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UNIVERSITY OF CENTRAL FLORIDA

2.0 TRANSPORTATION

2025-35 CAMPUS MASTER PLAN UPDATE

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2.1 INTRODUCTION

STATUTE & REGULATION



NARRATIVE

TRANSPORTATION GROWTH STRATEGY



The TRANSPORTATION element is required by Florida Statue 1013.30(3). The element must follow the guidelines stated in Florida Board of Governors (BOG) Regulations, Chapter 21.

BOG 21.205 states the purpose of the element as follows:

"This element assesses and makes transportation recommendations for integrating all modes of travel (bicycle, pedestrian, bus/transit, and motor vehicle) both on campus and in the off-campus planning study area. These recommendations shall coordinate policies, programs, and projects with the host and/or affected local governments, as well as with other state and regional agencies."

The Parking and Transportation Services Department supports the vital movement of people and services by managing and improving:

- Parking Systems and Facilities
- Transit Network (Shuttles)

Facilities and Business Operations and the UCF Police Department support the operations by managing and improving:

- Traffic Circulation (roadways)
- Pedestrian and Non-Motorized Circulation
- Sustainable Transportation

The Transportation element relies on enrollment growth projections to meet the Data & Analysis requirements of Board of Governors Chapter 21.

To determine future traffic volumes and to provide a conservative analysis UCF's consulting Transportation Engineers have employed a minimum 1% background growth rate for all roadways within the Context Area, as required by Orange County on similar traffic studies. To confirm this background traffic growth through the Horizon Year 2035, the following resources were examined:

- UCF Projected Enrollment for the 10-year planning interval, (see 1.0 FUTURE LND USE)
- Based on the latest BEBR¹ projections, the projected population growth rate for Orange County will be 1.5% per year from 2020 to 2035 (2020 population 1.404 million & 2035 population 1.755 million)
- A comparison of historical traffic counts obtained from the Orange County and Seminole County Annual Count Programs over the previous planning period resulted in

¹ University of Florida, Bureau of Economic and Business Research (BEBR)

STRATEGIC PLAN ALIGNMENT	negative annual growth rates or growth rates of less than 1% per year within the Context Area. Each CMP element aligns with one or more of the four priorities stated in the UCF strategic plan "UNLEASHING POTENTIAL – Becoming the University for the Future." The Transportation
	element aligns with:
	Community and Culture UCF's existing partnership with Lynx provides students, staff and faculty access to free public transportation throughout the greater Orlando metropolitan area.
	UCF's involvement in MetroPlan Orlando has established relations with local governments to coordinate future transportation planning and infrastructure improvements.
	Innovation and Sustainability UCF's transportation initiatives, such as propane-powered shuttles and electric fleet cars earn UCF credit toward STARS Gold.
	UCF transit and parking initiatives have reduced trips on campus. During the planning interval 2014 to 2019, the University generated -1.30 trips (negative) per additional student.
SUSTAINABILITY	Sustainability initiatives have been prioritized and integrated throughout the Transportation element. It encompasses items such as alternate transportation means, enhanced bicycle lanes, electrical vehicle expansion, and integration of renewable energy solutions. See also:
	 Goals, Objectives, and Policies – "Sustainable Transportation GOP" Data and Analysis – "g. Sustainable Transportation Approaches"
	Goals, Objectives and Policies that align with the Sustainability Tracking, Assessment & Rating System TM (STARS) Version 3.0^2 are shown in green text, with the specific <i>Category and Impact Area</i> and <i>Credit</i> # indicated in parentheses after the Goal, Objective, or Policy.
	Specific STARS sections in this element are aligned with the Categories and Impact Areas, Engagement (EN) , Operations (OP) , and Innovation & Leadership (IL) , and with these Stars 3.0 Credits:
	 EN-6: Community Partnerships OP-5: Energy Use OP-6: Greenhouse Gas Emissions OP-14: Commute Modal Split

² STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

	 IL-46: Electric Vehicle Infrastructure IL-48: Shared Mobility Program
RELATED ELEMENTS	See 7.0 INTERGOVERNMENTAL COORDINATION for collaboration with the host and affected local governments concerning campus traffic and infrastructure development.
	See 8.0 CAPITAL IMPROVEMENTS for future transportation projects
GLOSSARY	Terms used in this element may include:
Commuter Rail Line	Central Florida's commuter rail line is SunRail, with 16 Stops from DeBary, FL to Poinciana, FL.
Headway	Headway is a measurement of the distance or time between vehicles in a transit system. It can be expressed as the distance between vehicles or as the time it will take for the trailing vehicle to cover that distance.
Horizon Year	The last year in the planning interval for the 2025-35 Campus Master Plan Update, i.e., 2035.
MetroPlan Orlando	MetroPlan Orlando is the metropolitan transportation planning organization for Orange, Osceola, and Seminole Counties.
Micromobility	A category of personal transport vehicles such as electric scooters, electric skateboards, shared bicycles, and electric pedal assisted bicycles.
Multimodal Transportation Center	Multimodal Transportation Centers are hubs that integrate various modes of transportation and provides multiple options for commuters to travel. These hubs bring together automobiles, public transit, bicycles and pedestrians into a single location, such as the UCF/LYNX Transit Center, ³ the Research I Bus Terminal, and the Lynx Central Station in downtown Orlando.
Multimodal Path	A sidewalk or trail intended for use by pedestrians and micromobility vehicles. See also Non-vehicular.
Public Transit System	Central Florida Regional Transit Authority (LYNX) is the public bus service in Orange, Seminole, and Osceola Counties.
Private Transit System	UCF on-campus and off-campus shuttles to area apartment complexes and the Central Florida Research Park.
Non-vehicular Circulation	Non-Vehicular includes bicycles, skateboards, skates (in-line or roller), scooters (manual and motorized), or similar devices, and the paths or systems that serve them.
Sharrow	A shared lane marking or "sharrow" is a street marking placed in the travel lane to indicate locations where vehicles and bicycles must share the traffic lane.
Traffic Circulation System	All roadway facilities within the University Main Campus boundaries, as well as the external roadway facilities located within the Context Area.

³ The UCF/LYNX Transit Center is noted as the "UCF SuperStop" on the LYNX website, Google Maps and other internet sites such as TransitFeeds.com and OpenMobilityData.com.

Trip Generator	The goal of trip generation is to predict the number of trips, by purpose, which are generated by and attracted to each zone in a study area.
Vehicular	Vehicles include automobiles, trucks, motorized shuttles, autonomous shuttles, and motorized carts.

2.2 GOALS, OBJECTIVES, & POLICIES (GOP)

Traffic Circulation Systems GOP

GOAL 1: Provide adequate vehicular access to the campus, while continuing to coordinate with local communities and planning agencies regarding essential transportation improvements.

OBJECTIVE 1.1: Ensure safe, effective vehicular access to, from, and within campus.	POLICY 1.1.1: Every five years, the University shall review all campus development plans for compliance with the Campus Master Plan criteria for traffic circulation.
	POLICY 1.1.2: The University shall continue to limit vehicular access to the Academic Core, within Aquarius Circle (1,200-foot radius sidewalk), by means that may include, but are not limited to, restrictive signage and barrier gates.
	POLICY 1.1.3: The University shall reduce direct vehicular access onto major roads, such as Gemini Blvd. and Ken Dixon Way (formerly N. Orion Blvd.) ⁴ , by regulating the number of new driveways, consolidating access points, and creating cross- access and shared-access between adjacent driveways.
	POLICY 1.1.4: The University shall strive to maintain a minimum level of service (LOS) of E for all campus roadways, as defined in the <u>2023 FDOT Multimodal Quality/Level of Service Handbook</u> (Q/LOS) ⁵ , except when that LOS could only be accomplished by widening campus roadways beyond four lanes.
	POLICY 1.1.5: The University shall improve its traffic circulation without detrimental impact to environmentally sensitive areas, in compliance with 5.0 CONSERVATION and state and local environmental regulatory agencies.
	POLICY 1.1.6: The University shall identify proposed on-campus traffic circulation improvements in the 10-Year Schedule of Capital Projects (SCP) found in element 8.0 CAPITAL IMPROVEMENTS.
	POLICY 1.1.7: The University shall continue to identify and address deficiencies with existing campus roadways by installing signage to improve traffic circulation, implementing sharrows ⁶ to improve infrastructure for bicycles, and implementing traffic calming methods to mitigate vehicular accidents.
OBJECTIVE 1.2: Ensure continued coordination of UCF's transportation	POLICY 1.2.1: The University shall ensure concurrency for campus development, i.e., adequate roadways and parking facilities are in place and operating concurrently with proposed

⁴ North Orion Boulevard was renamed Ken Dixon Way on June 25, 2024 by the UCF Board of Trustees in honor of Kenneth G Dixon, '75.

⁵ <u>2023 FDOT Multimodal Quality/Level of Service Handbook</u> defines LOS on a scale of A-F.

⁶ See Glossary in 2.1 Introduction for a definition of "Sharrow."

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development, with available capacity and without degradation to system with that of the host and affected local the LOS defined by the University. aovernments. POLICY 1.2.2: The University shall coordinate transportation with the host and affected local governments, MetroPlan Orlando, and the Florida Department of Transportation (FDOT) by: collecting and reporting traffic data for on-campus roadways concurrent to every 5-year Campus Master Plan Update, or as necessary, to determine impact on the local host and affected governments. evaluating strategies and improvements to meet the projected need for additional access to the UCF campus. ensuring interconnection and synchronization of existing and new traffic signals. continuing to participate on the MetroPlan Orlando **Transportation Systems Management & Operations Advisory** Committee (TSMO) in a non-voting capacity; and • working together regarding their proposed transportation improvement projects. (EN-6: Community Partnerships) POLICY 1.2.3: The University shall survey students every five (5) years regarding transit, bicycle, and pedestrian services to ensure quality and quantity of transportation modes.

Parking Services and Facilities GOP

GOAL 2: Strive to consistently manage parking demand on campus.

OBJECTIVE 2.1: Ensure the provision of adequate safe, accessible, and effective parking facilities to meet future needs.	POLICY 2.1.1: The University shall reduce campus parking and traffic congestion by building "intercept garages" at the outer perimeter of campus. Such garages are intended to stop vehicular traffic from entering campus and transport drivers from the garages to the campus core by other means such as shuttles, autonomous vehicles, and bike sharing.
	POLICY 2.1.2: The University shall continue to issue residential parking permits that restrict student residents from parking outside of residential parking areas; and prevent commuter students from parking within residential areas.
	POLICY 2.1.3: The University shall monitor campus parking annually, to maintain the student-to-parking space ratio range that UCF designates as adequate (3:1 to 4:1).
	POLICY 2.1.4: The University shall provide adequate lighting at parking garages and lots, in keeping with to IES standards; and ensure the safety of students, faculty, and staff through the application of the <i>Crime Prevention Through Environmental Design</i> (CPTED) methodology.



POLICY 2.1.5: The University shall monitor visitor parking annually to establish and maintain appropriate visitor parking spaces.

POLICY 2.1.6: The University shall not build any future parking garages within the Campus Core, inside of Gemini Boulevard. All remaining buildable sites within the campus core must be reserved for future Academic Buildings. Future garages will be at the campus periphery to intercept vehicular traffic and reduce congestion within the campus core.

POLICY 2.1.7: The University shall continue to evaluate and implement parking industry technologies to ensure efficient and adequate access of the parking facilities, such as virtual parking permits, digital wayfinding, and parking space availability.

POLICY 2.1.8: The University shall investigate a variable pricing model for student parking designations. These methods could include locations-based pricing demand or student academic level rating.

POLICY 2.1.9: If new construction displaces an existing parking lot, replacement parking shall be considered as part of the new construction planning and budget. A parking study shall be conducted before removing existing parking to allow new construction. Need, funding, and type of replacement parking – paved or pervious (gravel, grass) – shall be considered on a caseby-case basis.

POLICY 2.1.10: The University shall continuously evaluate current resources to identify under-utilized parking locations and develop strategies to maximize usage.

POLICY 2.1.11: The University shall support and provide safe drop-off areas for ridesharing programs for UCF students, faculty, and staff.

(IL-48: Shared Mobility Program)⁷

POLICY 2.1.12: The University shall evaluate the need to provide additional garage(s) during the 10-year Planning Interval, as indicated in Future Conditions in the Data & Analysis section of this element.

POLICY 2.2.1: The University shall ensure the safety of students, faculty, and staff through the application of the *Crime Prevention Through Environmental Design* (CPTED) methodologies. based on five principles: natural access control, natural surveillance, territoriality, activity support, and maintenance.

POLICY 2.2.2: The University shall provide lighting at parking garages and lots in keeping with IES standards.

POLICY 2.2.3: The University shall continue to evaluate and implement parking industry technologies to ensure efficient and

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OBJECTIVE 2.2: Provide campus parking facilities that are safe, accessible, and effective.



⁷ Policy 2.1.11 could relate to STARS <u>IL 48: Shared Mobility Program</u>, if the University has or can develop a program to incentivize the use of car sharing or carpooling.

adequate access of the parking facilities, such as virtual parking permits, digital wayfinding, and parking space availability.

Transit Systems and Facilities GOP

GOAL 3: Develop a financially feasible multimodal transportation system that integrates services provided by UCF's private transit system, Central Florida's public transit system and commuter rail lines.

OBJECTIVE 3.1: Employ forward-thinking methods to reduce traffic congestion within the campus core.



POLICY 3.1.1: The University shall continue to explore opportunities with other transportation management associations to promote Transportation Demand Management (TDM) strategies both on-campus and within the Context Area.

POLICY 3.1.2: The University shall continue to optimize its existing shuttle services, with routes accommodating many students within the Context Area, as well as shuttle services to the Satellite Campuses.

(OP-14: Commute Modal Split)

POLICY 3.1.3: The University shall implement TDM strategies, as appropriate and fiscally feasible, including but not limited to:

- Improved utilization of public or private transit services
- Improved pedestrian and non-vehicular facilities
- Increased number of students living on campus
- Modifications to class scheduling times

(OP-14: Commute Modal Split)

POLICY 3.1.4: The University shall continue to coordinate with the host and affected local governments, LYNX, Brightline, and SunRail to promote alternative modes of transportation to campus from other locations.

(EN-6: Community Partnerships) (OP-14: Commute Modal Split) (IL-48: Shared Mobility Program)

POLICY 3.1.5: The University shall continue to coordinate with the Central Florida Expressway Authority (CFX), the Florida Department of Transportation (FDOT), and Orange County Transportation regarding future transportation improvements within the Context Area.

(EN-6: Community Partnerships)

POLICY 3.1.6: The University shall continue to investigate forward-thinking means of transportation, including, but not limited to autonomous vehicles.

OBJECTIVE 3.2: Increase transit ridership.

OBJECTIVE 3.3: Implement measures to improve transit service to, from, and within the campus.

POLICY 3.2.1: The University shall continue to encourage shuttle transit as a means of travel from residential areas and parking lots to campus destinations.

(OP-14: Commute Modal Split)

POLICY 3.2.2: The University shall continue to monitor, promote, and increase ridership on its private shuttle service.

(OP-14: Commute Modal Split)

POLICY 3.2.3: The University shall develop initiatives to

- market student transit services;
- increase shuttle ridership;
- decrease parking demand;
- decrease the use of single-occupant vehicles

(OP-14: Commute Modal Split)

POLICY 3.3.1: The University shall continue to explore adding new multimodal transportation centers, to minimize single-user vehicles on campus.

(OP-14: Commute Modal Split)

POLICY 3.3.2: The University shall measure the quality of its current services using performance-based assessments, using feedback collected through online⁸ surveys, student orientation, and other inquiries.

POLICY 3.3.3: The University shall continue to identify residential concentrations of students and to provide convenient transit routes by:

- increasing transit service on these routes
- decreasing transit headway times
- developing additional new routes
- modifying existing routes

(OP-14: Commute Modal Split)

POLICY 3.3.4: The University will review the potential impact on local communities for any proposed shuttle depot locations. Considerations will include traffic increases, noise levels, turn radii, and the overall suitability of the depot for the area.

POLICY 3.3.5: The University will support and implement transit route expansion in situations where there is evidence of student population growth in a particular location, or where the current transit system is deemed inefficient, limiting access to the university.

⁸ Online assessment addresses: Shuttles@ucf.edu, Decals@ucf.edu and Parkingevents@ucf.edu. 11 | 2.2 TRANSPORTATION - GOP

Pedestrian and Non-Vehicular Systems and Facilities GOP

GOAL 4: Create logical patterns of pedestrian and non-vehicular circulation systems which enhance the overall urban and social-academic quality of the campus.

OBJECTIVE 4.1: Encourage the use of pedestrian and nonvehicular circulation systems.



OBJECTIVE 4.2: Coordinate pedestrian and non-vehicular circulation systems with those developed by the POLICY 4.1.1: The University shall continue to encourage pedestrian and micromobility methods of travel from residential areas and parking lots to the Campus Core.

POLICY 4.1.2: The University shall continue to encourage and promote pedestrian and non-vehicular transportation by providing (when funding is available):

- Well-maintained and lighted sidewalks / bike path
- Bicycle racks near buildings
- Bike lockers
- Bicycle racks on UCF shuttles
- Bicycle-sharing and/or Scooter-sharing
- Skateboard lockers
- Showers/dressing rooms in new UCF buildings⁹

(OP-14: Commute Modal Split)

POLICY 4.1.3: The University shall continue to provide bicycle lanes on newly constructed or improved on-campus roadways, where feasible.

(IL-45: Bicycle Friendly Recognition)

POLICY 4.1.4: UCF will investigate locations where protected lanes are needed to improve safety, such as higher-speed campus roads.

POLICY 4.1.5: The University shall continue to provide crosswalks at all points where pedestrian and non-vehicular circulation cross Gemini Boulevard, at all campus entrances, and where required for safety. The University shall continue to evaluate crossings to ensure pedestrian safety.

- Traffic calming measures and pedestrian signalization may be used to make crossings safer.
- Installing raised crosswalks in areas with significant numbers of pedestrians crossing.
- Pedestrian crossing shall be subject to enforcement by the UCF Police department.

POLICY 4.2.1: The University shall continue to coordinate with the host and affected local governments regarding the implementation of sidewalks, bicycle paths and lanes, and safetyenhanced pedestrian crosswalks along all vehicular corridors adjacent to or leading in and out of campus.

⁹ LEED Bicycle Facilities (possible 2 points) requires "at least one on-site shower with changing facility for the first 100 regular building occupants and one additional shower for every 150 regular building occupants thereafter."

host and affected local POLICY 4.2.2: The University shall continue to coordinate with the host and affected local governments by reviewing their local governments. comprehensive plans, bicycle plans, or pedestrian circulation plans, and meeting with local governments and agencies, as necessary. POLICY 4.2.3: The University shall support the concept of signalized, mid-block pedestrian crosswalks on roads near campus to improve pedestrian safety by reducing jaywalking. A 2023 Pedestrian Safety Project, in which UCF partnered with Orange County and FDOT, will provide two mid-block pedestrian crosswalks at Alafava Trail near Solon Drive and on University Boulevard at Turbine Drive. UCFs 2020 Campus Development Agreement (CDA) with • Orange County discusses a future mid-block pedestrian crosswalk on McCulloch Road¹⁰ near Northgate Lakes apartments, between Alafaya Trail and Lockwood Blvd.¹¹ POLICY 4.2.4: In partnership with Orange County, the University shall "develop an on-campus bicycle pathway through the UCF campus, linking the existing trail systems of Orange and Seminole Counties, as required by a Campus Development Agreement executed in December 2020 between UCF and Orange County"¹² (IL-45: Bicycle Friendly Recognition) (EN-6: Community Partnerships) **OBJECTIVE 4.3:** POLICY 4.3.1: The University shall continue to educate the campus community with Pedestrian Safety Tips. Continue to promote pedestrian safety. POLICY 4.3.2: The University shall adjust traffic speed limits on campus roadways to increase driver and pedestrian safety, as advised by UCF Police Department. **OBJECTIVE 4.4:** POLICY 4.4.1: The University will strive to improve its bicycle facilities in order to maintain its status and improve its ranking as Continue to arow the cycling culture at UCF, a "Bicycle Friendly University."¹³ prioritizing ridership and (IL-45: Bicycle Friendly Recognition) safety. POLICY 4.4.2: The University will continue to provide information and education on bicycle safety and cycling amenities. The UCF Student Government Association website explains the SGA Bike Share (bike rental) and bike repair facilities. The UCF Police Department website details Bicycle Safety Tips and other information. The Parking and Transportation Department website identifies bike rack locations.

(IL-45: Bicycle Friendly Recognition)

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¹⁰ McCulloch Road crossings would require a partnership between UCF, Orange County, and Seminole County.

¹¹ McCulloch Road crossings would require coordination with the improvement of trails through the conservation area at the north edge of the UCF campus.

¹² This is included in CDAs executed in 2016 and 2020 between UCF and Orange County.

¹³ The League of American Bicyclists designated UCF as "bicycle friendly" at the Bronze Level in 2017 and again in 2022.

OBJECTIVE 4.5: Continue to support the use of micromobility devices on campus.	POLICY 4.5.1: The University limits the use of skateboards, roller blades, etc. to sidewalks and crosswalks. The use of such devices is prohibited by UCF Policy in all other areas, including roadways, bike lanes, parking lots, or inside any building or garage; or on-site improvements such as walls, steps, ramps, site furniture, or architectural elements. Riders must also yield the right-of-way to pedestrians, bicyclists, and motorists.
	POLICY 4.5.2 With the increased use of eBikes and eScooters on campus, UCF must adopt policies to address their use; and investigate pedestrian safety precautions.
OBJECTIVE 4.6: Review the need for additional lighting along pedestrian and non-vehicular circulation routes.	POLICY 4.6.1: The University shall follow the lighting guidelines described in the UCF Design, Construction, and Renovation Standards.
	POLICY 4.6.2: Concurrency requires that appropriate lighting systems be constructed concurrent with pedestrian and non-vehicular circulation systems.
	POLICY 4.6.3: The University will continue to monitor lighting levels throughout the campus, as needed to ensure safety.

Sustainable Transportation GOP

	nable transportation options, while balancing the refits of transportation with the need to protect the
OBJECTIVE 5.1: Integrate transportation and land use planning.	POLICY 5.1.1: Ensure planning for land use and transportation are conducted concurrently to mitigate negative impacts stemming from the expansion of one area on the infrastructure of the other.
	POLICY 5.1.2: Encourage supportive land use development, including compact and mixed-use developments that reduce trip length and are pedestrian friendly.
OBJECTIVE 5.2: Protect the environmental health of the campus.	POLICY 5.2.1: The University shall continue to implement distance learning, and coordination with satellite campuses, as techniques to reduce the quantity of students travelling to the Main Campus.
	(OP-14: Commute Modal Split)
	POLICY 5.2.2: The University shall continue to refine class scheduling as a method of mitigating peak-hour traffic conditions and maximizing utilization of existing transportation infrastructure investment.
	POLICY 5.2.3: The University shall evaluate the feasibility to install renewable solar photovoltaic panels on select parking garages and surface parking lots.
	(OP-5: Energy Use) (OP-6: Greenhouse Gas Emissions)

OBJECTIVE 5.3: Reduce dependence on the personal automobile by encouraging the use of alternative modes of transportation.

OBJECTIVE 5.4:

Create a living transportation plan with public involvement. POLICY 5.3.1: The University shall work with the host and affected local governments and public transit providers to evaluate all options for reducing the dependence on single occupancy automobiles.

(EN-6: Community Partnerships)

POLICY 5.3.2: The University shall continue to evaluate the usage of existing Electric Vehicle (EV) charging stations and increase the number of stations, where feasible.

(IL-46: Electric Vehicle Infrastructure)

POLICY 5.3.3: The University evaluate the feasibility of developing a car-sharing program with incentives for use.

(IL 48: Shared Mobility Program)

POLICY 5.3.4: The University shall evaluate the feasibility of developing a system for preferential parking for fuel efficient vehicles and provide incentives for use.

(IL-46: Electric Vehicle Infrastructure)

POLICY 5.3.5: The University shall identify strategies to increase walking, cycling, micromobility, transit, rideshare, and telecommuting.

(OP-14: Commute Modal Split)

POLICY 5.3.6: The University shall identify strategies to make transit operation more sustainable, including increased ridership, route optimization, and alternative energy sources.

POLICY 5.3.7: The University shall identify strategies to make motor vehicle use more sustainable, including incident management, signal optimization, rideshare, and carpooling.

Policy 5.4.1: UCF has plans to develop a Transportation Master Plan within the planning timeframe.

• Meanwhile, UCF formed a campus-wide committee called *MOBILITY 2030 - a Transportation Advisory Board* to engage all of UCF's existing transportation-related departments, committees, and advocates and assure that transportation planning at UCF meets the needs of the entire campus community. Its quarterly virtual meeting are open to the public.

2.3 DATA AND ANALYSIS

NARRATIVE	Since its inception in 1963 as the Florida Technical University, the University has experienced tremendous growth and is now the largest state university by student population in Florida with over 69,000 students - nearly 53,000 on the Main Campus alone (Fall 2024). Enrollment Projections for the Main Campus during the 10- year planning timeframe can be found in 1.0 FUTURE LAND USE, Data & Analysis.
	An increasing student population results in increased demands on infrastructure, such as new and improved roads, pedestrian walkways, bicycle facilities, transit improvements, and parking. The University has added significant transportation infrastructure to accommodate this growth, including Transportation Demand Management (TDM) strategies to decrease the use of single- occupant vehicles and encourage multimodal travel.
	The University of Central Florida maintains a network of internal roadways, as well as a fleet of over 49 shuttle buses that provide a critical transit mode to and from the campus. In addition, the University also maintains an extensive network of pedestrian and bicycle facilities on campus.
	With a growing student population, the University strives to integrate and coordinate all available modes of transportation within and surrounding the campus. The area examined by this transportation element is shown in Exhibit 2.0-12 Context Area Map.
	Data & Analysis includes Existing conditions, Planned improvements, Sustainable transportation approaches and Future conditions
Existing Conditions	
INVENTORY	This element requires an analysis of existing transportation facilities within and surrounding the University. In order to evaluate the existing conditions of the transportation facilities on campus, as well as those external facilities and systems located within the Context Area, an inventory of the existing transportation systems and campus demographic data was performed.
Campus Population – Enrollment and	The total number of students enrolled on the Main Campus in Fall 2024 was 52,857.
Employment	Additionally, there are about 13,000 permanent and temporary employees on the Main Campus.

a. Traffic Circulation Systems

Level of Service (LOS) Standards	local street is to provide direct access to adjacent land uses Level-Of-Service (LOS) describes a qualitative measure of a roadway's operational performance under existing or projected traffic conditions.
	 <u>Principal Arterial</u> – This is the highest level of arterial and generally has restricted access and serves longer distance through trips servicing larger metropolitan areas. This facility connects minor arterials, freeways, and other principal arterials. <u>Minor Arterial</u> – This type of roadway provides connections between principal arterials and collectors. It typically serves moderate distances with less emphasis on mobility than a principal arterial and with a greater level of access to adjacent land parcels. <u>Collector (Major and Minor)</u> – The collector street system provides a combination of land access and mobility, generally within residential neighborhoods, or larger industrial or commercial developments, and joins with other collector systems. Collectors distribute traffic from arterials to the local street system and their final destinations. <u>Local</u> – According to the AASHTO "Greenbook," the local street system comprises all facilities that do not fall into one of the higher roadway classifications. The primary function of a local street is to provide direct access to adjacent land uses
	standards and to evaluate operational characteristics. See 2.4 EXHIBITS for Existing Roadway Characteristics Table that details the functional classification of all study roadways within the Context Area. Roadways within the Context Area include the following classifications:
	Roadways provide two functions within the functional classification by providing varying levels of access and mobility. The functional classification of a roadway is used to set Level-Of-Service
	There are six (6) major classifications of roads: Expressway Freeway, Principal Arterial, Minor Arterial, Collector (Major and Minor), and Local Road.
Functional Classification System	The Florida Department of Transportation (FDOT) defines functional classification as "the process by which streets and highways are grouped into classes or systems, according to the character of service they are intended to provide."
	An inventory of existing roadway facilities in the Context Area is shown in Exhibit 2.0-1 Roadway Facility Inventory Table. This inventory includes the following roadway characteristics: roadway name, segment limits, number of lanes, jurisdiction, adopted level of service (LOS), and functional classification.
	For the purposes of this Transportation Element, traffic circulation system will be defined as all roadway facilities within the University Campus boundaries, as well as within the Context Area.

	There are six alphabetical LOS designations, A-F, used to describe a roadway's operating conditions. These designations range from the best, LOS "A," which represents free-flow conditions, to the worst, LOS "F," which represents breakdown conditions with significant delays.		
	For the purpose of this update, this element will follow the LOS standards developed in the <u>2023 FDOT Multimodal Quality/Level</u> of <u>Service Handbook (Q/LOS)</u> for state roadways, and Orange County's Concurrency Management System (CMS) for Orange County and on-campus roadways, and Seminole County CMS for Seminole County roadways. The FDOT 2023 Q/LOS Handbook includes Appendix B: Florida's Generalized Service Volumes Tables. 2.0 TRANSPORTATION Exhibit 2.4.1 shows the existing traffic volumes, roadway geometry and LOS for roadways within the Context Area.		
See Exhibits	Roadway maps and tables end of this element.	are located in 2.4 EXHIB	ITS, at the
b. Parking Systems			
	The need for large-capacity, well-distributed parking is paramount to support the needs of UCF's students, faculty, staff, and visitors. To accommodate parking demands, both permanent and temporary parking facilities are provided on campus. Parking for nearly 17,500 vehicles is provided on campus in ten (10) garages and more than 33 parking lots.		
	1 0	515.	
Campus Parking	Garage	Year Built / Enlarged	# of Spaces
Campus Parking Structures (Garages)			# of Spaces 1,647
• •	Garage	Year Built / Enlarged	-
• •	Garage Garage A	Year Built / Enlarged 2007	1,647
• •	Garage A Garage B	Year Built / Enlarged 2007 2000	1,647 1,289
• •	Garage A Garage B Garage C	Year Built / Enlarged 2007 2000 1998 / 2016	1,647 1,289 1,852
• •	Garage A Garage B Garage C Garage D	Year Built / Enlarged 2007 2000 1998 / 2016 2002	1,647 1,289 1,852 1,279
• •	Garage A Garage B Garage C Garage D Garage E	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007	1,647 1,289 1,852 1,279 696
• •	Garage A Garage B Garage C Garage D Garage E Garage F	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008	1,647 1,289 1,852 1,279 696 678
• •	Garage A Garage B Garage C Garage D Garage E Garage F Garage G	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008 2000	1,647 1,289 1,852 1,279 696 678 696
• •	Garage A Garage B Garage C Garage D Garage E Garage F Garage G Garage H	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008 2000 2011	1,647 1,289 1,852 1,279 696 678 696 1,340
• •	Garage A Garage B Garage C Garage D Garage E Garage F Garage G Garage H Garage I	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008 2000 2011 1997 2014	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270
Structures (Garages)	Garage A Garage A Garage B Garage C Garage D Garage E Garage F Garage G Garage H Garage I Libra Garage (J) TOTAL PARKING IN GARAGES	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008 2000 2011 1997 2014	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270 1,039 11,786
• •	Garage A Garage A Garage B Garage C Garage D Garage E Garage F Garage G Garage H Garage I Libra Garage (J) TOTAL PARKING IN GARAGES User Type	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008 2000 2011 1997 2014	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270 1,039 11,786
Structures (Garages)	Garage A Garage A Garage B Garage C Garage D Garage E Garage F Garage F Garage G Garage H Garage I Libra Garage (J) TOTAL PARKING IN GARAGES User Type Student	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2007 2007 2008 2000 2011 1997 2014 * # of Spaces 10,044	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270 1,039 11,786
Structures (Garages)	Garage A Garage A Garage B Garage C Garage D Garage E Garage F Garage F Garage G Garage H Garage I Libra Garage (J) TOTAL PARKING IN GARAGES User Type Student Housing (Student Residents)	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008 2000 2011 1997 2014 * # of Spaces 10,044 3,646	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270 1,039 11,786 % of Total 57.42% 20.84%
Structures (Garages)	Garage A Garage A Garage B Garage C Garage D Garage E Garage F Garage F Garage G Garage H Garage I Libra Garage (J) TOTAL PARKING IN GARAGES User Type Student Housing (Student Residents) Employee	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2007 2007 2008 2000 2011 1997 2014 * 10,044 3,646 2,020	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270 1,039 11,786
Structures (Garages)	Garage A Garage A Garage B Garage C Garage C Garage D Garage E Garage F Garage F Garage G Garage H Garage I Libra Garage (J) TOTAL PARKING IN GARAGES User Type Student Housing (Student Residents) Employee Reserved	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2008 2000 2011 1997 2014 * # of Spaces 10,044 3,646 2,020 164	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270 1,039 11,786
Structures (Garages)	Garage A Garage A Garage B Garage C Garage D Garage E Garage F Garage F Garage G Garage H Garage I Libra Garage (J) TOTAL PARKING IN GARAGES User Type Student Housing (Student Residents) Employee	Year Built / Enlarged 2007 2000 1998 / 2016 2002 2007 2007 2007 2008 2000 2011 1997 2014 * 10,044 3,646 2,020	1,647 1,289 1,852 1,279 696 678 696 1,340 1,270 1,039 11,786

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	Service	163	0.93%
	Motorcycle	153	0.87%
	Event Parking	604	3.45%
	Other	106	0.61%
	TOTAL PARKING	17,493	-
PARKING ANALYSIS Student Commuter Parking	The majority of UCF parkir with over 57% of the total sp		t commuters,
	UCF had nearly 40,000 student commuters in Fall 2024 (D and DT Permits). Parking industry standards indicate that student commuter parking turns over two to four times a day. Due to this turnover, UCF can accommodate parking demand for the student population with fewer than 11,000 designated student commuter parking spaces.		
Student Residential Parking	Residential parking is available to students who keep their cars on campus. Residential parking permits R, RL and KP are restricted to their individual housing communities (see below) from Monday through Friday between the hours of 7:00am and 5:30pm. After 5:30pm and on weekends, residents may park in red, blue or green spaces or lots except 24 hours reserved or any other signed space.		
R Permits	Students who live in Academic Village, Apollo and Libra Communities, must purchase R permits. R permits allow parking only in parking lots B-7 (as noted by signs); B-8; B-15 and Libra Garage.		
RL Permits	RL parking is for Lake Clair in the designated Lake Clair	•	llows parking
KP Permits	KP permits allow Knights Pl Garage E or G.	aza residents convenient	parking in
Faculty and Staff Parking	Faculty and staff parking available parking.	spaces total nearly 12	2% of UCF's
All-user parking	Some parking spaces, inclu and motorcycle parking, r students, faculty, and staff.		
Parking Utilization Study	In March 2024, UCF underto Study for all major lot types vehicles parked in each lot, counts by location and time	s on campus, including th utilization by location and	ne quantity of time, average
	In summary, the study indic more than 60% occupied several being close to full weekday parking was betw availability during the non-p	during most periods of capacity. The peak usag een 12:00 PM and 2:00	the day with ge for student PM. Parking
	For employee parking, the s student parking occupancy.		

employee parking was between 10:00AM and 2:00 PM, with occupancy being around 73%. PARKING **TECHNOLOGIES** In 2018, UCF began implementing License Plate Recognition License Plate (LPR) cameras, starting with camera installations at the main Recognition entrances of the campus. This was to increase security of the campus, as the technology can alert law enforcement of any vehicles that are stolen or have outstanding warrants. LPR static cameras were also installed at the entrances and exits of Garages A, B, C, D, H, and I (as well as the Parramore and Amelia garages at the downtown campus). Because of the LPR technology, UCF was able to transition to using Virtual Parking virtual parking permits over issuing physical decals. The created Permits numerous benefits for the campus community, such as eliminating concerns over lost or stolen physical permits, added security for identifying unregistered vehicles, and the convenience of registering for parking online before arriving to campus. Use of LPR expanded to mobile camera units installed on parking **Tracking Garage** enforcement vehicles. Parking Capacity The versatility of LPR software allows UCF to use the technology for other purposes such as tracking garage parking capacities with the static cameras that were installed in 2023. Installation of the static cameras at the garage entrances and exits created the framework in utilizing license plate data to capture parking capacities. The garage parking capacity counter was launched in January 2024 and can be found on parking.ucf.edu. In addition to cameras installed at the entrances of the campus, Parking Enforcement UCF has expanded its parking enforcement fleet from two to six parking enforcement vehicles with mobile LPR units. c. Transit Circulation NARRATIVE UCF offers various transit options for students, faculty, and staff to travel on- and off-campus. The University is served by both public and private transit systems. The LYNX system provides regional, public transportation throughout the metropolitan Orlando area. The University provides transportation for students residing in nearby apartment complexes, through the Campus Transit Shuttle system, which includes 15 regular, fixed shuttle routes serving over 20 off-campus apartment communities. Currently, shuttles run to communities within one mile of campus; but that radius is under reconsideration.

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2.0 TRANSPORTATION				
	The University also runs four Pegasus Express shuttles throughout campus for 12 hours per day (7:00 AM to 7:00 PM) to alleviate internal roadway congestion.			
TRANSIT SERVICES Multimodal Transportation Centers	 Multimodal Transportation Centers accommodate transit arrivals and transfers from one means of transit to another. Examples on the UCF Main Campus include: UCF/LYNX Transit Center (UCF Superstop) on Leo Lane Research 1 Bus Terminal on Scorpius Drive 			
LYNX	LYNX is greater Orlando's regional, public transit service that connects the University to Orange, Seminole, and Osceola Counties, as well as the City of Orlando.			
UCF/LYNX Transit Center	The UCF/LYNX Transit Center (aka UCF Superstop) is a Main Campus Multimodal Transportation Center located on Leo Lane between Garages A and I. LYNX buses enter and exit the UCF campus via University Boulevard.			
	LYNX bus routes have stops near several off-campus residential communities where they may serve UCF students.			
 Link #13 	UNIVERSITY BOULEVARD/WINTER PARK Round Trip UCF Superstop to LYNX Central Station/SunRail			
 Link #104 	EAST COLONIAL DRIVE Round Trip UCF Superstop to LYNX Central Station/SunRail			
 Link #434 	S.R. 434 Round Trip UCF Superstop to Seminole State College Altamonte Campus			
UCF Shuttle System	 The University maintains a fleet of approximately sixty-two (62), 28-36-passenger shuttle buses. The UCF shuttle system is an important transportation alternative to the single-passenger automobile. Ridership data is for FY 2022, FY 2023, and FY 2024. 5,919 boardings per day. (1.24 million over 210 class days) 1.24 million boardings annually (average the past 3 years) 			
	See also Ridership by Route, later in this chapter.			
Pegasus Express	The Pegasus Express is UCF's intra-campus shuttle route.			
Stops	One (1) route, with 11 strategic bus stops, operates on class days from 7:00 AM to 7:00 PM; and Summer semesters from 7:00 AM to 4:00 PM, excluding Saturdays.			
 1 2 3 4 5 6 	UCF Student Union Lake Claire Community Additions Financial Arena / Knights Plaza / Towers Engineering / Business Administration / CREOL / Research I Physical Sciences / Student Health Center Nike / Hercules / Neptune Communities / Red Coach Connect			

- 7
- 8
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- 10
- 11

Off-Campus Transit

Off-Campus Shuttle Routes

- Ro
- Ro
- Ro
- Ro .
- Ro
- Satel Trans
 - Ro Ho Ма
 - Academic Health Sciences Campus at Lake Nona (AHSC)

- Ferrell Commons / Recreation and Wellness Center
 - Nike / Hercules / Neptune Communities / Visitor & Parking Information Center
- Library / Millican Hall / Apollo Community
- Teaching Academy / Howard Phillips Hall
 - UCF / LYNX Transit Center

Fifteen (15) off-campus routes serve twenty-two (22) housing complexes within a mile of UCF as well as the Central Florida Research Park.

les	Apartment Communities	UCF Stop
oute 1	Knights Circle	Student Union
oute 2	College Station / Boardwalk	Millican Hall ¹⁴
oute 3	The Verge / The Place at Alafaya	UCF/LYNX Transit Center
oute 4	Mercury 3100 / Campus Crossings	Millican Hall ¹⁴
oute 5	Nine at Central /Village at Science Dr./ Research Pavilion	Physical Sci./UCF Health Cntr
oute 6	Northgate Lakes / Tivoli Apartments	Research 1 Bus Terminal
oute 7	The Pointe at Central	Millican Hall ¹⁴
oute 8	The Station / Riverwind at Alafaya	Research 1 Bus Terminal
oute 9	Knights Landing / Research Park	Physical Sci./UCF Health Cntr
oute 10	Orion on Orpington / The Lofts	UCF/LYNX Transit Center
oute 11	The Aves at Twelve100	UCF/LYNX Transit Center
oute 12	Lark Central Florida	Millican Hall ¹⁴
oute 13	NorthView	Research 1 Bus Terminal
oute 14	Plaza on University	UCF/LYNX Transit Center
oute 15	Arden Villas / Collegiate Village West	UCF/LYNX Transit Center
ellite Campus Isit	Students, faculty and staff with a valid L between UCF's Main Campus and UCF in Orlando.	
	Except on weekends, shuttles run on so services change depending on seme schedules, and special events	
osen College of ospitality anagement (RCHM)	 RCHM shuttle route stations/stops Main Campus - Intersection of F Agora Drive, near Classroom 1 Rosen Campus - the main parki No intermediate stops. Two (2) shuttles operate on one (1) transmission 	and the Student Union ng lot

AHSC Shuttle stations/stops:

- Main Campus the Physical Sciences Building •
- AHSC Shuttle Stop South entrance of the College of • Medicine on Laureate Bv.
- Intermediate stop Biomolecular Research Annex in • Central Florida Research Park.

¹⁴ During the CMP planning interval, planned improvements to the area around Millican Hall will require the Millican Hall bus stop to be decommissioned. Parking & Transportation Services is working on solutions for its replacement.

	Three (3) shuttles operate on one (1) transit route.				
 UCF Downtown Campus (UCFDT) UCF Shuttle Ridership 	 UCFDT Shuttle stations/stops: Main Campus - UCF/LYNX Transit Center on Leo Lane. UCFDT - Dr. Phillips Academic Commons (DPAC) No intermediate stops. Two (2) shuttles operate on one (1) transit route. Many of the University's students, faculty, and staff commute via the UCF Shuttles; significantly reducing the overall impact of the University on the surrounding roadway network. 				
	Total ridership was tallied by month; with the highest ridership in September and October respectively. Since the 2020-30 Campus Master Plan update, overall ridership has decreased 15.1% from 970,913 trips to 824,358 trips (5,090 fewer daily trips being completed).				
Shuttle Ridership by Route – Fall 2023			Avg Daily		
Route•Route 1•Route 2•Route 3•Route 4•Route 5•Route 6•Route 7•Route 8•Route 9•Route 10•Route 11•Route 113•Route 13•Route 15•PegExp•PNR•UCFDT	Community Knights Circle College Station / Boardwalk The Verge / The Place at Alafaya Mercury 3100 / Campus Crossings Nine at Central / Village of Science Drive/ Research Pavilion Northgate Lakes / Tivoli Apartments The Pointe at Central The Station / Riverwind Knights Landing / Research Parkway Orion on Orpington / The Lofts The Aves at Twelve100 Lark Central Florida NorthView Plaza on University Arden Villas / Collegiate Village West Pegasus Express Park and Ride UCF Downtown ^[2]	Total 147,373 29,824 43,837 47,708 40,393 44,552 44,673 35,301 15,308 36,776 61,701 40,042 41,763 36,351 52,837 11,369 923 34,682	Ridership / Route 1,889 382 562 612 518 571 573 453 196 471 791 513 535 466 677 146 12 445		
GSDT GSHSC	Tuesday Grocery Shuttle Downtown Grocery Shutte Academic Health Sciences Campus	6,427 471 7,727	82 6 99		
 RC 	Rosen College of Hospitality Management Total Ridership Average Daily Ridership	44,320 824,358	568 10,569		

d. Bicycle and Pedest	d. Bicycle and Pedestrian Circulation					
NARRATIVE	Pedestrian and multimodal pathways are key components of the University's transportation system. Since most students, faculty, and staff walk between their destinations, once on campus, it is important that a highly-developed network of pathways exist to facilitate efficient circulation.					
	The University has developed an intricate system of pedestrian and multimodal paths throughout the campus. The Campus Core, inside of Gemini Boulevard, is defined by three concentric walkways:					
	Aquarius Circle (1,200-foot radius), encircles the Academic Core					
	 Mercury Circle (800-foot radius) Pegasus Circle (400-foot radius), encircles the Student Union 					
	Connecting paths crisscross the campus and terminate at significant pedestrian generators such as academic buildings, parking facilities, multimodal centers, and on-campus residential communities. A map of UCFs sidewalk network can be found at: <u>https://map.ucf.edu/sidewalks/</u> .					
	UCF's multimodal pedestrian network is a natural extension between motorized modes of transportation (personal vehicles and transit) and destinations within the Academic Core.					
	The University has made a significant investment in facilities necessary to encourage pedestrian and bicycle activity. These safe, aesthetically pleasing facilities are well used by the student population, as well as by an active cycling community.					
	Many University buildings have one or more bicycle racks located at their entrances. As of Spring 2024, the University provides bicycle racks for approximately 6,500 bicycles. An interactive map for their locations is found at: <u>http://map.ucf.edu/bikeracks/</u> .					
e. Crash Analysis 201	8 - 2023					
NARRATIVE	Crash data for UCF was evaluated using the Campus Boundary and stratified by vehicle crashes and bicycle/pedestrian crashes. It is important to focus on the crashes that result in fatalities and develop strategies that can be implemented to reduce injury and fatal crashes.					

Vehicle Crashes

Signal Four Analytics was used to document crash data for motorist and non-motorist users throughout the Study area. Crash data was collected from January 1, 2018, to December 31, 2023.

During the six-year study interval, there were 1,842 vehicular crashes on campus, with two (0.11%) resulting in a fatality. The table below shows the vehicular crashes within the campus by year and severity.

Vehicular Crashes Within the UCF Campus Boundary	Year	Total Crashes	Fatal	Serious Injury	Injury	No Injury
	2018	426	0	3	59	364
	2019	450	0	4	51	395
	2020	151	0	3	24	124
	2021	226	0	4	33	189
	2022	256	0	0	39	217
	2023	333	2	0	41	290
	Although it is important to focus on reducing the overall number of crashes on the campus, identifying the location and causes of the crash assists in the identification and prioritization of safety issues and selection of strategies within the campus.					
	"Other" crashes were the most common classification. The 708 other crashes typically occurred in a parking lot. As 476 (67.23%) of the crashes had a sub-category of "parked vehicle", where 186 (26.27%) were sub-categorized as "backed into."					
Bicycle and Pedestrian Crashes	Within the UCF Campus there were a total of 57 crashes related to bicyclists and pedestrians, of those, 33 (57.8%) involved a pedestrian and 24 (42.2%) involved a cyclist. Of additional importance is that of the 2 fatalities noted during the crash analysis period, both involved a pedestrian and none involved a cyclist.					
	For pedestrian-related crashes, most crashes (60.61%) did not occur at an intersection; however, 24.24% of pedestrian crashes occurred at a four-way intersection.					
	For bicyclist-related crashes, the most crashes occurred at a T-Intersection (41.67%), whereas 33.33% of the cyclist crashes did not occur at an intersection.					
Bicycle and Pedestrian	Year	Total Creakes	Fatal	Serious	Injury	No
Crashes within the UCF Campus Boundary	2018	Crashes 16	0	Injury 1	13	Injury 2
Campus Boundary	2018	10	0	1	8	2
	2019	6	0	0	6	0
	2020	6	1	1	4	0
	2022	11	1	0	9	1
	2023	7	0	1	6	0

UCF Main Campus Crashes by Crash Type	
	 Angle Rear End Sideswipe Other Unknown Left Turn Off Road Right Turn Bicycle Head On Animal Pedestrian Rollover
RECOMMENDATION	It would be prudent for UCF to evaluate <i>high crash areas</i> , as indicated in EXHIBITS, for the purpose of improving the safety of both motorists and non-motorists, in keeping with UCF's commitment to creating a safer campus environment.
	Such an analysis could involve identifying trends, determining causes, and developing strategies to reduce the frequency and severity of crashes.
	The ultimate goal is to identify and implement corrective measure that would contribute to a safer commuting experience for everyone on and around the university campus.
f. Campus Lighting As	sessment
ANALYSIS	In 2022, UCF conducted a comprehensive photometry assessment of the Main Campus, to ascertain if any walkways, parking lots, or roadways recorded lower illumination levels than recommended by the Illuminating Engineering Society (IES).
	The assessment was performed by consultant, Salas Obrien, Inc. Measurements were taken on February 1 and March 2; beginning past twilight, when the sky was completely dark, and concluding between 1:00AM and 3:00AM. Both nights were characterized by clear skies and a new moon.
	The minimum IES lighting standard for the evaluation was 0.2 foot- candles for walkways and parking areas, and 1.0 foot-candles for roads.
	Roughly 350 areas of the UCF Main Campus did not meet the established illumination levels. Areas with lighting deficiencies were broken down to three main categories that include pedestrian pathways (198), parking lots (51), and roadways (103).
	 Areas that did not meet the IES standard have been undergoing improvements. A "Campus-wide Pedestrian Lighting LED Upgrade" replaced existing pedestrian light fixtures with LED within the Academic Core, bounded by Apollo Circle (1,200-foot radius sidewalk), including BA2 Courtyard, Education Courtyard, BA1 Bollards, lights near Biology and CREOL, and within Housing complexes

	 A "Street Light LED Upgrades" project replaced old single- head street lamps and poles with new dual-arm LED light fixtures and poles at University, Centaurus, and Central Florida Boulevards between Alafaya Trail and Gemini Blvd; on Gemini Blvd N. from Alafaya Trail to Greek Park Drive; and along Ken Dixon Way (formerly N. Orion Blvd). Dual- arm fixtures are less likely to be obscured by mature foliage.
UCF Pedestrian Pathways	General issues noted for the pedestrian pathways and sidewalks include under-illumination, malfunctioning fixtures, or obstructed lighting. In some locations, although proper lighting was installed initially, tree growth over the years had obscured the fixtures, reducing illumination levels. There were also several instances of sidewalks being installed or replaced without attention to lighting in the area.
UCF Parking Lots	Several parking lots across the campus have light fixtures that have malfunctioned or require lamp replacement. Many lots suffer from under-illumination due to either poor positioning of poles or missing poles, where damaged poles were removed but not replaced. Several smaller parking lots lack illumination.
UCF Roadway Lighting	Some roadways are equipped with single-head, high-pressure sodium or metal halide lamps, that are decades old. These fixtures fall short of delivering adequate lighting levels.
 Ken Dixon Way (formerly N. Orion Blvd.) 	On Ken Dixon Way, UCF has replaced all outdated single-head street lamps and poles with new dual-arm LED light fixtures and poles.
Gemini Boulevard	Except for the recently updated Gemini Boulevard North campus entrance, all of Gemini Boulevard is lit with median-mounted poles and single-head high-pressure sodium or metal halide lamps, that generate minimal illumination at the road surface. Many lights are obscured by mature and maturing foliage (palms, crepe myrtles and oaks).
	• Compared to the IES standard of 1.0 foot-candles for roads, few areas along this roadway exceeded 0.5 foot-candles, with most areas registering between 0.1 and 0.2 foot-candles.
RECOMMENDATION	UCF should continue to replace outdated single-head street lamps and poles with new dual-arm LED light fixtures and poles, particularly along Gemini Boulevard North, East, South and West. Dual-arm fixtures may be less likely to be obscured by mature foliage.
g. Sustainable Transpo	ortation Approaches
NARRATIVE	To reduce reliance on single-occupant vehicles, The University has been developing various mobility options, as well as working to increase the ratio of student housing-to-enrollment within the Context Area. Primary mobility options and strategies offered by the University include:

Shuttle Service	Reliable shuttle service with on-campus headways of 10 minutes or less during peak periods and special events, and off-campus headways of 15 minutes to housing and businesses in the Context Area.			
Micromobility solutions	Micromobility refers to lightweight, low-speed, wheeled vehicles operated by a single person and generally meant for travel over a short distance; including shared bike and scooter fleets; bicycles; pedal-assisted electric bikes; electric scooters, self-balancing and uni-wheel scooters, skateboards, and similar vehicles.			
Bicycles	Bike N' Gold, UCF's bike share program hosted by the Student Government, offers free long-term bike rentals for periods up to one semester.'			
	UCF tested a Bike Share program at one time, but does not have a commercial bike program at this time.			
Scooters	Student Government and Parking & Transportation Services partnered to bring electric scooters to campus.			
GREEN INITIATIVES	Additional sustainable transportation approaches are outlined below.			
Electric Vehicle Charging Stations	Electric Vehicle (EV) charging stations support UCF's commitment to sustainability and clean transportation initiatives.			
	 UCF has multiple Level-2 EV charging stations in high-demand parking areas on the Main Campus: 6 chargers in parking lot D1 (near Memory Mall) 2 chargers in parking lot B1 (near Teaching Academy) 2 chargers in parking lot B6 (near Visitor & Parking Information Center) 			
	There is an hourly service fee to use the EV charging stations. To utilize these charging stations, users register for an account on a mobile app.			
	There are also charging stations planned or already operating on UCF's Satellite Campuses.			
UCF Fleet Vehicle Program	 The UCF Fleet Vehicle Program is the university-wide initiative responsible for the management and maintenance of all university vehicles. The key responsibilities of the program include: Ensuring the safe and efficient use of state-owned vehicles by university staff, faculty, students, or volunteers Compliance with local, state, and federal regulations Handling risk management and training Overseeing the acquisition and disposal of state-owned vehicles The Fleet Vehicle Program plays a significant role in the university's sustainability efforts and helps reduce operational costs by maintaining efficient use and longevity of the fleet. 			
Parking Solutions Park & Ride	In support of the University's mission to reduce vehicular traffic in			
	the Campus Core, UCF has a <i>Park & Ride</i> at Lot E-4 on Homerun			

2.0 TRANSPORTATION				
	Court. Frequent UCF shuttles transport students to the nearest Multimodal Transportation Center.			
Transit Solutions	The University provides high-quality transit between residential areas and parking lots and other on-campus destinations. In conjunction with LYNX, the University continues to improve regional and campus transit service to, from, and within the campus.			
Shuttle Tracking	To enhance UCF Shuttle ridership, buses can be tracked via the UCF Mobile smartphone app or <u>https://ucf.doublemap.com/map/</u> . Riders can view GPS locations for each shuttle, with estimated arrival and departure times, bus stops, vehicle numbers, and routes.			
Pedestrian Walkways and Bicycle Paths	Residence halls, visitor parking areas, and campus parking lots are connected to other campus destinations via a network of pedestrian walkways and bicycle paths.			
 Micromobility Parking 	UCF provides scooter staging areas, bike racks and skateboard lockers near academic and student service buildings to encourage the use of micromobility devices.			
	Scooter providers should encourage the return of scooters to charging stations by means of financial incentives.			
Proposed East Orange Trail Spur	Orange County Parks and Recreation Division, and 5 th District Commissioner, Emily Bonilla, have collaborated to propose the East Orange Trail Spur, a multimodal pathway (pedestrian and micromobility) across the UCF campus from Central Florida Boulevard to Percival Road, and beyond to North Tanner Road.			
Limited-access Service Roads	UCF restricts non-service vehicular traffic on roads within the Academic Core ¹⁵ to promote pedestrian and bicycle safety. Vehicles with "disabled person parking permits" may park in designated spaces within the Core.			
	UCF's wide concentric sidewalks and radials may be used as limited-access service roads by Emergency and Service vehicles, when unavoidable.			
Transportation Demand Management (TDM)	 The University actively promotes TDM strategies both on-campus and in the Context Area. The University has TDM strategies, including, but not limited to: Comprehensive transit and shuttle services Improved pedestrian and non-vehicular facilities Increasing the quantity of students living on campus Modifications to class scheduling times A well-implemented Remote Work policy¹⁶ 			
Academic Solutions	The University has implemented academic solutions to reduce congestion and dependence on personal vehicles.			

 ¹⁵ The Academic Core is within the 1,200-foot radius sidewalk, Apollo Circle.
 ¹⁶Office of the President "Remote Work Arrangements"; Policy Number EP-20-6.1 3-012; Effective 5/25/2021

Class Scheduling
 The University has adjusted class scheduling to mitigate peak-hour traffic conditions and maximize utilization of existing transportation infrastructure.
 Online Degree Program
 UCF has robust online degree programs that reduce the need for students to travel to campus.

h. Event Traffic and Parking

Kenneth G. Dixon Athletics Village	The Kenneth G. Dixon Athletics Village is a mixed-use intercollegiate athletics complex located on the north end of campus.		
	Dixon Village includes the FBC Mortgage Stadium which hosts UCF home football games. Although the football stadium is a special trip generator, trips occur during non-peak hours. The impacts of the Dixon Village have been incorporated in previous sections of this element.		
	For the purposes of accommodating traffic generated by the stadium, the University has taken several measures to improve the flow of traffic entering and exiting the campus on game days. These strategies include signage, post-game activities that keep fans on campus and decrease traffic peaks, and the reversal of traffic lanes to double the capacity of roadways.		
Knight's Plaza	 North of Memory Mall, across Gemini Boulevard, is Knight's Plaza, a lively urban environment that hosts more than 200 events per year and includes the following facilities: Addition Financial Arena The Venue Retail and commercial spaces The Towers (4 mid-rise student residence halls) Three (3) parking garages 		
Event Traffic and Parking	Major events that occur on-campus and require coordination of guest parking include high school, state college, and University commencements, sporting events, and concerts. UCF garages and parking lots accommodate guests at these events.		
Future Conditions			
Committed Transportation Improvements	 Upon adoption of a Campus Master Plan, the UCF Board of Trustees enters into a Campus Development Agreement (CDA) with the Host Local Government – Orange County, per Chapter 1013.30 Florida Statutes. Among other things, the CDA must: Identify the geographic area of the campus and local government, Address public facilities and services including roads, sanitary sewers, solid waste, drainage, potable water, parks and recreation, and public transportation. For each of the facilities and services, identify requirements for level-of-service, the entity that will provide the service, and any financial arrangements relating to that provision. 		

The CDA is intended to ensure consistency between the Campus Master Plan and the local government's Comprehensive Plan. In 2020, UCF and Orange County agreed on the following Partnership Projects to improve the transportation deficiencies outlined in the Campus Master Plan.¹⁷

- 1. Working in Partnership to facilitate pedestrian safety improvements to the McCulloch Road corridor.
 - The County has initiated a Roadway Conceptual Analysis to evaluate the potential widening of McCulloch Road (two lanes to four lanes) from Dixon Way/Lockwood Boulevard to North Tanner Road.
 - b. The County will work with Seminole County regarding the addition of roadway lighting along the north (westbound) lane from McCulloch Road in Seminole County.
 - c. The County will collaborate with UCF and Seminole County in investigating the planning and funding of mid-block crossing at Northgate Circle.
 - d. UCF will work with the County as needed to provide any temporary construction easements required to support these improvements.
 - e. The County will initiate the Northeast Orange County Area Study (NEACATS) to evaluate and identify increasing mobility need in east Orange County and to identify projects that will improve network connectivity and provide relief to constrained corridors.
- 2. UCF will investigate the planning and funding of an oncampus walkway leading from West Plaza Drive to the midblock crossing at McCulloch and Northgate Circle.
- 3. UCF will develop an on-campus bicycle pathway through the UCF Campus, linking the existing trail system of Orange County and Seminole County.
- UCF will provide ~2.87 acres to amend two existing FDOT easements along Alafaya Trail in support of pedestrian safety projects.
- 5. The County will design, construct, and fund the installation of two recommended mid-block crossings, each controlled by a traffic sign, Pedestrian Hybrid Beacon (PHB) or Rectangular Rapid Flashing Beacon (RRFB).
- 6. The County will design, construct and fund signalization changes at University Boulevard and Alafaya Trail.
- 7. UCF will work with Duke Energy and FDOT to install pedestrian-scale lighting within the right-of-way on UCF property along the UCF side of Alafaya Trail.
- 8. UCF will provide wayfinding and signage on Alafaya Trail and University Boulevard that UCF determines to be desirable for branding.

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¹⁷ Campus Development Agreement Between UCF Board of Trustees and Orange County

2.0 TRANSPORTATION				
	UCF will perform traffic counts within the context area concurrently with UCF Campus Master Plan Updates.			
	The MetroPlan Orlando Transportation Improvement Program (2024–2028) has the following projects within the UCF Context Area.			
	 Resurfacing Project - SR 434 from Centaurus Drive to the Seminole County Line. Safety Project - SR 434 (Alafaya Trail) at Lokanotosa Trail/ Science Drive The Seminole County Public Works Department reports no other programmed improvements for the external facilities in the Context Area. 			
Future Parking Structures	The University will strive to provide additional garage(s) during the 10-year Planning Timeframe, to add 2,000 or more parking spaces as needed per demand studies and as funding is available.			
	The University will not build future parking garages within the Campus Core (inside of Gemini Boulevard). Future garages will be located near the campus entrances. See also, 8.0 CAPITAL IMPROVEMENTS, Schedule of Capital Projects for garages proposed within the planning interval.			
Intercept Garages	UCF has supported the concept of Intercept Garages since the 1995-2005 CMP, although none been constructed. Situated at the perimeter of campus, Intercept Garages will decrease traffic congestion by reducing the number of vehicles travelling on Gemini Boulevard and other campus roads. Transportation from the garages to the Campus Core could include short-headway shuttles, shared scooters and bicycles, autonomous shuttles, etc.			
	 UCF will study locations for Intercept Garages near the campus entrances (not in priority order): Ken Dixon Way (formerly N. Orion Blvd.) - a garage in this location could also serve UCFAA events Central Florida Boulevard - a garage in this location could serve RWC Sports Complex Centaurus Boulevard - a garage in this location could serve events at the future PIXEL (Performance, Immersive Experience & Entertainment Laboratory, fka Performing Arts Complex Phase II. North Gemini Boulevard - a garage in this location could serve Greek Park Libra Drive - after construction of a proposed residential garage on the South Campus, Libra Garage could be repurposed as an Intercept Garage. University Boulevard - UCF's primary campus entrance is an improbable location for another garage; as it already dead-ends into Garage A. Garages proposed during the planning interval will be listed on the 10-Year Schedule of Capital Projects (SCP) in 8.0 CAPITAL IMPROVEMENTS. 			

Horizon YR 2035 Roadway Conditions	An analysis of the projected impacts of development on offsite infrastructure was conducted for Horizon Year 2035, pursuant to Florida Statute 1013.30(3). The analysis was conducted to project the growth identified in the year 2035 horizon.				
Background Growth Assessment	See 2.1 Introduce explanation of the all roadways with the second	he minimum	n background		
Multimodal Mobility Plan Assessment	Although enrollment has increased since the 2020-30 Campus Master Plan Update was adopted, the University has continued to reduce the use of single-occupant vehicles, resulting in fewer trips into and out of campus.				
	See Sustainable Transportation Approach, for the strategies that the University has implemented to achieve this reduction. Since the 2020-30 Campus Master Plan Update, overall ridership has decreased 15.1% from 970,913 trips to 824,358 trips (5,090 fewer daily trips).				
Trip Rate per Student CMP 2015-25	During the 20 generated -1.73			lent.	he University
		YR 2014	YR 2019	Net Increase	Net Difference
	Enrollment	49,000	53,017	4,017	4.70
	Vehicle Trips	83,551	76,620	-6,931	-1.73
	Trips per Student	1.71	1.45		
Trip Rate per Student CMP 2020-30	During the 2020-30 CMP planning interval, the University experienced an increase in traffic volumes on campus, while a decrease in student enrollment.				
		YR 2019	YR 2024 (Anticipated)	Net Increase	Net Difference
	Enrollment	53,017	51,761	-1,256	0.04
	Vehicle Trips	76,620	79,392	2,772	- 2.21
	Trips per Student	1.45	1.53		
	For the purpose of providing a conservative analysis, the future traffic growth due to anticipated enrollment for the CMP 2025-35 will be based on the YR 2024 planning period rate of 1.53 trips per student, with an estimated 1% enrollment growth per year. Using this methodology, the resulting growth based on anticipated enrollment is summarized in the following table:				
UCF Trips based on			2024	2034	Net Increase
Projected Student	Enrollment		51,761	57,176	5,415
Enrollment	Anticipated Trips per Student Vehicle Trips		79,392	<u>1.53</u> 87,698	8,306
YEAR 2035	i	on Voor Tr	· · · · ·		
	The 2035 Horiz 2.4-2 Future				
HORIZON YEAR ANALYSIS	2.4-2 Future Roadway Conditions Table, in subsection 2.4. Four (4) roadways are projected to operate under adverse conditions, based on the maximum service volumes provided in the				

2023 FDOT Multimodal Quality/Level of Service Handbook. These roadways will operate adversely with or without the anticipated trips generated by the projected student population growth; thus, these roadways should be identified as *pre-existing* deficiencies.

As the University and the surrounding area continue to grow, the University will continue to implement strategies identified in the Sustainable Transportation Approach section of this element; and to promote strategies that reduce the use of the single-occupant vehicle and encourage multimodal travel, to continue the trend to reduce traffic volumes within the Context Area.

2.4 EXHIBITS

- Exhibit 2.4-1 Existing Roadway Inventory & Conditions Table
- Exhibit 2.4-2 Future Roadway Conditions Table
- Exhibit 2.4-3 UCF On-Campus Parking Facilities
- Exhibit 2.4-4 UCF Transit Services
- Exhibit 2.4-5 UCF Bike and Pedestrian Facilities
- Exhibit 2.4-6 Walking Distances from the Student Union
- Exhibit 2.4-7 Proposed Transportation Roadway Projects
- Exhibit 2.4-8 Existing Roadway Characteristics and Traffic Counts
- Exhibit 2.4-9 UCF Crash Analysis Jan 2018 through Dec 2023

Exhibit 2.4-1 Existing Roadway Inventory & Exhibit is an Inventory and detailed analysis of existing conditions of the roadways within the Context Area. Conditions Table

Road Name	From	То	# Lanes	Jurisdiction	Functional Classification	Adopted	AADT[1]	к	D	Adopted Pk. Hr. /Dir. LOS	PM Pk. Hr. Dir	Source	Current LOS	
					Classification	LOS		Factor[2]	Factor [3]	Capacity	Volume			
	Colonial Drive (SR 50)	Science Drive	6LD	State	Principal Arterial	D	59,187	0.09	0.56	2,680	2,983	FDOT	F	
Alafava Trail (SP 424) [4]	Science Drive	University Blvd.	6LD	State	Principal Arterial	D	60,228	0.09	0.55	2,680	2,981	FDOT	F	
Alafaya Trail (SR 434) [4]	University Blvd.	McCulloch Road	6LD	State	Principal Arterial	D	45,478	0.09	0.56	2,680	2,292	FDOT	С	
	McCulloch Road	Chapman Road	6LD	State	Principal Arterial	D	45,478	0.09	0.56	2,680	2,292	FDOT	С	
Central Florida Blvd.	Alafaya Trail (SR 434)	Gemini Blvd. S	4LD	UCF	Minor Collector	E	9,026	0.077	0.59	1,530	409	VHB Study	С	
Centaurus Drive	Alafaya Trail (SR 434)	Gemini Blvd. W	4LD	UCF	Minor Collector	E	6,194	0.097	0.61	1,530	368	VHB Study	С	
Chapman Road	SR 426 (Aloma Avenue)	Alafaya Trail (434)	4LD	Seminole Co.	Major Collector	E	22,507	0.091	0.51	2,000	1,051	Seminole County	С	
Colonial Drive (SR 50) [5]	Rouse Road	Alafaya Trail (434)	6LD	State	Principal Arterial	D	54,194	0.09	0.51	2,680	2,488	FDOT	D	
Discovery Drive / Libra Drive	Research Parkway	Gemini Blvd. S/E	4LD	UCF	Minor Collector	E	14,040	0.085	0.56	1,530	666	VHB Study	С	
Operative Divide Manth	Alafaya Trail (SR 434)	Greek Park Drive	4LD	UCF	Minor Collector	E	18,355	0.081	0.64	1,530	957	VHB Study	С	
Gemini Blvd. North	Greek Park Drive	Dixon Way (N. Orion Blvd.) [6]	4LD	UCF	Minor Collector	E	12,476	0.079	0.53	1,530	528	VHB Study	С	
Comini Dhud, Foot	Dixon Way (N. Orion Blvd.) [6]	Scorpius St	4LD	UCF	Minor Collector	E	13,589	0.084	0.51	1,530	586	VHB Study	С	
Gemini Blvd. East	Scorpius St.	Libra Drive	4LD	UCF	Minor Collector	E	19,306	0.086	0.56	1,530	929	VHB Study	С	
	Libra Drive	Ursa Minor St	4LD	UCF	Minor Collector	E	16,329	0.079	0.56	1,530	728	VHB Study	С	
Gemini Blvd. South	Ursa Minor St	Central Florida Blvd.	4LD	UCF	Minor Collector	E	14,989	0.079	0.5	1,530	598	VHB Study	С	
	Central Florida Blvd.	University Blvd.	4LD	UCF	Minor Collector	E	10,447	0.087	0.62	1,530	559	VHB Study	С	
Operation Direct Miles t	University Blvd.	Centaurus Drive	4LD	UCF	Minor Collector	E	10,447	0.087	0.62	1,530	559	VHB Study	С	
Gemini Blvd. West	Centaurus Drive	Aquarius Agora Dr	4LD	UCF	Minor Collector	E	5,648	0.092	0.73	1,530	379	VHB Study	С	
Greek Park Drive	Aquarius Agora Dr	Gemini Blvd. N	4LD	UCF	Minor Collector	E	5,648	0.092	0.73	1,530	379	VHB Study	С	
Laka Bishafi Daad	Colonial Drive (SR 50)	Percival Road	2L	Orange Co.	Major Collector	E	15,831	0.09	0.55	880	784	Orange County	С	
Lake Pickett Road	Percival Road	S. Tanner Road	2L	Orange Co.	Major Collector	E	11,505	0.09	0.58	740	601	Orange County	С	
Lokanotosa Trail	Rouse Road	Alafaya Trail (434)	2L	Orange Co.	Major Collector	E	10,117	0.095	0.54	800	514	Orange County	С	
Lockwood Blvd.	McCulloch Road	Oviedo City Limits	4LD	Seminole Co.	Minor Arterial	E	13,309	0.091	0.51	1,700	621	Seminole County	С	
McCullack David	Alafaya Trail (SR 434)	Lockwood Blvd.	4LD	Seminole Co.	Minor Collector	E	27,159	0.091	0.52	2,000	1,293	Seminole County	С	
McCulloch Road	Lockwood Blvd.	Old Lockwood/Tanner Rd	2L	Seminole Co.	Minor Collector	E	18,180	0.091	0.56	880	933	Seminole County	С	
Dixon Way (N. Orion Blvd.) [6]	McCulloch Road	Gemini Blvd. N/E	4LD	UCF	Minor Collector	E	14,056	0.107	0.73	1,530	1,099	VHB Study	С	
Percival Road	Tanner Road	Lake Pickett Road	2L	Orange Co.	Minor Collector	E	6,647	0.095	0.52	800	329	Orange County	С	
Rouse Road	Colonial Drive (SR 50)	Lokanotosa Trail	4LD	Orange Co.	Major Collector	E	28,617	0.09	0.56	2,000	1,442	Orange County	С	
	Lokanotosa Trail	University Blvd.	4LD	Orange Co.	Major Collector	E	25,754	0.09	0.52	2,000	1,205	Orange County	С	
	University Blvd.	Seminole County Line	4LD	Orange Co.	Major Collector	E	12,645	0.09	0.52	2,000	592	Orange County	С	
Linit on only Divid	Rouse Road	Alafaya Trail (434)	6LD	Orange Co.	Minor Arterial	E	55,640	0.09	0.55	3,020	2,754	Orange County	D	
University Blvd.	Alafaya Trail (SR 434)	Gemini Blvd. S/W	6LD	UCF	Minor Collector	E	15,693	0.082	0.53	2,304	685	VHB Study	С	
W. Plaza Dr.	Knights Victory Way	Dixon Way (N. Orion Blvd.) [6]	2L	UCF	Minor Collector	E	2,031	0.096	0.58	720	113	VHB Study	D	

[1] Annual average daily traffic (AADT) is the total volume of vehicle traffic on a highway or road for a year divided by 365 days.

[2] K Factor is the 30th highest hourly volume of the year (out of 8,760 possible hours in a calendar year) expressed as a percentage of the AADT volume.

[3] D Factor is the percentage of traffic moving in the peak travel direction during the 30th highest hourly volume of the year.

[4] Alafaya Trail is under FDOT Jurisdiction from Colonial to McCulloch, LOS standard for all urbanized state facilities is LOS D according to FDOT Procedures

[5] Colonial Drive is under FDOT Jurisdiction from Rouse Road to Alafaya Trail, LOS standard for all urbanized state facilities is LOS D according to FDOT Procedures

[6] On June 25, 2024, N. Orion Blvd was renamed "Ken Dixon Way" by UCF Board of Trustees

2.4 TRANSPORTATION Exhibits

Exhibit 2.4-2

Future Roadway Conditions Table

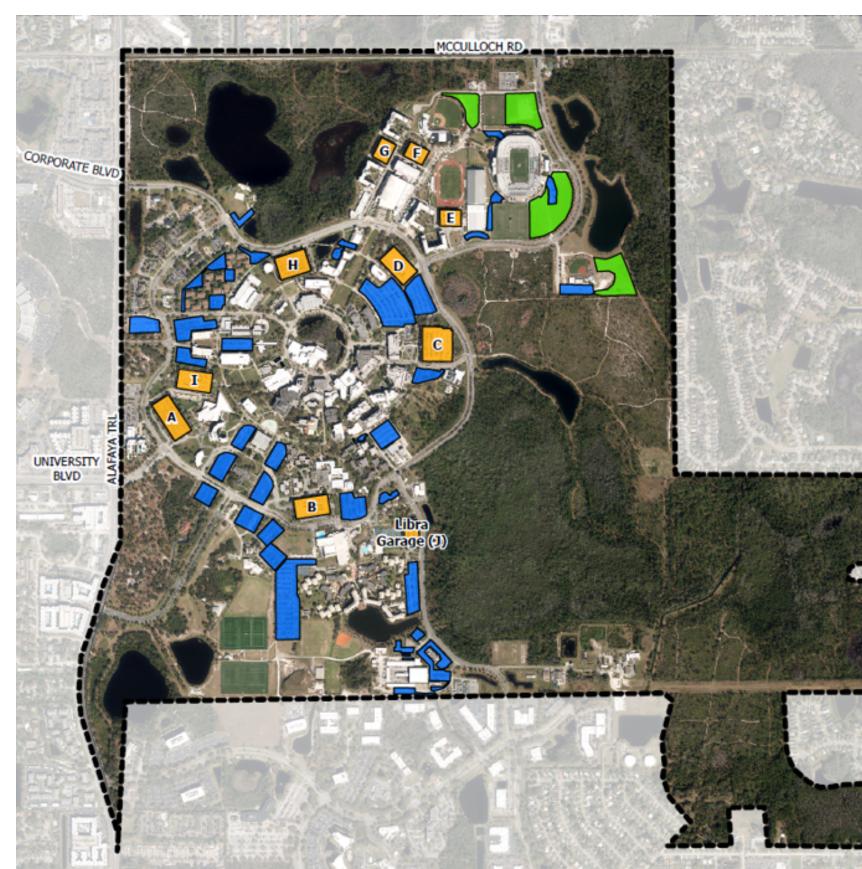
Conditions Table				D	CI 1 1 1			VD 2025 D 1		m _	UCF	Trips Gener	Generated					<u> </u>		
			Roadway Characteristics				YR 2035 Background Traffic			by Enrollment Growth			YR 2035 Total Trips				YR 2035 Traffic Conditions Comparison			
Road Name	From	То	No. of Lanes	Adopted LOS	Adopted Pk Hr./Dir. LOS Capacity		Daily	PM Peak Directional	V/C	Pre-Existing Deficiency (Yes/No)	YR 2035 Distribution (%)	Daily Project Trips	PM Peak Project Trips	Daily	PM Peak Directional	V/C	Deficiency (Yes/No)	YR 2035 Background V/C	YR 2035 Total V/C	Additional Deficiency Created (Yes/No)
	Colonial Drive (SR 50)	Science Drive	6LD	D	2,680	1.00%	66,289	3,341	1.25	Yes	20.08%	557	28	66,846	3,369	1.26	Yes	1.25	1.26	No
Alafava Trail (SR 434) [1]	Science Drive	University Blvd.	6LD	D	2,680	1.00%	67,455	3,339	1.25	Yes	7.88%	218	11	67,673	3,350	1.25	Yes	1.25	1.25	No
Alalaya Irali (SIX 434) [1]	University Blvd.	McCulloch Road	6LD	D	2,680	1.00%	50,935	2,567	0.96	No	9.00%	249	13	51,184	2,580	0.96	No	0.96	0.96	No
	McCulloch Road	Chapman Road	6LD	D	2,680	1.00%	50,935	2,567	0.96	No	12.70%	352	18	51,287	2,585	0.96	No	0.96	0.96	No
Central Florida Blvd.	Alafaya Trail (SR 434)	Gemini Blvd. S	4LD	E	1,530	1.00%	10,019	454	0.30	No	13.73%	381	17	10,400	471	0.31	No	0.30	0.31	No
Centaurus Drive	Alafaya Trail (SR 434)	Gemini Blvd. W	4LD	E	1,530	1.00%	6,875	408	0.27	No	9.24%	256	15	7,131	423	0.28	No	0.27	0.28	No
Chapman Road	Aloma Avenue	Alafaya Trail (434)	4LD	E	2,000	1.00%	25,208	1,177	0.59	No	1.66%	46	2	25,254	1,179	0.59	No	0.59	0.59	No
Colonial Drive (SR 50) [2]	Rouse Road	Alafaya Trail (434)	6LD	D	2,680	1.00%	60,697	2,786	1.04	No	3.01%	83	4	60,780	2,790	1.04	Yes	1.04	1.04	No
Discovery Drive/Libra Drive	Research Parkway	Gemini Blvd.	4LD	E	1,530	1.00%	15,584	739	0.48	No	17.11%	474	22	16,058	761	0.50	No	0.48	0.50	No
Gemini Blvd. North	Alafaya Trail (SR 434)	Greek Park Drive	4LD	E	1,530	1.00%	18,355	808	0.53	No	9.24%	256	13	18,611	821	0.54	No	0.53	0.54	No
Gemini Bivu. Nonn	Greek Park Drive	Dixon Way (N. Orion Blvd.) [3]	4LD	E	1,530	1.00%	12,476	621	0.41	No	18.79%	521	22	12,997	643	0.42	No	0.41	0.42	No
Gemini Blvd. East	Dixon Way (N. Orion Blvd.) [3]	Scorpius St	4LD	E	1,530	1.00%	13,589	1,062	0.69	No	30.47%	845	36	14,434	1,098	0.72	No	0.69	0.72	No
Scorpius St.	Scorpius St.	Libra Drive	4LD	E	1,530	1.00%	19,306	586	0.38	No	30.47%	845	41	20,151	627	0.41	No	0.38	0.41	No
	Libra Drive	Ursa Minor St	4LD	E	1,530	1.00%	16,329	650	0.42	No	19.02%	527	23	16,856	673	0.44	No	0.42	0.44	No
Gemini Blvd. South	Ursa Minor St	Central Florida Blvd.	4LD	E	1,530	1.00%	14,989	1,032	0.67	No	25.27%	700	28	15,689	1,060	0.69	No	0.67	0.69	No
	Central Florida Blvd.	University Blvd.	4LD	E	1,530	1.00%	10,447	664	0.43	No	14.32%	397	21	10,844	685	0.45	No	0.43	0.45	No
Gemini Blvd. West	University Blvd.	Centaurus Drive	4LD	E	1,530	1.00%	10,447	421	0.28	No	15.84%	439	24	10,886	445	0.29	No	0.28	0.29	No
	Centaurus Drive	Aquarius Agora Dr	4LD	E	1,530	1.00%	5,648	878	0.57	No	8.84%	245	16	5,893	894	0.58	No	0.57	0.58	No
Gemini Blvd. East	Libra Dr.	Scorpius St. (Star St.)	4LD	E	1,530	1.00%	21,430	1,032	0.67	No	19.02%	527	35	21,957	1,067	0.70	No	0.67	0.70	No
Gemini Blvd. South	Andromeda Dr.	Hercules Dr.	4LD	E	1,530	1.00%	16,638	664	0.43	No	25.27%	700	35	17,338	699	0.46	No	0.43	0.46	No
Greek Park Drive	Centaurus Drive	Gemini Blvd. North	4LD	E	1,530	1.00%	6,269	421	0.28	No	8.84%	245	13	6,514	434	0.28	No	0.28	0.28	No
Lake Pickett Road	Colonial Drive (SR 50)	Percival Road	2L	E	880	1.00%	17,731	878	1.00	No	0.02%	1	0	17,732	878	1.00	No	1.00	1.00	No
Lake Fickell Nodu	Percival Road	S. Tanner Road	2L	E	740	1.00%	12,886	673	0.91	No	0.00%	0	0	12,886	673	0.91	No	0.91	0.91	No
Lokanotosa Trail	Rouse Road	Alafaya Trail (434)	2L	E	800	1.00%	11,331	576	0.72	No	0.74%	21	1	11,352	577	0.72	No	0.72	0.72	No
Lockwood Blvd.	McCulloch Road	Oviedo City Limits	4LD	E	1,700	1.00%	14,906	696	0.41	No	7.35%	204	10	15,110	706	0.42	No	0.41	0.42	No
McCulloch Road	Alafaya Trail (SR 434)	Lockwood Blvd.	4LD	E	2,000	1.00%	30,418	1,448	0.72	No	0.04%	1	0	30,419	1,448	0.72	No	0.72	0.72	No
MCCulloch Noad	Lockwood Blvd.	Old Lockwood Rd.	2L	E	880	1.00%	20,362	1,045	1.19	Yes	5.42%	150	7	20,512	1,052	1.20	Yes	1.19	1.20	No
Dixon Way (N. Orion Blvd.) [3	McCulloch Road	Gemini Blvd.	4LD	E	1,530	1.00%	15,602	1,220	0.80	No	12.82%	355	18	15,957	1,238	0.81	No	0.80	0.81	No
Percival Road	Tanner Road	Lake Pickett Road	2L	E	800	1.00%	7,445	368	0.46	No	4.48%	124	6	7,569	374	0.47	No	0.46	0.47	No
	Colonial Drive (SR 50)	Lokanotosa Trail	4LD	E	2,000	1.00%	32,051	1,615	0.81	No	2.01%	56	3	32,107	1,618	0.81	No	0.81	0.81	No
Rouse Road	Lokanotosa Trail	University Blvd.	4LD	E	2,000	1.00%	28,844	1,350	0.68	No	3.27%	91	4	28,935	1,354	0.68	No	0.68	0.68	No
	University Blvd.	Seminole County Line	4LD	E	2,000	1.00%	14,162	663	0.33	No	0.00%	0	0	14,162	663	0.33	No	0.33	0.33	No
Linia constitut Disud	Rouse Road	Alafaya Trail (434)	6LD	E	3,020	1.00%	62,317	3,085	1.02	Yes	20.38%	565	31	62,882	3,116	1.03	Yes	1.02	1.03	No
University Blvd.	Alafaya Trail (SR 434)	Gemini Blvd.	6LD	E	2,304	1.00%	17,419	760	0.33	No	17.74%	492	27	17,911	787	0.34	No	0.33	0.34	No
W. Plaza Dr.	Knights Victory Way	Dixon Way (N. Orion Blvd.) [1]	2L	E	720	1.00%	2,254	126	0.18	No	3.75%	104	6	2,358	132	0.18	No	0.18	0.18	No

[1] Alafaya Trail is under FDOT Jurisdiction from Colonial Drive to McCulloch Road, LOS standard for all urbanized state facilities is LOS D according to FDOT Procedures

[2] Colonial Drive is under FDOT Jurisdiction from Rouse Road to Alafaya Trail, LOS standard for all urbanized state facilities is LOS D according to FDOT Procedures
 [3] On June 25, 2024, N. Orion Blvd was renamed "Ken Dixon Way" by UCF Board of Trustees

2.4 TRANSPORTATION Exhibits

Exhibit 2.4-3 UCF On-Campus Parking Facilities





2.4 TRANSPORTATION Exhibits



Legend

3	UCF Campus Boundary
	Existing UCF Garages
	Existing Surface Parking
	Existing Overflow / Grass Parking

Name	Capacity	Year
Garage A	1647	2007
Garage B	1289	2000
Garage C	1852	1998 / 2016
Garage D	1279	2002
Garage E	696	2007
Garage F	678	2008
Garage G	696	2000
Garage H	1340	2011
Garage I	1270	1997
Libra Garage (J)	1039	2014

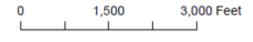
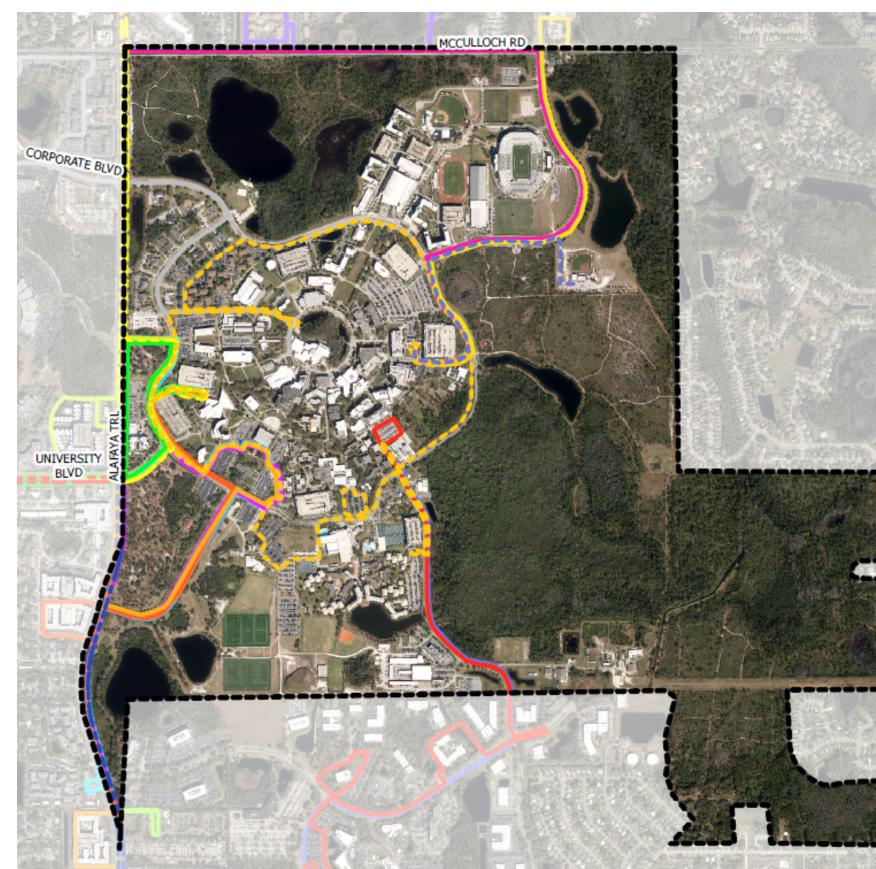


Exhibit 2.4-4 UCF Transit Services





2.4 TRANSPORTATION Exhibits

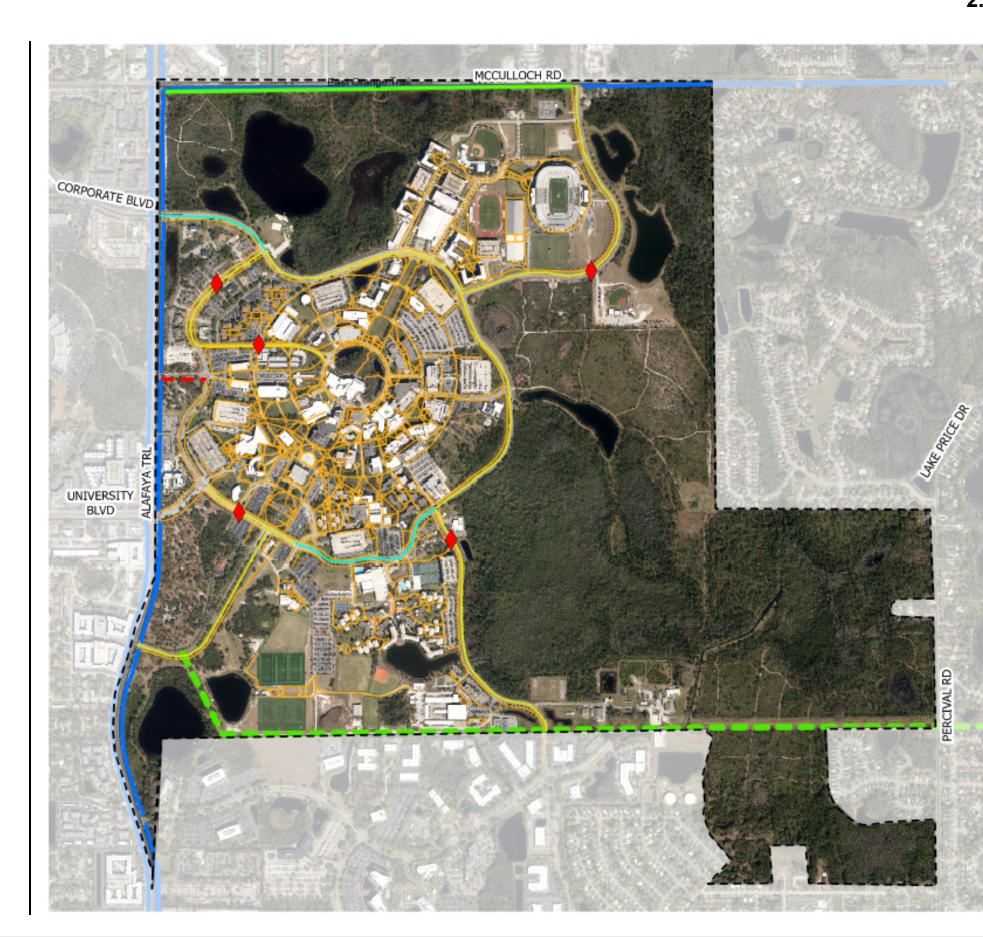


Legend

- UCF Campus Boundary
- Park and Ride
- Pegasus Express Route
- 104 East Colonial Drive / UCF
- 13 University of — Central Florida /
- LCS 434 - SR 434
- Crosstown
- 1 Knight Circle 10 - the Lofts /
- Orion on Orpington
- 11 The Aves @ Twelve100
- 12 Lake Central Florida
- 13 Northview
- 14 Plaza on University
- 15 Collegiate Village Inn / Arden Villas 2 - College Station/ Boardwalk 3 - The Verge / The Place at Alafaya 4 - Mercury 3100 / Campus Crossing 5 - Village of Science Drive / The Nine at Central 6 - Northgate Lakes / Tivoli
- 7 The Pointe at Central
- 8 Riverwind at Alafaya / The Station
- 9 Knights Landing / Research Park



Exhibit 2.4-5 UCF Bike and Pedestrian Facilities





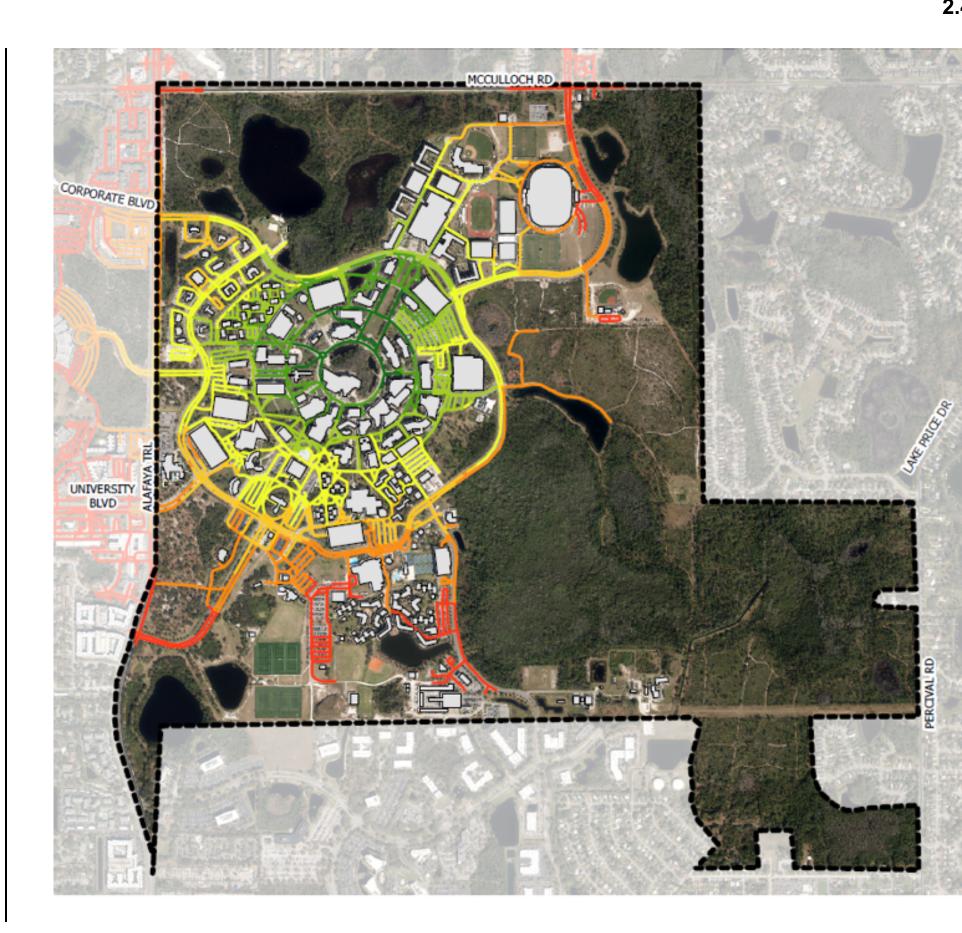
2.4 TRANSPORTATION Exhibits

<u>Legend</u>

- **EES** UCF Campus Boundary
 - Mid-Block Pedestrian Crossing
- Existing East Orange Trail
- Designated Bike Lanes [Both Sides]
- Designated Bike Lanes [One Side]
- Existing Sidewalks
- Existing Off-Campus Sidewalks
- Sidewalk Gaps
- Proposed East Orange
 Trail Spur



Exhibit 2.4-6 **Walking Distances** from the Student Union





2.4 TRANSPORTATION Exhibits



- - Boundary
- UCF Buildings
- Less than 2.5
- Minutes
- 2.5 to 5 Minutes
- 5 to 7 Minutes
- 7 to 10 Minutes
- 10 to 12 Minutes
- 12 to 15 Minutes
 - Greater than 15
 - Minutes

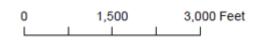
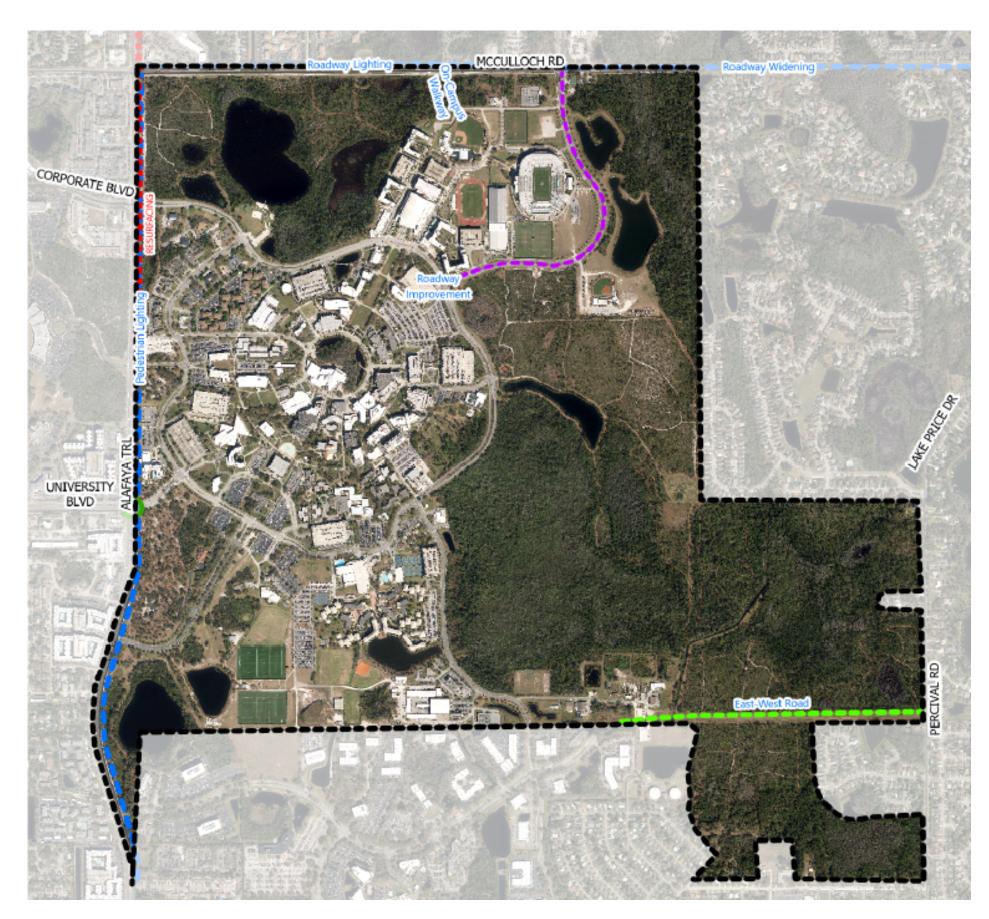


Exhibit 2.4-7 Proposed Transportation Roadway Projects





2.4 TRANSPORTATION Exhibits

<u>Legend</u>

- CD UCF Campus Boundary
 - Future
- O Intersection Improvements
 - Campus
- Development
 Agreements
 - Future Roadway
- Improvements by Others
 - Future Roadway
- --- Improvement by UCF
- FDOT 2025-2029 Work Program

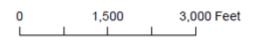
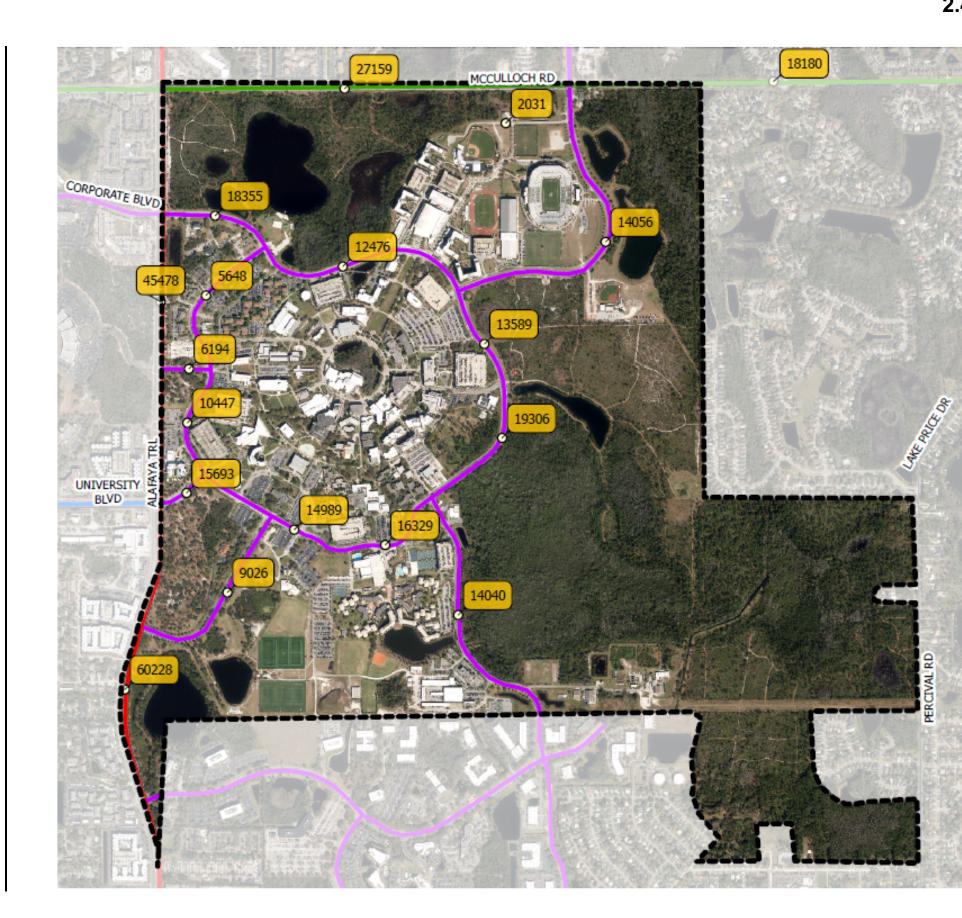


Exhibit 2.4-8 Existing Roadway Characteristics and Traffic Counts





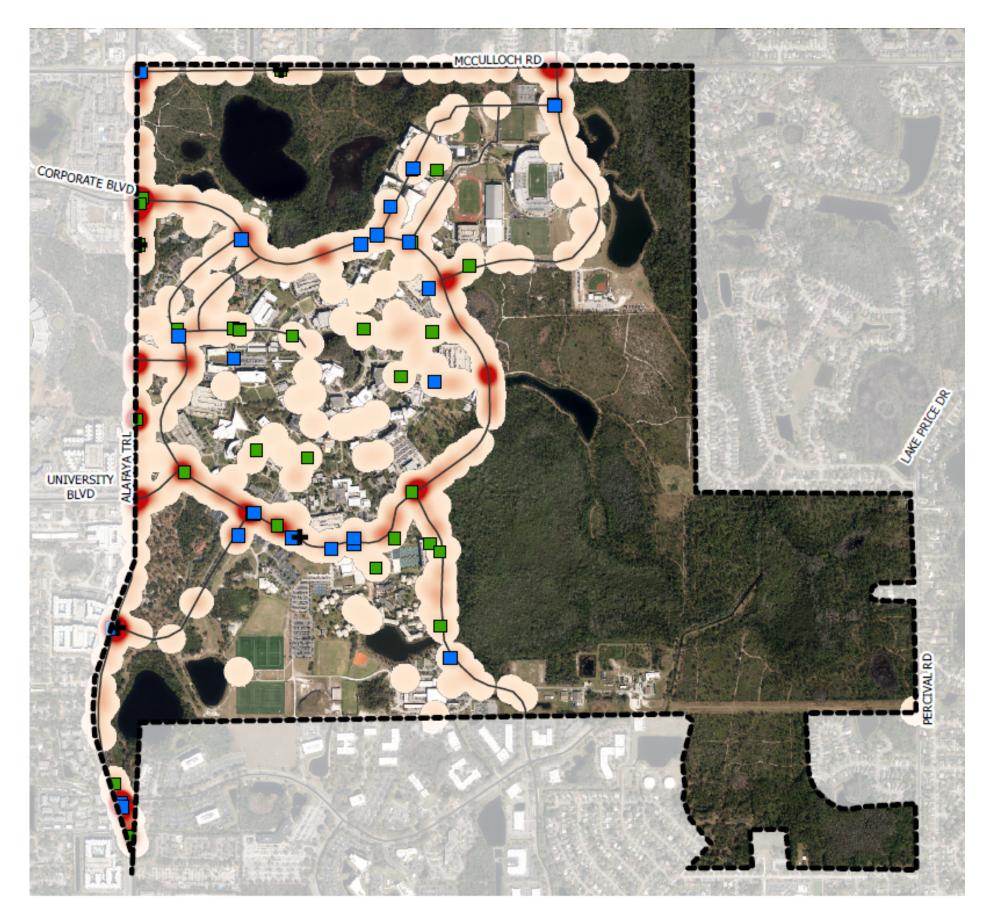
2.4 TRANSPORTATION Exhibits



- UCF Campus Boundary Existing UCF
- o Existing UCF Traffic Volumes
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
 - Average Daily Traffic



Exhibit 2.4-9 UCF Crash Analysis (Jan 2018 - Dec 2023)





2.4 TRANSPORTATION Exhibits

Legend

- CO UCF Campus Boundary
- UCF Pedestrian Crashes
- UCF Bicycle Crashes
- - Crashes
 - Low Crashes High Crashes

