



#### INTRODUCTION

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- 8.0 CAPITAL IMPROVEMENTS

**EVALUATION AND APPRAISAL REPORT** 







## UNIVERSITY OF CENTRAL FLORIDA

## **CAMPUS MASTER PLAN - INTRODUCTION**

2025-35 CAMPUS MASTER PLAN UPDATE

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#### A MESSAGE FROM THE PRESIDENT



Alexander N. Cartwright UCF President

The University of Central Florida's new Campus Master Plan is a roadmap for our future and a showcase of our commitment to student, faculty, and staff success.

This plan outlines our bold vision as an institution dedicated to education, research, innovation, and operational excellence. By optimizing our facilities and infrastructure, we are investing in the success of our students, faculty, and staff through an environment that fosters learning, connection, and discovery.

The enhancements outlined in this plan are integral for UCF's continued excellence, ensuring that we can make an even greater impact in the future as Florida's Premier Engineering and Technology University. I look forward to our continued work together as we create a 21st-century campus that best serves our community, region, and state.

Charge On!

Alexander Carturight

#### **UCF MAIN CAMPUS**

#### **History of UCF**

UCF was founded as "Florida Technological University" in 1963. It was created to support the growing technological industries in Central Florida, primarily those related to engineering and space. When it opened, the school provided other academic programs to give the students a broad-based education.

Re-named in the late 1970s, the "University of Central Florida," has become a rapidly-growing, leading research university, with a full complement of undergraduate and graduate programs. Cutting-edge research is performed in a wide variety of disciplines that span the academic spectrum.

#### **UCF Now**

#### A 21<sup>st</sup> Century University

The University of Central Florida is a thriving university located in metropolitan Orlando. With more than 69,000 students, UCF is one of the largest universities in the U.S. In addition to its impressive size, UCF is ranked as a best-value university by Kiplinger, and as one of the nation's most affordable colleges by *Forbes*. UCF benefits from a diverse faculty and staff who create a welcoming environment and provide opportunities for all students to grow, learn, and succeed.

#### A Foundation for Success

UCF and its 13 colleges offer 240 academic degrees. The Main Campus is 13 miles east of downtown Orlando and is adjacent to Central Florida Research Park, one of the top research parks in the

nation. UCF's fully online programs include bachelor's degrees, master's degrees, PhDs, certificates, and more.

#### **Top-Ranked College Education**

UCF is a leader in many academic and research fields, including optics and lasers, modeling and simulation, engineering and computer science, business administration, education, hospitality management, health care, and video game design. As of August 2023, UCF has awarded 419,318 degrees since classes began in 1968.

#### **Knight Life**

Home to FBC Mortgage Stadium and the Addition Financial Arena, UCF hosts a variety of concerts and shows, plus NCAA sports and cultural events. Student housing is abundant, as are on-campus events and activities. UCF offers an array of student services and academic resources to help students succeed and recognizes hundreds of student clubs and organizations.

The Future Land Use, Housing, and Transportation elements rely on enrollment growth projections to meet the Data & Analysis requirements of Board of Governors Chapter 21.

See 1.0 FUTURE LAND USE, Data & Analysis, Page 19 for a detailed chart of Projected Enrollment Growth from the 2024 Benchmark year to the Horizon Year 2034 for this CMP.

The DEP Land Document System shows that the UCF Main Campus is made up of two large parcels of land, totaling ~1,420 acres. See element 1.0 FUTURE LAND USE for more information on the parcels that make up the Main Campus.

**Parcel 1:** The historic Main Campus is ~1203 acres. This property is bounded by:

- McCulloch Road
- South: Central Florida Research Park
- East: University Estates, Regency Park, the "Eastern Parcel"
- West: Alafaya Trail

Parcel 2: The "Eastern Parcel" (2912 Percival Road) is ~217 acres.

UCF has thirteen (13) colleges.

- 1. College of Arts & Humanities (CAH)
- 2. College of Business Administration (CBA)
- 3. Burnett Honors College (BHC)
- 4. College of Community Innovation & Education (CCIE)
- 5. College of Engineering & Computer Science (CECS)
- 6. College of Health Professions and Sciences (CHPS)
- 7. College of Medicine (COM)
- 8. College of Nursing (CON)<sup>1</sup>

## **Growth-based CMP Elements**

 <u>UCF Projected</u> Enrollment

# How big is the UCF Main Campus?

## **UCF Colleges**

<sup>&</sup>lt;sup>1</sup> In 2025, the UCF College of Nursing will move form the Central Florida Research Park to its new home in the Dr. Phillips Nursing Pavilion on the Academic Health Sciences Campus at Lake Nona.

- 9. College of Optics and Photonics (CREOL)
- 10. College of Sciences (COS)
- 11. College of Graduate Studies (CGS)
- 12. College of Undergraduate Studies (CUS)
- 13. Rosen College of Hospitably Management (RCHM)<sup>2</sup>

#### **CAMPUS MASTER PLANNING**

# History of the UCF Campus Master Plan

The UCF 1995-2005 Campus Master Plan (CMP) was the first to be prepared by statutory requirement. Subsequent "Campus Master Plan Updates" were prepared for the planning periods 2000-10, 2005-15, 2010-20, 2015-25, and 2020-2030.

# Purpose and Intent of the UCF Campus Master Plan

The purpose and intent of the UCF Campus Master Plan (CMP) is threefold:

- 1. Growth Management planning for future campus development and growth
- 2. Ensuring Compatibility with the surrounding community (context area)
- 3. Concurrency Management

# Jurisdiction of the UCF Campus Master Plan

The UCF Campus Master Plan applies only to the UCF Main Campus. All satellite campuses are subject to the Comprehensive Plans of the governments in which they are located.

 Exception: All future capital projects, including those at Satellite Campuses and Sites, are included in the Schedule of Capital Projects (SCP) under 8.0 CAPITAL IMPROVEMENTS.

#### **Context Area**

BOG Regulation 21.201 defines Context Area as the area surrounding a university within which on-campus development may impact local public facilities and services and natural resources, and within which offcampus development may impact university resources and facilities

The extent of the UCF Context Area is considered to be:

- North of Campus (Seminole County) to just north of the Little Econlockhatchee River
- East of Campus (Orange County) to just east of Tanner Road
- South of Campus (Orange County) to just south of East Colonial Drive (SR 50)
- West of Campus (Orange County) to just west of Rouse Road

Concurrency requires that the facilities and services needed to support development be available concurrent with the impacts of that development.

## Concurrency

Requirements

Statewide Concurrency

In accordance with Florida Statute 163.3180 Concurrency, the only public facilities and services subject to the statewide concurrency requirements are:

Sanitary Sewer

<sup>&</sup>lt;sup>2</sup> RCHM is located in the City of Orlando, not on the Main Campus.

- Solid Waste
- Drainage (stormwater management)
- Potable Water
- Local Government Concurrency Requirements

Per the concurrency statute, "additional public facilities and services may not be made subject to concurrency on a statewide basis without appropriate study and approval by the Legislature; however, any local government may extend the concurrency requirement so that it applies to additional public facilities within its jurisdiction."

UCF Concurrency

The University has made additional infrastructure facilities and services subject to concurrency for years:

- Chilled Water
- Electrical Power
- Natural Gas
- Telecommunications Systems
- Other Concurrency Considerations

Like its Host Local Government, Orange County<sup>3</sup>, UCF also considers the concurrency of other facilities and services when planning the campus:

- Roads
- Transit
- Parking
- Recreation Space

#### **Statutes and Regulations**

Campus Master Plans are required by Florida Statute and the State University System Board of Governors Regulations.

Florida Statute 1013.30 recognizes a unique relationship between university campuses and their host governments.

Campus master plans and associated campus development agreements are intended to address this relationship and foster communication between universities and their host local governments.

University campuses provide research and educational benefits of statewide and national importance, and further provide substantial educational, economic, and cultural benefits to their host local governments. But, they may also have an adverse impact on the public facilities, services, and natural resources of host governments. Link: Florida Statute 1013.30

Florida Board of Governors (BOG) regulation *Chapter 21 Campus Master Plans* provides further clarification of the required elements and review process. Link: <u>BOG Chapter 21</u>

By statute and regulation, each Campus Master Plan (CMP) shall cover a period of at least 10 years and not more than 20 years.

UCF has always designated a planning interval of 10 years.

The CMP is updated every five (5) years, and adopted by the UCF Board of Trustees the year prior to the beginning of the planning interval.

<sup>&</sup>lt;sup>3</sup> Orange County, FL - Concurrency Management

#### **Statutory Review**

1013.30 (6) "Before a campus master plan is adopted, a copy of the draft master plan must be sent for review or made available electronically to the host and any affected local governments, the state land planning agency, the Department of Environmental Protection, the Department of Transportation, the Department of State, the Fish and Wildlife Conservation Commission, and the applicable water management district and regional planning council."

 Statutory Review Agencies

Host Local Government	Orange County
Affected Local Governments	Seminole County City of Orlando
	City of Oviedo
State Land Planning Agency	FloridaCommerce, aka Florida Department of Commerce <sup>4</sup>
Other Agencies named in f.s.1013.30 (6)	Florida Department of Environmental Protection (DEP) Florida Department of Transportation (DOT) Florida Department of State (DOS) Fish and Wildlife Conservation Commission (FWC)
Water Management District	St. Johns River Water Management District (SJRWMD)
Regional Planning Council	East Central Florida Regional Planning Council (ECFRPC)

Courtesy Review

An invitation to review the draft CMP will also be sent electronically to:

- MetroPlan Orlando the metropolitan planning organization for Orange, Osceola, and Seminole counties
- District 5 Orange County Commissioner

 Notification of the Review Period "The commencement of the review period must be advertised in newspapers of general circulation within the host local government and any affected local government to allow for public comment." [f.s. 1013.30 (6)]

- An electronic copy of the draft CMP will be posted on the UCF Planning, Design and Construction website: <a href="https://www.fp.ucf.edu/">https://www.fp.ucf.edu/</a>
- Orlando Sentinel (newspaper) UCF will advertise 90-day review and the locations where the draft CMP is available for review. This ad will also include preliminary details regarding the 2nd Public Hearing & Adoption.<sup>5</sup>
- John C. Hitt Library A printed copy of the draft CMP will be made available in the UCF library.
- Email Announcements will be sent to Campus constituents and to the UCF "Community Council and Neighbors."

 Statutory Review Period Florida Statute 1013.30 (6) states that the "agencies must be given 90 days in which to conduct their review and provide comments to the university board of trustees."

<sup>&</sup>lt;sup>4</sup> The 2023 Legislature enacted Ch. 2023-173, Laws of Florida, which, among other provisions, renamed the Department of Economic Opportunity (the State Land Planning Agency) to the Department of Commerce.

<sup>&</sup>lt;sup>5</sup> The 2nd Public Hearing and Adoption by the Board of Trustees will be advertised again before these meetings.

It is the intent of the Legislature that the university board of trustees comply with the notice requirements set forth in <u>s. 163.3184(11)</u> $^{6}$  to ensure full public participation in this planning process.

Affected Persons<sup>7</sup> are invited to provide comments on the Draft CMP by email or US mail, and invited to speak at the statutory meetings:

- Informal Information Session (Open House) May 2024
- 1st Public Hearing July 2024
- 2<sup>nd</sup> Public Hearing & Adoption December 2024

#### **CMP Adoption**

"Following receipt and consideration of all comments and the holding of an informal information session and at least two public hearings within the host jurisdiction, the university board of trustees shall adopt the campus master plan." [f.s. 1013.30 (6)]

## **Campus Master Plan Elements**

#### **Required Elements**

Florida Statutes and the State University System Board of Governors require that the Campus Master Plan include eight (8) elements:

- 1.0 Future Land Use
- 2.0 Transportation
- 3.0 Housing
- 4.0 General Infrastructure
- 5.0 Conservation
- 6.0 Recreation and Open Space
- 7.0 Intergovernmental Coordination
- 8.0 Capital Improvements

#### **Optional Elements**

Although Optional elements are permitted under BOG 21.212, the UCF 2025-35 Campus master Plan has no optional elements.

#### **CMP Format**

 Goals, Objectives, and Policies (GOP) Each element will contain Goals, Objectives, and Policies (GOP) as defined in Board of Governors Regulation 21.201.

- GOALS are the long-term end toward which programs or activities are ultimately directed.
- OBJECTIVES are a specific, measurable, intermediate end that is achievable and marks progress toward a goal.
- POLICIES are the way in which programs and activities are conducted to achieve an identified goal.

Data & Analysis (D&A)

Each required element will contain Data & Analysis (D&A) that supports any conclusions or recommendations. Optional Elements may also include D&A.

<sup>&</sup>lt;sup>6</sup> 163.3184 - Process for adoption of comprehensive plan or plan amendment.

<sup>&</sup>lt;sup>7</sup> Per 1013.30(2) (b) "Affected person" means a host local government; an affected local government; any state, regional, or federal agency; or a person who resides, owns property, or owns or operates a business within the boundaries of a host local government or affected local government. In order to qualify under this definition, each person, other than a host or affected local government, must have submitted oral or written comments, recommendations, or objections to the university during the period of time beginning with the advertisement of the first public hearing under subsection (6) and ending with the adoption of the campus master plan or plan amendment.

- Goals, objectives, policies, standards, findings, and conclusions must be based on data.
- Data must originate from professionally-accepted sources (best available existing data).
- Tables, charts, graphs, maps, figures, sources, and their limitations must be clearly described.

Maps & Tables

The following maps and tables are required by the BOG:

- Future Land Use Maps, per BOG 21.204
- Transportation Element Maps/Tables per BOG 21.205
- Housing Element Map, per BOG 21.206
- General Infrastructure Maps<sup>8</sup>, per BOG 21.207
- Conservation Element Map, per BOG 21.208
- Recreation & Open Space Map, per BOG 21.209
- A capital improvements schedule, per BOG 21.211, aka the UCF 10-Year Schedule of Capital Projects (SCP)

#### The UCF 2025-35 Elements

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The INTRODUCTION is an over-arching view of the University, its planning process, changes and improvements to the 2025-35 Campus Master Plan Update, and a snapshot of the University administration at the time of adoption.

1.0 Future Land Use

The FUTURE LAND USE element is required by f.s.1013.30 and BOG 21.204.

2.0 Transportation

The TRANSPORTATION element is required by f.s.1013.30 and BOG 21.205.

3.0 Housing

The HOUSING element is required by f.s.1013.30 and BOG 21.206.

4.0 General Infrastructure

The GENERAL INFRASTRUCTURE element is required by f.s.1013.30 and BOG 21.207.

 It includes the required sub-elements for Stormwater, Sanitary Sewer, Potable Water, and Solid Waste. UCF also adds subelements for Chilled Water, Electrical Power, Natural Gas, and Telecommunications.

5.0 Conservation

The CONSERVATION element is required by f.s.1013.30 and BOG 21.208. The element includes:

- Conservation of Natural Resources
- Conservation of Energy

## 6.0 Recreation and Open Space

The RECREATION & OPEN SPACE element is required by f.s.1013.30 and BOG 21.209.

• Intercollegiate Athletics is a component of this element.

<sup>&</sup>lt;sup>8</sup> Some GENERAL INFRASTRUCTURE Maps are withheld for security reasons.

# 7.0 Intergovernmental Coordination

8.0 Capital Improvements

Evaluation & Appraisal Report (EAR)

**Sustainability Review** 

The INTERGOVERNMENTAL COORDINATION element is required by f.s.1013.30 and BOG 21.210.

The CAPITAL IMPROVEMENTS element is required by f.s.1013.30 and BOG 21.211.

The EVALUATION & APPRAISAL REPORT (EAR) is a component of the Campus Master Plan that is required by BOG 21.202. Every 5 years, the University submits an EAR to the Board of Trustees. The purpose of the EAR is to evaluate the previous master plan to:

- List which goals, objectives and policies have been successfully reached;
- Identify the need for new or modified goals, objectives, or policies to correct unanticipated and unforeseen problems and opportunities that have occurred since adoption of the campus master plan; and
- Identify proposed and anticipated plan amendments necessary to address identified problems and opportunities.

The EAR for the 2020-30 Campus Master Plan Update will be submitted with the 2025-35 Campus Master Plan Update.

The UCF 2022-27 Strategic Plan <u>UNLEASHING POTENTIAL</u> – <u>Becoming the University for the Future</u>, addresses sustainability with the goal of reaching STARS Gold by 2027.

 UCF is currently rated STARS Silver, under STARS v.2.2, with 56.79 credits - see <u>UCF STARS Report 4/23/24</u>

The <u>Sustainability Tracking</u>, <u>Assessment & Rating System</u><sup>™</sup> (STARS) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance;" developed by the Association for the Advancement of Sustainability in Higher Education (AASHE).

The STARS platform provides quantifiable and comparable metrics to identify how well institutions of higher education have incorporated sustainability across broad swaths of university business, including Academics (AC), Engagement (EN), Operations (OP), Planning and Administration (PA), and Innovation and Leadership (IL). Institutions can earn points within a number of credits in each of these sections.

UCF reviewed each element of the CMP under <u>STARS v.3.0</u>. Sustainability is integrated throughout the 2025-35 Campus Master Plan Update.

Sustainable Goals, Objectives and Policies are **highlighted in green text**. Where applicable, the specific "Category and Impact Area" is listed, along with the specific "STARS credit" in parentheses.

#### **BOG 21.201 Definitions**

(23) "Sustainable Development" means development that uses methods, systems, and materials that do not deplete resources or interfere with natural cycles, and considers natural land, water, and energy resources as integral aspects of development.

(24) "Sustainability" means a dynamic state in which global ecological and social systems are not systematically undermined, so as to ensure that the ability of future generations to meet their needs is not compromised.

BOG 21.202(c) 3. "The campus master plan shall consist of... Implementation of sustainability initiatives in campus planning.

## **Next steps**

# Campus Development Agreement (CDA)

Upon adoption of the 2025-35 CMP by the UCF Board of Trustees, the University will negotiate a Campus Development Agreement (CDA) with Orange County, the host local government. The purpose of the CDA is to identify and help mitigate the University's impact on public services.

The CDA outlines specific Partnership Projects between Orange County and UCF to lessen or eliminate deficiencies identified in the Campus Master Plan; and identifies UCF's "fair share" of the cost of all necessary improvements. The UCF Board of Trustees is responsible for paying UCF's "Fair Share" for the measures agreed upon in the CDA.

#### WHO'S WHO at UCF?

Board of Trustees	Under the Florida Constitution, each state university is administered by a board of trustees consisting of thirteen members. Six board members are citizens appointed by the Governor and five are citizens appointed by the Board of Governors. The appointed members are confirmed by the Florida Senate and serve staggered terms of five years. The chair of the Faculty Senate and the President of the Student Body (SG) serve for the term of their elected offices.			
Gubernatorial	Alex Martins, Board Chair	(1/6/2026)		
Appointments (term expires)	Jeff Condello	(1/6/2026)		
	William J. "Bill" Christy	(1/6/2025)		
	Joseph D. Conte	(1/6/2025)		
	Digvijay "Danny" Gaekwad	(1/6/2028)		
	John Miklos	(1/6/2025)		
<ul> <li>Board of Governors Appointments (term expires)</li> </ul>	Michael A. Okaty, Board Vice Chair	(1/6/2025)		
	Tiffany A. Altizer	(1/6/2026)		
	Rick Cardenas	(1/6/2028)		
	Caryl C. McAlpin	(1/6/2025)		
	Vacant BOG-appointed seat			
Ex-Officio Trustees     (torre of office)	Faculty Senate Chair, Stephen King	2022-23, 2023-24, 2024-25		
(term of office)	Student Body President, Bryce Lister	2024-25		

#### **UCF** Leadership

President

Cabinet

Alexander N. Cartwright

Sheila Amin, Interim VP Information Technology, CIO, Dean BHC

Rhonda Bishop, VP for Compliance and Risk

Paige Borden, Chief Analytics Officer

Youndy C. Cook, J.D., VP and General Counsel

Paul Dosal, Sr. VP for Student Services

Adrienne Frame, VP for Student Success and Well-Being

Deborah C. German, VP for Health Affairs

Rodney Grabowski, Sr. VP for Advancement and Partnerships

Andrea Guzmán, VP for Access and Community Engagement

Gerald L. Hector, Sr., VP for Administration and Finance

Michael Johnson, Provost and Exec. VP Academic Affairs

Mike Kilbride, Executive Chief of Staff

Terry Mohajir, VP and Director of Athletics

Janet D. Owen, VP for Government and Community Relations

Winston Schoenfeld, VP for Research and Innovation

Robert Taft, Chief Audit Officer

Jonathan Varnell, VP for Administrative Operations

Burnett Honors College (BHC) - Sheila Amin

Arts & Humanities (CAH) - Jeffrey Moore

Business Administration (CBA) - Paul Jarley

Community Innovation & Education (CCIE) - Grant Hayes

Engineering & Computer Science (CECS) - Michael Georgiopoulos

Graduate Studies (CGS) - Elizabeth "Liz" Klonoff

Health Professions and Sciences (CHPS), Matthew Theriot (Interim)

Medicine (COM) - Deborah German

Nursing (CON) - Mary Lou Sole<sup>9</sup>

Sciences (COS) - Maggie Tomova

Optics and Photonics (CREOL) - David Hagan

Undergraduate Studies (CUS) - Wayne H. Bowen (Interim)

UCF Libraries - Beau Case

Rosen College of Hospitality Management (RCHM) - Cynthia Mejia

Deans

<sup>&</sup>lt;sup>9</sup> In November 2024, Dean Sole announced her pending retirement. Her replacement will require a nation-wide search.

**CMP Contributors** Many Thanks to those who contributed their time and energy to develop the UCF 2025-35 Campus Master Plan Update. Leader: Bill Martin, Planning, Design and Construction (PDC) 1.0 Future Land Use Team: Jon Bates, Michelle Dusseau (UMPC), Jennifer Elliott, Brandon Greenaway (2023-24 SG), Duane Siemen, Justin Wisor 2.0 Transportation Leader: Kevin Sowers, Auxiliary Services Team: Hatem Abou-Senna, Jon Bates, Christina Cabrera (2023-24 SG), Louann Huynh, James Mangan, RJ Mueller, Terry Wheeler 3.0 Housing Leader: Chris MacDonald, Housing & Residence Life (HRL) Team: Jon Bates, Richard Berwanger, Peter Mitchell, Brianna Urea (2023-24 SG), Meredith Varner 4.0 General Infrastructure Leader: Duane Siemen, Utilities & Engineering Services (UES) Team: Amanda Lindsey, Alex Parlato, Michael Scruggs, Justin Wisor

5.0 Conservation Leader: Jennifer Elliott, Arboretum & Sustainability Initiatives (ASI) Team: Ryan Chabot, John Guziejka, Amanda Lindsey, Alex Parlato,

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Marshall, James Wilkening, Justin Wisor

Leader: Fred Kittinger, Government & Community Relations 7.0 Intergovernmental Team: Jon Bates, Janet Owen, Brooke Martin (2023-24 SG), Bill Self, Coordination Austin Wilson

Leader: Ben Davis, Planning, Design and Construction (PDC) 8.0 Capital Improvements

Team: Jon Bates, Adrienne Frame, Bill Martin, Chuck Reilly, Winston

Schoenfeld, Duane Siemen, Justin Wisor

Introduction and Susan Hutson, Bill Martin

**Evaluation & Appraisal** Susan Hutson, Bill Martin Report (EAR)

Ryan Chabot, Jennifer Elliott, Alex Parlato Sustainability Review

Consultants Capital Improvements: Corgan

> Transportation: VHB Engineers and Corgan Future Land Use: GAI Consultants and Corgan **UCF Marketing & Communications** Photography:

Editing & Proofreading Susan Hutson, PDC

Michelle Laxer, FBO Bill Martin, PDC Dora Summa, PDC

**CONTACT US** Thank you for your interest in the UCF 2025-35 Campus Master Plan Update. Written comments are encouraged!

> Email: CampusMasterPlan@ucf.edu U.S. Mail: UCF Campus Master Plan

c/o Planning, Design and Construction

P.O. Box 163020 Orlando, FL 32816-3020



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## UNIVERSITY OF CENTRAL FLORIDA

## 1.0 FUTURE LAND USE

#### 2025-35 CAMPUS MASTER PLAN UPDATE

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## 1.1 INTRODUCTION

## STATUTE & REGULATION



# STRATEGIC PLAN ALIGNMENT

1.0 FUTURE LAND USE is one of eight elements required by Florida Statute 1013.30(3).

The Future Land Use Element must follow the guidelines stated in Florida Board of Governors (BOG) Regulations, Chapter 21.

BOG 21.204: "This element designates existing and future development as reflected in the goals, objectives and policies of the campus master plan, and describes how future development will be coordinated with land uses planned by the host and/or affected local governments in the planning study area."

This element aligns with all four priorities stated in the UCF strategic plan "UNLEASHING POTENTIAL – Becoming the University for the Future."

#### Student Success & Well Being

Housing and Mixed-Use zones consider future housing building sites.

#### Discovery & Exploration

Academic zones consider future research building sites.

#### Community & Culture

Recreation and Open Space zones consider future athletics building sites.

#### Innovation & Sustainability

STARS criteria have been incorporated where applicable.

#### **SUSTAINABILITY**

The University's commitment to sustainability and the protection of the environment is evident throughout this element.

As development continues, the University will continue to preserve natural lands through careful consideration of developmental densities and adjacent lands.

Goals, Objectives and Policies that align with the Sustainability Tracking, Assessment & Rating System<sup>TM</sup> (STARS) Version 3.0<sup>1</sup> are shown in **green text**, with the specific *Category and Impact Area* and *Credit #* indicated in parentheses after the Goal, Objective, or Policy.

Specific STARS sections in this element are aligned with the Category and Impact Area **Operations (OP)** and with this credit:

#### • OP-4: Ecologically Managed Grounds

# RELATED ELEMENTS

See 5.0 CONSERVATION regarding UCF's commitment to maintain conservation lands.

See 6.0 RECREATION & OPEN SPACE for information on activity-based recreation, resource-based recreation, and open space.

See 8.0 CAPITAL IMPROVEMENTS for capital projects projected for the campus within the 10-year planning interval.

<sup>&</sup>lt;sup>1</sup> STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

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## 1.2 GOALS, OBJECTIVES, & POLICIES (GOP)

#### **NARRATIVE**

The Future Land Use Element sets forth the existing and future land use patterns at the University of Central Florida. This element addresses how land use patterns correlate with those planned by the host and affected local governments in the planning study area.

Future Land Use on the UCF Campus shall be consistent with this Campus Master Plan, and the master plans of the Host Local Government<sup>2</sup> and the affected local governments.

The Orange County, FL 2010-2030 Future Land Use Map designates four (4) land use categories on the UCF Main Campus:

- INSTITUTIONAL
- CONSERVATION
- INDUSTRIAL
- WATER BODY

Orange County is updating their Comprehensive plan. See 1.3 DATA AND ANALYSIS for Item g. Existing and Projected Land Uses, per the Local Government's Comprehensive Plan.

The Board of Governors allows universities the option of using the land use categories established in their host local government's comprehensive plan or using their own land use categories.

UCF has established its own land use categories and Standards-of-Use for each land use category. See 1.4 EXHIBITS for UCF's Future Land Use Map (FLUM).

- ACADEMIC & STUDENT SUPPORT USES
- MIXED USE
- PARKING
- RECREATION & OPEN SPACE
  - Developed
  - o Natural Preserve
- CONSERVATION
  - Conservation Easements
  - o Wetlands
- RESIDENTIAL
- NON-ACADEMIC SUPPPORT
- WATER BODY

<sup>&</sup>lt;sup>2</sup> UCF's host local government is Orange County, and the affected local governments are Seminole County, Orlando, and Oviedo.

GOAL 1: Create developmental patterns that direct future growth to appropriate areas on campus; promote the educational mission of the University; protect environmentally-sensitive areas; and ensure compatibility with the community and host/affected local governments.

OBJECTIVE 1.1: The Campus Master Plan shall establish Standards-of-Use for each Future Land Use Category, promoting compact, efficient, and environmentally sensitive land planning.

ACADEMIC & STUDENT SUPPORT

MIXED USE

**PARKING** 

RECREATION & OPEN SPACE

- Developed

- Natural Preserve

POLICY 1.1.1: The University shall designate Future Land Use categories (See EXHIBITS for the Future Land Use Map). <u>The Campus Master Plan shall establish Standards-of-Use for each Future Land Use Category, promoting compact, efficient, and environmentally sensitive land planning.</u>

An explanation of each designated land use category, and the associated Standard-of-Use are shown below.

The ACADEMIC & STUDENT SUPPORT land use category supports academic and research uses, as well as Student Support functions, and is largely concentrated within the Academic Core of campus. This category includes buildings with classroom, research labs, and office spaces for faculty, staff, and administration that support academics.

A higher Floor Area Ratio (FAR) is targeted within the ACADEMIC & STUDENT SUPPORT category to concentrate academic/research and student support facilities within reasonable walking distance to classes. This facilitates the cohesive functioning of academic units.

Intensity: target FAR 3.0

The MIXED USE land category allows a variety of facility types in a specific area, including academic, research, support, housing, parking, retail, recreation/open space, and utilities.

Intensity: target FAR 3.0

The Parking Land Use category identifies campus areas where parking lots or parking structures are appropriate.

Intensity: target 500 spaces per acre for structured parking

The RECREATION & OPEN SPACE land use category shall support active and passive recreation uses, as well as general open space.

"RECREATION & OPEN SPACE - Developed" includes intercollegiate athletic venues, intramural and recreational sports fields and buildings, and urban parks, such as Memory Mall and Arboretum Park (part of the Arboretum lying west of Gemini Blvd. E).

Density/Intensity Target: 14.75 acres minimum per 1,000 FTE students

"RECREATION & OPEN SPACE - Natural Preserve" includes areas that UCF has voluntarily preserved for passive recreation uses and living laboratories, e.g. Arboretum Preserve (east of Gemini Blvd. E.), the Eastern Parcel, and the corner of Alafaya Tr. and McCulloch Rd.

Intensity: target FAR 0.00

(OP-4: Ecologically Managed Grounds)

#### **CONSERVATION**

- Conservation Easements

- Wetlands

RESIDENTIAL

NON-ACADEMIC SUPPORT

WATER BODY

The Conservation land use category shall allow conservation uses in conformance with the Conservation Element of the Campus Master Plan. Conservation areas are shown in the Future Land Use Map, the Recreation & Open Space Map (some open space is included), and the Conservation Map.

A Conservation Easement is a legally binding agreement between a landowner and a government agency or nonprofit land trust that limits development on the land.

UCF has just over 200 acres of land in Conservation Easements to the St. Johns River Water Management District - CE 30959, (Nov 4, 2002 amended 2011), and CE (June, 30, 2011).

Intensity: target FAR 0.00

#### (OP-4: Ecologically Managed Grounds)

Florida wetlands are areas that are inundated or saturated by surface water or ground water at a frequency and a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils.

UCF has over 360 acres of jurisdictional and non-jurisdictional wetlands (See 4.0 GENERAL INFRASTRUCTURE Stormwater Map and 5.0 CONSERVATION Wetlands Map). Some wetlands are also held in Conservation Easements.

Some campus wetlands are under consideration for compensatory mitigation3 to lift the wetland designation.

- Wetland W-14 (1.05ac) is currently in mitigation.
- Wetland W-9A (7.85ac.) Arboretum Park will seek to lift this wetland designation to facilitate the Park's enhancement as a Living Laboratory.

#### (OP-4: Ecologically Managed Grounds)

The RESIDENTIAL land use category identifies campus areas appropriate for housing development. This use also includes ancillary mixed-use spaces that support a housing community.

Density: target 100 - 300 beds per acre

The NON-ACADEMIC SUPPORT land use category identifies campus areas appropriate for facilities support, utilities, and similar nonacademic support spaces.

Intensity: target FAR 1.0

<u>UCF has two natural Lakes (Claire and Lee) and multiple man-made stormwater retention ponds.</u>

<sup>&</sup>lt;sup>3</sup> The Uniform Mitigation Assessment Method (UMAM) provides a standardized procedure for assessing the ecological values and functions of wetlands and other surface waters..

**OBJECTIVE 1.2: Protect** natural resources, including surface waters and wetlands.

**OBJECTIVE 1.3: Minimize** land use compatibility issues between the **University and the Host** Community.

POLICY 1.2.1: The University shall allow for conservation areas as identified on the Future Land Use Map and the Conservation Map (see Exhibits under these elements). Construction in these areas is limited as described in element 5.0 CONSERVATION.

#### (OP-4: Ecologically Managed Grounds)

POLICY 1.2.2: If construction in designated conservation areas is deemed by the University to be the only viable option, then UCF shall pursue reasonable efforts to minimize and mitigate any unavoidable impacts to these areas.

POLICY 1.2.3: Should mitigation be deemed necessary, Facilities and Business Operations (FBO) shall be responsible for coordinating any necessary actions with the appropriate UCF departments, and with federal, state, and regional agencies, in accordance with their permitting processes.

POLICY 1.3.1: Pursuant to Florida Statute 1013.30(6)-(9), any amendment to the adopted UCF Campus Master Plan shall be transmitted to the host and affected local governments and other external review agencies for review, if such amendment, alone or in conjunction with other amendments, would:

- Increase density or intensity of use of land on campus by more than
- Decrease the amount of natural areas or open space on campus by more than 10%; or
- Rearrange land uses in a manner that will increase the impact of development by more than 10% on a road or another public facility or service provided or maintained by the state, the county, the host local government, or any affected local government.

POLICY 1.3.2: Proposed amendments to the adopted Campus Master Plan which do not exceed the thresholds established in Florida Statute 1013.30(9), and which have the effect of changing land use designations or classifications, or impacting off-campus facilities, services or natural resources, do not require host and affected local government review; however, they may be submitted for a courtesy review.

POLICY 1.3.3: The University shall maintain a buffer between the campus and any adjacent single-family residential communities indicated on the Future Land Use Map.

Options for buffers between conservation land and adjacent singlefamily residential communities include:

- 200-foot-wide natural buffer
- 100-foot-wide natural buffer (may include conservation land as part of the buffer) and a six-foot tall barrier

Options for buffers between developable campus land and adjacent single-family residential communities include:

200-foot-wide natural buffer

50-foot-wide natural or landscaped buffer and a six-foot tall barrier

In order to maintain the effectiveness of the buffers, only non-invasive native plant species will be used for landscaping purposes.

#### (OP-4: Ecologically Managed Grounds)

POLICY 1.3.4: The University shall safeguard compatibility between UCF and the areas adjacent single-family residential communities on the University's borders by providing buffers, fences or walls, building setbacks, and/or stormwater retention areas to meet the needs of any future development.

Single-family residential communities abutting the UCF campus include:

Orange County - Buffers are on UCF land

- East University Estates, Regency Park, Ginger Creek
- South Bonneville

Seminole County - McCulloch Road provides the buffer

North Creekwood

POLICY 1.3.5: Prior to adopting any amendments that affect lands designated as conservation, the University shall:

- Perform reasonable site-specific environmental analyses, including qualitative state- and federal-listed plant and animal species surveys, water quality impact analyses, and alternative location assessments;
- Comply with Florida Statute 1013.30, even for those amendments that fall within the exemptions set forth in Florida Statute 1013.30(9)(a)-(c);
- Notify the Arboretum and Sustainability Initiatives Director of any proposed amendments to lands designated as conservation.

POLICY 1.4.1: Permanent academic functions shall be located in the Academic Core, an area between the 400-foot radius (Pegasus Circle) and Gemini Boulevard. Research functions may be located inside or outside of the Academic Core.

POLICY 1.4.2: Academic Core areas are defined by important formal open space systems and academic uses that are linked, similar, or adjacent to each other.

POLICY 1.4.3: To the extent possible, future surface parking areas shall be located outside of the 1,200-foot radius (Apollo Circle), in order to reduce vehicular versus pedestrian conflicts on campus.

POLICY 1.4.4: Overflow parking areas may be located outside of Gemini Boulevard.

POLICY 1.4.5: Temporary buildings, low density areas, and grade parking lots may remain until future projects for those areas are developed.

OBJECTIVE 1.4: Ensure land use compatibility on the University campus.

POLICY 1.4.6: As new buildings are constructed on existing parking lots, parking shall be consolidated into structured parking garages, in order to preserve the open nature of the campus and minimize impervious surfaces.

POLICY 1.4.7: "Intercept garages" shall be placed at strategic points near campus entrances to minimize traffic. These garage locations will intercept a high volume of vehicles before they penetrate the campus and cause congestion. The locations of these garages are shown on the Transportation Element and/or Capital Improvements Element map.

POLICY 1.4.8: The University Master Planning Committee (UMPC), along with University Architect and PDC shall review all development proposals for compliance with the UCF Campus Master Plan's criteria for element 1.0 FUTURE LAND USE.

POLICY 1.4.9: The University shall coordinate all decisions concerning land use and development on campus, especially those specifically mentioned in element 1.0 FUTURE LAND USE, with the Capital Improvements Plan (CIP) and all other applicable Campus Master Plan elements.

POLICY 1.5.1: Projects that propose increases to campus infrastructure, utilities, facilities, or services shall be approved for construction only if such facilities are funded to address concurrency with infrastructure, utilities, facilities, or service needs.

POLICY 1.5.2: The University shall prioritize coordination of land uses with appropriate facilities and services:

- Eliminate existing system deficiencies which may prevent future development.
- Maintain the existing system as long as it is deemed capable of meeting immediate needs.
- Expand systems to accommodate campus needs.

POLICY 1.5.3: Campus development projected to increase demands for solid waste collection and disposal shall be approved under provisions delineated in element 4.0 GENERAL INFRASTRUCTURE.

POLICY 1.5.4: Campus development that will increase the quantity of impervious surface areas shall be approved upon provision of a drainage system that adheres to the conditions set forth in element 4.0 GENERAL INFRASTRUCTURE, and the campus stormwater permit issued by the St. Johns River Water Management District (SJRWMD).

POLICY 1.5.5: Within the academic core, utility easements shall be reserved along defined access routes and where future building development is not planned, e.g., along the three (3) radius sidewalks (Pegasus, Mercury, and Apollo), along radial pedestrian walks, and in dedicated open spaces.

OBJECTIVE 1.5: Coordinate future land uses with the availability of facilities and services, ensuring the availability of suitable land on campus for utility facilities required to support proposed oncampus development.

OBJECTIVE 1.6: Coordinate future land uses with the appropriate topography and soil conditions.

POLICY 1.6.1: The University shall avoid development within the Federal Emergency Management Agency (FEMA) 100-year flood zone where feasible. Where flood zone impacts are required, the University shall mitigate these impacts consistent with local, state, and federal requirements.

POLICY 1.6.2: The University shall maintain a database of existing topographic and soil conditions which shall be updated on a regular basis.

POLICY 1.6.3: Areas containing severe soil constraints, such as those that are found in and around wetland sites and Lake Lee and Lake Claire, shall remain undisturbed. Soil constraints shall be demonstrated through formal studies prior to development.

POLICY 1.6.4: Future development, including topographical modifications and surface water run-off patterns, shall be consistent with the adopted Campus Master Plan and the current Campus Stormwater Master Plan approved by the SJRWMD.

POLICY 1.6.5: The University shall review future construction projects for consistency with existing topographic and soil data, consistent with policies listed in this element.

POLICY 1.6.6: The University shall require the integration of natural topographic and other physical features in project designs where feasible, in order to develop the campus in harmony with its natural environment.

## (OP-4: Ecologically Managed Grounds)

Policy 1.7.1: In coordination with state and local historic preservation officials, the University shall maintain an information file, identifying and locating properties under university ownership that may contain historic or archaeological resources which appear to qualify for inclusion in the National Register of Historic Places.

Policy 1.7.2: The University shall consider the effect of any undertaking on any historic property that is included, or eligible for inclusion, in the National Register of Historic Places.

Policy 1.7.3: The University shall consult with the State's Division of Historical Resources prior to any land clearing, ground disturbance, or rehabilitation activities, which may disturb, or otherwise affect unrecorded archaeological sites, or any property which is included, or eligible for inclusion, in the National Register of Historic Places.

Policy 1.7.4: The University shall consult with the State's Division of Historical Resources prior to demolishing or substantially altering an historic property in a manner that adversely affects its character, form, integrity, or archaeological value. The intent is to avoid or mitigate any adverse impacts, or to undertake any appropriate archaeological salvage excavation or recovery action.

OBJECTIVE 1.7: Ensure that future campus development is consistent with regulations regarding historically- or archaeologically-significant resources.

GOAL 2: Maintain a commitment to the protection of campus ecosystems and lands of significant environmental importance and ensure that these resources are protected for the benefit of present and future generations, while accommodating the continued development and expansion of the man-made environment of the campus.

OBJECTIVE 2.1: Designate environmentally-sensitive lands for protection based on state and regional criteria.

POLICY 2.1.1: The University shall continue to reserve lands designated as Conservation Easement in perpetuity, pursuant to a recorded Conservation Easement.

#### (OP-4: Ecologically Managed Grounds)

This designation shall allow very low-impact recreational or educational uses, such as hiking, non-motorized boating, bird watching, horseback riding, fishing, primitive camping, nature study, and such other activities which do not violate the recorded Conservation Easement.

GOAL 3: Evaluate the alignment of University's physical assets with planned enrollment growth through the Horizon Year. Ensure that systems are in place to support enrollment and physical growth of the campus.

OBJECTIVE 3.1: Evaluate the University's "Carrying Capacity" to understand the scope and cost of infrastructure enhancements needed for future growth and development.

POLICY 3.1.1: Form a campus-wide advisory committee to study the effect of proposed enrollment growth on physical assets, and limitations to growth due existing infrastructure. Include Subject Matter Experts from appropriate departments to contribute to the effort.

POLICY 3.1.2: Investigate the University's enrollment and research goals that might cause UCF to require additional physical facilities.

POLICY 3.1.3: Investigate each college's academic plans that might cause UCF to require additional Learning Spaces (Teaching Labs and Classrooms).

POLICY 3.1.4: Investigate each college's hiring plans that might cause UCF to require additional or reconfigured Office and Collaboration space.

POLICY 3.1.5: Continue to evaluate the utilization of existing physical space.

POLICY 3.1.6: Investigate the existing physical infrastructure and transportation systems of the campus to understand its current limitations. Systems may include but are not limited to potable water, chilled water, sanitary, stormwater, electrical, parking, natural gas, information technology, roads, parking, and transit.

POLICY 3.1.7: Where expansion of existing infrastructure is needed, provide high-level scope, schedule, and budget estimates for evaluation. Summarize conclusions in an executive report.

<sup>&</sup>lt;sup>4</sup> Carrying capacity is the number of organisms that an ecosystem can sustainably support. In this instance, the term is used to mean the maximum number of students that the University can sustain for a quality education, based on existing or planned human and material resources.

OBJECTIVE 3.2: Extend UCF's Concurrency<sup>5</sup> requirements commensurate with planned enrollment growth.

POLICY 3.2.1: Prior to increasing enrollment beyond established projections, UCF shall ensure that existing facilities and infrastructure can meet the needs of the proposed growth.

OBJECTIVE 3.3: Ensure that facilities required by "f.s. 163.3180 Concurrency" are in place and available to serve new development no later than the issuance of a certificate of occupancy or its functional equivalent.

POLICY 3.3.1: Prior to approval of a building permit or its functional equivalent, UCF shall consult with the applicable water supplier to determine whether adequate **Potable Water** supplies to serve the new development will be available no later than the anticipated date of issuance of a certificate of occupancy or its functional equivalent.

POLICY 3.3.2: Prior to approval of a building permit or its functional equivalent, UCF shall assure that existing or proposed **Drainage** (Stormwater facilities) can meet the additional needs of the proposed development (building, road, parking lot, impervious sports field, etc.).

POLICY 3.3.3: Prior to approval of a building permit or its functional equivalent, UCF shall assure that existing or proposed **Sanitary Sewer** systems can meet the additional needs of the proposed development.

POLICY 3.3.4: Prior to approval of a building permit or its functional equivalent, UCF shall assure that existing or proposed **Solid Waste** systems can meet the additional needs of the proposed development.

OBJECTIVE 3.4: Ensure that facilities, to which UCF currently extends
Concurrency, are in place and available to serve new development no later than the issuance of a certificate of occupancy or its functional equivalent.

POLICY 3.4.1: Prior to approval of a building permit or its functional equivalent, UCF shall assure that existing or proposed **Chilled Water** systems can meet the additional needs of the proposed facility.

POLICY 3.4.2: Prior to approval of a building permit or its functional equivalent, UCF shall assure that existing or proposed **Electrical Power** systems can meet the additional needs of the proposed facility.

POLICY 3.4.3: Prior to approval of a building permit or its functional equivalent, UCF shall assure that existing or proposed **Natural Gas** systems can meet the additional needs of the proposed facility.

POLICY 3.4.4: Prior to approval of a building permit or its functional equivalent, UCF shall assure that existing or proposed **Telecommunications** systems can meet the additional needs of the proposed facility.

OBJECTIVE 3.5: UCF shall extend Concurrency requirements to

POLICY 3.5.1: UCF will plan its **Transportation** infrastructure using the minimum enrollment growth per year required by the Host Local Government.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Concurrency refers to the timely provision of facilities and services "concurrent" to the demand for them.

<sup>&</sup>lt;sup>6</sup> See 2.1 TRANSPORTATION INTRODUCTION - Transportation Growth Strategy: To determine the background traffic growth through the Horizon Year 2035, the following resources were examined by VHB:

<sup>•</sup> BEBR projections - the projected population growth rate for Orange County will be 1.5% per year from 2020 to 2035.

Transportation Systems (Roads, Parking, Transit, Pedestrian and Micromobility) POLICY 3.5.2: Prior to approval of new development, UCF shall assure that existing or proposed **Roadway** systems can meet the additional needs of the proposed development.

POLICY 3.5.3: Prior to approval of new development, UCF shall assure that existing or proposed **Parking** systems can meet the additional needs of the proposed development.

POLICY 3.5.4: Prior to approval of new development, UCF shall assure that existing or proposed **Transit** systems can meet the additional needs of the proposed development.

POLICY 3.5.5: Prior to approval of new development, UCF shall assure that existing or proposed **Pedestrian and Micromobility** systems can meet the additional needs of the proposed development.

Context Area, as required by Orange County on similar traffic studies.

<sup>•</sup> Historical Traffic Counts - Orange and Seminole County traffic counts resulted in <u>negative</u> annual growth rates, or growth rates of less than 1% per year within the Context Area.

Based on this assessment, VHB assumed a minimum 1% background growth rate for all roadways within the

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## 1.3 DATA & ANALYSIS (D&A)

## FUTURE LAND USE Data & Analysis Requirements

Inventory and analyses as described in BOG Regulation 21.204 (1) Inventory and assess subsection b-g below to determine their impact on meeting the needs shown in subsection (a).

a. Existing and projected space and building needs, both within the planning study area and throughout the state, for academic, support, housing and parking facilities.

## UCF Educational Plant Survey - Existing & Projected Space

The Educational Plant Survey is a systematic and comprehensive study of the institution's sites, buildings, and the site improvements required to operate the facilities.

The EPS ensures that PECO dollars, and the assets constructed with PECO dollars are being directed appropriately towards needed educational buildings.

- The EPS includes Recommendations for New Facilities and for Existing Facilities (Renovation, Remodeling, Demolition)
- UCF's current EPS is the <u>2021 Educational Plant Survey</u>

## Capital Improvements - Existing & Projected Space

Projected Capital Projects on the UCF Main Campus and other Sites are indicated in 8.0 CAPITAL IMPROVEMENTS, regardless of the funding source. See 8.4 exhibits for the Schedule of Capital Projects (SCP) and Capital Improvements Map.

The University performs cost/benefit and concurrency analyses on site alternatives prior to constructing a building. Stormwater, utilities, proximity to related buildings, and other criteria are considered to ensure that a proposed site is the most appropriate.

#### b. Existing and projected vacant, open or underdeveloped university-controlled lands

Over 100 acres of the Main Campus is underdeveloped, vacant, or open land that UCF considers developable. This acreage will accommodate all projected growth within the planning timeframe and well into the future. See 1.4 EXHIBITS, Current Land Utilization Table.

While developed areas of campus have grown to nearly 600 acres, an even larger area has been set aside as perpetual and long-term conservation land.

c. Properties within the planning study area where title interest is held by the Board of Trustees of the Internal Improvement Trust Fund

#### **UCF Main Campus**

The current Main Campus is made up of two large tracts acquired in 1967 (Tract 1) and 1994 (Tract 2). held by the Board of Trustees of the Internal Improvement Trust Fund

# Tract 1 - The Original Main Campus

OCPA Parcel 31-22-03-0000-00-005 - 1194.2 acres Discrepancies between various current and historic records regarding this parcel cannot be resolved.



Tract 2 – The Eastern Parcel



Easements along the UCF boundaries

Alafaya Trail

## 1.0 FUTURE LAND USE

December 28,1967 Fee Simple Deed (ORB 2454 Pg. 1581) State Board of Education of Florida to the Trustees of the Internal Improvement Trust Fund (TIITF). The 1967 Deed was made up of seven parcels totaling 1,203.37 acres:

Parcel 1	313.1427	acres
Parcel 2	314.5039	
Parcel 3	150.1612	
Parcel 4	165.0756	
Parcel 5	89.7736	
Parcel 6	6.4447	
Parcel 7	163.935	

January 22, 1974 Parent Lease #2721 (ORB 3625, Pg. 1373) TIITF to Florida Board of Regents<sup>7</sup> 1203.0525ac.

OCPA Parcel 3122110000-00-00 - 2912 Percival Road 217.2ac. Discrepancies between various current and historic records regarding this parcel cannot be resolved.

February 10, 1994 DEP Certification: Consideration of purchase agreement to acquire 218.55ac. from Orange County Research & Development Authority by the University of Central Florida.

February 23, 1994 DEP Land Acquisition Survey Review Encumbered areas included within total area of 217.18 acres:

#### Parcel 1:

- 160' wide Easement to Florida Power Corp. (aka Duke Energy), ORB 1598, Pg. 962, ±4.77ac.
- 10' Florida Power Corp easement ORB 3005, Pg. 202
- 20' pipeline easement ORB 3329, Pg. 1319

#### Parcel 2:

- 160' wide Easement to Florida Power Corp. (aka Duke Energy), ORB 1671, Pg. 848, ±4.86ac.
- 20' pipeline easement ORB 3329, Pg. 1320.

#### Parcel 3:

 10' wide Florida Power Corp easement ORB 3307, Pg. 572, ±0.19ac.

#### Parcel 4:

- 8' wide Easement to Florida Power Corp. (aka Duke Energy) ORB 2765, Pg. 353, ±0.04ac.
- Orange County utility easement ORB 4014, Pg. 2034, ±0.14a

The following easements are along UCF's borders. These easements and leases reduce developable land, but do not reduce the campus acreage.

Document Easement 28221	<b>Year</b> 1989	<b>To, For, Acreage</b> FDOT, New easement along the west border, incl. 2 drainage ponds, ±17.431 ac.
Amendment 1 to 28221	1993	FDOT, Extends easement 28221 to the north, ±0.602 ac.
Easement 30952	2002	FDOT, New easement east of easement 28221, ±0.195 ac.
Amendment 2 to 28221	2020	FDOT, Alafaya Trail Pedestrian Safety Project adds six parcels totaling +/-2.7ac

<sup>&</sup>lt;sup>7</sup> The Florida Board of Regents is now known as the Florida Board of Governors

<sup>&</sup>lt;sup>8</sup> Note discrepancy between Survey Review (ORB 1671, Pg. 84) and Boundary Survey (ORB 1671, Pg. 81)

		Sublease	2018	Pegasus Hotel LLC, DBA Celeste Hotel, ±5.92ac.
•	McCulloch Road	Easement 28329	1992	Orange Co., 20' roadway easement and drainage ponds A, B, and C, ac. unstated
		Easement 30912	2002	Orange Co., 40' water main easement, ±4.518 ac.,
•	Libra Drive	Easement 33479	2022	Orange Co. Research & Development Authority, underground potable water interconnect line, $\pm 0.008$ ac.

#### d. Properties within the planning study area which may serve to meet future needs

# Properties within the Context Area

Seminole County

In addition to the parcels comprising the Main Campus, UCF controls the following properties within the Context Area.

- Developed NorthView student housing 3925 Lockwood Bv., <u>Carillon Planned Unit Development (PUD)</u>, parcel 35-21-31-512-0000002A, 8.06ac. (Intersection of Lockwood Bv. & McCulloch Rd.)
- Undeveloped <u>Carillon Planned Unit Development (PUD)</u>, parcel 35-21-31-300-007A-0000, ±8.41 ac. (Intersection of McCulloch Rd. & Lockwood Bv.)
- Undeveloped <u>Legacy Pointe Planned Unit Development (PUD)</u>, parcel 36-21-31-300-00400000, 15.65 ac. (Intersection of Old Lockwood Bv. & Nak-Nak Run)
- Orange County
- Undeveloped McKay Parcel, 11566 University Bv., parcel 31-22-09-000-00031, ±134.7 ac.
- Central Florida Research Park (aka UCF Site 0014) is a campuslike environment for business, located directly south of UCF, consisting of 1,027 acres of land with 65 buildings. UCF owns buildings in the CFRP and also leases space from the UCF Foundation and others.

UCF Foundation-owned, Leased to UCF and others

UCF Foundation-owned, Leased to UCF

TIITF-owned<sup>9</sup>, Leased to UCF and others

UCF BOT-owned, Leased to others 3rd-party-owned, Leased to UCF and others

<del>-</del>		
CFRP Building Name	Address	Bldg.#
Research Pavilion	12424 Research Pkwy.	8102
Orlando Tech Center Bldg. 300	12443 Research Pkwy.	8113
Orlando Tech Center Bldg. 500	12461 Research Pkwy.	8120
Orlando Tech Center Bldg. 600	12479 Research Pkwy.	8121
Orlando Tech Center Bldg. 700	12423 Research Pkwy.	8125
University Tower	12201 Research Pkwy.	8118
Innovative Center	3280 Progress Dr.	8112
Biomolecular Research Annex	12722 Research Pkwy.	8114
Digital Learning Center	12351 Research Pkwy.	8155
Partnership 1	12354 Research Pkwy.	8111
Partnership 2	3100 Technology Pkwy.	8119
Partnership 3	3039 Technology Pkwy.	8126
Partnership 4	12809 Science Dr.	8151
Partnership 5	12000 Research Pkwy.	8152
Bennett Building 3	3251 Progress Dr.	8129
Bennett Building 4	3259 Progress Dr.	8130
Research Pointe	12703 Research Pkwy.	8150

<sup>&</sup>lt;sup>9</sup> Board of Trustees of the Internal Improvement Trust Fund of the State of Florida (TIITF) – the entity that holds title to state-owned lands in Florida. per F.S. 253.03

#### e. Existing Natural, Archeological or Historic Resources

There are no known Areas of Critical State Concern, e.g., natural, archeological, or historic resources, within the planning study area.

f. Facilities, on University-controlled Lands, that are not under the Jurisdiction or Operation of the State University System

The following facilities are on University-controlled land, but are not under the jurisdiction or operation of the State University System of Florida (SUS).

- Celeste Hotel Land lease to Pegasus LLC, ±5.24 ac.
- Orange/Seminole County Fire/Rescue Station # 65 Land Lease to Orange and Seminole Counties, ±1.819 ac.<sup>10</sup> UCF required the Lessee to construct the Emergency Services Training Building (Bldg.# 350) for UCF's use.

#### g. Existing and Projected Land Uses, per the Local Government's Comprehensive Plan

#### Orange County Future Land Uses for the UCF Main Campus

BOG 21.204: Future development will be coordinated with land uses planned by the host and/or affected local governments in the planning study area.

Existing land uses and development on university controlled property shall be shown on the land use map, using either the land uses established in the host local government's comprehensive plan or using its own land use categories.

The Orange County Comprehensive Plan is being updated at the time of this writing.

- Current OC Plan
- <u>Destination 2030</u>, the current Orange County Comprehensive Plan, shows the following land uses for the UCF Main Campus.
  - Original Main Campus Institutional (INST) 2.0 FAR
  - Eastern Parcel Industrial (I) 0.75 FAR
- Pending OC Update

<u>Vision 2050</u>, the pending Orange County Comprehensive Plan Update, will be implemented through the adoption of a new Land Development Code — the Orange Code — which will focus on placemaking standards and context-based regulations.

This Code relies on development characteristics that are desired, rather than what communities seek to avoid. It will introduce a new planning framework where "Place Types" will replace many of the prior Future Land Use Map categories. The three "Place Types" will include Centers, Corridors, and Neighborhoods.

The UCF Regional Center, located in the East Market Area, primarily supports the University of Central Florida and surrounding research-related and student housing developments.

- FAR: 3.0 (Commercial, Office & Mixed Use)
- Density: Min. 12 du/ac Max. 50 du/ac
- Flexible Density: Max. 70 du/ac if the Housing Division's certified Affordable/Attainable criteria is met

 $<sup>^{10}</sup>$  Originally  $\pm 2.453$  ac., the acreage was corrected because the Fire Station site overlapped one of the pond parcels that was already included in Easement 28329

#### **UCF - Future Land Uses** for the UCF Main Campus

The University uses its own land use categories, as permitted by BOG 21.204. UCF's land use categories are illustrated on the Future Land Use Map (FLUM) in 1.4 EXHIBITS.

The UCF FLUM identifies the land use categories associated with future development sites to accommodate proposed construction projects identified in element 8.0 CAPITAL IMPROVEMENTS.

#### **CONTEXT AREA**

#### Definition

BOG 21.201 (4) "Context area for Campus Development Agreements" means an area surrounding the university, within which on-campus development may impact local public facilities and services and natural resources, and within which off-campus development may impact university resources and facilities.

The size of the context area may be defined by natural or man-made functional or visual boundaries, such as areas of concentration of offcampus student-oriented housing and commercial establishments. stormwater basins, habitat range, or other natural features.

To facilitate planning analysis and intergovernmental coordination the context area may differ in configuration in the various elements of the campus master plan.

- See 1.0 FUTURE LAND USE, Exhibits for Future Land Use Context Area.
- See the Housing and Transportation Elements for applicable Context Area for those elements.

#### PROJECTED ENROLLMENT

#### **UCF Enrollment** 2024-2034

UCF Analytics and Integrated Planning (fka Institutional Knowledge Management) provides the following student headcount for the University for Fall 2024 (benchmark) through Fall 2034 (horizon vear)

	<u>year).</u>		
<u>Benchmark</u>	<u>Semester</u>	All Sites	Main Campus
Early Actual	<u>Fall 2024</u>	<u>70,181</u>	<u>52,857</u>
<b>Enrollment Projections</b>			
Main Campus enrollment is estimated based on the historic trend of ~75% of All Sites.	Fall 2025 Fall 2026 Fall 2027 Fall 2028 Fall 2029 Fall 2030 Fall 2031 Fall 2032 Fall 2033 Fall 2034	70,224 70,804 71,614 72,442 73,038 73,622 74,211 74,803 75,403 76,006	52,668 53,103 53,711 54,332 54,779 55,217 55,658 56,102 56,552 57,005
Growth-based Campus			•

Master Plan Elements

enrollment growth projections to meet the Data & Analysis requirements of Board of Governors Chapter 21.

Enrollment peaked in 2020, when UCF's robust online programs allowed students from throughout the state to continue their education in safety and without interruption. The University experienced a trend of negative growth from 2021 to 2022.

When a negative growth rate is anticipated, UCF will use a minimum growth rate per year for growth-based CMP Elements

#### **HOST & AFFECTED LOCAL GOVERNMENTS**

#### **Host Local Government**

Florida Statute 1013.30 (2) (c) "Host local government" means a local government within the jurisdiction of which all or part of a campus of an institution is located, but does not include a county if no part of an institution is located within its unincorporated area.

Orange County

Orange County is UCF's "Host Local Government," because it is directly affected by development that is proposed for the UCF campus. UCF is bordered by Orange County on its eastern, southern, and western borders.

The Central Florida Research Park on UCF's southern border is located in Orange County.

# Affected Local Govenments

Florida Statute 1013.30 (2) (a) "Affected local government" means a unit of local government that provides public services to or is responsible for maintaining facilities within a campus of an institution or is directly affected by development that is proposed for a campus.

Seminole County

UCF is bordered by Seminole County to the north. The county line is in the middle of McCulloch Road. Seminole County is considered one of UCF's "Affected Local Governments," because it may be directly affected by development that is proposed for the UCF campus.

The <u>Seminole County Comprehensive Plan</u> webpage has links to the Comprehensive Plan and the Future Land Use Maps.

City of Orlando

The City of Orlando is bordered on the North, East and West by Orange County. It is bordered on the South by Osceola County. UCF is 6 miles from Orlando at its closest point.

The City of Orlando is considered one of UCF's "Affected Local Governments" because three of UCF's Satellite Campuses are located in Orlando: the Rosen College of Hospitality Management, the Academic Health Sciences Campus, and the UCF Downtown Campus.

These Satellite Campuses are not governed by the UCF Campus Master Plan, but by Orlando's comprehensive plan, which is called the Growth Management Plan.

 Proposed capital projects for Satellite Campuses in Orlando are indicated on the Schedule of Capital Projects (SCP) in element 8.0 CAPITAL IMPROVEMENTS.

City of Oviedo

The City of Oviedo is located one mile north of the Orange County line. It is not is directly affected by development that is proposed for the UCF campus. As a courtesy, UCF includes the City of Oviedo in the statutory review of its Campus Master Plan updates.

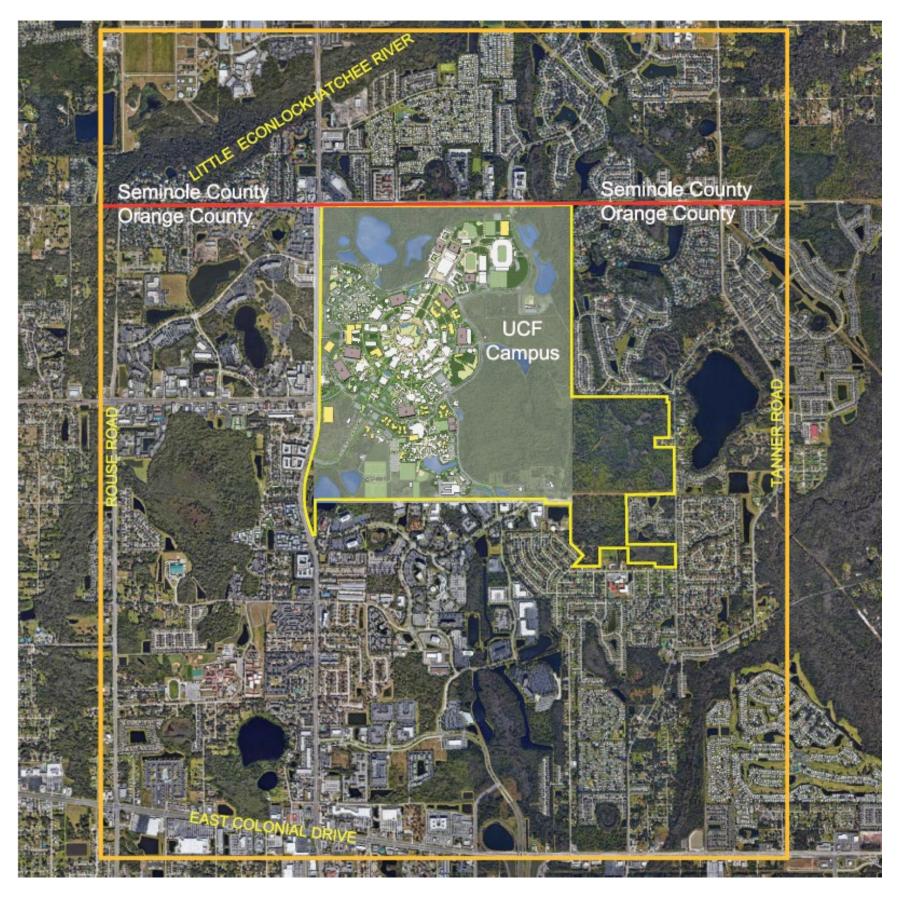
# 1.4 EXHIBITS

Exhibit 1.4 - 1 Context Area Map

Exhibit 1.4 - 2 Current Land Utilization Table

Exhibit 1.4 - 3 Future Land Use Map (FLUM) - Revised Nov 2024

Exhibit 1.4 - 1
Future Land Use
Context Area Map



# **LEGEND**



# **UCF CONTEXT AREA**

North of Campus (Seminole County) to just north of the Little Econlockhatchee River at Alafaya Trail

East of Campus (Orange County) to just east of Tanner Road

South of Campus (Orange County) to just south of E. Colonial Drive (SR 50)

West of Campus (Orange County) to just west of Rouse Road

# Exhibit 1.4 - 2 Current Land Utilization Table

This Land Utilization Table indicates how UCF's land is distributed between Developed Parcels with and without infill sites available, Developable Parcels, and Undevelopable Parcels.

MAIN CAMPUS	1420.3 Total Acres		
DEVELOPED and DEVELOPABLE	Incudes Developed areas with infill sites available. See 8.4 Capital Improvements Map for future facilities proposed for these areas.		
CAMPUS CORE ACADEMIC CORE      KENNETH G.	The CAMPUS CORE is that part of the campus that lies inside of Gemini Boulevard, ~231 ac. The Campus Core includes:  The ACADEMIC CORE is the area inside of the 1,200-foot concentric sidewalk known as Apollo Circle, ~104 acres  Academic/Student Support Facilities Parking Facilities Open Space - Developed Memory Mall Recreation & Open Space - Developed Non-Academic Support Facilities Subject Bodies Stormwater Ponds 1-F, 4-B1, 4-B2  That area outside of Apollo Circle, but inside of Gemini Blvd., ~127 Ac. is the remainder of the CAMPUS CORE Academic/Student Support Facilities Housing Facilities Housing Facilities Apollo Community Libra Community Carek Park Recreation & Open Space - Developed ARBORETUM PARK - ~12-acre urban park that includes Wetland W-9A Parking Facilities Grapes (5) and Parking Lots Utility Plants Conservation Wetland 9-A Water Bodies Stormwater Pond 1-F  The KENNETH G. DIXON ATHLETICS VILLAGE, is home to UCF Athletics, ~70 Ac.		
DIXON ATHLETICS VILLAGE  • ARA DRIVE RESEARCH NEIGHBORHOOD	<ul> <li>Recreation &amp; Open Space - Developed         <ul> <li>UCF Athletics facilities (Baseball, Football, Soccer, Track, Softball, etc.)</li> </ul> </li> <li>The ARA DRIVE RESEARCH NEIGHBORHOOD is a mixed use research neighborhood on the south border of campus. ~32 Ac.         <ul> <li>Mixed Use</li> <li>Research Facilities</li> <li>Non-Academic Support Facilities</li> <li>Conservation</li> <li>Wetlands &amp; Conservation Easements W-18/P13 and W19/P-14</li> </ul> </li> </ul>		

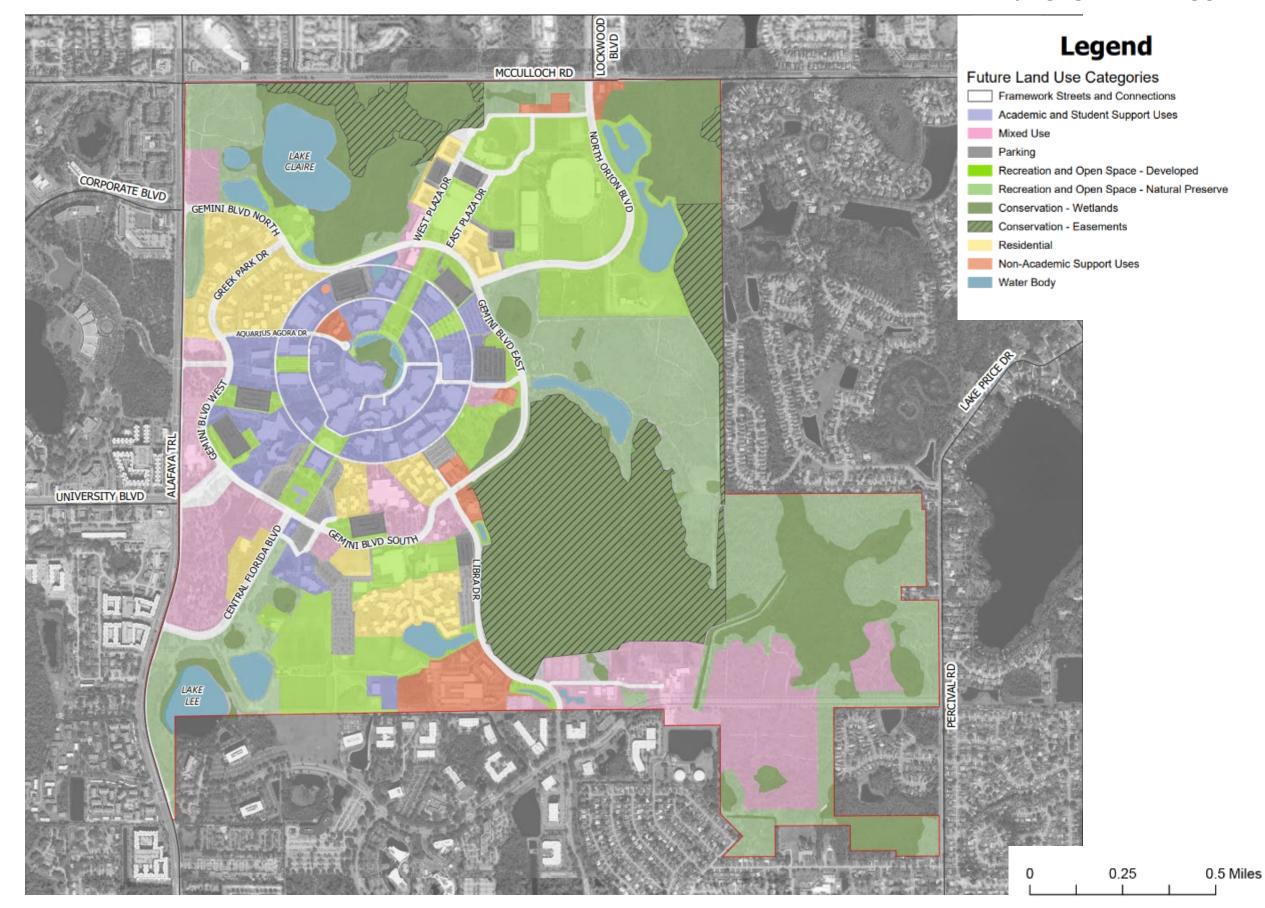
Exhibit 1.4 - 2 (Cont.)	SOUTH CAMPUS      KNIGHTS PLAZA AREA	Water Bodies Stormwater Pond 4-Za Utility Easement Duke Energy - a 160' wide utility easement spans the south UCF Boundary from its east to west border  The SOUTH CAMPUS lies south of Gemini Blvd S., and extends from Central Florida Blvd. to slightly east of Libra Dr., ~180 Ac. Academic/Student Support Facilities Housing Facilities Academic Villages – Nike, Hercules, and Neptune Communities Recreation & Open Space - Developed Recreation & Wellness Center RWC Park Parking Facilities Garage (1) and Parking lots Non-Academic Support Facilities Facilities Complex Conservation Water Bodies Lake Lee (natural lake) Stormwater Ponds 3-A and 4-L  The KNIGHTS PLAZA area, once known as "Uptown UCF", is located north of Gemini Blvd N., along both sides of West Plaza Drive and East Plaza Drive. It abuts the Kenneth G. Dixon Athletics Village on the north and east. Housing Facilities Towers 1-4 Recreation & Open Space - Developed Pixel Use Facilities Recreation & Open Space - Developed
	<ul> <li>LAKE CLAIRE RECREATION AREA</li> </ul>	<ul> <li>Parking Facilities         <ul> <li>Garages (3)</li> </ul> </li> <li>LAKE CLAIRE RECREATION AREA lies south of Lake Claire and north of Gemini Blvd. N., ~4.2 Ac</li> <li>Recreation &amp; Open Space – Developed</li> <li>Water Bodies         <ul> <li>Lake Claire (natural lake)</li> </ul> </li> </ul>
	LAND LEASES	CELESTE HOTEL - occupies land leased to Pegasus LLC, ~5.24 ac.  ORANGE/SEMINOLE COUNTY FIRE/RESCUE STATION # 65 - occupies land leased to Orange and Seminole Counties, ~1.82 ac.
	UNDEVELOPED or UNDER-DEVELOPED	This category includes parcels that have the potential for development or more development.
	EASTERN PARCEL	EASTERN PARCEL at 2912 Percival Rd., ~217.2 ac., extends east from Ara Dr. to Percival Rd., bordered by Regency Park subdivision on the north and Bonneville subdivision on the south. It surrounds Ginger Creek subdivision on three sides.  • Recreation & Open Space - Natural Preserve  • Part of the Parcel, ~ 40 acres, is Developable Land, currently kept in its natural state.  • Conservation  • Wetlands W-21, W-22, W-24, W-25, W-26, W-27, W-28 and part of W-9B  • Utility Easements

# Exhibit 1.4 - 2 (Cont.)

	<ul> <li>Duke Energy a 160' wide utility easement spans this parcel from its east to west border</li> <li>Orange County</li> </ul>
ALAFAYA TRAIL FRONTAGE	FRONTAGE PARCEL bounded by University Blvd., Gemini Blvd. S, and Central Florida Blvd., ~37.0 Ac.  • Mixed Use  • Housing (Burnett House, the UCF President's home)  • Parking  • Developable Land, currently kept in its natural state.  FRONTAGE PARCEL north of Gemini Blvd. N acreage was established by a 2000 CMP challenge, ~6.7 Ac.  • Mixed Use  • Developable Land currently kept in its natural state.  FRONTAGE PARCEL south of Centaurus Blvd a woodland site lying north of the Celeste Hotel, ~4.25 Ac.  • Mixed Use  • Developable Land, currently kept in its natural state.  FRONTAGE PARCEL north of Centaurus Blvd., ~3.6 Ac.  • Mixed Use,  • Parking
UNDEVELOPABLE	This category includes "Recreation & Open Space – Natural Preserve" (lands that UCF has voluntarily designated for long-term preservation), along with Wetlands, Conservation Easements, and Water Bodies
NORTH CAMPUS NATURAL AREA	The NORTH CAMPUS NATURAL AREA, ~144.2 Ac. is located north of Gemini Boulevard N. and West/North of West Plaza Drive. Lake Claire Recreation Area lies within this sector (see DEVELOPED and DEVELOPABLE).  • Recreation & Open Space - Natural Preserve  • Northwest Parcel - Upland Scrub, acreage established by a 2000 CMP challenge, ~17.3 ac.  • Conservation  • Wetlands and Conservation Easements W-1, W-2, W-3, W-4, W-4a, W-4A2, P-1A, P-1B  • Water Bodies  • Lake Claire  • Stormwater Ponds 1-C,1-D, 2-D, Orange County Ponds A and B  • Other  • Utility Easements
EAST CAMPUS NATURAL AREA	The EAST CAMPUS NATURAL AREA is east of Gemini Blvd E and N. Orion Blvd.  Recreation & Open Space - Natural Preserve  ARBORETUM PRESERVE - this part of the Arboretum is made up of natural lands east of Gemini Blvd. E. and South of N. Orion Blvd. The boundaries of the Arboretum have not been surveyed in over 25 years. See a history of Arboretum in 5.0 CONSERVATION with estimated acreages.  PRESIDENT'S RESERVE - This ~47 acre parcel was set aside in 1995 for a future president to determine its use. Categorized in the FLUM as Developable for the last 25 years; this parcel will now be voluntarily preserved in its natural state during the planning interval.  Conservation  Wetlands and Conservation Easements W5, W-9B, W-8/P-5, W-16/P-7 and W-20/P-6, P-2, P-3A, P3-B  Residential Buffers between UCF and single-family residential areas  Water Bodies  Stormwater Ponds 2H, 2-H Ext., 4-R (Creole Pond)  Orange County Pond C

Exhibit 1.4 - 3 Future Land Use Map (FLUM)

Revised Nov 2024











#### 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.

In previous years, UCF's consulting transportation engineers have used projected enrollment to determine future traffic volumes. UCF has not yet developed its projected enrollment vision for the 10-year planning interval, 2025 to 2035

To determine the background traffic growth through the Horizon Year 2035, the following resources were examined:

- 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 negative annual growth rates or growth rates of less than 1% per year within the Context Area.

<sup>&</sup>lt;sup>1</sup> University of Florida, Bureau of Economic and Business Research (BEBR)

Based on this assessment, and to provide a conservative analysis, a minimum 1% background growth rate was assumed for all roadways within the Context Area, as required by Orange County on similar traffic studies.

# STRATEGIC PLAN ALIGNMENT

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<sup>TM</sup> (STARS) Version  $3.0^2$  are shown in **green** text, with the specific *Category and Impact Area* and *Credit* # 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

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

OP-6: Greenhouse Gas Emissions

OP-14: Commute Modal Split

• IL-45: Bicycle Friendly Recognition

• 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,<sup>3</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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.

boundaries, as well as the external roadway facilities located

within the Context Area.

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.)<sup>4</sup>, 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 2023 FDOT Multimodal Quality/Level of Service Handbook (Q/LOS)<sup>5</sup>, 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<sup>6</sup> 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

<sup>&</sup>lt;sup>4</sup> 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.

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

<sup>&</sup>lt;sup>6</sup> See Glossary in 2.1 Introduction for a definition of "Sharrow."

system with that of the host and affected local governments.

development, with available capacity and without degradation to the LOS defined by the University.

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 *Crime Prevention Through Environmental Design* (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 case-by-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)<sup>7</sup>

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

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

<sup>&</sup>lt;sup>7</sup> 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.**

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)

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

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 online<sup>8</sup> 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.

# Pedestrian and Non-Vehicular Systems and Facilities GOP

<sup>&</sup>lt;sup>8</sup> Online assessment addresses: Shuttles@ucf.edu, Decals@ucf.edu and Parkingevents@ucf.edu.

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.



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 buildings<sup>9</sup>

#### (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 safety-enhanced pedestrian crosswalks along all vehicular corridors adjacent to or leading in and out of campus.

POLICY 4.2.2: The University shall continue to coordinate with the host and affected local governments by reviewing their local comprehensive plans, bicycle plans, or pedestrian circulation

OBJECTIVE 4.2:
Coordinate pedestrian
and non-vehicular
circulation systems with
those developed by the
host and affected local
governments.

<sup>&</sup>lt;sup>9</sup> 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."

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 Alafaya 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 Road<sup>10</sup> near Northgate Apartments, between Alafaya Trail and Lockwood Blvd.<sup>11</sup>

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)

POLICY 4.3.1: The University shall continue to educate the campus community with Pedestrian Safety Tips.

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.

POLICY 4.4.1: The University will strive to improve its bicycle facilities in order to maintain its status and improve its ranking as a "Bicycle Friendly University." <sup>13</sup>

(IL-45: Bicycle Friendly Recognition)

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)

OBJECTIVE 4.3: Continue to promote pedestrian safety.

OBJECTIVE 4.4: Continue to grow the cycling culture at UCF, prioritizing ridership and safety.

<sup>&</sup>lt;sup>10</sup> McCulloch Road crossings would require a partnership between UCF, Orange County, and Seminole County.

<sup>&</sup>lt;sup>11</sup> McCulloch Road crossings would require coordination with the improvement of trails through the conservation area at the north edge of the UCF campus.

<sup>&</sup>lt;sup>12</sup> This is included in CDAs executed in 2016 and 2020 between UCF and Orange County.

<sup>13</sup> 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**

GOAL 5: Develop sustainable transportation options, while balancing the economic and social benefits of transportation with the need to protect the environment.

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.

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.

#### **OBJECTIVE 5.4**:

Create a living transportation plan with public involvement.

#### 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 52,000 on the Main Campus alone. Enrollment projections for the Main Campus during the 10-year planning timeframe can be found in the CMP 1.0 INTRODUCTION.

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 Employment The total number of students enrolled on the Main Campus in Fall 2023 was 51,761.

Additionally, there are about 13,000 permanent and temporary employees on the Main Campus.

#### a. Traffic Circulation Systems

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.

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.

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."

There are six (6) major classifications of roads: Expressway Freeway, Principal Arterial, Minor Arterial, Collector (Major and Minor), and Local Road.

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 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:

- <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
- Minor Arterial 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

Level of Service (LOS) Standards

Level of service (LOS) describes a qualitative measure of a roadway's operational performance under existing or projected traffic conditions.

#### Roadways

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 2020 FDOT Quality/Level of Service Handbook (Q/LOS). The FDOT 2020 Q/LOS Handbook includes Table 4 Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas. It shows the existing traffic volumes, roadway geometry and LOS for roadways within the Context Area.

#### See Exhibits

Oversized roadway tables and maps are located in 2.4 EXHIBITS, at the end of this element.

### 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.

# Campus Parking Structures (Garages)

Garage	Year Built / Enlarged	# of Spaces
Garage A	2007	1,647
Garage B	2000	1,289
Garage C	1998 / 2016	1,852
Garage D	2002	1,279
Garage E	2007	696
Garage F	2008	678
Garage G	2000	696
Garage H	2011	1,340
Garage I	1997	1,270
Libra Garage (J)	2014	1,039
TOTAL PARKING IN GARAGE	11,786	

# Parking by User Type

User Type	# of Spaces	% of Total
Student	10,044	57.42%
Housing (Student Residents)	3,646	20.84%
Employee	2,020	11.55%
Reserved	164	0.94%
Disabled	401	2.34%
Meters	184	1.05%
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 parking is allocated for student commuters, with nearly 58% of the total spaces on campus.

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 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 Claire residents. This permit allows parking in the designated Lake Claire (Lots H5-H9).
- KP Permits
- KP permits allow Knights Plaza residents convenient parking in Garage E or G.

Faculty and Staff Parking

Faculty and staff parking spaces total nearly 12% of UCF's available parking.

All-user parking

Some parking spaces, including disabled, overflow, event parking, and motorcycle parking, may be used by all users, including students, faculty, and staff.

Parking Utilization Study

In March 2024, UCF undertook a detailed 5-day Parking Utilization Study for all major lot types on campus, including the quantity of vehicles parked in each lot, utilization by location and time, average counts by location and time of day, and parking capacity by type.

In summary, the study indicated that the student parking lots are more than 60% occupied during most periods of the day with several being close to full capacity. The peak usage for student weekday parking was between 12:00 PM and 2:00 PM. Parking availability during the non-peak periods was 37% to 60%.

For employee parking, the study returned a similar trend to the student parking occupancy. However, the peak period for employee parking was between 10:00AM and 2:00 PM, with occupancy being around 73%.

#### PARKING TECHNOLOGIES

 License Plate Recognition In 2018, UCF began implementing License Plate Recognition (LPR) cameras, starting with camera installations at the main 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).

 Virtual Parking Permits Because of the LPR technology, UCF was able to transition to using virtual parking permits over issuing physical decals. The created 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.

 Tracking Garage Parking Capacity Use of LPR expanded to mobile camera units installed on parking enforcement vehicles.

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.

Parking Enforcement

In addition to cameras installed at the entrances of the campus, 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.

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

UCF/LYNX Transit Center connects the University to Orange, Seminole, and Osceola Counties, as well as the City of Orlando. The UCF/LYNX Transit Center (aka UCF Superstop) is a Main Campus Multimodal Transportation Center located on Leo Lane

LYNX is greater Orlando's regional, public transit service that

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

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.

**UCF Student Union** 

1 2 Lake Claire Community

Additions Financial Arena / Knights Plaza / Towers 3

Engineering / Business Administration / CREOL / Research I 4

5 Physical Sciences / Student Health Center

6 Nike / Hercules / Neptune Communities / Red Coach Connect

7 Ferrell Commons / Recreation and Wellness Center

8 Nike / Hercules / Neptune Communities / Visitor & Parking Information Center

9 Library / Millican Hall / Apollo Community

Teaching Academy / Howard Phillips Hall

11 UCF / LYNX Transit Center

# 10

#### • Off-Campus Transit

Off-Campus Shuttle Routes

:	Route 1 Route 2 Route 3 Route 4 Route 5			
	Route 6			
•	_			
•	Route 7			
•	Route 8			
•	Route 9			
•	Route 10			
•	Route 11			
•	Route 12			
•	Route 13			
•	Route 14			
•	Route 15			
Satellite Campus				

 Satellite Campus Transit

 Rosen College of Hospitality
 Management (RCHM)

 Academic Health Sciences Campus at Lake Nona (AHSC)

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

Apartment Communities	UCF Stop
Knights Circle	Student Union
College Station / Boardwalk	Millican Hall 14
The Verge / The Place at Alafaya	UCF/LYNX Transit Center
Mercury 3100 / Campus Crossings	Millican Hall 14
Nine at Central /Village at Science Dr./	Physical Sci./UCF Health Cntr
Research Pavilion	
Northgate Lakes / Tivoli Apartments	Research 1 Bus Terminal
The Pointe at Central	Millican Hall 14
The Station / Riverwind at Alafaya	Research 1 Bus Terminal
Knights Landing / Research Park	Physical Sci./UCF Health Cntr
Orion on Orpington / The Lofts	UCF/LYNX Transit Center
The Aves at Twelve100	UCF/LYNX Transit Center
Lark Central Florida	Millican Hall 14
NorthView	Research 1 Bus Terminal
Plaza on University	UCF/LYNX Transit Center
Arden Villas / Collegiate Village West	UCF/LYNX Transit Center

Students, faculty and staff with a valid UCF ID can travel via shuttle between UCF's Main Campus and UCF's three satellite campuses in Orlando.

Except on weekends, shuttles run on scheduled class days. Shuttle services change depending on semester sessions, final exam schedules, and special events

RCHM shuttle route stations/stops

- Main Campus Intersection of Pegasus Circle & Aquarius Agora Drive, near Classroom 1 and the Student Union
- Rosen Campus the main parking lot
- No intermediate stops.

Two (2) shuttles operate on one (1) transit route.

#### 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.

Three (3) shuttles operate on one (1) transit route.

#### UCFDT Shuttle stations/stops:

- Main Campus UCF/LYNX Transit Center on Leo Lane.
- UCFDT Dr. Phillips Academic Commons (DPAC)
- No intermediate stops.

<sup>&</sup>lt;sup>14</sup> 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.

# UCF Shuttle Ridership

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	Community	Total	Ridership / Route
<ul><li>Route 1</li></ul>	Knights Circle	147,373	1,889
<ul><li>Route 2</li></ul>	College Station / Boardwalk	29,824	382
<ul><li>Route 3</li></ul>	The Verge / The Place at Alafaya	43,837	562
<ul><li>Route 4</li></ul>	Mercury 3100 / Campus Crossings	47,708	612
Route 5	Nine at Central / Village of Science Drive/ Research Pavilion	40,393	518
<ul><li>Route 6</li></ul>	Northgate Lakes / Tivoli Apartments	44,552	571
<ul><li>Route 7</li></ul>	The Pointe at Central	44,673	573
<ul><li>Route 8</li></ul>	The Station / Riverwind	35,301	453
Route 9	Knights Landing / Research Parkway	15,308	196
<ul><li>Route 10</li></ul>	Orion on Orpington / The Lofts	36,776	471
<ul><li>Route 11</li></ul>	The Aves at Twelve100	61,701	791
<ul><li>Route 12</li></ul>	Lark Central Florida	40,042	513
<ul><li>Route 13</li></ul>	NorthView	41,763	535
<ul><li>Route 14</li></ul>	Plaza on University	36,351	466
<ul><li>Route 15</li></ul>	Arden Villas / Collegiate Village West	52,837	677
<ul><li>PegExp</li></ul>	Pegasus Express	11,369	146
<ul><li>PNR</li></ul>	Park and Ride	923	12
<ul><li>UCFDT</li></ul>	UCF Downtown <sup>[2]</sup>	34,682	445
<ul><li>GS</li></ul>	Tuesday Grocery Shuttle	6,427	82
<ul><li>DT GS</li></ul>	Downtown Grocery Shutte	471	6
<ul><li>HSC</li></ul>	Academic Health Sciences Campus	7,727	99
■ RC	Rosen College of Hospitality Management	44,320	568
	Total Ridership	824,358	
	Average Daily Ridership		10,569

# 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: <a href="https://map.ucf.edu/sidewalks/">https://map.ucf.edu/sidewalks/</a>.

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: <a href="http://map.ucf.edu/bikeracks/">http://map.ucf.edu/bikeracks/</a>.

### **e. Crash Analysis 2018 - 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.

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.

#### **Vehicle Crashes**

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.

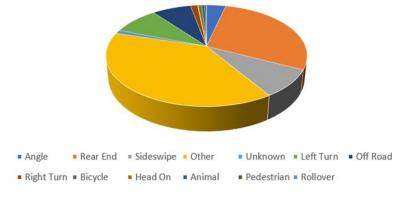
For pedestrian-related crashes, most crashes (60.61%) did not occur at an intersection; however, 24.24% of pedestrian crashes occurred at a four-way intersection.

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 Crashes within the UCF Campus Boundary

Year	Total Crashes	Fatal	Serious Injury	Injury	No Injury
2018	16	0	1	13	2
2019	11	0	1	8	2
2020	6	0	0	6	0
2021	6	1	1	4	0
2022	11	1	0	9	1
2023	7	0	1	6	0

UCF Main Campus Crashes by Crash Type



#### RECOMMENDATION

It would be prudent for UCF to evaluate *high crash areas*, 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 Assessment

#### **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 singlehead 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). Dualarm 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 Transportation 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 *Park & Ride* at Lot E-4 on Homerun 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 <a href="https://ucf.doublemap.com/map/">https://ucf.doublemap.com/map/</a>. 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

 Micromobility Parking

<u>Proposed East</u>
 Orange Trail Spur

## Limited-access Service Roads

Transportation
Demand
Management (TDM)

## **Academic Solutions**

Class Scheduling

 Online Degree Program Residence halls, visitor parking areas, and campus parking lots are connected to other campus destinations via a network of pedestrian walkways and bicycle paths.

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.

Orange County Parks and Recreation Division, and 5<sup>th</sup> 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.

UCF restricts non-service vehicular traffic on roads within the Academic Core<sup>15</sup> 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.

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 policy<sup>16</sup>

The University has implemented academic solutions to reduce congestion and dependence on personal vehicles.

The University has adjusted class scheduling to mitigate peak-hour traffic conditions and maximize utilization of existing transportation infrastructure.

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

<sup>&</sup>lt;sup>15</sup> The Academic Core is within the 1,200-foot radius sidewalk, Apollo Circle.

<sup>&</sup>lt;sup>16</sup>Office of the President "Remote Work Arrangements"; Policy Number EP-20-6.1 3-012; Effective 5/25/2021

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.<sup>17</sup>

- 1. Working in Partnership to facilitate pedestrian safety improvements to the McCulloch Road corridor.
  - a. 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.

<sup>17</sup> Campus Development Agreement Between UCF Board of Trustees and Orange County

- 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.
- 4. UCF will provide ~2.87 acres to amend two existing FDOT easements along Alafaya Trail in support of pedestrian safety projects.
- 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.
- 9. 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 report no other programmed improvements for the external facilities in the Context Area.

The University will strive to provide additional garage(s) during the 10-year Planning Timeframe, to add 2,000 or more parking

# Future Parking Structures

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 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 introduction in this Transportation element, for an explanation of the minimum 1% background growth rate assumed for all roadways within the Context Area.

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 2015-25 CMP planning interval, the University generated -1.73 additional trips per student.

	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 (Anticipat ed)	Net Increase	Net Difference
Enrollment	53,017	51,761	-1,256	2 21
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 Projected Student Enrollment 
 2024
 2034
 Net Increase

 Enrollment
 51,761
 57,176
 5,415

 Anticipated Trips per Student
 1.53

 Vehicle Trips
 79,392
 87,698
 8,306

YEAR 2035 HORIZON YEAR ANALYSIS The 2035 Horizon Year Traffic Assessment is provided in Exhibit 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 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 (Revised Nov 2024)
Exhibit 2.4-2	Future Roadway Conditions Table (Revised Nov 2024)
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 (Revised Nov 2024)
Exhibit 2.4-6	Walking Distances from the Student Union
Exhibit 2.4-7	Proposed Transportation Roadway Projects (Revised Nov 2024)
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 revised Nov 2024

Exhibit 2.4-1
Existing Roadway Inventory 8
Conditions Table

Existing Roadway Inventory & Exhibit is an Inventory and detailed analysis of existing conditions of the roadways within the Context Area.

Road Name	From	То	# Lanes	Jurisdiction	Functional Classification	Adopted	AADT[1]	ĸ	D	Adopted Pk. Hr. /Dir. LOS	PM Pk. Hr. Dir	Source	Current LOS
					Classification	LOS	1	Factor[2]	Factor [3]	Capacity	Volume	1	
	Colonial Drive (SR 50)	Science Drive	6LD	State	Principal Arterial	D	59,187	0.09	0.56	2,680	2,983	FDOT	F
Alefeve Teel (OD 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	Е	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
Comini Dhad North	Alafaya Trail (SR 434)	Greek Park Drive	4LD	UCF	Minor Collector	Е	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
Gemini Blvd. East	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 Bivd. East	Scorpius St.	Libra Drive	4LD	UCF	Minor Collector	Е	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	Е	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
Gemini Blvd. West	University Blvd.	Centaurus Drive	4LD	UCF	Minor Collector	Е	10,447	0.087	0.62	1,530	559	VHB Study	С
Gernini Biva. 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	Е	5,648	0.092	0.73	1,530	379	VHB Study	С
Lake Pickett Road	Colonial Drive (SR 50)	Percival Road	2L	Orange Co.	Major Collector	Е	15,831	0.09	0.55	880	784	Orange County	С
Lake Picket 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
McCulloch Road	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
MCCullocti 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
	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
Rouse Road	Lokanotosa Trail	University Blvd.	4LD	Orange Co.	Major Collector	Е	25,754	0.09	0.52	2,000	1,205	Orange County	С
	University Blvd.	Seminole County Line	4LD	Orange Co.	Major Collector	Е	12,645	0.09	0.52	2,000	592	Orange County	С
University Blvd.	Rouse Road	Alafaya Trail (434)	6LD	Orange Co.	Minor Arterial	Е	55,640	0.09	0.55	3,020	2,754	Orange County	D
Offiverally DIVU.	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	Е	2,031	0.096	0.58	720	113	VHB Study	D

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

<sup>[2]</sup> 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.

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

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

<sup>[5]</sup> 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

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

Exhibit 2.4-2 Future Roadway Conditions Table

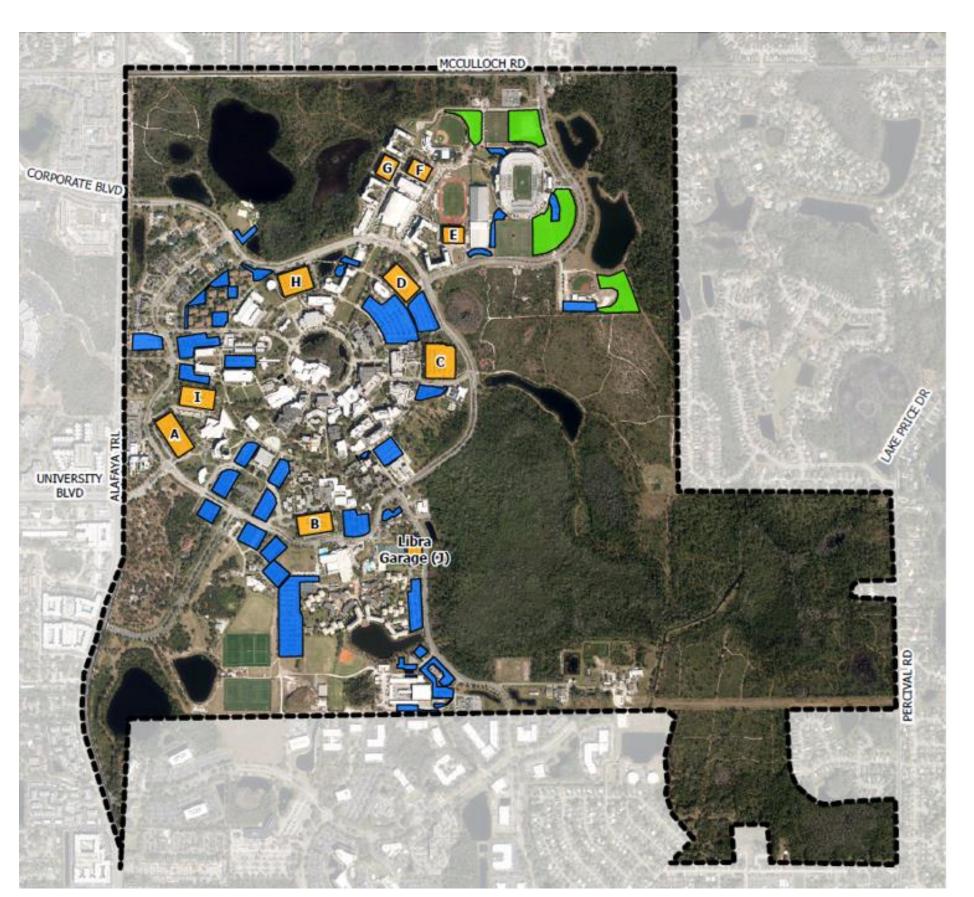
				Roadw	ay Characteristi	cs		YR 2035 Backç	ground Tra	affic	1	Trips General			YR 2035 T	otal Trips		YR 2035 Traffi	ic Conditions	Comparison
Road Name	From	То	No. of Lanes	Adopted LOS	Adopted Pk Hr./Dir. LOS Capacity	Growth Rate	Daily	PM Peak Directional	V/C	Pre-Existing Deficiency (Yes/No)	YR 2035 Distribution (%)	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
rialaya Irali (OK 404) [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	Е	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	Е	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
Consist Black Newly	Alafaya Trail (SR 434)	Greek Park Drive	4LD	Е	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 Blvd. North	Greek Park Drive	Dixon Way (N. Orion Blvd.) [3]	4LD	Е	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
Ossid Blad Foot	Dixon Way (N. Orion Blvd.) [3]	Scorpius St	4LD	Е	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
Gemini Blvd. East	Scorpius St.	Libra Drive	4LD	Е	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	Е	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	Е	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	Е	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	Е	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
Gemini biva. West	Centaurus Drive	Aquarius Agora Dr	4LD	Е	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	Е	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	Е	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	Е	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	Е	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 Fickett Road	Percival Road	S. Tanner Road	2L	Е	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	Е	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	Е	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	Е	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
NICCUIIOCH Road	Lockwood Blvd.	Old Lockwood Rd.	2L	Е	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	Е	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	Е	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	Е	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	Е	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	Е	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
Hairanaika Dhad	Rouse Road	Alafaya Trail (434)	6LD	Е	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	Е	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	Е	720	1.00%	2,254	126	0.18	No	3.75%	104	6	2,358	132	0.18	No	0.18	0.18	No

<sup>[1]</sup> 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

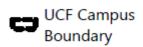
<sup>[2]</sup> Colonial Drive is under FDOT Jurisdiction from Rouse Road to Alafaya Trail, LOS standard for all urbanized state facilities is LOS D according to FDOT Procedures

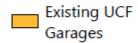
<sup>[3]</sup> On June 25, 2024, N. Orion Blvd was renamed "Ken Dixon Way" by UCF Board of Trustees

Exhibit 2.4-3 UCF On-Campus Parking Facilities



# **Legend**







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

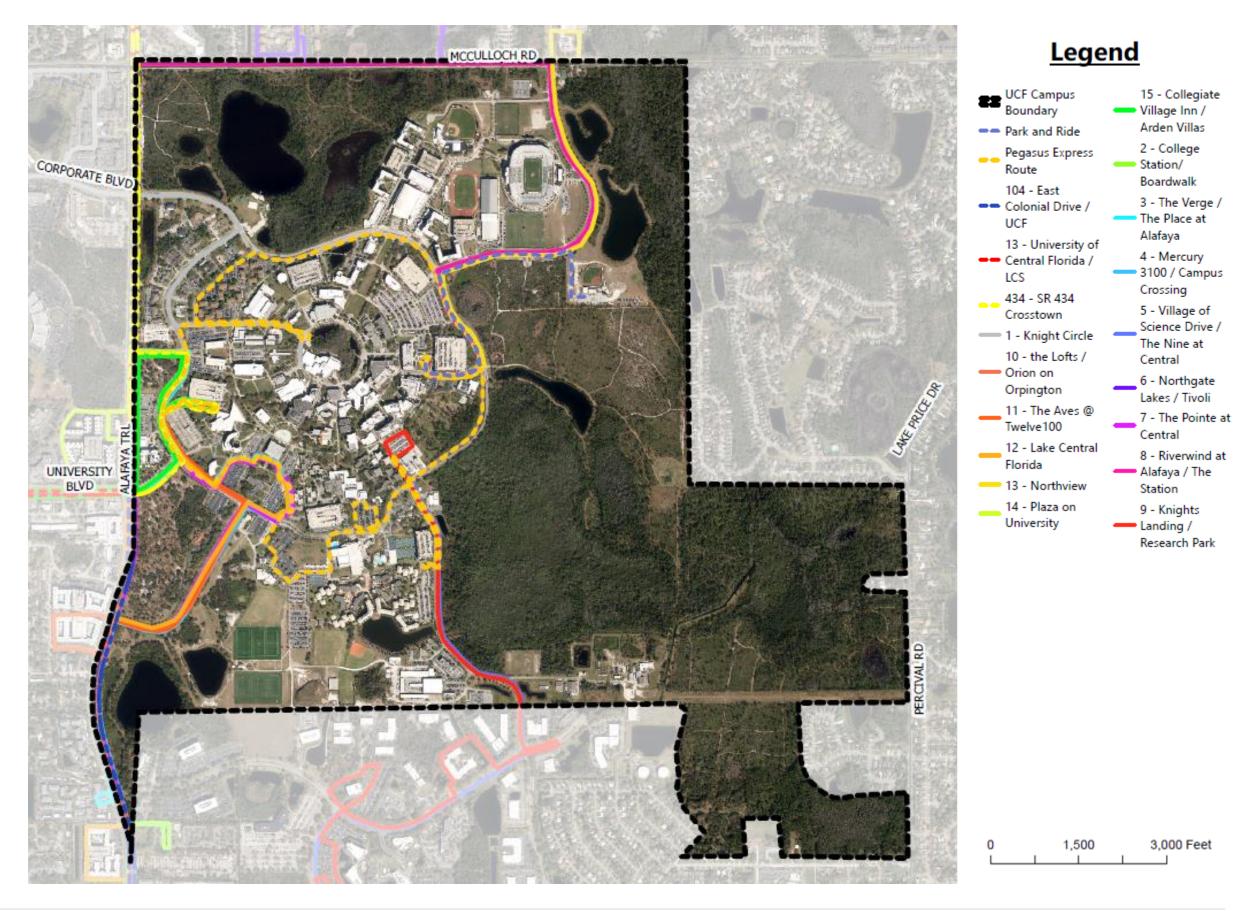
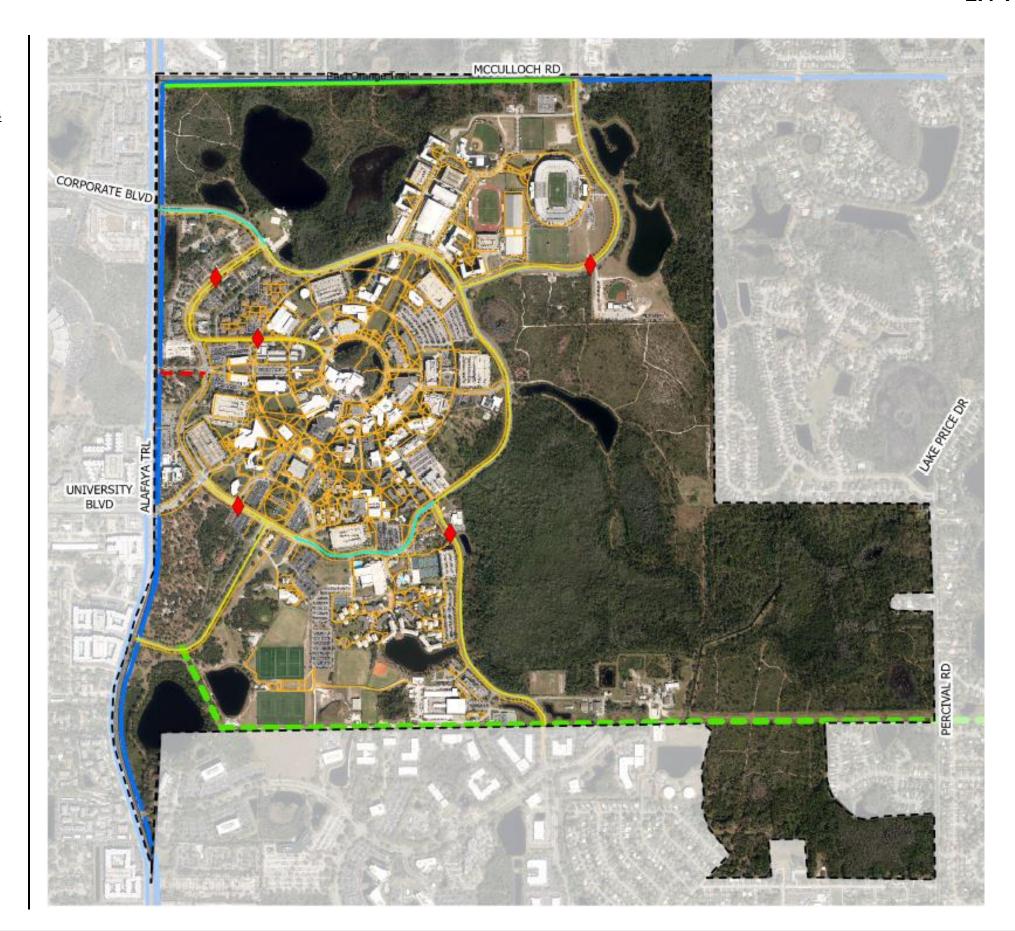




Exhibit 2.4-5 UCF Bike and Pedestrian Facilities

Exhibit 2.4-5 revised Nov 2024



# <u>Legend</u>

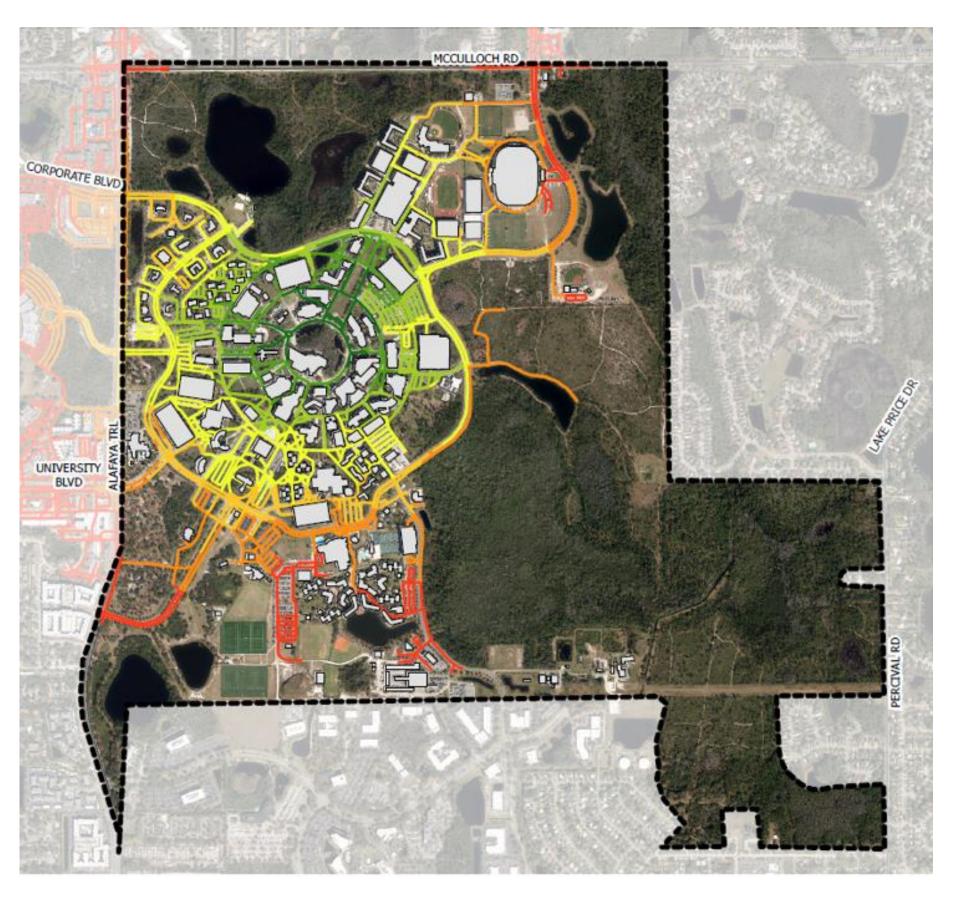
**CCC** UCF Campus Boundary

- Mid-Block Pedestrian Crossing
- Existing East Orange
- \_\_\_ 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





UCF Campus 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

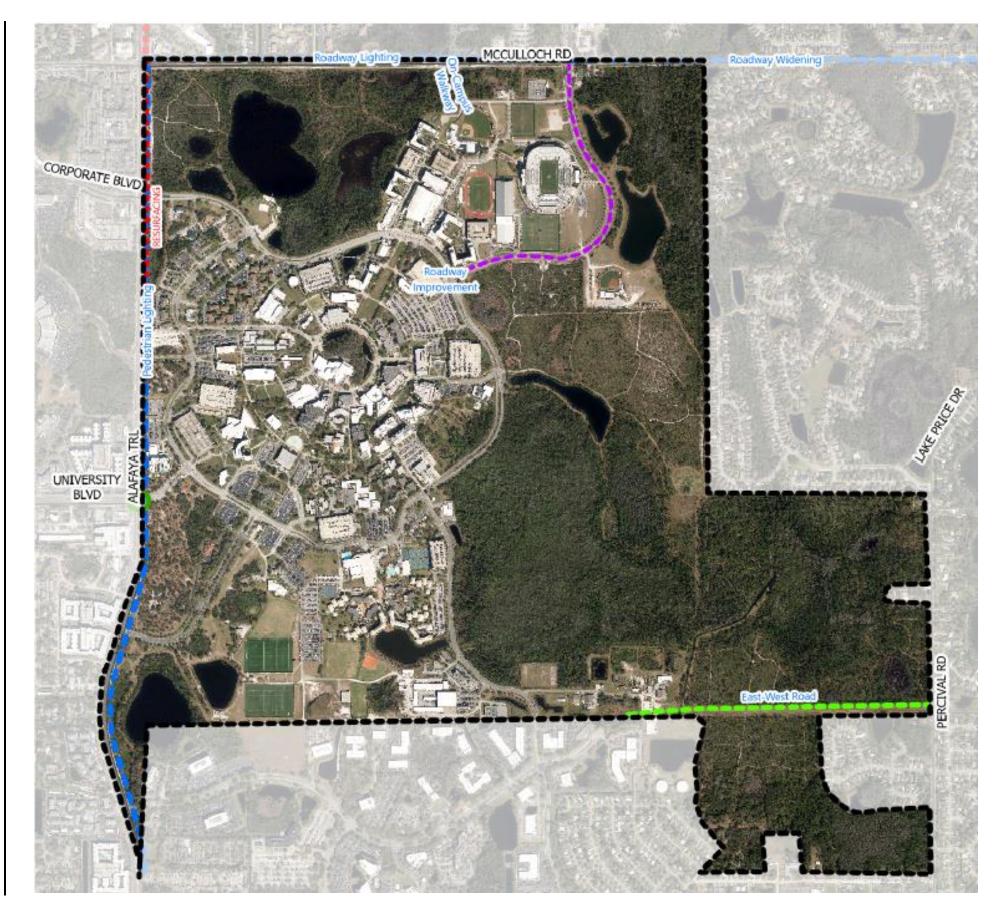
— Greater than 15 Minutes



0 1,500 3,000 Feet

Exhibit 2.4-7
Proposed
Transportation
Roadway Projects

Exhibit 2.4-7 revised Nov 2024



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

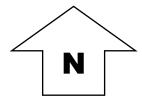
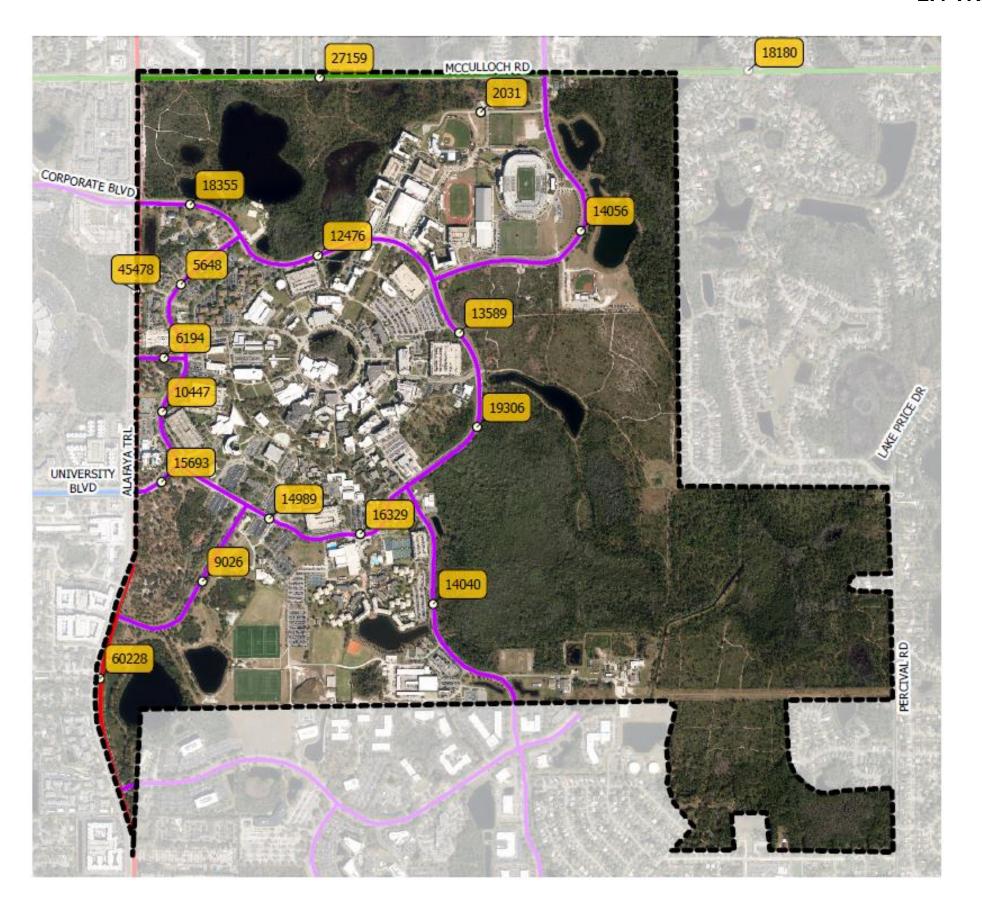


Exhibit 2.4-8
Existing Roadway
Characteristics and
Traffic Counts



# **Legend**

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

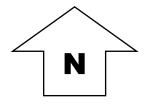
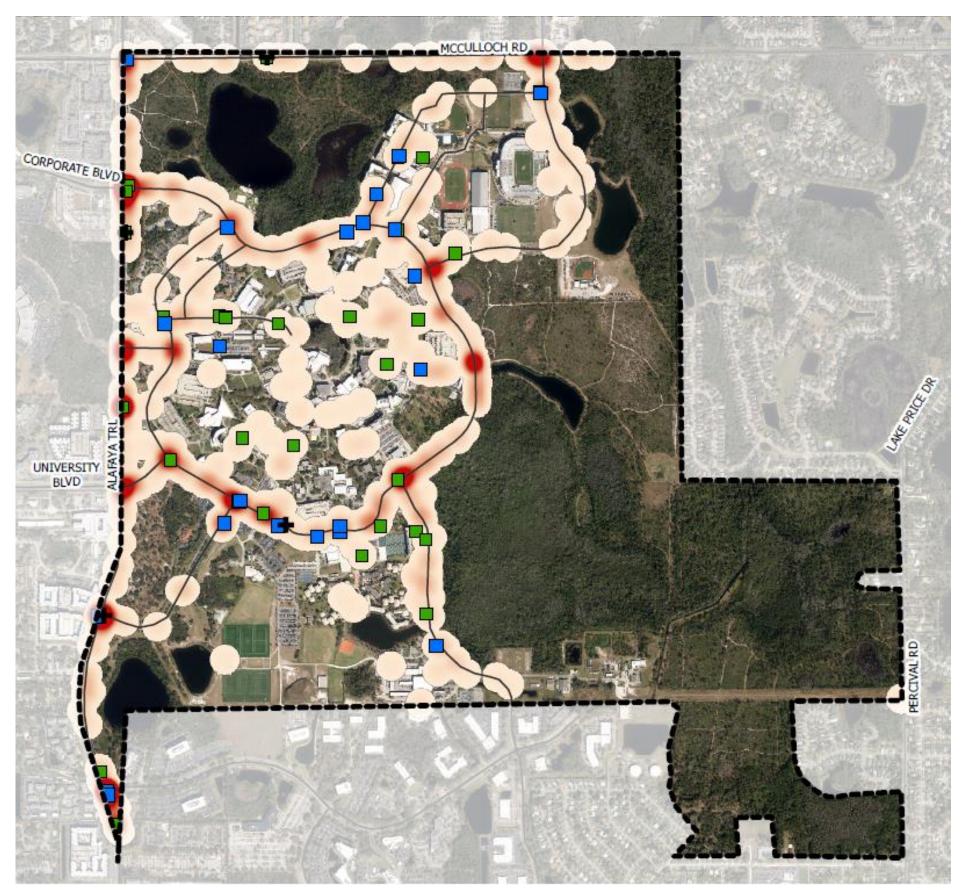


Exhibit 2.4-9 UCF Crash Analysis (Jan 2018 - Dec 2023)



# Legend

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



0 1,500 3,000 Feet



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UNIVERSITY OF CENTRAL FLORIDA

# 3.0 HOUSING

## 2025-2035 CAMPUS MASTER PLAN UPDATE

## **Contents**

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On-Campus Housing	9
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Housing Need	
3.4 EXHIBITS	15

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## 3.1 INTRODUCTION

#### **STATUTE & REGULATION**



Live.

Learn.

Charge On.



The Housing Element, 3.0 HOUSING, is required by Florida Statute 1013.30.

The purpose of the element is described in Florida Board of Governors regulation Chapter 21, Section 21.206, as follows:

"The intent is to ensure the availability of housing facilities on the university campus and within the host and/or affected communities, that are adequate to meet the needs of the projected university enrollment; and eliminate substandard student housing."

The college experience doesn't happen only in a classroom. Learning takes place everywhere, and living on campus provides the convenience and resources students need, to:

- Learn about themselves
- Learn about others
- Learn about their community
- And learn to be a Knight

The Department of Housing and Residence Life (DHRL) provides housing for over 11,000 students on the Main Campus and within the context area, in university-owned, -managed, and -affiliated properties.

Student housing is an integral part of student retention efforts at UCF. The department strives to integrate learning in the residence halls to support academic and co-curricular programs. Learning is guided by a residential curriculum that focuses on three concepts:

- Community Engagement
- Self-Awareness

As a result of living on campus, students will have the opportunity to explore and address their personal and social responsibility in an interconnected world, thus becoming engaged global citizens.

#### Housing and Residence Life Vision Statement

Department of Housing and Residence Life will be a premier experience for students to live, learn, and become tomorrow's global citizens.

#### **Housing and Residence Life Mission Statement**

The mission of the Department of Housing and Residence Life is to provide residents with safe, inclusive housing communities that foster student success through innovative living and learning opportunities.

# STRATEGIC PLAN ALIGNMENT

This element aligns with one of the priorities stated in the UCF strategic plan "UNLEASHING POTENTIAL – Becoming the University for the Future", specifically:

#### **Student Success and Well-Being**

Student Success and Well-Being is at the core of on-campus housing. Students who live in campus communities are consistently retained at a higher level and graduate in 4 years at a higher rate than students who live off-campus. Living on campus provides access to resources that support students navigating the college experience, provide opportunities to engage in campus activities, feel a sense of belonging and thrive as UCF students. The benefits of this access and support extend past a student's time as a campus resident.

#### SUSTAINABILITY

The University's commitment to sustainability through the protection of the environment is evident in the Housing element. New construction considerations, such as bed density and building location, could impact the use of campus natural lands. The operations and maintenance of the existing buildings impacts the amount of water and energy that are consumed on a daily basis.

There are no Goals, Objectives and Policies in this element that specifically align with the Sustainability Tracking, Assessment & Rating System<sup>™</sup> (STARS).<sup>1</sup>

#### RELATED ELEMENTS

See 2.0 TRANSPORTATION regarding parking concurrency for new housing communities.

See 8.0 FUTURE LAND USE for areas of campus that are intended for housing land use.

See 8.0 CAPITAL IMPROVEMENTS & IMPLEMENTATION for housing projects projected in the 10-year planning timeframe.

#### **GLOSSARY**

DHRL Department of Housing and Residence Life

FTIC

First Time in College freshmen are students who have earned a standard high school diploma from a Florida public or regionally accredited high school, or its equivalent, and who have earned fewer than twelve (12) semester hours of transferable college credit since receiving a standard high school diploma or its equivalent (BOG Regulation 6.002). This includes students applying with any dual enrollment credit during high school, even those concurrently earning an AA degree and a high school diploma.

<sup>&</sup>lt;sup>1</sup> STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

## 3.2 GOALS, OBJECTIVES, & POLICIES

GOAL 1: The provision of public and private housing facilities on campus and within the host community should be aligned with the needs and the projected University enrollment during the planning period.

OBJECTIVE 1.1: Strive to align the availability of housing with projected need, using on-campus and University-managed and -affiliated properties.

POLICY 1.1.1: The University shall seek to provide more beds to house a majority house at least 75% of First-Time-in-College (FTIC) full time enrolled (FTE) students and retained 2nd Second-year undergraduate students within the planning period.

POLICY 1.1.2: The University shall continue to provide a variety of on-campus housing options for students. Mixed-use developments shall be considered.

POLICY 1.1.3: University-owned housing shall be built on campus grounds. Future housing sites shall be located on the Future Land Use Element and described in the Capital Improvements Element.

POLICY 1.1.4: The timing and phasing requirements and priorities for future on-campus student housing shall be identified in the Capital Improvements element.

POLICY 1.1.5: Florida Concurrency requirements will ensure the provision of sanitary sewer, potable water, storm water management, and solid waste facilities and are reflected in the General Infrastructure element.

POLICY 1.1.6: UCF Concurrency requirements will ensure the provision of chilled water, electrical power, natural gas and telecommunications, and are reflected in the General Infrastructure element.

POLICY 1.2.1: University-managed and -affiliated off-campus housing shall be provided to ensure availability of housing within close proximity to campus. The University shall apply similar rules and regulations to students living in these facilities as to on-campus housing, and shall provide services (e.g., shuttles) to create and

POLICY 1.2.2: The University shall provide information on student enrollment to private developers and local governments, to ensure that the off-campus housing stock (beds) and support facilities continue to meet the demands of the student body projected not to be housed on campus.

maintain functional connections to the Main Campus.

POLICY 1.2.3: The University shall continue to provide information to students concerning the availability of affordable, off-campus housing within proximity to campus.

POLICY 1.2.4: The "Student Neighborhood Relations" office shall continue to:

OBJECTIVE 1.2: Support the development of offcampus housing within the Context Area, to address projected need.

- Monitor the supply, costs, and suitability of off-campus housing.
- Maintain a registry of off-campus housing providers.
- Monitor factors pertaining to safety, pedestrian access, transit utilization, etc.

OBJECTIVE 1.3: Ensure capital renewal of existing student housing to prevent or eliminate substandard student housing.

POLICY 1.3.1: Preventative maintenance programs shall be established and reviewed periodically.

POLICY 1.3.2: The timing or phasing for renovation and remodeling of existing university-controlled housing facilities will be determined by Facility Condition Assessments conducted during the planning interval and coordinated with student occupancy.

## 3.3 DATA & ANALYSIS

## **On-Campus Housing**

#### **Descriptions**

UCF has numerous on-campus housing communities built between 1968 and 2013. The bed counts for the housing described below are listed under HOUSING INVENTORY in this section.

Apollo Community The University's first housing project, the Apollo Community, opened in the fall of 1968. It consists of four residence halls (Volusia, Lake, Osceola, and Polk Halls) that are two-story structures with suite-style living units. Each suite consists of two double rooms, a common living area and bath, and in some cases, a single room.

Libra Community UCF's second housing project, the Libra Community, was built in 1980 to accommodate 446 student spaces. It consists of three residence halls (Brevard, Orange, and Seminole Halls) and a Commons building. Orange and Seminole Halls are four-story buildings, and Brevard Hall is a three-story building. All rooms in this community are suite-style, with two double rooms sharing one bathroom.

 Lake Claire Community Apartments In 1994, the on-campus housing options for students were further diversified with the opening of the Lake Claire Community Apartments. This community consists of fifteen, three-story buildings and a Commons building. The apartments were designed to meet the needs of upper-level, single undergraduates, and graduate students. In addition to offering cooking facilities, which the residence halls do not have, each apartment has four single bedrooms, two bathrooms, and a living room.

Libra Community II Phase II of the Libra Community opened in the spring of 1999. Citrus, Sumter, and Flagler Halls were designed to meet the continued demand to house freshmen and sophomores on-campus. All rooms are double occupancy, suite-style, with four students sharing a bathroom. The rooms are configured around a common lounge/student space. Additional common area spaces were added to the Libra Community with this project.

 The Academic Village This project was constructed in two phases. Phase I opened in 2001 (Nike), and Phase II in 2002 (Hercules). Academic Village consists of suite-style residence halls where four students share a bathroom, and apartments that house either two or four students, with two students sharing one bathroom. The residence halls are three-story structures, with the apartment building ranging from two to four stories in height. Student programming space is included in both phases of the project.

 Academic Village II Academic Village II (Neptune) opened in August 2013. This project consists of three buildings, ranging in height from four to five stories. The living units are in a suite configuration, with four single bedrooms sharing two bathrooms. Every residential floor has a communal kitchen, TV lounge, study room, and laundry room. Community amenities include a 60-seat classroom, a large multipurpose room and kitchen, two large group study rooms, a grab-and-go food store, a mail center, a large outdoor patio space

with wireless internet, and offices for residence life staff, an academic advisor, and a counselor.

 The Towers at Knights Plaza The Towers, four seven-story buildings with a combined design capacity of 2,004 student spaces, was constructed in three phases, opening in 2006, 2007, and 2008 respectively. Students may choose from a combination of 4 bedroom / 2 bath, 4 bedroom / 4 bath, and 1 bedroom / 1 bath apartments. All bedrooms are single occupancy. Small study lounges are included on six (6) of the seven (7) floors. The ground floor lobbies, and adjacent courtyards provide student programming space for educational and social events.

## Managed and Affiliated Housing

UCF manages, or affiliates with, properties located off-campus including NorthView, which serves the main campus.

When all UCF-owned and -managed facilities have reached full capacity, students are referred to University-affiliated housing. Affiliated properties include Knights Circle, The Pointe at Central, and Union West on the Downtown Campus. Residence Life services are provided at each affiliated complex by the incumbent property management firm(s), and the UCF Police Department provides services at Knights Circle, The Pointe at Central, and the Downtown Campus including UnionWest.

## ADA Compliance

UCF Housing complies with ADA Accessibility Guidelines (ADAAG) throughout the building inventory.

### **Housing Inventory Beds on the Main Campus**

## Housing Communities



Community	Building	Beds						
APOLLO COMMUNITY								
	Lake Hall	Suite	108					
	Osceola Hall	Suite	103					
	Polk Hall	Suite	108					
	Volusia Hall	Suite	108					
APOLLO Tota	APOLLO Total Beds							



LIBRA COMMUNITY						
Brevard Hall	Suite	121				
Orange Hall	Suite	156				
Seminole Hall	Suite	162				
Citrus Hall	Suite	116				
Sumter Hall	Suite	232				
Flagler Hall	232					
LIBRA Total Beds	LIBRA Total Beds					



LAKE CLAIRE COURTYARD APARTMENTS						
	Building 55	Apartment	47			
	Building 56	Apartment	47			
	Building 57	Apartment	47			
	Building 58	Apartment	47			

	Building 59	Apartment	47
	Building 60	Apartment	47
	Building 61	Apartment	47
	Building 62	Apartment	47
	Building 63	Apartment	47
	Building 64	Apartment	43
	Building 66	Apartment	47
	Building 67	Apartment	47
	Building 68	Apartment	47
	Building 69	Apartment	47
	Building 70	Apartment	47
LAKE CLAIR	E Total Beds		701
ACADEMIC V	/ILLAGE		
Nike	Building 101	Suite	143
Community	Building 102	Suite	151
	Building 103	Suite	169
	Buildings 104-105	Apartment	176
	Buildings 106-107	Apartment	176
Hercules	Building 108	Suite	139
Community	Building 109	Suite	151
	Building 110	Suite	169
	Buildings 111-112	Apartment	176
	Buildings 113-114	Apartment	180
Neptune Community	Building 156	Suite	203
	Building 157	Suite	208
	Building 158	Suite	254
ACADEMIC V	ILLAGE Total Beds	1	2,295
TOWERS AT	KNIGHTS PLAZA (Managed Hous	ina)	
	Tower 1	Apartment	502
	Tower 2	Apartment	510
	Tower 3	Apartment	478
	Tower 4	Apartment	506
TOWERS Tot			1,996
Total Mair	n Campus Residence Hall	Beds	6,438
Total man	- Campuo Rooidonoo Han		0,400
FRATERNITY	//SORORITY (State-owned building	gs)	
	Alpha Epsilon Phi	Greek	39
	Kappa Alpha Theta	Greek	45
	Chi Omega	Greek	40
	Kappa Kappa Gamma	Greek	40
FRATERNITY	//SORORITY (Other building owne	ers)	
· · · · · · · · · · · · · · · · · · ·	July 1 (Outer ballating Owne	· •/	









Greek

40

Zeta Tau Alpha Sorority

	Delta Delta Delta Sorority	Greek	52	
	Pi Beta Phi Sorority	Greek	39	
	Alpha Tau Omega Fratern	ity Greek	34	
	Alpha Xi Delta Sorority	Greek	21	
	Alpha Delta Pi Sorority	Greek	32	
	Kappa Delta Sorority	Greek	28	
	Sigma Chi Fraternity	Greek	33	
	Kappa Sigma Fraternity	Greek	24	
	GREEK HOUSING Total Beds		467	
UCF-managed	NORTHVIEW (Main Campus)	594		
Housing	TOTAL UCF-MANAGED Beds	594		
MAIN CAMPUS HOUSING TOTALS	UCF-Owned and -Managed Beds serving the Main Cam Housing Communities Total Beds Greek Housing Total Beds NorthView Total Beds			
	TOTAL UCF-Owned and -Managed Bed	<u>7,499</u>		
UCF-affiliated	KNIGHTS CIRCLE (Main Campus)		2,532	
Housing	THE POINTE AT CENTRAL (Main Campus)	1,224		
	UNIONWEST (UCF/Valencia downtown cam	635		
	Total UCF-Affiliated Beds serving the	4,391		
	GRAND TOTAL (including Greek	11,890		
Other Managed Housing	Housing on UCF's satellite campuses has the potential to offset demand on the Main Campus for students who take coursework on more than one campus and choose to live at a satellite campus. See UnionWest (UCF Downtown) <sup>2</sup>			
	Rosen College of Hospitality Management (R	388		
	Total UCF- Managed Beds on Satellite Campuses		388	
UCF Housing Support Facilities	<ul> <li>Libra Community Center (Bldg. 0033)</li> <li>Lake Claire Community Office and Center (Bldg. 0065)</li> <li>Housing Administration Building (Bldg. 0073)</li> <li>Academic Villages Mail Center (Bldg. 0115)</li> <li>Housing Administrative Services (Bldg. 0159)</li> <li>Fraternity and Sorority Life (Bldg. 0415)</li> </ul>			
	Housing Administrative Servi	ces (Bldg. 0159)		
Off-Campus Non-University	Housing Administrative Servi	ces (Bldg. 0159)	# Beds	

<sup>&</sup>lt;sup>2</sup> UnionWest student housing at UCF Downtown is no longer managed by UCF. UCFDT housing has some potential to offset demand on the Main Campus; but Valencia students make up a majority of the UnionWest population.

Facilities Complex Name/Rental Range/Beds

Arden Villas	\$887 – \$1,247	624
Boardwalk at Alafaya Trail	\$849	480
Campus Crossings on Alafaya	\$755	888
College Station Orlando	\$825	300
Current Orlando	\$1,041 - \$1,675	286
HUB on Campus Orlando	\$809 - \$857	745
Lark Central Florida	\$966 - \$1,615	995
Mercury 3100	\$947 - \$966	836
Northgate Lakes	\$1,009 - \$1,072	710
Orion on Orpington	\$901	624
Plaza on University	\$1,123 - \$1,184	1,308
Riverwind at Alafaya Trail	\$724 - \$738	436
The Accolade Collegiate Village East	\$1,222 – \$1,703	513
The Accolade Collegiate Village West	\$1,125 – \$1,730	1,096
The Aves @ Twelve 100	\$1,080 – \$1,664	1,527
The Lofts Orlando	\$953 - \$1,495	726
The Nine at Central	\$1,013 - \$1,794	764
The Phoenix	\$816 - \$1.299	394
The Quad	\$765	384
The Retreat East	\$795 - \$1,115	602
The Retreat West	\$895 - \$1,075	894
The Station Alafaya	\$1,000 - \$1,084	750
The Verge Orlando	\$969 - \$1,639	930
The Village at Science Drive	\$999 - \$1,044	728
Tivoli Orlando	\$735 - \$1,300	684
Vale East	\$949 - \$1,099	476

## **Housing Need**

# Housing Demand

The demand and need for on-campus housing at UCF will be informed by multiple sources that may include <u>Projected Enrollment</u> data,<sup>3</sup> housing application processes and occupancy data, data from external sources, as well as county and state government entities responsible for approving proposed multi-family housing project development.

The University strives to provide on-campus housing for 75% of <u>First-Time-in-College</u> (FTIC) students to enhance students' first-year experience and the overall collegiate environment. Remaining inventory will focus on Second-year students in an effort to support university retention efforts.

Additional on-campus housing will continue to strengthen the University community, increase retention and progression, and alleviate the University's impact on neighborhoods within the context area.

Housing
Analysis
FTIC Main
Campus Beds
2024 - 2034

Main Campus Beds 2024	<u>7,499</u>
Fall 2024 FTIC	
FTIC full-time enrolled <sup>4</sup>	<u>6,721</u>
FTIC full-time enrolled 75% Target	<u>5,041</u>
FTIC full-time enrolled Housed on Main Campus (83.2%)	<u>5,597</u>
Projected Fall 2034 FTIC	
FTIC full-time enrolled	<u>7,248</u>
FTIC full-time enrolled 75% Target	<u>5,436</u>

## Potential On-Campus Housing Sites

UCF has identified several potential sites for future housing communities:

- Site on Gemini Boulevard South, west of the Recreation and Wellness Center (Bldg. 0088) at the former site of Buildings 0038 and 0039
- Site of Parking Lot B-9, south of Ferrell Commons and the Housing Administration Building
- Site of the current Creative School for Children (CSC) at the intersection of Gemini Boulevard South and Libra Drive.
  - CSC will be moving to a new facility during the planning interval.

Projected housing projects and sites may be revised from those mentioned here or shown in FUTURE LAND USE and CAPITAL IMPROVEMENTS <u>exhibits</u>. Such revisions may require a Minor Amendment to this 2025-35 Campus Master Plan Update.

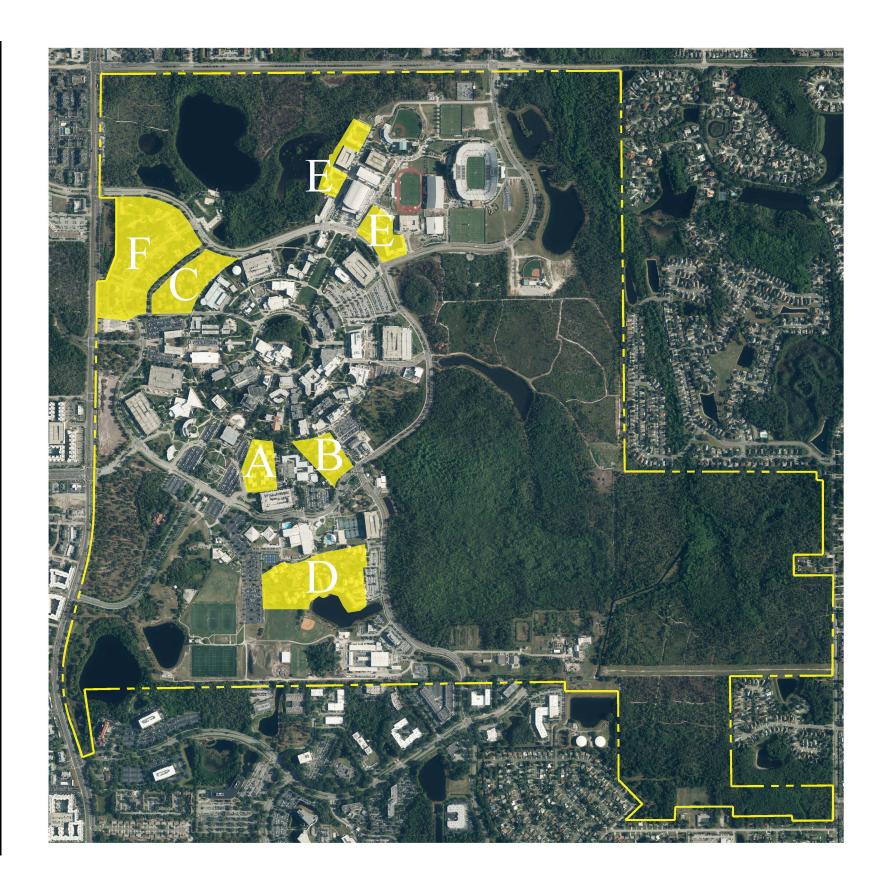
<sup>&</sup>lt;sup>3</sup> See FUTURE LAND USE element for Enrollment Projections.

<sup>&</sup>lt;sup>4</sup> Full Time Enrollment or FTE (12 hour) is part of the terms and conditions in the UCF housing agreement.

## 3.4 EXHIBITS

Exhibit 3.4-1 Existing On-Campus Housing Map Exhibit 3.4-2 Off Campus Housing Map (Context Area)

Figure 3.4-1 Existing On-Campus Housing Map

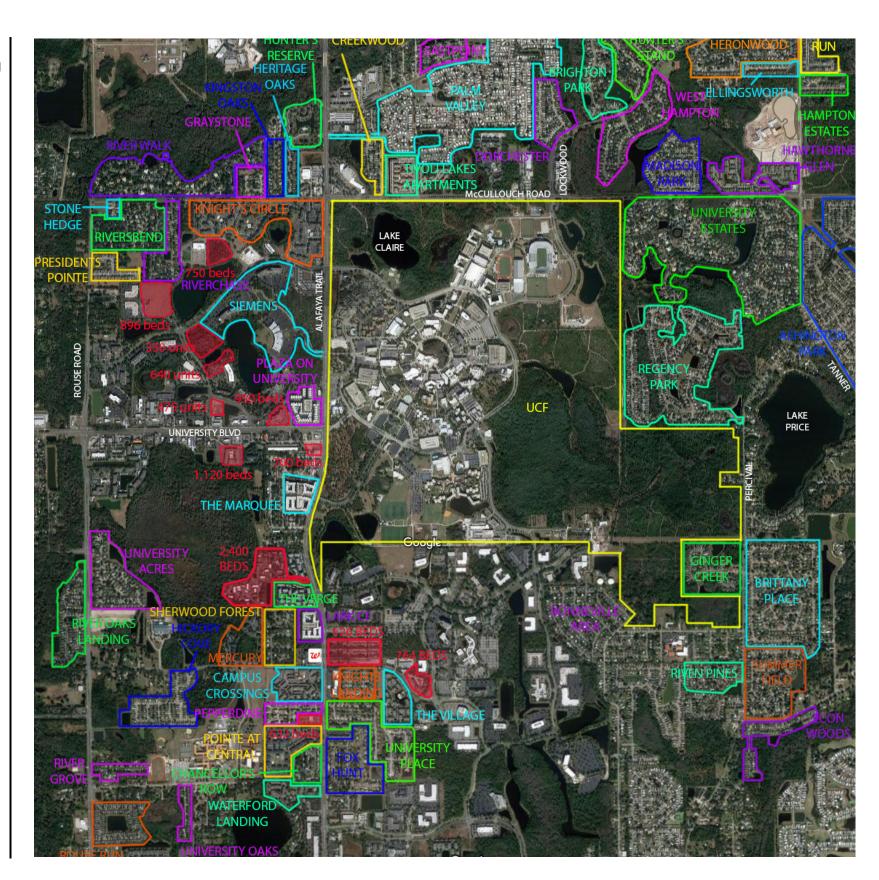




- A. Apollo Community
- B. Libra Community
- C. Lake Claire Community Apartments
- D. Academic Villages
- E. The Towers at Knights Plaza
- F. Greek Park



Figure 3.4-2 Off Campus Housing Map (Context Area)





Map indicates existing off-campus singlefamily and multi-family housing. Colors indicate separate neighborhoods.

Student Housing developments that are in planning, design, construction, or have recently opened are shown in red.





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# UNIVERSITY OF CENTRAL FLORIDA

# **4.0 GENERAL INFRASTRUCTURE**

# 2025-35 CAMPUS MASTER PLAN UPDATE

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# 4.1 INTRODUCTION

# STATUTE & REGULATION



#### **NARRATIVE**

The General Infrastructure element is required by Florida Statue 1013.30(3). The element must follow the guidelines stated in Florida Board of Governors (BOG) Regulation 21.207:

"This element ensures the provision of adequate capacity for stormwater management, potable water, sanitary sewer and treatment, and solid waste facilities required to meet the future needs of the university. The General Infrastructure Element shall consist of a Stormwater Management Sub-Element, a Sanitary Sewer Sub-Element, a Potable Water Sub-Element, and a Solid Waste Sub-Element."

These plans are intended to ensure that growth does not negatively impact the environment, and that infrastructure and University-provided utility services are not overwhelmed by unplanned development.

Future development shall optimize the use of existing utility infrastructure and utility generation assets. Conserving precious water resources through ongoing collaborative and integrated planning will avoid technical and financial risks, and capacity constraints associated with overburdening the University's generation, distribution, and transmission systems.

Campus development shall adhere to development best practices - meeting or exceeding University and State prescriptive green-building requirements to effectively minimize energy and water consumption These practices will reduce utility demands, the need for additional infrastructure and capacity, and ensure sustainable university growth.

UCF shall continue to apply engineering rigor to all design considerations for energy and water efficiency initiatives implemented in campus facilities. All building systems shall be treated as "utility system assets" in renovation projects resulting in more effective and efficient use of resources to reduce regional resource impacts, campus operational expenses, and overall environmental impact.

# STRATEGIC PLAN ALIGNMENT

This element aligns with all four priorities stated in the UCF strategic plan "UNLEASING POTENTIAL – Becoming the University for the Future."

# Student Success and Well Being

Well-maintained infrastructure directly impacts the student experience:

 Reliable Power Supply: A reliable electrical system is essential for uninterrupted learning. Students rely on powered devices (laptops, tablets, etc.) for research, assignments, and virtual classes.

- Heating and Cooling: Proper climate control ensures comfort in classrooms, libraries, and dorms.
- Water and Sanitation: Clean water supply and functional restrooms are basic necessities.

# Discovery and Exploration

High-quality infrastructure plays a crucial role in supporting research and innovation:

- Laboratories and Research Centers: State-of-the-art labs, technology centers, and collaborative spaces are essential for cutting-edge research, and have intense infrastructure demands.
- Infrastructure for Emerging Fields: As UCF expands its focus on fields like cybersecurity, space exploration, and biotechnology, appropriate infrastructure is vital.

# Community and Culture

Infrastructure projects can positively impact the surrounding community:

- Community Spaces: Quality shared facilities (such as event venues, libraries, or parks) can benefit both UCF and the local community.
- Collaboration Opportunities: Infrastructure can foster partnerships with local businesses and organizations.

# Innovation and Sustainability

One of the specific goals in the Strategic Plan is to achieve STARS Gold, which offers many points for Operations efficiency. Aligning infrastructure planning with sustainability goals is critical. Implementing energy-efficient systems reduces UCF's environmental impact and costs.

- Green Building Practices: Sustainable construction methods and materials contribute to long-term environmental stewardship and occupant comfort.
- Alternative Transportation: Encouraging biking, walking, and public transportation reduces carbon emissions and expands campus accessibility.

Sustainability is integral to UCF's campus development and General Infrastructure. This encompasses energy efficiency, responsible water management, green building practices, and waste management. By prioritizing these aspects, UCF ensures a cost effective, resilient, and eco-friendly campus that benefits both current and future students.

Goals, Objectives and Policies that align with the Sustainability Tracking, Assessment & Rating System<sup>TM</sup> (STARS)<sup>1</sup> are shown in **green text**, with the specific *Category and Impact Area* and

**SUSTAINABILITY** 

<sup>&</sup>lt;sup>1</sup> STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

*Credit #* indicated in parentheses after the Goal, Objective, or Policy.

Specific STARS sections in this element are aligned with the Category and Impact Area, **Operations (OP)**, and with these STARS 3.0 credits:

- OP-3: Water Use
- OP-4: Ecologically Managed Grounds
- OP-5: Energy Use
- OP-6: Greenhouse Gas Emissions
- OP-12: Waste Generation and Recovery

### RELATED ELEMENTS

See 5.0 CONSERVATION for utility use reduction strategies for energy and water conservation.

See 5.0 CONSERVATION for Conservation Easements.

See 8.0 CAPITAL IMPROVEMENTS for projected capital improvements during the planning timeframe.

# **CONCURRENCY**

Concurrency Management Systems are defined in Florida Statute 163.3180 as sanitary sewer, solid waste, drainage [stormwater] and potable water.

UCF has elected to make additional facilities and services subject to concurrency, and included Sub-elements for: chilled water, electrical power, natural gas and telecommunications systems.

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# 4.2 GOALS, OBJECTIVES, & POLICIES

# 4.2 Utility Infrastructure Overview

GOAL 1: Develop and manage UCF's utility production, distribution infrastructure, and associated capital assets to support campus needs.

OBJECTIVE 1.1: Ensure that there is adequate and reserve capacity and infrastructure for distribution, transmission, and generation to accommodate growth.

POLICY 1.1.1: Utility infrastructure costs shall be considered as a component of a new building and renovation project budgets.

POLICY 1.1.2: No development may be permitted if utility generation, infrastructure, and/or capacity is not available concurrent with the impacts of the development.

Fiscal obligations for projects that increase campus capacity of infrastructure will be addressed in the "Utility Master Service-Level Disclosure."

POLICY 1.1.3: The University shall transition towards higherdensity new construction and renovation practices, seeking to maximize existing space, reduce energy-intensive mixed-use space, and implement alternative lower-carbon and resourceefficient expansion to reduce the capital required to adequately expand utility infrastructure University generation capacity.

POLICY 1.1.4: To reduce the impact on greenhouse gas emissions, building operations, and utility costs, Utilities and Engineering Services (UES) shall have first-right of refusal for utility services where production and infrastructure capacity is available, and to all categories of end users and public-private partnerships. Commodities include natural gas, electric, water, stormwater, wastewater, chilled water, and heating-hot water.

POLICY 1.1.5: UES is the single point of contact and liaison for all utility distribution design, interconnection, disconnection, expansion, and construction of utility facilities.

OBJECTIVE 1.2: Monitor and inventory infrastructure assets using smart technologies.

POLICY 1.2.1: The University will use GIS mapping to track, maintain, and protect its infrastructure distribution systems.

POLICY 1.2.2: The University will implement and maintain smart infrastructure technologies to monitor reliability and efficiency of infrastructure distribution and production systems.

# 4.2-A Stormwater Management Sub-Element

#### NARRATIVE

The University's stormwater system is located within the St. Johns River basin and is regulated by the St. Johns River Water Management District (SJRWMD).

As defined by SJRWMD, stormwater is rainwater that runs off of hard surfaces into the nearest body of water, both natural lakes and/or man-made retention ponds. A stormwater system is a tool for managing that runoff.

As UCF continues to develop, stormwater management remains crucial; as new development increases the risk of flooding through disruption to natural hydrological systems and watersheds.

GOAL 2: Manage stormwater to protect campus populations and facilities, remain sensitive to environmental inputs, and accommodate university growth.

OBJECTIVE 2.1: Pursue low-impact development practices to prevent increases to stormwater runoff.

POLICY 2.1.1: Stormwater retention and detention features shall be incorporated into the design of parks, trails, commons and open spaces, and building roof tops where such features do not detract from to enhance the recreational or aesthetic value of a site.

# (OP-3: Water Use)

POLICY 2.1.2: Native vegetation and/or xeriscaping shall be employed, where feasible, to reduce peak runoff downstream through infiltration and storage.

## (OP-4: Ecologically Managed Grounds)

POLICY 2.1.3: Techniques such as infiltration, storage and reuse, bioretention, open-grid pavement semi-pervious surfaces, and the reduction of impervious areas shall be used to reduce runoff.

## (OP-4: Ecologically Managed Grounds)

POLICY 2.1.4: Any future development that increases the quantity of impervious surface shall report the change in total volume of runoff (in cubic feet) relative to the existing site performance of stormwater runoff, assuming the 95<sup>th</sup> percentile of rainfall events.

# (OP-3: Water Use)

POLICY 2.2.1: The University shall use slow-release fertilizers and/or carefully managed and timed fertilizer applications to ensure maximum root uptake and minimal surface water runoff or leaching into groundwater.

## (OP-4: Ecologically Managed Grounds)

POLICY 2.2.2: The University shall perform routine maintenance on its motor vehicle fleet to prevent oil, grease, and other fluids from leaking onto impervious surfaces, where they might be conveyed to surface and ground waters by runoff.

OBJECTIVE 2.2: Use Green Industry Best Management Practices (BMPs) to minimize University-generated stormwater pollutants.

# (OP-4: Ecologically Managed Grounds)

POLICY 2.2.3: The University shall avoid the use of broadspectrum pesticides, using the least-toxic and minimal applications, aimed at targeted species, when possible.

## (OP-4: Ecologically Managed Grounds)

POLICY 2.2.4: The University shall coordinate pesticide application with irrigation schedules to reduce runoff and leaching into groundwater.

# (OP-4: Ecologically Managed Grounds)

POLICY 2.2.5: The University shall incorporate features into the design of fertilizer and pesticide storage, mixing, and loading areas that are designed to prevent/minimize spillage.

# (OP-4: Ecologically Managed Grounds)

OBJECTIVE 2.3: Oversee UCF's stormwater management.

POLICY 2.3.1: UES shall maintain all rainwater management facilities, perform monthly inspections, and resolve any issues within three months of identification.

POLICY 2.3.2: UES shall perform all subsurface maintenance pertaining to stormwater management including, but not limited to, inlets, manholes, and pipes connecting stormwater movement and drainage.

POLICY 2.3.3: UES shall perform all above-ground maintenance pertaining to stormwater, including but not limited to areas of erosion, retention and detention ponds, storm inlets, and environmental permitting.

# 4.2-B Sanitary Sewer Sub-Element

# **NARRATIVE**

The University operates and maintains its own sanitary sewer collection facilities and transportation network comprising basins, lift stations, force mains, gravity lines, pump stations, and appurtenant equipment to collect and transport effluent to the Iron Bridge Water Pollution Control Facility (Iron Bridge), a regional wastewater treatment plant in Seminole County.

# GOAL 3: Ensure that the sanitary sewer system adequately serves current and future campus needs.

OBJECTIVE 3.1: Maintain the sanitary sewer distribution system and provide capacity to meet current and future needs. POLICY 3.1.1. The University shall design and construct sanitary sewer distribution system improvements to eliminate system deficiencies, maintain and improve system characteristics, and expand the system to accommodate demand from proposed growth.

# 4.2-C Potable Water Sub-Element

## **NARRATIVE**

The University operates and maintains its own potable water treatment plant and distribution system. This system provides campus potable water needs

# GOAL 4: Provide quality potable water to the campus with reliable backup sources and capacity for future needs.

OBJECTIVE 4.1: Ensure that adequate potable water supply and distribution infrastructure is available for new and renovated facilities.

POLICY 4.1.1: The University shall rely upon land uses, the Campus Master Plan (CMP), and Building Programs to address potable water capacity as limited by the SJRWMD. The concurrency management system establishes the statutory mechanism that ensures campus facilities and services needed to support development are available in relation to the impacts of such development.

POLICY 4.1.2: Monitor usage of potable water compared to the universities Consumptive Use Permit (CUP), and ensure allowed capacity continues to meet University future needs.

POLICY 4.1.3: The campus water system shall have redundant supply and distribution networks. Supply redundancy can be achieved by multiple water plant sources, e.g., Orange County and the Research Park, and by multiple raw water wells.

OBJECTIVE 4.2: Maintain potable water facilities to keep the current quality and quantity of potable water available.

POLICY 4.2.1: The University shall perform annual reviews of major system components of the water supply and distribution system. Review shall include wells, well pumps, water treatment plant components, storage tanks, distribution pumps, backup generators, distribution piping and valves, etc.

POLICY 4.2.2: Monitor and maintain the quality and capacity of raw water sources. Bi-annual testing of wells for sediment, water source testing as needed during maintenance.

POLICY 4.2.3.: Meet or exceed all pertinent FDEP and EPA water quality requirements by maintaining all regulatory water testing and treatment.

POLICY 4.2.4: Address updated EPA guidelines for Per- and Polyfluoroalkyl Substances (PFAS) and disinfection byproducts (DBPs) with new or expanded treatment facilities or new sources of potable water.

OBJECTIVE 4.3: Conserve potable water for human health and advancing research.

POLICY 4.3.1: Regardless of first cost, all new construction and renovations that increase water use shall adhere to the mandatory provisions in the latest *high-performance building standard* and follow the appropriate compliance paths to ensure campus water efficiency and conservation measures are implemented.

(OP-3: Water Use)

POLICY 4.3.2: The University shall first use all available lowerquality sources of water, including reclaimed water, and

stormwater, before using higher-quality water sources, when possible, as required by the CUP.

POLICY 4.3.3: All irrigation and industrial uses of water shall utilize reclaimed water as their primary source, with potable water backup for mission critical facilities, unless reclaimed water has potential to impact campus health and safety.

(OP-3: Water Use)

# 4.2-D Solid Waste Sub-Element

# **NARRATIVE**

UCF Recycling has made tremendous strides, diverting more than 30% of solid waste from entering landfills, compared to baseline data of a 5% recycling rate in 2006. UCF implements a single-stream recycling program.

GOAL 5: Plan future campus development to ensure that solid waste collection and disposal, and recycling efforts adequately serve campus needs.

OBJECTIVE 5.1: Ensure that adequate solid waste collection and disposal capacity can accommodate future demand and development.

POLICY 5.1.1: The University shall continue to assume one or more of the following level-of-service standards:

- Multiple weekly waste collections
- Approximately 1 pound per day per person of landfill
- Approximately 3 pounds per day per person of recyclables

POLICY 5.1.2: Future increases in campus waste generation shall be approved only if existing solid waste disposal capacity is already on-line to accommodate the increased need, or additional capacity will be funded and on-line at the forecasted time of need.

POLICY 5.1.3: As necessary and appropriate, UCF shall continue to participate in the regional solid waste management and waste reduction strategies undertaken by Orange County.

POLICY 5.1.4: The University shall continue to use commercial vendors to collect and transfer solid waste to area disposal sites.

POLICY 5.1.5: UCF Recycling shall identify the location of waste and recycling areas, dumpster sizes, and pick-up schedules for new construction.

# GOAL 6: UCF will continue to develop a robust recycling program.

**OBJECTIVE 6.1: Promote recycling through education and outreach.** 

POLICY 6.1.1 The University shall promote ongoing education, awareness, and student involvement to establish practices that align with UCF's waste diversion and recycling initiatives, and the implementation of large-scale recycling programs.

(OP-12: Waste Generation and Recovery)

POLICY 6.1.2: UCF Recycling shall continue to establish relationships with student working groups and organizations to brainstorm ideas, gather data, and create recycling initiatives.

# (OP-12: Waste Generation and Recovery)

POLICY 6.1.3: UCF Recycling shall continue to actively participate on UCF committees and engage with community groups to increase awareness and increase the campus recycling rate.

# (OP-12: Waste Generation and Recovery)

POLICY 6.2.1: UCF shall continue to promote recycling by strategically placing receptacles at campus facilities (inside/outside).

# (OP-12: Waste Generation and Recovery)

POLICY 6.2.2: UCF Recycling shall continue to work with departments to properly recycle or repurpose materials that would otherwise be discarded; and promote responsible purchasing plans that minimize waste generation and reduce chemical waste.

# (OP-12: Waste Generation and Recovery)

POLICY 6.2.3: UCF shall construct a Recycling Center (as funding becomes available) to centralize recycling efforts, house compactors and equipment, and increase the efficiency of our recycling collection process.

# (OP-12: Waste Generation and Recovery)

POLICY 6.2.4: UCF will continue to work closely with contracted haulers and local Recycling Centers to promote remanufacturing and the use of recyclables as a source of raw material.

## (OP-12: Waste Generation and Recovery)

# OBJECTIVE 6.2: The University shall strive to reach the statewide recycling goal of 75% to reduce the volume of solid waste entering the landfill.



# 4.2-E Chilled Water Production Sub-Element

## **NARRATIVE**

Chilled water for campus cooling is produced at centralized district energy plants, rather than being produced on site at individual campus buildings. Chilled water produced in the district cooling system is distributed through over 15-miles of underground pipes to cool student residence halls, academic, research, administrative, and athletic facilities. UCF's district plants are strategically placed to efficiently service the needs of core campus buildings and reduce building energy consumption. The remaining campus buildings are currently supported by stand-alone chilled water systems, direct expansion HVAC (Heating, Ventilation, and Air Conditioning) units, and ground source heat pumps.

GOAL 7: Promote district cooling with energy- and economic-efficiency where appropriate within the district energy loop; and maintain capacity for future needs.

OBJECTIVE 7.1: Invest in chilled water technologies that facilitate economies of scale, otherwise infeasible on a single-building basis.

POLICY 7.1.1: All new construction and renovation projects shall connect to UCF's thermal district energy systems based on the results of a life cycle cost analysis and where geographically feasible.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

POLICY 7.1.2: Any replacement of HVAC systems not connected to district chilled water must have a life cycle cost analysis done, and be converted to district chilled water if economical, except systems which are backup to district chilled water for mission critical facilities.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

OBJECTIVE 7.2. Expand and optimize district chilled water system facilities to ensure the ability to meet future campus demands most efficiently.

POLICY 7.2.1: Chilled water production facilities will be expanded as necessary to meet the demands for all projects planned.

POLICY 7.2.2: Chilled water production facilities will be optimized to generate chilled water in the most reliable, economical and energy efficient means possible utilizing controls, thermal energy storage, and any proven technology available.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

# 4.2-F Electrical Power and Other Fuel Sub-Element

## **NARRATIVE**

Primary power to the University is provided by Duke Energy Florida.

The University also produces cost-effective electricity to offset purchased electricity.

# GOAL 8: Provide cost-effective, reliable, and resilient electric utilities.

OBJECTIVE 8.1. Maintain and extend reliability and resiliency of the University electric grid.

POLICY 8.1.1: The University will make every effort to collaborate with the utility service provider to configure the campus electric grid in ways to maintain and extend its reliability and resiliency, ensuring capacity is available for future campus demands.

POLICY 8.1.2: The University shall investigate opportunities to implement distributed generation and smart grid technologies to provide reliable and resilient electrical services to campus buildings.

OBJECTIVE 8.2. Continue to evaluate and implement distributed technologies

POLICY 8.2.1: Reduce <u>and track</u> purchased energy <del>cost</del> <u>consumption</u> through conservation, demand side management, fuel-switching and renewable energy initiatives.

that provide the lowest cost of energy and achieve sustainability goals.

 UCF tracks changes in greenhouse gas emissions through time using SIMAP and submits these reports in fulfillment of OP-6 STARS requirements.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

POLICY 8.2.2: The University shall evaluate lower-carbon distributed generation technologies with higher efficiencies with intent to reduce energy costs, improve infrastructure efficiency, and provide portfolio diversity.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

POLICY 8.2.3 UCF shall evaluate, with its research partners and utility providers, microgrid technologies that incorporate energy storage and sustainable energy generation, to reduce cost and improve reliability of the campus electric grid.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

# 4.2-G Natural Gas Sub-Element

#### **NARRATIVE**

Natural gas provides heating for building domestic water and HVAC systems, and fuel for electricity production. The University owns and maintains the natural gas infrastructure and purchases wholesale natural gas on the open market.

# GOAL 9: Provide the campus with fuel to reduce utility expenditure and achieve greater heating efficiencies.

OBJECTIVE 9.1. Provide a natural gas system to reliably serve the University.

POLICY 9.1.1: Continue to reduce purchased natural gas costs by leveraging competition among natural gas marketers and suppliers through contract negotiations on the open market.

POLICY 9.1.2: The University shall use existing and developing technologies to provide additional safety and reliability for the campus systems.

POLICY 9.1.3: Any new or replacement natural gas (or any other combustion fuel) equipment must have a life cycle cost analysis done against electric alternatives, and electric must be used, except where cost savings are made by natural gas.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

# **4.2-H Telecommunications Systems Sub-Element**

#### NARRATIVE

UCF IT provides the University with all Information Technology and applications for daily operations. The mission of UCF IT is to support our students, faculty, and staff in achieving their teaching, learning, research, and service objectives by:

Providing reliable technology solutions and services.

Providing responsive and reliable IT infrastructure and support

Continually assessing and improving our service offerings.

As the primary provider of information technology resources, UCF IT is responsible for designing, installing, and maintaining all IT enterprise systems and support for the UCF community, including Physical Infrastructure (including multiple campuses and over 450+ MDF/IDF's<sup>2</sup>).

- Campus Network WAN, LAN, WIFI, Cellular Center and Cloud infrastructure.
- Information Security
- Applications

Campus IT enterprise systems shall comply with all University Policies, Section 4: "Technology and Communications." <a href="https://policies.ucf.edu/">https://policies.ucf.edu/</a>

# GOAL 10: Provide an on-campus telecommunications system, which adequately serves future campus population needs.

OBJECTIVE 10.1: UCF shall continue to identify and resolve deficiencies in telecommunications systems, through ongoing inspection and coordination with service providers.

OBJECTIVE 10.2: Ensure the provision of adequate telecommunications facility services through continued internal funding of improvements and coordination with external service providers.

POLICY 10.1.1: The University shall continue to identify, upgrade, repair, and/or replace existing Encased Duct Banks and telecommunications copper, fiber, and Coaxial cables as facilities are added or renovated.

POLICY 10.1.2: The timing and phasing requirements and priorities for the provision of future enterprise IT system improvements shall be driven by the CAPITAL IMPROVEMENTS element.

POLICY 10.2.1: UCF IT shall be responsible for the continued coordination of enterprise IT infrastructure and services that includes staff, vendors, and manufacturers.

POLICY 10.2.2: The University shall establish the following overall implementation priorities:

- (1) Continued operations of all UCF IT enterprise systems,
- (2) Maintenance of the UCF-owned Maintenance Holes and duct bank system.
- (3) Expansion of the existing telecommunications distribution system capacity in order to serve the University more efficiently, and
- (4) Expansion of the telecommunications distribution system capacity, including the designation of future demarcation sites to link new development areas/buildings with on and off-campus systems.

<sup>&</sup>lt;sup>2</sup> A main distribution frame (MDF) is the primary hub that interconnects IT and telecommunication lines coming into a building to the internal IT network via Intermediate Distribution Frames (IDFs) which cross connect from the MDF to remote workstation devices.

POLICY 10.2.3: The University shall rely upon the land uses identified in FUTURE LAND USE, and projects identified in the CAPITAL IMPROVMENTS and the Capital Improvements Plan (CIP), to coordinate a staged expansion of IT enterprise systems to ensure that an adequate system is on-line at the time of projected increased demand.

# 4.3 DATA & ANALYSIS

# Capital Renewal and Concurrency Management

Ongoing capital renewal is necessary to provide continued reliable utility services to the campus.

 The University shall continue to identify and reserve funding to facilitate the improvement, expansion, and maintenance of its utility infrastructure, as described in this element.

Concurrency means that adequate facilities and services are in place to serve new development as it occurs.

 The University shall ensure concurrency for capital projects, if and when they are funded. See UCF's Schedule of Capital Projects (SCP) in element 8.0 CAPITAL IMPROVEMENTS for a list of proposed projects through the Horizon Year.

# 4.3-A Stormwater Management Sub-Element D&A

#### **NARRATIVE**

Stormwater is of concern for two main issues, the threat of flood due to volume and timing of runoff water, and potential contaminants and high nutrient content within the water entering the environment. Stormwater management is intended for flood prevention, water drainage, filtration, and for managing water through efficient infrastructure and low-impact strategies.

Campus stormwater is currently managed by Utilities and Engineering Services (UES). The basin and pond locations are maintained within ArcGIS. In the unlikely event that additional stormwater ponds are needed, alternative methods of storage may be used, such as the exfiltration system under Garage H.

# STORMWATER ANALYSIS



The Stormwater Master Plan and subsequent stormwater permit were generated in the early 1990s based on projected development within the campus. The University is divided into four major drainage basins and three sub-basins, as shown on Exhibit 4.4-1. Modifications have been made to the master permit as a result of changes in projected growth and development.

The University currently maintains a master stormwater permit (No. 20026) from the SJRWMD. This permit allows for development within designated stormwater basins as it relates to an approved additional impervious area within each basin. Currently, the permitted impervious impacts are monitored by the University and an independent consultant to ensure that permit capacities are not exceeded. The University maintains a current record of existing stormwater facilities and the current permitted impacts available to review for future development. The remaining Impervious Area, available in each drainage sub-basin, is carefully tracked. This information, along with plan data, is maintained by the University and updated as new development impacts the current data.

The stormwater system functions in accordance with the existing master permit. No adverse impacts have occurred as a result of discharges leaving University property through the stormwater management system.

UCF's stormwater system is in good condition, and its life expectancy is anticipated to exceed 25 years with routine maintenance.

The system's discharge points were selected to minimize impacts to adjacent natural resources. The University has made extensive efforts to reduce impacts to adjacent resources, including construction of stormwater ponds, maintaining and enhancing existing wetland systems by incorporating them into the master drainage system, restricting post development discharge to less than pre-1985 rates, and providing required water-quality treatment.

The University may need to modify the existing master permit to accommodate future expansion in several sub-basins, including the transfer of available impervious areas from one sub-basin to another. SJRWMD has been receptive to transfers, provided the final outfall conditions remain the same and additional treatment is provided in higher pollutant-loading areas.

The University has maintained a stormwater management facility which accommodates and exceeds SJRWMD criteria for preservation, except for Basin 4-F which is allowed to discharge directly into Wetland W-9. This condition was grandfathered by SJRWMD when the master stormwater system was developed and permitted in 1994. The stormwater system enhances the existing wetlands by providing natural hydration to each system to maintain its ecological function. Because the ecological function of the existing wetlands was considered in the original permitting design, the University should also consider habitat enhancements for wetlands and other transitional areas (buffers).

Inventory of mapped distribution assets

Lines	26	Mi.
Combination Inlet	73	Ea.
Curb Inlet	172	Ea.
Grate or Drop Inlet	646	Ea.
Other Inlet	4	Ea.
Yard Inlet	1	Ea.
Pipe Inlet	30	Ea.
Pipe Outlet	120	Ea.
Stormwater Manhole	354	Ea.
Pond Outlet	25	Ea.

Impervious Area

According to the most recent *Stormwater Master Plan Impervious Area Status Report (March 25, 2024*), there are 68 acres of remaining imperious area allowed on campus, subject to the proximity of construction to the drainage area.

# 4.3-B Sanitary Sewer Sub-Element D&A

### **NARRATIVE**



Wastewater on campus is collected through various-sized gravity sewer mains that feed from student residence halls, concessions, athletics, academic and research facilities, and retail establishments as well as campus thermal and electrical generation facilities. The effluent is then discharged into underground pumping or lift stations through dedicated force mains on campus, ultimately discharging to the Seminole County/City of Orlando Iron Bridge Water Pollution Control Facility (Iron Bridge).

Twenty-four pump stations collect and lift the effluent out of the low points on campus. The effluent is then pumped through 16" force mains to a demarcation point located at the corner of McCulloch Road and S.R. 434 prior to being pumped to Iron Bridge.

The University also has an extended wastewater collection service area, collecting and transporting effluent outside of the main campus. Municipal wastewater services were not available in the early 1980's, and as a result, the University provides sanitary sewer collection and transportation utility services to Central Florida Research Park (1200-acre campus), a subsidiary of the Orange County Research Development Authority (OCRDA) (1981), and Siemens Quadrangle I (1983).

The expansion of the existing utility distribution network is directly influenced by the location of new buildings on campus. Because the final locations of proposed buildings are unknown, a sanitary sewer hydraulic study and resulting performance model will be necessary. This model will allow the campus and future design engineering teams to evaluate the hydraulic performance of the campus under a variety of load scenarios and peak conditions.

# **Existing Conditions**

The University has a bulk wholesale agreement (2018) with Seminole County to transfer an annual average limit of 1,100,000 gallons per day (GPD) of wastewater to Iron Bridge. UCF may also purchase up to an additional 700,000 GPD until December 31, 2040.

#### **Contractual Obligations:**

- Central Florida Research Park Contract: 350,000 Gal/Day
- UCF Hotel Contract: 40,500 Gal/Day
- Siemens Quad 1 Contract: 20,633 Gal/Day

Average UCF use the past 5 years, including contractual customers: is 600,000 Gal/Day. Available Capacity is 500,000.

Capital Renewal Funding (CRF) is required to keep the infrastructure and lift station assets in good condition for its present use, based on facility life cycles. In the event of a power grid interruption or loss of power, sanitary spills could occur, carrying negative risk and consequences from both regulatory and environmental perspectives, as well as public perception.

Inventory of mapped distribution assets

Gravity Main	7.9	Mi.
Force Main	5.3	Mi.
Service Lines	3.9	Mi.
Plug Valve	11	Ea.
Tapping Valve	11	Ea.
Gate Valve	4	Ea.
Lift Stations	22	Ea.
Manholes	262	Ea.

# **Future Conditions**

The sanitary sewer system at UCF is capable of supporting UCF's projected enrollment. The total current system capacity is 1,100,000 gallons per day, with 500,000 available to the main campus, which is using approximately 188,867 gallons per day. This leaves a substantial available capacity to accommodate future increases in usage. The projected growth in Full-Time Equivalent (FTE) students and employees over the next decade is expected to be within the limits of the existing sewer infrastructure.

# 4.3-C Potable Water Sub-Element D&A

#### **NARRATIVE**

The University owns and operates a water treatment plant that can process up to 3.2 million GPD. This system consists of four wells that pump from the Floridan aquifer to elevated storage tanks (200,000 gal) and ground water storage tanks (100,000 gal), with pump capacity of 2,200 gallons per minute (GPM).

The maximum annual ground water withdrawal from the Floridan aquifer system for commercial, industrial, and institutional use is limited to 385.1 million gallons per year (MGPY).

The domestic water system serving UCF is monitored, controlled, and maintained by the University, and is held to the same rigorous testing standards as municipal water systems under Florida Department of Environmental Protection (FDEP) drinking water standards. Each year, the University provides a Consumer Confidence Report to inform the public about water quality and services delivered.

The University employs an Inter-local Emergency Interconnection Agreement with Orange County Utilities (OCU). A control valve (24") allows UCF to switch to OCU potable water during emergencies. OCU water is then provided through the UCF-owned and -operated booster pumping station, to provide supplemental system pressure.

# Existing Conditions – Water Infrastructure



Inventory of mapped distribution assets

- Water Lines
- Backflows
- Valves

Miscellaneous

# **Future Conditions**

UCF needs a larger groundwater storage tank for furnished water, due to potable water capacity constraints and increasingly stringent water quality parameters, as monitored by the Environmental Protection Agency (EPA).

As regulation requirements continue to become more stringent, the University must prepare for additional advanced treatment to meet the unfunded mandates from the EPA. Over the last several years, the EPA has required UCF to monitor per-and polyfluoroalkyl substances (PFAS) and Disinfection by-products (DBPs). This necessitates additional capital investment into infrastructure, technology, and treatment systems to monitor and collect data and fulfill these requirements.

Campus water pipe distribution extends over 21 miles of the Main Campus, serving the majority of the University along with Siemen's Quadrangle I, and as an emergency interconnection supply to the Central Florida Research Park.

The expansion of the existing utility distribution network is directly influenced by the location of new buildings on campus. Because the final locations of proposed buildings are unknown, a potable water hydraulic study and resulting performance model are recommended prior to approval of any new construction.

Core Main	3.2	Mi.
Service Lines	2.9	Mi.
Potable	165	Ea.
Irrigation	1	Ea.
Other	15	Ea.
Fire	78	Ea.
Hydrant	174	Ea.
Hydrants	176	Ea.
Gate Valve	412	Ea.
Tapping	127	Ea.
Butterfly	55	Ea.
Interconnect	19	Ea.
Fire Valves	212	Ea.
Water Meters	237	Ea.
Curb	9	Ea.
Abandoned	7	Ea.
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The analysis of potable water usage indicates that UCF's current infrastructure is well-positioned to support UCF's projected enrollment over the next decade. With a Consumptive Use Permit (CUP) capacity of 385,100,000 gallons per year and a current usage of 238,190,500 gallons per year, there is a significant buffer to accommodate increased demand. The estimated 10-year increase in water use is projected to be manageable within the existing capacity, ensuring that the infrastructure can support the anticipated growth without requiring immediate upgrades. This suggests that UCF's potable water system

<u>is robust enough to handle the additional load from future development.</u>

Environmental Stewardship and Sustainability The University should continue to rely upon land use density, high-performance building programs as identified in the CMP, and ongoing implementation of Capital Plans and Programs to address the limited potable water capacity as constrained by SJRWMD. Strategic focus should adhere to the latest green building industry standards to treat water "efficiency first" with respect to conservation initiatives. UCF must holistically evaluate indoor, outdoor, and specialized water uses, while deploying advanced metering infrastructure to protect the Floridan Aquifer and the state's precious water resources.

Moreover, the SJRWMD has made an aggressive effort to conserve and protect the Floridan Aquifer since 2001. The University will have to continue to re-prioritize growth needs and capital means to supply these future water demands.

Indoor Water Use Reduction

Potable water usage in buildings constitutes a large portion of freshwater consumption at the University. As campus growth continues to increase, existing campus buildings will require mechanical, electrical, and plumbing renovations and reprogramming in pursuit of pre-eminence. The installation of new plumbing fixtures (urinals, private lavatory faucets, and showerheads) that meet or exceed the EPA WaterSense Label will significantly reduce consumption by as much as 20-50%, when compared to code compliant fixtures.

Since 2009, UCF has further reduced fixture and fitting water use from the calculated baseline (code-compliant building) adhering to the latest version of the U.S. Green Building Council's Leadership in Energy and Environment Design (LEED) Indoor Water Use Reduction Water Efficiency credit, achieving 20-52% reduction over the baseline in all new capital projects that are eligible to participate in the program requirements.

Outdoor Water Use Reduction (Irrigation)

The University has transitioned irrigation for much of the campus from potable to reclaimed water; with the exceptions of the Arboretum, where food is harvested for human consumption, and the Recreation and Wellness Center pool perimeter (as required by health codes). Irrigation practices had previously consumed large quantities of the campus's potable water.

Landscape and Natural Resources (LNR) has adopted industry best management practices for landscaping. Responsible landscape designs and the use of native, adapted, and drought-tolerant plants have dramatically reduced, and in some cases eliminated, the need for irrigation, while integrating building sites into their surroundings more effectively. Native plants also tend to require less fertilizer and fewer chemical pesticides, which degrade water quality when carried away in stormwater runoff.

Specialized Water Use Reduction (Cooling Tower Water Use) The campus district chilled water system provides centralized cooling to 58 buildings on the main campus, servicing over five million square feet of space. It employs a refrigeration system that removes heat by an evaporative process through the use of multiple cooling towers located at each of the generation facilities. The water used in the cooling towers would account for over 50% of the University's annual Consumptive Use Permit (CUP) allocation.

Through Seminole County – UCF Bulk Wholesale Wastewater and Reclaimed Water Service Agreement, UCF can receive up to 2M gallons of reclaimed water per day for specialized uses (such as irrigation and the evaporative cooling process) until December 31, 2040.

The University has used reclaimed water to augment the potable water supply required in the cooling towers, thus reducing water consumption against the CUP. Over the past 5 years, UCF has also reduced potable water use in other applications, including 200M gallons per year for irrigation and 30M gallons per year for industrial uses.

Water efficiency and conservation efforts at UCF will require continuous evaluation to identify and implement alternatives to potable water in response to stringent changes made by the Florida water management districts, FDEP's changes in drinking water quality standards, water conservation, changes to the Florida Building Codes, and aggressive reduction efforts championed by national green building standards. Most importantly, water conservation is a mandatory operating condition of the CUP that expires in 2034.

# 4.3-D Solid Waste Sub-Element D&A

#### **NARRATIVE**



 Non-Hazardous Recycling The University strives to develop an environmentally- and economically-sustainable materials-recovery program, through campus-wide promotions and recycling opportunities; and be certified as "Zero Waste Campus". Although great progress has already been made, UCF has also partnered with Orange County to work toward a greater impact than just UCF.

UCF Recycling Services, a unit of Facilities Operations, operates a robust recycling program. The UCF recycling program includes:

- Plastics #1 through #7 (tubs, jugs, jars, bottles, etc.)
- Mixed Paper (office paper, books, magazines, phonebooks, newspaper, cereal boxes, paper egg cartons, paper bags, milk cartons, juice cartons, etc.)
- Corrugated cardboard
- Glass (bottles and jars)
- Scrap metal (steel cans, aluminum cans, loose metal lids, steel bottle caps, clean balled aluminum foil, empty aerosol cans)

 Hazardous Recycling EHS recycles hazardous materials that are ignitable, corrosive, toxic, or reactive, specifically:

- Batteries
- Light bulbs and ballasts
- Chemicals (laboratory, housekeeping, landscaping, antifreeze)
- Specialty Recycling

UCF Surplus Property handles the transfer or disposal of property, equipment, or other assets for which the originating department no longer has a justifiable use. UCF Surplus Property collects and repurposes:

- UCF Logo items
- Electronics (E-waste)
- Furniture and large items
- Burn boxes

Surplus property recycling is governed by statutes and regulations including three (3) Florida statutes (F.S. 273.04 Property Acquisition, F.S. 273.05 Surplus Property, and F.S. 273.055 Disposition of State-Owned Tangible Personal Property) and a UCF regulation (7.302 Surplus Property).

# Monthly Recycling Rate (FY 2023)

The recycling rate is the monthly percentage of solid waste diverted from the landfill and recycled.

January 2023	28.36%
February 2023	26.24%
March 2023	26.75%
April 2023	27.50%
May 2023	22.05%
June 2023	33.11%
July 2023	38.24%
August 2023	25.01%
September 2023	32.97%
October 2023	30.05%
November 2023	26.28%
December 2023	48.84%
Recycle percentage FY 2023 (Rounded)	30.45%

Recycling & Solid Waste Data (Jan-Dec 2023)

Recycling & Solid Waste Figures	Running Total
CY January - Dec 2023	Weight (lbs)
Scrapmetal - Tin (lbs)	17,600.00
Surplus (Pounds Sold)	296,411.04
Surplus (Pounds Recycled)	0.00
Single Stream Recycling (lbs)	205,240.00
Cardboard ( lbs)	621,906.00
Ballasts (lbs)	2,478.00
Lamps (lbs)	12,405.60
Batteries ( lbs)	6,337.00
Oils (lbs)	3,424.75
Hazardous Waste (lbs)	39,338.00
Tires (Pounds Sold)	0.00
Pallets - Wood ( lbs)	0.00
Yard waste (lbs)	1,154,499.96
Donations (Housing)	10,622.00
Mattresses (Housing)	2,805.00
Mixed Recycling/Construction Debris (Ibs)	526,340.00

# 4.3-E Chilled Water Production Sub-Element D&A

## **NARRATIVE**

Environmental Stewardship and Sustainability Chilled water demand is evaluated in terms of capacity (tons of refrigeration) and flow, measured in GPM. Historically, the peak summer demand (August and September) for refrigeration (cooling) of campus is approximately 10,000 tons, serving the energy needs of 58 campus buildings with over five million gross square feet.

A robust district energy system is both necessary and integral to keep up with campus demands, providing the necessary flexible platform to integrate multiple resources (combined heat and power, and thermalenergy storage) to provide the University with a more resilient, efficient, and sustainable campus and support the core missions of research and education.

The District Energy approach of generating chilled water centrally is more energy-efficient than using in-building equipment; thus, environmental impacts are reduced. Greater efficiencies are possible when using larger, more efficient equipment and with the ability to stage equipment to match the load while remaining within its highest efficiency range. The district cooling system allows UCF to incorporate peak shifting technologies such as thermal energy storage, to reduce the cost of purchased electricity.

As UCF centralizes its approach to cooling campus buildings, and phases out in-building equipment, there will be less use of refrigerants that can potentially affect the ozone layer and contribute to global

warming. Additionally, the University must inventory, manage, and track refrigerants for regulatory and compliance purposes. Many refrigerants are being commercially phased out as part of the Montreal Protocol.

#### **Economic Benefits**

The University's district energy plants provide economic benefits, including, but not limited to:

- Realizing fiscal economies of scale, when compared to the more conventional, decentralized approach;
- Achieving higher thermal and emission efficiencies than stand-alone equipment;
- Reducing and eliminating the need for building engineers and operators for in-building HVAC (Heating, Ventilation, and Air Conditioning) systems;
- Reducing property and liability insurance costs with the elimination of in-building equipment;
- Reducing noise associated with in-building equipment;
- Freeing up space for the building's intended use; and
- Providing asset redundancy to ensure campus cooling.

District energy operations at UCF function to provide greater asset availability. The criteria for evaluating this paradigm is to allow for one machine to be out of service for maintenance, and for a second machine to fail during campus peak cooling demand. This is commonly referred to as having a firm capacity of N+2, where "N" is the number of machines available for use, and N+2 is the total number of machines.

# District Energy Plant (DEP) Capacities

Description	Plant Capacity	Build-Out Capacity
DEP I	8,000	8,000
DEP II	4,000	4,000
DEP III	4,000	4,000
DEP IV Cooling Capacity	4,000	8,000
DEP IV Heating Hot Water Capacity Installed	5,257MBh	10,514 MBh
DEP IV Heating Hot Water Capacity Available	2,628MBh	
Peak Cooling Demand	15,000	
Available Cooling Capacity (N+2)	490	
Subscribed Cooling Capacity	510	
Total Refrigerated Tons (RT)	20,000 RT	24,000 RT

# Existing District Energy System

The campus is served by four (4) central chilled water generation facilities through a network of below-ground district chilled water piping systems that span 15 miles on campus. District Energy Plants (DEP) I-IV were built in 1966, 1994, 2008, and 2018, respectively.

The district piping systems are circuitous in nature, following the circular configuration of the campus topography, roads, and walkways. Pipes are composed of high-density polyethylene (HDPE) and ductile iron, with the some of the oldest being asbestos concrete pipe.

Cooling energy from the district energy system is distributed through

district piping systems to the buildings on campus. Most campus buildings are also equipped with tertiary pumps, piped in series with the DEP distribution pumps. The tertiary (building) pumps respond through local controls unique to each respective building's piping circuit. Building pipe pressure is monitored to increase or decrease flow rates corresponding to the cooling demands of each building.

A small number of campus buildings are not equipped with tertiary pumps, but rely on the district piping system pressure, which is generated through the distribution pumps.

The University constructed a three-million-gallon thermal energy storage (TES) tank in 2009, which stores and cools water at less-costly off-peak electric rates (at night). The water is discharged during the on-peak hours, or when campus electrical demand is highest. This allows the University to realize considerable savings by shifting approximately two megawatts of electricity to off-peak and lower demand periods, by storing chilled water for campus cooling demands.

In 2017, to improve the reliability metrics of chilled water distribution, UCF and Duke Energy Florida partnered to separate the distribution feeders at each chilled water generation facility into three (3) separate feeds. In the event of a momentary outage or power outage on the commercial grid, this reduces the negative risk associated with interruption of environmentally sensitive cooling and dehumidification of campus buildings.

Inventory of mapped distribution assets

Return	8.2	Mi
Supply	8.1	Mi
Hot Water	1.3	Mi.
Chilled Water Valve	373	Ea.
Hot Water Valve	28	
Chilled Water Vault	35	
Hot Water Vault	16	

# Infrastructure Improvements

Much of the original chilled water distribution from the 1970s, about 3.4 miles, is made up of asbestos concrete pipe that should be phased out due to age, surface corrosion, operator safety, and deterioration. Underground asbestos does not pose a threat to health and safety while it is in place, but working on the material requires special mitigation procedures to avoid exposure.

Much of the original chilled water distribution from the 1970s, about 3.4 miles, is made up of asbestos concrete pipe that should be phased out due to age, surface corrosion, operator safety, and deterioration. Underground asbestos does not pose a threat to health and safety while it is in place, but working on the material requires special mitigation procedures to avoid exposure.

To prevent HVAC equipment from fouling and organics from forming in the evaporative distribution network, distribution flow rate must be a minimum of 5 feet/sec. Several portions of campus are well below the desired flow rate. To combat this issue, right-size piping is necessary to replace existing pipe, in addition to adding hydraulic flow relief through new infrastructure to support the system's peak cooling loads.

Distribution capacity is at its limit in some areas on campus where growth is expected, new lines are being installed in these areas to accommodate the expansion. Other areas have had no chilled water infrastructure and have been dependent on air-cooled chillers or heat pump equipment. Some of this new distribution infrastructure will be used to connect existing buildings to chilled water as the existing equipment comes to its end of life.

# 4.3-F Electrical Power and Other Fuel Sub-Element D&A

#### **NARRATIVE**

The University purchases electricity from Duke Energy Florida through a Time-of-Use (TOU) tariff for General Service Time of Use (GSDT-1) and Stand by Service (SS-1). As such, the energy and demand components of the University electric billing is further apportioned by an on-peak period and a base period, and is categorized according to season; March through November (summer) and December through March (winter).

An important operating characteristic of TOU rates is that electric utilities target or define certain hours by season, month, and period, with the intent to incentivize customers to reduce energy consumption and/or demand with tiered rates. Weekends and select holidays are considered base hours, the lowest rates.

The University owns and operates a 5.5-megawatt (MW) Combined Heat and Power (CHP) Plant, employing a natural gas combustion reciprocating engine to provide on-site electrical and thermal

generation. Due to overall efficiency of the CHP, lower natural gas price prices, and generation of power on campus, UCF has avoided purchasing more of its electricity from Duke Energy.

Existing Conditions of the Electrical Infrastructure

Duke Energy Florida feeds power to UCF through two of its owned and operated substations: UCF South (near Facilities and Safety) and North (near the stadium). UCF's strategic planning for future load growth necessitates close collaboration with Duke Energy to ensure seamless scalability and sustainability. Presently, the feeders dedicated to serving UCF collectively have an approximate capacity



of 80 megawatts (MW), while UCF's campus peak demand approaches 24 MW.

The UCF-Duke Energy commercial grid distribution system was designed with multiple redundancy features. Manual switching options allow for each substation (and its respective circuits) to carry the full UCF electric load. The switching capabilities also facilitate maintenance functions and minimize the duration of electrical outages.

The University leases equipment from Duke Energy, including approximately 82 medium voltage distribution switches and approximately 189 distribution transformers. Duke Energy charges UCF approximately \$50k per month. The lease fee covers existing Duke Energy equipment (distribution switches and transformers) and new equipment as required (or as requested by UCF) to meet electrical power and distribution requirements. The lease is periodically adjusted based on equipment changes (new additions, replacement / repairs and removals).

Radial circuits are a type of electrical distribution configuration where power flows from a single source, such as a distribution board or transformer, outward to various endpoints or loads. In this setup, each endpoint is connected directly to the source, forming a radial pattern resembling spokes on a wheel. While simple and easy to install, radial circuits are susceptible to single points of failure. If any part of the circuit experiences a fault or failure, it can disrupt power supply to all downstream endpoints connected to that radial. This vulnerability underscores the need for more resilient configurations, such as looped circuits, which can maintain power supply even if one section of the circuit is compromised. Most of the facilities are on looped circuits, but there remain 8 radials on non-critical facilities.

Distribution transformers in need of attention are classified into the following groups, along with the quantity of each:

- Tier One: Radial services needing conversion to loops. (5)
- Tier Two: Radial services that may not require conversion to loops. (7)
- Tier Three: Radial services that are disconnected and do not require looping. These units are slated for removal. (5)

The substations have ~70% capacity available at peak, so there are no anticipated transmission needs for any future growth.

Inventory of mapped distribution assets

Electric Manholes	72
Electric Switchgears	82
Electric Transformers	189

The Combined Heat and Power plant (CHP) is approaching half of its expected useful life and continues to provide an educational living lab for students and cost savings to the university. Manufacturer service contracts and regular maintenance ensure continued reliable operations.

Energy Storage and Smart Grid Projects The university maintains approximately 120kW of PV solar installed on campus. Of the two primary sites, the Garage B solar is about halfway through its useful life, and the solar charging system is at its end of life. An additional 150kW of PV solar is being built as part of a research microgrid project, with a 500kW/1000kWh battery energy storage system (BESS) and more.

UCF is well-positioned to become one of the most electrically efficient, reliable, and resilient institutions in the country, while also bringing significant economic benefit and reduction of carbon emissions. Most importantly, these improvements can be interactively integrated with the teaching and research mission of the University, resulting in a world-class showcase of advanced energy technology.

This opportunity presents at a time when several developments have converged to offer all institutions improvements in various energy system attributes, including an unsubsidized cost of energy from PV systems that is competitive with traditional fossil-fueled generation; reduced electric energy storage costs in batteries; and dramatic improvements in the efficiency of major electric loads.

The campus grid is effectively that of a small city, with many commuting workers, full-time residents, and significant electric and critical loads. There are many benefits of operating as a microgrid.

The campus has several existing buildings that are solar-ready – the rooftop structure and electrical gear are compatible with the installation of PV panels and interconnecting equipment with little modification. The buildings and estimated generating capacities for this effort are:

Trevor Colburn Hall: 380 kW

Research 1: 170 kWBand Building: 165 kW

Other existing buildings with substantial generating potential will have their structural and electrical systems modified and upgraded to accommodate rooftop PV installation. These buildings and their estimated generating capacities are:

Millican Hall: 172 kW

Nicholson Fieldhouse: 901 kW

Wayne Densch Sports Center: 555 kW

• Recreation and Wellness Center: 533 kW

Nicholson School of Communication: 339 kW

 Parking Garage top decks fitted with structures to support the PV panels and provide shaded parking beneath, for a total combined array size of 13,700 kW.

Several of the campus stormwater retention ponds could support Floating Photovoltaic (FPV) systems, by covering about 60% of the pond surface with solar arrays. Benefits of FPV include efficiency gains due to lower cell temperatures; reduced balance of system costs associated with land costs and control of vegetation; improved water quality; reduced evaporation rates; and avoidance of land-energy

conflicts. The estimated total combined array size for potential retention ponds (including 1-F, 4-B2, 4-B1, 2-H, and 1-D) is 2,480 kW.

There are occasionally opportunities provided by the local utility providers for opting into community solar programs. In these programs, utility scale solar is constructed and maintained by the utility provider off campus, and a modified rate is used to provide that solar energy to a customer. The result is functionally renewable energy, reducing volatility of electric costs, and in some cases reduced cost of electric utilities; all while requiring no capital expense from the university.

Environmental Stewardship and Sustainability The University must shift its paradigm toward carbon-free distributed generation facilities with higher efficiencies; thereby reducing energy cost; improving infrastructure resiliency through grid-strengthening projects; and providing portfolio flexibility with campus energy mixes deploying both smart and microgrid applications, as well as renewable energy. More information on conservation efforts and emerging technologies can be found in element 5.0 CONSERVATION, Conservation of Energy.

# 4.3-G Natural Gas Sub-Element D&A

## **NARRATIVE**

UCF owns, operates, and maintains a natural gas distribution network on campus, and distributes gas supplied by TECO Peoples Gas through more than 24,000 linear feet of low-, medium-, and high-pressured pipeline.

The system serves academic and research buildings, food service operations, and the combined heat and power plant. Secondary services supplied, owned, and operated by TECO Peoples Gas includes much of Greek Park, Knights Plaza, Towers I-IV, Additions Arena, and UCF Athletics on the north end of campus.

Because natural gas is deregulated in Florida, UCF has been able to reduce its natural gas costs by leveraging competition among natural gas marketers and suppliers through contract negotiations on the open market.

Natural gas provides greater efficiencies than electricity when comparing their use for the same applications. Due to its lower cost, natural gas is used as a primary fuel source to power UCF's combined heat and power plant; feed boilers for domestic hot water heating, building heating and dehumidification processes; and to operate gas appliances in kitchen and concession areas.

The University's natural gas system is designed and sized to service only the UCF campus but may be expanded to serve the demands created by its future growth.

The expansion of the existing gas utility distribution network is directly influenced by the location of new buildings on campus. Because the final locations of proposed buildings and renovations are unknown, a natural gas analysis shall be completed using GasWorks to



understand the distribution pressure relationships and system performance scenarios prior to approval of any new construction.

Regular maintenance ensures the integrity and reliability of the distribution system, as well as compliance with safety regulations and industry standards. The university contracts out annual valve maintenance of valves within the natural gas distribution system as required. This addresses regulatory compliance, valve inspection, testing, repair, and replacement, as necessary.

The university operates and maintains cathodic protection systems used to mitigate corrosion and protect underground metallic structures within the natural gas distribution network. This includes monitoring the effectiveness of cathodic protection measures through periodic inspections and testing. monitoring in identifying and addressing corrosion-related risks, safeguarding infrastructure longevity, and ensuring regulatory compliance.

The main gas distribution on campus is up to 100psi, which is necessary to operate the Combined Heat and Power Plant. A study was completed that indicates the pressure on the distribution system downstream of the CHP could be reduced to 35psi without impacting service. Lowering pressure reduces the risk of leaks and potential hazards associated with higher pressure systems. Avoiding natural gas applications where possible would reduce the risk of safety hazards, such as gas leaks and carbon monoxide poisoning, while also promoting energy efficiency and decreasing greenhouse gas emissions.

Inventory of mapped distribution assets

Main	9.8	Mi.
Service Lines	2.1	Mi.
Gas Meters	45	Ea.
Gas Valves	124	Ea.

# 4.3-H Telecommunications Sub-Element D&A

# Existing conditions

A facility capacity analysis, by geographic service area indicates capacity surpluses and deficiencies.

Existing conditions, based on the facility design capacity and the current demand on facility:

The UCF IT Enterprises systems consists of an underground network of encased duct banks and maintenance holes interconnecting the majority of the buildings on the Main Campus: and several satellite campuses. This interconnection of Telecommunications utility pathways serves all buildings and major Nodes.

All UCF IT Enterprises systems and services are distributed over the campus fiber optic backbone, throughout the encased duct bank system. Services such as Voice, CATV, emergency services, data network (wired and wireless) are all delivered over the fiber backbone along with associated network electronic equipment.

These systems are maintained through a fiber mesh topology that terminates at seven geographical nodes throughout all campuses. Each of these demarcation points contain network border and WAN equipment that interconnect through a ring utilizing Florida Lambda Rail's Internet and Research capabilities

## In addition, UCF IT:

- Maintains detailed sub-system drawings in CAD, Bluebeam, and other map applications.
- Has GPS coordinates for all maintenance holes and encased duct bank paths.
- Has performed first responder, cellular, and WIFI mapping for all campus locations.

In 2024, UCF IT continued to focus on reducing duplicative systems and applications that create additional system administration and expense to the university.

UCF IT enhanced the former Telecommunications Master Plan to include annual lifecycle IT enterprise system expense that contains all physical layer infrastructure, network, data center, audio visual, and peripheral devices. These lifecycles are structured around UCF IT Standards and Guidelines for all IT enterprise systems.

# Future Planning to the Horizon Year

UCF IT expects to continue the use of the existing fiber optic cabling and reduce the overall amount of copper cabling between a Node and building.

- However, technological advancements or new service requirements cannot always be predicted and may involve a change in current plans.
- The use of encased duct bank facilitates low-cost changes of cable media between buildings.

#### UCF IT will continue to evaluate

- The general performance of existing telecommunications systems and facilities,
- The adequacy of the current level of service provided by the facility,
- The general condition and expected life of the facility, and
- The impact of the facility upon adjacent natural resources.

UCF IT will continue to design, install, and support the telecommunications infrastructure throughout all campus locations. The level of service provided will remain high.

UCFIT will remain the sole owner-provided locator of underground telecommunications utilities, with respect to Sunshine811 compliance.

#### **4.0 GENERAL INFRASTRUCTURE**

#### **4.4 EXHIBITS**

Exhibit 4.4-1 Stormwater Basins, Ponds & Wetlands Map Exhibit 4.4-2 UCF Stormwater Master Plan Map

#### The following UCF Maps are restricted for security purposes:

Sanitary Sewer Infrastructure Map Solid Waster Infrastructure Map Potable Water Infrastructure Map Telecommunications Infrastructure Map

Exhibit 4.4-1 Stormwater Basins, Ponds & Wetlands Map

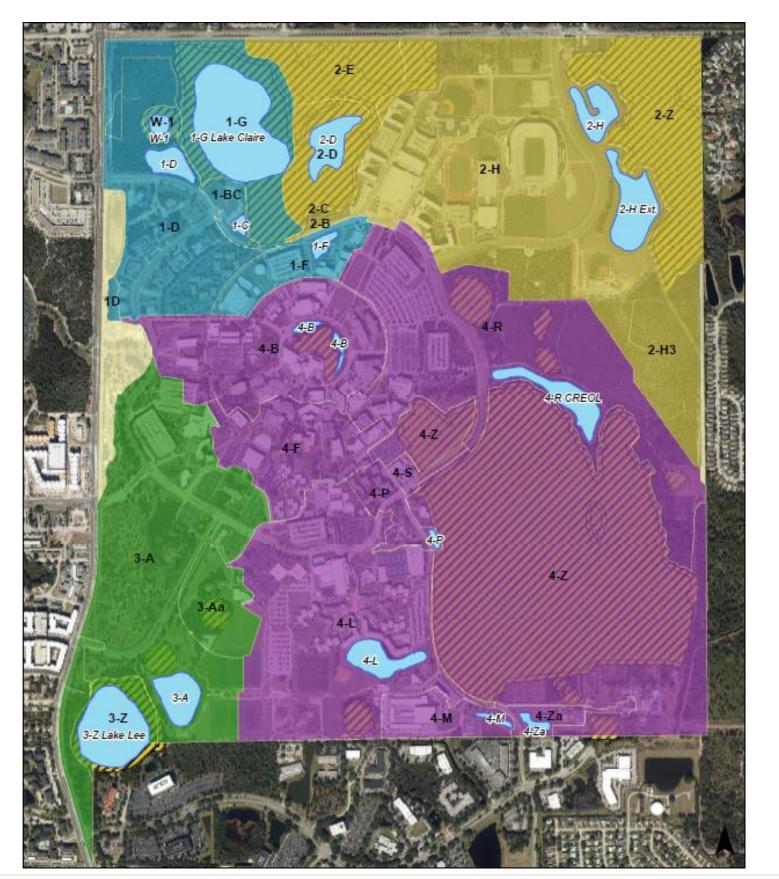
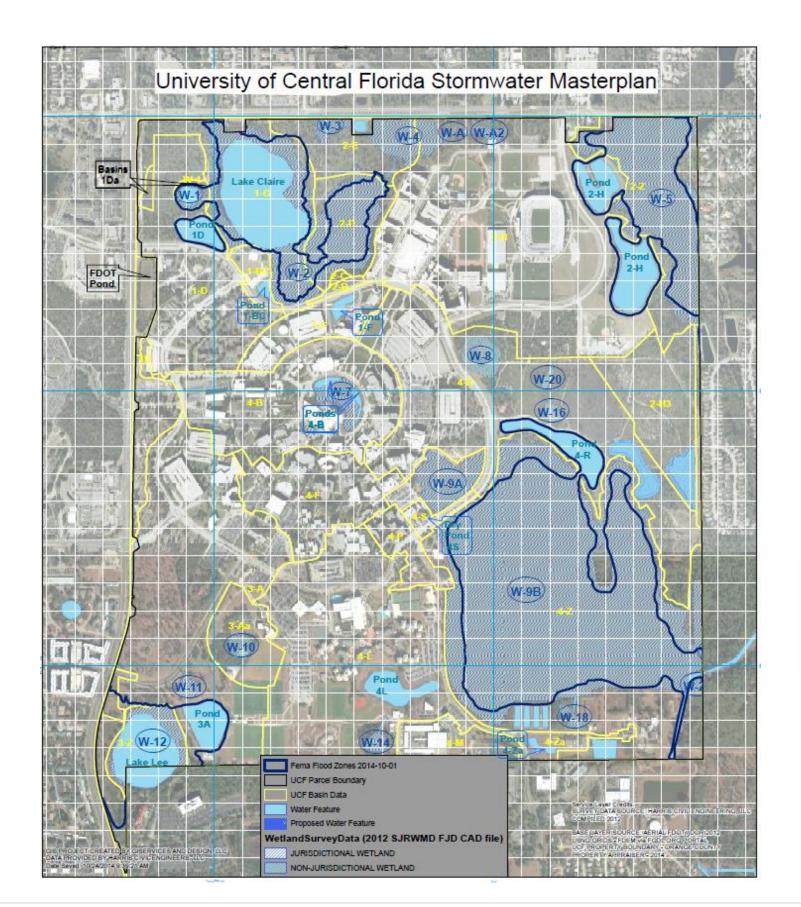






Exhibit 4.4-2 UCF Stormwater Master Plan Map



OVERALL BASIN BREA		
TOTAL DRAINAGE AREA	1173.25	acres
ONSITE AREA NOT INCLUDED	26.07	acres
OFFSITE AREA INCLUDED	(1.62)	acres
TOTAL UCF BOUNDARY AREA	1197.70	acres





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#### UNIVERSITY OF CENTRAL FLORIDA

# **5.0 CONSERVATION**

#### 2025-35 CAMPUS MASTER PLAN UPDATE

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#### **5.1 INTRODUCTION**

# STATUTE & REGULATION



NARRATIVE

The CONSERVATION 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 21.208 states the purpose of the element as follows:

"This element ensures the conservation, protection and wise use of all natural ecosystems and natural resources on the university campus and in the planning study area".

This element outlines the University's goals, objectives, and policies related to conservation of natural habitats and species, prevention of water and air pollution, and the efficient use of energy.

The University is committed to preserving and enhancing its natural areas and the biological diversity they support. The University of Central Florida (UCF) campus lies at the southern end of the Southeastern Coastal Plain, which was designated as a global "biodiversity hotspot" in 2015. Global concern over the loss of biodiversity and habitats due to human activities makes preservation of the campus's remaining natural assets an important goal.

The campus contains sixteen different types of native ecosystems, including important local examples of longleaf pine and sand pine scrub ecosystems, which are considered critically endangered globally. These natural areas contribute importantly to conservation of regional biodiversity, including threatened and endangered species protection. Additionally, our campus natural lands support campus as a living laboratory, and experiential place-based learning.

# STRATEGIC PLAN ALIGNMENT

This element aligns with one or more of the four priorities stated in the UCF strategic plan "UNLEASHING POTENTIAL – Becoming the University for the Future", specifically:

#### Student Success and Well-Being

Enrich the student learning experience for the development of career and cultural competencies.

Expand access to high-impact practices such as study abroad, learning communities, internships, experiential learning, and undergraduate research.

Access to hands-on activities in the living laboratories of the UCF Arboretum and campus natural lands enhances our students' experiential learning and undergraduate research opportunities.

#### SUSTAINABILITY

Sustainability and conservation are intrinsically linked through their shared goal of responsible resource management.

- Conservation practices such as protecting endangered species or preserving natural habitats - contribute directly to long-term sustainability by maintaining ecological balance and ensuring the well-being of future generations.
- Sustainable practices such as renewable energy adoption, waste reduction, and ethical consumption - promote conservation efforts by minimizing environmental impact and safeguarding our planet's finite resources.

Goals, Objectives and Policies that align with the Sustainability Tracking, Assessment & Rating System<sup>TM</sup> (STARS)<sup>1</sup> are shown in **green text**, with the specific *Category and Impact Area* and *Credit #* indicated in parentheses after the Goal, Objective, or Policy.

Specific STARS sections in this element are aligned with these Categories and Impact Areas: **Academics (AC)**, **Engagement (EN)**, and **Operations (OP)**, and these STARS 3.0 credits:

- AC-4: Applied Learning
- EN-1: Outreach and Communications
- OP-3: Water Use
- OP-4: Ecologically Managed Grounds
- OP-5: Energy Use
- OP-6: Greenhouse Gas Emissions
- OP-12: Waste Generation and Recovery

#### **RELATED ELEMENTS**

See 1.0 FUTURE LAND USE for a table of the acreages of Developed, Developable, and Undevelopable campus lands and the Future Land Use Map.

See 2.0 TRANSPORTATION for policies designed to discourage dependence on personal automobiles and to encourage alternative modes of transportation on campus.

See 4.0 GENERAL INFRASTRUCTURE for more information on Energy Infrastructure and Conservation, and Water Use and Conservation.

<sup>&</sup>lt;sup>1</sup> STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

### 5.2 GOALS, OBJECTIVES and POLICIES (GOP)

#### A. Conservation of Natural Ecosystems and Resources - GOP

#### **NARRATIVE**

The Arboretum and Sustainability Initiatives (ASI) department, a unit of UCF Facilities & Business Operations (FBO), manages the campus natural lands with mechanical vegetation control, prescribed fire (controlled burns), and invasive species removal; and maintains a network of trails, making these areas accessible for nature enjoyment and passive recreation.

The University has received state-wide recognition for its land management program, which focuses on conservation management at the urban-wildland interface. The goals and policies for natural lands conservation presented in this element will enhance the diversity and abundance of native plants and animals living in campus natural lands and will help establish UCF as a national leader in conservation management and environmental stewardship.

Using and conserving water resources appropriately, improving air quality, and preventing or minimizing pollution are key aspects of the University's commitment to conservation and sustainability.

- The University's effort to protect its surface waters is guided by its National Pollutant Discharge Elimination System (NPDES) Permit. This 5-year stormwater permit, overseen by UCF's Utilities and Engineering Services (UES)<sup>2</sup> department, is issued by the Florida Department of Environmental Protection (FDEP), and reported for in years two and four.
- Air quality is addressed through transportation initiatives, such as the use of alternative fuels and renewables, and the University's Air Operation Permit.<sup>3</sup> This permit is also issued by FDEP, and overseen by UCF's Environmental Heath and Safety department.

GOAL 1: Conserve the region's biodiversity and natural heritage by designating significant campus conservation areas, developing wildlife-friendly landscapes, and minimizing the impact of future development on vulnerable species and habitats.

OBJECTIVE 1.1: Review and designate the status of all environmentally

POLICY 1.1.1: The University shall maintain in a natural state all areas identified as Conservation or Preservation in this CMP.

(OP-4: Ecologically Managed Grounds)

<sup>&</sup>lt;sup>2</sup> UCF uses an outside consultant, Harris Engineering, to manage this permit.

<sup>&</sup>lt;sup>3</sup> UCF uses an outside consultant, Grove Engineering, to manage this permit.

sensitive lands on campus, based on state and regionally determined criteria.

- New areas may be designated as conservation in the future, based on documented conservation values, such as the presence of imperiled or vulnerable species or natural communities, or other features of state, regional, or local significance.
- Conservation areas may have minimal structures and improvements necessary to ensure safe access and essential support functions (e.g., signage kiosks, security fencing or barricades, natural water crossings).
- There shall be no construction in conservation areas except pursuant to an amendment to this Plan adopted in accordance with all applicable state and local requirements.
- See Data and Analysis for Improvements to identify and brand conservation and preservation areas as the "UCF Forest"

POLICY 1.1.2: The University shall apply the "Conservation Easement" Land Use Category to natural lands that are set aside in perpetuity pursuant to a recorded conservation easement. This designation allows only low-impact uses such as hiking, bird watching, nature study, or other low-impact uses consistent with the easement requirements.

Other Natural Lands that are not part of a designated Conservation Easement or Jurisdictional Wetland, may be identified and preserved based on the goals, objectives, and policies in this element.

POLICY 1.2.1: The University shall continue to protect and conserve imperiled and vulnerable plant and animal species, including threatened and endangered species, and species of special concern.<sup>4</sup>

POLICY 1.2.2: The University shall coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) to maintain and manage populations of the Gopher Tortoise, *Gopherus polyphemus*, on campus, due to the tortoise's key role as an indicator of upland habitat quality, and its status as a protected species.

Upland preservation areas may serve as gopher tortoise relocation sites until the carrying capacity has been reached for that specific parcel as defined and permitted by the FWC.

OBJECTIVE 1.2:
Conserve, protect, and manage native plant communities and wildlife habitats within a system of interconnected wetlands and upland preserves.

<sup>&</sup>lt;sup>4</sup> See Endangered Species Act of 1973, as amended, Ch. 68A-27, F.A.C. Rules Relating to Endangered or Threatened Species, and federal and state management policies relating to the protection of these species.

POLICY 1.2.3: The University shall coordinate with appropriate state and regional environmental agencies, such as the St. Johns River Water Management District (SJRWMD), Florida Fish and Wildlife Conservation Commission (FWC), and Florida Forest Service (FFS), to manage designated Conservation Areas appropriately.

POLICY 1.2.4: The University shall develop information systems and plans that support conservation management. These shall include, but not be limited to:

- A Geographic Information System (GIS) database that includes digital overlays depicting the location of plant communities, conservation areas, or the locations of threatened and endangered species, and species of special concern, as well as rare or imperiled plant communities (e.g., ranked as G1-G3 or S1-S3 by the Florida Natural Areas Inventory).
- Land management plans that include management and restoration techniques, monitoring and evaluation of species and habitat quality, and detailed methods for the removal and control of invasive, exotic plants in campus natural lands.

#### (OP-4: Ecologically Managed Grounds)

POLICY 1.2.5: Native plant species should be used in the landscaping of new facilities, to the greatest extent possible.

- UCF shall exclude the use of Category I and II invasive species in landscaping, as listed in the current Florida Invasive Species Council (FISC) List of Invasive Plant Species.
- Efforts should be made to avoid using all other invasive species where applicable.

As defined in UCF's Weed Management Plan, ASI will periodically survey campus natural lands for the presence of Category I and II invasive species; and remove and properly dispose of these exotic plants. Existing landscaped areas will not be cleared of exotic plants.

#### (OP-4: Ecologically Managed Grounds)

POLICY 1.2.6: The University shall maintain established buffers, termed Riparian Habitat Protection Zones (RHPZ),<sup>5</sup> consisting of uplands that are within 50-feet landward of all campus wetlands.

The RHPZ buffers shall remain in a natural undisturbed state to the greatest extent possible.

7 | 5.2 CONSERVATION – GOP

<sup>&</sup>lt;sup>5</sup> See Riparian Wildlife Habitat Standards set forth in Chapter 40C-41.063 of the Florida Administrative Code.

POLICY 1.2.7: The University will use prescribed burns to manage native upland vegetation and habitat in campus natural areas, including those designated as Conservation, and those designated for other Future Land Uses but currently in a natural state.

#### (OP-4: Ecologically Managed Grounds)

Prescribed burns will be conducted periodically as conditions allow to provide suitable habitat for plant and animal species adapted to these fire-dependent ecosystems (e.g. sandhill, upland pine, pine flatwoods), and to mitigate the potential for catastrophic wildfire.

The University will follow accepted ecological practices or prescribed burns and comply with all applicable regulatory guidelines. ASI will be responsible for conducting prescribed burns and will coordinate with, and notify appropriate internal departments (University administration, Landscape and Natural Resources, Facilities Operations, Environmental Health and Safety, University Police, etc.) and external agencies (Florida Forest Service and Orange County Fire Rescue Department).

Courtesy communications about planned burns will be shared with neighboring residential communities; and traffic signs will be placed near burn sites to notify the campus community and visitors of burn activities.

POLICY 1.3.1: The University shall avoid or minimize biological and hydrological impacts to designated Conservation Areas. Any proposed development adjacent to Conservation Areas shall be designed and implemented to minimize potential impact on the

Landscape treatments of any such development shall preserve significant existing vegetation and plan for a gradual transition between developed and undeveloped areas.

POLICY 1.3.2: The University shall avoid or minimize any encroachment into designated Riparian Habitat Protection Zones (RHPZ), which are defined in Policy 1.2.6, above.

If a review of the environmental and economic costs of a proposed development demonstrates that encroaching into the buffer is the only viable option, then the University shall pursue all reasonable efforts to minimize and mitigate any environmental impacts to the area. A permit shall be obtained from the SJRWMD if proposed improvements are within the RHPZ of a wetland conservation easement.

POLICY 1.3.3: During the initial planning phase of any physical changes or impacts to campus natural areas, the University, through the ASI Natural Resources program shall perform an environmental assessment, and census of plant and animal species in the affected area in accordance with:

OBJECTIVE 1.3: Restrict activities that may threaten the survival of imperiled or vulnerable species or habitats.

area.

- Florida Fish and Wildlife Conservation Commission "Florida's Endangered and Threatened Species" Dec 2022<sup>6</sup>
  - Federally-designated: Endangered (FE), Threatened (FT), Threatened because of similarity of appearance [FT(S/A)], or Non-essential experimental population (FXN).
  - State-designated: Threatened (ST), or of Special Concern (SSC).
  - "NatureServe Conservation Status"
    - Global (G) Conservation Status Ranks: G1 Critically Imperiled, G2 Imperiled, or G3 Vulnerable
    - National (N) and Subnational (S) Conservation Status Ranks: S1 Critically Imperiled, S2 Imperiled, or S3 Vulnerable
  - Or flora and fauna otherwise afforded protection by the host communities and state and federal agencies.

Mitigation plans for any identified species shall be formulated and shall include options for protecting or relocating them, or setting aside other protected areas to mitigate for lost habitat.

POLICY 1.4.1: The University shall encourage conservation within its landscaped areas by designing landscapes that provide habitat for birds, pollinators, and other native species.

Landscape design and development will follow the 2016 Campus Landscape Master Plan and Design Standards (or most recent document if updated during the planning period); and will use the principles of the "Sustainable Campus and Landscape Approach" outlined in the plan to develop wildlife-friendly and conservation-oriented landscapes.

POLICY 1.4.2: The University shall support a healthy tree canopy throughout campus by maintaining "Tree Campus: Higher Education" accreditation through the Arbor Day Foundation and fulfilling requirements of that program; and by maintaining its GIS-based, digital "Urban Tree Inventory" and tree care policies.

#### (OP-4: Ecologically Managed Grounds)

POLICY 1.4.3: The University shall support and enhance the diversity and abundance of pollinator species on campus and shall maintain its designation as a "Bee Campus USA" by fulfilling its annual commitments to the requirements of that program.

POLICY 1.5.1: ASI will partner with other entities both within and outside the University to develop courses, internships, and other

OBJECTIVE 1.4: Enhance natural habitats and species in both developed and undeveloped areas of campus.

**OBJECTIVE 1.5: Foster and encourage use of** 

<sup>&</sup>lt;sup>6</sup> "Florida's Endangered and Threatened Species Dec 2022" <a href="https://myfwc.com/media/1945/threatened-endangered-species.pdf">https://myfwc.com/media/1945/threatened-endangered-species.pdf</a>

<sup>&</sup>lt;sup>7</sup> NatureServe https://www.natureserve.org/

<sup>&</sup>lt;sup>8</sup> Bee Campus USA is a program of the Xerces Society, a non-profit organization that has worked to protect invertebrates and their habitats since 1971. UCF has been an Affiliate since 2018.

campus landscapes and natural areas as an outdoor "living laboratory" for hands-on experiential learning in conservation and land management.

student training opportunities that build upon our programs in conservation and natural resource management.

POLICY1.5.2: The University will track the use of the campus as an outdoor living laboratory through site use permits issued by ASI (Exhibit 5.4-3). The University will designate sectors of the campus' natural areas as official laboratory assets, supporting many college research goals which require outdoor study sites.

(AC-4: Applied Learning)

GOAL 2: Protect regional water and air quality, and human and environmental health, by preventing or minimizing pollution and properly disposing of hazardous wastes.

#### **OBJECTIVE 2.1:**

Conserve, appropriately manage, and protect the quantity and quality of regional water sources.

POLICY 2.1.1: The University shall strive to prevent harmful pollutants from entering its Municipal Separate Storm Sewer System (MS4), by following requirements set forth in its "National Pollutant Discharge Elimination System (NPDES) permit" as required by the Florida Department of Environmental Protection (FDEP).

Utilities and Engineering Services (UES) shall be responsible for updating the NPDES permit, coordinating NPDES activities, and monitoring campus surface water for compliance with existing surface water quality standards as specified in the University's NPDES permit.

POLICY 2.1.2: The University shall use reclaimed water, for landscape irrigation, where applicable. UCF's reclaimed water is sourced from the Iron Bridge Water Pollution Control Facility, operated in Seminole County by the City of Orlando.

#### (OP-3: Water Use)

POLICY 2.1.3: The University shall continue to monitor and test raw well water, destined for potable use, on a daily and monthly basis per FDEP requirements.

POLICY 2.1.4: The University shall continue to implement a comprehensive water conservation program, to include:

- Using reclaimed water for the campus irrigation system and chilled water system make-up water
- Using automated timers and other irrigation flow-monitoring mechanisms
- Planting Florida-Friendly Landscaping<sup>™</sup> and droughtresistant landscapes for new building construction and landscape renovations, whenever possible
- Using low-flush fixtures in new construction and renovations.
- Implementing the water conservation plan submitted by the University to the SJRWMD, which is a basis for issuing the University's Consumptive Use Permit (CUP).

POLICY 2.1.5: The University shall not undertake activities on campus that would contaminate groundwater sources or designated recharge areas, unless provisions have been made to prevent such contamination or otherwise provide mitigation for such activities to maintain established water quantity and quality standards.

POLICY 2.1.6: The University shall continue to maintain and update the University Spill Prevention Control and Countermeasures Plan, overseen by EHS. <sup>9</sup>The University shall inspect and maintain all petroleum storage tanks to prevent oil discharges and prepare it to respond safely and effectively to mitigate the impacts of discharge to navigable waterways.

OBJECTIVE 2.2: Maintain or improve existing air quality on campus.

POLICY 2.2.1: The University shall continue to participate in and consider those programs that will maintain or improve existing air quality on campus lands.

POLICY 2.2.2: The University shall minimize emissions of air pollutants by minimizing the storage and use of volatile and hazardous materials in campus buildings, as established by the UCF Department of Environmental Health and Safety.

POLICY 2.2.3: Parking structures shall be designed to facilitate rapid ingress and egress of vehicles to minimize idling time, and to maximize airflow throughout to eliminate pockets of stagnation where pollutants can congregate.

POLICY 2.2.4: The University shall continue to comply with its Air Operation Permit. 10 The University shall monitor and maintain records, provide compliance testing, and maintain stationary combustion equipment and pollution controls to ensure emissions are within permitted parameters. The University shall meet federal and state air quality regulations prior to construction of stationary combustion equipment.

POLICY 2.2.5: To improve air quality on campus, stationary combustion on campus should be reduced, and electric alternatives shall be prioritized over the use of natural gas (or other combustion fuels). A new internal process should be developed to approve or deny the use of new stationary combustion systems.

#### (OP-5: Greenhouse Gas Emissions)

OBJECTIVE 2.3: To maximize on-campus reclamation of hazardous

POLICY 2.3.1: All University buildings shall be designed with facilities to accommodate collection, storage, and disposal of recycled materials.

(OP-12: Waste Generation and Recovery)

<sup>&</sup>lt;sup>9</sup> UCF Environmental Heath and Safety Department <a href="https://ehs.ucf.edu/spill-prevention">https://ehs.ucf.edu/spill-prevention</a>

<sup>&</sup>lt;sup>10</sup> Air Operating Permit 0950015-017-AO

materials and consumer products.

POLICY 2.3.2: The University shall provide on-campus facilities for the collection and storage of hazardous materials used in University operations as required by federal, state, and local regulations.

POLICY 2.3.3: The University shall implement academic programs that promote awareness of environmental benefits of recycling.

POLICY 2.3.4: The University shall continue to enforce hazardous materials handling and storage procedures per the recommendations of the Department of Environmental Health and Safety.

POLICY 2.3.5: The University shall use only licensed and permitted hazardous waste transportation and disposal companies.

#### B. Conservation of Energy - GOP

#### **NARRATIVE**

Energy in its many forms impacts nearly every aspect of university life, as it powers the heating and cooling of buildings, water distribution, lighting, computers, and UCF's world-changing research experiments.

UCF's enormous appetite for energy warrants serious consideration, given the associated environmental and financial impacts. As energy costs and demands continue to grow, achieving energy sustainability has become increasingly important to the University's mission.

Appropriate policies and procedures that govern how we use our environmental resources and facilities will enable UCF to achieve the improvements necessary to establish itself as a national leader in energy research, education, and stewardship.

Although this plan focuses on the energy use attributed to buildings and associated systems, the energy and environmental impacts of transportation are equally important. Currently, these two major energy consumers (buildings and vehicles) are largely decoupled, but this will not always be the case. As the use of electric vehicles increases, the interplay between building and vehicle energy will also increase.

We owe it to future generations to preserve and protect our finite natural resources, as we are all stewards of this Earth.

# GOAL 3: Reduce campus energy use through innovative technologies <u>to achieve</u> Carbon Neutrality by 2050.

OBJECTIVE 3.1: Reduce energy use by campus infrastructure, buildings,

POLICY 3.1.1: All UCF buildings shall be benchmarked to determine energy performance using the ASHRAE Building Energy Quotient database or other appropriate benchmark

and systems energy, to meet or exceed peer building benchmark Energy Utilization Index (EUI) and Energy Cost Index (ECI) performance metrics. databases for prioritization of energy efficiency projects and retrocommissioning activities.

#### (OP-5: Energy Use)

POLICY 3.1.2: All building lighting systems shall be upgraded to energy-efficient lighting technologies to reduce electrical power and HVAC cooling loads, reduce the maintenance burden of relamping efforts, and eliminate the use of mercury-containing bulbs.

#### (OP-5: Energy Use)

POLICY 3.1.3: All energy-intensive HVAC equipment shall be upgraded at end of life to meet or exceed the current UCF Design, Construction and Renovation Standards, to reduce energy expenditure and improve Indoor Air Quality (IAQ).

#### (OP-5: Energy Use)

POLICY 3.1.4: All campus site lighting (roadway, parking, sidewalks, signage, etc.) shall be upgraded to energy-efficient lighting technologies to improve site lighting characteristics, thus reducing energy expenditure and improving safety.

#### (OP-5: Energy Use)

POLICY 3.1.5: All building chilled water connections and associated tertiary pumps shall be modernized to meet both uniform specifications and the UCF Design, Construction and Renovation Standards to improve chilled water usage characteristics, reduce pumping power, and improve the chilled water temperature differential (Delta T).

#### (OP-5: Energy Use)

POLICY 3.1.6: All E&G funded<sup>11</sup> buildings shall be recommissioned in adherence to the latest version of ANSI/ASHRAE Standard 202 and ASHRAE Guideline 0.2 within a three-year cycle to maintain building system performance, document performance degradation due to entropy, and prioritize system modernization projects.

#### (OP-5: Energy Use)

POLICY 3.1.7: All energy efficiency building practices shall be guided by ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1 and the latest green building standard at the time of project conception.

POLICY 3.1.8: The University shall reduce HVAC loads by raising or lowering the temperature in all non-essential, unoccupied spaces after-hours. The University shall also work to implement

<sup>&</sup>lt;sup>11</sup> The Education and General (E&G) budget consists of State-appropriated General Revenue, Educational Enhancement (Lottery) funding, and Student Tuition and Matriculation payments. E&G funds are used for general instruction, research, public service, plant operations and maintenance, student services, libraries, administrative support, and other enrollment related and stand-alone operations of the university.

computer shutdown protocols for all UCF-owned non-server, non-critical computers and peripheral hardware.

(OP-5: Energy Use)

POLICY 3.2.1: UCF shall strive to reduce greenhouse gas emissions and improve economic stabilization of electrical utility rates.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

POLICY 3.2.2: A Photovoltaic (PV) Prioritization Plan shall be developed and implemented to install PV on select building roofs, parking garages, retention ponds, and elsewhere as approved by the administration.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

POLICY 3.2.3: New construction projects shall be designed and built to be solar-ready, when feasible.

(OP-5: Energy Use)

(OP-6: Greenhouse Gas Emissions)

Solar PV points of connection shall be located at the utility transformers instead of at the buildings, allowing for clear demarcation of PV electrical generation systems from building electrical systems.

POLICY 3.3.1: UCF shall continue to develop partnerships between its operations and academic units to enhance the quality of real-world academic applications and foster greater research potential in the areas of utilities, sustainability, and the built environment.

POLICY 3.3.2: Utilities and Engineering Services (UES) shall continue to work with Real Estate & Space Administration and the Registrar's Office to optimize space use and planning, reducing energy use associated with under-utilized and unoccupied spaces.

(OP-5: Energy Use)

Development of an energy conscious space usage policy could result in a significant reduction in campus energy consumption.

POLICY 3.3.3: UCF shall continue to pursue human-led energy conservation policies as outlined in the Collective Impact and Climate Action Plans, such as "Kill-a-watt" competitions and "Green Office" certifications.

(EN-1: Outreach and Communications)

OBJECTIVE 3.2: Transition electrical power sources from public-utility sourced power to onsite renewable energy and other onsite generation technologies.

OBJECTIVE 3.3: Utilize UCF's infrastructure, buildings, and systems as "living labs" for academic collaboration, research, and hands-on experiential learning.

#### 5.3 DATA and ANALYSIS (D&A)

#### A. Conservation of Natural Ecosystems and Resources - D&A

#### **Nature Conservation**

#### Overview

The UCF campus contains significant natural areas, many of which are protected from future development. Areas of interest include the Arboretum, preserved upland areas, wetland conservation easements and other wetlands, Lakes Lee and Claire, and campus stormwater ponds.

Natural areas provide substantial habitat for diverse and abundant plant and wildlife populations and offer attractive campus assets for connection with nature and recreational opportunities. The preservation of both the quantity and quality of these resources is vital to the continued ecological function of these resources as well as the quality and character of the UCF campus.

Nearly half of UCF's Main Campus acreage is natural land, uplands, bodies of water, and wetland habitats. A third of these natural areas are preserved in perpetual Conservation Easements to the St. Johns River Water Management District (SJRWMD). The remainder of UCF's natural areas include jurisdictional wetlands, and wetland buffers, and uplands set aside for long-term voluntary preservation.

#### **Arboretum Park**

Arboretum Park is a small urban park included within the acreage of the Campus Core

- The Arboretum, established in 1983 by President Trevor Colbourn, began with approximately 12 acres of a disturbed pond pine community on the east side of the developed part of campus.
- This area is now known as the Arboretum Park. Nearly eight of its 12 acres is wetland W-9A
- Arboretum and Sustainability Building

A new Arboretum and Sustainability Building is included on the Capital Improvement Map. This building will replace the aging modular that lies within the Park. The new facility will be constructed just outside of the Park's borders, freeing up more parkland.

#### RECOMMENDATION

ASI recommends that the UCF wetland designation be lifted from the W-9A wetland to allow the parkland to be further developed as a Living Laboratory

#### **Arboretum Preserve**

Arboretum Preserve lies east of Gemini Blvd. The boundaries of the Arboretum Preserve have not been surveyed for over 25 years. See also Arboretum Park above.

- In 1988, UCF President Altman expanded the Arboretum (k/n/a Arboretum Park) to include a 5 acre Cypress dome, a 2-3 acre oak hammock, and about 12-15 acres of sand pine and wild rosemary scrub, connected to the original Arboretum by a cabbage palm community and increasingly rare Florida Longleaf pine flatwoods." This area is now known as the Arboretum Preserve
- In 1990, the Grusenmeyer-Scott Survey showed the Arboretum as 83.507 acres, but only because it included over 35 acres of Wetland 9B as well as the original 12-acre Arboretum Park. W-9B has been protected by a Conservation Easement since 2002, and is no longer considered part of the Arboretum Preserve.
- o The 1996 Hartman Survey shows the Arboretum as 30.643 ac.
- The 2001 DRMP Survey added 7.893ac. "Buffer" east of the Hartman Survey parcel, later redefined as 6.412 ac.
- Land Swap

Part of the Hartman Survey parcel is being repurposed as "Recreation & Open Space - Developed" in this CMP.
However, a large parcel of land formerly known as the President's Reserve is being voluntarily preserved as "Recreation & Open Space – Natural Preserve" in this CMP. This parcel was set aside in 1995 for a future president to determine its use. It has been categorized on the Future Land Use Map as Developable for 25 years.

#### RECOMMENDATION

ASI recommends that the Arboretum Preserve be surveyed during the planning interval.

#### The "UCF Forest"

ASI recommends that natural areas (examples include: scrubby flatwoods, xeric hammock, basin swamps, marshes, wet prairie, etc.) on the Main Campus be designated as the "UCF Forest."

#### RECOMMENDATION

These areas could be "branded" to enhance their educational benefits.

- Trail Heads could be designed to include entrance features or landmarks at the main entrances to the "UCF Forest."
- Signage, at the trailheads, could describe the natural features, ecosystems, flora, fauna, etc. that may be encountered in that part of the "UCF Forest"

Decorative natural fences (split rail, bamboo, etc.) could be added along the more public edges of the "UCF Forest" to highlight this campus feature.

 Invasive Species ASI maintains a *Weed Management Plan* that identifies nuisance plant species in the natural lands. All plants listed in the Florida Invasive Species Council's "2023 FISC List of Invasive Plant Species" are monitored, mapped, and chemically treated. Most of these invasive exotics are stable or decreasing in coverage due to proactive

management, with support of funding awards from the Florida Fish and Wildlife Conservation Commission (FWC).

Monitoring

Vegetation monitoring is completed for environmental permits with the SJRWMD and for internal documentation. Data collected is also used for habitat evaluation and restoration research.

 Gopher Tortoises Gopher Tortoises and their burrows are surveyed and monitored periodically post prescribed fire by ASI.

 Threatened/ Endangered Plants/ Animals All listed threatened and endangered plant and animal species that are observed during compliance monitoring and general field observations are documented, mapped, and reported.

#### **Surface Water Quality**

The University of Central Florida's water features include two (2) natural lakes, Lake Claire and Lake Lee, thirteen (13) man-made stormwater ponds, and several other natural wetland and stream systems.

These water bodies are monitored regularly by UES and pond-management contractors. Periodic measurements of pond and lake systems have included dissolved oxygen, temperature, acidity (pH), conductivity, and turbidity. The University currently samples Lake Claire and Lake Lee monthly as part of the "Florida LAKEWATCH" program.

#### **Hazardous Materials and Spill Prevention**

Underground and Above-ground Tanks

The University has several above-ground storage tanks associated with diesel generators, lubricant oil, motor vehicle oils, and used oils. All of these tanks are double-walled and range in size from 25 gallons to 5,200 gallons. The University remediated and closed several old underground storage tanks in the 1990s. The current fuel island was installed in 1995 at the Facilities Management Compound. This underground tank has a capacity of 17,500 gallons and is FDEP-compliant.

The University continues to maintain and update its Spill Prevention Control and Countermeasures Plan. The University inspects and maintains all petroleum storage tanks to prevent oil discharges from occurring. The UCF Department of Environmental Health and Safety (EHS), a unit of Compliance, Ethics, and Risk, trains University personnel to respond safely and effectively to mitigate the impacts of discharge to navigable waterways.

Hazardous Materials and Waste

The University uses hazardous materials in its academic and research activities. All such materials are carefully monitored and regulated to assure there is no indication of any prior or current toxic waste problems on the campus.

Environmental Health and Safety (EHS) is responsible for ensuring the University's compliance with local, state, and federal environmental

laws and regulations. Areas covered include hazardous materials storage, hazardous waste management, environmental assessments, site remediation, the investigation and cleanup of contaminated media on state-owned property, storage tanks, environmental health, and regulatory monitoring to track changes to environmental regulations as they relate to environmental compliance.

Various campus departments generate hazardous waste, particularly those involved in engineering, science, or health-related research. Hazardous material inventory is maintained by laboratory managers and shop managers in the departments.

#### EHS is responsible for:

- The safe and legal disposal of all hazardous chemicals and wastes generated by the University.
- Contracting with licensed and permitted contractors for final disposal of waste, after it is collected, profiled, and safely characterized.
- Overseeing the inventory training, auditing, and outside agency reporting.

Air Quality

EHS provides monitoring, recordkeeping, and compliance testing in accordance with UCF's Air Operation Permit, issued by Florida Department of Environmental Protection (FDEP)<sup>12</sup>. The University maintains stationary combustion equipment and pollution controls to ensure emissions are within permitted parameters. The University obtains construction permits for new, stationary combustion equipment.

According to the 2023 Greenhouse Gas Emissions Report, <sup>13</sup> stationary sources of emissions (generators, boilers, kitchen equipment, etc.) account for 97% of all combustion emissions generated on campus, and 25% of all emissions, including indirect, related to the university.

#### B. Conservation of Energy - D&A

#### **NARRATIVE**

UCF is fully committed to an energy conservation and sustainability program based on universal participation and continual improvement.

All UCF buildings and facilities are operated with the health, welfare, and safety of all students, faculty, and staff in mind, and in support of instruction and research. Regardless of their sources of funding, buildings will be operated in the most energy-efficient manner possible. Individual and departmental awareness and accountability are essential to the overall success of this initiative.

<sup>&</sup>lt;sup>12</sup> Air Operating Permit 0950015-017-AO

<sup>&</sup>lt;sup>13</sup> The Greenhouse Gas Emissions Report is one of the credits that UCF reports on for STARS. The inventories are conducted using SIMAP<sup>®</sup>, which estimates emissions based on the data ASI receives from UES and others related to fuel use, business travel, etc.

The current University Policy on Energy and Water Efficiency shall be followed by all members of the University community.

**Current Energy Use** 

University energy data can be viewed on the <u>Open Energy Information System</u> dashboard.

UCF has developed a campus-wide system to track and report its energy utilization, which assists operations staff in optimizing building performance throughout the campus building portfolio; enhancing the University's advantage in energy and environment; and developing internal and external partnerships to creatively implement a broad range of expanded demand-side management initiatives.

Energy Efficient Projects

The University is responsible for coordinating numerous energy initiatives related to green buildings and energy efficiency. This includes capital energy improvement projects, renovations, and equipment replacement; and updates to University Policies relating to energy, sustainability, and the built environment.

The University prioritizes energy efficiency projects in Education and General (E&G) buildings based on the total Operations & Maintenance (O&M) costs normalized per square foot of conditioned space. O&M costs are comprised of all utility costs, as well as costs associated with service and repair work orders. While this method tends to prioritize the smaller, energy-intensive laboratory buildings, those buildings often are prime candidates for energy efficiency projects.

Based on this prioritization schedule, the University benchmarks and conducts ASHRAE Level 2 energy audits. In buildings that are not performing optimally, the condition of the energy-using systems contributing to the utility use is assessed. If the systems are still within an acceptable range of life cycle but are underperforming, those buildings are identified as candidates for retro-commissioning (or recommissioning if they've been commissioned previously). If it is determined that an energy-using system should be upgraded, replaced, or modernized, a design work begins to find initial budget figures and a scope of work for the design and implementation of Facility Improvement Measures (FIMs).

Commissioning Process of New Construction

As described in the ASHRAE Commissioning Standards and Guidelines: Standard 202, the Commissioning (Cx) approach is a quality-focused process to achieve the Owner's Project Requirements, starting at project inception and continuing throughout the life of the facility.

Commissioning is not an additional layer of construction or project management, but rather a strategy to reduce the cost of delivering construction projects and increase value to owners, occupants, and users. It focuses on the integration and interdependency of facility systems, since a performance deficiency in one system can result in less-than-optimal performance by other systems. Upon completion, commissioning is intended to reduce the life-cycle cost of the facility as well as the project capital cost through the warranty period.

All projects at UCF that impact utility use or the indoor environment require Commissioning, according to the University Policy on Energy and Water Efficiency.

Retro-commissioning Process of Existing Building Automation System The Retro-commissioning (RCx) approach allows for a repeatable, standardized approach to optimizing building system performance. RCx involves verification that the Building Automation System (BAS) is functioning as designed, such as checking if sensors are calibrated and actuators/relays are verified.

Devices that are not performing properly are recalibrated, repaired, or replaced, and trend logs and system alarm notifications are updated accordingly. A re-Testing, Adjusting and Balancing (reTAB) is then conducted to restore proper airflow and water flow characteristics to the HVAC and/or laboratory ventilation systems. Once fully functional, the system's sequence of operations is tested and optimized to confirm that the programming is functioning as intended, and opportunities for optimization are recorded.

Lighting Technology Upgrades

Lighting upgrade projects play a large part in energy conservation strategies at UCF. The University will continue to evaluate building and site lighting systems for the possibility of upgrading to more efficient fixtures with uniform lighting levels, color (temperature), and Color Rendering Index (CRI).

At the time of this plan's development, LED technology is state-of-theart and thus is the basis of technology reviewed and approved for upgrade and modernization projects.

In even further commitment to environmental stewardship, UCF has committed to complying with the International Dark Sky Association certification for exterior lighting fixtures.

# Green Building Standards

Since 2007, UCF has pursued *Leadership in Energy and Environmental Design* (LEED) certification for all new construction, major renovations, and recently for existing buildings adhering to the latest LEED rating system.

High-performance buildings play an integral part in supporting UCF's learning environment. Through LEED's high-efficiency standards, UCF LEED buildings are consuming approximately 30% less energy (based on ASHRAE 90.1 2010) and 40% less water than similar non-LEED buildings.

Alternative Fuel Vehicles Under the Energy Policy Act (EPAct) of 1992, state government fleets with 20 or more light duty motor vehicles are required to acquire Alternative Fuel Vehicles (AFVs) as a portion of their annual vehicle acquisitions. That portion became 75% by 1999.

EPAct 1992 originally defined AFVs as "Any dedicated vehicle or dual-fueled vehicle designed to run on at least one alternative fuel." In 2008, EPAct was amended to add qualified fuel cell motor vehicles, advanced lean burn technology motor vehicles, and qualified hybrid motor vehicles

Compliance with AFV acquisition requirements is measured based on AFV acquisition credits, which are earned based on the acquisition of any non-exempt light-, medium-, or heavy-duty AFV or quantity of biodiesel used by the agency during that FY.

UCF's Environmental Health and Safety (EHS) oversees UCF's compliance with EPAct 1992. In replacing existing fleet vehicles or adding to the fleet, UCF has met the requirements of the act:

- UCF's sedans and pickup trucks are primarily flex-fuel or allelectric vehicles.
- UCF is changing its Utility Cart fleet to electric.

Although not UCF-owned, nor earning AFV acquisition credits for UCF; 80% of UCF shuttles run on propane and 20% on biodiesel.

Photovoltaic (PV) systems are anticipated to become a greater source of electrical energy on UCF campuses during the 2025-35 planning interval.

See OBJECTIVE 1.2 regarding the transition of electrical power sources from public-utilities to onsite renewable energy generation technologies.

- Rooftop Photovoltaic Systems (rooftop solar panels) are recommended in this CMP for all new UCF buildings.
- Floating Photovoltaic (FPV) systems represent an emerging market for PV systems sited directly on bodies of water.

Possible benefits of FPV include efficiency gains due to lower cell temperatures; reduced balance of system costs associated with land costs and control of vegetation; improved water quality; reduced evaporation rates; and avoidance of land-energy conflicts.

The Florida Solar Energy Center (FSEC) was awarded a contract by the U.S. Department of Energy to assess the performance of FPV systems relative to their land-based counterparts. This will provide UCF with the data necessary to determine the incremental benefits of FPV on campus water bodies, preserving land for conservation or future development.

The rollout of PV installations will be based on energy generation potential, structural engineering reviews, digital grid lab simulation, and available funding.

Distributed
Generation –
Photovoltaic (PV)

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# **5.4 EXHIBITS**

Exhibit	5 4-1	Conservation	I ands	Man
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Exhibit 5.4-2 Map of Threatened and Endangered Plants and Animals Exhibit 5.4-3 Site Use Permits and Participants Through Time

Exhibit 5.4-1 Conservation Lands Map

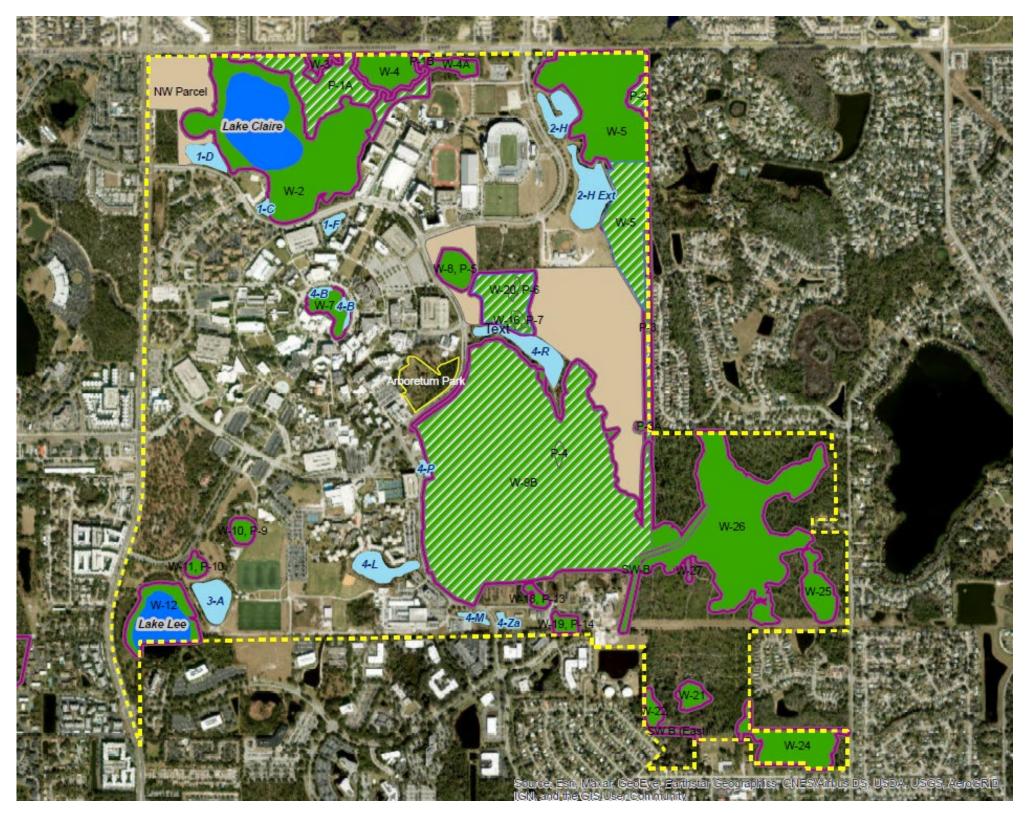
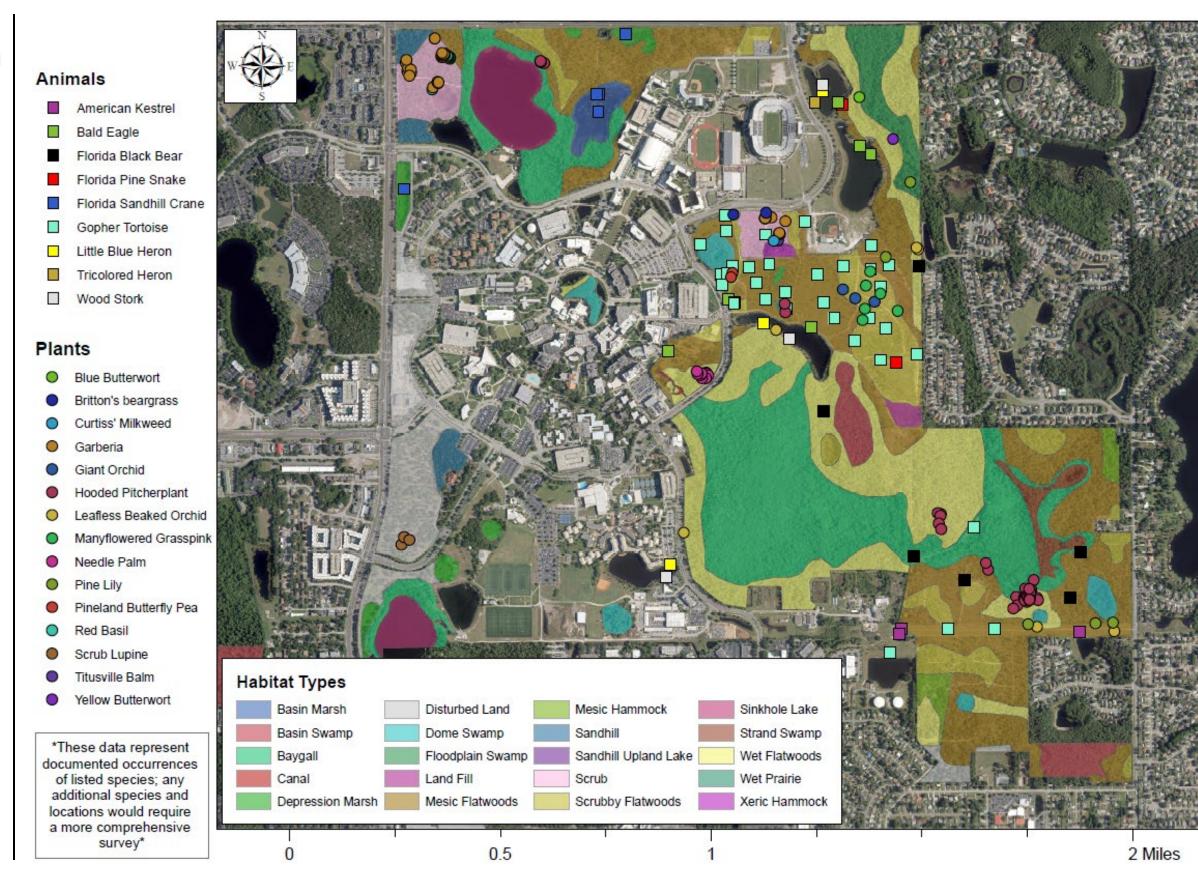
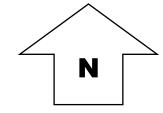






Exhibit 5.4-2 Map of Threatened and Endangered Plants and Animals



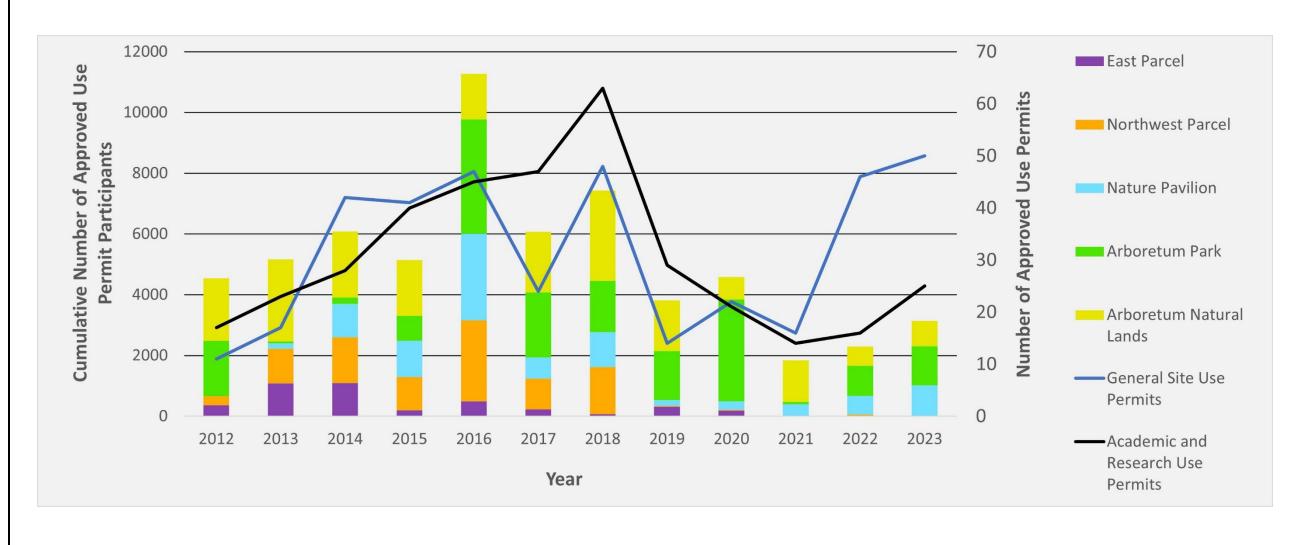


# Exhibit 5.4-3 Site Use Permits and Participants Through Time

Graph detailing approved Site Use Permits and number of cumulative permit participants under the Arboretum and Sustainability Initiatives Site Use Permit program through time.

Bar graph colors represent the cumulative number of approved Site Use Permit participants within a given year broken down by designated use area(s), and are measured on the primary (left-hand side) vertical axis. Line graphs represent changes in the number of approved General Site Use Permits (blue line) and Academic and Research Site Use Permits (black line) through time, and are measured on the secondary (right-hand side) vertical axis.

Site Use Permit applications decreased during the COVID-19 pandemic, but have begun to increase in 2022 and 2023. Please note that these participant data cover only the number of individuals listed on Site Use Permits; areas covered by Site Use Permits are also open 365 days a year, sunrise to sunset, for general public recreational use (e.g., hiking, bird watching, photography) outside of official, permitted use. As such, the number of individuals using these areas in a given year is likely significantly higher than the data presented here.





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#### UNIVERSITY OF CENTRAL FLORIDA

# **6.0 RECREATION & OPEN SPACE**

2025-35 CAMPUS MASTER PLAN UPDATE

#### **CONTENTS**

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## **6.1 INTRODUCTION**

#### **STATUTE & REGULATION**



**NARRATIVE** 

STRATEGIC PLAN ALIGNMENT

The RECREATION & OPEN SPACE element is required by Florida Statue 1013.30(3); and must follow the guidelines stated in Florida Board of Governors (BOG) Regulations, Chapter 21.

BOG 21.209 states the purpose of the RECREATION & OPEN SPACE element as follows:

"This element ensures the provision of adequate and accessible recreation facilities and open space to meet the future needs of the university."

In the Future Land Use element, Recreation & Open Space has been divided into two Land Use Categories.

Recreation & Open Space - Developed

- Intercollegiate Athletics Facilities such as buildings, stadiums, courts, and fields
- Recreation Facilities such as buildings, courts, and fields
- Arboretum Park

#### Recreation & Open Space - Natural Preserve

- Lands that UCF voluntarily preserves, predominantly in their natural, scenic, open, or wooded condition; e.g. Arboretum Preserve, Northwest Parcel, President's Reserve, and Neighborhood Buffers.
- Not included are lands, such as Jurisdictional Wetlands and Conservation Easements, for which UCF has granted a right or interest to other entities to conserve.

This element aligns with one or more of the four priorities stated in the UCF strategic plan "UNLEASHING POTENTIAL – Becoming the University for the Future", specifically:

#### Student Success and Well Being

Adequate and accessible recreation and open space aligns with this priority as the provision of recreation and open space allows for the expansion of access to high-impact practices and student well-being programs that contribute directly to success. Campus Recreation programs and facilities significantly impact student retention, with consistent use observed to correlate with retention rates above university goals.

#### Discovery and Exploration

The provision of activity laboratory space within the Colleges of Community Innovation and Education (CCIE) and Health Professions and Sciences (CHPS), as well as the use of the Arboretum and its natural environment by the Department of Biology, allows for investment in health and human performance that will address prevailing workforce needs in the healthcare sector.

### **Community and Culture**

The Strategic Plan aspires to expand university and community investment in the UCF Athletics Association's Mission XII initiative. Establishing lifelong connections with our community through athletic and alumni engagement activities is supported by growth plans in this element.

## **SUSTAINABILITY**

Goals, Objectives and Policies that align with the Sustainability Tracking, Assessment & Rating System<sup>TM</sup> (STARS)<sup>1</sup> are shown in **green** text, with the specific *Category and Impact Area* and *Credit* # indicated in parentheses after the Goal, Objective, or Policy.

Specific STARS sections in this element are aligned with the Category and Impact Area, **Engagement (EN)**, and credit:

EN 8: Shared Facilities

#### **RELATED ELEMENTS**

- 1.0 FUTURE LAND USE, Future Land Use Map for information on campus areas designated for Recreation & Open Space.
- 2.0 TRANSPORTATION for additional information on parking.
- 5.0 CONSERVATION for additional information on open space.
- 8.0 CAPITAL IMPROVEMENTS for recreation and athletics capital projects projected for the planning timeframe.

#### **DEFINITIONS**



**Activity-based** facilities are defined as those facilities designed, constructed, and designated for specific sports or recreation activities, including:

 Indoor and outdoor recreation facilities. e.g. intercollegiate and intramural sports facilities (softball, soccer, tennis, etc.), gymnasia.

**Resource-based** refers to those facilities that are primarily used for general recreation or organized social functions, including:

 Open fields, picnic areas, nature trails, boating lakes, and public parks. This category may also include on-campus man-made features (malls, courtyards, plazas, quadrangles, parks) where students, faculty, and staff gather for casual interaction or play.

Resource-based facilities are further categorized as:

- Active Resource-Based Facilities generally accessible open spaces or parks where recreation activities are permitted, such as picnic areas, open fields, nature trails.
- Passive Resource-Based Facilities areas that are relatively inaccessible to any type of recreation activity, such as conservation and environmental mitigation lands.

<sup>&</sup>lt;sup>1</sup> STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

## 6.2 GOALS, OBJECTIVES & POLICIES

## **Recreation and Open Space - GOP**

#### **NARRATIVE**

Goals, Objectives & Policies (GOP) are stated here for "Activity-Based Recreation" and "Resource-Based Recreation" as defined in 6.1 Introduction.

GOAL 1: Provide a variety of safe, efficient, and enjoyable on-campus recreation facilities and open space areas to promote the health, well-being, and campus aesthetic for students, faculty, staff, and visitors.

OBJECTIVE 1.1: Pursue a variety of public and private funding sources and programs to ensure the development and availability of recreational facilities and educational laboratories for students and other user groups.

POLICY 1.1.1: Student Success and Well-being (SSWB) and the College of Community Innovation and Education (CCIE) shall assure the provision of adequate recreation and open space facilities to support quality recreational and sports programs for all UCF students.

The development of programs and facilities will be based upon student demand, user interest, and the availability of appropriate funds.

POLICY 1.1.2: Landscape & Natural Resources (LNR)<sup>2</sup> and the Arboretum shall be responsible for the creation and maintenance of all trails and trail systems in the campus natural lands.

The University will encourage the campus and surrounding communities to use UCF's natural lands as an outdoor living laboratory and recreational space, to enhance physical and mental well-being.

#### (EN-8: Shared Facilities)

POLICY 1.1.3: The Arboretum will evaluate funding opportunities for the development of Arboretum Park (the Arboretum site within the Campus Core) as a park-like setting offering recreational opportunities for students, faculty, staff and the Local Community.

#### (EN-8: Shared Facilities)

POLICY 1.1.4: The University shall continue to utilize contractual relationships with off-campus, private, and public facility providers to meet recreation or physical program and facility needs.

<sup>&</sup>lt;sup>2</sup> LNR includes both the Arboretum & Sustainability group and Landscape Operations.

OBJECTIVE 1.2: Pursue a variety of continuing inhouse planning and facility development programs to ensure that high quality recreation and open space areas are adequately and efficiently provided.



OBJECTIVE 1.3: Promote unrestricted or managed public access to all campus recreation and open space areas to the maximum extent feasible.

POLICY 1.2.1: UCF shall continue to maintain and develop functional and aesthetically pleasing open spaces between structures and throughout the campus. This shall be accomplished through the application of building development and land use intensity guidelines consistent with elements 1.0 FUTURE LAND USE and 5.0 CONSERVATION.

POLICY 1.2.2: Although separate facilities would be ideal for Recreation, Intercollegiate Athletics, and Sports Education programs, representatives of these programs shall share facilities when practicable.

POLICY 1.2.3: UCF shall continue to develop future recreation facilities. Once all remaining sites in RWC Park have been developed, additional campus sites must be explored.

POLICY 1.2.4: When designing and programming future campus development of open spaces, Student Success and Well-Being (SSWB), and the College of Community Innovation and Education (CCIE) and Planning, Design & Construction (PDC) shall consider which recreation programs and facilities could be maintained in these spaces as part of the campus open space scheme.

POLICY 1.2.5: The University shall continue to identify priorities for improvements to recreation and open space facilities to correct existing deficiencies and meet future demands.

 Capital Projects proposed within the planning period shall be indicated in the Schedule of Capital Projects (SCP), found in element 8.0 CAPITAL IMPROVEMENTS

POLICY 1.3.1: Campus open space areas shall be developed and maintained as areas of unrestricted public access, wherever feasible.

#### (EN-8: Shared Facilities)

- "Trails and associated facilities should be designed or retrofitted so that accessibility is a key tenet"; 3 even when absolute access is not feasible.
- UCF may restrict or limit access to certain areas of environmentally sensitive habitat, as necessary to protect endangered animal and plant species.

POLICY 1.3.2: The University shall prioritize use of campus recreational facilities for UCF students, faculty, and staff. Once student demands are met, faculty, staff, and non-campus users will be accommodated, on a fee basis.

 Reasonable maintenance and restoration periods for any recreational facility will take precedence over access.

6 | 6.1 RECREATION & OPEN SPACE - GOP

<sup>&</sup>lt;sup>3</sup> Source: Florida Greenways and Trails Council's "Unpaved Non-Motorized Trail Guidelines")

OBJECTIVE 1.4: Protect and enhance present campus open spaces.

POLICY 1.4.1: The University shall protect all existing conservation lands and maximize the retention of open space; by judicious placement of future buildings, parking facilities, infrastructure, and other man-made improvements.

 See also 1.0 FUTURE LAND USE, 5.0 CONSERVATION, and 8.0 CAPITAL IMPROVEMENTS.

Areas indicated on the Future Land Use Map as category "Recreation & Open Space" cannot be changed without an amendment to the CMP.

POLICY 1.4.2: The University shall select sites for buildings and infrastructure that ensures the retention of campus open space, when feasible.

POLICY 1.4.3: The University shall strive to create new, park-like greenspaces between buildings, where shown on the Future Land Use Map, and the Capital Improvements Map.

## **Intercollegiate Athletics - GOP**

#### **NARRATIVE**



MISSION: To positively transform the lives of our students academically, athletically, and personally through a nationally competitive intercollegiate athletics program that enhances the reputation and visibility of the University of Central Florida.

VISION: To be Florida's preeminent intercollegiate athletics program, representing UCF and our community with distinction on the national stage as "Orlando's Hometown Team."

# GOAL 1: Continue developing UCF's athletics facilities to align with the UCF Mission XII initiative.

OBJECTIVE 1.1: Design and implement a world-class athletics master facilities development plan.

POLICY 1.1.1: The UCF Athletics Association (UCFAA), in consultation with Planning, Design and Construction (PDC), will review and assess athletics facilities needs and prioritize future construction, enhancements, and expansion projects.

POLICY 1.1.2: UCFAA facilities, projected for the 10-year planning timeframe, shall be listed on the Schedule of Capital Improvements (SCP) in element 8.0 CAPITAL IMPROVEMENTS.

POLICY 1.1.3: UCFAA shall establish the priority use of intercollegiate athletics facilities.

POLICY 1.1.4: UCFAA will seek external creative assistance with conceptualizing capital projects and facilities enhancements to obtain donor support for the facilities development campaign.

POLICY 1.1.5: UCFAA will establish an annual facilities maintenance and reinvestment budget for new capital projects and existing facilities.

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## 6.3 DATA & ANALYSIS

## **Recreation & Open Space Facilities Inventory**

Data and Analysis Requirements.

BOG Regulation 21.209 (1) Inventory and assess (the following) against the projected needs for recreation and open space facilities required to meet the needs of the projected university population (students, faculty and staff) based on university standards and calculations or established level of service standards.

- (a) university-owned or -managed recreational sites (including open spaces, incidental recreation facilities, parks, lakes, forests, reservations, freshwater and saltwater beaches)
- (b) privately-owned, state owned, or local government-owned recreational facilities and open spaces within the planning study area
- (c) planned future recreation and open space facilities, both oncampus and off-campus within the planning study area

 University-owned or -Managed Recreational Sites See Exhibit 6.4-1 for an Inventory of all existing athletics, recreation and open space facilities that are UCF-owned and -managed, along with their sizes and typical uses.

University owned and managed facilities are used primarily for:

- Academic classes within the College of Community Innovation and Education (CCIE) and College of Health Professions and Sciences (CHPS)
- Recreation and Wellness Center (RWC) programs including Fitness, Aquatics, Outdoor Adventure, Intramural Sports, and Sport Clubs
- Intercollegiate Athletics programs sponsored by the UCF Athletics Association (UCFAA)
- On-campus residential recreation
- Outdoor, nature based, active recreational programing and activities supported by the Natural Resources and Arboretum departments.

UCF facilities are periodically available for rent and/or open to public use as noted in the "Typical Uses" column in Exhibit 6.4-1.

Existing privately-, state-, or local government-owned sports facilities, recreation facilities, and open space are available within and near the Context Area.

UCFAA, Education, and Sport Clubs utilize Non-University Owned/Managed facilities for Golf, Tennis, and Bowling.

#### Bowling:

Local bowling lanes are used for events, academic classes and by Sport Clubs. These facilities are privately-owned and -managed, and are used on a fee basis.

Privately-owned, Stateowned, or Local Government-owned Recreational Facilities and Open Spaces





Golf:

UCFAA uses the Intercollegiate Golf Training Facility at Twin Rivers Golf Club for intercollegiate men's and women's golf training. The facility is owned and managed by the City of Oviedo.

Several local par 72, 18-hole golf courses are used by education classes; and UCF entities pay a use fee.

#### Tennis:

For intercollegiate men's and women's tennis training and competition, UCF uses the Collegiate Center at the U.S Tennis Association (USTA) National Campus in Lake Nona (12 courts, clubhouse, and stadium).

Hiking, Canoeing, Kayaking, Cycling, Birding, etc.:

State Parks and Natural Areas: There are many off campus Resource-Based facilities that are used by academic programs and RWC adventure trips, and even more that are open and accessible to the public.

UCF has an abundance of Resource-Based active and passive recreation space, as defined in 6.1 Introduction.

A review of Activity-Based recreation space, such as intramural fields and courts, illustrates a deficit of space to serve the needs of the UCF community. The following comparisons to other institutions and to recognized space-planning guidelines further illuminate the need for additional Activity-Based recreation space.

Several projects specific to the UCF Recreation and Wellness Center have been undertaken to address this deficit; but more indoor and outdoor recreation spaces are needed.

# Recreational Sports Planning Guidelines

Level-Of-Service

Standard (LOS)

Based on a review of the National Intramural Recreational Sports Association's (NIRSA) "Space Planning Guidelines for Campus Recreational Sport Facilities," the following LOS standards are presented for comparison purposes.

onal Standard per 1,000 students
0.94 acres
8,960 SF

#### **Peer Comparisons**

Based on total enrollment,<sup>4</sup> the following is an assessment of UCF against peer institutions of similar size, as well as against other state universities.

Based on the NIRSA standard of 8,960 square feet per 1,000 students, a school of UCF's size should have 621,107 total square feet of indoor recreation space.

The figures below demonstrate UCF's comparative lack of Indoor Recreation Space and Outdoor Playing Field Space.

<sup>&</sup>lt;sup>4</sup> Comparable data was unavailable to support a comparison of other Universities Main Campuses to UCF 's Main Campus only.

# Comparison Indoor Recreation Space

Peer Institutions and other State Universities	Fall 2023 Enrollment	Indoor Space (SF)	Indoor Space SF/Student
The Ohio State University	65,405	725,000	11.08
University of Texas Austin	53,082	500,000	9.41
Texas A&M	69,598	540,000	7.75
University of South Florida	48,732	220,961	4.53
Florida State University	43,701	180,000	4.11
University of Florida	54,992	201,581	3.60
UCF	69,316	150,000	2.16

# Comparison Outdoor Playing Field Space

Peer Institutions and other State Universities	Fall 2023 Enrollment	Field Space (acres)	Acres/1,000 students
Florida State University	43,701	117.00	2.68
The Ohio State University	65,405	54.98	0.84
Texas A&M	69,598	50.00	0.71
University of Texas Austin	53,082	35.67	0.67
University of Florida	54,992	35.00	0.63
University of South Florida	48,732	22.75	0.46
UCF	69,316	24.85	0.35

## Recreation - Current and Future Facilities

### Analysis and Recommendations for Improvement



UCF routinely investigates opportunities to provide Recreation and Open space Facilities to address future demand, in addition to any facilities issues or limitations.

As indicated by the Level of Service (LOS) standards set by the National Intramural-Recreational Sports Association (NIRSA), UCF currently has a lower existing LOS for recreation space than the NIRSA LOS standards or by comparison to other universities with similar enrollment.

In addition to the LOS standard from NIRSA, it is important to consider current NIRSA Facilities and Construction Reports such as "Facility Construction & Renovation at NIRSA Member Institutions, 2016-2020," and other publications such as "Physical Space on Campus" from the ACUI 2012 Summit on Building Community, and Recreation Planning Principles, outlined by the NIRSA and Society for College and University Planning (SCUP) through a joint effort, that include:

- Establish recreation as a pillar of the University's comprehensive plan
- Create and maintain a vision of physical development of recreational facilities, a vision which supports the mission and master plan
- Instill a real sense of community and enrich the experience of all who come to campus; and
- Foster a safe, secure, and accessible environment

# RECOMMENDATIONS FOR IMPROVEMENTS

Based on student satisfaction surveys, observation, and data published by NIRSA, RWC has identified a list of problems, constraints, and opportunities were. They are not in priority order.

The UCF Recreation and Wellness Center Vision states: "(RWC) strives to both set and stay ahead of national standards for university recreation programs and facilities…"

Future Resource-Based recreation and open space must be carefully planned, utilizing spaces formed between buildings and the protection and expansion of natural areas.

As the campus continues to grow, more land will be needed for Activity-based recreation facilities, buildings, and parking.

#### INDOOR FACILIITIES

The Recreation and Wellness Center (RWC)



The Recreation and Wellness Center helps to serve the recreation needs of the UCF community. The 85,000 square foot facility was opened in 2002 and expanded in 2010 to add 65,000 square feet, including more fitness area, multipurpose courts, racquetball courts, a new lap pool, and an outdoor adventure center. These additions have been successful, but still leave UCF with inadequate square footage compared to peer institutions and national standards.

Recreation and Wellness Center amenities:

- Track (1/8 mile)
- Multipurpose Courts (6)
- Racquetball Courts (4)
- Fitness Space
  - o Free Weight Area
  - Machine Weight Area
  - Cardio Equipment Area
  - Functional Fitness Area
- Outdoor Adventure Center
- Climbing Tower
- Leisure Pool (186,000 gallon)
- Lap Pool (9-lane regulation)
- Tennis Courts (8)
- Pickleball Courts (4)
- Sand Volleyball Courts (4)
- Outdoor basketball courts (3)

RECOMMENDED IMPROVEMENTS TO INDOOR FACILITES Addition to the Recreation and Wellness Center - the intent is for the current site, south and west of the existing facility, to be built out to serve the needs of the UCF community (see 8.0 CAPITAL IMPROVEMENTS, Schedule of Capital Projects and Capital Improvements Map).

- A master plan exercise in 2007 indicated that the RWC facility could be expanded to include additional court space, multipurpose rooms, fitness space, and an expansion to the outdoor adventure center.
- A Project to update HVAC in the RWC is CITF funded for 2025 – see 8.0 CAPTAL IMPROVEMENTS, Schedule of Capital Improvements.

UCF loss of Indoor Facilities

During previous planning intervals RWC has closed facilities, not increased them as was needed. Dedicated indoor Sport Club space should be included in any future expansion of the Recreation and Wellness Center.

- RWC @ Knights
   Plaza
- The addition of RWC's Knights Plaza facility in 2013 had greatly improved the indoor facility inventory, however the facility closed in 2023 due to a lack of available Activity and Service Fee funding to sustain the operation of the leased facility.
- RWC @ Ferrell Commons

The Ferrell Commons facility was renovated in 2015 to provide a dedicated space for Sport Club martial arts clubs to practice. The renovation decreased the overall space available for Sport Clubs, as the facility was divided to accommodate the Lead Scholars Academy.

• Tennis Complex

RWC sacrificed one tennis court to make space for pickleball.

#### **OUTDOOR FACILITIES**

#### Lake Claire Recreation Area

The William E. and Mary Jo Davis Recreation Area on Lake Claire has become a thriving natural recreation facility on campus, with a highly visible location on the northwest corner of campus on Gemini Boulevard North near Greek Park.

Lake Claire Recreation Area amenities:

- Boat House
- o Picnic Pavilions (3)
- Sand Volleyball Courts (2)
- Playing Field
- Outdoor Fitness Stations

The Lake Claire facility was last redeveloped in 2012 to include picnic pavilions (3), sand volleyball courts (2), and a lighted playing field. Exercise stations and an ADA accessible dock and restroom have also been added to enhance the facility.

# RECOMMENDED IMPROVEMENTS

Aside from physical enhancements to Lake Claire, the space should also host only activities which are consistent with its natural environment, in order to preserve and protect the facility for its primary usage.

Once a popular tailgating site, Lake Claire Recreation Area no longer permits tailgating due to behavioral incidents, safety concerns, and damage to the facilities and site.

Boathouse

A total renovation of the boathouse is needed to create a facility that is both fitting to the area's aesthetics and allows its staff to serve students more efficiently.

The current boat house is a covered, outdoor chain-link facility that is not sufficiently large or secure to meet the demand of the UCF community. An updated boathouse design was proposed in a 2010 Lake Claire Recreation Area Master Plan.

Parking lot

The parking lot (H10) at Lake Claire is gravel and dirt. An upgrade to pavement with parking space striping would improve the user experience. See element 2.0 TRANSPORTATION for information on proposed improvements to campus parking lots.

Trail system

There are under-maintained trails through the woods behind Lake Claire. If feasible, the trails should be improved, maintained, and connected with current on-campus trails.

#### **RWC Park**

The RWC Park encompasses all the outdoor playing field facilities in a park-like environment on the south side of campus. The Park was master planned to include state-of-the-art artificial turf fields and support facilities.

The Rec and Wellness Park has these amenities:

- Artificial Turf Fields (6)
- o Sport Club Field
- o North Grass Field
- Softball Field
- o Challenge Course
- o Disc Golf Course
- o Outdoor Fitness Gym
- Past Improvements
- The first phase of the redevelopment of the park was completed in 2006 and added three (3) lighted artificial turf fields to the existing softball fields, sport club fields, and multipurpose fields.
- Phase II construction was completed in 2009, and added three (3) additional lighted turf fields, a support and restroom facility (building 320), and a maintenance facility (building 321).
- The first phase turf fields were re-turfed in 2016, including a repair of the drainage and base layer. The phase II turf fields were re-turfed in 2023. It is recommended that the fields continue to be re-turfed every 10-12 years based on wear.

RECOMMENDED IMPROVEMENTS

Future phases of RWC Park must address the shortfall of baseball/softball fields, the addition of lighted fields dedicated to Sport Clubs, dedicated pedestrian paths and a support facility for safety, security, and access.

The RWC Park Master plan should complete all future phases to support student usage. This would include:

- RWC Sport Fields
- Add artificial turf fields 7 & 8 should replace current grass fields. This would add two additional lighted fields for Intramural Sports, Sport Clubs and open recreation.
- Add Varsity Sport Club grass field 1, to the south of the current Sport Club field. This would add one lighted competition field for Rugby, Soccer and Ultimate.
- Add a new Support Facility to provide additional security and access management. This building would also provide a severe weather shelter for users, along with additional restrooms and indoor programming space.

RWC Buildings

• RWC Softball Fields

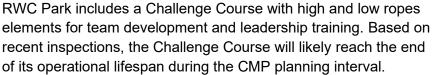
UCF currently has a critical shortage of softball fields. In 2000, the expansion of University Housing decreased the quantity from three (3) to one (1) field. NIRSA standards call for 0.15 fields per 1000 students or 9.9 fields. While Intramural Sports participation these sports has declined in recent years, the UCF Baseball and Softball club currently must rent off-campus fields for competitions.

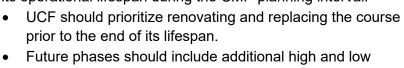
• Construct one (1) Baseball/Softball multipurpose field adjacent to the current softball field.

 RWC Transportation Infrastructure RWC Park is a vibrant, well-lit activity space, frequently used in the evenings and on weekends. The supporting transportation infrastructure needs improvement.

- Parking: RWC Park lacks dedicated parking. Lot B8 provides only 120 spaces, shared by RWC Park and UCF Marching Band
- Sidewalks: Lot B8 has no dedicated pedestrian paths around or through the lot. Students need a safe way to walk, run or bike to the RWC Park.
- Road Improvements: An existing east-west service road, utilized by vehicles that support Marching Band and UCF Facilities, poses a pedestrian safety issue for RWC Park.

 RWC Challenge Course





 The open space around the Challenge Course must be preserved, as the facility is intended to be secluded in a natural area and encroachment on its buffer would lessen its appeal and effectiveness.

elements to provide new programs and accommodate larger



groups.

RWC Tennis

The Tennis complex has eight (8) lighted courts west of Libra Garage, shared by the entire UCF community, including UCF Athletics.

UCF has a deficit of intramural tennis courts. The NIRSA standard of 0.41 Tennis Courts per 1,000 students suggests UCF needs 27 courts (deficit of 19 courts).

 Additional tennis courts should be provided to serve the UCF community. UCF Athletics is planning the addition of 12 intercollegiate tennis courts near the softball complex. This facility will relieve a great deal of strain on the intramural tennis complex.

RWC Sand Volleyball

Existing Sand Volleyball facilities: Six (6) courts – four (4) southwest of Tennis complex and two (2) at Lake Claire

 RWC is considering relocating the Sand Volleyball courts from the Tennis Complex to RWC park to alleviate surface maintenance concerns with sand courts located next to hard courts.

Existing Pickleball facilities: Four (4) pickleball courts, at the Tennis Complex, open to the UCF community. In 2024, the RWC converted a tennis court into four (4) pickleball courts. The remaining eight (8) courts are now available strictly for tennis.

- RWC should monitor the popularity and use of these pickleball courts; and consider adding additional courts should funding allow.
- Relocating the Sand Volleyball courts from the Tennis Complex to RWC park, would allow for more pickleball courts.

Existing Disc Golf facility: 18-hole Disc Golf course, west of RWC Park. In 2021, the RWC expanded the Disc Golf Course from 9- to 18-holes. This course is open to the UCF and Local communities and should continue to be maintained at a high level.

No current recommendations

RWC Basketball

Existing facilities: Three (3) Basketball courts, off of Ursa Minor St, also open to UCF students and RWC Members.

No current recommendations



RWC Disc Golf

## **Open Space – Current and Future Facilities**

#### **INVENTORY**

Open Space, as defined in the element 6.1 Introduction, includes nearly 800 acres of spectacular natural lands and on-campus manmade features.

Active Resource-Based Facilities (natural and man-made):

- Memory Mall
- Burnett Honors College formal garden
- Health Sciences I and II courtyard
- Knights Plaza
- Arboretum Park (within the Campus Core)
  - Current Environmental Education and Outreach Center
- Arboretum Preserve (east of Gemini Blvd. E.)
  - Timothy Newman Nature Pavilion
- Campus nature trails
  - Arboretum Nature Trails
  - Lake Claire Nature Trails
  - East Parcel Nature Trails

#### Passive Resource-Based Facilities

- Conservation Easements
- Jurisdictional Wetlands

# RECOMMENDED IMPROVEMENTS

UCF's Open Space needs improvements. See also 5.0 CONSERVATION element.

- Proposed improvements to Lake Claire Recreation Area are indicated under Recreation Facilities.
- The Arboretum and Sustainably Department plans to:
  - Replace the aging, modular Environmental Education and Outreach Center with a new Arboretum and Sustainability Center (see 8.0 CAPITAL IMPROVEMENTS)
  - Improve Arboretum Park to enhance its purpose as a living laboratory.
- Provide future open spaces at the current sites of some large surface parking lots. Examples from 1.0 FUTURE LAND USE, Future Land Use Map:
  - North of Trevor Colbourn Hall (Lot H2)
  - East of Health Sciences II (Lot D1)

## Intercollegiate Athletics – Current and Future Facilities

#### **NARRATIVE**

UCF Athletics is committed to making the Kenneth G. Dixon Athletics Village the best of its kind in collegiate athletics.

See 6.4 EXHIBITS regarding current University-owned and -managed Athletics Facilities.

Planning Objective

On a continual basis, UCFAA reviews and assesses athletics facility needs and prioritizes future construction, enhancements, and expansion projects.

**Priorities** 

- Student-athlete competition, training, nutrition, academic, and personal/career development
- Fan experience
- Revenue development
- Administration and support

RECOMMENDED IMPROVEMENTS

Significant expansion is anticipated during the 2025-35 planning interval, as funding becomes available.

The following projects, projected for the 10-year planning timeframe, are listed and mapped in 8.0 CAPITAL IMPROVEMENTS - Exhibits.

- Roth Tower Addition/Remodeling/Renovation
- Relocation of Football Practice Field
- Parking and Promenade Improvements
- Remodeling/Renovation Wayne Densch Sports Center
- New Football Operations Building
- New McNamara Cove
- New Soccer Stadium & Field
- New Track Stadium & Track
- New Tennis Complex
- Basketball Excellence Center The Venue
- Spectrum Stadium Steel Re-coating

## 6.4 EXHIBITS

Exhibit 6.4-1 Existing Recreation and Athletics Facilities

Exhibit 6.4-2 Recreation and Wellness Current Facilities Inventory Map

Exhibit 6.4-3 UCFAA Current Facilities Inventory Map

Exhibit 6.4-1 Existing Recreation and Athletics Facilities	University-owned and University-managed			
On-Campus	Facilities used primarily by Intercollegiate Athletics - "Keys" refer facilities shown on UCFAA Current Facilities Inventory Map			
Athletics Facilities	Key Description	Size	Typical Uses	
	A Addition Financial Arena (2007)	370,773 GSF	Men's and Women's Intercollegiate Basketball training and competition, commencement, and special events. Managed by UCF Convocation Corp	
	B The Venue (1991)	Incl above	Intercollegiate Women's Volleyball training and competition, and Special Events. Managed by UCF Convocation Corporation	
	C John Euliano Park (2001)	4.7 acres	Intercollegiate Baseball (Spring home games). Youth Camps	
	D Soccer Practice Field (2006)	2.37 acres	Intercollegiate Men's and Women's Soccer training	
	E Track and Soccer Complex (1991, Stadium added 2010)	6.85 acres	Intercollegiate Women's Track, Men's Soccer, and Women's Soccer training and competition. Limited University community use	
	F Nicholson Field House (2005)	81,337 GSF	Indoor conditioned training. Regulation football field	
	G Roth Athletics Center	45,791 GSF	Administrative offices, Sport program offices, Team facilities	
	H Wayne Densch Sports Center (2004)	GSF	Student-Athlete Training Facility, Football Staff Offices, Sports Medicine, Strength and Conditioning, Equipment Operations	
	I Football Practice Fields two fields (2006, one moved 2024)	4.57 acres	Fall/Spring Practice, and Youth Camps	
	J FBC Mortgage Stadium (2007)	10.12 acres	Intercollegiate Football games (Fall), and Special Events	
	K Roth Tower	See Stadium	Part of FBC Stadium	
	L Wayne Densch Center for Student-Athlete Leadership (2016)	45,330 GSF	Student-Athlete dining and nutrition, and Special Events	
	M Garvy Center for Student-Athlete Nutrition (2018)	See Stadium	Student-Athlete dining and nutrition, and Special events	
	N Softball Complex (2006)	1.65 acres	Fall/Spring Practice, Home Games, and Youth Camps	
	<ul> <li>Tennis Courts - see Shared On-Campus Facilities</li> </ul>	~		
Off-Campus Athletics	Facilities used primarily by Intercollegiate Athletics			
Facilities	Description	Size	Typical Uses	
	UCF Evans Family Rowing Center (Lake Pickett)	5.0 acres	Varsity Fall/Spring Home Games, Practices, Youth Camps	
On-Campus Recreation	Facilities used primarily for Recreation - "Codes" refe	r facilities sh	own on RWC Current Facilities Inventory Map	
Facilities	Code Description	Size	Typical Uses	
	1 Recreation and Wellness Center (RWC)	156,111 GSF	Recreation Use for Students and Faculty/Staff.	
	• 1.1 • RWC Lap Pool	0.23 acres	Recreation Use for Students and Faculty/Staff	
	• 1.2 • RWC Leisure Pool	2.06 acres	Recreation Use for Students and Faculty/Staff	
	2 William E. and Mary Jo Davis Lake Claire Recreation Area	4.2 acres	Boat house, Rec. facilities, etc. may be reserved by the UCF Community. Lake Claire, itself, is available to the public.	
	3 RWC Park (Fields & Support Facilities)	14.81 acres	Intramural Leagues, Sport Club Practices and Games, Rentals	
	• 3.1 • RWC Park Sport Club Field	3.87 acres	Sport Club Practice and Games	
	• 3.2 • RWC Park Softball Field	2.02 acres	Recreation Use and Intramural Tournaments	
	• 3.3 • RWC Park North Grass Field	4.15 acres	Reservations, Sport Clubs Games and Practices	
	4 Challenge Course	4.52 acres	UCF Community reservations	
	5 Outdoor Basketball Courts (3 lighted)	0.43 acres	UCF Community reservations	
	6 Sand Volleyball Courts (4 lighted)	0.35 acres	Campus Recreation Use, Intramural tournaments	
	7 RWC @ Ferrell Commons (part of Bldg. 7-E)	14,058 GSF	Sport Club Practices, Academic Martial Arts classes	
On-Campus Shared	Facilities shared by UCFAA, CCIE, CHPS, and Recre		ness	
Facilities	Code Description	Size	Typical Uses	
	8 Tennis and Pickleball Courts (8 Tennis / 4 Pickleball, lighted)	1.62 acres	Varsity Practice, Intramurals, Campus Recreation, Youth Tennis Camp, Tennis Club. Pickleball available to UCF Community.	
	9 Disc Golf	37.15 acres	UCF Community Use	
	10 Band Field	1.79 acres	UCF Marching Knights and Campus Recreation Use	
	11 Education Complex (ED)	110,272 GSF	Sport Clubs, Academic Classes, UCFAA Practice	
	• 11.1 • Gymnasium (ED 176)	(12,907 asf)	Academic Classes	
	• 11.2 • Multipurpose (ED 174)	(2,769 asf)	Physiology of Work & Exercise Response (POWER) Lab	
	• 11.3 • Wellness Research Center (ED 179)	(2,427 asf)	Kinesiology Lab	
Open Space	Facilities shared by UCF Community and Local Comm	, ,	os.orogy <u></u>	
> F F	Description	Size	Typical Uses	
	Nature Trails	~ 3 miles	Hiking, biking, nature observation	
	Wetlands	o miles	r many, ominy, nataro observation	
	Upland Preservation		See 5.0 Conservation Element for acreage of Conservation and Preservation areas	
	Lakes		222 2.2 2325. Taken Element for acroage of concertation and thought around	

• Lake Claire Recreation Area

Exhibit 6.4-2 Recreation and **Wellness Current Facilities Inventory Map** 

## **RECREATION FACILITIES (South Campus)**

- A. Recreation and Wellness Center
- B. Lap Pool
- C. Leisure Pool
- D. Tennis Courts (8) & Pickleball Courts (4)

- G. RWC Park Multipurpose Sport Fields, Softball Field
- H. Outdoor Adventure Challenge Course, Disc Golf Course

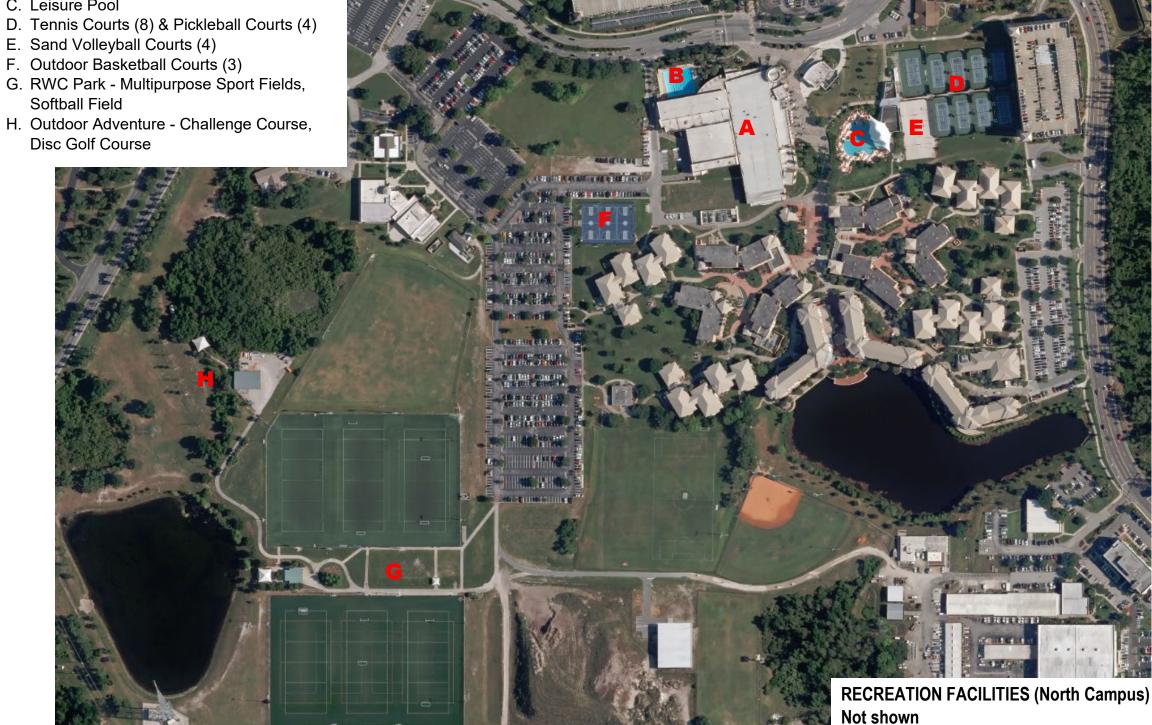
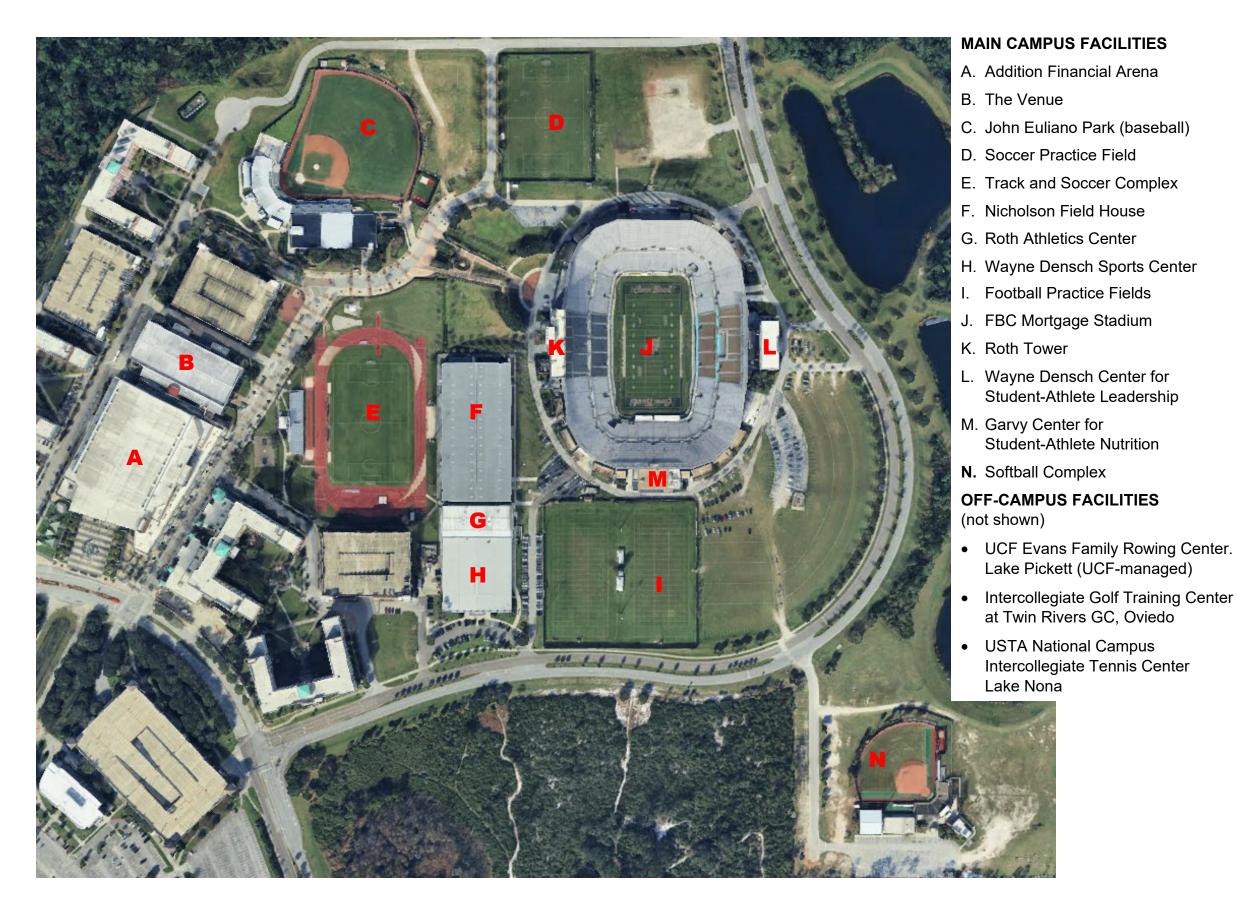


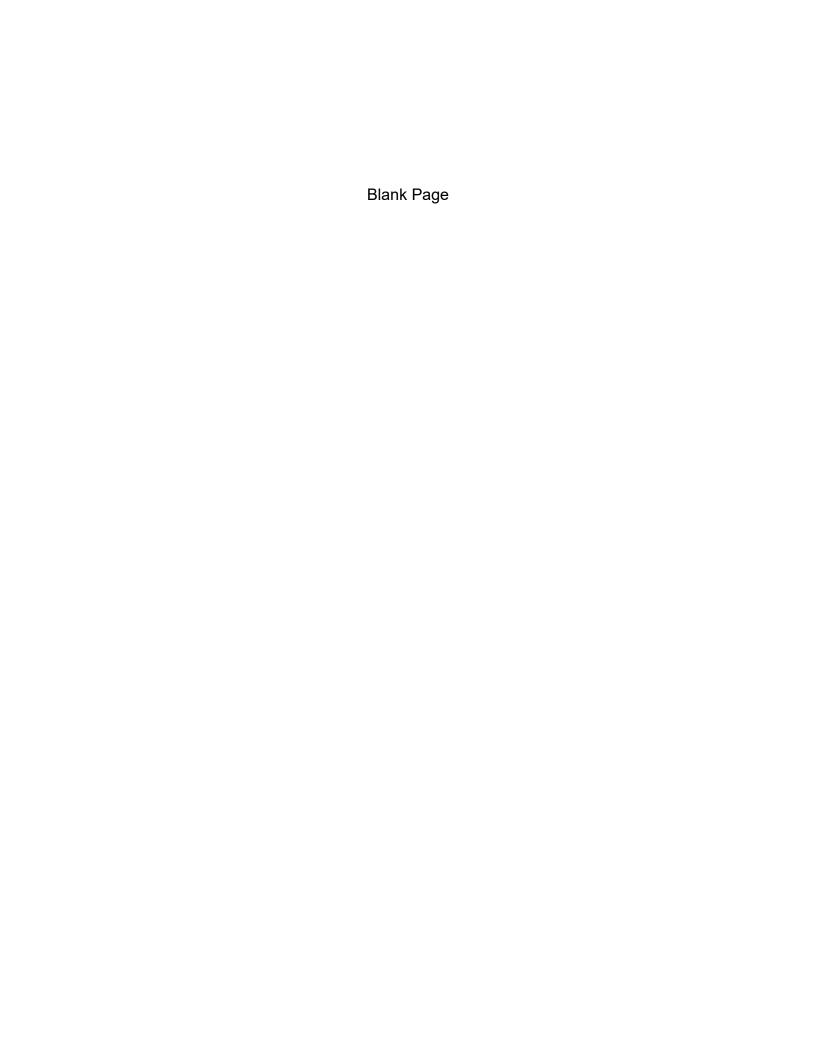


Exhibit 6.4-3 UCF Athletics Association -Current Facilities Inventory Map











UNIVERSITY OF CENTRAL FLORIDA

# 7.0 INTERGOVERNMENTAL COORDINATION

2025-35 CAMPUS MASTER PLAN UPDATE

#### **CONTENTS**

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#### 7.1 INTRODUCTION

#### STATUTE & REGULATION



#### **NARRATIVE**



# STRATEGIC PLAN ALIGNMENT

7.0 INTERGOVERNMENTAL COORDINATION is an element that 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 21.210 states the purpose of the element as follows:

"This element identifies and resolves goals, objectives, policies and development proposed in campus master plans that may be incompatible with adjacent local governments, and regional and state agency plans. Intergovernmental coordination shall be utilized to the extent required to carry out the provisions of this Chapter."

A metropolitan university is not distinct and separate from its community, but rather part and parcel of the surrounding region's education, economic, and social vitality. As an anchor institution in the community, the University of Central Florida reflects, serves, and responds to the community's needs, priorities, and goals by strengthening and diversifying the local economy; providing the knowledgeable and creative talent necessary to sustain business and civic organizations; and contributing to efforts which lift up the human condition.

As an institution predicated upon partnerships, UCF's commitment to collaboration with the community spans from surrounding neighborhoods to industry leaders; from non-profit entities to governmental and quasi-governmental organizations that represent our region's citizens and common interests.

UCF's Campus Master Plan process must also reflect that commitment to both serve the surrounding region, and to involve our local partners in the planning process that will determine how we plan to meet the future economic, educational, and social needs of the Central Florida community. This element establishes the goals and framework by which UCF will share, develop, and seek input from others on the University's CMP Update and its implementation.

This element aligns with one or more of the four priorities stated in the UCF strategic plan "UNLEASHING POTENTIAL – Becoming the University for the Future", specifically:

#### Community and Culture

The Goals, Objectives, and Policies in the Intergovernmental Coordination element support UCF's integration of community-facing functions to streamline connections between the university and its industry, community, and public partners. Two key priorities are:

• Establish comprehensive partnerships that integrate education, research, the arts, service, workforce development, and philanthropic engagement

• Integrate community-facing functions to streamline connections between the university and its industry, community, and public partners.

#### SUSTAINABILITY

Goals, Objectives and Policies that align with the Sustainability Tracking, Assessment & Rating System<sup>™</sup> (STARS) Version 3.0¹ are shown in **green text**, with the specific *Category and Impact Area* and *Credit* # indicated in parentheses after the Goal, Objective, or Policy.

Specific STARS sections in this element are aligned with the Category and Impact Area, **Engagement (EN)**, and with this credit:

#### **EN-6: Community Partnerships**

#### **RELATED ELEMENTS**

See 1.0 FUTURE LAND USE for UCF's Land Use designations.

See 8.0 CAPITAL IMPROVEMENTS for Capital Projects projected in the 10-year planning interval.

#### **GLOSSARY**

For the purpose of this element, the following terms apply:

**BOT - Board of Trustees** 

CDA - Campus Development Agreement

CMP - Campus Master Plan

MOU - Memorandum of Understanding

MRF - Materials Recovery Facility

PDC - Planning, Design and Construction

SSWB - Student Success and Well-being

**UES - Utilities and Engineering Services** 

<sup>&</sup>lt;sup>1</sup> STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

## 7.2 GOALS, OBJECTIVES, & POLICIES

#### **NARRATIVE**

The UCF Campus Master Plan directs the University's physical growth and supporting infrastructure, and fosters compatibility with our surrounding host community, stewardship of resources, and ongoing coordination over the planning interval of the CMP (10 years). As such, the following goals, objectives, and policies provide the framework for managing intergovernmental coordination with our host- and affected- local, regional, state, and federal government partners.

GOAL 1: Achieve the goals, objectives, and policies of the UCF Campus Master Plan through the use and promotion of intergovernmental coordination with local, regional, state, and federal government entities.

OBJECTIVE 1.1: Promote land use compatibility between the University and the host local government through the coordination of the UCF Campus Master Plan with the comprehensive master plans of the host community.

POLICY 1.1.1: Proposed amendments to the Comprehensive Policy Plan of Orange County which have the effect(s) of changing land uses or policies that guide the development of land within the context area, affect the provision of local services, or otherwise impact University facilities or resources shall be submitted to the University Architect for review and comment.

POLICY 1.1.2: The University shall establish, in conjunction with Orange County, a process for reciprocal review of comprehensive plans.

POLICY 1.1.3: Proposed amendments to the adopted CMP which exceed the thresholds established in Chapter 1013.30(9), F.S., shall be transmitted to the host and affected local governments and other applicable governing bodies for review in accordance with the procedures established in Florida Statute 1013.30(6).

POLICY 1.1.4: Proposed amendments to the CMP which do not exceed the thresholds established in F.S. 1013.30(9), and which have the effect of changing the manner in which development on campus may occur or impacting off-campus facilities, services, or natural resources, shall be transmitted to the Orange County Planning Department for a courtesy review.

POLICY 1.1.5: The University shall meet with appropriate government entities, as needed, for review and comment on enrollment projections, and to review appropriate elements of local government comprehensive plans.

POLICY 1.1.6: Every effort shall be made to formalize the terms and conditions of the reciprocal plan review process through an inter-local agreement or memorandum of understanding.

OBJECTIVE 1.2: Establish administrative procedures and coordination mechanisms for the reciprocal review of campus and host community development plans.



POLICY 1.2.1: Whenever practical and reasonable, proposed development within the context area which has the potential to impact or affect University facilities or resources shall be submitted to FPC for review. The areas for review would include land use, transportation, utilities infrastructure, and conservation.

POLICY 1.2.2: Whenever practical and reasonable, the University Architect shall meet with appropriate officials of the Host Local Government to establish the criteria and thresholds for development proposals which would be subject to review by the University e.g., comprehensive plan amendments, rezoning, and special exceptions to context area properties. The construction or renovation of single-family homes and other small-scale developments shall be excluded from University review.

POLICY 1.2.3: Florida Statute 1013.30 (1), University Campus Master Plans and Campus Development Agreements supersedes the requirements of F.S. Title XI, Chapter 163, Part II Growth Policy; County and Municipal Planning; Land Development Regulation (ss. 163.2511-163.3253).

POLICY 1.2.4: University officials shall participate and cooperate with local officials in the review of proposed campus enrollment to assess potential impacts on local, regional, and state resources and facilities.

POLICY 1.2.5: Once the Campus Development Agreement (CDA) is executed, all campus development shall proceed without further review by the host local government if it is consistent with the adopted CMP and CDA.

POLICY 1.2.6: University officials shall participate and cooperate with local officials and representatives from appropriate regional and state agencies in the identification of appropriate strategies to mitigate the impacts of campus development on local, regional, and state resources, facilities, and natural resources.

#### (EN-6: Community Partnerships)

POLICY 1.2.7: University officials shall participate and cooperate with local officials in the review of proposed development within the Context Area to assess potential impacts on University resources and facilities.

POLICY 1.2.8: When it is determined that proposed enrollment on campus would have an adverse impact on local services, facilities, or natural resources, University officials shall partner with Orange County and other pertinent regional and state agencies in the identification of appropriate strategies to mitigate the impact consistent with the terms and conditions of the inter-local agreement.

#### (EN-6: Community Partnerships)

POLICY 1.2.9: UCF shall work with the Host Local Government to update the Memorandum of Understanding (MOU) between Orange County and UCF, dated August 3, 2010.

See Data & Analysis for more on this MOU.

POLICY 1.2.10: When it has been determined that proposed development within the designated Context Area would have an adverse impact on the University's facilities and resources, UCF officials shall partner with local, regional, or state officials to identify appropriate strategies to mitigate those impacts.

POLICY 1.2.11: Any dispute between the University and a host or affected local government regarding the assessment or mitigation of impacts shall be resolved in accordance with the process established in Florida Statute 1013.30 (8).

OBJECTIVE 1.3: Assess and mitigate the impacts of development on UCF, the host and affected local governments, the surrounding community, and service providers.

POLICY 1.3.1: As stated in F.S. 1013.30 (10), within 270 days after adoption of the UCF CMP, a draft Campus Development Agreement (CDA) shall be transmitted to appropriate host and affected local governments. This Agreement:

- (a) Must identify the geographic area of the campus and local government covered by the campus development agreement.
- (b) Must establish its duration, which must be at least 5 years and not more than 10 years.
- (c) Must address public facilities and services including roads, sanitary sewer, solid waste, drainage, potable water, parks and recreation, and public transportation.
- (d) Must identify, for each of the facilities and services listed in paragraph (c), the level-of-service standard established by the applicable local government; the entity that will provide the service to the campus; and describe any financial arrangements between the Board of Governors and other entities relating to the provision of the facility or service.
- (e) Must determine, for each of the facilities and services listed in paragraph (c), the impact of existing and proposed campus development reasonably expected over the term of the campus development agreement on each service or facility and any deficiencies in such service or facility which the proposed campus development will create or to which it will contribute.
- (f) May, if proposed by the University Board of Trustees (BOT), address the issues prescribed in paragraphs (d) and (e) with regard to additional facilities and services, including, but not limited to: electricity, non-potable water, law enforcement, fire and emergency rescue, gas, and telephone.
- (g) Must, to the extent it addresses issues addressed in the campus master plan and host local government comprehensive plan, be consistent with the adopted CMP and host local governments' comprehensive plans.

POLICY 1.3.2: UCF and the host government shall execute the CDA within 180 days after receipt of the draft agreement.

POLICY 1.3.3: All improvements to facilities or services which are deemed necessary to eliminate any identified deficiencies must be specifically listed in the CDA, and UCF's fair share of the cost of such improvements must be stated in the CDA per Florida Statute 1013.30(13). All of UCF's concurrency management responsibilities are fulfilled when UCF expends the total amount of funds specifically identified in the CDA.

POLICY 1.3.4: Any dispute between the University and host local government which arises from the implementation of the CDA shall be resolved in accordance with the process established in Florida Statute 1013.30 (16).

OBJECTIVE 1.4: Ensure intergovernmental coordination in the event of an emergency.

POLICY 1.4.1: The University shall work closely with the Orange and Seminole Counties' Offices of Emergency Management, the Sheriff's Departments, the American Red Cross, and other relevant organizations to develop standards and operating procedures to improve preparedness for emergency events.

POLICY 1.4.2: The University shall coordinate the use of campus resources for the staging of emergency services for an emergency event, when needed.

POLICY 1.4.3: The University shall participate in emergency exercises to evaluate management plans and procedures.

POLICY 1.5.1: The University shall coordinate the provision of adequate stormwater management facilities consistent with

element 4.0 GENERAL INFRASTRUCTURE.

POLICY 1.5.2: The University shall coordinate the provision of adequate potable water facilities consistent with element 4.0 GENERAL INFRASTRUCTURE.

POLICY 1.5.3: The University shall coordinate the provision of adequate sanitary sewer facilities consistent with 4.0 GENERAL INFRASTRUCTURE.

POLICY 1.5.4: The University shall coordinate the provision of adequate solid waste collection facilities consistent with 4.0 GENERAL INFRASTRUCTURE.

POLICY 1.5.5: The University shall coordinate the provision of adequate electrical power and natural gas service consistent with 4.0 GENERAL INFRASTRUCTURE.

POLICY 1.5.6: The University shall coordinate with appropriate authorities, such as the Expressway Authority, for transportation system improvements consistent with elements 1.0 FUTURE LAND USE and 2.0 TRANSPORTATION.

POLICY 1.5.7: The University shall coordinate pedestrian and non-vehicular circulation improvements consistent with element 2.0 TRANSPORTATION.

POLICY 1.5.8: The University shall coordinate the provision of onand off-campus housing consistent with element 3.0 HOUSING.

OBJECTIVE 1.5: Ensure the provision of adequate public services and facilities necessary to support development on campus and to meet the future needs of the University.

OBJECTIVE 1.6: Ensure
that future campus
development is consistent
with regulations regarding
historically- or
archaeologicallysignificant resources.

OBJECTIVE 1.7: UCF will continue to maintain involvement with the immediate local community in an effort to position the University as a community resource, an intellectual hub, and a community asset.

Policy 1.6.1: In coordination with state and local historic preservation officials, the University shall maintain an information file, identifying and locating properties under university ownership that may contain historic or archaeological resources which appear to qualify for inclusion in the National Register of Historic Places.

Policy 1.6.2: The University shall consider the effect of any undertaking on any historic property that is included, or eligible for inclusion, in the National Register of Historic Places.

Policy 1.6.3: The University shall consult with the State's Division of Historical Resources prior to any land clearing, ground disturbance, or rehabilitation activities, which may disturb, or otherwise affect unrecorded archaeological sites, or any property which is included, or eligible for inclusion, in the National Register of Historic Places.

Policy 1.6.4: The University shall consult with the State's Division of Historical Resources prior to demolishing or substantially altering an historic property in a manner that adversely affects its character, form, integrity, or archaeological value. The intent is to avoid or mitigate any adverse impacts, or to undertake any appropriate archaeological salvage excavation or recovery action.

POLICY 1.7.1: Maintain, strengthen, and develop relationships within region, as well as with representatives of economic development, health care, and community and governmental agencies.

POLICY 1.7.2: Develop, coordinate, and foster partnerships encompassing internal University participants and external community participants promoting <u>sustainable</u> economic development initiatives and entrepreneurship.

#### (EN-6: Community Partnerships)

POLICY 1.7.3: Develop, plan, and coordinate opportunities designed to highlight the President of the University, his goals and his vision.

POLICY 1.7.4: Maintain and strengthen chamber of commerce relationships.

POLICY 1.7.5: Continue to develop and coordinate community initiatives focused on <u>sustainable</u> economic development, social issues, and service opportunities furthering integration within the community.

#### (EN-6: Community Partnerships)

POLICY 1.7.6: Continue to keep the neighboring communities UCF's Neighbors apprised of UCF's development plans, by hosting Neighborhood Meetings between Planning, Design and Construction (PDC), Neighbors, UCF departments, and Local Government representatives

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### 7.3 DATA & ANALYSIS

#### **NARRATIVE**

This element promotes proper communication and coordination between the University and affected state and local governments. Because of UCF's rapid growth, increased development and infrastructure coordination with the host community and other governmental bodies will be vital to effectively meet future needs.

#### **Inventory Agencies**

#### BOG 21.210(a)

- Host Local Government
- Affected Local Governments
- State Agencies

Regional Agencies

Utility Companies

Inventory and assess the list of all host and affected local governments, and other units of local government providing services but not having regulatory authority over the use of land, independent special districts, water management districts, regional planning councils, and state agencies with which the university coordinates, or which provide services to the university.

- Orange County
- Seminole County
- City of Orlando
- City of Oviedo
- Florida Department of Economic Opportunity (DEO is the "State Land Planning Agency")
- Department of Environmental Protection (DEP)
- Florida Department of Transportation (FDOT)
- Department of State
- Fish and Wildlife Conservation Commission (FWC)
- St. Johns River Water Management District (SJRWMD)
- East Central Florida Regional Planning Council
- Seminole County Planning and Development Division

This inventory shall also include regional or state agencies with land use or environmental regulatory authority, and authorities, independent special districts, and utility companies which provide services to the university.

These Utility Companies provide services to the University

- Potable Water St. Johns River Water Management District, Orange County Utilities
- Primary Electrical Power Duke Energy Florida
- Natural Gas TECO Peoples Gas
- Reclaimed Water Iron Bridge Water Pollution Control Facility
- Solid Waste Waste Pro®
  - Recycling hauled to Orange County MRF
  - Solid Waste hauled to Orange County Landfill
- Stormwater St. Johns River Water Management District
- Wastewater Treatment Iron Bridge Water Pollution Control Facility

# 7.0 INTERGOVERNMENTAL COORDINATION DATA & ANALYSIS

#### **Coordination Mechanisms**

BOG 21.210(b)

Intergovernmental
Coordination and
Communication with the
Host Local Government

Intergovernmental
Coordination and the
UCF Campus Master Plan

Intergovernmental Coordination and the Campus Development Agreement (CDA) Assessment of the existing coordination mechanisms in place for each governmental entity.

On August 3, 2010, UCF and Orange County executed a 5-year Memorandum of Understanding (MOU):

- Orange County agreed to notify UCF of all public hearings for comprehensive plan amendments, rezoning, and special exceptions located within the Context Area.
- UCF agreed to notify Orange County of amendments to the adopted Campus Master Plan.

This MOU has not expired due to a renewal clause; but needs to be revisited

As required by Statute and indicated in the Goals, Objectives, and Policies, UCF will continue to develop and implement its community outreach program with respect to the Campus Master Plan (CMP). The University presents the CMP at various phases throughout the update process at public hearings, informal information sessions, and neighborhood group meetings.

Throughout the update process, coordination with local governments is essential to ensure that all input is considered prior to final adoption of the CMP.

Per F.S 1013.30 (6) A copy of the draft master plan is sent for review or made available electronically to the host and any affected local governments, the state land planning agency (the DEO), the Department of Environmental Protection, the Department of Transportation, the Department of State, the Fish and Wildlife Conservation Commission, and the applicable water management district and regional planning council.

Per Florida Statutes 1013.30 (10), the University is required to enter into a CDA with local governments that addresses the impacts of University development on local government support infrastructure. Negotiation of the CDA occurs in conjunction with every five-year CMP update, and includes the identification of a process whereby the impacts of development are assessed.

The primary purpose of the CDA is for UCF and local governments to identify areas of impact from University-generated development on the local infrastructure system, and to address mitigation for the University's proportionate share of the impacts.

The University works closely with local government representatives to ensure that CMP updates are consistent with the CDA, and with state and local comprehensive plans.

# 7.0 INTERGOVERNMENTAL COORDINATION DATA & ANALYSIS

# Intergovernmental Coordination and UCF Websites

The Planning, Design, and Construction (PDC) website is a critical tool that the University uses to communicate with state and local governments, the campus community, and the public. The University maintains a copy of the current Campus Master Plan Updates on the website, as required by Florida Statute 1013.30 (3). Past CMPs and Amendments are also posted on the website.

## Planning Documents

The following documents are located on the Planning, Design and Construction Website, under the Planning tab:

- UCF Campus Master Plan Update (current and past)
- Campus Development Agreement (CDA)
- 5-year Capital Improvement Plans (CIP)
- UCF Campus Aerial Photos
- Other planning documents

# Intergovernmental Coordination and Transportation

The University will continue to coordinate with affected state and local governments with regard to transportation issues resulting from University-generated development, including impacts on area and campus roadways, transit, parking, and bicycle/pedestrian facilities.

 Regional Transportation Planning MetroPlan Orlando is a regional transportation planning body that leads transportation planning efforts in Orange, Osceola, and Seminole counties, and seeks to address the overall transportation challenges of the rapidly-growing metropolitan area which includes UCF.

UCF is a non-voting member of the MetroPlan Orlando Transportation Systems Management & Operations Advisory Committee (TSMO).

Public Transit

The University participates with LYNX, the local area public transportation entity, and has developed the UCF/LYNX Transit Center<sup>2</sup>, a multimodal center on Leo Lane between Garages A and I, to facilitate student, faculty, staff, and visitor use of public transit facilities.

Railroads

The University will continue to coordinate with local governments looking to interconnect multiuse trail systems through and/or around campus.

# Intergovernmental Coordination and General Infrastructure

UCF's General Infrastructure, subject to the State concurrency statute, is managed by Utilities and Engineering Services (UES).

Infrastructure includes stormwater management, potable water, sanitary sewer and treatment, and solid waste facilities, in accordance with State statute.

UES and UCFIT also manage UCF's chilled water, electrical power, natural gas, and telecommunications systems.

<sup>&</sup>lt;sup>2</sup> The UCF/LYNX Transit Center is identified on Google Maps as the UCF SuperStop.

# 7.0 INTERGOVERNMENTAL COORDINATION DATA & ANALYSIS

 Stormwater Master Planning The St. Johns River Water Management District (SJRWMD) approved the update to the UCF Campus Stormwater Master Plan in 2014, thus providing adequate, environmentally-sound stormwater management and capacity for current and future campus growth. The update significantly reduces University-generated offsite stormwater impacts on the surrounding community.

The University will continue to coordinate with state and local governments regarding development within the parameters of the approved Stormwater Master Plan. In addition, the University intends to sponsor public symposia addressing this issue with local stormwater officials and the public.

Potable Water

In July of 2009, the University secured a secondary interlocal potable water supply agreement to provide the University with an emergency backup water supply of 145,453 gallons per day. Through coordination with Orange County, UCF provided an easement through its southern property for a new regional water service line.

The campus Consumptive Use Permit (CUP) was updated in June 2022 to allow draw of 385.1M gallons from the Upper Floridian Aquifer. It is integral that UCF partners with the Central Florida region host governments to focus on how to economically generate regional resources and alliances to deploy alternative water extraction methods, as ground water has become a precious and limited commodity. These additional treatment methods will drive purchased water commodity costs.

UCF is investigating construction of its own Water Treatment Plant.

 Wastewater / Reclaimed Water On June 1999, UCF entered contract with Seminole County to receive wastewater (1MGD, with additional 0.8MGD available) and reclaimed water service (up to 2MGD). On September 2018, UCF purchased an additional 0.1MGD of wastewater capacity from Seminole County.

In addition, the University coordinated with the host government and upgraded its sanitary sewer infrastructure by sending its sanitary waste to the City of Orlando's Iron Bridge Water Pollution Control Facility (Iron Bridge) for processing and reuse.

As part of that agreement, the University receives treated effluent from Iron Bridge for irrigation and process water uses.

In a renewed agreement in June 2021 with Orange County Research and Development Authority, UCF provides up to 428,060 GPD of wastewater transportation capacity through campus to Iron Bridge by means of the university's agreement with Seminole County, as well as emergency potable water interconnection.

# 7.0 INTERGOVERNMENTAL COORDINATION DATA & ANALYSIS

# Intergovernmental Coordination and Environmental Protection

 Environmental Protection

Fire Protection

# Intergovernmental Coordination and UCF's Fair Share

2016 and 2020 CDA

The cumulative growth of the University and its surrounding community has changed the area's character from semi-rural and suburban to an academic urban center.

Growth increases the need to coordinate environmental monitoring and conservation efforts. As a center of learning, UCF holds an important position in this partnership. As part of its mission, UCF shall provide critical knowledge and expertise, and demonstrate its commitment to beneficial growth management and concurrency.

The University partnered with Orange County, providing a tract of land in its northeast corner for the *Orange County / Seminole County Fire and Rescue Station 65*, which has served the University, and nearby neighborhoods, since 1999.

Inventory and assess all previous fair share payments made by the University to its host or affected local government as a result of existing Campus Development Agreement(s).

UCF paid its Fair Share of the "Alafaya Trail Pedestrian Safety Project" in collaboration with Orange County and the Florida Department of Transportation. UCF's fair share included:

- Donating an easement for a multimodal sidewalk
  - The easement UCF donated exceeded the originally agreed-upon acreage and value.
- Contributing to funding the installation of two (2) recommended mid-block crossings.
  - o UCF paid the agreed NTE<sup>3</sup> of \$517,000.
- Contributing to funding signalization changes at University Blvd and Alafaya Tr.
  - UCF paid the agreed NTE of \$100,000.
- Pedestrian Scale Lighting for the multimodal sidewalk.
  - UCF paid \$29,403 to Duke Energy, which was within the agreed NTE of \$75,000.
- Monthly rental to Duke Energy for maintenance and utilities for the Pedestrian lighting.
  - UCF signed the Duke Energy rental agreement, and is paying monthly costs to Duke Energy for added pedestrian fixtures on Alafaya Trail.

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<sup>&</sup>lt;sup>3</sup> NTE – Not to exceed.







# UNIVERSITY OF CENTRAL FLORIDA

# **8.0 CAPITAL IMPROVEMENTS**

2025-35 CAMPUS MASTER PLAN UPDATE

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## 8.1 INTRODUCTION

### **STATUTE & REGULATION**



**NARRATIVE** 

STRATEGIC PLAN ALIGNMENT

The CAPITAL IMPROVEMENTS Element is required by Florida Statue 1013.30(3).

Each Campus Master Plan element must follow the guidelines stated in the Florida Board of Governors (BOG) Regulations, Chapter 21. BOG Regulation 21.211 states the purpose of the CAPITAL IMPROVEMENTS element:

"This element evaluates the need for public facilities as identified in other campus master plan elements; to estimate the cost of improvements for which the university has fiscal responsibility; to analyze the fiscal capability of the university to finance and construct improvements; to adopt financial policies to guide the funding of improvements; and to schedule the funding and construction of improvements in a manner necessary to ensure that capital improvements are provided when required based on needs identified in the other campus master plan elements. All development is contingent upon the availability of funding.

The CAPITAL IMPROVEMENTS element includes

- GOALS OBJECTIVES AND POLICIES related to Capital Improvements on the UCF Main Campus and other sites.
- DATA AND ANALYSIS based on the facility needs as identified in the other elements to support the future needs as identified in the future land use element.
- EXHIBITS include:
  - A Schedule of Capital Projects (SCP) listing all future projects envisioned for the 10-year planning interval, on the Main Campus and other Sites.
  - A Capital Improvements Map of the Main Campus showing the proposed locations (sites) for improvements shown in the SCP

This element aligns with all four priorities stated in the UCF strategic plan "UNLEASHING POTENTIAL – Becoming the University for the Future", specifically:

### Student Success and Well Being

Capital Improvements that provide on-campus housing and student success facilities will "accelerate student success and enhance wellbeing."

### Discovery and Exploration

Capital Improvements providing academic and research facilities are examples of how UCF will "invest in our research infrastructure in ways that address prevailing workforce needs in the state,

accelerate the development of industry clusters, attract new companies and high-wage jobs to Florida."

## Community and Culture

Capital Improvements improve the University and will "help make UCF a destination of choice for the most talented people, a best place to learn and work, and a partner of choice in our community."

### Innovation and Sustainability

The first goal of this element is "Provide sustainable academic and research facilities and infrastructure to meet the education, research, workforce development, and support missions of the University, and meet the evolving demands of student enrollment and investors."

#### **SUSTAINABILITY**

The University's commitment to sustainability and the protection of the environment is evident throughout this element.

Goals, Objectives and Policies that align with the Sustainability Tracking, Assessment & Rating System<sup>TM</sup> (STARS)<sup>1</sup> are shown in **green** text, with the specific *Category and Impact Areas*, **Operations (OP)** and **Planning and Administration (PA)**, and the specific credits indicated in parentheses:

- OP 1: Building Design and Construction
- PA 2: Commitments and Planning

#### **RELATED ELEMENTS**

See these related elements:

- 1.0 FUTURE LAND USE for the Future Land Use Map (FLUM)
- 2.0 TRANSPORTATION for proposed transportation improvements
- 3.0 HOUSING for proposed housing improvements
- 4.0 GENERAL INFRASTRUCTURE for proposed utility infrastructure improvements
- 6.0 RECREATION AND OPEN SPACE for proposed recreation and athletics improvements

## **GLOSSARY**

REMODELING means the changing of existing facilities by rearrangement of spaces and their use. [Florida Statute 1013.01(17) and BOG Regulation 14.001(16)]

RENOVATION means the rejuvenating or upgrading of existing facilities by installation or replacement of materials and equipment. [Florida Statute 1013.01(18) and BOG Regulation 14.001(17)]

<sup>&</sup>lt;sup>1</sup> STARS (Sustainability Tracking, Assessment, and Rating System) is "a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."

# 8.2 GOALS, OBJECTIVES, & POLICIES

GOAL 1: Provide sustainable academic and research facilities and infrastructure to meet the education, research, workforce development, and support missions of the University, and meet the evolving demands of student enrollment and investors.<sup>2</sup>

OBJECTIVE 1.1: Ensure that state-of-the-art facilities and supporting infrastructure will be available to meet the needs of the University.

POLICY 1.1.1: The University shall evaluate growth patterns and data to predict the need for capital improvements, including reviewing:

- enrollment growth to evaluate classroom and teaching lab needs
- research and faculty growth to evaluate research laboratory needs
- space utilization data to evaluate office, classroom, and other space needs
- campus growth to evaluate infrastructure needs

Refer to Future Land Use Goal 3 for related requirements regarding the University's "Carrying Capacity".

POLICY 1.1.2: When necessary, the University shall consider the use of facilities in other areas, including satellite campuses and partnerships with state colleges, schools, and local businesses.

POLICY 1.1.3: The University shall prepare a yearly Capital Improvement Plan (CIP) requesting planning, construction, and equipment funds for all proposed capital projects within the next five (5) year time frame. The CIP shall include project descriptions and justifications.

POLICY 1.2.1: The University shall renovate, repair, and upgrade existing buildings and infrastructure to increase their useful life spans, or demolish aging facilities no longer able to serve existing or future needs.

POLICY 1.2.2: The University shall review the facilities condition of all campus structures and infrastructure every three years to determine the need for replacement, repairs, or renovations to meet ongoing and changing needs of the campus. The University shall systematically evaluate aging facilities to determine whether or not they can serve existing or future needs.

POLICY 1.2.3: The University shall demolish facilities that are listed under "Demolition Recommendations" on the

OBJECTIVE 1.2: Provide for the replacement and renewal of capital facilities and infrastructure to meet growth; remodel and/or renovate facilities and infrastructure; and demolish obsolete facilities.

<sup>&</sup>lt;sup>2</sup> Language taken from the Strategic Plan. Priority 4 Innovation and Sustainability speaks to "sustainable facilities" and Planning Considerations speaks to "evolving demands of our students and investors."

Educational Plant Survey. Demolition should involve careful deconstruction and recycling or reuse of building materials where possible.

POLICY 1.2.4: When a new building is completed, vacated areas of older facilities may be renovated to meet the needs of new occupants. The University shall provide space to accommodate faculty, staff, and students displaced by renovation.

OBJECTIVE 1.3: Coordinate land use with a schedule of capital improvements that will meet existing and projected facility and infrastructure needs.

POLICY 1.3.1: Land uses for proposed building sites shall be consistent with the future land uses indicated on the Future Land Use Map (FLUM).

POLICY 1.3.2: Site locations for all projects on the Schedule of Capital Projects (SCP) shall be shown on the Capital Improvements Map.

## **GOAL 2: Implement improvement projects with approved funding sources.**

OBJECTIVE 2.1: Capital improvement projects and funding are to align with Capital Improvement Plan (CIP) and Master Plan goals.

POLICY 2.1.1: The University shall seek state funds, federal funds, research grants, and donor funds to construct teaching, research, housing, athletic, and support facilities as described in the CIP.

POLICY 2.1.2: Capital budget requests each year shall be consistent with the provisions of the Campus Master Plan, Educational Plant Survey and with Campus Development Agreements with local governments.

OBJECTIVE 2.2: Seek additional funds to augment state capital construction funds.

POLICY 2.2.1: The University shall work with the UCF Foundation to seek external funds in the form of gifts and donations to provide campus facilities.



POLICY 2.2.2: The University may obtain funding through the selling of revenue bonds to construct and renovate student housing, on-campus healthcare facilities, and on-campus parking structures.

POLICY 2.2.3: The University may use auxiliary funds for specific construction needs, such as parking lots, parking garage structures, bookstore expansion, and other auxiliary support space needs.

POLICY 2.2.4: The University may seek funding through other state and non-state sources to meet construction requirements that are needed as part of the Campus Master Planning process.

# GOAL 3: Design and construct capital improvement projects in a responsible manner.

OBJECTIVE 3.1: Design and construct projects in alignment with campus-wide STARS goals.

POLICY 3.1.1: The University shall first consider remodeling and/or renovation of a facility before demolition and construction a new replacement building.

POLICY 3.1.2: The University shall regularly review STARS goals and incorporate strategies where appropriate in order to move towards a higher STARS rating.

(OP-1: Building Design and Construction) (PA-2: Commitments and Planning)

OBJECTIVE 3.2: Design and construct projects within available approved funding.

resilience.

POLICY 3.2.1: The University shall incorporate methods for obtaining competitive pricing for capital improvement projects over \$4 million.

OBJECTIVE 3.3: Design and construct projects with foresight regarding campus

POLICY 3.2.2: The University shall carefully analyze design and construction bids, and negotiate or value-engineer to align with established budgets.

POLICY 3.3.1: The University shall prepare for natural disasters with long-term resilience planning.

POLICY 3.3.2: The University shall prioritize infrastructure and capital improvements that support long-term resilience that aligns with the strategic plan of the University.

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## 8.3 DATA & ANALYSIS

## **Project Funding**

#### Overview

The following is an inventory and assessment of existing and anticipated revenue sources and funding mechanisms available for capital improvement financing.

 Public Education Capital Outlay (PECO) The University receives funding from the State for capital improvements in various appropriation types. The primary funding source is Public Education Capital Outlay (PECO). These funds are appropriated to the State University System (SUS) pursuant to Section 1013.64(4), Florida Statutes, which provides that a list of projects is submitted to the Commissioner of Education for inclusion in the Fixed Capital Outlay Budget Request. A lump sum appropriation (sum of digits) may be provided for remodeling, renovation, maintenance, repair, and site improvements for existing satisfactory facilities. The projects funded from PECO are normally for institutional, academic support, or institutional support purposes.

 Capital Improvement Trust Fund (CITF) UCF students pay Capital Improvement Fees and Building Fees as part of their tuition, in accordance with Florida Statue 1009.24

"Capital Improvement Trust Fund (CITF) is funded by student fees to support student related projects. Funds are collected by the university and transmitted to the State to pay for debt service. Remaining funds are returned to university after receiving legislative authorization. A portion of the fee may be used for university child care centers." 3

Student-related projects include student unions, libraries, university childcare centers and recreation facilities. Projects funded by CITF are selected and prioritized by the CITF Committee (see Approval and Advisory Committees in this D&A)

 Private Donations and Grants Private donations and grants are another source of revenue authorized by Florida Statute. Legislative approval is not required for the use of these funds.

Debt and Bonds

Auxiliary Organizations, such as Housing and Residence Life, Business Services, and Parking and Transportation Services, and Direct Service Organizations, such as UCF Athletics, use revenues collected from their operations to fund capital improvements. Auxiliaries may also bond capital improvements and pledge auxiliary revenues for debt service. Either method requires BOT approval.

Federal Funding

Examples of recent federal funding included programs such as:

- U.S. Department of Education *Higher Education Emergency Relief Fund (HEERF)*, authorized by the CARES Act.
- U.S Department of the Treasury State and Local Fiscal Recovery Funds (SLFRF), authorized by the American Rescue Plan Act.

<sup>&</sup>lt;sup>3</sup> Source: State University System, Glossary of Budget and Finance Terms.

## **Capital Improvement Planning Documents**

## Overview

 10-year Schedule of Capital Projects (SCP) The following is a description of planning documents submitted to the BOG or the State to inventory and assess capital improvements.

The Campus Master Plan includes a 10-Year Schedule of Capital Projects (SCP), based on needs identified throughout the Campus Master Plan. The SCP will include all projected projects on all campuses for the 10-Year planning interval.

The SCP defines improvements as 3-year committed, 10-year projected, and those consistent with the Campus Development Agreement (CDA).

In the five-year interval between Campus Master Plan updates, the Board of Trustees may amend the SCP to add, remove, rename, or relocate projects.

 Five-year Capital Improvement Plan (CIP) The CIP includes a prioritized list of the University's current and future capital project for a five-year period, submitted to the state for capital funding requests. The CIP identifies variables such as project priority, purpose, cost, and proposed timing.

The CIP will be revisited and submitted to the state annually, allowing variable factors to be adjusted based on circumstances such as emerging strategies, changes in priorities, cost or scheduling, or new funding opportunities.

 Annual Fixed Capital Outlay Budget Request (FCOB) The Budget Request is prepared annually by Facilities and Business Operations in collaboration with the Senior Vice President of Administration and Finance.

The FCOB is approved by the Provost, University President, and the Board of Trustees (BOT), then submitted to the State University System of Florida Board of Governors.

 Plant Operations and Maintenance (PO&M) The State of Florida provides Plant Operations and Maintenance (PO&M) funding for most of the University's facilities that contain Educational and General (E&G) space. Since 2016, the state has not provided PO&M funding for any newly-constructed or expanded E&G buildings.

The cost of operating and maintaining Auxiliary space is derived from auxiliary revenues.

## **Approval and Advisory Committees**

#### Overview

The following is a description of committees and governing bodies used to evaluate and facilitate campus planning and capital improvements.

 Facilities and Infrastructure Committee The Facilities and Infrastructure Committee<sup>4</sup> is a standing committee of the University of Central Florida Board of Trustees. The purpose of the committee is to advise the Board on the University's capital improvement needs, including but not limited to, campus master planning, new construction projects, deferred maintenance, real estate, information technology, operational technology, and cybersecurity.

<sup>&</sup>lt;sup>4</sup> The BOT Facilities and Infrastructure Committee replaced the Facilities and Finance Committee in July 2021.

"The Committee will review and recommend the following to the Board for action: Construction projects (new, remodeling, site work) with a projected total project cost in any amount greater than \$2 million, and any material changes to the projects." (F&I Charter)

 Capital Project Planning Committee (CPPC) The purpose of the CPPC is to develop an annual comprehensive list of capital project requests for the university, prioritize the capital project needs of the university, and recommend funding sources for these projects.

Capital projects are defined as new construction projects of any value, remodel/renovation projects that exceed \$4M total project cost, or projects that require real estate transactions that require UCF BOT approval.

 University Master Planning Committee (UMPC) The UMPC is a Faculty Senate Joint Committee that serves as an advisory body to the University President on short- and long-range issues related to land use, facilities planning, and future development of the campus, including the protection and preservation of natural resources.

Its broadly representative group of faculty, administrators, staff, and students provides recommendations on matters related to campus aesthetics including signage, site furnishings, public art, and some temporary installations.

 Capital Improvement Trust Fund Committee (CITF) Projects funded from the Capital Improvement Trust Fund (CITF) are selected and prioritized by the CITF Committee, an ad hoc advisory committee formed jointly by Student Success and Well-Being (SSWB) and Student Government (SG).

UCF's Capital Improvement Trust Fund Committee serves to develop and recommend a list of projects for which to request CITF funds, and recommends any increase in the student CITF fee.

The recommendations of the CITF committee take effect only after approval by the Student Body President and University President, with final approval by the Board of Trustees.

 University Space Committee (USC) The University Space Committee (USC) is a standing committee and governing body formed to evaluate potential impacts to the University from proposed real estate and space initiatives. The committee is charged with overseeing and maintaining best practices for use of space throughout UCF.

The USC makes recommendations to the executive administration regarding space and real estate initiatives and whether they are in the University's best interest.

The USC is comprised of decision-makers who are involved in real property and/or space matters in each University area (or their designees). Subject matter experts and/or guests are invited as necessary.

- Other Advisory Bodies
  - Faculty Senate
  - Student Government (SG)
  - UCF Community Council and Neighbors

The Faculty Senate is the primary voice of the faculty and serves as the main channel of communication between faculty and administration.

 Faculty participate in capital and campus planning through the University Master Planning Committee, which was formed by a Faculty Senate Resolution (see UMPC, earlier in this D&A).

The SG is a representative body modeled after the United States government with Executive, Legislative, and Judicial branches. The SG president is a member of the Board of Trustees and the CITF Committee. In this capacity, the student body president represents the students regarding capital and campus planning. Members of the SG were included in the majority of the Element Teams that developed this 2025-35 Campus Master Plan.

The UCF Community Council and Neighbors is a vital body of neighbors of the University. The University communicates with this group regarding:

- Statutory meetings (CMP, BOT, etc.)
- Status of Projects meetings
- Prescribed burns
- Traffic issues (Commencement, etc.)
- Athletics and other campus events

## **Capital Planning Procedures, Policies, and Tools**

#### Overview

 5-Year Capital Improvement Plan (CIP) List and describe procedures, policies, documents, and tools that UCF uses to implement Capital Projects.

Annually, in Spring, the 5-Year Capital Improvement Plan (CIP) is prepared by Facilities and Business Operations and submitted to the UCF Board of Trustees for approval.

After BOT approval, the CIP is submitted to the Florida Board of Governors as part of the Fixed Capital Outlay Budget Request.

### The CIP includes:

- The PECO request a prioritized list of up to five PECO projects, the funding type and amount being requested, and the years in which funding is being requested for planning, construction, and equipment.
- A list of the CITF committee's selections for CITF funding.
- A list of capital projects requiring Legislative authorization to be constructed, acquired, and financed by a university or a university direct support organization, aka the Back of Bill.

## Campus Master Plan Amendments

The Campus Master Plan may be amended during the 5-year interval between updates. Projects may be added, removed, renamed, relocated, or otherwise changed by means of an amendment approved by the Board of Trustees.

Florida Statute 1013.30 (9) governs whether Campus Master Plan amendment is minor or major.

- Minor Amendments may be approved by a vote of the UCF Board of Trustees. To be defined as a Minor Amendment, the statute limits changes in land use, loss of natural areas, and impact on public facilities or services provided by the state, county, and host or affected local governments.
- Major Amendments must be adopted by the same process as the Campus Master Plan itself, in accordance with Florida Statute 1013.30 (6-8).
- Educational Plant Survey (EPS)

In Florida, all public school districts, colleges and state universities are required to conduct an Educational Plant Survey (EPS) at least once every 5 years using "uniform data sources and criteria" (Florida Statutes 1013.31).

An EPS is a systematic and comprehensive study of each institution's sites, buildings, and the site improvements required to operate the facilities. It includes a review of both the 1) existing educational and ancillary facilities and 2) anticipated future needs for repair, expansion and/or demolition.

The EPS is a safeguard mechanism to ensure that PECO dollars, and the assets constructed with PECO dollars are being directed appropriately towards needed educational buildings.

The current <u>2021 Educational Plant Survey</u> was performed in 2020 and remains in effect from July 1, 2021 through June 30, 2026.

Project Approvals

UCF requires several internal approvals for capital projects: 5

- The BOT Facilities and Infrastructure Committee charter requires the committee to review construction projects (new, remodeling, site work) and any material changes to the projects.
- The Capital Projects Approval Policy requires that a Capital Projects Funding Certification Form be completed and signed by the University President, the Vice President submitting the request, the Chief Financial Officer, and General Counsel.
- Building Programs

Board of Governors Regulation 14.004 Fixed Capital Outlay Legislative Budget Request Procedures states: "The university is responsible for the preparation of a project's building program as well as institutional capital improvement planning, which shall be consistent with the university's strategic plan, campus master plan, and educational plant survey."

UCF prepares Building Programs (BP) for proposed new buildings. The intent of a BP is to define a project's high-level objectives and campus impacts. As required by the BOG, it assures the proposed project aligns with the university's Strategic Plan, Campus Master Plan, and Educational Plant Survey. UCF adds a description and history of the project and information on the site and infrastructure.

<sup>&</sup>lt;sup>5</sup> Currently, these UCF approval requirements for capital projects is limited to projects with a projected total cost greater than \$2 million.

 Academic Programs For large academic projects, PDC oversees academic programming, using highly qualified professional consultants to program each type of facility.

Academic Programs are prepared after extensive deliberation and consultation with the colleges and departments that will be occupying a proposed facility.

The purpose of Academic Programming is to:

- Document how UCF wants to utilize space in capital project;
- Explore and promote shared space for more efficient use;
- Describe quantities of each type of space (classrooms teaching labs, research labs, offices, etc.);
- Estimate the overall size of the facility:
- Capture and disseminate a cooperative philosophy and the direction UCF would like to follow in commencing design.
- Land Use Plans (LUP)

All land on the Main Campus belongs to the State of Florida. Land Use Plans (LUP) are submitted for all BOT leases of non-conservation properties.

As a manager of non-conservation lands, UCF submits a LUP to the Division of State Lands one year from the effective date of the lease (anniversary date). LUPs are intended to address the requirements of Florida Statute 253.034 and Florida Administrative Code 18-2.018.

## **Guidelines and Standards**

 UCF Design, Construction, and Renovation Standards The planning, construction, operation, and maintenance of facilities is a critical function supporting the educational, research, and service missions of UCF. As the entity responsible for directing planning, design, and construction, Facilities and Business Operations strives to provide high-quality and cost-effective services.

Link: UCF Design, Construction, and Renovation Standards

 Landscape Master Plan and Design Guidelines The UCF Campus Landscape Master Plan and Design Standards, published in 2016, provides a unified vision for future campus development.

State
 Requirements
 for Educational
 Facilities 2014
 (SREF)

Link: UCF Campus Landscape Master Plan and Design Standards

SREF is organized by the sequence of steps required in the facilities processes and covers definitions, property acquisition/disposal, finance, lease and lease-purchase, historic buildings, program development, professional services, inspection services, design standards and inspection standards[...] for Florida universities.

 Facilities and Business
 Operations
 Policies and
 Procedures Link: <a href="https://www.fldoe.org/core/fileparse.php/7738/urlt/srefrule14.pdf">https://www.fldoe.org/core/fileparse.php/7738/urlt/srefrule14.pdf</a>

FBO has many policies and procedures that apply to Campus and Capital Planning.

Link: FBO Policies and Procedures

# 8.4 EXHIBITS

Exhibit 8.4-1 Schedule of Capital Improvements (SCP) *Revised Nov 2024* Exhibit 8.4-2 Capital Improvements Map *Revised Nov 2024* 

Exhibit 8.4-1 Rev. 10-Year Schedule of Capital Projects (SCF	Nov 2024	MAP KEYS correspond with projects shown on 8.4-2 CAPITAL IMPROVEMENTS MAP	Campus	Bldg. #	Project Type	Recommendation	FCI	GSF	PROJECT SCOPE - Variables such as priority, cost, and timing are recorded annually on the 5-year Capital Improvement Plan
ALL CAMPUSES	MAP KEY	3-YEAR COMMITTED PROJECTS							
MAIN CAMPUS	1	Biological Sciences	Main 0001	0020	Renov/Remod	2021 EPS		116,607	In Construction (PECO \$21.63M, 2022-23 CIP)
	2	Chemistry Building	Main 0001	0005	Renov/Remod	2021 EPS		49,073	In Construction (PECO \$30.0M, 2023-24 CIP)
	3	John C Hitt Library (aka 21 <sup>st</sup> Century Library)	Main 0001	0002	Renov/Remod	CITF 2023 CPPC 2024			Ph 2B in construction. Future Ph to be designed.
	4	(New) Creative School for Children	Main 0001	0167	New	CITF 2024		14,678	Replace Creative School for Children on new site (CITF \$17.0M, 2025-26 CIP)
	5	Recreation & Wellness Center	Main 0001	0088	Reno	CITF 2024		156,111	HVAC Systems (CITF \$13.0M, 2024-25 CIP)
	6	Football Practice Field Relocation	Main 0001	NA	Sitework		NA		Clears site for Football Ops Building & McNamara Cove
	7	Roth Tower at FBC Mortgage Stadium	Main 0001	0135	New / Renov.		NA		In Design/Construction
	8	Student Union	Main 0001	0052	Renov/Remod	CITF 2025		63,900 of 161,755	(CITF \$6.0M, 2025-26 CIP)
OTHER CAMPUSES	No Key	Dr. Phillips Nursing Pavilion [fka College of Nursing Building]	AHSC Site 0016	1003	New	2020-30 SCP	NA	90,000	In Construction (2022 GAA Section 197, Legislative initiative funded w/o EPS Rec.)
	No Key	Rosen Main Building	RCHM Site0015	0903	Renov/Remod			158,980	Remodeling for greater space efficiency. Funded \$12.8M
MAIN CAMPUS		PROJECTS CONSISTENT WITH THE	CAMPUS	DEVE	LOPMENT	<b>AGREEMENT</b>	1		
	No Key	McCulloch Road Improvements	Main 0001			2020 CDA			Orange Co.: Provide mid-block crossing at Northgate Circle. UCF: Pedestrian Trail from said mid-block crossing to West Plaza Dr.
	No Key	Cross-Campus Bike Path	Main 0001			2020 CDA			UCF to develop an on-campus bicycle pathway linking existing trail systems of Orange Co. and Seminole Co.
MAIN CAMPUS	MAP KEY	10-YEAR PROJECTED PROJECTS							
ACADEMIC & STUDENT SUPPORT	9	Research II	Main 0001	166	New Bldg.	2021 EPS CPPC 2024		~105,060	Research labs and cleanrooms with supporting office space. (PECO \$114.64M, 2025-26 CIP)
FACILITIES	10	Workforce Entrepreneurship Resource eXchange (WERX) [fka Advanced Workforce Entrepreneurship Cntr, Learning Laboratory, Discovery & Innovation Hub]	Main 0001	155	New Bldg.	2021 EPS CPPC 2024		~100,000	Multidisciplinary classroom, teaching lab, and maker space building. Includes incubator and industry research/collaboration spaces.  (PECO \$76.9M, 2025 26 CIP)
	11	Performance, Immersive Experience & Entertainment Laboratory - PIXEL (fka Performing Arts Complex Phase II)	Main 0001	0119 P	Addition to 0119	2021 EPS CPPC 2024		~100,000	Flexible performance space w/ multiple venues, assembly and production support spaces (PECO \$77.5M, 2023-24 CIP)
	12	Arboretum & Sustainability Center	Main 0001	TBD	New Bldg.	2020-30 SCP		~15,000	New Center replaces aging Arboretum modular
	13	Space Technology and Aerospace Research (STAR)	Main 0001	TBD	New Bldg.	CPPC 2024		~140,000	Space research labs and classrooms focused on programs such as propulsion, space MedEd, and planetary science.
	14	i-Design Engineering Center	Main 0001	TBD	New Bldg.	CPPC 2024		~22,000	
	15	Academic Building	Main 0001	TBD	New Bldg.			TBD	Located in the greenfield site of former Colbourn Hall
	16	Student Success Center	Main 0001	TBD	TBD	CPPC 2024		TBD	Collocate student services, resources, and academic assistance
	17	Research III	Main 0001	TBD	New Bldg.	2020-30 SCP		~140,000	Research labs focused on programs such as quantum computing, cybersecurity/data security, Al computing, and themed experience.
	18	Howard Phillips Hall	Main 0001	0014	Renov/Remod	2021 EPS	10%	64,619	Total Renovation (PECO \$34M, 2025-26 CIP)
	19	CREOL	Main 0001	0053	Renov/Remod		22%	111,891	Ph 1 and Ph 2, the older sections. Build-out of white box space

Exhibit 8.4-1 SCP (cont.) Revised Nov 2024

EXIIIDIL 0.4-1 3CP	, ,	Neviseu Nov 2024		Blda					
MAIN CAMPUS	MAP KEY	10-YEAR PROJECTED PROJECTS	Campus	Bldg. #	Project Type	Recommendation	FCI	GSF	Scope
ACADEMIC & STUDENT SUPPORT	20	ASSIST Education Complex	Main 0001	0021	Renov/Remod	CPPC 2024		~12,840	Renovate Gymnasium into Teaching Labs
FACILITIES (Cont.)	21	Barbara Ying Center	Main 0001	0071	Renov/Remod		34%	5,789	
	22	Health Sciences I	Main 0001	0080	Renov/Remod		13%	97,129	Programmatic changes have occurred in this building requiring remodeling.
	23	Engineering Building II	Main 0001	0091	Renov/Remod	2021 EPS	11%	~25,500 of 105,545	Expansion opportunities (PECO \$14.0M,-2025-26 CIP)
	24	Theater Building	Main 0001	0006	Renov/Remod		42%	29,469	HVAC
	25	Millican Hall	Main 0001	0001	Renov/Remod	2021 EPS	16%	87,742	
	26	Multipurpose Building	Main 0001	TBD	New Bldg.			TBD	
HOUSING & DINING FACILITIES	27	South Campus Housing	Main 0001	~	New Bldg(s)				New Housing Community south of Gemini Blvd S
I ACILITIES	28	Central Campus Housing	Main 0001	~	New Bldg(s)				New Housing Community - Site TBD
	29	Dining Facility	Main 0001	~	New Bldg.				Dining facility to replace Ferrell Commons - Site TBD
	30	Libra Community	Main 0001		Renov/Remod			262,606	Libra 1 ('80) – Brevard/Orange/Seminole Halls & Commons Bldg. Libra 2 ('99) – Citrus/Sumter/ Flagler Halls
TRANSPORTATION FACILITIES	31	Ken Dixon Way Improvements (fka N. Orion Blvd. <sup>6</sup> )	Main 0001		Improvements				
	32	University Blvd Improvements	Main 0001		Improvements				
	33	Campus Entrance Features/Signs	Main 0001		New Bldg.				
	34	South Campus Residential Garage	Main 0001		New Bldg.			TBD	
	35	Orion Intercept Garage	Main 0001		New Bldg.			TBD	
	36	Road and Transit Stop Improvements	Main 0001		Improvements				Improving Transit Stop locations, Traffic calming measures, etc.
NON-ACADEMIC SUPPORT FACILITIES	37	Water Treatment Plant	Main 0001		New Bldg.			TBD	Ara Drive. Total Est Cost \$24M (UES)
SOFF OICH FACILITIES	38	Storage Facility	Main 0001		New Bldg.			TBD	Ara Drive - Commercial-style Unit Storage Facility
	39	Recycling Center	Main 0001		New Bldg.			TBD	Ara Drive
RECREATION	40	Recreation & Wellness Center, Phase III	Main 0001	0088	Addition to 0088	2020-30 SCP CPPC 2024		~50,000	Addition to the Recreation and Wellness Facility
FACILITIES	41	RWC Park Phase IV	Main 0001		Renov/Remod	2020-30 SCP		TBD	Entrance Element, Field Improvements, Dirt Pile site, New sidewalk for Ped Safety
	42	Lake Claire Recreation Center	Main 0001		Improvements	2020-30 SCP CPPC 2024		TBD	New Boathouse (Bldg.0334) and misc. renovations
	43	Football Operations Building	Main 0001	0363	New Bldg.				FB Coaches Offices, Team rooms, etc.
	44	McNamara Cove	Main 0001	363A &B	New Facility	2020-30 SCP			Recovery Pools, Cove Canteen Pavilion 363A, Restroom Pavilion 363B
	45	Soccer Stadium Complex	Main 0001		New Facility	2020-30 SCP			New Soccer Stadium and Soccer Field
	46	Tennis Complex	Main 0001		New Facility	2020-30 SCP			Competition Courts (12) & Support Facilities

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<sup>&</sup>lt;sup>6</sup> On June 25, 2024, North Orion Boulevard was renamed Ken Dixon Way by the UCF Board of Trustees.

Exhibit 8.4-1 SCP (cont.) Revised Nov 2024

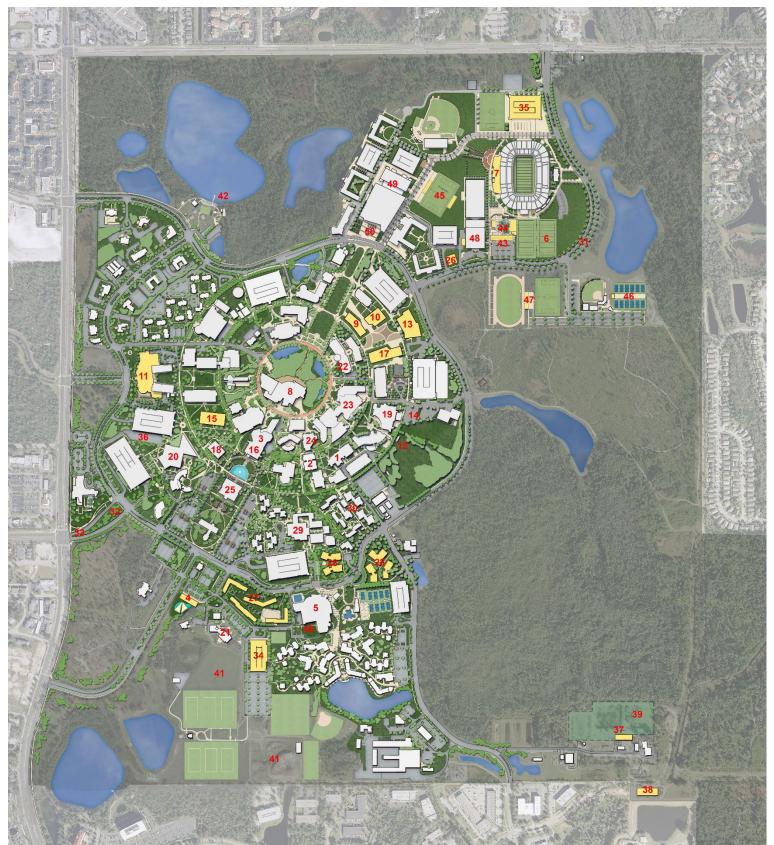
MAIN CAMPUS	MAP KEY	10-YEAR PROJECTED PROJECTS	Campus	Bldg.#	Project Type	Recommendation	FCI	GSF	Scope
RECREATION FACILITIES (Cont.)	47	Track & Field Complex	Main 0001		New				New Stadium, Running Track, and Practice Field
	48	Wayne Densch Sports Center	Main 0001	0077	Renov/Remod				Total renovation and remodel
	49	Basketball Excellence Facility - The Venue	Main 0001		Renov/Remod	2020-30 SCP			Renovation of The Venue; add offices and student-athlete team space
	50	Parking and Plaza Improvements	Main 0001	~	Sitework				Improvements to Surface Parking Lot E2

OTHER CAMPUSES/SITES	10-YEAR PROJECTED PROJECTS	Campus	Bldg.#	Project Type	Recommendation	FCI	GSF	Scope
ACADEMIC & STUDENT SUPPORT FACILITIES	Discovery & Innovation Hub	Daytona Site 0006	TBD	New Bldg.	Legislative Initiative		~100,000	Legislative Initiative \$20.0M FY 2024-25 (PECO \$60M, 2025-26 CIP)
	Florida Solar Energy Center	FSEC Site 0010	2001	Renov/Remod	2021 EPS		48,147	(PECO \$8.3M, 2024-25 CIP)
	Marine Turtle & Coastal Research Station	Site 0054	1985	New Bldg. & Renov/Remod	2020-30 SCP CPPC 2024		TBD	New Coastal Biology Station and Renovation of Caretta House
	UCF Downtown Building II	UCF DT Site 0017	TBD	New Bldg.			TBD	Third DT Campus building (in addition to DPAC and CMB)
	Sensitive Compartmented Information Facility	Research Park	TBD	New Bldg.	CPPC 2024		TBD	SCIF facility
	SuperLab	AHSC Site 0016	TBD	New Bldg.			TBD	New FDLE Regional Operations Center (ROC). & UCF's Forensic Science academic & research programs
	Lake Nona Cancer Center Renovations	AHSC Site 0016	1050	Renov/Remod	CPPC 2024		~14,000	
	AHSC <sup>7</sup> Discovery & Innovation Building	AHSC Site 0016	TBD	New Bldg.	2020-30 SCP CPPC 2024		TBD	Future home of CHPS programs at Lake Nona This was combined with CON on the 2020 CMP SCP
	Institute for Hospitality in Healthcare	AHSC Site 0016	TBD	New Bldg.	2020-30 SCP		TBD	Collaboration between COM and RCHM
HOUSING FACILITIES	AHSC Campus Housing	AHSC Site 0016	TBD	New Bldg.	CPPC 2024		~300 bds	
TRANSPORTATION FACILITIES	AHSC Parking Garage	AHSC Site 0016	TBD	New Bldg.			TBD	Concurrency for facilities proposed at AHSC through 2035
NON-ACADEMIC SUPPORT FACILITIES	AHSC Central Energy Plant	AHSC Site 0016	TBD	New Bldg.			~10,000	Chiller Plant, similar to CEP at UCF DT Campus Concurrency for facilities proposed at AHSC through 2035

The Academic Health Sciences Campus (AHSC) at Lake Nona is often referred to as the Health Sciences Campus (HSC)
 18 | 8.4 CAPITAL IMPROVEMENTS - Exhibits

Exhibit 8.4-2 Capital Improvements Map

Revised Nov 2024





KEY	PROJECT
1	Biological Sciences
2	Chemistry Building
3	John C Hitt Library
4	Creative School for Children
5	Recreation & Wellness Center
6	Football Practice Field Relocation
7	Roth Tower at FBC Mortgage Stadium
8	Student Union
9	Research II
10	Workforce Entrepreneurship Resource eXchange (WERX)
11	Performance, Immersive Experience & Entertainment Laboratory - PIXEL
12	Arboretum & Sustainability Center
13	Space Technology and Aerospace Research (STAR)
14	i-Design Engineering Center
15	Academic Building
16	Student Success Center
17	Research III
18	Howard Phillips Hall
19	CREOL
20	ASSIST Education Complex
21	Barbara Ying Center
22	Health Sciences I
23	Engineering Building II
24	Theater Building
25	Millican Hall
26	Multipurpose Building
27	South Campus Housing
28	Central Campus Housing
29	Dining Facility
30	Libra Community
31	Ken Dixon Way Improvements
32	University Blvd Improvements
33	Campus Entrance Features/Signs
34	South Campus Residential Garage
35	Intercept Garage
36	Road and Transit Stop Improvements
37	Water Treatment Plant
38	Storage Facility
39	Recycling Center
40	Recreation & Wellness Center, Phase III
41	RWC Park Phase IV
42	Lake Claire Recreation Center
43	Football Operations Building
44	McNamara Cove
45	Soccer Stadium Complex
46	Tennis Complex
47	Track & Field Complex
48	Wayne Densch Sports Center
49	Basketball Excellence Facility - The Venue
50	Parking and Plaza Improvements





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# UNIVERSITY OF CENTRAL FLORIDA

# **EVALUATION & APPRAISAL REPORT**

# Overview of the 2020-30 Campus Master Plan

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# **Evaluation & Analysis Report - Introduction**

## **EAR INTRODUCTION**

#### **NARRATIVE**

# MONITORING & EVALUATION

The EVALUATION & APPRAISAL REPORT (EAR) is a review and assessment of the 2020-30 Campus Master Plan (CMP) adopted by the UCF Board of Trustees on November 14, 2019.

The EAR for the 2020-30 CMP is incorporated into the 2025-35 Campus Master Plan Update in accordance with Board of Governors Chapter 21.

### **BOG 21.202 GENERAL REQUIREMENTS**

- (7) MONITORING AND EVALUATION REQUIREMENTS. For the purpose of evaluating and appraising the implementation of the campus master plan, each master plan shall contain a section identifying monitoring and evaluation procedures to be followed in updating the adopted campus master plan every five years which address the following:
  - (a) Each university shall submit to the Board of Trustees, within four years from the date of plan adoption and every five years thereafter, an evaluation and appraisal report which:
    - 1. Lists which goals, objectives and policies have been successfully reached;
    - 2. Identifies the need for new or modified goals, objectives, or policies needed to correct unanticipated and unforeseen problems and opportunities that have occurred since adoption of the campus master plan; and
    - 3. Identifies proposed and anticipated plan amendments necessary to address identified problems and opportunities.
  - (b) Each university shall submit to the university Board of Trustees, within five years from the date of plan adoption and every five years thereafter, a proposed plan amendment which incorporates the findings and recommendations contained in the evaluation and appraisal report, and which contains updated baseline data (as appropriate) and goals, objectives and policies to be accomplished during the remainder of the overall planning period.

## **REQUIRED ELEMENTS**

Eight elements are required by Florida Statute 1013.30(3) and Board of Governors Regulation Chapter 21.

Only the eight required elements will be included in this EAR. They will be evaluated in the order in which they were shown in the 2020-30 CMP:

- FUTURE LAND USE
- HOUSING
- RECREATION & OPEN SPACE

5 | EAR - Introduction

# **Evaluation & Analysis Report - Introduction**

- GENERAL INFRASTRUCTURE
- TRANSPORTATION
- INTERGOVERNMENTAL COORDINATION
- CONSERVATION
- CAPITAL IMPROVEMENTS

## **OPTIONAL ELEMENTS**

UCF included Optional Elements in the 2020-30 CMP, as permitted under F.S. 1013.30. Optional Elements are not subject to review under BOG Regulation 21.212.

The following optional elements will be retired from the 2025-35 UCF Campus Master Plan:

- URBAN DESIGN
- PUBLIC SAFETY
- IMPLEMENTATION
- ACADEMIC & SUPPORT FACILITIES
- FACILITIES MAINTENANCE
- UTILITIES
  - The four Utilities Sub-Elements (chilled water, electrical power, natural gas, telecommunications) that were included in this element, will be moved to GENERAL INFRASTRUCTURE in the 2025-35 CMP; and will be evaluated in this EAR.

## **EVALUATION FORMAT**

The Goals and Objectives from the 2020-30 CMP will be evaluated according to four criteria.

ONGOING

UCF will continue to address these Goals and Objectives

MET

These Goals and Objectives have been successfully reached.

UNMET

How were they MET?

RETIRED

These Goals and Objectives were not reached.

Why were they UNMET?

These UCF Goals or Objectives will be removed from the <u>2025-</u> 35 Campus Master Plan.

Why were they Retired?

# **Evaluation & Analysis of the Future Land Use Element**

# **FUTURE LAND USE**

#### **NARRATIVE**

Element 2.0 FUTURE LAND USE & URBAN DESIGN in the 2020-30 the CMP will be re-numbered and renamed element 1.0 FUTURE LAND USE in the 2025-35 CMP.

The optional sub-element URBAN DESIGN will be retired.

Goal 1: To create developmental patterns that direct future growth to appropriate areas on campus, promote the educational mission of the University, protect environmentally sensitive areas, and ensure compatibility with the community.

**GOAL 1 Analysis** 

## **ONGOING**

• Language revised to include "...and host/affected local governments".

OBJECTIVE 1.1: The Campus Master Plan shall define Future Land Use Categories and related density/intensity of use.

#### **ONGOING**

- Language revise to read: The Campus Master Plan shall establish Standards-of-Use for each Future Land Use Category, promoting compact, efficient, and environmentally sensitive land planning.
- In the 2025-35 CMP revised UCF's land use categories to:
  - ACADEMIC & STUDENT SUPPORT
  - MIXED USE
  - PARKING
  - RECREATION & OPEN SPACE
    - Developed
    - Natural Preserve
  - CONSERVATION
    - o Conservation Easements
    - Wetlands
  - RESIDENTIAL
  - NON-ACADEMIC SUPPORT
  - WATER BODY

OBJECTIVE 1.2: Protect natural resources, including surface waters and wetlands.

**ONGOING** 

OBJECTIVE 1.3: Minimize land use compatibility issues between the University and the Host Community.

**ONGOING** 

OBJECTIVE 1.4: Correct existing land use

**ONGOING** 

# **Evaluation & Analysis of the Future Land Use Element**

compatibility problems on the University campus.

 Language simplified in the 2025-35 CMP to read "Ensure land use compatibility on the University campus."

This Objective has UNMET Policies:

- UCF has not implemented the intercept parking concept, because no garages we built during the planning interval.
   This policy will carry forward to the 2025-35 CMP.
- Surface parking within the Academic Core remains a land use compatibility issue.
- Parking Lots D-1 and H-2 remain within the Academic Core.
   UCF will strive to relocate this parking into intercept garages and repurpose these areas as Recreation Space.

OBJECTIVE 1.5: Coordinate future land uses with the availability of facilities and services.

### **ONGOING**

- Language revised in the 2025-35 CMP to read "Coordinate future land uses with the availability of facilities and services, ensuring the availability of suitable land on campus for utility facilities required to support proposed on-campus development."
- In accordance with Florida Statute 163.3180 Concurrency, the only public facilities and services that are subject to the statewide concurrency requirements are Sanitary Sewer, Solid Waste, Drainage, and Potable Water.
- UCF extends the Concurrency requirement to other utilities: Chilled Water, Primary Electric Power, Natural Gas, and Stormwater.

# RETIRED

• This objective was removed in the 2025-35 CMP, as UCF has limited control of off-campus constraints.

OBJECTIVE 1.6: Minimize off-campus constraints which limit future development on campus, e. g., traffic and utilities, and minimize on-campus conflicts with land uses within the context area.

OBJECTIVE 1.7: Coordinate future land uses with the appropriate topography and soil conditions.

OBJECTIVE 1.8: Ensure that future campus development is consistent with regulations regarding historically- or archaeologically- significant resources.

#### **ONGOING**

• This objective is renumbered to 1.6 in the 2025-35 CMP.

### **RETIRED**

 This objective was removed in the 2025-35 CMP, as UCF has no historically or archaeologically-significant resources that have been identified on the Main Campus.

### UCF is Not Retiring this Objective

 In accordance with f.s. 1013.30(3), UCF has revised 1.0
 FUTURE LAND USE, Goal 1 to reinsert Objective 1.7
 (verbatim from 2020 Objective 1.8) to ensure the protection of historically- and archaeologically-significant resources.

# **Evaluation & Analysis of the Future Land Use Element**

See also 7.0 INTERGOVERNMENTAL COORDINATION Goal 1, where UCF has reinserted Objective 1.7, verbatim from 1.6 in 2020.

Goal 2: Maintain a commitment to the protection of campus ecosystems and lands of significant environmental importance, and ensure that these resources are protected for the benefit of present and future generations, while accommodating the continued development and expansion of the man-made environment of the campus.

**GOAL 2 Analysis** 

**ONGOING** 

OBJECTIVE 2.1: Designate environmentally-sensitive lands for protection based on state and regional criteria.

**ONGOING** 

# **Evaluation & Analysis of the Housing Element**

# **HOUSING**

#### **NARRATIVE**

Element 3.0 HOUSING in the 2020-30 the CMP will remain the same name and number in the 2025-35 CMP.

Goal 1: Ensure the provision of public and private housing facilities on campus and within the host community are adequate to meet the needs of the projected University enrollment during the planning period.

## **GOAL 1 Analysis**

## **ONGOING**

 Language revised in the 2025-35 CMP to read "The provision of public and private housing facilities on campus and within the host community should be aligned with the needs and the projected University enrollment during the planning period

OBJECTIVE 1.1: Ensure the availability of affordable housing units and support facilities on-campus and through University-managed and -affiliated housing properties to meet the projected need for student housing.

## **ONGOING**

- Language revised in the 2025-35 CMP to read "Strive to align the availability of housing with projected need, using oncampus and University-managed and -affiliated properties."
- The University has identified several possible locations for new housing communities on the UCF Campus.

OBJECTIVE 1.2: Ensure the availability of off-campus housing and support facilities within close proximity to the campus to meet the projected student enrollment.

### **ONGOING**

- Language revised in the 2025-35 CMP to read "Support the development of off-campus housing within the Context Area, to address projected need."
- When on-campus housing facilities have reached full capacity, UCF refers students to off-campus housing. Many private apartment complexes house UCF students within the Context Area. In support of off-campus housing, the UCF Shuttle System offers regular routes between UCF and many offcampus student apartment complexes.

OBJECTIVE 1.3: Provide structural and aesthetic improvements of existing student housing to prevent or eliminate substandard student housing.

#### MET and ONGOING

- Language revised in the 2025-35 CMP to read "Ensure capital renewal of existing student housing to prevent or eliminate substandard student housing.
- UCF has no sub-standard housing on-campus.
- UCF will continue to maintain existing on-campus housing communities to the highest level and renovate them when necessary.

# **Evaluation & Analysis of the Recreation & Open Space Element**

# **RECREATION & OPEN SPACE**

#### NARRATIVE

Element 4.0 ATHLETICS, RECREATION & OPEN SPACE from the 2020-30 CMP will be re-numbered and renamed element 6.0 RECREATION & OPEN SPACE in the 2025-35 CMP.

The 2025-235 CMP will categorize Recreation & Open space as -Developed and -Natural Preserve land uses. Athletics will be included under Recreation & Open Space – Developed.

Goal 1: Provide a variety of safe, efficient, and enjoyable on-campus recreation and intercollegiate athletics facilities, educational laboratories, and open space areas which promote the health, welfare and campus aesthetic ambience for faculty, staff, students, and visitors.

**GOAL1** Analysis

## **ONGOING**

- Language revised in the 2025-35 CMP to read "Goal 1: Provide a variety of safe, efficient, and enjoyable recreation facilities and open space areas to promote the health, wellbeing, and campus aesthetic for students, faculty, staff, and visitors."
- Recreation facilities include intercollegiate athletic facilities.

**ONGOING** 

Objective 1.1: Pursue a variety of public and private funding sources and programs to ensure the development and availability of recreational facilities and educational laboratories for students and other user groups.

OBJECTIVE 1.2: Pursue a variety of continuing inhouse planning and facility development programs to ensure that *high quality* recreation, educational laboratories, and open space areas are adequately and efficiently provided.

OBJECTIVE 1.3: Promote unrestricted or managed public access to all campus recreation and open space areas to the maximum extent feasible.

OBJECTIVE 1.4: To protect and enhance present campus open spaces.

#### **ONGOING**

- During the 2020-2024 UCF did not increase recreation facilities to correct existing deficiencies and meet future demands.
- UCF converted some tennis courts to pickleball courts, increasing the tennis court deficit, but meeting a new need.

**ONGOING** 

**ONGOING** 

# Evaluation & Analysis of the General Infrastructure Element

# **GENERAL INFRASTRUCTURE**

#### **NARRATIVE**

Element 5.0 GENERAL INFRASTRUCTURE & UTILTIES from the 2020-30 CMP will be re-numbered and renamed element 4.0 GENERAL INFRASTRUCTURE in the 2025-35 CMP.

The optional sub-element UTILITIES will be retired, but its optional sub-elements will be added under GENERAL INFRASTRUCTURE.

## **Utility Infrastructure Overview**

Goal 1: Develop and manage UCF's utility production, distribution infrastructure, and associated capital assets to support campus needs.

**GOAL 1 Analysis** 

OBJECTIVE 1.1: Ensure that there is adequate and reserve capacity and infrastructure for distribution, transmission, and generation to accommodate growth.

OBJECTIVE 1.2: Monitor and inventory infrastructure assets using smart technologies.

**ONGOING** 

**ONGOING** 

**ONGOING** 

## **Stormwater Management Sub-element (required)**

Goal 1: Manage stormwater by replicating natural site hydrology to protect campus populations and facilities, and remain sensitive to the environment.

**GOAL 1 Analysis** 

### **ONGOING**

- Language revised in the 2025-35 CMP to read "Manage stormwater to protect campus populations and facilities, remain sensitive to environmental inputs, and accommodate university growth."
- In the 2025-35 CMP, renumber Goals sequentially instead of having a Goal 1 in every sub-element. This will be GOAL 2.

OBJECTIVE 1.1: Pursue low-impact development practices to prevent increases to stormwater runoff.

OBJECTIVE 1.2: Use Green Industry Best Management Practices (BMPs) to minimize University-generated stormwater pollutants.

**ONGOING** 

**ONGOING** 

#### Evaluation & Analysis of the General Infrastructure Element

OBJECTIVE 1.3: Oversee UCF's stormwater management.

**ONGOING** 

#### Sanitary Sewer Sub-element (required)

### Goal 1: Ensure that the sanitary sewer system adequately serves current and future campus needs.

**GOAL 1 Analysis** 

**ONGOING** 

Renumber as GOAL 3 in the 2025-35 CMP.

OBJECTIVE 1.1: Maintain the sanitary sewer system and upgrade its mechanical and electrical components.

#### **ONGOING**

 Language revised in the 2025-35 CMP to read "Maintain the sanitary sewer distribution system and provide capacity to meet current and future needs."

#### **Potable Water Sub-element (required)**

#### Goal 1: Provide quality potable water to the campus with reliable backup sources.

**GOAL 1 Analysis** 

ONGOING

• Renumber as GOAL 4 in the 2025-35 CMP.

OBJECTIVE 1.1: Ensure that adequate potable water supply and distribution piping is available for new and renovated facilities.

ONGOING

OBJECTIVE 1.2: Maintain the current quality and quantity of raw water available in the campus potable water well field. ONGOING

Revise

OBJECTIVE 1.3: Conserve potable water for human health and advancing research.

 Revise to read: "Maintain potable water facilities to keep the current quality and quantity of potable water available."

**ONGOING** 

#### Solid Waste Sub-element (required)

### Goal 1: Plan future campus development to ensure that solid waste collection and disposal, and recycling efforts adequately serve campus needs

**GOAL 1 Analysis** 

ONGOING

Renumber as GOAL 5 in the 2025-35 CMP.

OBJECTIVE 1.1: Promote recycling through education and outreach.

#### **MET**

- UCF has actively promoted recycling through education and outreach and will continue to do so.
- This Objective will be retired from the 2025-35 CMP.

# **Evaluation & Analysis of the General Infrastructure Element**

OBJECTIVE 1.2: The University shall strive to reach the statewide recycling goal of 75% to reduce the volume of solid waste entering the landfill

#### UNMET

- UCF has not met the statewide recycling goal of 75% reduction in volume of solid waste entering the landfill.
- Instead of this OBJECTIVE, UCF will add "GOAL 6: UCF will continue to develop a robust recycling program" to the 2025-35 CMP.

#### **Chilled Water Production Sub-element (optional)**

Goal 1: Promote district cooling with energy and economic efficiency where appropriate within the district energy loop.

**GOAL 1 Analysis** 

#### **ONGOING**

- Renumber as GOAL 7 in the 2025-35 CMP
- Language revised in the 2025-35 CMP to read "Promote district cooling with energy and economic efficiency where appropriate within the district energy loop, and maintain capacity for future needs."

OBJECTIVE 1.1. Invest in energy technologies that facilitate economies of scale, otherwise infeasible on a single-building basis.

**ONGOING** 

#### **Electrical Power and Other Fuel Sub-element (optional)**

#### Goal 1: Provide cost-effective, reliable, and resilient electric utilities.

**GOAL 1 Analysis** 

**ONGOING** 

OBJECTIVE 1.1. Maintain and extend reliability and

resiliency of the University electric grid.

OBJECTIVE 1.2. Continue to evaluate and implement distributed technologies that provide the lowest cost of energy and achieve carbon targets.

Renumber as GOAL 8 in the 2025-35 CMP

**ONGOING** 

**ONGOING** 

#### **Natural Gas Sub-element (optional)**

Goal 1: Provide the campus with an eco-friendly fuel to reduce utility expenditure and achieve greater heating efficiencies.

**GOAL 1 Analysis** 

**ONGOING** 

• Renumber as GOAL 9 in the 2025-35 CMP.

## **Evaluation & Analysis of the General Infrastructure Element**

• Language revised in the 2025-35 CMP to read "Provide the campus with fuel to reduce utility expenditure and achieve greater heating efficiencies."

OBJECTIVE 1.1. Provide a natural gas system to reliably serve the University.

**ONGOING** 

#### **Telecommunications Systems Sub-element (optional)**

### Goal 1: Provide an on-campus telecommunications system, which adequately serves future campus population needs.

**GOAL 1 Analysis** 

OBJECTIVE 1.1: Through ongoing inspection and coordination efforts with service providers, UCF shall continue to identify and

service providers, UCF shall continue to identify and resolve deficiencies in telecommunications systems.

OBJECTIVE 1.2: Ensure the provision of adequate telecommunications facility services through continued internal funding of improvements and coordination with external

**ONGOING** 

• Renumber as GOAL 10 in the 2025-35 CMP

#### **ONGOING**

 Language revised in the 2025-35 CMP to read "UCF shall continue to identify and resolve deficiencies in telecommunications systems, through ongoing inspection and coordination with service providers."

# **Evaluation & Analysis of the Transportation Element**

#### **TRANSPORTATION**

#### **NARRATIVE**

Element 6.0 TRANSPORTATION from the 2020-30 CMP will be re-numbered element 2.0 TRANSPORTATION in the 2025-35 CMP.

#### **Traffic Circulation Systems Sub-element**

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

**GOAL 1 Analysis** 

OBJECTIVE 1.1: Set guidelines to ensure safe, effective vehicular access to, from, and within campus.

OBJECTIVE 1.2: Ensure continued coordination of UCF's transportation system with that of the host and affected local governments.

**ONGOING** 

#### **ONGOING**

• Language revised in the 2025-35 CMP to read "Ensure safe, effective vehicular access to, from, and within campus."

**ONGOING** 

#### **Parking Services and Facilities Sub-element**

Goal 2: Strive to consistently manage parking demand on campus by maximizing multimodal transportation solutions with existing resources

**GOAL 2 Analysis** 

#### **ONGOING**

• Language revised in the 2025-35 CMP to read "Strive to consistently manage parking demand on campus."

OBJECTIVE 2.1: Ensure the provision of adequate parking facilities to meet future needs

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

#### **ONGOING**

 Language revised in the 2025-35 CMP to read "Ensure the provision of adequate safe, accessible, and effective parking facilities to meet future needs."

**ONGOING** 

#### **Transit Systems and Facilities Sub-element**

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 line, and a future autonomous vehicle (AV) shuttle service.

**GOAL 3 Analysis** 

#### **ONGOING**

• Language revised in the 2025-35 CMP to read "Develop a financially feasible multimodal transportation system that

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# **Evaluation & Analysis of the Transportation Element**

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.

OBJECTIVE 3.2: Increase transit ridership.

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

ONGOING

**ONGOING** 

**ONGOING** 

#### Pedestrian and Non-Vehicular Systems and Facilities Sub-element

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

**GOAL 4 Analysis** 

OBJECTIVE 4.1: Encourage the use of pedestrian and non-vehicular circulation systems.

OBJECTIVE 4.2: Coordinate pedestrian and non-vehicular circulation systems with those developed by the host and affected local governments.

**ONGOING** 

**ONGOING** 

#### **ONGOING**

- UCF, Orange County, and FDOT are collaborating on the "Alafaya Trail Pedestrian Safety Project," which began construction in Fall of 2023.
- At UCF's request, Orange County added a multimodal sidewalk along UCF's north border from Alafaya Tr. to N. Orion Bvd. in 2020 (0.93 mi.)

#### **UNMET**

 UCF's 2020 CDA with Orange County addressed collaborating to develop an on-campus bike trail that connects Orange County trails to Seminole County trails.
 No action has been taken in the planning interval.

OBJECTIVE 4.3: Continue to promote pedestrian safety.

OBJECTIVE 4.4: Continue to grow the cycling culture at UCF by prioritizing ridership and safety.

OBJECTIVE 4.5: Continue to support the use of other non-vehicular personal

**ONGOING** 

#### **UNMET**

 UCF's move from E-bike Sharing to E-scooter Sharing in 2020 was a setback to "growing the cycling culture at UCF."

#### **ONGOING**

• In 2020, UCF adopted an E-scooter Sharing program

# **Evaluation & Analysis of the Transportation Element**

transportation devices on campus.

OBJECTIVE 4.6: Review the need for additional lighting along pedestrian and non-vehicular circulation routes.

• Language revised in the 2025-35 CMP to read "Continue to support the use of micromobility devices on campus."

#### **ONGOING**

 During the Planning Interval, UCF performed a lighting analysis of the campus and is systematically improving lighting levels where needed.

#### **Sustainable Transportation Sub-element**

Goal 5: Develop sustainable transportation options, while balancing the economic and social benefits of transportation with the need to protect the environment.

**GOAL 5 Analysis** 

OBJECTIVE 5.1: Integrate transportation and land use planning.

OBJECTIVE 5.2: Protect the environmental health of the campus.

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

OBJECTIVE 5.4: Consider all modes of alternative transportation.

OBJECTIVE 5.5: Measure transportation performance.

OBJECTIVE 5.6: Create a living transportation plan with public involvement.

**ONGOING** 

**ONGOING** 

ONGOING

**ONGOING** 

#### **RETIRED ONGOING**

Objective 5.4 from 2020-30 became Objective 5.3 in 2025: "Reduce dependence on the personal automobile by encouraging the use of alternative modes of transportation."

#### **RETIRED** ONGOING

Objective 5.5 from 2020-30 became Objective 3.3 in 2025: Implement measures to improve transit service to, from, and within the campus.

#### **RETIRED ONGOING**

<u>UCF has plans to develop a Transportation Master Plan within</u> 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.

# **Evaluation & Analysis of the Intergovernmental Coordination Element**

#### INTERGOVERNMENTAL COORDINATION

#### NARRATIVE

Element 7.0 INTERGOVERNMENTAL COORDINATION from the 2020-30 CMP will remain the same name and number in the 2025-35 CMP.

Goal 1: Achieve the goals, objectives, and policies of the UCF Campus Master Plan through the use and promotion of intergovernmental coordination with local, regional, state, and federal government entities.

**GOAL 1 Analysis** 

OBJECTIVE 1.1: Promote land use compatibility between the University and the host local government through the coordination of the UCF Campus Master Plan with the comprehensive master plans of the host community.

ONGOING

**ONGOING** 

**ONGOING** 

OBJECTIVE 1.2: Establish administrative procedures and coordination mechanisms for the reciprocal review of campus and host community development plans.

OBJECTIVE 1.3: Assess and mitigate the impacts of development on UCF, the host and affected local governments, the surrounding community, and service providers.

OBJECTIVE 1.4: Ensure intergovernmental coordination in the event of an emergency.

#### **ONGOING**

 During the planning interval, several Minor Amendments were made to the 2020-30 CMP. None resulted in sufficient impact on our Host or Affected Local Governments to trigger the requirements for a Major Amendment under f.s. 1013.30(9).

- Hurricane Ian, in Sept 2022, was among strongest and most intense hurricanes in the history of Florida.
- UCF coordinated with local governments regarding this catastrophic event.

# **Evaluation & Analysis of the Intergovernmental Coordination Element**

OBJECTIVE 1.5: Ensure the provision of adequate public services and facilities necessary to support development on campus and to meet the future needs of the University.

OBJECTIVE 1.6: Ensure the protection of natural and historically- and archaeologically- significant resources from any negative impacts of campus development.

OBJECTIVE 1.7: UCF will continue to maintain involvement with the immediate external community in an effort to position the University as a community resource, an intellectual hub, and a community asset.

#### **ONGOING**

- In accordance with Florida Statute 163.3180 Concurrency, the only public facilities and services subject to statewide concurrency are Sanitary Sewer, Solid Waste, Drainage, and Potable Water
- UCF extends the Concurrency requirement to four other utilities: Chilled Water, Primary Electric Power, Natural Gas, and Stormwater.

#### RETIRED ONGOING

- This objective was removed in the 2025-35 CMP, as UCF has no historically- or archaeologically-significant resources that have been identified on the Main Campus.
- In accordance with f.s.1013.30(3), UCF has revised INTERGOVERNMENTAL COORDINATION, Goal 1 to reinsert Objective 1.6 from the 2020-30 CMP, to ensure the protection of natural and historically- and archaeologically-significant resources

#### **ONGOING**

 This Objective has been renumbered to 1.6 in the 2025-35 CMP. Not renumbered

## **Evaluation & Analysis of the Conservation Element**

#### **CONSERVATION**

**NARRATIVE** 

Element 9.0 CONSERVATION from the 2020-30 CMP will be renumbered element 5.0 CONSERVATION in the 2025-35 CMP.

#### **Conservation of Natural Ecosystems and Resources Sub-Element**

Goal 1: Conserve the region's biodiversity and natural heritage by designating significant campus conservation areas, developing wildlife-friendly landscapes, and minimizing the impact of future development on vulnerable species and habitats.

**GOAL 1 Analysis** 

OBJECTIVE 1.1: Review and designate the status of all environmentally sensitive lands on campus, based on state and regionally determined criteria.

OBJECTIVE 1.2: Conserve, protect, and appropriately manage native plant vegetative communities and wildlife habitat as a system of interconnected wetlands and upland preserves.

OBJECTIVE 1.3: Restrict activities that may threaten the survival of imperiled or vulnerable species or habitats.

OBJECTIVE 1.4: Enhance natural habitats and species in both developed and undeveloped areas of campus.

OBJECTIVE 1.5: Foster and encourage use of campus landscapes and natural areas as an outdoor "living laboratory" for hands-on experiential learning in conservation and land management.

**ONGOING** 

**ONGOING** 

**ONGOING** 

• Language revised in the 2025-35 CMP

**ONGOING** 

**ONGOING** 

**ONGOING** 

Goal 2: Protect regional water and air quality and human and environmental health by preventing or minimizing pollution and properly disposing of hazardous wastes.

GOAL 2 Analysis

OBJECTIVE 2.1: Conserve, appropriately manage, and

ONGOING

## Evaluation & Analysis of the Conservation Element

protect the quantity and quality of regional water sources.

OBJECTIVE 2.2: Maintain or improve existing air quality on campus.

OBJECTIVE 2.3: To maximize on-campus reclamation of hazardous materials and consumer products.

**ONGOING** 

**ONGOING** 

#### **Conservation of Energy Sub element**

#### **Energy Efficiency**

Goal 1: Reduce campus energy use through innovative technologies to achieve Carbon Neutrality by 2050.

**GOAL 1 Analysis** 

#### **UNMET ONGOING**

Renumber as GOAL 3 in the 2025-35 CMP.
 Revise to read: "Reduce campus energy use through innovative technologies."

No rewrite of GOAL 3. It will continue to read: "Reduce campus energy use through innovative technologies to achieve Carbon Neutrality by 2050."

• The University has made progress toward climate neutrality but has retired the UCF 2010 Climate Action Plan.

The University has met the goals of the retired UCF 2010 CAP; and has begun developing a new CAP.

OBJECTIVE 1.1: Reduce energy use by campus infrastructure, buildings, and systems energy to meet or exceed peer building benchmark Energy Utilization Index (EUI) and Energy Cost Index (ECI) performance metrics.

**ONGOING** 

OBJECTIVE 1.2: Transition electrical power sources from public-utility sourced power to onsite renewable energy and other onsite generation technologies, reducing greenhouse gas emissions and improving

## **Evaluation & Analysis of the Conservation Element**

economic stabilization of electrical utility rates.

OBJECTIVE 1.3: Utilize the infrastructure, buildings, and systems as "living labs" for academic collaboration and research, in cooperation with Facilities and Safety, for hands-on experiential learning.

#### **ONGOING**

- Revise to read: "Utilize UCF's infrastructure, buildings, and systems as "living labs" for academic collaboration, research, and hands-on experiential learning."
- Note: The name Facilities and Safety was changed to Facilities and Business Operations (FBO) in 2021.

#### **Microgrids**

Goal 2: To transition the campus to a microgrid to synchronize generation assets to the existing medium voltage power distribution system.

**GOAL 2 Analysis** 

#### RETIRED RELOCATED

• CONSERVATION, Microgrids, Goal 2 will be relocated to GENERAL INFRASTRUCTURE as Goal 8:

GOAL 8 "Provide cost-effective, reliable, and resilient electric utilities."

#### RETIRED RELOCATED

- Objective 2.1 will be removed in the 2025-35 CMP.
- See GENERAL INFRASTRUCTURE, GOAL 8, policies, which include:

POLICY 8.1.2: "The University shall investigate opportunities to implement distributed generation and smart grid technologies to provide reliable and resilient electrical services to campus buildings."

OBJECTIVE 2.1. Transition the UCF electrical transmission and distribution systems to a Smart Grid model capable of islanding the UCF Main Campus in a "microgrid" configuration for economic benefit, inclement weather, or other conditions that warrant separation from the public electrical utility grid.

# **Evaluation & Analysis of the Capital Improvements Element**

### **CAPITAL IMPROVEMENTS**

#### **NARRATIVE**

Element 10.0 CAPITAL IMPROVEMENTS & IMPLEMENTATION from the 2020-30 CMP will be re-numbered and renamed element 8.0 CAPITAL IMPROVEMENTS in the 2025-35 CMP.

The optional sub-element IMPLEMENTAITON will be retired.

Goal 1: Provide academic, research, and support facilities to meet the education, research, and support missions of the University, as stated in the Educational Plant Survey, and meet the needs of student enrollment.

**GOAL1** Analysis

#### **ONGOING**

 Revise to read: "Provide sustainable academic and research facilities and infrastructure to meet the education, research, workforce development, and support missions of the University, and meet the evolving demands of student enrollment and investors."

OBJECTIVE 1.1: Ensure that adequate facilities and supporting infrastructure will be available when needed to meet the needs of the University; replace obsolete facilities.

**ONGOING** 

 Revise to read: "Ensure that state-of-the-art facilities and supporting infrastructure will be available to meet the needs of the University."

OBJECTIVE 1.2: Construct buildings with approved funding sources.

#### **RETIRED**

- UCF has implemented safeguards to assure that proper funding sources are used to construct or renovate UCF's facilities
- The 2025-35 Capital Improvements element will include a GOAL 2 reading: "Implement improvement projects with approved funding sources."

OBJECTIVE 1.3: Provide for the replacement and renewal of capital facilities to meet growth; renovate, repair, or upgrade facilities; and demolish obsolete facilities. **ONGOING** 

OBJECTIVE 1.4: Coordinate land use with a schedule of capital improvements that will meet existing and projected facility needs

# **Evaluation & Analysis of the Capital Improvements Element**

Goal 2: Provide support facilities including utility plants, student services buildings, libraries, computer services buildings, food services buildings, auxiliary services buildings, and other buildings to meet the needs of faculty, staff, and students.

Stail, and Students.	
GOAL 2 Analysis	ONGOING
	<ul> <li>Language revised in the 2025-35 CMP to read "Implement improvement projects with approved funding sources."</li> </ul>
OBJECTIVE 2.1: Seek additional funds to augment state capital construction funds.	Language revised in the 2020-33 GMP to read implement improvement projects with approved funding sources."  ONGOING