighting will allow for safe street crossing and better visibility for all roadway users while also minimizing light pollution.

Context Sensitivity

MetroPlan Orlando recognizes that Complete Streets solutions vary according to each street's land use context. Appropriate design standards and input from community members should be considered within each context, providing for a flexible, innovative, and balanced approach resulting in safe, comfortable environments for everyone.

MetroPlan Orlando seeks to put additional emphasis on safety with consideration for appropriate facilities based on mode of travel and speed. Internal research has shown that bicyclist and micromobility accommodation is especially context sensitive. In order to prioritize safety of all users, the choice of roadway improvements should take into account land use, numbers of intersections and driveways, motorist speeds, and visibility.

Impacts

During the design phase of the Complete Street project, it is vital for planners and engineers to consider the impacts to the community during each phase. Community engagement is necessary and encouraged during this phase. It is the goal of the Complete Streets policy to mitigate any unintended consequence such as involuntary displacement. The design must also take into consideration traffic flows during the construction of the Complete Street, specifically for the safety for all users. The project must also address maintenance of traffic during construction, especially for bicyclists, pedestrians and other vulnerable users.

8.0 Implementation

MetroPlan Orlando will implement its Complete Streets policy through a multi-faceted approach that considers local context, existing programming, and community outreach. This process will be revisited every five years during the Metropolitan Transportation Plan (MTP). Implementation of this policy will be done through a menu of options, including but not limited to:

Education and Training

MetroPlan Orlando will develop educational materials for local agencies; assist in training workshops for elected officials, community leaders, and private development partners on the benefits of Complete Streets; and distribute best practice information on Complete Streets design.

These materials will include, but are not limited to:

- Communications Guide
- Training Workshops
- Informational Handouts
- Manuals

Programming

MetroPlan Orlando will incorporate the Complete Streets policy into its existing and forthcoming planning and policy documents. This includes, but is not limited to:

- Project Application Tool: MetroPlan Orlando will develop guidance documents, such as a checklist, that assist local municipalities with incorporating Complete Streets elements into planning and design. The documents will guide a project's submission in MetroPlan Orlando's Project Application Tool and resulting Project Profile. Complete Streets best practices, governing design standards, and a series of local case studies will inform this guidance.
- Planning Documents and Activities: The Complete Streets policy will be integrated into MetroPlan Orlando's planning documents and activities, including but not limited to:
    - Bicycle and Pedestrian Plan
    - Metropolitan Transportation Plan
    - Transportation Improvement Program
    - Congestion Management Process
    - Public Participation Plan
    - Transportation Systems Management and Operations Activities, including Intelligent Transportation Systems and emerging technologies

- Freight Planning Activities
- Health Planning Activities

Prioritization

MetroPlan Orlando shall prioritize Complete Streets projects using a variety of goals, federal planning factors, and performance measures and targets that will be outlined in the 2045 Metropolitan Transportation Plan. Where applicable, these measures shall place emphasis on addressing traditionally underserved communities (such as Environmental Justice areas, defined in our Title VI Plan), ensuring the residents of these communities are able to make multimodal connections to vital activity centers.

Under FDOT's Resurfacing, Restoration and Rehabilitation (RRR) process as well as the roadway maintenance programs of other local government partners, MetroPlan Orlando will prioritize Complete Street elements within roadway projects to ensure projects are as cost effective as possible.

MetroPlan Orlando's Congestion Management Process (CMP) follows an objective-driven, performance based approach to planning for congestion management. Using an established set of goals and objectives that were informed by the Metropolitan Transportation Plan (MTP), the CMP provides a mechanism for ensuring that investment decisions are made with a clear focus on desired outcomes. As Complete Streets projects are identified and/or developed, the CMP will help qualify potential projects for inclusion into the regional transportation program and will prioritize the projects using the same rubric for all submitted projects. The CMP establishes a baseline condition for future comparison of conditions and allows for project prioritization based on the potential to meet the goals and objectives established as part of the CMP.

Funding

MetroPlan Orlando will explore and identify funding sources to implement high quality Complete Streets projects in priority multi-modal areas, based on existing and future land use contexts. These funding sources could include, but not be limited to:

- Resurface, Restoration, and Rehabilitation projects
- Federal and state discretionary grant programs
- Philanthropic programs
- Public-Private Partnerships

MetroPlan Orlando allocates its urbanized area funds into four different categories: Complete Streets; Bike, Pedestrian, and Regional Trails; TSMO; and Transit. Of those funds, 23% is dedicated to Complete Streets, however 100% of the TMA funds go towards elements that are found in Complete Streets. The prioritization of funding for these projects is ranked by MetroPlan Orlando's performance-based prioritization process.

9.0 Exceptions and Appeals

During the planning and design process, conditions may arise where it may be inappropriate to provide bicycle, pedestrian, or transit facilities. These exceptions include:

1. Limited access facilities where bicyclists and pedestrians are prohibited by law from using the road. In this instance, it is necessary to accommodate bicyclists and pedestrians elsewhere within the same transportation corridor and to provide safe, comfortable crossings for bicyclists and pedestrians at interchanges and connecting neighborhoods, activity centers, or the regional trail network.
2. Transit accommodations are not required where there is no existing or planned transit service.
3. An equivalent alternative already exists, or is programmed in the Transportation Improvement Program (TIP) as a separate project, for the specific use being exempted.

4. The cost of providing bicycle or pedestrian facilities would be excessively disproportionate to the need or probable use.
5. Emergency repairs (such as a water main leak) that require immediate, rapid response; however, temporary accommodations for all modes should still be made. Depending on the severity of the repairs, opportunities to improve multimodal access should still be considered where possible.
6. Routine maintenance of the transportation network that does not change the roadway geometry or operations, such as mowing, sweeping, and spot repair.
7. A demonstrated absence of current and future need.

For projects funded by MetroPlan Orlando, exceptions for not accommodating active transportation, micromobility and transit users in accordance with this policy will require approval of the MetroPlan Orlando Board. These exceptions will be submitted and proceed through the established MPO transportation planning process. While under review by the MetroPlan Orlando, the public is able to comment on any exception prior to its approval or rejection.

10.0 Evaluation and Performance Standards

MetroPlan Orlando shall continually evaluate this policy on inputs, outputs, and outcomes, as determined by a five-year evaluation plan. These measures, where applicable, will be disaggregated by income, race, vehicle access, language, and others. MetroPlan Orlando will report to the Board the performance of the Complete Streets policy based on the evaluation plan and performance standards listed below.

Performance Measures

- Existing miles of Complete Streets
- Miles of sidewalk and gaps
- Miles of bike lanes and bike lane gaps
- Population within a quarter mile of a transit stop
- Percentage of network that can facilitate 3 or more modes of travel
- Ratio of shelters to bus stops

Indicators

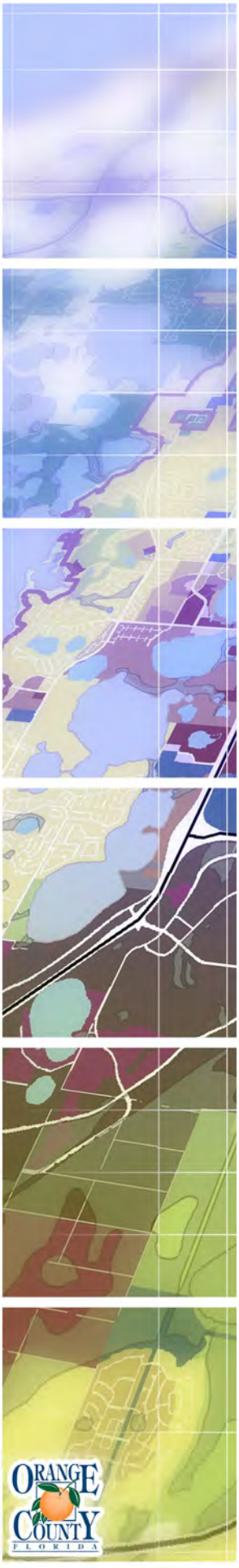
- Bicycle connectivity to activity centers
- Pedestrian connectivity to activity centers
- Safety elements on existing corridors (plans/programs)
- Rate of crashes, injuries, and fatalities by mode
- SunRail and LYNX ridership
- Pedestrian counts
- Bicyclist counts
- Micromobility user counts (if available)
- Public engagement in traditionally underserved communities measure

MetroPlan Orlando will update and strengthen its evaluation criteria and performance standards as new plans and policies are adopted.

FDOT Five Year Work Program

BD	Name	Item Description	Item	Work Mix Description	Phase	Phase Description	BE	Category	Category Description	Funding Source	2024	2025	2026	2027	2028	Grand Total
05	ORANGE	ORANGE-ORLANDO INTL AIRSIDE APRON IMPROVEMENTS	448178-1	AVIATION PRESERVATION PROJECT	94	CAPITAL GRANT	55100100	088719	AVIATION DEV/GRANTS	State 100%	500,000					500,000
								NSB	NOT STATE BUDGET	Local	500,000					500,000
		ORANGE-ORLANDO INTL CCTV IMPROVEMENTS	438486-4	AVIATION SECURITY PROJECT	94	CAPITAL GRANT	55100100	088719	AVIATION DEV/GRANTS	State 100%	550,000					550,000
								NSB	NOT STATE BUDGET	Local	550,000					550,000
		ORANGE-ORLANDO INTL CONSTRUCT TAXIWAY G&H	451261-2	AVIATION PRESERVATION PROJECT	94	CAPITAL GRANT	55100100	088719	AVIATION DEV/GRANTS	State 100%	3,000,000	3,000,000				6,000,000
								NSB	NOT STATE BUDGET	Federal	18,000,000	18,000,000				36,000,000
										Local	3,000,000	3,000,000				6,000,000
		ORANGE-ORLANDO INTL FAA AIRFIELD IMPROVEMENTS	438487-1	AVIATION CAPACITY PROJECT	94	CAPITAL GRANT	55100100	088719	AVIATION DEV/GRANTS	State 100%	30,000		3,000,000			3,030,000
								NSB	NOT STATE BUDGET	Federal			18,000,000			18,000,000
										Local	30,000		3,000,000			3,030,000
		ORANGE-ORLANDO INTL TERMINAL COMPLEX	448578-1	AVIATION CAPACITY PROJECT	94	CAPITAL GRANT	55100100	088719	AVIATION DEV/GRANTS	State 100%	10,179,859	5,998,314				16,178,173
								NSB	NOT STATE BUDGET	Federal	61,079,152					61,079,152
										Local	10,179,839	5,998,314				16,178,153
		ORLANDO BICYCLE STUDY FROM SUNRAIL AT ORLANDO HEALTH TO LAKE IVANHOE	441163-1	BIKE PATH/TRAIL	18	PLANNING OTHER AGCY	55100100	088704	TRANSP PLANNING CONSULT	Federal			199,972			199,972
		ORLANDO CITYWIDE PEDESTRIAN TRAFFIC SIGNALS	437508-1	TRAFFIC SIGNALS	58	CONST OTHER AGENCY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal	1,278,554					1,278,554
		ORLANDO CROSS BIKE/PED SAFETY STUDY (VARIOUS STREETS)	450582-1	FEASIBILITY STUDY	18	PLANNING OTHER AGCY	55100100	088704	TRANSP PLANNING CONSULT	Federal Earmark	606,000					606,000
								NSB	NOT STATE BUDGET	Local	151,500					151,500
		ORLANDO INTERNATIONAL AIRPORT ROADWAY IMPROVEMENTS	446715-1	AVIATION PRESERVATION PROJECT	94	CAPITAL GRANT	55100100	088719	AVIATION DEV/GRANTS	State 100%				2,000,000		2,000,000
								NSB	NOT STATE BUDGET	Local				2,000,000		2,000,000
		PERFORMANCE AESTHETICS	422042-7	ROUTINE MAINTENANCE	72	MAINT CONSULTANT	55150200	088712	HIGHWAY MAINTENANCE CONTR	State 100%	1,071,522	1,041,758	950,000	950,000	950,000	4,963,280
		PERFORMANCE SIDEWALK	429153-2	ROUTINE MAINTENANCE	72	MAINT CONSULTANT	55150200	088712	HIGHWAY MAINTENANCE CONTR	State 100%	237,600	500,000	500,000			1,237,600
		PINE HILLS TRAIL PHASE 2 FROM BONNIE BRAE NORTH TO CLARCONA-OCOEE RD	428047-2	BIKE PATH/TRAIL	38	PE OTHER AGENCY	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	874,533					874,533
								NSB	NOT STATE BUDGET	Local	26,945					26,945
					58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal				3,932,280		3,932,280
					68	CONST SUP OTHER AGCY	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal				668,487		668,487
		POWERS DRIVE AT NORTH LANE	435527-1	INTERSECTION IMPROVEMENT	58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal	1,442,391					1,442,391
								NSB	NOT STATE BUDGET	Local	286,344					286,344
					68	CONST SUP OTHER AGCY	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal	65,500					65,500
		REGENT AVENUE CROSSING IMPROVEMENTS #622366G	451336-1	RAIL SAFETY PROJECT	57	CONST RAILROAD	55100100	088808	RAIL DEVELOPMENT/GRANTS	Federal	210,000					210,000
		REGIONAL CAP/CAR SHARE PROGRAM	425147-1	COMMUTER TRANS. ASSISTANCE	12	PLANNING CONSULTANT	55100100	088774	PUBLIC TRANSIT DEV/GRANTS	State 100%	1,280,112	1,125,706	1,159,477	1,194,261	1,230,089	5,989,645
		ROADWAY AESTHETICS VARIOUS LOCATIONS	425636-1	ROUTINE MAINTENANCE	72	MAINT CONSULTANT	55150200	088712	HIGHWAY MAINTENANCE CONTR	State 100%	900,000	900,000				1,800,000
		SAND LAKE RD FROM ORANGE BLOSSOM TRAIL TO ORANGE AVE	450638-1	RESURFACING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	600,000					600,000
					52	CONST CONTRACT	55150200	088797	RESURFACING	State 100%			2,322,113			2,322,113
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%			10,900			10,900
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%			278,653			278,653
		SAND LAKE RD INTERCHANGE FROM W OF SR 528 TO W OF SR 435	444315-1	INTERCHANGE IMPROVEMENT	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	61,270					61,270
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%		476,100				476,100
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal	542,916					542,916
					58	CONST OTHER AGENCY	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	155,000					155,000
					5A	CONST CONTRACT BONUS	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal	2,000,000					2,000,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	3,078,000	279,312				3,357,312
		SHINGLE CREEK KIRKMAN TRAIL FROM OLD WINTER GARDEN RD TO RALEIGH ST	448756-1	BIKE PATH/TRAIL	58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal		2,000,000				2,000,000
					68	CONST SUP OTHER AGCY	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal		206,400				206,400
		SHINGLE CREEK TRAIL FROM SR 528 TO DESTINATION PARKWAY	430225-5	BIKE PATH/TRAIL	58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal	7,890,888					7,890,888
		SHINGLE CREEK TRAIL FROM W. TAFT VINELAND ROAD TO SR 528	430225-4	BIKE PATH/TRAIL	58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal	8,341,608					8,341,608
		SHINGLE CREEK TRAIL PHASE 4 FROM ALHAMBRA DR TO OLD WINTER GARDEN RD	452289-1	BIKE PATH/TRAIL	38	PE OTHER AGENCY	55100100	088849	PRELIMINARY ENGR CONSULT	Federal			1,531,901			1,531,901
					58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal					4,000,000	4,000,000
								NSB	NOT STATE BUDGET	Local					4,353,412	4,353,412
					68	CONST SUP OTHER AGCY	55150200	NSB	NOT STATE BUDGET	Local					1,503,615	1,503,615
		SILVER METEOR DR AT RR CROSSING #622368V	449472-1	RAIL SAFETY PROJECT	57	CONST RAILROAD	55100100	088808	RAIL DEVELOPMENT/GRANTS	Federal	192,331					192,331
		SR 15 FROM DEVONSHIRE LN TO LAKE UNDERHILL RD	447090-1	RESURFACING	62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	75,000					75,000
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%	335,000					335,000
		SR 15/600 (US 17/92) ORLANDO AVE FROM S OF NOTTINGHAM ST TO MONROE AVE	408429-2	URBAN CORRIDOR IMPROVEMENTS	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	281,127					281,127
		SR 400 (I-4) E OF CR 522 (OSCEOLA PKWY) TO WEST OF SR 528	242484-8	ADD LANES & RECONSTRUCT	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal					5,300,000	5,300,000
					36	PE UTILITY	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	272,500					272,500
					43	ROW PURCHASE	55100100	088777	RIGHT-OF-WAY LAND ACQ	Federal	59,752,138	40,718,244				100,470,382
										R/W and Bridge Bonds	10,000,000	36,168,705	2,861,000			49,029,705
					45	ROW RELOCATE	55100100	088777	RIGHT-OF-WAY LAND ACQ	Federal	310,286	35,596				345,882
					4B	ROW SERVICES	55100100	088853	RIGHT-OF-WAY SUPPORT	Federal	12,185,334	6,985,265	314,800			19,485,399
		SR 400 (I-4) FROM W OF SR 528 BEACHLINE TO W OF SR 435 KIRKMAN RD	440947-1	LANDSCAPING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%					100,000	100,000
		SR 400 FROM WEST OF SR 536 TO WEST OF DARYL CARTER PARKWAY	449771-1	ADD MANAGED LANES	36	PE UTILITY	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	1,000,000					1,000,000
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal	16,832,564					16,832,564
		SR 416 (SILVER STAR RD) FROM SR-438 (PRINCETON ST) TO SR-500 (US 441)	448801-1	RESURFACING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	241,343					241,343
					52	CONST CONTRACT	55150200	088797	RESURFACING	State 100%		4,202,513				4,202,513
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%		10,580				10,580
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		405,000				405,000
		SR 423 / JOHN YOUNG PARKWAY FROM SR 408 TO SHADER ROAD	449763-1	ITS COMMUNICATION SYSTEM	52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal	707,248					707,248
										State 100%	34,000					34,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	10,835					10,835
							55150200	088718	CONSTRUCT INSPECT CONSULT	Federal	158,142					158,142
		SR 423 FROM KINGSWOOD DR TO ADANSON ST	449214-1	INTERSECTION IMPROVEMENT	52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal		2,388,065				2,388,065
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal		270,128				270,128
		SR 424 (EDGEWATER DR) FROM S OF SATEL DR TO N OF ALOHA ST	450531-1	TRAFFIC SIGNALS	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	450,000					450,000
					52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal			722,670			722,670
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal			94,830			94,830
		SR 426 (FAIRBANKS RD) FROM S PARK AVE TO N LAKEMONT AVE	451282-2	RESURFACING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	1,700,000					1,700,000
					52	CONST CONTRACT	55150200	088797	RESURFACING	State 100%			8,720,000			8,720,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%			10,900			10,900
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%			839,736			839,736
		SR 426 FROM EAST OF SR 424 (EDGEWATER DR) TO WEST OF I-4	445211-1	RESURFACING	62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	25,675					25,675
		SR 434 (ALAFAYA TRAIL) AT LOKANOTOSA TRAIL/SCIENCE DRIVE	451245-1	SAFETY PROJECT	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal		500,000				500,000
					52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal				1,073,588		1,073,588
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal				140,375		140,375
		SR 434 FOREST CITY FROM SR 424 EDGEWATER DR TO SEMINOLE CO LINE	239422-1	ADD LANES & RECONSTRUCT	52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%				14,721,773		14,721,773
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Local				5,091,785		5,091,785
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%				89,840		89,840
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%				1,610,935		1,610,935
			239422-2	MISCELLANEOUS CONSTRUCTION	58	CONST OTHER AGENCY	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	1,949,595			1,300,000		3,249,595
		SR 434 FROM CENTAURUS DR TO THE SEMINOLE COUNTY LINE	448799-1	RESURFACING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	116,621					116,621
					52	CONST CONTRACT	55150200	088797	RESURFACING	Federal		1,524,201				1,524,201
										State 100%		169,055				169,055
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		202,629				202,629
		SR 435 AT CR 526 (OLD WINTER GARDEN RD)	451246-1	SAFETY PROJECT	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal		450,000				450,000
					52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal				726,581		726,581
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal				95,455		95,455
		SR 436 (SEMORAN BLVD) AT UNIVERSITY BLVD/SCARLET RD	451256-1	SAFETY PROJECT	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal		450,000				450,000
					52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal				683,907		683,907
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal				89,840		89,840
		SR 436 FROM NORTH OF OLD CHENEY HWY TO NORTH OF UNIVERSITY PARK DR	445303-1	BIKE LANE/SIDEWALK	58	CONST OTHER AGENCY	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	301,559					301,559
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	54,344					54,344
		SR 436 FROM NORTH OF OLD CHENEY HWY TO SOUTH OF UNIVERSITY PARK DR	445303-2	LANDSCAPING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	50,000					50,000
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%		386,170				386,170
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%		15,870				15,870
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		63,480				63,480
		SR 436 FROM US 441 TO SEMINOLE COUNTY LINE	450640-1	RESURFACING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	1,000,000					1,000,000
										State 100%	700,000					700,000
					52	CONST CONTRACT	55150200	088797	RESURFACING	Federal			8,383,910			8,383,910
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%			10,900			10,900
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%			1,006,069			1,006,069

Orange County Comprehensive Plan: Vision 2050



ORANGE COUNTY

PLANNING DIVISION

2023-1-C-CP-1
VISION 2050

STATE-COORDINATED REVIEW

2010 - 2030 COMPREHENSIVE PLAN

FloridaCommerce
Bureau of Community Planning and Growth

JULY 25, 2023

BCC TRANSMITTAL PUBLIC HEARING

AUGUST 8, 2023

FC TRANSMITTAL SUBMITTAL

PREPARED BY:
ORANGE COUNTY PLANNING, ENVIRONMENTAL AND DEVELOPMENT SERVICES

PLANNING DIVISION
COMPREHENSIVE PLANNING SECTION

TRANSPORTATION

The purpose of the Transportation Chapter is to plan for and implement a multimodal transportation system that is designed for all users and encourages an array of mobility options. The Transportation chapter provides goals, objectives and policies (GOPs) to provide for a safe, accessible, and convenient multimodal transportation system. The GOPs were updated based on the most recent transportation data and analysis and have been coordinated with the Transportation Chapter Map series, with a design to support all elements of the comprehensive plan. In addition to providing safe and adequate capacity for conventional vehicular traffic, the GOPs promote, encourage and provide for alternative transportation options within the County. To reinforce the nexus between land use and transportation and to emphasize complete streets and connectivity between uses, several of the current Transportation Chapter GOPs have been relocated to the Mobility section of the Land Use, Mobility and Neighborhoods chapter.

The chapter contains new and updated GOPs to address emerging trends in transportation and technology. The GOPs provide the framework to prepare for the rapidly changing environment of technological advances in transportation and delivery methods. The GOPs address and support the use of automated, connected, electric, and shared vehicles (ACES), micro-mobility, next-generation transportation corridors and emerging technology to promote the safe and efficient movement of goods and people. The data and analysis and GOPs provide the groundwork for Orange County to continually evaluate, plan, and implement a multimodal transportation system that meets the needs of its citizens, businesses, and visitors. The continued coordination with local, regional, state, and federal agencies will create a multimodal transportation network that further enhances the quality of life of Orange County residents.

TRANSPORTATION

GOAL T 1: MULTIMODAL TRANSPORTATION SYSTEM

Orange County will design a safe, accessible, and financially-feasible multimodal transportation system for roadways, rail, transit, major bicycle and pedestrian facilities, trails, and aviation to increase healthy and equitable mobility for all and reduce environmental impacts and greenhouse gas emissions. (GOAL T1)

OBJ T 1.1: LONG-RANGE TRANSPORTATION PLAN (LRTP); The County adopts the Long-Range Transportation Plan (LRTP), through the County's long-term transportation improvement program, as Map 1 of the Transportation Map Series. This transformational plan includes the 10-year Capital Improvement Schedule, a 5-year Capital Improvement Program, state transportation projects, and other needed County transportation improvement projects inclusive of proposed partnership projects. This annually-updated plan represents a cost-feasible project plan that addresses current and future transportation deficiencies within the planning horizon. (Added 05/04, Ord. 04-06, Objective 1.2-r; Amended 09/13, Ord. 2013-19) (OBJ T1.1)

T 1.1.1: The planning, design, construction, and operation of roadway corridors shall be consistent with the adopted Planning Sector/ Future Land Use designation and Roadway Context Classification of the communities and will consider environmental impacts. Through the Roadway Conceptual Analysis (RCA) process, or other appropriate method, the County will seek public input throughout the process, including measures to mitigate adverse impacts to adjacent land uses and established neighborhoods to the extent feasible. (Added 05/04, Ord. 04-06, Policy 2.1.6; Amended 11/12, Ord. 2012-20; Amended 11/15, Ord. 2015-20) (T1.1.1.2)

T 1.1.2: The roadway component of the Long Range Transportation Plan (LRTP) will be implemented by utilizing the following four-step process: Roadway Conceptual Analysis (RCA); Roadway Design and Permitting; Right-of-Way Acquisition; and Roadway Construction. (Added 05/04, Ord. 04-06, Policy 1.2.1-r; Amended 11/12, Ord. 2012-20) (T1.1.1)

T 1.1.3: A Roadway Conceptual Analysis (RCA) will be completed as part of proposed County roadway projects as directed by the County. Partnership projects, when appropriate, shall perform a Preliminary Design Study (PDS) instead of an RCA. The RCA process includes a public participation element, including a Board of County Commissioners (BCC) public hearing. Following BCC approval of the RCA, the project can then proceed to final design and permitting, right-of-way acquisition, and construction phases. The PDS may follow a similar process. (Added 05/04, Ord. 04-06, Policy 1.2.2-r; Amended 11/12, Ord. 2012-20) (T1.1.1.1)

T 1.1.4: Whenever reasonably possible, future roadways shall be designed to promote livability and land use-transportation integration, in part by avoiding or minimizing the severing or fragmenting of existing neighborhoods. The County will coordinate with the Florida Department of Transportation (FDOT), the Central Florida Expressway Authority, and other appropriate entities to help ensure that limited access and other roadway projects that are constructed by them are developed consistent with the Context Classification of Orange County and avoid or minimize negative impacts to existing neighborhoods, wildlife corridors, and sensitive natural areas, and to coordinate these projects with conservation and land use decisions. (Added 12/07, Ord. 2007-20, Policy 2.1.7; Amended 11/12, Ord. 2012-20; Amended 11/15, Ord. 2015-20) (T1.1.1.3)

T 1.1.5: The County shall plan, design, construct, and operate transportation corridors to support emergency evacuation, emergency response, and post disaster recovery activities. The County will ensure that corridor improvements intended to enhance emergency evacuation and response are not used to promote additional development in hazardous areas or areas not planned for growth. (Added 11/15; Ord. 2015-20) (T3.6.10)

T 1.1.6: The County shall plan enhanced or new transportation corridors, where appropriate, to accommodate multiple modes of transportation, including opportunities for recreational trails and other forms of active transportation, and to accommodate multiple uses, including broadband, electrification, and utility infrastructure. (Added 11/15; Ord. 2015-20) (T3.6.5)

OBJ T 1.2: IMPLEMENTATION; The County shall implement a financially-feasible multimodal transportation system in coordination with government agencies and public and private entities that is supported by a diverse portfolio of revenue sources. (Added 05/04, Ord. 04-06, Objective 4.1-r; Amended 05/04, Ord.04-06, Policy 4.1.3-r; Amended 11/12, Ord. 2012-20) (OBJ T1.3)

T 1.2.1: The County shall continue to use an annually-updated, financially feasible, and phased Five-Year Capital Improvement Program and a 10-year Capital Improvement Schedule to implement the identified transportation improvements required to maintain the designated level of service and quality of service. (Added 05/04, Ord. 04-06, Policy 4.1.1-r; Amended 11/12, Ord. 2012-20; Amended 06/17, Ord. 2017-12) (T1.3.1)

T 1.2.2: To ensure the Capital Improvements Program is responsive to transportation demands, priority for funding County transportation improvement projects shall be based on factors such as:

A. Safety for all users;

B. Capacity or level of service deficiency;

C. Right-of-Way availability/preservation;

D. Partnership potential;

E. Consistency with the Future Land Uses designations and Context Classification and other policies of the Comprehensive Plan and coordination with MetroPlan Orlando's Metropolitan Transportation Plan and Transportation Improvement Program and the Florida Department of Transportation's adopted work program;

F. Promotes the use of transportation modes other than the automobile where applicable;

G. Located within the County's Urban Service Area or Targeted Sector;

H. Provides congestion relief on backlogged facilities, to the extent possible;

I. Provides optimal use of existing facilities;

J. Promotes transportation resiliency, including support for emergency evacuation, response, and/or post-disaster recovery; and

K. Promotes transportation equity, including compliance with Title VI of the Civil Rights Act, the Americans with Disabilities Act, and all applicable state and federal regulations.

(Policy 4.1.10; Amended 11/12, Ord. 2012-20; Amended 11/15, Ord. 2015-20) (T1.3.2)

T 1.2.3: The County shall consider all available funding sources, including, but not limited to; those at the State and Federal levels, gasoline and fuel taxes, impact fees, development-related fees, public/private initiatives for transportation projects, additional user fees (car rental surcharge), higher license and tag fees, and other appropriate options. (Added 05/04, Ord.04-06, Policy 4.1.2-r; Amended 11/12, Ord. 2012-20) (T1.3.3, T1.3.5)

T 1.2.3.1: The County shall use revenues generated from Transportation Impact Fees to provide new road capacity and other multi-modal transportation improvements. (Added 05/04, Ord. 04-06, Policy 4.1.4; Amended 11/12, Ord. 2012-20) (T1.3.3.1)

T 1.2.3.2: In addition to paying impact fees or other applicable development-related fees, new and redevelopment shall be responsible for the costs of all internal subdivision transportation infrastructure, as required by the Land Development Code, and pedestrian access improvements at project entrances to facilitate safe and accessible connections to the transportation network. (Policy 4.1.6; Amended 11/12, Ord. 2012-20, Amended 11/16, Ord. 2016-28) (T1.3.3.2)

T 1.2.3.3: The County shall fund maintenance and operating costs with revenues generated from the Constitutional Gas Tax, Local Option Gas Tax, and other appropriate funding sources. (Added 05/04, Ord. 04-06, Policy 4.1.5) (T1.3.4)

T 1.2.4: The County shall continue to utilize special assessments as a means of paving streets and providing traffic calming improvements in existing neighborhoods. (Policy 4.1.11; Amended 11/12, Ord. 2012-20) (T1.3.4.1)

T 1.2.5: To provide for an efficient and cost-effective transportation system, the County shall continue to acquire rights-of-way for timely management or acquisition of property to the extent financially practical and permitted by law. (Objective 4.2-r; Policies 4.2.1-r, 4.2.2-r; Amended 11/12, Ord. 2012-20; Amended 11/15, Ord. 2015-20) (T1.3.6)

OBJ T 1.3: REGIONAL COORDINATION; The County will coordinate with local governments, government agencies, public and private entities to develop a regional multimodal transportation system. (Goal 3-r; Objective 3.1-r) (OBJ T3.4)

T 1.3.1: The County will continue to coordinate with the Florida Department of Transportation (FDOT), MetroPlan Orlando, Central Florida Expressway Authority, LYNX, local governments, and private entities to identify needed multimodal and intermodal transportation projects. These include projects identified on the Orange County Five-Year Capital Improvements Program and 10- Year Capital Improvements Schedule, MetroPlan Orlando Transportation Improvement Program, State Transportation Improvement Program, LYNX Transit Development Plan, and MetroPlan Orlando Metropolitan Transportation Plan. (Objective 1.3-r, Policies 1.3.1-r, 1.3.4-r, 3.1.1-r, 3.1.3-r; Amended 11/15, Ord. 2015-20;T3.4.2) (T3.4.2)

T 1.3.2: The County shall continue to participate in Interlocal Agreements, Joint Participation Agreements (JPA), and other coordinated funding efforts with other local jurisdictions and public/private partnerships with private developers as a means of funding necessary transportation projects identified in the Long Range Transportation Plan (LRTP) that are consistent with the County's adopted Comprehensive Plan and coordinated with MetroPlan Orlando's Metropolitan Transportation Plan and Transportation Improvement Program and the Florida Department of Transportation's adopted work program. (Added 05/04, Ord. 04-06, Policy4.1.7-r; Policy 1.4.1-r, Amended 11/12, Ord. 2012-20) (T1.3.7)

T 1.3.3: The County shall coordinate with MetroPlan Orlando to ensure that air quality and carbon emissions, tourism, and freight movement are issues considered in the development of the regional Metropolitan Transportation Plan and in related project development activities. (Added 05/04, Ord. 04-06, Policies 1.5.1, 3.1.1-r, 3.4.3-r; Amended 03/13, Ord. 2013-07; Amended 11/16, Ord. 2016-28; T3.4.3) (T3.4.3)

T 1.3.4: The County will work with MetroPlan Orlando to develop and implement County and regional freight routing plans to ensure freight efficiency, leverage transportation investments, and ensure compatibility with other land uses in the County. (Added 11/16, Ord. 2016-28;T3.4.2.2) (T3.4.2.2)

T 1.3.5: The County will continue to coordinate with the Florida Department of Transportation (FDOT), MetroPlan Orlando, Central Florida Expressway Authority, local governments, and private entities to address capacity and operational project needs identified in state and regional freight plans. (Added 11/16, Ord. 2016-28)

T 1.3.6: The County will continue to assess the investment of County funds in selected State roadway projects to ensure the timely construction of needed transportation improvements. (Policy 1.2.5; Policy T1.4.4-r, Amended 11/12, Ord. 2012-20) (T1.3.10)

T 1.3.7: The County shall oppose the transfer of Florida Department of Transportation (FDOT) jurisdictional roadways to Orange County jurisdiction unless the roads are improved by the State to meet County adopted level of service and design standards and additional State funds for adequate maintenance and alleviation of deficiencies are made available. (Policy 4.1.9; Policy 1.4.5-r,Amended 11/12, Ord. 2012-20) (T1.3.11)

T 1.3.8: Based on annexation activity or other factors, the County shall coordinate with municipalities to pursue the appropriate jurisdictional transfer of roadways and associated drainage facilities to municipalities, consistent with Ch. 335, Florida Statutes, and relevant Joint Planning Area Agreements and/or developer's agreements, as applicable. (Added 11/12, Ord. 2012-20) (T1.3.12)

T 1.3.9: The County shall continue to support the construction of transportation projects, including improvements by the Central Florida Expressway Authority, the Florida Department of Transportation (FDOT), and Florida's Turnpike Enterprise, to the greatest extent feasible. (Added 12/07, Ord. 2007-20; Policy 1.3.5-r; Amended 11/15, Ord. 2015-20) (T3.4.11)

T 1.3.10: The County shall continue to support the planning and construction of "Beyond the Ultimate" I-4 improvements from US 27 in Polk County and to SR 472 in Volusia County. (Added 06/15, Ord. 2015-07) (T3.4.13)

OBJ T 1.4: MULTIMODAL INFRASTRUCTURE; The County will support the infrastructure and service improvements necessary to increase mobility options for all users, address costs associated with usage, promote safety for all modes of the transportation system, and promote the use of transit, bicycle, and pedestrian facilities, including multi-use trails. (Amended 11/16, Ord. 2016-28) (OBJ T3.3)

T 1.4.1: The County shall, where appropriate, ensure that design features associated with major roadway projects promote safe and convenient bicycle travel in accordance with Florida Department of Transportation (FDOT) guidance or other engineering standards determined appropriate by the County Engineer. (Added 05/04, Ord. 04-06, Policies 1.6.8, 1.6.8.1-r, Amended 11/16, Ord. 2016-28) (T3.3.2)

T 1.4.2: The County shall continue to coordinate with LYNX, the Florida Department of Transportation (FDOT), MetroPlan Orlando, and other local governments and agencies to identify, design and develop transportation facilities that promote safety for all users of the transportation system and the use of all modes of transportation. (Policies 1.6.6-r, 3.2.2-r, Amended 11/16, Ord. 2016-28) (T3.4.4)

T 1.4.3: The County shall coordinate with MetroPlan Orlando and local governments to implement the regional connectivity of the Trails Master Plan, to plan an integrated system of high-quality trail networks, and to promote the development of recreational trails and other forms of active transportation. (Policies 1.6.8.3-r, 1.6.8.4-r; Amended 11/13, Ord. 2013-22; Amended 11/15, Ord. 2015-20) (T3.4.8)

T 1.4.4: The County shall continue to use the Orange County Trails Master Plan to implement a countywide multi-use trail system. (Added 05/04, Ord. 04-06, Policy 1.6.8.2-r; Amended 11/13, Ord. 2013-22) (T3.3.3)

T 1.4.5: The County will coordinate with all relevant state and federal agencies to advance the state trail network, including, but not limited to, the Shared-Use Nonmotorized (SUN) Trail network and the Florida Coast-to-Coast Trail, and to seek appropriate state and federal funding for Orange County segments of state trails.

T 1.4.6: The County shall consider the special mobility and transit needs of the transportation disadvantaged in association with the construction or retrofit of sidewalks, signalized intersections and roadways at the collector level or above, including design and installation of midblock crossings, beacons, and/or other safety features, as warranted as it pertains to infrastructure within county right-of-of-way in accordance with Title VI requirements. (Policy 2.2.6-r; Amended 11/16, Ord. 2016-28) (T3.3.5)

OBJ T 1.5: TRANSIT; The County will partner with LYNX, SunRail and other established transit providers to implement a comprehensive multimodal transit system that offers efficient, convenient, and reliable travel options to residents, employees, and visitors throughout Orange County.

T 1.5.1: The County shall support high-frequency public transit including, but not limited~~,~~ to, commuter rail, light rail, high-speed rail, circulator systems, and Bus Rapid Transit (BRT), where appropriate. (Policy 1.7-r) (T3.3.1)

T 1.5.2: The County shall conduct all transit coordination, transit-oriented land use and transportation planning, and related capital projects in Orange County using LYNX's Transit Development Plan and Orange County Transit Plan, including its designated high-capacity corridors and planned improvements.

T 1.5.3: The County will support LYNX in seeking appropriate dedicated transit funding sources and shall continue to support mass transit and paratransit~~,~~ for people with disabilities, through the appropriation of funds on an annual basis. (Added 05/04, Ord. 04-06, Policy 4.1.15; Policy 1.4.3-r, Amended 11/12, Ord. 2012-20) (T1.3.9)

T 1.5.4: The County shall continue to collaborate with the Florida Department of Transportation (FDOT), MetroPlan Orlando, LYNX, local governments, and the private sector to promote the use of Travel Demand Management (TDM), Transportation Systems Management and Operations (TSMO), and Intelligent Transportation Systems (ITS) strategies leverage transit capacity improvements and transit services by promoting technologies such as, but not limited to, Passenger Information System, Automated Speed Enforcement, Traffic Surveillance, Signal Synchronization and Transit Signal Priority**,** and~~,~~ Electronic Toll Collection, where feasible. (Added 05/04, Ord. 04-06, Policies 1.3.2, 1.6.4, 1.6.5, 1.6.7; T3.4.5)

T 1.5.5: The County shall continue to coordinate with LYNX and MetroPlan Orlando to accommodate the special needs of the transportation disadvantaged in accordance with federal, state, and local regulations and definitions. This includes the provision of safe, accessible, and convenient public transportation service and facilities~~,~~ through financial and technical assistance and through inter-agency agreements. (Objective 2.2-r; Policies 2.2.1-r, 2.2.2-r, 2.2.3, 2.2.4; Amended 11/16, Ord. 2016-28; T3.4.6)

T 1.5.6: The County shall continue to work with Orange County Public Schools and LYNX to facilitate transportation of students to and from school, promote Safe Routes to School and the use of all modes of transportation, and to identify and address hazardous walking conditions consistent with statutory requirements. (Policy 2.2.5; Amended 11/16, Ord. 2016-28; T3.4.7)

OBJ T 1.6: AVIATION; Existing and future aviation facilities within Orange County shall be integrated into the overall transportation system. (Objective 1.9-r; OBJ T3.5)

T 1.6.1: The County shall coordinate with the Greater Orlando Aviation Authority (GOAA), the City of Orlando, LYNX, MetroPlan Orlando, the Florida Department of Transportation (FDOT), the Central Florida Expressway Authority, and private entities, as applicable, to promote multimodal and intermodal transportation systems that connect the Orlando International Airport (OIA) and the Orlando Executive Airport (OEA) to the overall transportation network. (Policy 3.2.4-r) (T3.5.1)

T 1.6.2: The County, through its role on MetroPlan Orlando and the Greater Orlando Aviation Authority (GOAA) governing boards and other appropriate means, shall continue to ensure that GOAA's aviation improvements and operations are coordinated with area transportation agencies and projects, are supported by appropriate land use and airport noise regulations, are reviewed for potential transportation and environmental impacts and required mitigation, and are consistent with the Comprehensive Plan. (Objective 1.8-r; Policy 1.8.7-r) (T3.5.2)

T 1.6.3: The County shall coordinate with any proposed new general aviation facility to provide technical assistance as needed and to ensure aviation development is consistent and compatible with surrounding land use and community context to address transportation and environmental impacts and required mitigation consistent with applicable plans and regulations; to implement appropriate land use and airport noise regulations; and coordinate surface transportation access and projects consistent with local, regional, and state transportation plans. (Added 05/03, Ord. 03-03, Objective 1.10, Policies 1.10.1, 1.10.2, 1.10.3, 1.10.4; T3.5.5)

T 1.6.4: Orange County will encourage the continued provision of commercial air carrier and general aviation facilities that efficiently meet the needs of passengers, commercial airlines, and general aviation users.

GOAL T 2: MOBILITY STANDARDS

The County shall establish and maintain a concurrency management system and mobility strategies that ensures the multimodal transportation network and services needed to support the land use designations established in the Land Use, Mobility, and Neighborhoods Chapter of the Comprehensive Plan are available concurrent with development and respect the context of areas traversed by transportation corridors. (GOAL T2)

OBJ T2.1: MULTIMODAL LEVEL OF SERVICE; The County shall continue to ensure minimum quality and level of service standards on County roads and State roads within unincorporated Orange County are maintained to the extent feasible. (Added 05/04, Ord. 04-06, Objective 1.1) (T2.1.1)

T 2.1.1: The minimum peak-hour roadway level of service standards for Orange County shall be as follows:

Table LMN 2.1.1 (a) Level of Service Standards

	STATE AND COUNTY			
Type	Rural	Urban Non-SIS and Non-TRIP	SIS Facilities	TRIP Funded Facilities
Principal Arterial, Urban (Class I)	N/A	E	E	E
Principal Arterial, Urban (Class II)	N/A	E	E	E
Principal Arterial, Rural	D	N/A	N/A	N/A
Minor Arterial, Urban	N/A	E	E	E
Minor Arterial, Rural	D	N/A	N/A	N/A
Collector, Major and Minor Urban	N/A	E	E	E
Collector, Rural	D	N/A	N/A	N/A

County roadway capacities shall be determined by using the context-based guidelines established by the most recent edition of the Florida Department of Transportation (FDOT) Quality/Level of Service Handbook or other County-accepted methodologies. (Added 06/07, Ord. 2007-06, Policy 1.1.2-r; Amended 09/13, Ord. 2013-19; Amended 12/14, Ord. 2014-30) (T2.1.1)

T 2.1.2: Quality of service standards for Multimodal Transportation Networks (MMTNs) as adopted in Land Use, Mobility, and Neighborhoods Policy LMN 6.6.2 shall be maintained to avoid current and future deficiencies. (Replaced 09/13, Ord. 2013-19) (T2.1.2)

T 2.1.3: On a countywide basis, the County will use Level of Traffic Stress measures to assess pedestrian and bicycle quality of service and appropriate performance measures for transit, as detailed in the most recent edition of the FDOT Quality/Level of Service Handbook.

OBJ T 2.2: CONCURRENCY MANAGEMENT SYSTEM; The County shall maintain a concurrency management system that ensures that transportation facilities and services needed to support new and redevelopment are available concurrent with the impacts of such development. (Objective T1.4) (OBJ T2.2)

T 2.2.1: The County shall review the impacts of development in conjunction with the issuance of all development permits to ensure the following:

A. Consistency with the Context Classification and adopted Level of Service/Quality of Service is maintained.

B. Financially-feasible roadways scheduled to begin construction on or before the first year of the County's current Five-Year Capital Improvements Program and meet all statutory and/or rule requirements or that are facilities included in the first year of the Florida Department of Transportation (FDOT) Five-Year Transportation Plan shall be included in the roadway capacity analysis of the Concurrency Management System.

C. Developer-funded projects shall be included in the transportation analysis, if the project's capacity is available when the impacts of development occur, as stipulated within an executed developer's agreement.

(Added 05/04, Ord. 04-06; Amended 06/07, Ord. 2007-06, Policy 1.4.1-r; Amended 09/13, Ord. 2013-19) (T2.2.1)

T 2.2.2: Development permits shall not be issued for new and redevelopment that degrade the roadway level of service below the adopted level of service standard, unless the County calculates a proportionate share contribution, based on the formula provided in Orange County Code. (Added 03/08, Ord. 2008-05, Policy 1.4.2; Amended 09/13, Ord. 2013-19) (T2.2.2)

T 2.2.3: Proposed partnership projects cannot be used to satisfy traffic concurrency unless necessary interlocal agreements or joint participation agreements have been executed. (Policy 1.2.7) (T2.2.5)

T 2.2.4: The transportation impact area for all concurrency applications, including Comprehensive Plan Future Land Use Map (FLUM) Amendments, shall include all roadway segments and signalized intersections located within the project's impact area defined by the latest Orange County Concurrency Management System (CMS) or Comprehensive Plan Amendment (CPA) methodology. (Amended 12/14, Ord. 2014-30, Policy T1.3.8-r) (T2.2.6)

T 2.2.5: The County shall coordinate with all counties and local governments in, or adjacent to, the County, as appropriate, to ensure that development impacts that traverse jurisdictional boundaries will not cause the level of service in the adjacent jurisdiction to diminish below the adopted standard. This shall be done through the comprehensive plan amendment and review process, by providing up-to-date information and data sets regarding proposed and future developments, and through scheduled coordination meetings. (Policies 3.1.4-r, 3.1.5-r; Amended 09/13; Ord. 2013-19, Policy T2.2.8-r) (T2.2.7)

T 2.2.6: The Concurrency Management System shall maintain traffic count data for State and City roadways located within a municipal boundary for informational purposes and to aid coordination efforts. New and redevelopment that impacts these roadways shall be subject to the mobility requirements of the relevant jurisdiction, in coordination with Orange County and the County's Concurrency Management System, as applicable. (Amended 09/13; Ord. 2013-19, Policy T2.2.8.1-r) (T2.2.8)

T 2.2.7: The Concurrency Management System shall maintain traffic count data on limited access facilities for informational purposes and to aid coordination efforts. Implementation of the Concurrency Management System shall continue to ensure the appropriate distribution and assignment of trips from limited access facilities to other roadway facilities in the impact area in review of development-related transportation studies. (Amended 09/13; Ord. 2013-19, Policy T2.2.8.2-r) (T2.2.8.1)

OBJ T 2.3: CONSTRAINED CORRIDORS; The County will plan and implement multimodal facilities and the use of non-vehicular modes to increase transportation options and accessibility.

T 2.3.1: The County shall enforce multimodal transportation standards and applicable concurrency regulations on new and redevelopment development permits for non-vested development that adversely impact constrained or backlogged facilities. A constrained roadway is defined as a facility to which adding two or more through lanes to meet current or future traffic needs is not possible because of location within the boundary of a municipal jurisdiction, existing development and right-of-way limitations, policy barriers and/or hydrological features. A backlogged roadway is defined as a facility where the level of service standard adopted in the Orange County Comprehensive Plan is not being met, the facility is not constrained, and improvements for the roadway segment are not programmed for construction. (Added 5/04, Ord. 04-06, Policies 1.1.2.1(A)(B), 1.1.2.3-r; Amended 09/13, Ord. 2013-19) (T2.2.3)

T 2.3.2: Constrained and backlogged facilities shall be included in regular updates to the Implementation and Property Rights Chapter, to address and be incorporated into the Concurrency Management System, based on available funding. (Amended 09/13, Ord. 2013-19; Amended 12/14, Ord. 2014-30; Amended 6/16, Ord. 2016-15; Amended 06/17, Ord. 2017-11) (T2.2.31)

T 2.3.3: New and redevelopment applications impacting backlogged and constrained facilities shall be subject to concurrency and, if needed, a proportionate share agreement will be required. A comprehensive transportation study shall be required, and if the adopted level of service cannot be met under current conditions, or if the improvement is not funded for construction in the five-year Capital Improvements Program, the applicant and County must agree upon mitigating improvements. Private developers shall contribute to the County's multimodal transportation system through the County's transportation concurrency and proportionate share regulations. As parcels are developed or redeveloped, the site design shall conform to applicable standards and requirements in the County's Land Development Code, transportation impact analysis requirements, and concurrency requirements. (T2.2.4)

OBJ T 2.4: LONG-TERM CONCURRENCY MANAGEMENT SYSTEM; The County establishes a Long-term Transportation Concurrency Management System to correct deficiencies in transportation facilities on designated roadways that are included in the Orange County Ten-Year Capital Improvements Schedule and to implement operational improvements that may be needed. (Added 05/04, Ord. 04-06; Policy 1.4.7-r; Amended 09/13, Ord. 2013-19; OBJ T2.4)

T 2.4.1: A long-term (10-year) schedule of capital improvements for transportation facilities will be established for any long-term concurrency management system and will be reflected in the Implementation and Property Rights Chapter. (T2.4.1)

T 2.4.2: An applicant may satisfy transportation concurrency through a proportionate share calculation on the impacted facility which shall be applied to the applicable facility or facilities on the long-term schedule of capital improvements, or the applicant may provide proportionate share payment for operational improvements along the failing facility or facilities. (Amended 09/13; Ord. 2013-19, Policy T2.4.3-r) (T2.4.2)

T 2.4.3: Transportation facilities identified as mitigation for traffic impacts in the long-term concurrency management system shall be added to the long-term schedule of capital improvements in the next regularly scheduled update of the Implementation and Property Rights Chapter. (Amended 09/13; Ord. 2013-19, Policy T2.4.4-r) (T2.4.3)

T 2.4.4: In addition to the Ten-Year Capital Improvements Schedule, operational improvements may be added to the Capital Improvements Program as part of the next regularly scheduled update of the Implementation and Property Rights Chapter. These projects include, but are not limited to, intersection improvements, turn lanes, roundabouts, and Intelligent Transportation Systems (ITS) improvements. All intersection analysis for major projects will follow FDOT's Intersection Control Evaluation (ICE) procedures. (Added 09/13, Ord. 2013-19) (T2.4.4)

OBJ T 2.5: PROJECTS THAT PROMOTE PUBLIC TRANSPORTATION; The County may grant an exception from transportation concurrency for projects that promote public transportation, as defined in s. 163.3164(38), Florida Statutes, subject to an approved transportation study. (Added 05/09, Ord. 2009-15; Amended 06/12, Ord. 2012-14; Amended 03/13, Ord. 2013-07) (OBJ T2.8)

T 2.5.1: Projects that promote public transportation are developments within the Urban Service Area boundary that directly affect the provision of public transit, including transit terminals, transit lines and routes, separate lanes for the exclusive use of public transit services, transit stops (shelters and stations), office buildings or projects that include fixed-rail or transit terminals as part of the building, and projects that are transit-oriented and designed to complement reasonably proximate planned or existing public facilities. (Added 05/09, Ord. 2009-15, Policy T2.6.1; Amended 06/12, Ord. 2012-14) (T2.8.1)

T 2.5.2: Where there are opportunities, the County shall ensure that new and redevelopment shall be designed such that the long-range plan for sustainable public transportation options are realized by implementing specific performance standards that will exempt the development from traditional road concurrency. A portion of a Planned Development or proposed development may be eligible for concurrency exception for trips generated for these portions by meeting the performance standards in Policy T 2.4.5. This partial exception shall not affect other portions of a Planned Development or proposed development that do not comply with these policies, which shall still be subject to concurrency. Review of these portions not receiving a concurrency exception shall not be subject to the performance standards. (Added 05/09, Ord. 2009-15, Policy T2.6.2; Amended 06/12, Ord. 2012-14; Amended 03/13, Ord. 2013-07) (T2.8.2)

T 2.5.3: Transportation concurrency exceptions granted under this objective shall not relieve development from meeting performance standards set forth to ensure the appropriate mix of land use and accommodating infrastructure are provided. (Added 05/09, Ord. 2009-15, Policy T2.6.3; Amended 06/12, Ord. 2012-14; Amended 03/13, Ord. 2013-07) (T2.8.3)

T 2.5.4: Proposed transit-oriented projects shall be reviewed based on the results of a study conducted by the applicant, which shall be consistent with County-approved methodologies. (Added 05/09, Ord. 2009-15, Policy T2.6.4; Amended 06/12, Ord. 2012-14; Amended 03/13, Ord. 2013-07) (T2.8.4)

T 2.5.5: Compliance with performance standards shall be subject to the final approval by the County during the development review process based upon the following:

- Place Types shall be organized in such a way that the densities and intensities promote transit use, with higher density and intensity commercial offices, multi-family residential, and institutions located within walking distance to transit stations/stops and connected by pedestrian and bicycle circulation systems, consistent with all County-adopted Land Development Code standards for transit-oriented development.
- Vehicle parking supply shall be based on average demand, not peak demand, using shared vehicle parking to accommodate demand peaks. It is preferred that parking be located on the street, behind buildings, and in carefully designed and located parking structures.
- Buildings are, to the extent practicable, to be located and oriented in a manner that accommodates all modes of travel and with facades and design features that contribute to an active street scene and create pedestrian-oriented environments, consistent with Orange Code.

(Added 05/09, Ord. 2009-15, Policy T2.6.5; Amended 06/12, Ord. 2012-14) (T2.8.5)

GOAL T 3: TECHNOLOGY AND SUSTAINABILITY

The County shall use state-of-the-art and energy-efficient infrastructure, vehicles, materials, technologies, and methodologies, where financially feasible, to develop and operate transportation corridors that increase efficiency within the multimodal transportation network, enhance safety, accommodate new transportation technologies and facilitate the movement of goods and people.

OBJ T 3.1: ACES; The County will plan, design, construct, and maintain surface transportation infrastructure to support Automated, Connected, Electric, and Shared vehicles (ACES) and other emerging technologies.

T 3.1.1: The County will provide infrastructure that supports Autonomous/Automated Vehicles (AV) technology and the safe integration of AVs into the transportation network, where feasible, which may include pavement strength, roadway markings, and other elements to improve safety and mobility for all roadway users.

T 3.1.2: The County will continue to evaluate and incorporate Connected Vehicle (CV) technology, where feasible, in the transportation network to enable cars, trucks, buses, and other vehicles' communication to share important safety and mobility information related to traffic signals, work zones, school zones, and other infrastructure.

T 3.1.3: The County may provide infrastructure and facilities that support electrification of the transportation system and the adoption of electric vehicles (EV), consistent with the County's Sustainable Operations and Resilience Action Plan and applicable Florida Department of Transportation (FDOT) EV plans.

T 3.1.4: The County will include ACES-supportive infrastructure investment for functionally-classified roadways in the Capital Improvements Program, where feasible and based on available funding.

T 3.1.5: The County will monitor and evaluate adopted transportation technology systems, equipment, and components to determine their compatibility, efficiency, resiliency, cost effectiveness, and ability to support the safe and efficient movement of people and goods within the County.

T 3.1.6: The County will support the provision of intermodal stations which include electric charging infrastructure to facilitate safe and accessible transitions between appropriate travel modes, including pedestrians, bicycles, electric bicycles and scooters, rail, buses, and automobiles. (Added 05/04, Ord. 04-06, Policy 1.7.4-r; Amended 11/16, Ord. 2016-28) (T3.3.6)

OBJ T 3.2: MULTIMODAL CORRIDORS; The County will coordinate infrastructure planning for next-generation transportation corridors that include multiple transportation modes and emerging technologies with all appropriate local, regional, and state agencies.

T 3.2.1: The County shall continue to collaborate with the Florida Department of Transportation (FDOT), MetroPlan Orlando, LYNX, local governments, Central Florida Expressway Authority, and the private sector, to plan the development and operation of viable and financially feasible transportation systems on a local and regional scale which use state-of-the-art and energy-efficient infrastructure, vehicles, materials, technologies, and methodologies, where economically feasible. (Added 05/04, Ord. 04-06, Policies 1.7.1-r, 1.7.3-r, 3.1.1-r, 3.1.2-r, Objective 3.2-r, Policy 3.4.1; Amended 11/15, Ord. 2015-20) (T3.4.1)

T 3.2.2: The County will promote Travel Demand Management (TDM) and Transportation Systems Management Operations (TSMO) strategies and conduct related studies, as needed, to improve capacity, traffic operations, and efficiency where appropriate and will ensure coordination with related agencies, such as LYNX, MetroPlan Orlando, Central Florida Expressway Authority, the Florida Department of Transportation (FDOT), municipalities, and adjacent counties. (Added 05/04, Ord. 04-06, Policies 1.2.4-r, 1.3.2, 1.6.5; Amended 11/12, Ord. 2012-20; T1.1.2)

T 3.2.3: The County shall evaluate infrastructure investments for interoperability to ensure appropriate coordination with local, regional, and state agency systems and operations.

T 3.2.4: The County's transportation plans, designs, and operations will provide for continuity of operations by identifying and mitigating cybersecurity and data security issues within the transportation network.

OBJ T 3.3: MULTIMODAL SYSTEM; The County will coordinate land use and infrastructure planning to support multiple modes and emerging technologies, in order to facilitate the safe and efficient movement of goods and people.

T 3.3.1: The County will assess current freight and logistics trends, technologies, and implications for transportation and land use to develop an urban freight plan that supports distribution systems that maintain freight deliveries at a scale appropriate for the roadway network and land uses, while ensuring community compatibility and appropriate infrastructure.

T 3.3.2: The County shall consider a range of commercial vehicle classifications as defined by the Federal Highway Administration, including buses and trucks, in the planning and design of the County's transportation system's capacity and operations to ensure freight mobility and efficiency. (Added 05/04, Ord. 04-06, Objective 1.5; Policies 1.5.1, 1.5.2, 1.5.3; Amended 11/16, Ord. 2016-28) (T1.1.5)

T 3.3.3: The County will support the Florida Department of Transportation's efforts to plan and construct truck parking facilities to encourage the safe and efficient delivery of goods to the County's residents, visitors, and businesses.

T 3.3.4: The County will develop and enhance standards for curb zone management to address freight, electric vehicle charging, and designated on-street drop-off/pick-up zones for transit and goods and services based on the functional classification of the roadway, consistent with Federal Highway Administration guidelines and other best practices.

T 3.3.5: The County recognizes that the concentration of mobility services at a designated location within a mobility hub will facilitate transit service, support shared and autonomous vehicle services, provide electric vehicle charging infrastructure, and support community transportation choices and mobility. The County will explore potential locations, minimum standards, and amenities for mobility hubs, where appropriate, in coordination with LYNX and other agencies.

OBJ T 3.4: SUSTAINABILITY; The County will ensure that transportation investments, including roadway construction and associated improvements, contribute to the sustainability and resilience of Orange County and its communities.

T 3.4.1: The County shall coordinate with the Florida Department of Transportation (FDOT), the Central Florida Expressway Authority, Florida's Turnpike Enterprise, other agencies and municipalities to help ensure roadway construction and associated improvements are done in a sustainable, cost effective, and environmentally sensitive manner. The County shall encourage the use of parkway-associated stormwater management facilities, including green infrastructure for aquifer recharge, wetland and habitat restoration, as irrigation sources in lieu of groundwater. (Added 12/07, Ord. 2007-20; Policy 3.1.7; Amended 11/15, Ord. 2015-20) (T3.4.12)

T 3.4.2: The County will retrofit existing facilities where possible to restore impacts to the environment from prior investments, such as restoring natural water flow or wildlife connectivity.

T 3.4.3: The County will encourage early, large-scale coordination of transportation, land use, and conservation decisions to identify solutions that advance multiple goals, such as coordination on land purchases and easements and water storage, treatment, and drainage.

T 3.4.4: The County will support more efficient system management, multimodal options, and clean energy alternatives that reduce net energy consumption and associated emissions of air quality pollutants and greenhouse gases and contribute to improved public health.

T 3.4.5: The County will adapt transportation planning, design, construction, and maintenance techniques to increase sustainability, reduce vulnerability, and improve resilience of existing and new transportation facilities, such as use of emerging technologies and advanced materials, stormwater management, and infrastructure modifications.

T 3.4.6: The County will enhance the sustainability and agility of the transportation system during emergencies and disruptions by expanding real-time information sharing, enhancing system management, providing more multimodal options, and supporting greater redundancy for critical infrastructure.

GOAL T 4: VISION ZERO AND SAFETY

Orange County will design a safe and accessible multimodal transportation system to eliminate all traffic fatalities and severe injuries (Vision Zero). The multimodal system will promote equitable access to all communities and prioritize a safe, comfortable, and attractive pedestrian environment.

OBJ T 4.1: VISION ZERO; The County shall continue to develop polices, construct multimodal improvements, and implement safety countermeasures on the transportation network to achieve its Vision Zero goal of preventing serious injuries and all traffic- related fatalities while ensuring the safety of all roadway users.

T 4.1.1: The County shall partner with the Florida Department of Transportation (FDOT), MetroPlan Orlando, LYNX, local governments, and other regional and local entities, as appropriate, in regional and local initiatives focused on engineering, evaluation, enforcement, education, and encouragement of activities to improve pedestrian and bicyclist safety to reduce crashes. (Added 11/16, Ord. 2016-28) (T3.4.4.1)

T 4.1.2: The County will engage a broad range of partners including first responders, technology providers, insurance companies, and health care institutions in developing and implementing safety solutions.

T 4.1.3: The County will strategically allocate and align resources to advance Vision Zero, including higher funding priority for projects with an anticipated safety benefit.

T 4.1.4: The County shall proactively review transportation conditions and implement safety treatments to avoid crashes, as well as identify high crash-frequency locations and review crash data, to prioritize roadway, pedestrian and bicycle improvements that help ensure the safety of all users. (Added 05/04, Ord. 04-06, Policy 2.1.2-r; Amended 11/12, Ord. 2012-20; Amended 11/15, Ord. 2015-20) (T1.1.3)

T 4.1.5: Traffic calming measures such as narrowed roadway and lane widths, on-street parking, reduced posted speeds, horizontal deflection, speed cushions, roundabouts, raised crosswalks, continuous walking and bicycling routes, or other measures recommended in Section 202 on Speed Management in the FDOT Design Manual shall be encouraged. (UD1.4.3)

T 4.1.6: The County shall continue to research, monitor, and evaluate emerging trends in micro-mobility and impacts to the safe and efficient movement of people within the County's transportation network to address any identified safety needs, including on heavily-traveled streets consistent with s. 316.008 (1)(n), Florida Statutes.

OBJ T 4.2: SAFETY AND EQUITY; Orange County shall continue to provide and promote a safe integrated network of transportation options for all roadway users, including roadway and transit users, pedestrians, and bicyclists, underserved populations and the transportation disadvantaged, with adjacent municipalities and other transportation providers to enhance transportation equity and environmental justice.

T 4.2.1: The County shall include the appropriate pedestrian facilities on any new or reconstructed street in accordance with applicable federal accessibility laws and with Florida Department of Transportation (FDOT) guidance or other engineering standards determined appropriate by the County Engineer. (Amended 11/16, Ord. 2016-28) (T3.3.4)

T 4.2.2: The County will plan, design, operate, and maintain County roadways to promote safety for people of all ages and abilities, including pedestrians, cyclists, transit users, motorists, and freight and service operators, through the adoption of Complete Streets policies and implementation guidelines. (Added 11/16, Ord. 2016-28) (T3.3.7)

T 4.2.3: The County will focus on removing barriers to transportation for persons with disabilities, low income, and limited English proficiency, such as improved signage and wayfinding, enhanced coordination of services across jurisdictions and between public and private partners, and technology solutions.

T 4.2.4: The County will enhance transportation options for traditionally underserved communities and socioeconomic groups, focusing on rural areas, urban core areas, and other neighborhoods with accessibility gaps.

T 4.2.5: The County shall provide the opportunity for the public to participate in the transportation planning process through public meetings, public workshops, small group meetings, websites, press releases, and other public forums. Public input shall be solicited at the Roadway Conceptual Analysis or other initial stage of planning through public meetings held in the affected geographic area of the project. These meetings shall be scheduled and conducted in accordance with County guidelines, including public notification, Title VI compliance, and accessibility. (Objective 3.3-r; Policies 3.3.1-r, 3.3.2-r) (T3.4.10)

Orange County Pedestrian & Bicycle Safety Action Plan

Walk-Ride-Thrive!

Pedestrian & Bicycle Safety Action Plan

Overview

Orange County's Walk-Ride-Thrive! pedestrian safety program includes Orange County's first Pedestrian and Bicycle Safety Action Plan (PBSAP). The first phase of the PBSAP, completed in 2018, accomplished the following:

- Documented the County's extensive pedestrian and bicycle safety efforts to date
- Analyzed crash data and crash typing to identify location and behavioral factors that contribute to crashes
- Reviewed the engineering design features that Orange County currently uses or could adopt to decrease crashes on County roadways
- Coordinated with regional partners, including MetroPlan Orlando, Best Foot Forward, Orange County Public Schools, and LYNX.

Project Schedule

The first phase of the PBSAP was completed in 2018. The next phase of the PBSAP includes public outreach to Orange County residents and organizations to present findings and obtain their input and recommendations on improving bicycle and pedestrian safety in Orange County.

https://www.orangecountyfl.net/TrafficTransportation/WalkRideThrive/PedestrianandBicycleSafetyActionPlan.aspx

Orange County Trails Master Plan

ORANGE COUNTY

TRAILS MASTER PLAN

July 2022

ORANGE COUNTY PARKS & RECREATION

vhb

1.0 Executive Summary

1.1 Executive Summary

"Imagine a system of nearly 170 miles of wide, paved, multipurpose trails throughout Orange County, connecting residents and visitors to neighborhoods, parks, schools, offices, shopping, natural areas and attractions. Imagine families and individuals of all ages and abilities walking, running, bicycling and skating for both recreation and alternative means of transportation, just as they do today on Orange County's West Orange Trail and Little Econ Greenway Trail. And imagine new opportunities for economic development, social interaction and environmental protection and enhancement along the Trail corridors." Those were the main ideas guiding Orange County's 2012 Trails Master Plan.

In the nine years since the 2012 Trails Master Plan, Orange County has focused on expanding and improving its trail network to provide active transportation and recreation options to enhance the quality of life of its residents and visitors and support economic development.

As required by the Orange County Comprehensive Plan, this update builds on the 2012 Trails Master Plan and is necessary to provide an analysis of projects that have been completed, as well as to serve the needs of our changing and diverse population.

This Master Plan focuses on the County's mainline trails, a network of wide, paved, multi-purpose trails that form the primary network of the County's bikeways and trails system. This Plan provides the vision for how these trails will connect throughout the County and with trails in other jurisdictions. Other projects, such as roadway projects or smaller trail spurs to connect local destinations, or sidewalks, bike lanes, hiking trails or similar projects can enhance the connectivity of the mainline trail system, but are not included in the Plan, as they are generally being constructed throughout the County. These types of projects provide the facilities that can help to complete the bicycle/pedestrian network. The mainline trails evaluated in the Master Plan update are more focused on countywide connectivity to major destinations and regional trail networks.

This Plan update reviews the existing conditions and changes to the trail network and previously proposed trails since the 2012 Plan, as well as design guidelines for new trails. It also provides conceptual plans for eight (8) mainline trails:

1. Apopka Vineland Trail
2. Azalea Park Trail
3. Clarcona-Ocoee Connector Trail
4. East Orange Trail
5. East Orange Spur
6. Lake Apopka Connector Trail
7. Little Econ Greenway
8. Wekiva Trail

Further feasibility analyses were conducted for the following five (5) trails to provide a more detailed overview of potential opportunities and constraints for the proposed alignments:

1. Horizon West Trail (Phase 2)
2. Innovation Way Trail – North (Phase 1B)
3. Pine Hills Trail (Phase 2B)
4. Shingle Creek Trail (Phase 4)
5. West Orange Trail (Phase 4)

During the planning process, community outreach was a critical component to understanding how people use the trail system and what people felt would improve the trail systems, including potential connections to be considered and types of amenities.

In addition to the public outreach, the project team held meetings with 26 stakeholder organizations, including local municipalities, local bicycle and environmental organizations, transit providers and utility companies to discuss needs, opportunities, potential connections and alignments options.

This Plan incorporates the ideas and comments from this outreach and aims to build upon the County's stated vision for its trails system.

3.0 Existing Conditions

3.2 Existing Conditions

3.2.1. Existing Trail System

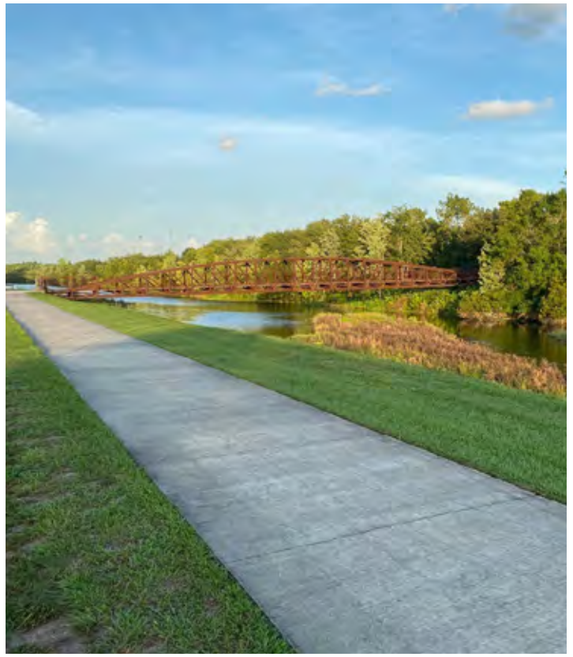
The Orange County trail system includes ten (10) mainline trails that provide access to destinations, such as parks, around the County and connections to a regional trail system. The existing mainline trails are depicted in Figure 3 and include:

1. Avalon Trail
2. Cady Way Trail
3. Clarcona-Ocoee Connector Trail
4. Horizon West Trail
5. Innovation Way North and South Trails
6. Lake Apopka Loop Trail
7. Little Econ Greenway
8. Pine Hills Trail
9. Shingle Creek Trail
10. West Orange Trail (including Wekiva Trail)

These ten mainline trails combine to provide more than seventy (70) miles of trails for residents and visitors to run, walk, and bike, and are maintained by seven (7) different agencies. The Orange County Parks and Recreation Department maintains approximately 53.9 miles of the system. Other agencies responsible for maintenance include:

1. Avalon Park Homeowners Association
2. City of Orlando
3. City of Winter Garden
4. City of Winter Park
5. Florida Department of Transportation
6. Orange County
7. St. Johns River Water Management District

For additional information and mapping of the existing trail system, please see the Existing Conditions Technical Memorandum found in Appendix A.



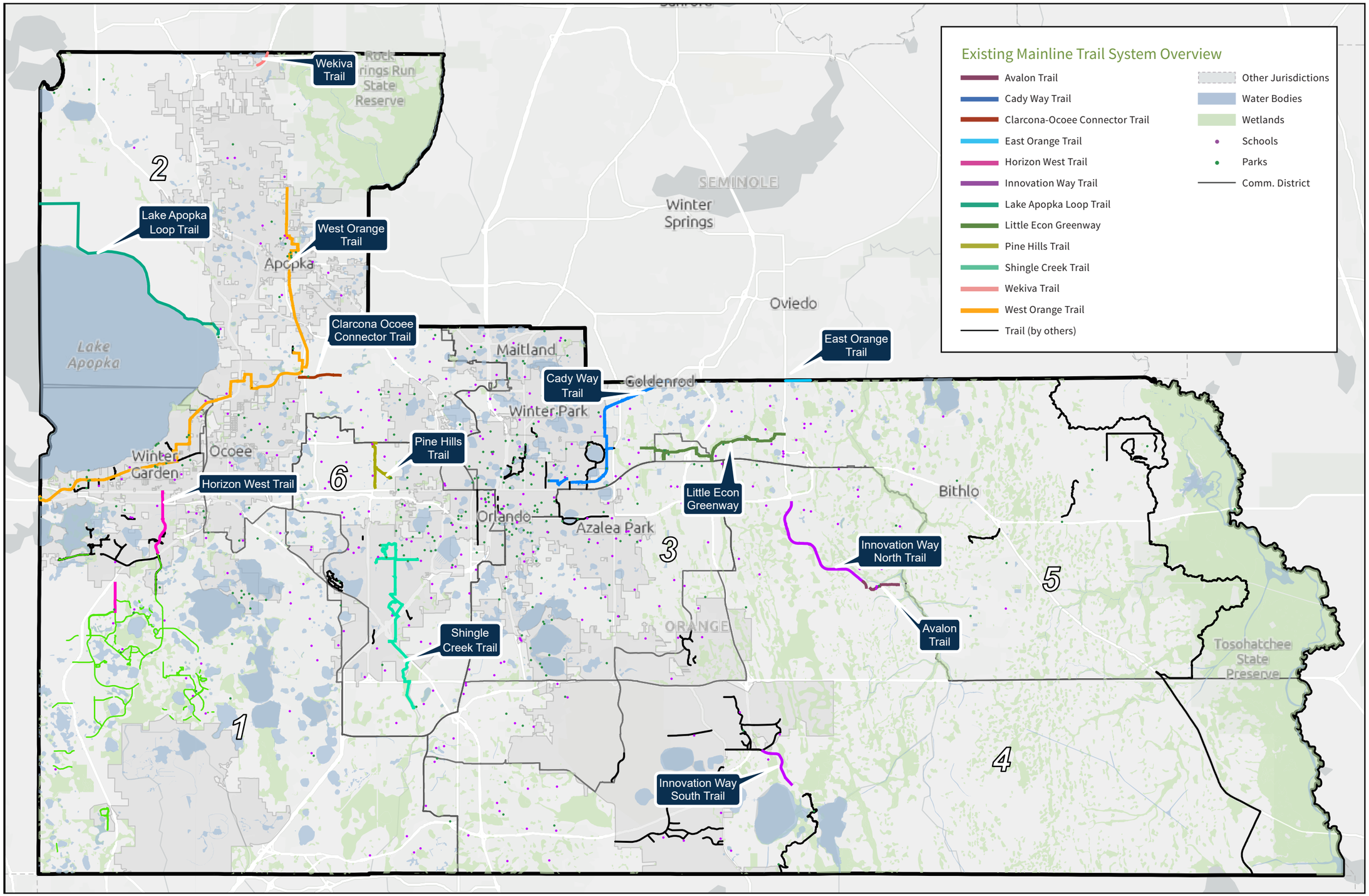


Figure 3: Orange County Existing Mainline Trails

6.0 Appendices

Cady Way Trail

The Cady Way Trail is made up of five segments totaling 7.79 miles in length (Table 2). The segments are maintained by three separate agencies: Orange County, the City of Orlando, and the City of Winter Park.

Table 2: Cady Way Trail

Trail Name	***Length (Miles)***	***Maintaining Agency***
Cady Way Trail (from Coy Drive to McCullough Avenue)	0.86	City of Orlando
Cady Way Trail (from McCullough Avenue to Golfside Drive	2.84	City of Orlando
Cady Way Trail (from Golfside Drive to Summerfield Road)	0.28	City of Winter Park
Cady Way Trail (from Summerfield Road to Hall Road)	3.62	Orange County
Cady Way Trail (from Truman Road to North Semoran Boulevard)	0.19	Orange County
Total	*7.79*	

As depicted in Figure 6 the first two segments of the Cady Way Trail are maintained by the City of Orlando and passes on the outside edge of the Baldwin Park neighborhood. The trail begins at Coy Drive just south of Druid Lake and ends at McCullough Avenue at the Fashion Square Mall. The trail picks up on the east side of the Mall and continues east and then north to Golfside Road in Winter Park.

The segment maintained by Winter Park begins at Golfside Road and ends at Summerfield Road near the northern end of the Winter Park Golf Club.

The Orange County maintained segment continues north from Summerfield Road to Hall Road near Goldenrod Park and the Orange/Seminole County Line. This segment connects to the Cross Seminole Trail/Purple Heart Trail in Seminole County.

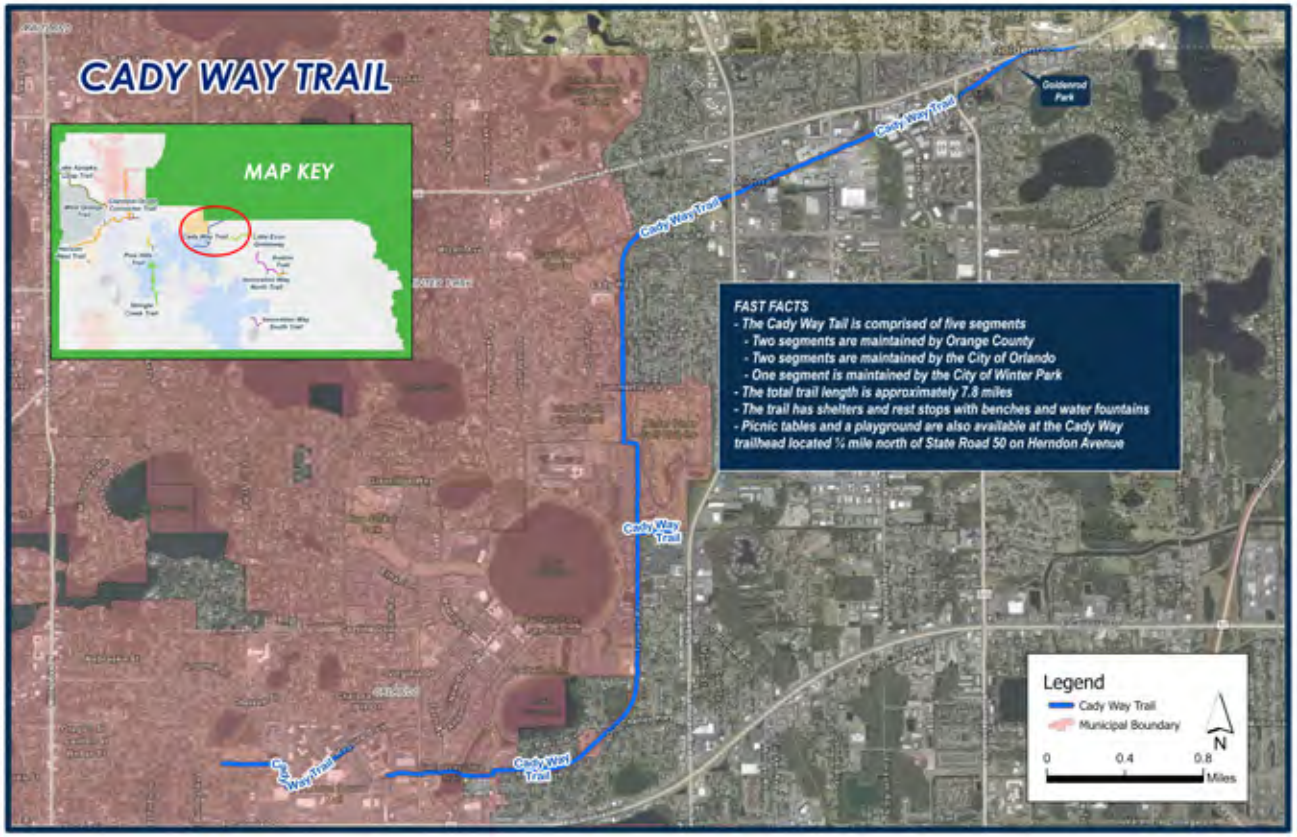
The remaining Orange County segment spurs off the main trail at Baldwin Park Street and terminates west of Semoran Boulevard.

Trail Count Data

Data on trail activity for the Cady Way Trail was provided by the City of Orlando for the period from April 1,2020 through September 30, 2020. During that period, the total trail traffic was approximately 99,000 users, with a daily average of 541 users. Fifty-four percent (54%) of the trail traffic traveled in the northbound direction and the remaining 46% in the southbound direction.

Based on Orange County count data from October 2015 through May 2020, the average monthly trail use was approximately 45,200 users, with an average annual count (January through December) of approximately 574,000 users.

Figure 6: Cady Way Trail Map



LYNX Transit Development Plan

TRANSIT DEVELOPMENT PLAN

Major Update

September 2022

Prepared by:

Kimley»Horn

Prepared for:

Central Florida Regional Transportation Authority d.b.a. LYNX

LYNX

Mobility Needs

Over the last several years, LYNX has diligently worked with its funding partners to develop three separate County Transit Plans. The County Transit Plans reflect a 20-year vision, public transportation needs, and are the product of a broad effort by LYNX to optimize its service offerings and establish a unified approach for addressing transit needs across its large service area. The preparation of the three individual County Transit Plans lay the groundwork for this TDP Major Update and are inclusive of service and capital needs. The County Transit Plans are designed to be consistent with regional plans and are based on the following elements:

- build-out of a comprehensive multi-tiered network of mobility options,
- upgraded and expanded transit passenger facilities and system support infrastructure,
- enhanced SunRail service designed to serve as the regional north-south transit spine,
- a high frequency core transit network connecting activity and employment centers along regional commercial corridors, and
- fast and frequent regional express services that vastly improve transit travel time.

Twenty-year plan elements for all three counties are compiled and summarized in this TDP Major Update and reflect the total operating and capital needs for LYNX service. The 10-year needs are a subset of the 20-year plan, including the operating and capital needs prioritized in Phases 1 through 5 in the Orange County Plan and Phases 1 and 2 in the Seminole and Osceola Transit Plans. More detailed county-by-county information is available separately in each corresponding county plan, and a list of the 20-year needs and 10-year needs is provided in Appendix H.

County Transit Plans

Given the variety of travel markets identified in the LYNX service area, the needs documented in the County Plans are categorized by major service category and then by service type. The result is a new hierarchy of public transportation services that support a multi-tiered transit network designed to meet the travel needs of a variety of different user groups. Specifically, the transit network consists of five major service categories that are divided into eight service types. Major service categories include high frequency service, regional and commuter express service, primary and secondary local service, community and circulator service, and on-demand and flexible service. Descriptions of the major service categories are provided on the following pages.

The transition to the new service hierarchy will also result in a new route nomenclature that will be inclusive of eight service types, or route series. A brief description of each route series is provided in Table 50. Together, the new network of services are layered to provide a range of mobility and accessibility options for the region that focus on:

- More routes with improved service frequency, and
- Transition from fixed route to on-demand service in areas where first- and last-mile connections will broaden coverage efficiently and cost-effectively.

Table 50: Service Type Summary

Route Series	Name	Description
100	High Frequency Local Stop Routes	Corridor-based, all stop service that facilitates access. Standard or articulated vehicles.
200	High Frequency Limited Stop Routes	Corridor-based service with fewer stops and that serves longer trips. Standard or articulated vehicles.
300	Regional Express Routes	Limited stop service that connects regional activity centers via highways and major arterials. Coach buses.
400	Commuter Express Routes	
500	Primary Local Stop Routes	Local mixed-traffic operations with minor deviations to enhance accessibility.
600	Secondary Local Stop Routes	
700	Community/Circulator Routes	Neighborhood level connectivity to and from activity nodes. Smaller transit vans.
800	On-Demand/Flexible Services	On-demand service within defined service areas and that provides for broad service coverage.

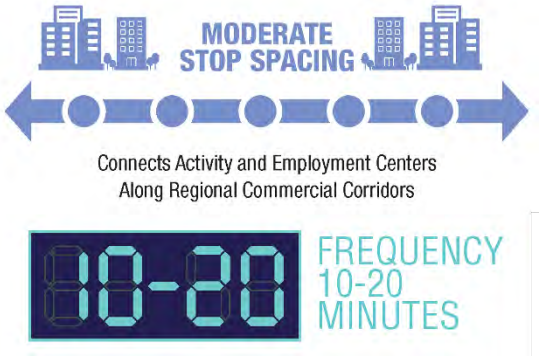
County Needs Plans Major Service Categories and Service Types

The following major service category descriptions are provided to define key characteristics of the route series in Table 50. The descriptions also allow for an understanding for the location and extent of each service type within the LYNX service area. The subsequent map series provides illustrations of the proposed service network for each referenced service category. A complete three-county service map reflecting the 20-year vision identified for all three counties is shown in Figure 52.

High Frequency Service (Figure 48)

High frequency services include high frequency local routes (100 series) and high frequency limited stop routes (200 series). Key characteristics include:

- Operation along regional commercial corridors
- High quality, fast and convenient transit service
- Includes both local stop frequent service and limited stop frequent service within the same corridor.
- 100 series routes provide accessibility along the corridor
- 200 series routes provide faster service for longer trips along the same corridor.



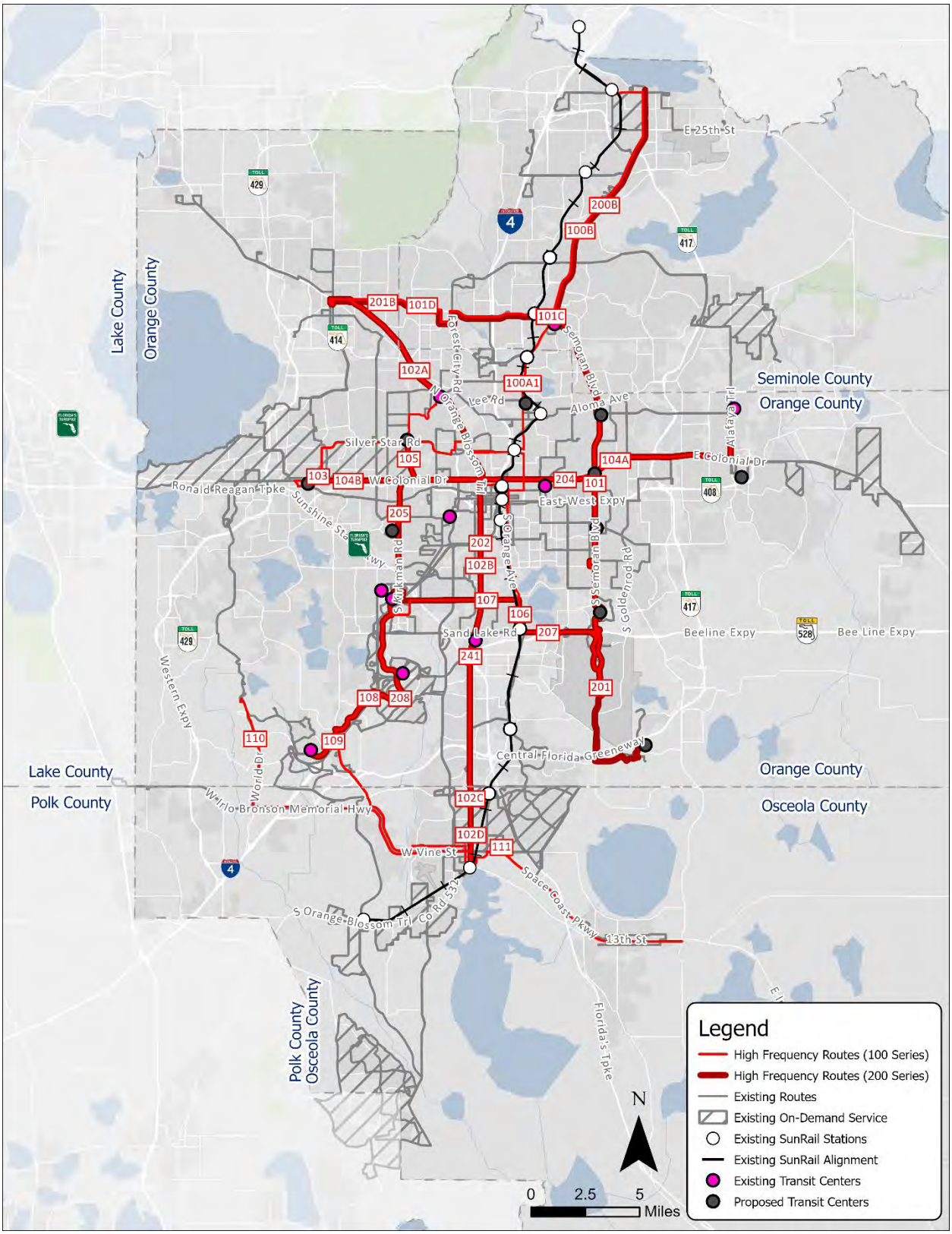


Figure 48: 20-Year Vision High Frequency Routes

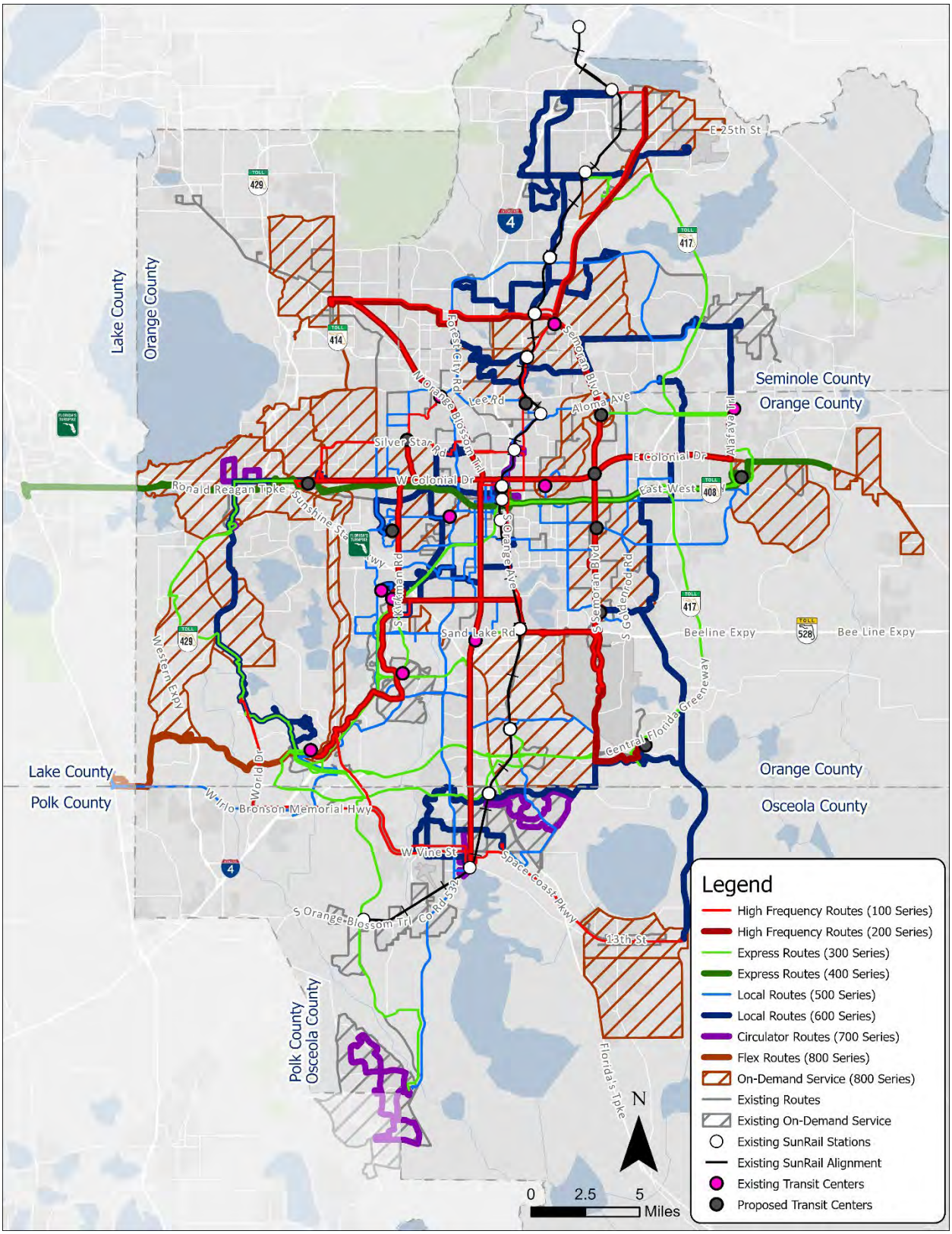


Figure 52: 20-Year Vision All Routes and Service

High Capacity and Primary Corridors

In addition to the major service types defined in Table 48, the County Needs Plans include high capacity and primary transit service corridors. These corridors are identified in all three county plans and consist of capital improvements that enable frequent, limited stop, and express services. Specific improvements for each corridor will vary depending on corridor segment travel patterns, corridor characteristics, and appropriate investment strategies.

High capacity and primary corridor improvements are envisioned to consist of high-quality transit features including walk-up stations, community stations, enhanced facility connections and access, signal timing and coordination, transit signal priority (TSP), dedicated transit lanes, and park and ride facilities. The location of proposed high capacity and primary corridors are depicted in Figure 53 and include the following:

- Silver Star Road (Orange County)
- Oak Ridge Road (Orange County)
- U.S. 17-92 (Orange County and Seminole County)
- SR 436 (Orange County and Seminole County)
- U.S. 441 (Orange County and Osceola County)
- S.R. 50 (Orange County)
- Kirkman Road (Orange County)
- International Drive (Orange County)
- SR 528 (Orange County)
- SR 408 East/West Express (Orange County)
- U.S. 192 (Osceola County)

Additional Needs

Additional needs not included in the County Needs Plans were identified after completion of those plans and during TDP-related discussions with the Regional Working Group and Technical Advisory Committee. Additional needs include the following services:

- Eatonville/Maitland NeighborLink zone in Orange County (as shown in Figure 51)
- Disney/Four Corners Flex Route in Orange County (as shown in Figure 51)
- Lake Nona/St. Cloud local route in Osceola County (as shown in Figure 50)
- Lake Mary NeighborLink zone in Seminole County (as shown in Figure 51)

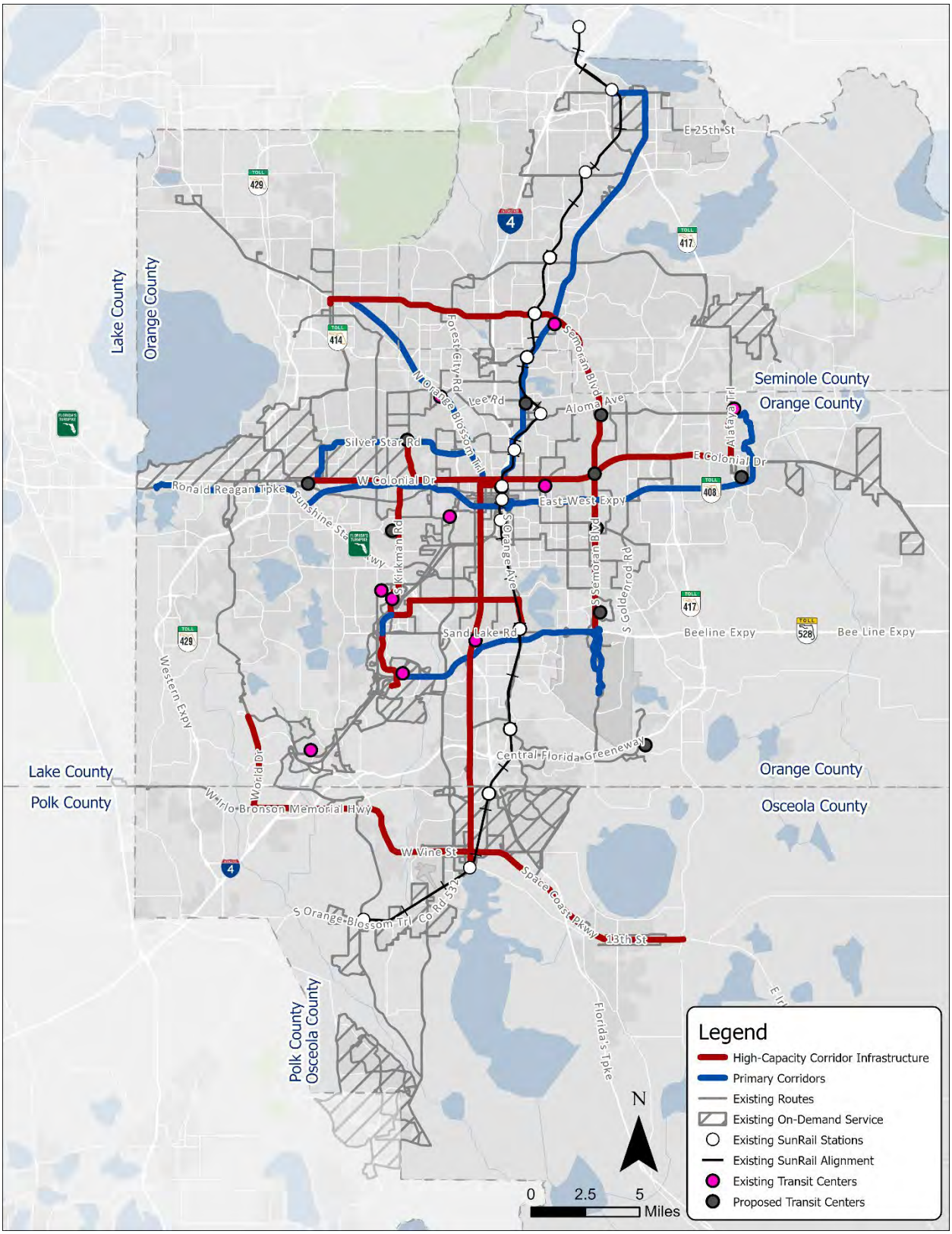


Figure 53: High Capacity and Primary Corridors

Systemwide 20-Year Vision

Summary operating statistics and service levels, including number of routes by service type, annual hours of service, and annual service miles, for the entire three-county 20-year transit network are summarized in Table 51. County-by-county operating statistics and service levels are shown in Table 52 through Table 54. In addition, Figure 54 through Figure 56 illustrate the full network of services for each county, Orange, Osceola, and Seminole, respectively, in the LYNX service area.

Table 51: Systemwide 20-Year Vision Summary by Service Type

Route Series	Name	# of Routes	Annual Service Hours	Annual Service Miles
100 and 200	High Frequency Local Stop and Limited Stop Routes	29	1,181,689	17,446,350
300 and 400	Regional and Commuter Express Routes	17	365,468	7,351,611
500 and 600	Primary and Secondary Local Stop Routes	43	1,147,172	11,537,313
700 and 800	Community/Circulator Routes and On-Demand/Flexible Services	41	425,685	1,517,828 [1]

1. Annual service miles include circulator and flex routes only

Table 52: Orange County 20-Year Vision Summary by Service Type

Route Series	Name	# of Routes	Annual Service Hours	Annual Service Miles
100 and 200	High Frequency Local Stop and Limited Stop Routes	26	910,831	13,112,255
300 and 400	Regional and Commuter Express Routes	14	288,922	5,836,367
500 and 600	Primary and Secondary Local Stop Routes	32	746,107	7,933,394
700 and 800	Community/Circulator Routes and On-Demand/Flexible Services	24	256,788	837,891 [1]

1. Annual service miles include circulator and flex routes only

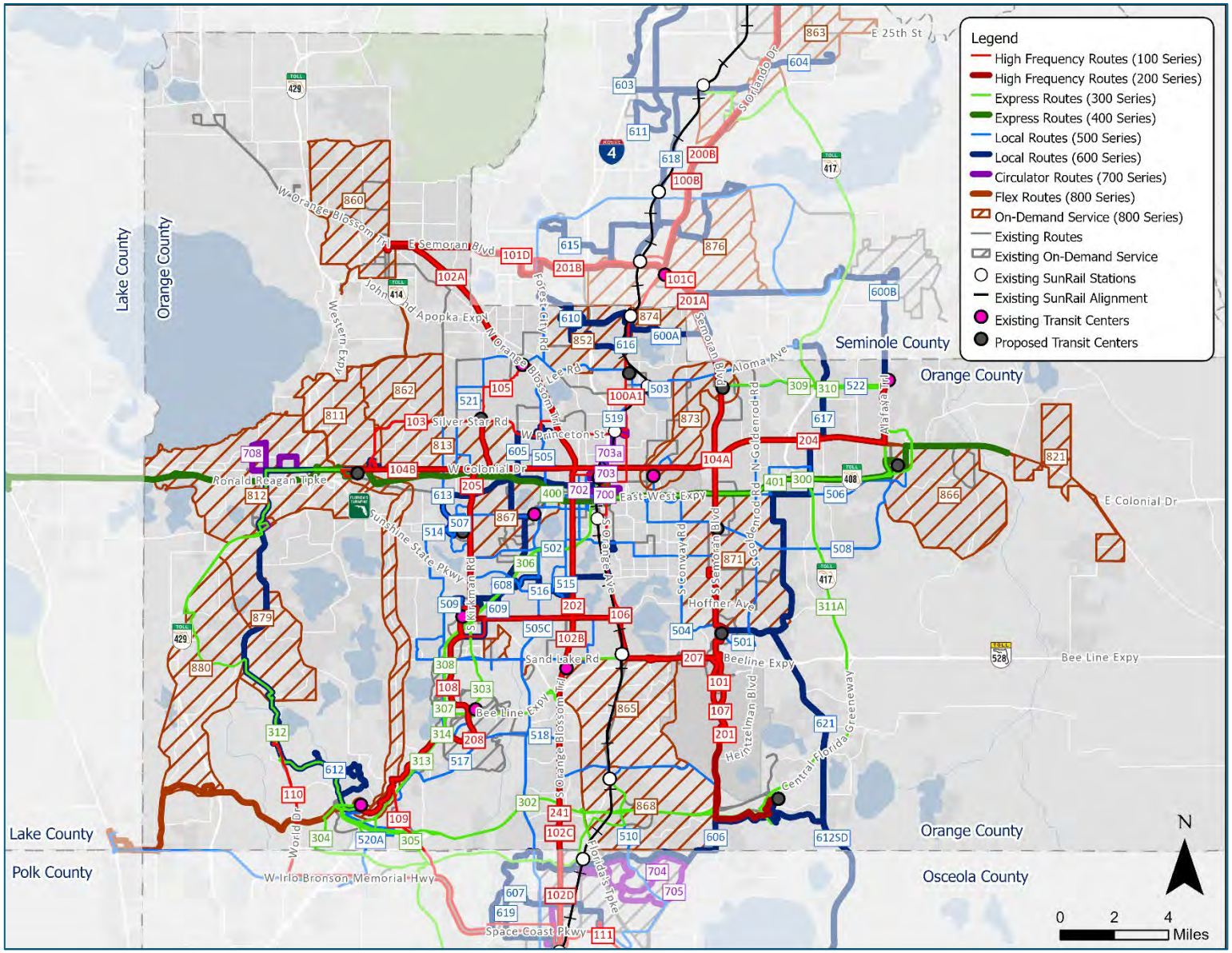


Figure 54: Orange County 20-Year Vision

10-Year Transit Needs

The transit needs for the LYNX service area are derived from the phased implementation defined in the three County Transit Plans. The 10-year plan includes a variety of service changes, including new and replacement routes, and capital and infrastructure needs, including vehicle expansion, new or expanded transit facilities, and high-capacity corridor infrastructure.

Service Plan

The service plan for the 10-year needs is based on the new or replacement routes as indicated in Phases 1 and 2 of the Osceola and Seminole County Plans and the first five phases in the Orange County Plan. In addition, existing April 2022 routes are included that will remain within the 10-year horizon. The list of new and replacement routes are listed in Appendix F and the 10-year needs project list is included in Appendix H.

Table 55 provides a comparison of 10-year needs plan service levels as compared to existing service levels. As shown in that table, the number of routes, service miles, and service hours within each service type will increase from the current April 2022 service levels. Aligned with the priority to increase service frequency, the 100 and 200 route series increase substantially in terms of service hours and miles. The 700 and 800 series service nearly doubles in terms of hours of service, reflecting the expansion of the footprint of NeighborLink services. The entire 10-year service network is illustrated in Figure 57 and corresponding county-by-county service networks are shown in Figure 58 through Figure 61.

Table 55: 10-Year Needs Summary by Service Type

Route Series	Name	Annual Service Hours		Annual Service Miles	
		10-Year	Existing	10-Year	Existing
100/200	High Frequency Local Stop and Limited Stop Routes	877,561	150,925	11,707,399	1,855,287
300/400	Regional and Commuter Express Routes	365,468	107,509	7,351,611	2,056,612
500/600	Primary and Secondary Local Stop Routes	864,817	807,006	10,564,581	10,698,598
700/800	Community/Circulator Routes and On-Demand/Flexible Services	274,640	108,321	1,116,939	523,403
	Total	2,382,486	1,173,761	30,740,531	15,133,900

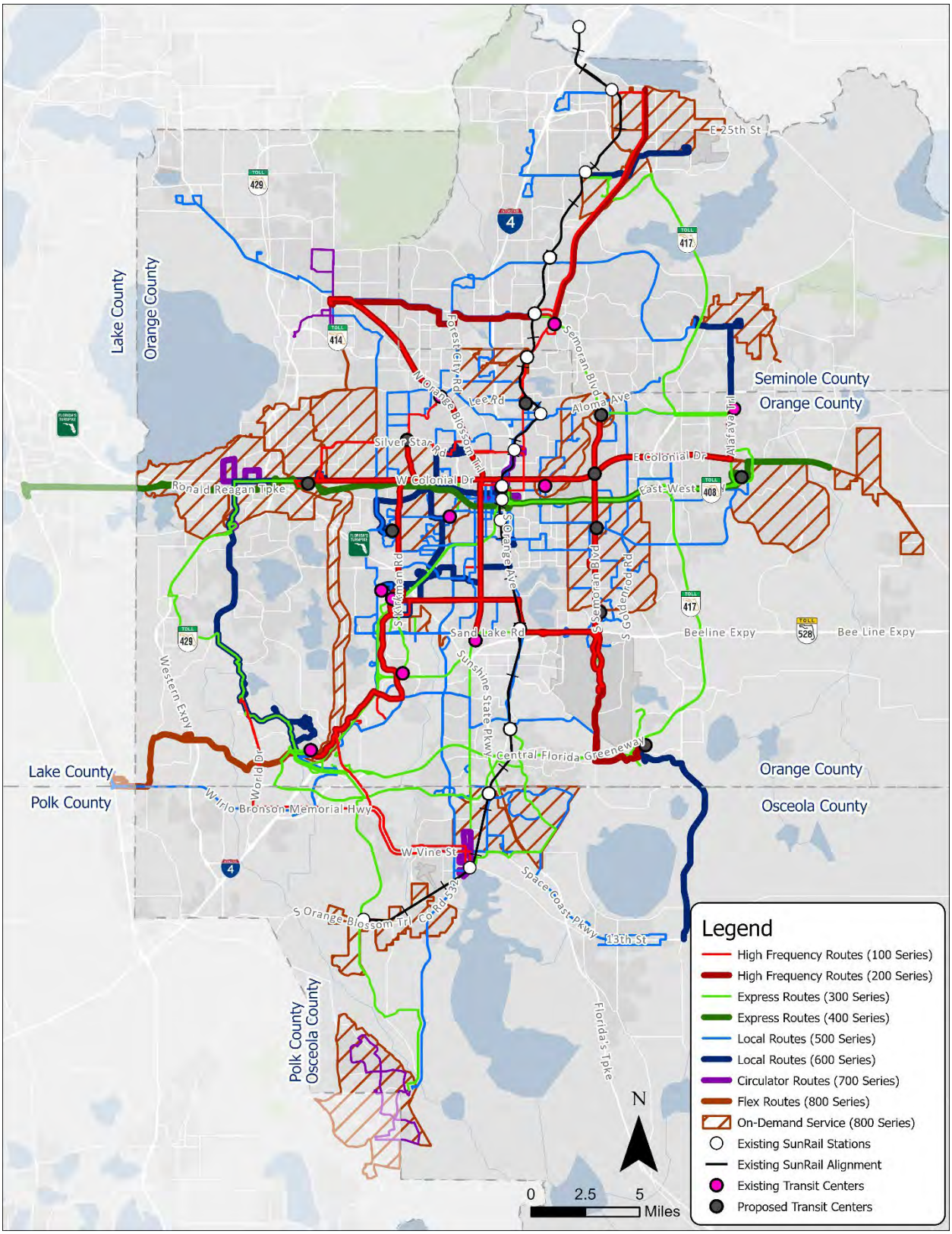


Figure 57: 10-Year Needs All Routes and Service

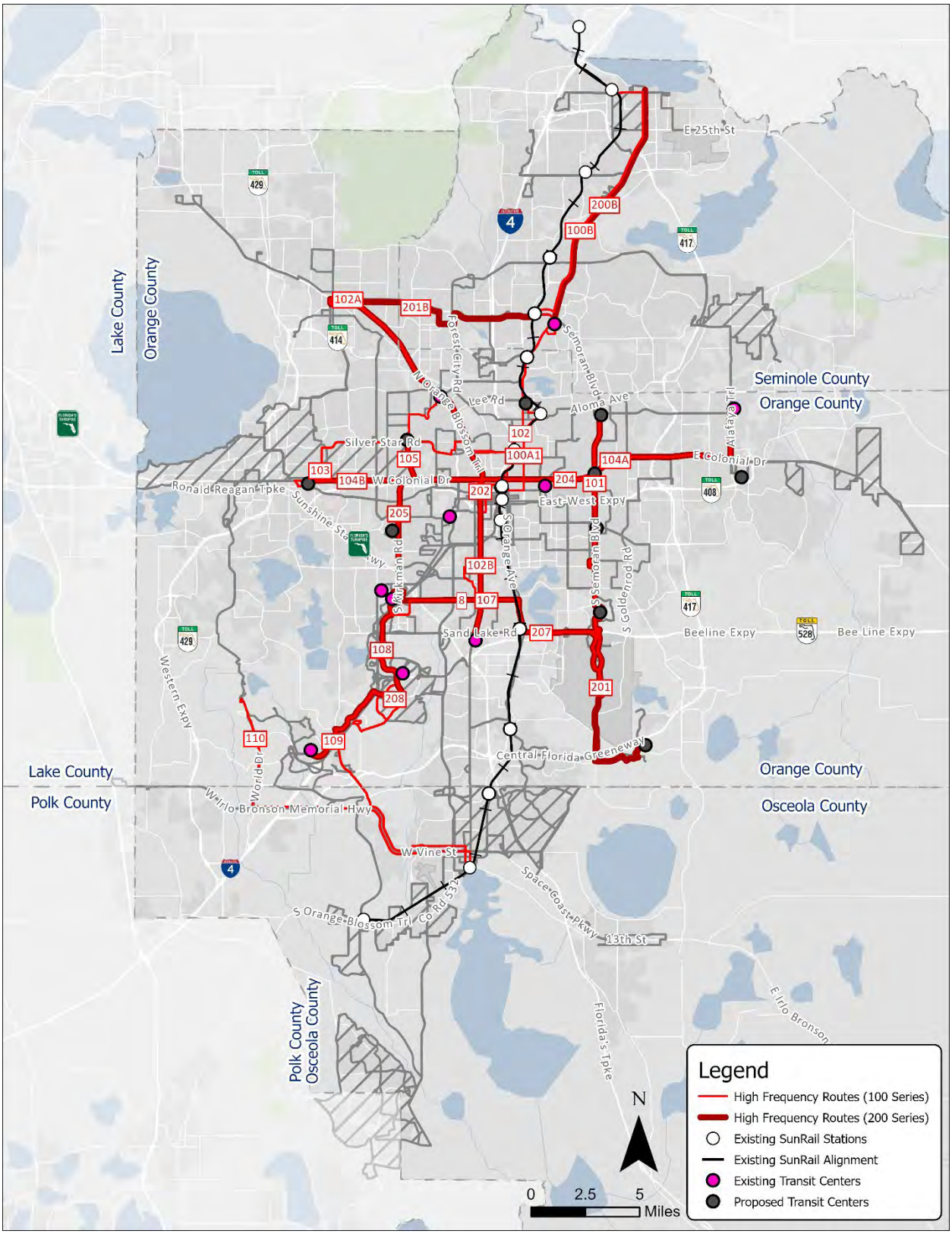


Figure 58: 10-Year Needs High Frequency Routes

Capital Improvements

A commensurate amount of capital investment will be required to support the level of service identified in the 10-year service plan. Capital improvement needs include fleet replacement and expansion, a new southern operations and maintenance facility, investment in customer amenities and facilities including new and expanded transit centers and stations. Capital also includes technology and infrastructure improvements to implement high-capacity corridors as defined in the County Transit Plans.

Three major capital improvement categories are described in this section including, transit centers, a new southern operations and maintenance facility, and high-capacity corridor infrastructure. Details on other capital needs such as fleet replacement and expansion, passenger amenities, and state of good repair investments, including associated costs, are provided in Section 8 of this report.

Transit Centers

The following list of transit centers is inclusive of new transit centers and transit center upgrades that are required to support the 10-year TDP service plan. New transit centers will serve as hubs and transfer connections for the broad set of services outlined in the service plan. The expansion of transit centers will also be required to increase passenger and bus capacity, improve customer amenities, and facilitate safe bus movement and operations given the convergence of more and different types of services as proposed in the 10-year service network.

New and Expanded Transit Centers in Orange County:

- Universal CityWalk / Parking Garage, Transfer Center
- Disney Springs, Transfer Center
- Curry Ford / S.R. 436, Transfer Center
- Full Sail, Transfer Center
- Waterford Lakes Shopping Center, Transfer Center
- OIA South Terminal, Transfer Center Expansion
- Valencia College, Transfer Center
- Meadow Woods SunRail Station, Additional Bus Bays
- Rosemont Superstop, Transfer Center Expansion
- Pine Hills Transit Center, Transfer Center Expansion
- Nemours Children's Hospital, Transfer Center
- Florida Mall, Transfer Center Expansion
- S.R. 50 / S.R. 436, Transfer Center
- SR 429/New Independence, Park and Ride
- Lee Vista/SR 436, Transfer Center
- Orlando Packing District, Transfer Center
- Colonial Plaza, SuperStop
- Maitland SunRail Station, Station and bus bays
- Orlando Health/Walmart, Transfer Center
- Sand Lake Road SunRail Station, Station and bus bays
- LYNX Central Station
- Destination Parkway, Transfer Center

New and Expanded Transit Centers in Seminole County:

- Longwood SunRail Station, Station and Bus Bays
- US 17/92 at Seminole Towne Center, Transfer Center Expansion

New and Expanded Transit Centers in Osceola County:

- Plaza Del Sol SuperStop
- Kissimmee Intermodal Station, Transit Center Expansion
- Four Corners / US 192 at Westside Blvd, Transfer Center

Southern Operations and Maintenance Facility

The existing LYNX Operations Center (LOC) is at capacity. The new service levels identified in the 10-year needs will require the development of a second operations center / maintenance facility to support fleet maintenance and other critical operational functions. A location in the southern part of LYNX's service area is necessary to meet system operational and service efficiency objectives. LYNX is currently working to identify an adequately sized site that can support the scale of new services. Site acquisition, environmental analysis, and design and construction of the new maintenance facility will have a direct impact on supporting new services and all of these activities are anticipated to be completed within the next five years.

High-Capacity Corridor Infrastructure

Eleven high-capacity and primary corridors were identified for inclusion in the 10-year service plan. As indicated earlier in this report, high capacity and primary corridor improvements are envisioned to consist of high-quality transit features including walk-up stations, community stations, enhanced facility connections and access, signal timing and coordination, transit signal priority (TSP), dedicated transit lanes, and park and ride facilities. As a result, the scale of capital infrastructure investment required to implement these projects is much larger than for other bus service identified in the service plan.

The eleven high-capacity and primary corridor projects that will require capital investment are listed below and are shown in Figure 62. These projects are consistent with short and mid-term phasing in the County Transit Needs plans that align with the 10-year planning horizon of the TDP:

Primary Corridors:

- Silver Star Road (Orlando Health to US 441)
- US 17-92 (LCS to Sanford)
- US 441 (Apopka SuperStop to LCS)
- SR 528 (Destination Parkway to OIA)
- SR 408 East/West Express (UCF to Turnpike/SR 50)
- I-Drive (Sand Lake to Universal Boulevard)

High Capacity Corridor Infrastructure:

- SR 436 (OIA to University Boulevard)
- US 441 (LCS to Florida Mall SuperStop)
- SR 50 (Ocoee to UCF)
- Kirkman Road (Pine Hills to I-Drive)
- I-Drive (Sand Lake to Sea Harbor Drive)

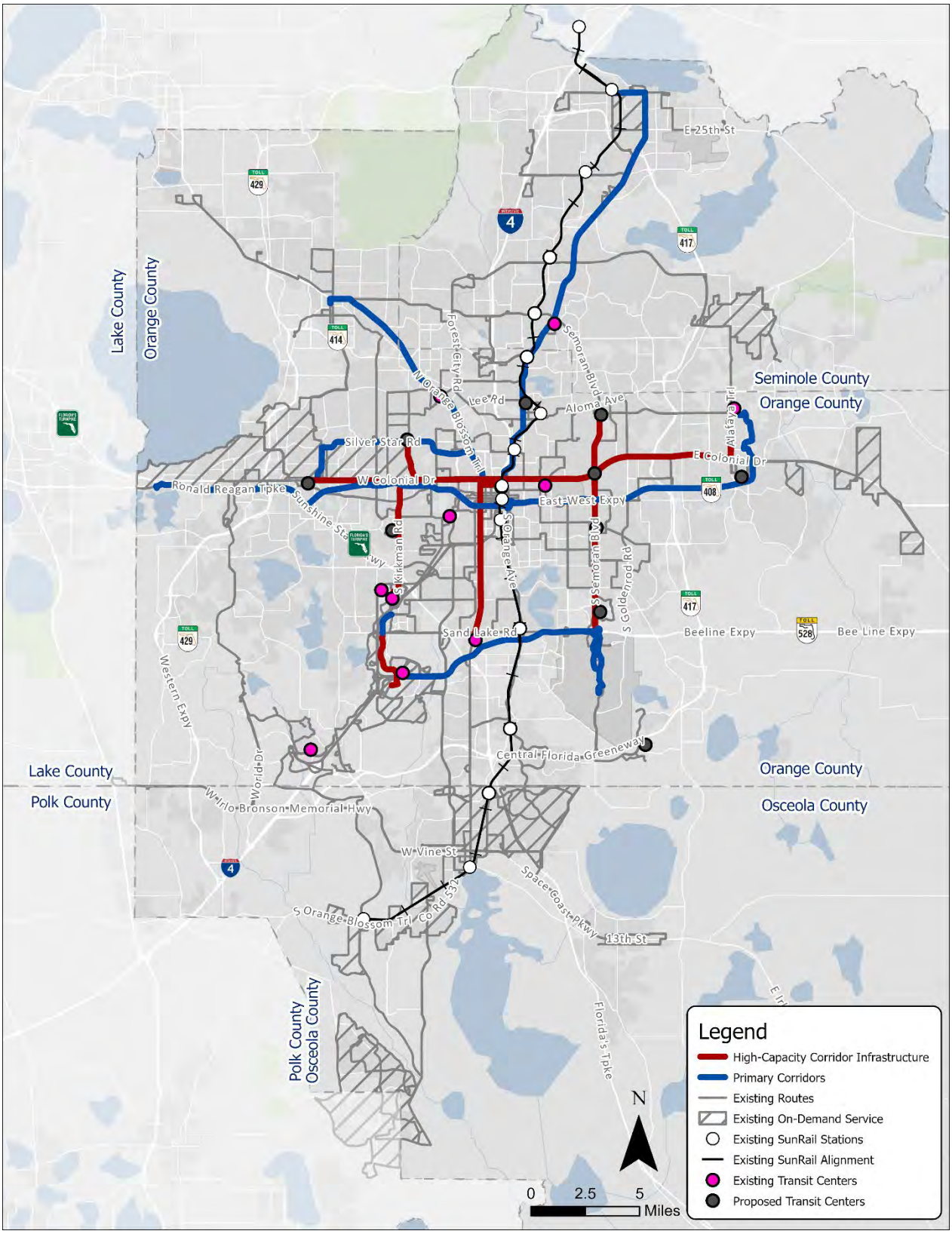


Figure 62: 10-Year High Capacity and Primary Corridors

2032 TDP 10-Year Needs Plan with High-Capacity Corridor Improvements

TDP 10-Year Needs w/ High-Capacity Corridor Improvements - Service Improvements

The TBEST 2032 TDP Needs Network *with* High Capacity Corridor Improvements scenario includes service improvements to increase high frequency service on the following corridors:

1. SR 436 High-Capacity Corridor: Frequency and bus stop spacing improvements to Route 201 including: 20-minute to 15-minute headway, average stop spacing increase from 1,844 ft. to 3,939 ft. with stops served decreasing from 117 to 55.
2. US 441 – Downtown to Florida Mall High-Capacity Corridor: Frequency improvements to Route 202 including: 20-minute to 15-minute headway with no stop spacing changes.
3. Kirkman Road – Pine Hills Drive to I-Drive High-Capacity Corridor: Frequency and bus stop spacing improvements to Route 205 including: 20-minute to 15-minute headway, average stop spacing increase from 1,628 ft. to 3,882 ft. with stops served decreasing from 60 to 24.
4. SR 50 – UCF to Ocoee High-Capacity Corridor: Improved Route 204 service from 20-minute to 15-minute headway.
5. Oak Ridge – OIA to Convention Center: Improved Route 207 service from 20-minute to 15-minute headway.
6. US 192 – Kissimmee to Disney: Added Limited Stop route service with 15-minute headway.
7. SR 408 Enhanced Express Service: 5% travel time improvements to routes 300, 400, 401A and 401B

The service changes resulted in a system-wide service expansion of 130 percent. This is higher than the 104 percent expansion calculated for the TDP 10-Year Needs Plan scenario *without* High Capacity Corridor improvements. The corridor improvements (i.e., revenue miles) were added to the Limited Stop grouping which resulted in a growth of 1,029 percent relative to the 2022 base network. High Frequency routes within this scenario resulted in a service expansion of 108 percent. Table 61 summarizes increases in annual revenue miles for each route grouping in the 2032 TDP 10-Year Needs Plan *with* High-Capacity Corridor Improvements scenario. Figure 65 illustrates the distribution of new vehicle trips for that same scenario.

Table 61: 2032 10-Year TDP with High-Capacity Corridor Improvements Service Summary

Route Grouping	2022 Annual Revenue Miles	2032 TDP Annual HC Corridor Revenue Miles	Absolute Service Change	Growth Rate
High Frequency	1,692,116	3,531,533	1,839,417	108.7%
Limited Stop	992,423	11,210,433	10,218,010	1029.6%
Regional Express	400,243	4,513,502	4,113,258	1027.7%
Commuter Express	1,657,520	2,960,438	1,302,918	78.6%
Primary Local	6,117,123	10,898,320	4,781,197	78.2%
Secondary Local	4,370,292	2,373,070	-1,997,221	-45.7%
Circulator	572,713	1,129,536	556,824	97.2%
SunRail	497,681	889,970	392,290	78.8%
Total	**16,300,110**	**37,506,803**	**21,206,692**	**130.1%**

LYNX SR 436 Transit Corridor Study

LYNX

SR 436
TRANSIT CORRIDOR STUDY
CONNECTING COMMUNITIES

IMAGINE TRANSIT THAT

GETS YOU THERE ON TIME

CONNECTS OUR COMMUNITIES

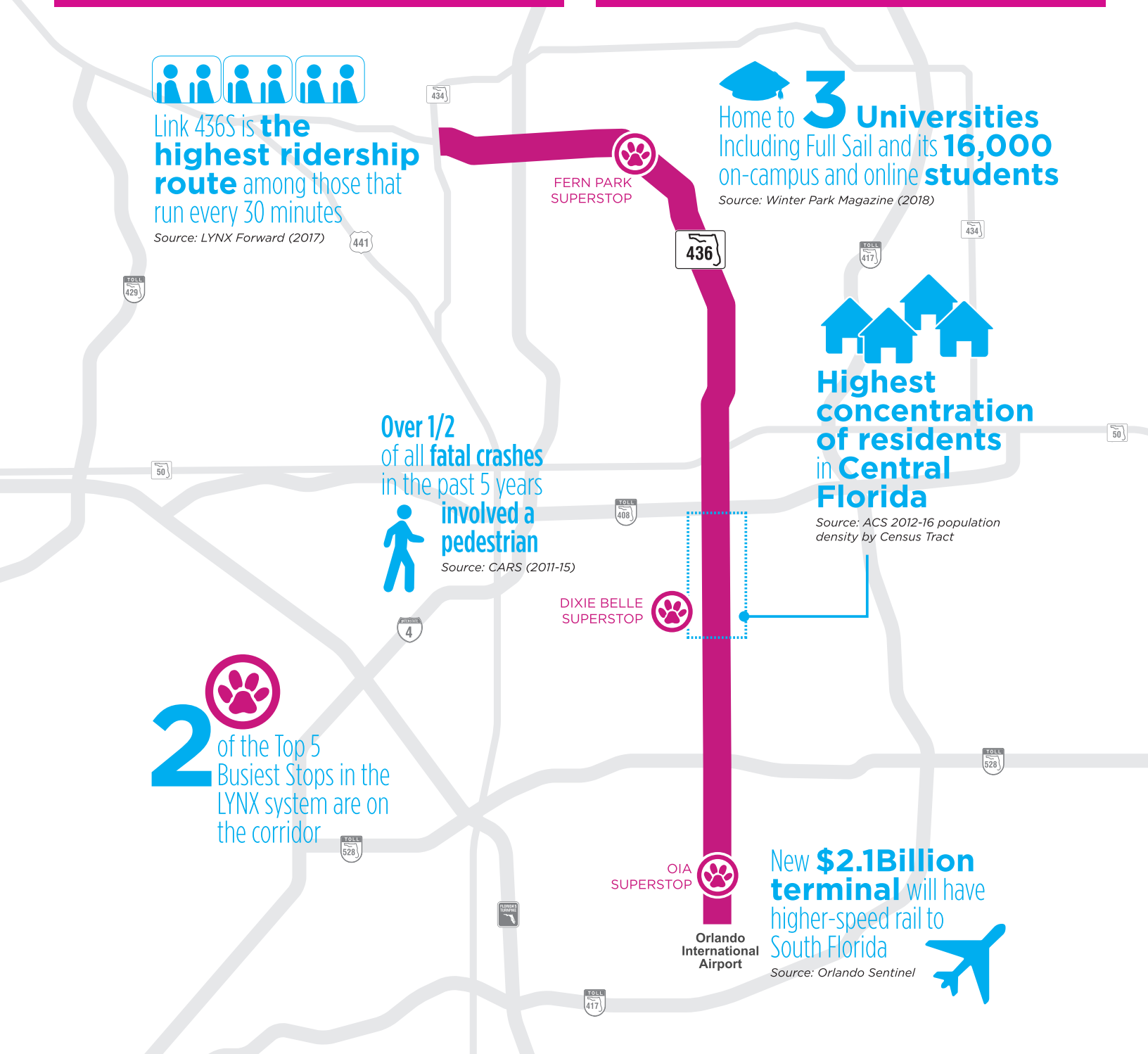
PUTS OUR REGION ON TOP

WHY SR 436?

- A critical artery connecting key economic centers of growing Metro Orlando
- A local business street with 100,000 jobs
- Home to 200,000 residents
- The gateway for many of the 72 million annual Orlando tourists

WHY NOW?

- Addressing safety for all users is imperative
- Premium transit is vital to compete for high tech jobs and talents
- Other regions are investing in premium transit; Central Florida cannot be left behind!



WHAT ARE THE INGREDIENTS FOR BETTER BUS SERVICE ON SR 436?

Many strategies to improve bus service have been implemented throughout the country. Here are the ones that we can adopt for SR 436 and the Central Florida region.

Potential for mixed-use transit oriented development near stations

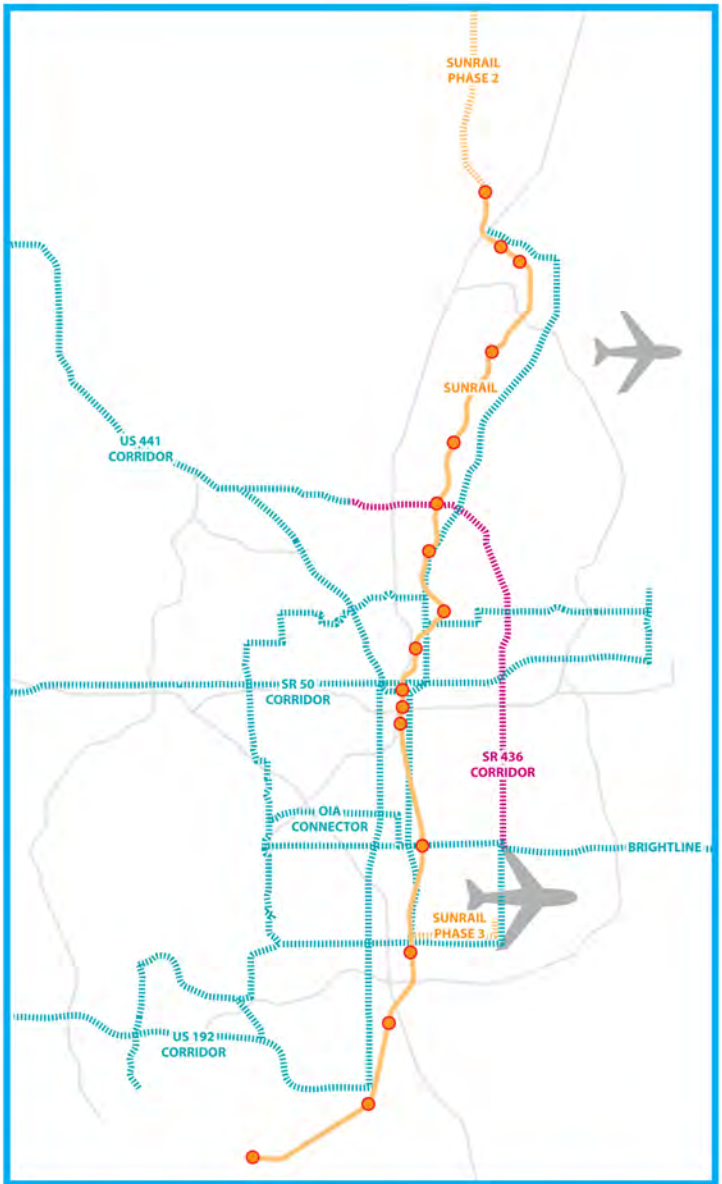
Safe & comfortable pedestrian & bicycle facilities accessing the station

Smart signals that communicate with transit vehicles to shorten transit wait times at signals.

Stations with amenities such as off-board ticketing, wi-fi, information screens displaying estimated arrival times, wayfinding and network maps, etc.

Bus only or shared bus lanes with transit signal priority

Frequent headways and specially branded, hybrid/electric, low-floor buses for level boarding with amenities such as on-board wi-fi, bike storage, etc.

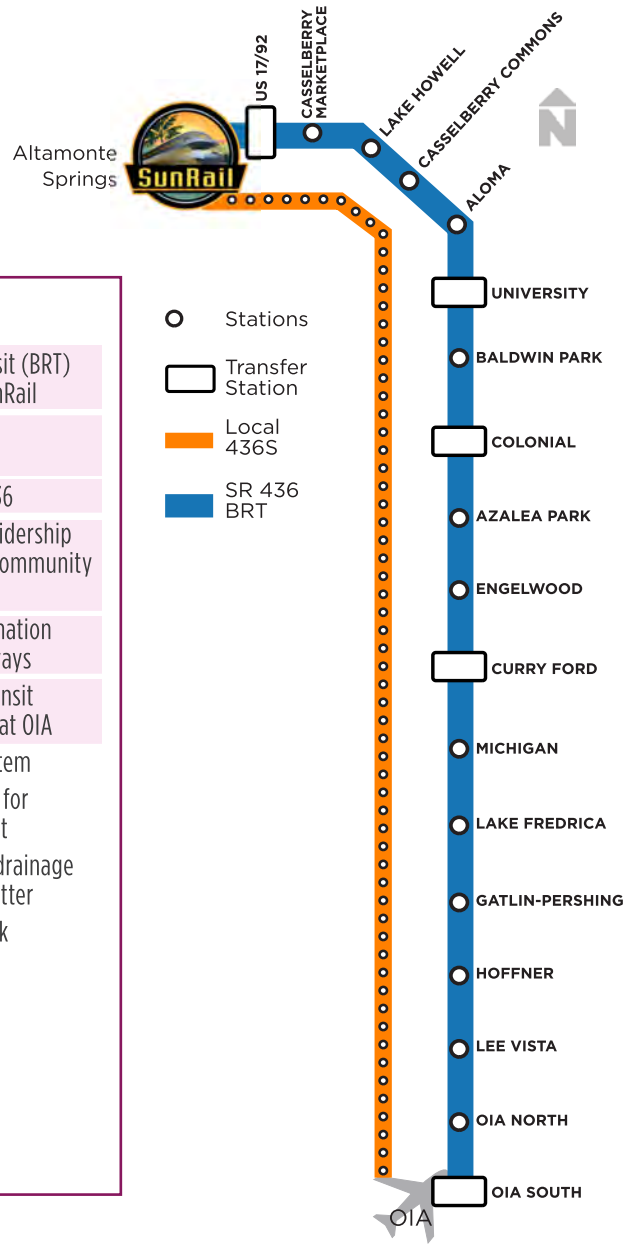


Connections to Other Modes

The success of transit on SR 436 depends on a successful regional transit system.

A PACKAGE OF RECOMMENDATIONS

The Study concluded with a package of recommendations that can be advanced with varying implementation timeframes. This package comprises the following:



ONGOING

- Enhance sidewalks on SR 436
- Enhance surrounding ped/bike network
- Improve streetscape and lighting
- Increase crossing locations

SHORT-TERM:

- Limited-stop bus from OIA to SunRail
- Reduce speeding
- Conduct ped/bike safety education and enforcement
- Implement ped-friendly signal timing
- Protect left-turns
- Optimize travel on alternative facilities through TSM&O
- Update signage at OIA
- Implement TSP and queue jumps
- Form a SR 436 Action Group
- Market health benefits of transit
- Engage community to champion transit
- Preserve affordable housing
- Advance transit supportive development

LONG-TERM:

- Bus Rapid Transit (BRT) from OIA to SunRail
  - Use stations, not "stops"
  - Run on SR 436
  - Serve high-ridership locations & community destinations
  - Use a combination of running ways
  - Seamless transit connections at OIA
- Build a BRT system
- Secure funding for premium transit
- Convert swale drainage to curb-and-gutter
- Expand network connectivity

Key Recommendations

RUNNINGWAYS TO BE CONSIDERED

The BRT service would operate on a combination of runningways including mixed-traffic and dedicated lanes. The applicability, benefits, and costs of particular runningway types vary along different segments of SR 436. The runningway recommendations should be studied in more detail in the next stage of project development.

Long right-turn lanes can be converted to Business Access and Transit (BAT) lanes.

Exclusive transit lanes could be implemented along the median or on the curbside

PREMIUM TRANSIT ON SR 436 WILL OFFER:

- **15-min headways**
- **Sheltered stations spaced farther apart**
- **Real-time bus arrival info**
- **Transit Signal Priority for buses at intersections**
- **Off-board ticketing**
- **Near-level boarding**
- **Bicycle racks**
- **Better buses**

WHAT COULD WE ACHIEVE?

ENHANCE TRANSIT EXPERIENCE

Nearly 8,000 corridor riders a day.

BRT riders save 30 to 45 minutes daily.

SAFE WALKING & BICYCLING

Wider sidewalks, more crossings, and less speeding.

ENCOURAGE REDEVELOPMENT

Up to 19 station areas catalyzing redevelopment and economic growth.

RELIABLE AUTO MOBILITY

Reduced conflicts will result in safer and more reliable auto mobility.

IMPLEMENTABLE IMPROVEMENTS

The project is cost-effective and will be competitive when seeking Federal grants.

SUPPORT COMMUNITY HEALTH

A Health Impact Assessment identified opportunities to encourage healthier communities as part of transit investment.

IN THE MEANTIME...

Before the long-term solution is implemented, LYNX and our partners are looking to give riders a **new choice** by adding limited-stop FastLink service on SR 436 in the next two years. This will be coupled with more **direct connections to SunRail**. This **short-term low-cost** improvement will offer better service, get riders used to premium transit, and **demonstrate the viability of longer-term solutions**.

Orange County Title VI Nondiscrimination Policy and Plan

Orange County Title VI Nondiscrimination Policy and Plan

April 2022

Title VI Nondiscrimination Policy and Complaint Procedures

Policy Statement

Orange County, Florida (the “County”) values diversity and welcomes input from all interested parties, regardless of cultural identity, background or income level. Moreover, the County believes that the best public policy and governmental services result from careful consideration of the needs of all of its communities and when those communities are involved in the public policy and governmental services decision-making process. Thus, the County does not tolerate discrimination in any of its programs, services, or activities.

Pursuant to Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d et seq. (Title VI, and related laws and regulations), other federal and state authorities, and Orange County, Florida Regulations and Standard Operating Procedures, the County will not exclude from participation in, deny the benefits of, or subject to discrimination any person on the grounds of race, color, national origin, sex, age, disability, religion, income, or family status.

Nondiscrimination Assurances

As a participant in the Florida Department of Transportation’s (FDOT) Local Agency Program (LAP), Orange County must certify to FDOT and the Federal Highway Administration (FHWA) that its programs, services and activities are being conducted in a nondiscriminatory manner. This certification is required every three years or commensurate with a change in executive leadership.

These certifications are termed “assurances” and serve two important purposes. First, they document the County’s commitment to nondiscrimination and equitable service to its community. Second, they serve as a legally-enforceable agreement by which the County may be held liable for breach. Those wishing to view the Orange County’s Nondiscrimination Assurance may do so by visiting the County’s website or contacting the County’s designated Title VI/Nondiscrimination Coordinator.

Complaint Procedures

The County has established a discrimination complaint procedure and will take prompt and reasonable action to investigate and eliminate discrimination when found. Any person who believes that he or she has been subjected to discrimination based upon race, color, national origin, sex, age, disability, religion, income, family status, or other reason in any of the County's

programs, services, or activities may file a complaint with the County Title VI/Nondiscrimination Coordinator by visiting www.orangecountyfl.net.

The written complaint should contain the identity of the complainant; the basis for the allegations (i.e., race, color, national origin, sex, age, disability, religion, income, family status, or other reason); and a description of the alleged discrimination with the date of occurrence. If the complaint cannot be submitted in writing, or if the complainant has a Limited English Proficiency (LEP), the complainant may phone 3-1-1 (407-836-3111) for assistance.

The Title VI/Nondiscrimination Coordinator will respond to the complaint within thirty (30) calendar days and, if the complaint is directly related to use of state pedestrian or transportation facilities, will notify FDOT in accordance with the FDOT Local Agency Program Manual. The County will promptly take reasonable steps to resolve the matter. If the County is unable to resolve the complaint to the satisfaction of the complainant, the Title VI/Nondiscrimination Coordinator will forward the complaint, along with a record of its disposition, to the FDOT District 5 Office and other appropriate federal and/or state agency or agencies for further processing. Additionally, the Title VI/Nondiscrimination Coordinator shall maintain a record of every complaint and whether the complaint was resolved at the County level or forwarded for resolution.

The County's Title VI/Nondiscrimination Coordinator communicates with the County Administrator, as deemed necessary, but is not required to obtain management or other approval to discuss discrimination issues with the County Administrator. If the complainant is unable or unwilling to submit a complaint to the County, or if the complainant is dissatisfied with the County's handling or resolution of a complaint, the complaint may be submitted directly to FDOT for processing. FDOT serves as a statewide clearinghouse for Title VI purposes and will either assume jurisdiction over the complaint or forward it to the appropriate federal or state authority for continued processing:

Florida Department of Transportation Equal Opportunity Office
ATTN: Title VI Complaint Processing
605 Suwannee Street MS 65
Tallahassee, FL 32399

The County will cooperate with any ensuing investigation by, for example, making information available for inspection and cooperating with onsite visits and witness interviews.

Environmental Justice

Environmental justice was a concept first made official in 1994 by Executive Order 12898.[15] Per this order, federal agencies and agencies receiving federal funds are required to identify and address disproportionately adverse effects of an agency's programs, policies, and activities on minority and low-income populations. The order also requires the County to include all potentially-affected communities in full and fair participation in the decision-making process and to prevent the denial, reduction, or significant delay in benefits from the County's programs, services, and projects.

Environmental justice requirements outlined in Executive Order 12898 apply to all of Orange County's activities, not just those funded with federal dollars. As a participant in the Florida Department of Transportation's (FDOT) Local Agency Program (LAP)[16], Orange County must ensure and document compliance with all applicable federal and state requirements per LAP guidance.

Based on the County's equity and inclusion goals, six indicators are recommended for incorporation into Orange County's environmental justice framework and are listed with sources:

- Low-Income Households (American Community Survey Table B17017)
- People of Color (American Community Survey Table B03002)
- Older Adults (American Community Survey Table B01001)
- Limited English Proficiency Households (American Community Survey Table C16002)
- Population with a Disability (American Community Survey Table B23024)
- Overcrowded Households (American Community Survey Table B25014)

The first two indicators – low-income and people of color – are included in the federal definition of environmental justice and commonly used by other agencies. The next three indicators part of the chosen group are older adults over 64, limited English proficiency, and people with a disability, which are commonly used by other agencies and are fairly high percentages of Orange County's

[15] Summary of Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. US Environmental Protection Agency, February 1994. https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice

[16] Local Agency Program Manual, Chapter 3, Florida Department of Transportation, September 2018. https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/lap/manual/chapter-3.pdf?sfvrsn=85596d80_4

population. The last indicator recommended is overcrowded households, based on feedback from various Orange County Divisions.

Program Compliance

The Florida Department of Transportation, as a steward of federal funds, is responsible for oversight of funded projects on behalf of FHWA.[17] Local agencies that are certified can receive funds to develop, design, and construct transportation facilities with federal funds. The FDOT Nondiscrimination Handbook for Local Agencies[18] notes that LAP agencies have two primary responsibilities related to environmental justice:

1. **Outreach:** Local agencies must ensure and document early, continuous, and meaningful opportunities for involvement by minority and low income communities.

2. **Data Collection and Analysis:** Local agencies must scrutinize demographic data to ensure that LAP activities will not have disproportionately high or adverse impacts on underserved communities and, where impacts are unavoidable, that documented steps are taken to avoid, minimize or mitigate impacts

Orange County will conduct outreach and collect data on an ongoing basis and will perform data analysis at least every three (3) years, per LAP re-certification and compliance needs.

Environmental Justice Framework

As a result of the review of other agencies' approaches to define underserved or disadvantaged communities within their jurisdictions for prioritization in projects and funding decisions, a composite criterion, County Equity Priority Area (CEPA), is the recommended basis for Orange County's required data collection and analysis for environmental justice compliance. The County's CEPA-based analysis will determine where potential disproportionate high or adverse impacts would result from County programs and investments to avoid, minimize, or mitigate these impacts.

The CEPA composite indicator is comprised of data from the six indicators described in Table 6

[17] Local Agency Program Manual, Chapter 3, Florida Department of Transportation, September 2018. https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/lap/manual/chapter-3.pdf?sfvrsn=85596d80_4

[18] Nondiscrimination Handbook for Local Agencies, Florida Department of Transportation, October 2018, https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/lap/title-vi/nondiscrimination-handbook-for-local-agencies.pdf?sfvrsn=2fe248ea_8.

below. Areas in Orange County identified as having the highest risk of environmental justice impacts have CEPA scores of 5 or 6. Lower risk areas have CEPA scores of 3 or 4. The County can review CEPA scores in various planning, policy, and project activities to help ensure these activities maintain compliance with environmental justice regulations.

Table 6: Criteria for Identifying Underserved Communities

Model Criteria	American Community Survey Table Name	Protected Class	Authorizing Source or Guiding Document
Low-Income Households	B17017: Poverty Status in the Past 12 Months by Household Type	Low-Income	Executive Order 12898 and FHWA's Title VI Program and Related Authorities: 23 CFR
People of Color	B03002: Hispanic or Latino Origin by Race	Race and Minority	Executive Order 12898, Title VI of the Civil Rights Act of 1964, FHWA's Title VI Program and Related Authorities: 23 CFR, and Title VI Requirements and Guidelines for FTA Recipients
Limited English Proficiency Households	C16002: Household Language by Household Limited English-Speaking Status	Limited English Proficiency and National Origin	Title VI of the Civil Rights Act of 1964, FHWA's Title VI Program and Related Authorities: 23 CFR 200, and Title VI Requirements and Guidelines for FTA Recipient
Older Adults	B01001: Sex by Age	Age	FHWA's Title VI Program and Related Authorities: 23 CFR 200
People with a Disability	B23024: Poverty Status in the Past 12 Months by Disability Status	Disability	FHWA's Title VI Program and Related Authorities: 23 CFR 200
Overcrowded Households	B25014: Tenure by Occupants per Room	N/A	U.S. HUD Comprehensive Housing Affordability Strategy

Low-Income[19]

This indicator is the percentage of households whose income in the past 12 months was below the Federal Poverty Level (FPL). In Orange County, the average was 14.48 percent of households in 2019. The areas where more than 25 percent of the households have incomes below the poverty level are located in downtown Orlando, near University of Central Florida, Belle Isle, near Orange County Convention Center, and Apopka. Outside the Urban Service Area, the unincorporated areas of Zellwood and Tangerine to the northwest of Apopka also have a significant portion of

[19] The Federal Poverty Level (FPL) is a measurement of the minimum amount of annual income that is needed for individuals and families to pay for essentials, such as room and board, clothes, and transportation. The FPL takes into account the number of people in a household, their income, and the state in which they live. The percentage of the population living below the indicated federal poverty threshold is based on their family income, size, and composition.

residents with household income below poverty level.

People of Color[20]

This indicator is the percentage of population that identifies as a people of color. The nomenclature of People of Color (POC) is used, instead of the traditional terminology of "minority," due to the fact that Orange County had a non-white population of 59.98 percent in 2019 and is a "majority-minority" county. Being majority-minority, referencing people from traditionally minority race and ethnicity groups as the minority is no longer applicable from a statistical or socioeconomic standpoint. Areas in the top quintile with the most POC have over 90 percent within a census tract block group and are mostly concentrated on the west side of the City of Orlando around Clear Lake, Lake Mann, Lake Lawne, Hiawassee, and east of Universal Orlando Resort. Other areas are outside the Urban Service Area boundary in Winter Garden and North of Lake Apopka, which has between 60 percent and 75 percent of its population identifying as POC.

Limited English Proficiency

This indicator is the percentage of households speaks English less than very well. Please refer to the Part A: Self-Assessment section of this document for more information.

Persons with a Disability

This indicator is the percentage of households with at least one person with a disability. In Orange County, the average was 9.93 percent of the households in 2019. The top quintile has over 20 percent of the households with a disability within a census tract block group, and there is a higher proportion of this population near Lake Lawne, east of Belle Isle, Winter Garden, and southeast Apopka. Outside of the Urban Service Area, there are a few concentrations of persons with a disability in northwest Apopka and the unincorporated areas of Christmas and Wedgefield.

Older Adults

This indicator is the percentage of the population over 64 years old. In Orange County, the average was 11.64 percent of the population in 2019. The top quintile has over 29 percent of older

[20] The designation "people of color" indicates the percentage of the population that does not identify as Non-Hispanic White, inclusive of the following categories: Black, Hispanic (Latino), Native American, Asian/Pacific Islander, and Mixed/Other. The term people of color recognizes the significant disparities that have endured over time as a result of historical discrimination and racism and highlights these inequities against non-white populations. Racial Equity Baseline Conditions Report, SCAG, March 2021. https://scag.ca.gov/sites/main/files/file-attachments/racialequitybaselineconditionsreport_03242021revision.pdf

adults within a census tract block group, and there is a higher proportion of this population in Maitland, Winter Park, Windermere, Belle Isle, Lake Mann, and near Orange County Convention Center. Outside the Urban Service Area, Apopka and the unincorporated areas of Christmas and Wedgefield have a higher average of older adults, compared to the rest of the county.

Overcrowded Households[21]

This indicator is the percentage of households whose number of occupants per room exceeded 1.5 in 2019. In Orange County, the average was 1.07 percent of households that are overcrowded. The areas in the top quintile, where more than 3 percent of households are overcrowded, are located in on the south side of Universal Orlando Resort, around Orange County Convention Center, southeast Orlando, south side of Ocoee, south side of Apopka, and in Maitland. Outside the Urban Service Area, the unincorporated areas northwest of Apopka and east of the Urban Service Area boundary also have a portion of households with the problem of overcrowding, compared the rest of Orange County.

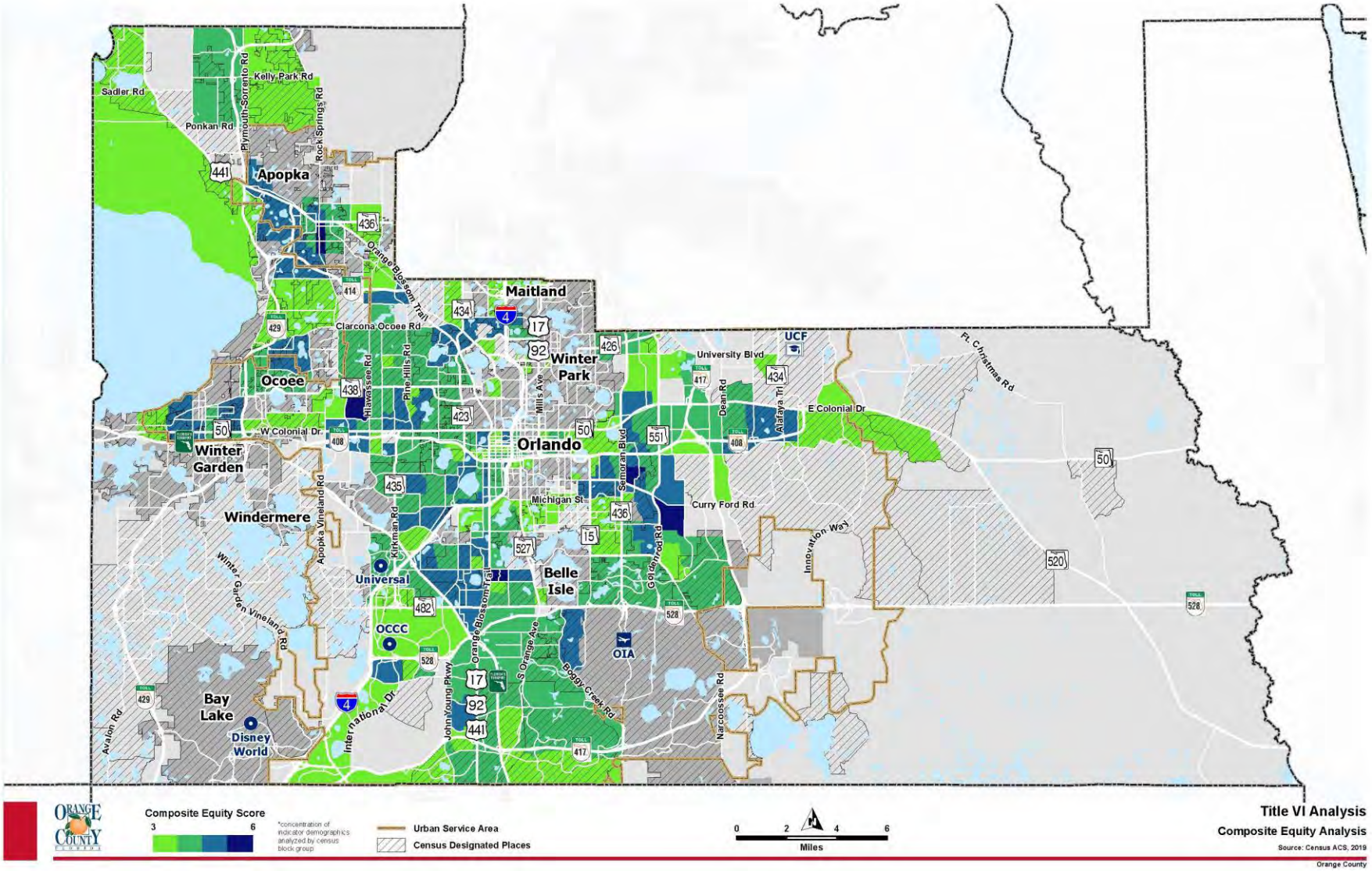
Locations of County Equity Priority Areas

Countywide, six of the County's total of 375 Census tract block groups, or 1.6 percent, have the maximum CEPA score of 6 points. These areas are in pockets around the North of Orlando International Airport, Ocoee, Apopka, and Belle Isle. Another 55 census tract block groups, or 14.6 percent, have a CEPA score of five points, for a total of 16.2 percent of the County Census tract block groups considered high-priority CEPAs. In addition, a total of 80 Census tract block groups, or 21.3 percent, have a CEPA score of four points. A total of 66 census tracts, or 17.6 percent, have a CEPA score of three points.

Among the 207 Census tract block groups that qualify as a CEPA, having a disability is the most prevalent vulnerable population, with 184 Census tract block groups (88.8%) having more residents with a disability than half of the County. Households under the FPL (155 Census tract block groups) and people of color (154 Census tract block groups) are the two next largest indicator populations present in the CEPAs.

[21] The US Department of Housing and Urban Development considers more than 1 person per room in a dwelling as "crowding" and more than 1.5 persons per room in a dwelling as "overcrowding."

Figure 5. County Equity Priority Areas for Orange County, Florida



To comply with environmental justice regulations, Orange County must:

- Collect demographic data to understand the socioeconomic characteristics of the community;
- Have a robust public involvement strategy for reaching out to and collecting input from underserved communities;
- Ensure full and fair participation by all potentially-affected communities in transportation decisions;
- Analyze plans, programs and activities to ensure they avoid disproportionately high or adverse impacts on protected communities;
- Prevent denial, reduction, or significant delay in benefits to protected communities;
- Use avoidance, minimization and mitigation strategies to eliminate or reduce disproportionately high or adverse impacts of its plans; and
- Coordinate with appropriate federal agencies where avoidance, minimization and mitigation strategies do not preclude disproportionately high and adverse impacts.

Appendix C: Adjacent Roadway Project Plans

COMPONENTS OF CONTRACT PLAN SET

ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS

INDEX OF SIGNING AND PAVEMENT MARKING PLANS

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

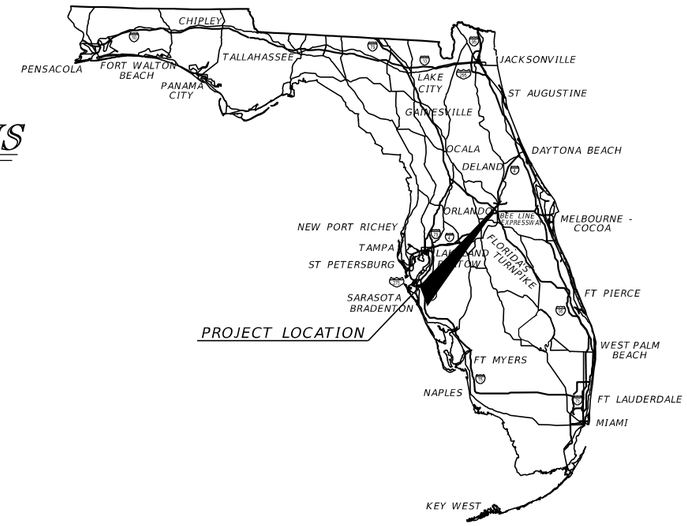
SIGNING AND PAVEMENT MARKING PLANS

FINANCIAL PROJECT ID 445303-1-52-01

ORANGE COUNTY (75003)

STATE ROAD NO. 436
FROM NORTH OF OLD CHENEY HWY.
TO NORTH OF UNIVERSITY PARK DR.

PROJECT LOCATION URL:	https://tinyurl.com/w8a9wn9h
PROJECT LIMITS:	BEGIN MP 7.897 – END MP 9.919
EXCEPTIONS:	NONE
BRIDGE LIMITS:	NONE
RAILROAD CROSSING:	NONE



ALEX W. HINKLE
LICENSE
No 82354
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THE ABOVE NAMED PROFESSIONAL IS RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SIGNING AND PAVEMENT MARKING PLANS ENGINEER OF RECORD:

ALEX W. HINKLE P.E. NO.: 82354
PROTEAN DESIGN GROUP
100 EAST PINE STREET, SUITE 600
ORLANDO, FL 32801
(407) 246-0044
CONTRACT NO.: CA971
VENDOR NO.: F59-3473441

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2023-24 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

APPLICABLE IRs: N/A

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, July 2022 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

FDOT PROJECT MANAGER:

BEATA STYS-PALASZ, P.E.

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
E57B5	23	S-1

MATCHLINE STA. 515+16.44 SEE SHEET S-20

R3-17 24"x18" R5-3 30"x30" STA. 515+78 700-1-11 1 AS

R1-1 30"x30" FTP-55R-06 24"x30" STA. 516+36 700-1-11 1 AS

STA. 516+37 700-1-60 1 AS

W11-2 30"x30" W16-7PL 24"x12" 85' RT. 700-1-11 1 AS

STA. 516+78 700-1-60 1 AS

W11-2 36"x36" W16-7PL 24"x12" STA. 517+05 700-1-11 1 AS

R3-2 36"x36" R3-4 36"x36" STA. 517+17 700-1-11 1 AS

R3-17 24"x18" R3-17AP 24"x8" STA. 518+58 700-1-11 1 AS

W11-2 36"x36" W16-7PR 24"x12" STA. 517+02 STA. 516+84 700-1-11 2 AS

R6-1R 36"x12" R5-1 30"x30" STA. 516+56 700-1-11 1 AS

W11-2 36"x36" STA. 520+05 700-1-11 2 AS

R5-1A 30"x18" R9-6 12"x18" STA. 516+82, 67' RT. 700-1-11 1 AS

R2-1 30"x36" R2-1 30"x36" STA. 520+90 700-1-12 1 AS

R2-1 30"x36" STA. 520+90 700-1-11 1 AS

0 10 40 Feet

R/W LINE

Antique Oaks Cir

6" WHITE W/ BDWR RPMs @ 40'

+50

6" WHITE

24" WHITE +42, 62' LT.

+21

12" WHITE +46, 77' LT.

6" DOUBLE YELLOW W/ BDY RPMs @ 40'

11.1' 10.9'

7'

12" WHITE +79, 77' LT.

12" WHITE +93, 70' LT.

24" WHITE +45, 68' LT.

6" WHITE

DIRECTIONAL ARROW (TYP.)

WRONG WAY ARROW (TYP.)

W11-2 IN PAVEMENT WARNING MARKING (PREFORMED THERMO.)

6" WHITE W/ BDWR RPMs @ 20'

12' 14' 12' 12'

+70 +20

END SB PAVEMENT MARKINGS
STA. 518+44.90
℄ CONST. SR 436
MATCH EXIST.

SR 436 (Semoran Blvd.)

END PROJECT
END NB PAVEMENT MARKINGS
STA. 518+20.00
℄ CONST. SR 436
MATCH EXIST.

END CONSTRUCTION
END SIGNING
STA. 520+89.70
℄ CONST. SR 436

+96

6" WHITE (2'-4' SKIP)

6" YELLOW (6'-10' SKIP)

6" YELLOW +53

YELLOW TUBULAR MARKER (TYP.)

6" YELLOW

8" WHITE

18" WHITE @ 20'

MDW RPMs @ 8"

11' 11' 11' 11'

516 517 518 519 520 521

6" YELLOW

12" WHITE +03, 18' LT.

+85 +64

24" WHITE (PREFORMED THERMO.) (TYP.)

6" WHITE W/ BDWR RPMs @ 20'

MDY RPMs @ 8"

12" WHITE +93, 45' RT.

6" WHITE (2'-4' SKIP)

12" WHITE +83, 11' RT.

6" WHITE (10'-30' SKIP) W/ BDWR RPMs @ 40'

6" WHITE

+20 +29

6" WHITE (6'-10' SKIP)

12' 12' 13' 13'

18" YELLOW @ 10'

R 8.25'

+77

6" WHITE W/ BDWR RPMs @ 40'

24" WHITE +89, 44' RT.

+85

24" WHITE +75, 80' RT.

+12

6" WHITE

+40

12" WHITE +14, 74' RT.

8'

7'

23.5'

22.2'

6" DOUBLE YELLOW W/ BDY RPMs @ 40'

12" WHITE +75, 67' RT.

University Park Dr.

R/W LINE

R3-17 24"x18" STA. 515+44 700-1-11 1 AS

R1-2 18"x18"x18" STA. 516+02 700-1-11 1 AS

R1-1 30"x30" FTP-55R-06 24"x30" STA. 516+81 700-1-11 1 AS

W11-15 30"x30" W16-9P 24"x12" STA. 516+85 700-1-11 1 AS

STA. 516+85 700-1-60 1 AS

W11-2 36"x36" W16-7PL 24"x12" STA. 516+94 700-1-11 1 AS

STA. 516+62 700-1-60 1 AS

Exist. Sign STA. 518+66 (TO REMAIN)

R4-11 30"x30" STA. 519+89 700-1-11 1 AS

R2-1 30"x36" STA. 520+90 700-1-11 1 AS

YELLOW TUBULAR MARKER 704-1-2 2 EA

(D) 6" WHITE (10'-30' SKIP) W/ BDWR RPMs @ 40'

(E) 8" WHITE W/ BDWR RPMs @ 20'

(F) YELLOW REFLECTIVE PAINT W/ MDY RPMs @ 8"

(G) BICYCLE PAVEMENT MARKINGS (PREFORMED THERMO.) (TYP.)

(H) 24" WHITE @ 2' (PREFORMED THERMO.)

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ALEX W. HINKLE, P.E.
LICENSE NUMBER 82354
PROTEAN DESIGN GROUP
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ORLANDO, FL 32801

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 436	ORANGE	445303-1-52-01

SIGNING AND PAVEMENT MARKING PLAN

SHEET NO. S-21

2/15/2023 2:18:56 PM jharrios
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Appendix D: ADA Compliance Field Review Summary

University Boulevard Pedestrian and Bicyclist Safety Study

ADA Compliance Field Review

February 7th, 2024

1 FIELD REVIEW INTRODUCTION

An ADA Compliance field review was held by VHB was held on February 7th, 2024, to observe the existing bicycle and pedestrian conditions along the study corridor and to gain insight into what improvements may be developed for the corridor.

The Field Review Notes section below summarizes notes from the field review. The Field Review Summary section summarizes observations from the field review and briefly describes the preferred typical section after observing the corridor. Finally, the attached base maps show the preliminary base maps for the study corridor, along with observation annotations from the field review.

2 FIELD REVIEW NOTES

Below are the summarized notes from the field review:

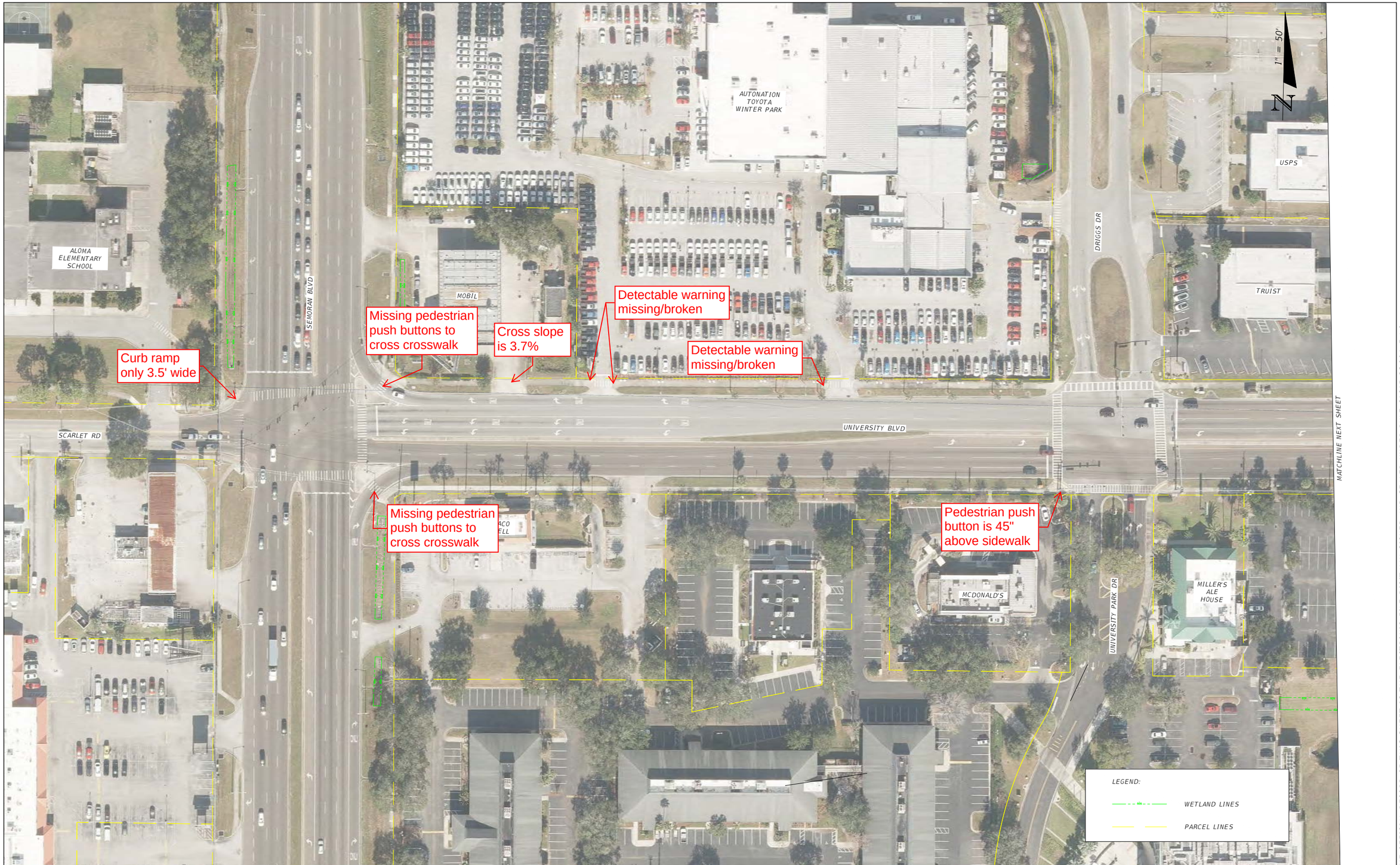
1. The curb ramp at the northwest corner of University Boulevard and Semoran Boulevard is only 3.5’ wide
2. The pedestrian refuge islands at the northeast and southeast corners of University Boulevard and Semoran Boulevard are missing the pedestrian push buttons to cross the free flow right turn lanes
3. The cross slope of the southern driveway at 203 Semoran Boulevard is 3.7%
4. The detectable warnings for the southern driveways for AutoNation Toyota Winter Park are either broken or missing
5. The pedestrian push button at the southwest corner of University Boulevard and Driggs Drive is 45” above the sidewalk
6. There is a large bump in the middle of the eastern curb ramp at the northwesternmost driveway at 3300 University Boulevard.
7. LYNX stop 3667 is missing a concrete connection to University Boulevard
8. The main driveway for Full Sail University is missing detectable warnings
9. The crosswalk pavement markings at the southern driveways for Costco are worn and difficult to see
10. The pedestrian push button at the southeast corner of University Boulevard and Forsyth Road is 52” above the sidewalk
11. LYNX stop 1850 is missing a concrete connection to University Boulevard
12. The cross slope of the driveway leading to Perkin’s and Zaxby’s is 5.6%
13. The cross slope of the driveway at 6400 University Boulevard is 4.6%
14. The cross slope of the driveway at 6438 University Boulevard is 4.9%
15. The crosswalk pavement markings at the driveway leading to 6438 University Boulevard are worn and difficult to see
16. The cross slope of the driveway at 6504 University Boulevard is 5.1%
17. The cross slope of the driveway at 6566 University Boulevard is 4.3%
18. There is a large bump in the middle of the eastern curb ramp at the driveway at 6911 University Boulevard.
19. The cross slope of the driveway at 6600 University Boulevard is 4.3%
20. The crosswalk pavement markings at the driveway at 7000 University Boulevard are worn and difficult to see
21. The detectable warnings driveway leading to 3935 Sutton Place Boulevard are missing
22. The western curb ramp at the driveway leading to 3935 Sutton Place Boulevard is only 3.5’ wide
23. LYNX stop 1840 is missing a concrete connection to University Boulevard

24. The detectable warnings at the northwest, northeast, and southeast corners of the intersection of University Boulevard and Metric Drive are missing
25. The crosswalk pavement markings are worn on the eastern and southern legs of the intersection of University Boulevard and Metric Drive
26. The crosswalk is missing on the western leg of the intersection of University Boulevard and Metric Drive
27. The stopbar is located in front of the crosswalk for the southern driveway at 7235 University Boulevard
28. The crosswalk pavement markings are worn on the southern driveway at 4000 Goldenrod Road
29. The pedestrian refuge islands at the northwest and southeast corners of University Boulevard and Goldenrod Road are missing the pedestrian push buttons to cross the free flow right turn lanes
30. The crosswalk pavement markings don't line up with the middle of several of the curb ramps at the intersection of University Boulevard and Goldenrod Road
31. Both curb ramps for the north driveway leading to 3770 Goldenrod Road are only 3' wide
32. The cross slope of the north driveway leading to 3770 Goldenrod Road is 3.9%
33. The detectable warning is broken at the eastern curb ramp at the north driveway leading to 7416 University Boulevard
34. The cross slope of the north driveway leading to 7416 University Boulevard is 3.9%
35. The eastern curb ramp for the driveway leading to 7360 University Boulevard is only 3.5' wide
36. The crosswalk pavement markings are worn for the driveway leading to 7360 University Boulevard
37. LYNX stop 1853 is missing a concrete connection between the bus stop and University Boulevard

3 FIELD REVIEW SUMMARY

After observing the entire study corridor, there are a variety of existing pedestrian and bicycle facilities along University Boulevard that do not meet ADA criteria. During the concept development phase of this project, improvements will be proposed in order for these facilities to meet or exceed minimum ADA criteria.

4 ATTACHMENT: ANNOTATED BASE MAPS



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UNIVERSITY BLVD PEDESTRIAN/CYCLIST SAFETY STUDY

ADA FIELD REVIEW

SHEET NO. 1

MATCHLINE PREVIOUS SHEET

MATCHLINE NEXT SHEET

1" = 50'

N

Crosswalk pavement markings worn

Crosswalk pavement markings worn

Large bump in curb ramp

No pavement connection between bus stop and road

Detectable warnings missing

UNIVERSITY BLVD

COSTCO GAS STATION

CHICK-FIL-A

SONNY'S BBQ

FULL SAIL UNIVERSITY

LEGEND:

WETLAND LINES

PARCEL LINES

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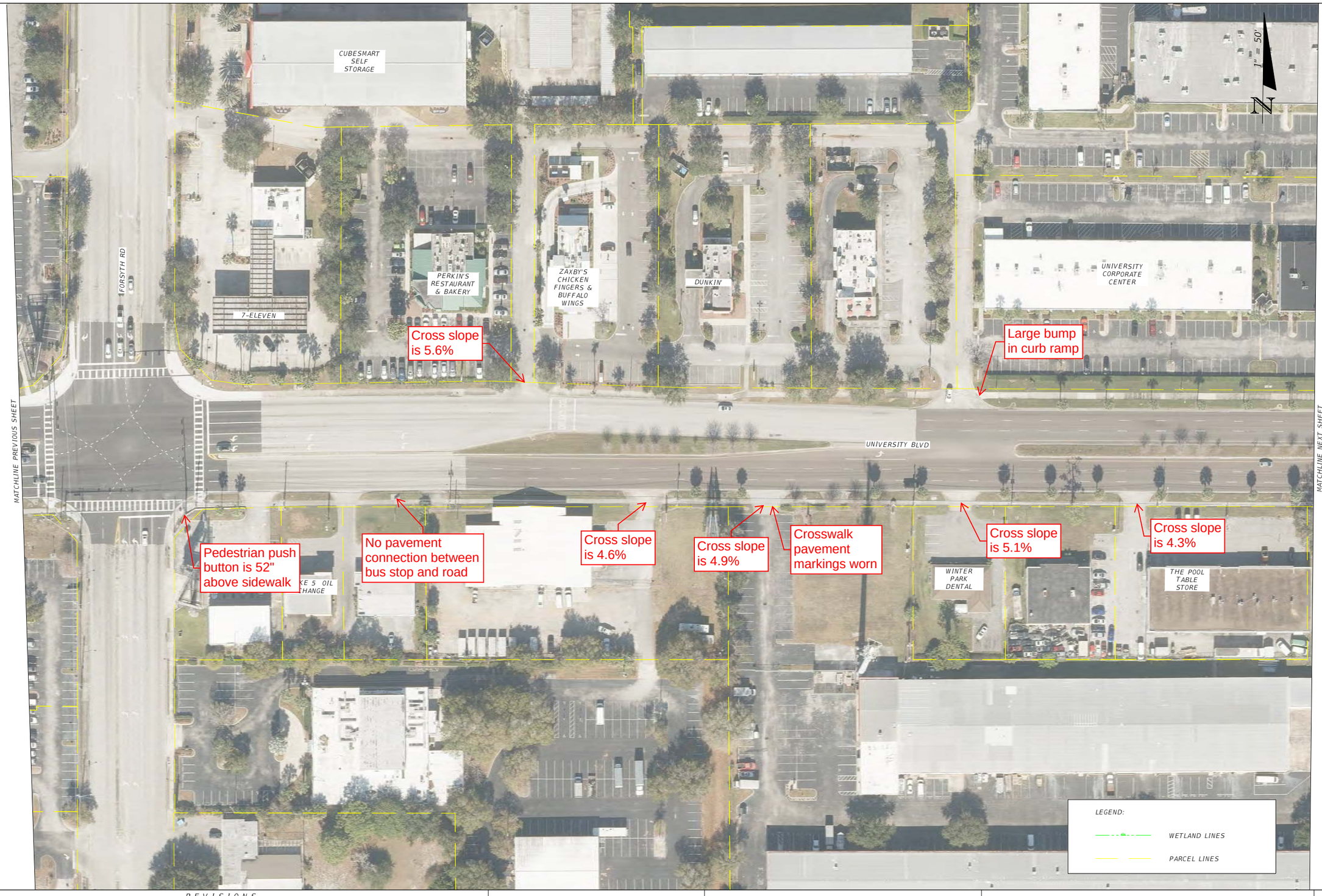
ADA FIELD REVIEW

SHEET NO. 2



MATCHLINE PREVIOUS SHEET

MATCHLINE NEXT SHEET

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ADA FIELD REVIEW

SHEET NO. 3

MATCHLINE PREVIOUS SHEET

MATCHLINE NEXT SHEET

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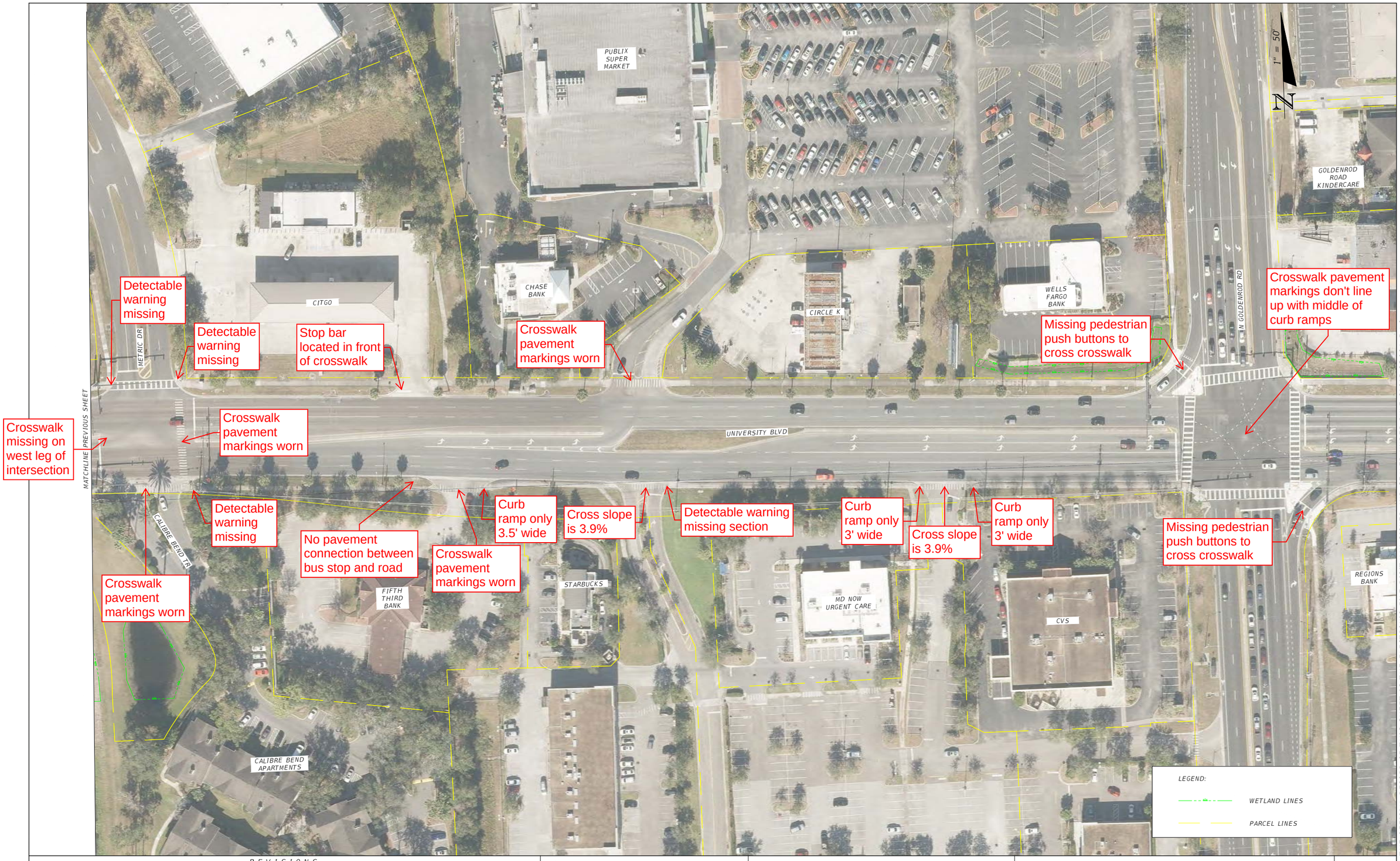
UNIVERSITY BLVD PEDESTRIAN/CYCLIST SAFETY STUDY

ADA FIELD REVIEW

SHEET NO. 4



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UNIVERSITY BLVD PEDESTRIAN/CYCLIST SAFETY STUDY

ADA FIELD REVIEW

SHEET NO. 5