

FLORIDA ATLANTIC UNIVERSITY

2019 BOCA RATON CAMPUS MASTER PLAN UPDATE

Adopted April 20, 2021



acknowledgements

UNIVERSITY PLANNING TEAM

Dr. John Kelly, University President
Stacy A. Volnick, Vice President of Administrative Affairs and Chief Administrative Officer
Azita Dotiwala, Facilities Management Director of Budget and Planning

Jeff Atwater, Vice President of Strategic Initiatives and Chief Financial Officer
Dr. Bret Danilowicz, Provost and Vice President of Academic Affairs
Daniel C. Flynn, Vice President of Research
Peter Hull, Vice President of Public Affairs
David Kian, Vice President of Legal Affairs and General Counsel
Corey King, Vice President of Student Affairs
Danita Nias, Vice President for Advancement and Chief Executive Officer
Brian White, Vice President and Director of Athletics

MASTER PLANNING TEAM

Hanbury
Keith Storms, Principal in Charge
Scott Miller, Lead Planner
Nancy Redenius, Planner
John Dreiling, Project Manager
Yvonne M. Thibodeau, Space Planner

EDSA

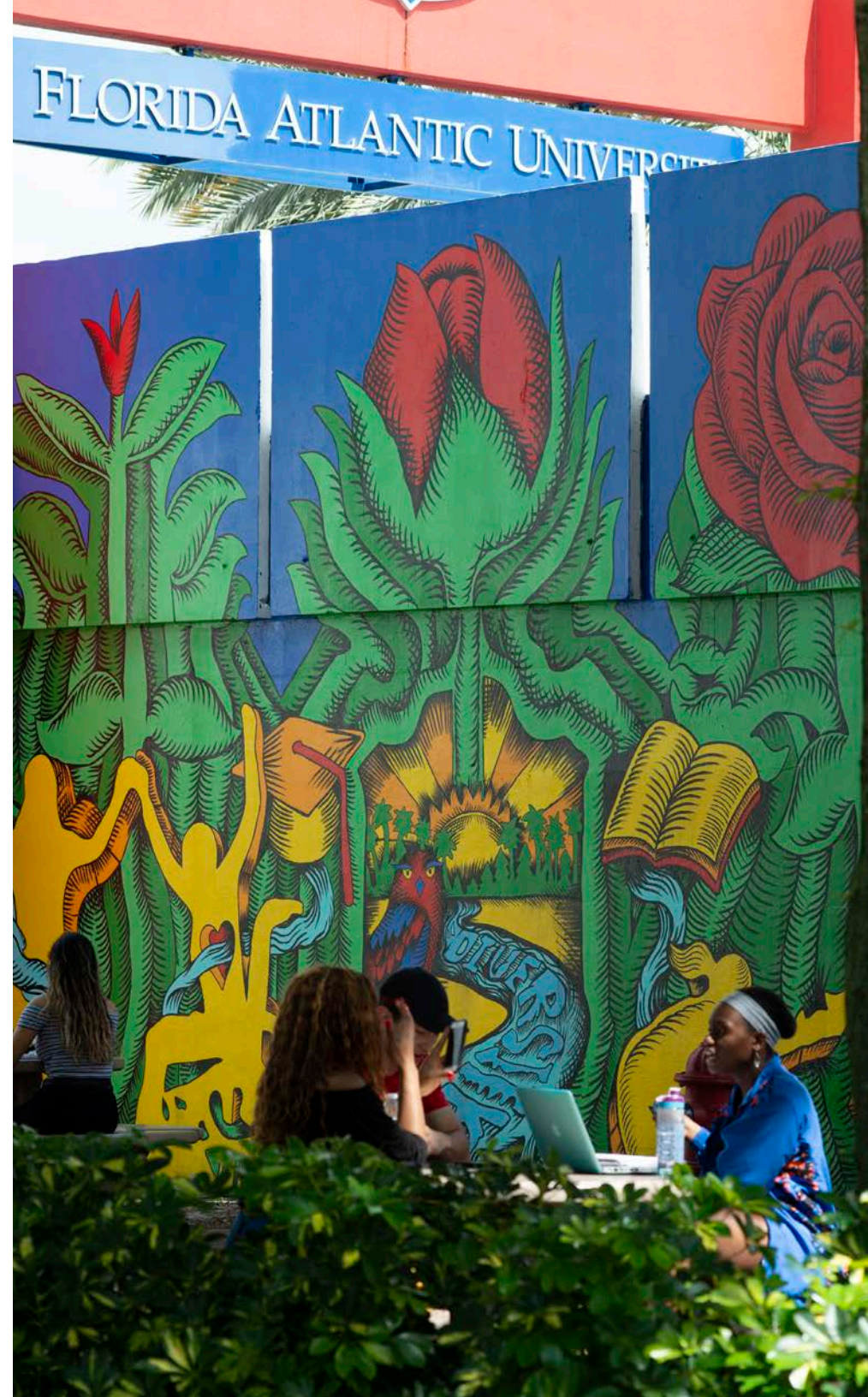
Kona A. Gray, Principal in Charge
Mihaela Zaharescu, Landscape Architect

Kimley-Horn

Jason Webber, Civil Engineer
Adam Kerr, Transportation Engineer

Associated Engineers, Inc. (AEI)

Scott Robinson, Principal in Charge



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executive summary

PRINCIPLES, PROGRAM, PLACE

“A Strategic Plan for the Race to Excellence” is a bold institutional vision that inspired this plan for the future of the campus. The 2019 Campus Master Plan will provide direction for physical improvements to help realize the vision of the strategic plan.

The 2019 Campus Master Plan is the result of an 18-month collaborative process with the campus community and the University’s host community. The principles, program, and place-making strategies outlined in the plan represent an intentional synthesis of interrelated ideas and goals in order to begin the process of physically embodying the goals of the University’s strategic plan. The Campus Master Plan is a roadmap for future growth, while allowing flexibility in its implementation. The plan is based on a series of historical, land use, and natural frameworks that guide the recommendations laid out in this document.

Data collection and research for the Master Plan commenced in the spring of 2018. Over the following year, the planning team developed multiple iterations of analysis and options informed by input from the Executive Committee and broader university community. The Board of Trustees gave final approval on March 26th, 2019.

strategic plan

The Campus Master Plan seeks to support FAU's aspiration and goals laid out in "A Strategic Plan for the Race to Excellence 2015-2025".

THE ASPIRATION

Florida Atlantic will pursue, with unbridled ambition, the intention of becoming the country's fastest-improving public research university.

The institution developed this plan to attract many collaborators for the mutual benefit of Florida Atlantic and its external constituents. The plan captures the direction that the University can follow to nationally differentiate itself.

- We will recruit and retain the highest talent in faculty, staff and students.
- Our programs will develop in focal areas, known as Pillars and Platforms.
- We will concentrate on very strategic capital facilities projects.
- The organizational efficiency of the university will be greatly enhanced.
- Most importantly we will "budget to the plan" not "plan to the budget."



strategic goals

1

BOLDNESS

A uniquely competitive and globalized student body

Build a geographically—diverse population of students who excel in focused academic areas and engage in enriching activities that drive them to timely graduation and successful futures.

2

SYNERGY

Prominent teams of researchers and scholars

Invest in focused pillars and platforms—connecting the most talented faculty, staff and students to expand on the robust culture of nationally respected research and inquiry.

3

PLACE

Deep engagement with South Florida's global communities

Partner with a diverse set of local stakeholders and enhance the physical spaces to build upon the unique cultural, demographic and environmental characteristics of each campus community—striving for leadership in developing the South Florida culture and economy.

4

QUALITY

Continuously-assessed and evolving best practices

Design a resilient, lean organization—based on best logistical practices—that identifies economies of scale and incorporates new technologies to promote institutional development.

5

BRAND

National reputation for excellence

Communicate the incredible stories of the University to an increasingly eGlobal audience, so that key internal stakeholders can link with external consistency groups.

6

STRATEGY

Wise and innovative allocation of resources

"Budget to the plan" and pursue new revenue streams in order to make FAU self-reliant and thriving in the midst of competitive public and private funding opportunities.

process overview

In addition to over fifty meetings and on-campus workshops to gather input on FAU's current status and future needs, the planning team conducted an online student survey and open forums on campus. The workshops included sessions with campus committees, focus groups, leadership, faculty, and staff. This input was combined with site analysis, observation of existing conditions and facilities, input from the Facilities Staff regarding existing utilities and infrastructure, and a macro level space needs analysis.

The Space Needs Analysis Summary can be found in Appendix A of this document. In order to support 2028 enrollment growth goals, the analysis identified an additional need of almost two million assignable square feet, with the greatest future needs in Residential Life (1.1M ASF), Research (260,000 ASF), Student Life (130,000 ASF) and Study/Library (118,000 ASF) space. The University is projected to have more than enough office space to support the targeted enrollment growth. The expansive need for Residential Life space is required to enable the growth to 9,000 on-campus residential students; more than double the existing residential population.

Early in the master planning process, the planning team worked closely with the FAU Executive Committee to develop a list of guiding principles for the master plan in support of FAU's strategic goals. These planning principles are outlined on the right.



Campus Open Forums and Input Sessions

master plan principles

PROMOTE ACADEMIC EXCELLENCE

- Design for 21st century learning environments to enhance engagement.
- Provide more meeting/study spaces to promote peer to peer and faculty to student interaction.
- Site flexible interdisciplinary spaces to promote collaborative inquiry.

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses.
- Expand facilities and services to enhance student life and embrace diversity.
- Enhance the open space network for activities to invigorate campus life.

EXPAND RESEARCH CAPABILITIES

- Focus on the Four Pillars: Healthy Aging, Neuroscience, Ocean Science and Engineering / Environmental Sciences, Sensing and Smart Systems.
- Capitalize on synergistic opportunities for interdisciplinary collaboration.

PROMOTE ATHLETICS EXCELLENCE + WELLNESS

- Increase competitiveness in Directors Cup to enhance FAU pride and identity.
- Expand recreational facilities to promote holistic growth.
- Enhance community engagement on campus through the fan experience and recreational opportunities.

LEVERAGE CAMPUS LOCATIONS + PARTNERSHIP OPPORTUNITIES

- Promote synergistic partnerships within Boca Raton, Abacoa/Jupiter, and the South Florida region.
- Maximize research partnerships to drive innovation and spur economic development.
- Develop mixed-use opportunities on campus to create a cultural destination for the host communities.

PROMOTE HIGH PERFORMING CAMPUS SYSTEMS

- Focus on sustainable solutions to enhance natural systems and long term return on investment in built systems.
- Make the most of existing resources: efficient and effective utilization of space.
- Promote flexibility and technology in campus spaces to maximize investment and usability.

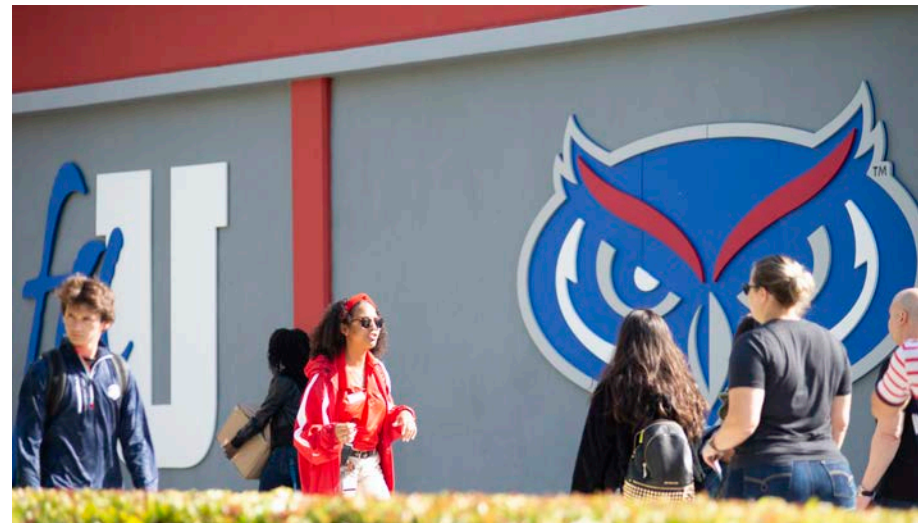
key recommendations

The Campus Districts Plan provides a comprehensive vision to meet long-term goals for the growth of the campus. While a master plan typically provides for the needs of a campus within a ten-year horizon, the Campus Districts Diagram (Figure 0.1) and Natural Systems Diagram (Figure 0.2) provide a broad framework for the campus to guide development and growth beyond the specific program needs identified. Key recommendations include:

- » A new Gateway District in the southeast area of campus to support partnership opportunities, upper class student housing, and community engagement programs.
- » Future academic facilities located primarily in the core campus area, proximate to existing academic programs. The plan also outlines numerous renovation opportunities to maximize the use of existing academic space and to potentially repurpose underutilized spaces for computational research and some types of clinical research.
- » The University strategic plan outlines ambitious research goals. The plan provides for research space accommodations on campus property and also recognizes the potential to leverage research partnerships utilizing the Research Park and other locations.
- » Significant growth in on-campus housing accommodations to strengthen the residential campus environment. The plan intentionally locates housing for first and second year students in the south campus area, closer to student life amenities and support programs. Future upper class housing is located in the southeast area of campus Gateway District to provide suite-style and apartment style accommodations, complementing mixed-use development in this area.



Conceptual Rendering of covered plaza at the Intersection of the Breezeway and Diversity Way



Tour group and students walk by iconic FAU mural at the southern terminus of the Breezeway

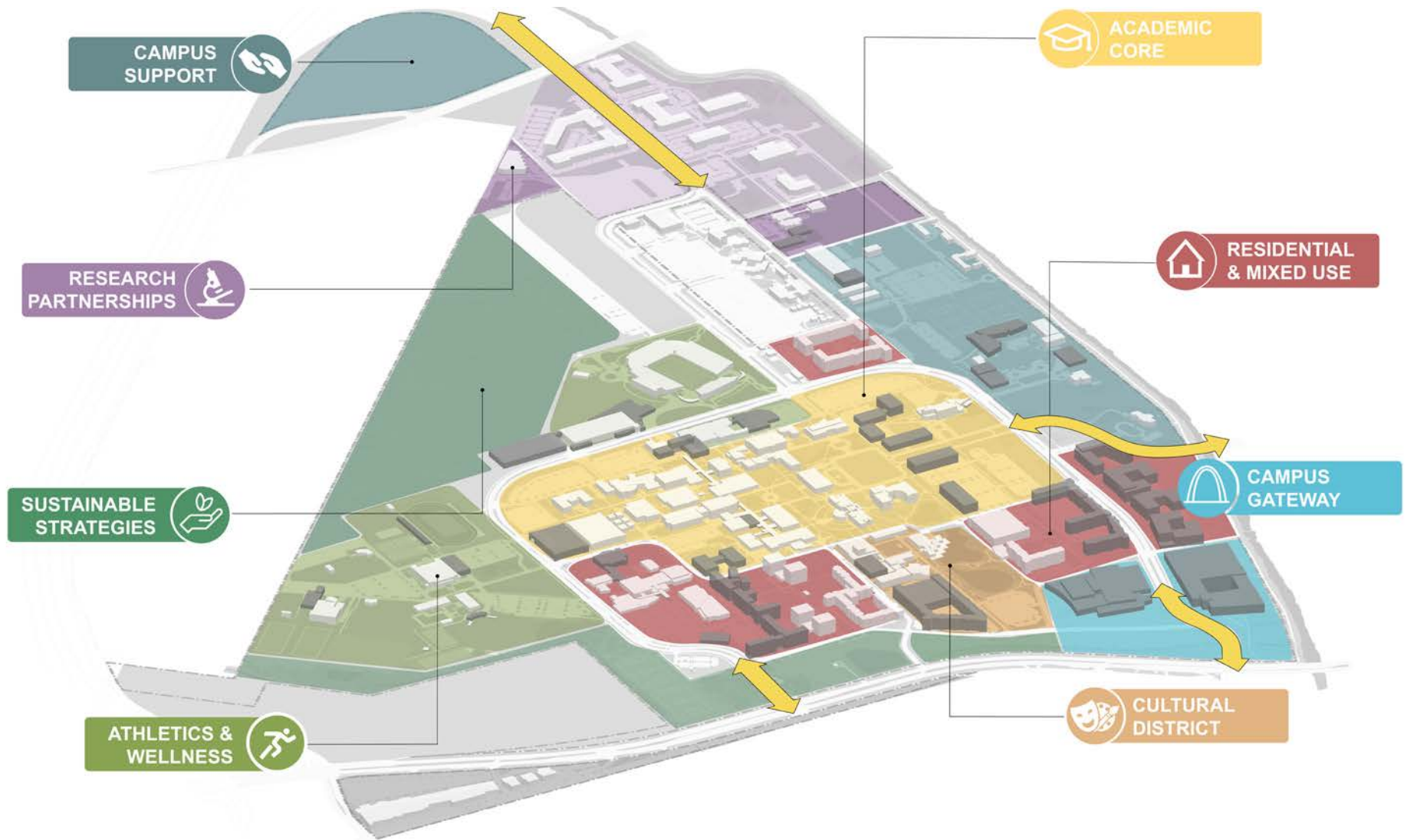
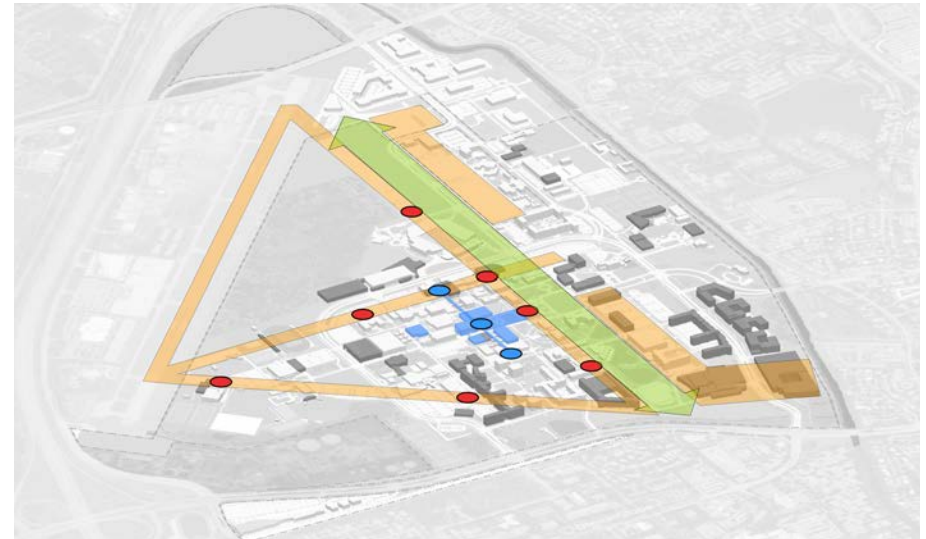


Figure 0.1, Campus Districts Diagram

key recommendations

- » Programmatic zones organized around a north-south greenway and around reinforced north-south and east-west pedestrian circulation paths and nodes. Implementation of the Greenway will transform the open space network, connecting the Gateway District to the campus core and north to FAU Stadium while providing connection to the campus' history as an Army Air Base through interpretive exhibits and signage.
- » Parking shifts to the periphery of the campus core to maximize open space, valuable building sites, and to enhance the pedestrian experience in the walkable core campus.
- » Preserve and enhance natural systems and conservation areas along with a natural green space buffer on the perimeter of campus.
- » Implement and showcase sustainable practices throughout the campus that capitalize on FAU's unique location.
- » Recognize and celebrate the noteworthy history of the FAU campus and the former Army Air Base through historic markers and exhibits in strategic and significant campus locations.



Historic Framework Diagram



Campus Aerial circa 1964

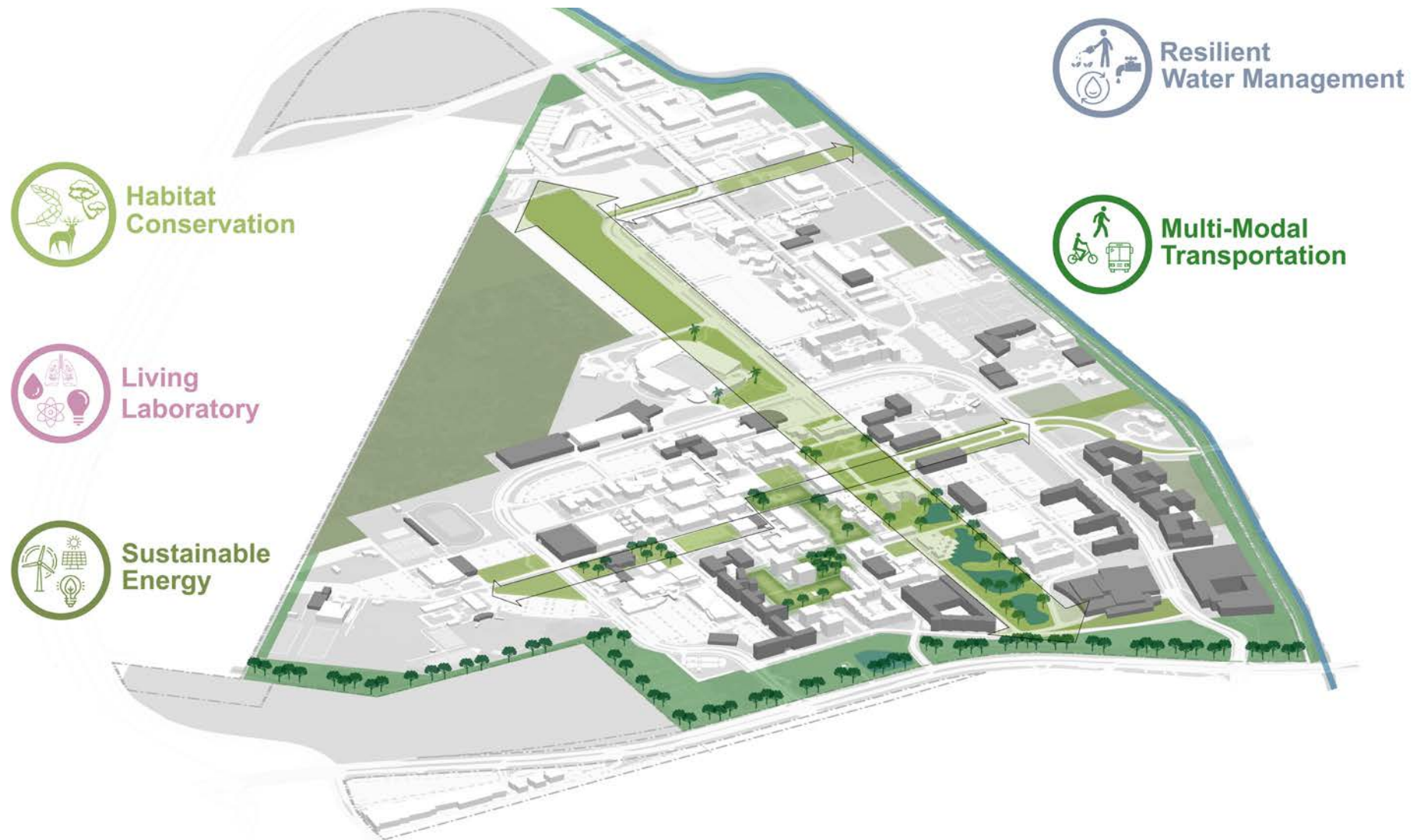


Figure 0.2, Natural Systems Diagram

current projects

currently in design or construction

- ① Schmidt Family Complex
- ② Student Union Renovation and Addition
- ③ New Residence Hall
- ④ A.D. Henderson School Improvements

priority projects

5 year horizon

- Ⓐ Medical/Clinical Research (outside of property boundary)
- Ⓑ Expanded Public Safety Facilities
- Ⓒ Parking Deck 4
- Ⓓ Baseball Stadium: New Stands, Press Box, Batting Cage
- Ⓔ Arts + Letters Addition
- Ⓕ Upperclassman Housing
- Ⓖ Mixed Use Development



Current and Priority Projects Plan Diagram, Not to Scale

near-term projects

10 year horizon

- Ⓜ Student Recreation
- Ⓛ Renovation/Addition to Oxley
- Ⓜ Basketball Practice Facilities
- Ⓚ Parking Deck 5
- Ⓛ Student Union Expansion
- Ⓜ Welcome Center
- Ⓝ Student Residence Halls
- Ⓞ Library/Study Space Expansion (Core Campus)
- Ⓟ Alumni Center Expansion
- Ⓠ Student Recreation Center Expansion
- Ⓡ Vivarium + Science Addition
- Ⓢ Student Wellness Center
- Ⓣ School of Health Sciences Building
- Ⓤ Engineering Expansion
- Ⓥ Gateway Village Apartments + Retail
- Ⓦ Mixed Use Development



long-term considerations

beyond 10 year planning horizon

- i New Soccer Stadium + Fieldhouse
- ii New Stands at Track
- iii Parking Deck 6
- iv Student Residence Halls
- v Future Academic
- vi Performing Arts Center



Long-Term Considerations Plan Diagram, Not to Scale



Master Plan Concept Aerial Rendering, Southeast Campus

- (iii) Parking Deck 6
- (iv) Student Residence Halls
- (v) Future Academic
- (vi) Performing Arts Center
- (f) Upperclassman Housing
- (g) Mixed Use Development Gateway
- (v) Village Apartments + Retail



MASTER PLAN ELEMENTS

This master plan consists of 18 Elements, as outlined in the State Guidelines for the Campus Master Plan System. These Elements include Goals, Objectives, and Policies for their respective subject.

mission statement

Florida Atlantic University is a public research university with multiple campuses along the southeast Florida coast serving a uniquely diverse community. It promotes academic and personal development, discovery, and lifelong learning. FAU fulfills its mission through excellence and innovation in teaching, outstanding research and creative activities, public engagement and distinctive scientific and cultural alliances, all within an environment that fosters inclusiveness.

vision statement

Florida Atlantic University aspires to be recognized as a university of first choice for excellent and accessible undergraduate and graduate education, distinguished for the quality of its programs across multiple campuses, emulated for its collaborations with regional partners, and internationally acclaimed for its contributions to creativity and research.



fau values

Florida Atlantic University values an academic environment that facilitates intellectual growth through open and honest expression. The University is committed to excellence at all levels of the educational and creative experience, to success for all students, and to development of the capacity to make reasoned and discriminating judgments with respect for differences and diversity in ideas. The University values lifelong learning because it encourages the continual use of the mind. The University values the vital role it plays in the life of the surrounding community, in society, and as an engine for economic development. More specifically, the University is committed to:

- Preparing students to fulfill productive destinies in the workplace and in society;
- Promoting academic freedom and an atmosphere of free and open inquiry;
- Recognizing and rewarding superior performance, innovation and creativity in all facets of University activity;
- Supporting all those who rely on the University, such as families, employers of students and graduates, and community partners;
- Accounting for the sound use and careful stewardship of its resources, ensuring responsibility for its mission;
- Providing equal access and equal rights and justice for all persons and encouraging mutual regard for the rights and liberties of all persons;
- Respecting all persons and displaying civility in all interactions;
- Providing a secure environment for the pursuit of learning;
- Fostering community service and social responsibility;
- Promoting honesty in all spheres, social and moral development, and ethical standards in all areas of human activity; and
- Assuring clear and open communication and sharing of information.

academic program

The University's Accountability Plan establishes institutional goals for the future and is regularly updated to reflect the University's progress and trajectory. This master plan update has been developed using the goals established in the University's 2018 Accountability Plan. The current Accountability Plan can be found at the Office of the Provost web page at: <http://fau.edu/provost>

The data contained in Table 2.1 represents the enrollment projections for Fall 2018-2021 approved in FAU's 2018 Accountability plan. The projections for Fall 2022-2028 use the growth percentages approved in the 2018 Accountability Plan, except for a more modest growth rate of undergraduate transfer students after 2021. The University routinely updates its enrollment projections; please refer to the University website for the most current projections.



Table 2.1, Ten Year Projection of Headcount Enrollment 2018-2028

	FALL 2017 ACTUAL	FALL 2018 PLAN	FALL 2019 PLAN	FALL 2020 PLAN	FALL 2021 PLAN	FALL 2022 PLAN	FALL 2023 PLAN	FALL 2024 PLAN	FALL 2025 PLAN	FALL 2026 PLAN	FALL 2027 PLAN	FALL 2028 PLAN
Undergraduate	23,766	24,257	25,563	26,092	26,636	27,402	27,402	27,795	28,193	28,597	29,008	29,426
Graduate	4,901	4,950	5,000	5,050	5,100	5,151	5,203	5,255	5,307	5,360	5,414	5,468
Unclassified	1,644	1,660	1,706	1,751	1,768	1,786	1,804	1,822	1,840	1,858	1,877	1,896
Total	30,311	30,867	32,269	32,893	33,504	34,339	34,409	34,872	35,340	35,815	36,299	36,790
% growth over previous year		101.83%	104.54%	101.93%	101.86%	102.49%	100.20%	101.35%	101.34%	101.34%	101.35%	101.35%
Boca Raton Campus	23,698	24,133	25,206	25,671	26,150	26,500	26,856	27,217	27,583	27,955	28,332	28,715

3 urban design

The 2019 FAU Boca Raton Campus Master Plan Update creates a framework for growth that builds on the campus' physical origins as an Army Air Base and the original 1962 Campus Plan. It provides a road map for physically implementing FAU's Strategic Plan. The Urban Design Element establishes conceptual principles for the organization of future development, including buildings and open spaces on the Boca Raton campus.

The Element is structured around four main goals:

1. Strengthen Campus Districts
2. Enhance and clarify the overall Campus Framework
3. Implement Sustainable Growth strategies
4. Maintain Community Coordination of proposed projects

GOAL 1: Strengthen Campus Districts

Campus Districts are described by the intended primary use. Services such as parking, utilities and other needs are contained in each use zone. Some overlap of program or functional use may occur between or within zones and serves to both maximize efficient use of facilities and enrich the campus experience through multi-use opportunities. Clear connections between use zones should be maintained or created.

Objective 1A: Enhance the civic realm of the academic core.

- **Policy 1A-1:** Enhance Alumni Plaza to functionally and symbolically represent the heart of the Boca Raton Campus with shade, seating, and lawn suitable for campus events.
- **Policy 1A-2:** Enhance the entry plaza east of the Administration Building as both the historic campus gateway and as part of the north-south campus Greenway.
- **Policy 1A-3:** Site academic and study spaces along the Breezeway to promote collaboration and departmental identity.
- **Policy 1A-4:** Utilize infill sites for future academic facilities to increase campus density and create logical connections between buildings.

- **Policy 1A-5:** Create new, and enhance existing, courtyards and usable green space between facilities.
- **Policy 1A-6:** Add new parking structure on west side of existing Parking Deck 1 to accommodate enrollment growth.

Objective 1B: Consolidate service functions in Campus Support District.

- **Policy 1B-1:** Expand University Police Department facilities with an addition to existing building.

Objective 1C: Expand and enhance Student Housing and Support District.

- **Policy 1C-1:** Expand residence halls to house all first and second-year students in a centralized district southwest of the campus core.
- **Policy 1C-2:** Create new courtyards and enhance existing green space to encourage outdoor passive recreation and socializing.
- **Policy 1C-3:** Enhance the housing districts' frontage along the landscape buffer at Glades Road with shade, seating, and connected sidewalks.
- **Policy 1C-4:** Expand Student Union, (with new meeting facility), into existing Lifelong Learning Building, (move Lifelong Learning to Gateway District), to promote more student functions and a more dynamic campus social hub.
- **Policy 1C-5:** Enhance the open space to the north of the student union for events and social functions.
- **Policy 1C-6:** Enhance Heritage Park for outdoor social gatherings and study.
- **Policy 1C-7:** Site a new Welcome Center southwest of the Student Support Services building to orient campus visitors and share campus history and accomplishments.

Objective 1D: Expand and enhance Athletics, Recreation, and Wellness District.

- **Policy 1D-1:** Recreation Center addition to be sited at north end of the Breezeway creating a true northern pedestrian gateway to the campus core.
- **Policy 1D-2:** Add new parking structure on west side of existing Parking Deck 3 to accommodate enrollment growth.
- **Policy 1D-3:** Enhance west side of Athletics District with landscape and open space improvements and create pedestrian connections between venues.

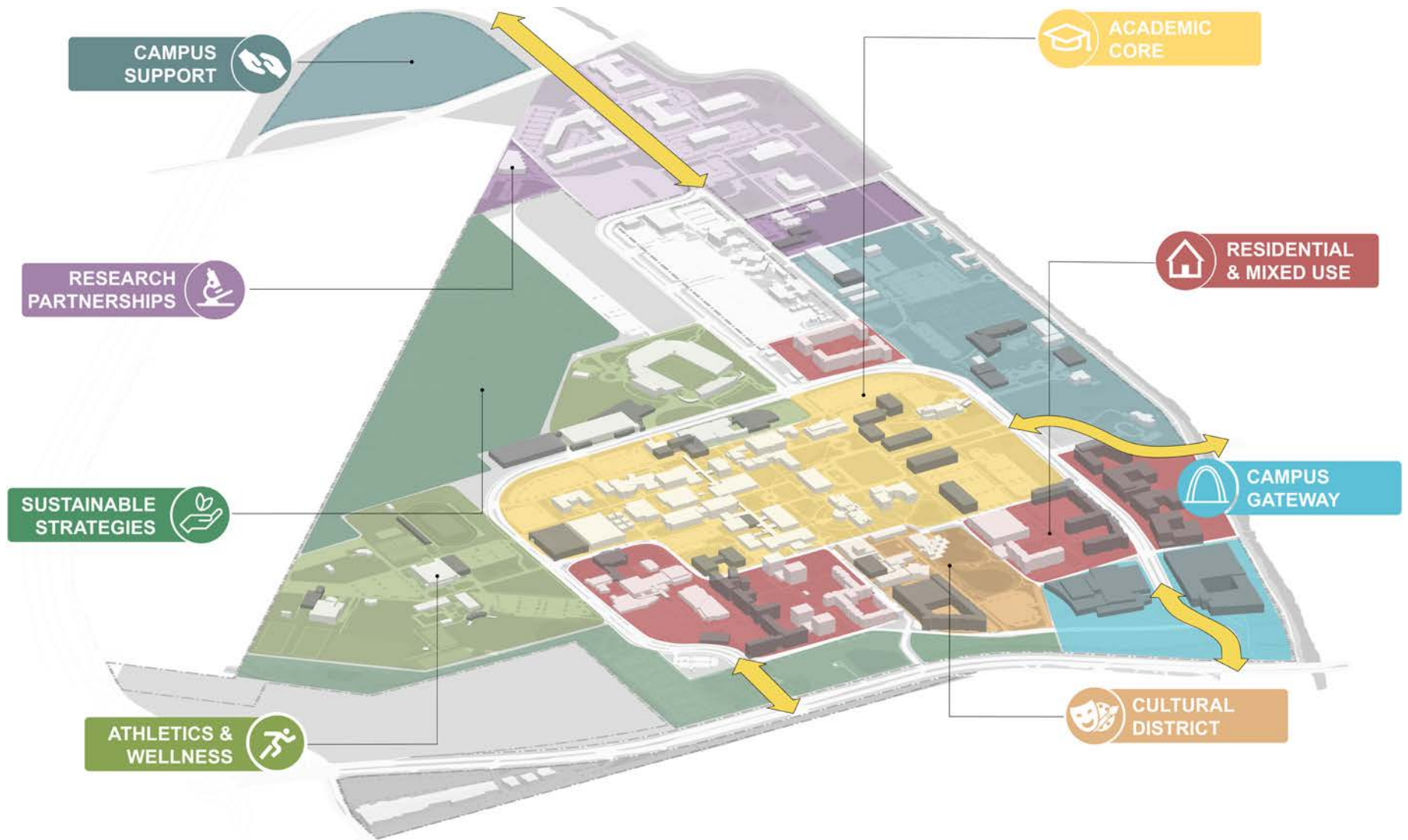


Figure 3.1, Campus Districts Diagram

- **Policy 1D-4:** Expand and enhance Athletics Facilities to improve team facilities, fan experience, and Athletics identity including:
 - New basketball practice facility on east side of the Arena
 - Renovated baseball stadium and practice field with new entry and signage
 - New soccer stadium adjacent to Oxley Athletic Center to improve team visibility
 - Addition to Oxley Athletic Center to act as a visual terminus to the district
 - New track and field stands and fieldhouse to also serve tennis needs
 - Replace Athletics Fieldhouse West with improved facilities
- **Policy 1D-5:** Maintain use of existing recreation fields and upon completion of new football practice facility, reclaim existing fields for student recreation and intramurals.

Objective 1E: Steward and protect Conservation Areas.

- **Policy 1E-1:** Continue practices to protect native plant and animal species on campus as outlined in Element 13, Conservation.
- **Policy 1E-2:** Initiate conservation land swap for new parking structure west of Parking Deck 3 with larger acreage and greater wildlife usage at location north of softball stadium and lot 12.
- **Policy 1E-3:** Improve trails and signage to promote appropriate use and education of the unique wildlife and plant life on campus.

Objective 1F: Create a Cultural District to enhance community engagement and strengthen programs.

- **Policy 1F-1:** Strengthen connection between arts facilities surrounding College of Arts & Letters with improved landscape and outdoor amenities at the Greenway.
- **Policy 1F-2:** Relocate Ritter Gallery to ground floor of Parking Deck 2 or nearby to expand cultural resources in the district and to activate ground floor of facilities adjacent to pedestrian walkways.
- **Policy 1F-3:** Site future Arts venues adjacent to Greenway to enhance campus and community involvement in the arts and to create a vibrant district connecting the Academic Core to the Gateway District.

- **Policy 1F-4:** Enhance the outdoor amphitheater adjacent to University Theatre with shade structure, expand use to include outdoor films and other events.

Objective 1G: Create a new Gateway District along East University Drive from realigned Indian River Street to 20th Street.

- **Policy 1G-1:** Create a mixed-use zone consisting of commercial/retail space with upper level and graduate student housing above, a new Lifelong Learning Center, and leasable office space.
- **Policy 1G-2:** Utilize a “complete street” concept to include on-street parking, site amenities to encourage outdoor dining, appropriate shade, lighting, and signage. Consideration should be given to adding bike lanes.
- **Policy 1G-3:** The Gateway District will have an urban character with continuous street frontage from Indian River Street to 20th Street. Ground floor program should be public in nature so as to promote pedestrian activity and provide a dynamic social environment complementary to the Cultural District.
- **Policy 1G-4:** Site larger “anchor” tenants so as to be visible from Glades Road and mixed-use housing closer to the campus core.
- **Policy 1G-5:** Utilize structured parking primarily with on-street parking so as to promote a continuous walkable streetscape.
- **Policy 1G-6:** Retain landscape buffer between Glades Road and Indian River street to retain FAU’s civic presence and to allow for traffic queuing.
- **Policy 1G-7:** Retain and enhance open space along El Rio Canal as part of a linear park running along the eastern campus boundary.

Objective 1H: Leverage Partnership Opportunities with adjacent districts.

- **Policy 1H-1:** Work with Research Park to explore academic research locations, research partnerships, and other entrepreneurial ventures.
- **Policy 1H-2:** Site School of Health Sciences facilities on FAU land immediately south of Research Park to promote academic and research growth and community engagement.
- **Policy 1H-3:** Explore opportunities with Palm Beach State College (PBSC) program and land use partnerships.
- **Policy 1H-4:** Explore partnership opportunities for the FAU-owned land north of Spanish River Boulevard.

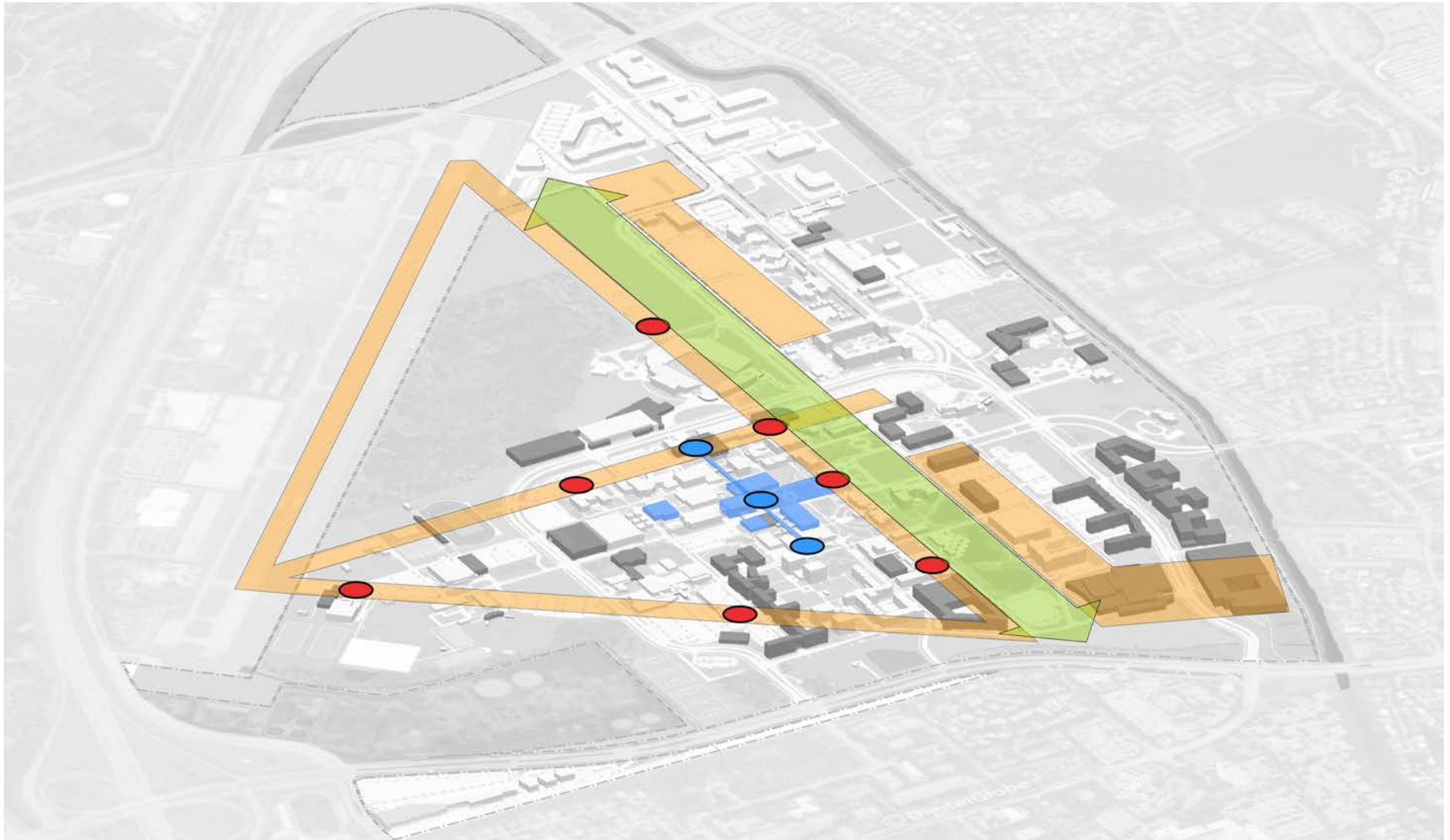


Figure 3.2, Historic Overlay Diagram

GOAL 2: Enhance and clarify the overall Campus Framework

Objective 2A: Structure growth around primary east-west and north-south axes.

- **Policy 2A-1:** Strengthen east-west axis connecting the historic 20th Street entry, Alumni Plaza, Library Walk, and Volusia Street to the Athletics District with shaded walks and enhanced site amenities.
- **Policy 2A-2:** Implement The Greenway as a primary north-south axis connecting the Gateway District and Cultural District at Glades Road northward to the Research Park.
- **Policy 2A-3:** Extend The Breezeway north to connect across North University Drive to the Schmidt Center and Athletics.

Objective 2B: Recognize the historic framework of the former Army Air Base and Breezeway

- **Policy 2B-1:** Implement historic markers or exhibits along The Greenway and at other prominent locations on campus along the former runways. Other locations may include Lot 5 (the last remaining intact remnant of the runways), the south end of the football stadium, the Administration Building, the outdoor amphitheater, the Education Building, the Oxley Athletic Center, and at the proposed Welcome Center at the West University Drive gateway.
- **Policy 2B-2:** Recognize the original Campus Plan with historic markers along The Breezeway. Specifically honor the position in Alumni Plaza where President Johnson dedicated the new university.

Objective 2C: Maintain and enhance the functional linkages and quality of the campus.

- **Policy 2C-1:** Extend the pedestrian systems within the core campus, to serve pedestrians better. The University shall add extensions to the pedestrian-way system as needed that encourage walking and provide the armature for future campus facilities and infrastructure.
- **Policy 2C-2:** Extend secondary east-west pedestrian pathways:
 - Academic Way: from the track eastward connecting multiple academic departments along the southern edge of the College of Business to the Henderson School at the east edge of campus.

- Diversity Way: connecting the student union to The Greenway and to the Gateway District.

- **Policy 2C-3:** Extend multiple north-south paths to connect the core campus south to the South Housing Village, Cultural District, and Gateway District and to the north to Athletics, Innovation Village, PBSC, and the Research Park.

GOAL 3: Implement Sustainable Growth Strategies

Objective 3A: Support the development of energy-efficient facilities.

- **Policy 3A-1:** Design facilities to meet or exceed current state energy design guidelines and to site facilities, utilize materials, shading devices, and landscaping to improve energy efficiency.
- **Policy 3A-2:** Promote passive energy conservation techniques, such as the planting of shade trees, and solar orientation of buildings and windows. These techniques shall be among the criteria for evaluating the siting, orientation, landscape and architectural design of all new and renovated facilities.
- **Policy 3A-3:** Explore opportunities to harness renewable energy sources, specifically solar “umbrellas” on parking structures and arrays on rooftops.

GOAL 4: Community Coordination

Objective 4A: Work together with the host city to continue/develop compatible land uses in the context area of the campus.

- **Policy 4A-1:** Coordinate on-campus development and development within the campus context area as outlined in Element 12, Intergovernmental Coordination.
- **Policy 4A-2:** The University shall work closely with the City of Boca Raton to coordinate the integration of bike paths, walkways, transit, and other linkages to the community into the City’s plans for similar facilities.

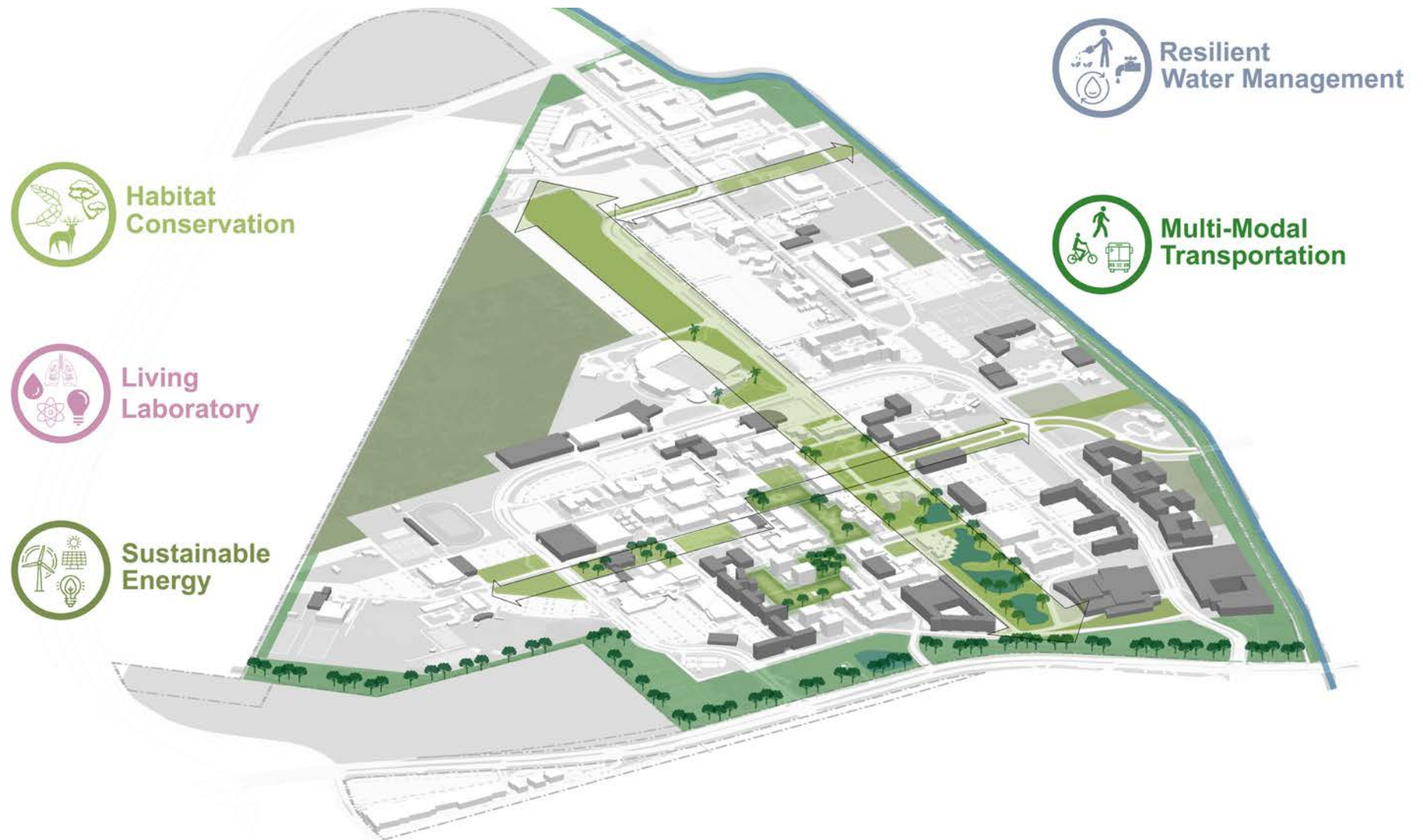


Figure 3.3, Natural Systems Diagram

4 future land use

Land use guidelines establish and maintain land use patterns for the long-range development of the campus to maximize program efficiencies and synergistic relationships while allowing for future growth.

GOAL 1: To establish and follow land use patterns for the long-range development of the campus.

Objective 1A: Establish core campus infill development land use to promote functional adjacencies and a pedestrian oriented environment.

- **Policy 1A-1:** Concentrate academic, first and second year student housing, and support facility development within the existing core campus. Increased density will strengthen the campus' "sense of place" and provide a more connected pedestrian environment.
- **Policy 1A-2:** Expand and enhance a well-defined open space framework to complement land use functions, strengthen campus connections, and provide usable outdoor spaces that activate a rich campus experience.

Objective 1B: Establish new urban streetscape development pattern at E University Drive between NW 20th Street and realigned Indian River Street. (See Element 3, Urban Design)

- **Policy 1B-1:** Create a mixed-use "main street" for campus encompassing upper level and/or graduate housing above a commercial/retail base along with institutional support functions.
- **Policy 1B-2:** Develop streetscape enhancements to support a pedestrian oriented environment with outdoor amenities.

Objective 1C: Define and enhance Academic land use on campus.

- **Policy 1C-1:** Continue to augment and create academic zones to foster interdisciplinary collaboration.
- **Policy 1C-2:** Preserve land designated under the Academic land use for future academic growth. Land may be used to meet parking demand in the interim.
- **Policy 1C-3:** Utilize infill sites within the Academic Core for new facilities when possible to promote program adjacencies and to support appropriate density suitable for a pedestrian environment.

- **Policy 1C-4:** Site new Academic facilities and spaces to enhance and expand the open space network to create clear connections and aid in campus orientation. Specifically, site departmental exhibition and study space along The Breezeway to enhance program identity and student success.

Objective 1D: Define and enhance campus Support land use.

- **Policy 1D-1:** Continue to locate Student Life programs within the core campus. As the on-campus residential population grows, support functions will be needed to service this population.
- **Policy 1D-2:** Student Life facilities will be included in the E University Drive Gateway District.
- **Policy 1D-3:** Continue to enhance and expand Athletics facilities, implement open space connections between venues to create an Athletics Village, enhance Athletics identity along West University Drive, and connect Athletics to the campus core via landscaped pedestrian paths.
- **Policy 1D-4:** Continue to focus Campus Services such as Facilities Management and University Police in its current location.
- **Policy 1D-5:** Redevelop Alexander D. Henderson University School within its current site.

Objective 1E: Define and enhance Residential land use on campus.

- **Policy 1E-1:** Consolidate First- and Second-Year Housing in the existing South Housing Village. Innovation Village apartments will house upper level students. Upper level and graduate housing will be housed in the Gateway District.
- **Policy 1E-2:** Enhance outdoor spaces in all housing locations to promote outdoor activities and community building.

Objective 1F: Define and expand Recreation and Open Space land use on campus.

- **Policy 1F-1:** Expand and improve student recreation facilities. Convert football practice fields to recreational use when new football practice fields are implemented and repair or replace basketball courts.

LEGEND

ACADEMIC	67 AC
SUPPORT	130 AC
RESIDENTIAL	40 AC
RECREATION AND OPEN SPACE	198 AC
UTILITIES	6 AC
NON-FAU UTILITIES	6 AC
ROADS AND PARKING	148 AC
CONSERVATION	99 AC

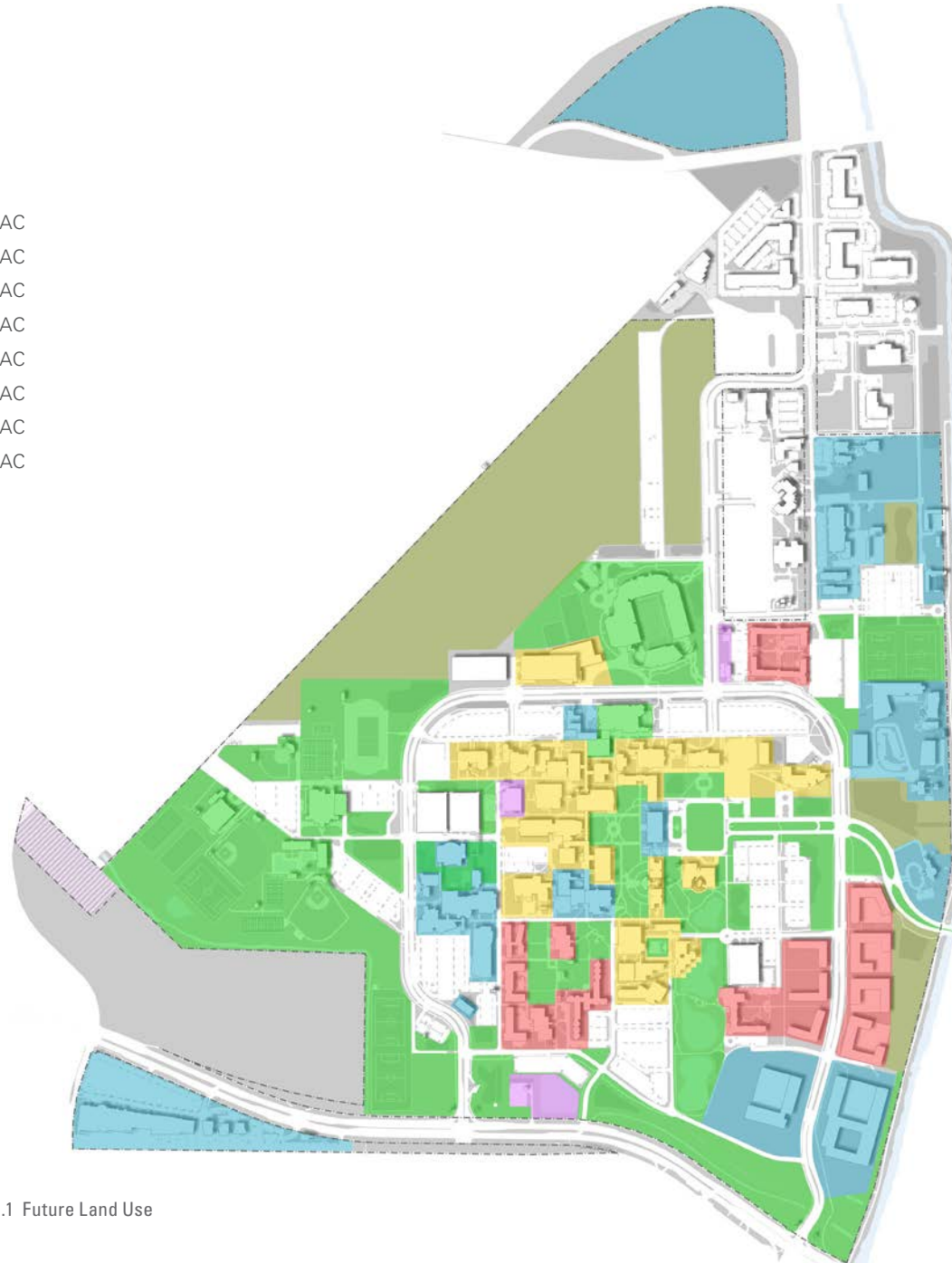


Figure 4.1 Future Land Use

- **Policy 1F-2:** Expand and enhance campus open space. Implementation of the Greenway will transform the open space network, connecting the Gateway District to the campus core and north to FAU Stadium while providing connection to the campus' history as an Army Air Base through exhibits and signage.
- **Policy 1F-3:** Enhance Alumni Plaza to functionally and symbolically represent the heart of the Boca Raton Campus.
- **Policy 1F-4:** Create a continuous recreation trail around the perimeter of campus that connects to the Greenway.
- **Policy 1F-5:** Enhance east-west connections across campus, especially at Diversity Way, from Athletics to Administration, and from the Education Building to Engineering East.

Objective 1G: Ensure the availability of suitable land on-campus for future utilities needs.

- **Policy 1G-1:** Current major utility locations to remain in place.

Objective 1H: Expand Parking capacity to accommodate future growth and clarify campus road network.

- **Policy 1H-1:** Utilize parking demand reduction strategies to minimize the number of new spaces constructed.
- **Policy 1H-2:** As campus growth occurs, much of it will displace existing surface parking lots. Utilize structured parking to accommodate new demand and conserve land resources.
- **Policy 1H-3:** Continue to site parking at the core campus perimeter to reduce traffic flow on campus and to promote a pedestrian oriented campus core.
- **Policy 1H-4:** Consider decommissioning or limiting public access to minor campus roads that are underutilized and/or cause dangerous pedestrian/auto conflict: NW 8th Avenue between University Drive and Palm Beach State College Drive, Dade Avenue between Indian River Street and Volusia Street.

Objective 1I: Preserve and enhance Conservation land use on campus.

- **Policy 1I-1:** Continue to manage habitat zones that provide a proper environment for on-campus native plants and animal species at risk, consistent with policies outlined in Element 13, Conservation.

- **Policy 1I-2:** The University shall permit no new development, expansion or replacement of existing development in areas designated on the Future Land Use Map as Conservation, unless development is undertaken by federal or state government in the public interest, and the impacts are mitigated. Before any such development is authorized and a plan of development approved, FAU shall conduct a review of all available environmental and economic options (including the costs of mitigation). If this review indicates that development in designated conservation areas is the only viable option, then FAU will pursue all reasonable efforts to minimize and mitigate any unavoidable impacts to such areas.
- **Policy 1I-3:** The University shall adopt and adhere to policies regarding environmental management outlined in Element 13, Conservation,, and shall require adherence to these standards by all parties performing design and construction of facilities on University property.

Objective 1J: Define and enhance Research land use on campus.

- **Policy 1J-1:** Collocate research space to promote interdisciplinary collaboration.
- **Policy 1J-2:** Pursue partnerships to grow the FAU research enterprise at The Research Park at Florida Atlantic University.
- **Policy 1J-3:** House low intensity research space in underutilized academic or office space.

GOAL 2: To maintain, manage, and review land use plan intent and guidelines

Objective 2A: Encourage careful use of the University's existing land resources and minimize deviations from the land use plan.

- **Policy 2A-1:** The President and Executive Committee shall annually coordinate land use and development decisions with the current schedule of capital improvements.
- **Policy 2A-2:** Continue development of facilities on the current FAU Boca Raton campus. No additional property is required during this planning period.
- **Policy 2A-3:** Locate unforeseen facilities according to schematic sites and zones as delineated on the Future Land Use graphic, Figure 4.1.



Objective 2B: Coordinate future land uses with the availability of facilities and services.

- **Policy 2B-1:** The Vice President of Administrative Affairs or delegate will coordinate future land uses with the availability of facilities and services to ensure that utilities and infrastructure (except transportation facilities) will be provided at adopted levels of service prior to occupancy. The Department of Engineering and Utilities shall review and evaluate all future construction projects to ensure that adequate provisions for infrastructure and utilities have been incorporated into the design by documenting:
 - The provision and maintenance of necessary utility easements, corridors, and points of connection;
 - The provision of adequate supply lines to accommodate future development and facility expansion; and
 - The provision of open space and convenient and safe traffic flow and parking at established levels of service.
- **Policy 2B-2:** The University will continually monitor the adequacy of stormwater management facilities and policies, open space, and the safety and convenience of on-campus traffic flow to maintain adopted levels of service. Amendments to the adopted plan will be pursued, if necessary, to implement required changes.
- **Policy 2B-3:** Provisions for stormwater management, open space, and safe and convenient on-campus traffic flow, considering needed vehicle parking, are included in the development density guidelines and should be provided at the adopted level of service as part of each facility development. Refer to Element 9 for related stormwater policies, to Element 3 and Element 8 for open space policies, and to Element 11 for parking related policies.

Objective 2C: Protect natural resources on campus from the adverse impacts of development.

- **Policy 2C-1:** The University shall require the integration of natural topographic and other physical features in project designs to develop University property in harmony with its natural environment.
- **Policy 2C-2:** The Director of Facilities Planning will coordinate future land uses and the design of all future construction projects with appropriate topography and soil conditions in continuation of BOT standard practices, (however there are no significant topography and soil variances across the campus).
- **Policy 2C-3:** The Vice President of Administrative Affairs or delegate shall review all future construction projects for consistency with existing topographic and soil data. As part of the design process for any programmed improvement and prior to approval and acceptance of the design by the University, FAU shall require that geotechnical testing be conducted to determine relevant soil characteristics of the site and to ensure that the design(s) reflect consideration of these conditions.
- **Policy 2C-4:** The University shall maintain a database of existing topographic and soil conditions, which will be updated with as-built and survey data developed for future construction projects.
- **Policy 2C-5:** The University shall ensure that appropriate methods of controlling erosion and sedimentation to help minimize the destruction of soil resources be used during site development and use. Such methods shall include, but not be limited to:
 - Phasing and limiting the removal of vegetation
 - Minimizing the amount of land area that is cleared
 - Limiting the amount of time bare land is exposed to rainfall
 - Use of temporary ground cover on cleared areas if construction is not imminent
 - Special consideration shall be given to maintaining vegetative cover on areas of high soil erosion potential (i.e., banks of streams, steep or long slopes, stormwater conveyances, etc.).

Objective 2D: Protect historic and archaeological resources on campus from the adverse impacts of development.

- **Policy 2D-1:** The University shall maintain an inventory and evaluation of all archaeological and historic properties under University ownership that appear to qualify for the National Register of Historic Places.
- **Policy 2D-2:** The University shall consult and coordinate with the Department of State's Division of Historical Resources prior to any land clearing, ground disturbing, or rehabilitation activities which may disturb or otherwise affect any property which is included, or eligible for inclusion, in the National Register of Historic Places.
- **Policy 2D-3:** The University shall consider the effects of such an undertaking identified in Policy 1F-2 above on any historic property that is included, or eligible for inclusion, on the National Register for Historic Places. The University shall afford the State Division of Historical Resources a reasonable opportunity to comment on such an undertaking.
- **Policy 2D-4:** Prior to a historic property being demolished or substantially altered in a way that adversely affects its character, form, integrity or archaeological or historical value, the University shall consult with the Department of State's Division of Historical Resources to avoid or mitigate any adverse impacts, or to undertake any appropriate archaeological salvage excavation or recovery action.

GOAL 3: To coordinate University land use patterns with the host community Strategic coordination of University land use patterns with the host community and other local entities and partners will mutually benefit the institution and broader community.

Objective 3A: Eliminate land use compatibility problems and constraints between the University and the host community.

- **Policy 3A-1:** The Vice President of Administrative Affairs or delegate will periodically meet (at least annually) with the City of Boca Raton to eliminate or minimize land use compatibility problems and constraints (See also Element 12, Intergovernmental Coordination).



Objective 3B: Minimize on-campus conflicts with the host community's land uses within the context area and minimize off-campus constraints that limit future development on campus.

- **Policy 3B-1:** New development for academic uses shall be located in or near the central campus core area. Other land uses should be located to enhance the functional campus experience and may provide community engagement opportunities.
- **Policy 3B-2:** Coordinate on-campus development and development within the campus context area as outlined in Element 12, Intergovernmental Coordination.

5 academic facilities

GOAL 1: It is the goal of the University to ensure appropriate provision of academic facilities to meet enrollment projections and University needs. To this end, the plan established specific planning principles early in the master planning process to support academic excellence:

PROMOTE ACADEMIC EXCELLENCE

- Design for 21st century learning environments to enhance engagement
- Provide more meeting/study spaces to promote peer to peer and faculty to student interaction
- Site flexible interdisciplinary spaces to promote collaborative inquiry

EXPAND RESEARCH CAPABILITIES

- Focus on the Four Pillars: Healthy Aging, Neuroscience, Ocean Science and Engineering/Environmental Sciences, Sensing and Smart Systems
- Capitalize on synergistic opportunities for interdisciplinary collaboration

In support of the above goals, the plan proposes a long term land use concept that focuses academic facilities primarily in the core campus area, proximate to existing academic programs. The plan also outlines numerous renovation opportunities to maximize the use of existing academic space and to potentially repurpose underutilized spaces for computational research and some types of clinical research. The University strategic plan outlines ambitious research goals. The plan provides for research space accommodations on campus property and also recognizes the potential to leverage research partnerships utilizing the Research Park and other locations.

Objective 1A: Construct new academic facilities to support the mission of the University and to provide for space needs dictated by enrollment growth.

- **Policy 1A-1:** Locate future academic and research facilities in accordance with Figure 5.1 which illustrates new facilities planned for the five and ten year horizons as well as renovations to academic spaces.

- **Policy 1A-2:** The most recent Work Plan from 2016 concluded that the Boca campus has enough classroom space to meet its near term enrollment growth. Therefore, the master plan recommends maximizing the use of existing classroom space and implementing renovation strategies where appropriate to address classroom quality and technology needs.
- **Policy 1A-3:** The University shall continue to utilize space needs projections (as defined and established by State Requirements for Educational Facilities) to determine future academic facility programs and to plan the renovation of existing academic facilities.
- **Policy 1A-4:** Locate unforeseen facilities (arising from grant awards or other circumstances) according to schematic sites and zones as delineated on the Future Land Use graphic, Figure 4.1.

Objective 1B: Promote synergy and collaboration among academic disciplines and strengthen the sense of community on campus.

- **Policy 1B-1:** In order to achieve the desired goals above, the plan also recommends that academic programming include complementary study spaces and interdisciplinary spaces as well as informal gathering areas outside of classrooms and labs.
- **Policy 1B-2:** Additionally, each academic building should be designed to contribute to the broader campus environment. Strategies include:
 - Siting, orienting and shaping buildings to create and enhance outdoor campus spaces
 - Providing flexible study and collaboration spaces at the ground level with views to the outdoors
 - Promoting visibility to and from collaboration spaces and activities, particularly adjacent to pedestrian circulation areas such as the Breezeway
 - Providing shaded outdoor areas adjacent to buildings.

LEGEND



-  FUTURE ACADEMIC FACILITIES
-  ACADEMIC FACILITY RENOVATION



Figure 5.1 Academic Facilities

6 support facilities

GOAL 1: It is the goal of the University to ensure appropriate provision of support facilities to meet enrollment projections and University needs. To this end, the plan established specific planning principles early in the master planning process to support facilities:

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses
- Expand facilities and services to enhance student life and embrace diversity
- Enhance the open space network for activities to invigorate campus life

EXPAND RESEARCH CAPABILITIES

- Focus on the Four Pillars: Healthy Aging, Neuroscience, Ocean Science and Engineering/Environmental Sciences, Sensing and Smart Systems
- Capitalize on synergistic opportunities for interdisciplinary collaboration

PROMOTE ATHLETICS EXCELLENCE + WELLNESS

- Increase competitiveness in Directors Cup to enhance FAU pride and identity
- Expand recreational facilities to promote holistic growth
- Enhance community engagement on campus through the fan experience and recreational opportunities

LEVERAGE CAMPUS LOCATIONS + PARTNERSHIP OPPORTUNITIES

- Promote synergistic partnerships within Boca Raton, Abacoa/Jupiter, and the South Florida region
- Maximize research partnerships to drive innovation and spur economic development
- Develop mixed-use opportunities on campus to create a cultural destination for the host communities

In support of the above goals, the plan proposes a long term land use concept that locates support facilities in the respective appropriate land use zones. The plan also outlines renovation strategies to maximize the use of existing space as suitable for support facilities.

Objective 1A: Provide new support facilities to support the mission of the University and to provide for space needs dictated by enrollment growth.

- **Policy 1A-1:** Locate future support facilities in accordance with Figure 6.1 which illustrates new support facilities planned for the five and ten year horizons as well as renovations to existing spaces.
- **Policy 1A-2:** Commence programming and planning efforts as necessary to ensure appropriate dining, recreation and other student life space are provided to support the significant on-campus housing expansion. Amend the adopted campus master plan as necessary to include the results of these studies.
- **Policy 1A-3:** Continue to fund support facilities, both new construction and remodeling/renovation projects, based on legislatively allocated and PECO funding processes. At the same time, actively seek alternative or additional private funding for new support facilities.
- **Policy 1A-4:** Develop strategies for marketing available parcels for support/research (including office, R&D, light industrial, etc., that generally support University programs) and support/commercial (including bookstore, copy shop, dry cleaners, etc., that generally support resident and non-resident students, faculty and staff).
- **Policy 1A-5:** Periodically assess childcare operations to ensure appropriate availability and variety of services to the campus population
- **Policy 1A-6:** The University will continue to update as necessary, a consolidated support facility priority listing to combine all new support facility construction/renovation programs, whatever the source of funding.
- **Policy 1A-7:** The University's President and the Executive Committee will continue to develop an annual program that addresses the allocation of funds for the development of future support facilities.
- **Policy 1A-8:** Locate unforeseen facilities (arising from grant awards or other circumstances) according to schematic sites and zones as delineated on the Future Land Use graphic, Figure 4.1.

LEGEND


-  FUTURE SUPPORT FACILITIES
-  SUPPORT FACILITY RENOVATION



Figure 6.1 Support Facilities

7 housing

GOAL 1: It is the goal of the University to ensure appropriate provision of housing facilities on campus to meet University needs. To this end, the plan established specific planning principles early in the master planning process that relate to housing facilities:

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses
- Expand facilities and services to enhance student life and embrace diversity
- Enhance the open space network for activities to invigorate campus life

LEVERAGE CAMPUS LOCATIONS + PARTNERSHIP OPPORTUNITIES

- Promote synergistic partnerships within Boca Raton, Abacoa/Jupiter, and the South Florida region
- Maximize research partnerships to drive innovation and spur economic development
- Develop mixed-use opportunities on campus to create a cultural destination for the host communities

In support of the above goals, the plan proposes a long term land use concept that locates residence life facilities in land use areas proximate to existing housing and student life facilities and in gateway locations to facilitate a mixed-use cultural destination. The plan intentionally locates housing for first and second year students in the south campus area, closer to student life amenities and support programs. Future upper class housing is located in the southeast area of campus Gateway District to provide suite-style and apartment style accommodations, complementing mixed-use development in this area.

Objective 1A: Provide housing facilities to support the mission of the University and to provide for on campus residential growth.

- **Policy 1A-1:** Locate future housing facilities in accordance with Figure 7.1 which illustrates new housing facilities planned for the five and ten year horizons as well as renovations/additions to existing housing. The timing and phasing requirements and priorities are established in the Capital Improvements Element.
- **Policy 1A-2:** Commence housing programming and planning efforts as necessary to outline specific program and site planning for residential communities to support the significant on-campus housing expansion. Amend the adopted campus master plan as necessary to include the results of these studies.
- **Policy 1A-3:** Commence programming and planning efforts as necessary to ensure appropriate dining, recreation and other student life space are provided to support the on-campus housing expansion. Amend the adopted campus master plan as necessary to include the results of these studies.
- **Policy 1A-4:** Develop strategies for marketing available parcels for support/research (including office, R&D, light industrial, etc., that generally support University programs) and support/commercial (including bookstore, copy shop, dry cleaners, etc., that generally support resident and non-resident students, faculty and staff).
- **Policy 1A-5:** The University's Department of Housing & Residential Life will continue their annual program that addresses the priorities, amounts of revenue-based funds and the potential for using CITF funds and other private sources and grants, etc. (if available) for the development of future on-campus housing facilities, including parking, recreation facilities, student activities, food, beverage and entertainment, etc. The University's Department of Housing & Residential Life prepares an RPG (Residential Program Guidelines) with assistance from Facilities Management and Comptroller to be submitted to the Division of Financial Affairs. The Division of Financial Affairs determines if bonding is viable for the project. The Board of Trustees and FAU Foundation approve such projects and sets priorities.
- **Policy 1A-6:** The University's Department of Housing & Residential Life will continue to update internal procedures to ensure the provision of necessary support facilities in new housing development. These procedures shall include the identification of student needs for parking, student activity program facilities, recreation facilities, retailing needs, food and beverage, leisure and entertainment needs, telecommunications and other academic support needs.
- **Policy 1A-7:** The University is open to exploring various options to fund Housing including public/private development.

LEGEND

- FUTURE HOUSING
- HOUSING ZONES

PROJECTED BED COUNT

A FIRST AND SECOND YEAR EXPERIENCE

3,611 beds

B INNOVATION VILLAGE (UPPERCLASSMEN HOUSING)

1,204 beds

C UPPERCLASSMEN HOUSING

2,512 beds

D APARTMENTS AND TRANSITIONAL HOUSING

1,500 beds

TOTAL

8,827 beds

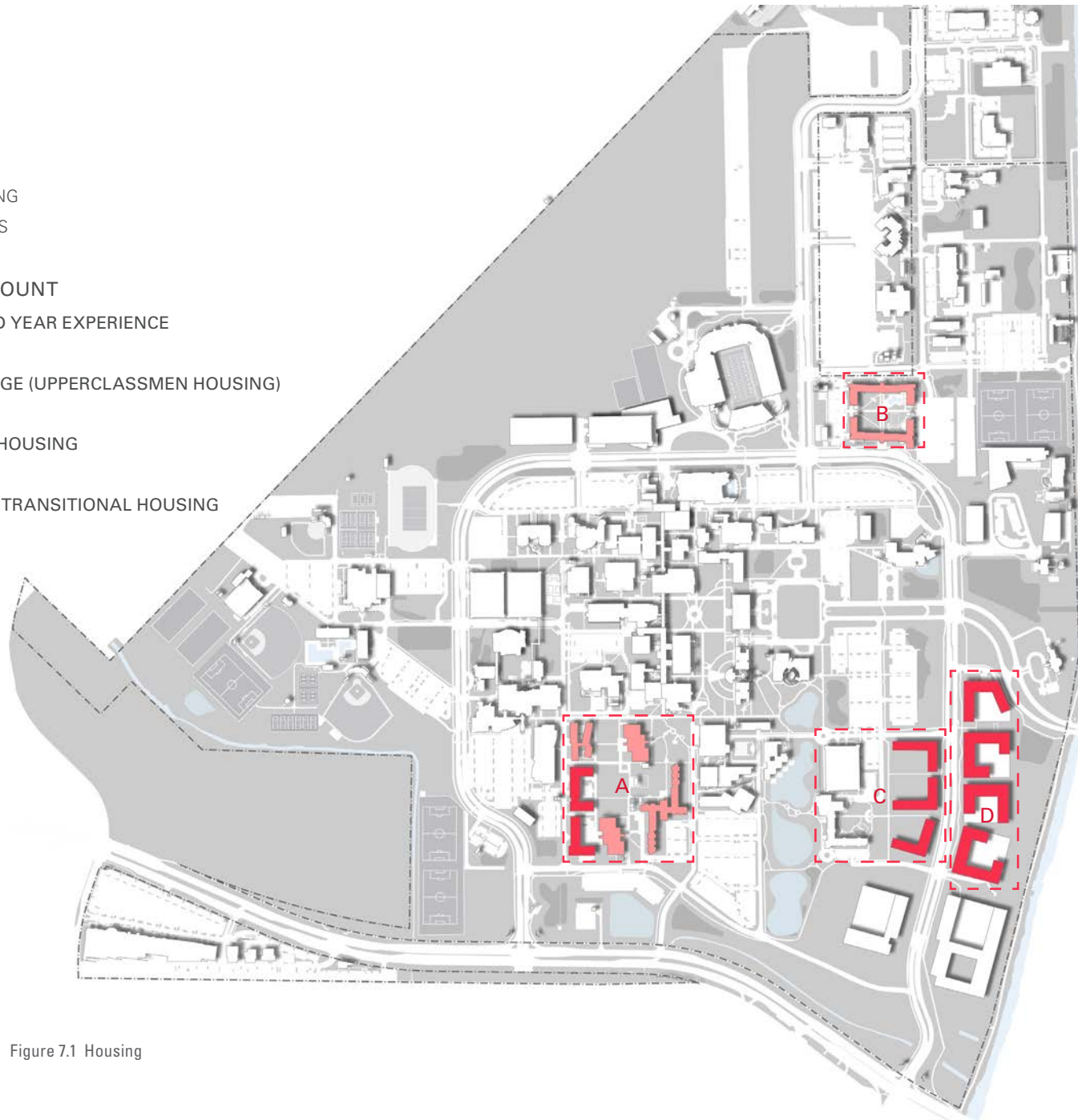


Figure 7.1 Housing

8 recreation and open space

GOAL 1: It is the goal of the University to ensure appropriate provision of recreation and open space on campus to meet University needs. To this end, the plan established specific planning principles early in the master planning process that relate to recreation and open space:

ENHANCE THE LIVING/LEARNING ENVIRONMENT

- Create a more residential character for Boca Raton and Jupiter Campuses
- Expand facilities and services to enhance student life and embrace diversity
- Enhance the open space network for activities to invigorate campus life

PROMOTE ATHLETICS EXCELLENCE + WELLNESS

- Increase competitiveness in Directors Cup to enhance FAU pride and identity
- Expand recreational facilities to promote holistic growth
- Enhance community engagement on campus through the fan experience and recreational opportunities

In support of the above goals, the plan proposes a long term land use concept that creates a north-south greenway as an organizing element for future campus expansion and as an iconic campus space. Additionally, the plan proposes reinforcement and enhancement to existing open spaces such as the Alumni Plaza area and spaces adjacent to the Breezeway and Diversity Way. The plan also suggests expanding outdoor recreation areas in concert with on-campus housing growth. Moreover, a perimeter walking and biking path is proposed to connect campus with community pedestrian and biking networks as well as walking paths in and around the conservation area. See Landscape component for additional information regarding open space.

Objective 1A: Maintain access for students and surrounding community to recreation facilities and provide additional outdoor recreation space as enrollment and on campus housing increases.

Objective 1B: Expand bike and walking trails as indicated in the plan to promote multi-modal circulation and enhance campus connectivity. Allow for bicycle route connections from the bike storage areas to major destinations and to the existing bike trails around the campus.



LEGEND

RECREATION AND OPEN SPACE



Figure 8.1 Recreation and Open Space

9 general infrastructure

STORMWATER MANAGEMENT

GOAL 1: It is the goal of the University to provide adequate stormwater management facilities and services to meet the present and future needs of the University and to protect the public and property.

The FAU Boca Raton campus is under the regulation of the South Florida Water Management District (SFWMD) for Environmental Resource Permitting (ERP) relating to stormwater management. The Boca Raton campus currently has three Master ERPs for the campus, SFWMD Permit #50-03706-P for the main portion of the FAU controlled campus, SFWMD Permit #50-01718-S for the Palm Beach State College portion of campus, and SFWMD Permit #50-03359-P for the Research & Development Park portion of campus. The last major update of the SFWMD Permit #50-03706-P for FAU was issued approval by SFWMD on May 26, 2015, under Application #141218-12. This update served to correct the permit by more accurately depicting the basin boundaries, storage available, and water quality for each of the basins on campus as well as provide for future development based on the previous master plan.

The Lake Worth Drainage District (LWDD) no longer permits drainage improvements, with the exception of review of any control structure modifications or projects affecting, or immediately adjacent to, their canals, right-of-way, or easements.

Objective 1A: Maintain records and permits

- **Policy 1A-1:** Verify, update, and maintain the FAU Infrastructure Drawings for existing and proposed stormwater management facilities, as projects are constructed or areas are reviewed for accuracy. Reserve stormwater management areas from future development or ensure replacement in kind when redeveloped.
- **Policy 1A-2:** Update the Master Campus Environmental Resource Permit for the proposed master plan, once accepted. Include stormwater management improvements necessary for the proposed development in accordance with the below noted recommendations.

Objective 1B: Meet or exceed level of service requirements

- **Policy 1B-1:** Minimize the development of facilities within the 100-year floodplain. Limit, or mitigate for, impacts to the 100-year floodplain with all developments and redevelopments on campus.
- **Policy 1B-2:** Runoff from the 100-year storm event in excess of facility capacity will be accommodated by overland flow.
- **Policy 1B-3:** Buildings shall be constructed at or above the 100-year / 3-day (no discharge) maximum flood elevation as determined by the South Florida Water Management District Conceptual Permit for each basin.
- **Policy 1B-4:** Maximum discharge rates to the off-site LWDD canals shall be based on the 25-year / 72-hour storm event as determined by the South Florida Water Management District Conceptual Permit for each basin.
- **Policy 1B-5:** Minimum roadway crown elevations will be designed for a 10-year / 24-hour storm event.
- **Policy 1B-6:** Minimum parking lot elevations will be designed for a 5-year / 24-hour storm event.
- **Policy 1B-7:** Continue to meet or exceed water quality criteria as established by SFWMD when developing and redeveloping the campus.

Objective 1C: Utilize sustainable stormwater management methods

- **Policy 1C-1:** Implement underground storage and water quality treatment, when feasible, potentially including exfiltration trenches, underground storage systems (StormTech or similar) in order to maximize development area and usable green space.
- **Policy 1C-2:** Implement sustainable stormwater management practices, potentially including bioswales, dry retention areas/swales, green roofs (when feasible), pervious pavement, and other green/sustainable design methods to treat and store stormwater.
- **Policy 1C-3:** Expand and improve surface water lakes and dry detention areas where possible.

LEGEND

■	BASIN 1	28.56 AC
■	BASIN 2	40.40 AC
■	BASIN 3	18.50 AC
■	BASIN 4	103.02 AC
■	BASIN 5	171.42 AC
■	BASIN 6	36.58 AC
■	BASIN 7	32.05 AC
■	BASIN CORE	73.50 AC

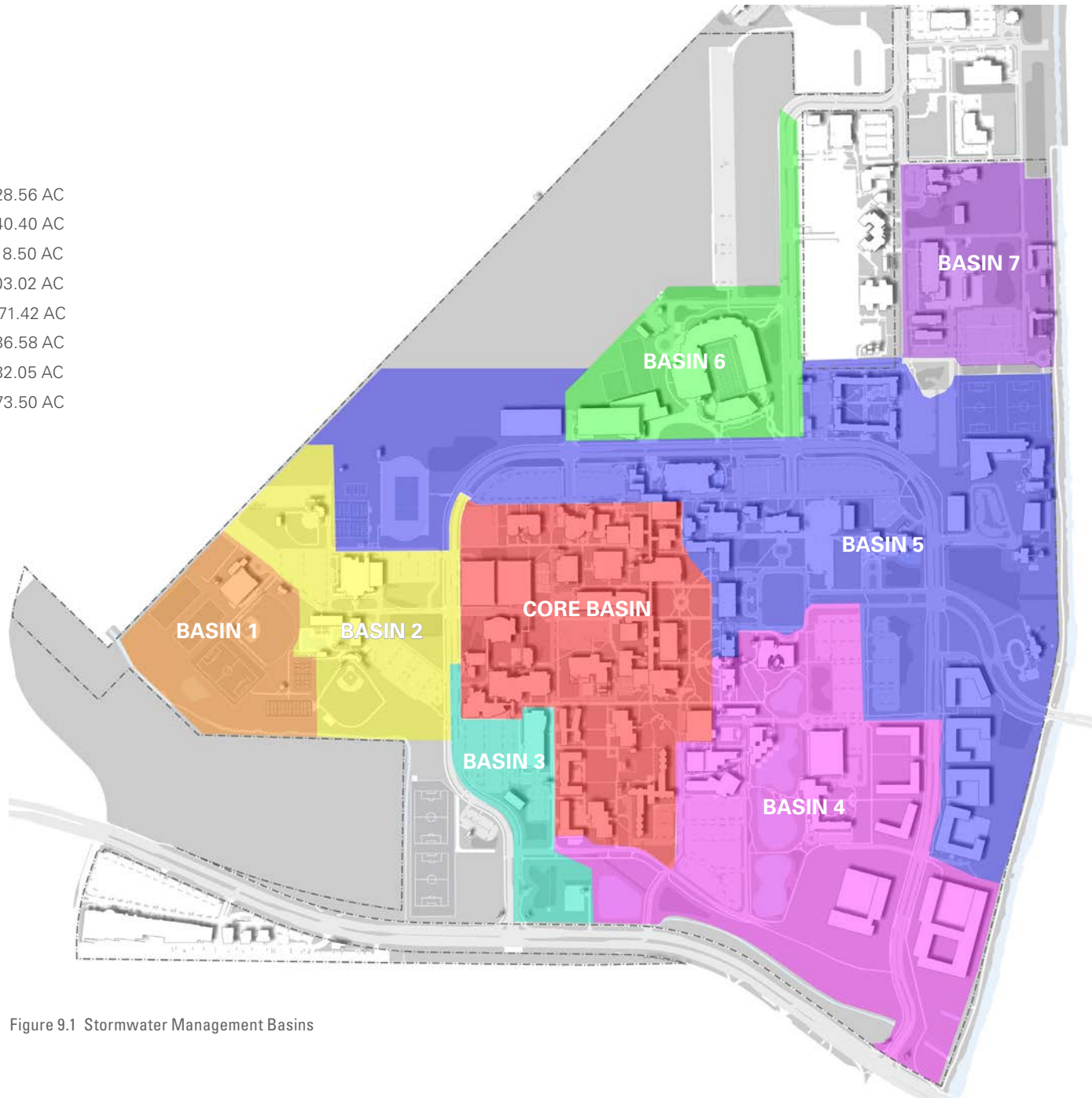


Figure 9.1 Stormwater Management Basins

Objective 1D: Implement an inspection and maintenance program

- **Policy 1D-1:** Inspect campus-wide stormwater management facilities on a routine basis, no more than five (5) years, in accordance with SFWMD requirements.
- **Policy 1D-2:** Identify areas experiencing frequent local ponding and improve stormwater management facilities and conveyance to reduce or eliminate ponding.
- **Policy 1D-3:** Implement a maintenance program to uncover buried stormwater management structures; flush and clean all pipes; vacuum out structures on a routine basis; and ensure proper maintenance of stormwater management detention and retention areas.

Objective 1E: Protect and conserve the natural functions of soils

- **Policy 1E-1:** Minimize impacts to downstream waters by utilizing appropriate Best Management Practices for temporary construction and permanent stormwater management systems in accordance with the Florida Department of Environmental Protection (FDEP) standards, such as the LWDD Canals for outfall of stormwater from the FAU campus, to ensure protection of the water quality of those receiving bodies. Development shall not adversely affect adjacent or downstream properties.
- **Policy 1E-2:** Require construction practices that minimize soil erosion in accordance with the National Pollution Discharge Elimination System (NPDES), administered by the Florida Department of Environmental Protection (FDEP). Such practices generally consist of the use of erosion screens; inlet protection; sod, seed, or mulch; phasing and limiting the removal of vegetation; minimizing the amount of land area that is cleared; and wetting soils to prevent wind-borne erosion during construction. Strategies for minimizing soil erosion shall be included in the Soil and Water Resources Protection Guidelines.





POTABLE WATER

GOAL 2: It is the goal of the University to provide adequate water facilities and services, both potable and fire, to support the mission of the University.

The FAU Boca Raton campus currently receives water from the City of Boca Raton via five (5) connections to the off-site municipal water system. The water system is master-metered by the City of Boca Raton at those connection locations. Improvements within the FAU Boca Raton campus to the water distribution system must be permitted through the City of Boca Raton and the Palm Beach County Health Department, meeting both of their standards. No deficiencies to the on-campus water distribution system have been identified by FAU or are known at this time. The system will be adjusted and expanded in order to serve the proposed future development in this master plan, once approved.

Objective 2A: Maintain records and permits

- **Policy 2A-1:** Verify, update, and maintain the FAU Infrastructure Drawings for existing and proposed water distribution and fire protection facilities, as projects are constructed or areas are reviewed for accuracy.

Objective 2B: Meet or exceed level of service requirements

- **Policy 2B-1:** Provide adequate water supply, through coordination with the City of Boca Raton, to provide adequate potable water service and fire protection service for the proposed master plan.
- **Policy 2B-2:** The University shall establish a procedure and assign responsibility for regularly scheduled coordination meetings with appropriate City officials relative to University water needs. FAU shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that potable water will be supplied to the campuses to meet the future needs of the University.
- **Policy 2B-3:** Annually review future construction programs and priorities for deficiency remediation as part of the capital improvements procedures of the BOT to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.

- **Policy 2B-4:** Water distribution facilities should be planned and designed at a minimum for the following unit capacities which reflect current actual usages, and should be checked periodically against records to amend as needed if actual usage varies:
 - Average daily use: 10 GPD/ Full Time Student plus 15 GPD / Faculty and Staff
 - Peak daily rate: Based on a 2.5 peaking factor to the Average Daily Use.
- **Policy 2B-5:** Distribution system shall provide a minimum static pressure in all mains of 65 psi; a minimum residual pressure at building plumbing fixtures of 35 psi; and a minimum fire flow residual pressure of 20 psi.
- **Policy 2B-6:** Expand or relocate the campus water distribution system to accommodate the proposed master plan, serving new buildings.

Objective 2C: Utilize sustainable water management design methods

- **Policy 2C-1:** Implement water-saving measures requirements for new building construction such as use of ultra-low volume fixtures and xeriscape landscaping procedures. See Element 15, Architectural Design Guidelines for further guidance.
- **Policy 2C-2:** Continue to expand the use of the existing reclaimed water (gray water) for irrigation to ensure no use of potable water for irrigation.

Objective 2D: Implement an inspection and maintenance program

- **Policy 2D-1:** Implement a program to operate every valve and flush every fire hydrant within the FAU campus on an annual basis with a written log of the operations.
- **Policy 2D-2:** Maintain leak detection and repair program for existing lines. Monitor meter readings for abnormal data.
- **Policy 2D-3:** Ensure backflow prevention devices are installed on all service lines. Eliminate any cross-connection violations of State requirements.

LEGEND

- EXISTING POTABLE WATER LINE
- CONNECTION TO CITY LINE



Figure 9.2 Potable Water

SANITARY SEWER

GOAL 3: It is the goal of the University to provide adequate sanitary sewage facilities and services to support the mission of the University.

The FAU Boca Raton campus currently discharges sanitary sewer to the City of Boca Raton via four (4) connections to the off-site municipal sewer force main system. Improvements within the FAU Boca Raton campus to the sewer collection system must be permitted through the City of Boca Raton and the Palm Beach County Health Department, meeting both of their standards. No deficiencies to the on-campus sewer collection system have been identified by FAU or are known at this time. The system will be adjusted and expanded in order to serve the proposed future development in this master plan, once approved.

Objective 3A: Maintain records and permits

- **Policy 3A-1:** Verify, update, and maintain the FAU Infrastructure Drawings for existing and proposed sewer collection facilities, as projects are constructed or areas are reviewed for accuracy.

Objective 3B: Meet or exceed level of service requirements

- **Policy 3B-1:** The University shall establish a procedure and assign responsibility for regularly scheduled coordination meetings with appropriate City officials relative to University sanitary sewer needs. FAU shall pursue any interlocal agreements or memoranda of understanding necessary to ensure that sanitary sewer will be supplied to the campuses to meet the future needs of the University.
- **Policy 3B-2:** Annually review future construction programs and priorities for deficiency remediation as part of the capital improvements procedures of the BOT to ensure capacity and capital improvements required to meet future University needs are provided when required, based on needs identified in other master plan elements.

- **Policy 3B-3:** Sewer collection facilities should be planned and designed at a minimum for the following unit capacities which reflect current actual usages, and should be checked periodically against records to amend as needed if actual usage varies:
 - o Average daily use: 10 GPD/ Full Time Student plus 15 GPD / Faculty and Staff
 - o Peak daily rate: Based on a 2.5 peaking factor to the Average Daily Use.
- **Policy 3B-4:** The sewer collection system, including gravity sewer mains and laterals, lift stations, force mains, grease traps, and other sewer collection facilities shall be designed in accordance with the City of Boca Raton, Florida Department of Environmental Protection (FDEP), Palm Beach County Health Department (PBCHD), Florida Administrative Code Section 64E-6, and 10 States Standards requirements, as applicable.
- **Policy 3B-5:** Expand or relocate the campus sewer collection system to accommodate the proposed master plan, serving new buildings.

Objective 3C: Implement an inspection and maintenance program

- **Policy 3C-1:** Television (TV) inspect all sewer mains on campus over a five-year span. TV inspection should be performed in order to review the existing sewer main conditions for the following:
 - o Sewer lines must be watertight to prevent ground water inflow and infiltration resulting in capacity reduction and increased pumping costs and to prevent possible contamination of ground water.
 - o Identify and correct leaks, damaged or broken pipe, and other deficiencies in the gravity collection system.
 - o Identify sewer mains with insufficient slopes, mains that are overloaded, clogged, or otherwise not functioning to their full capacity.
- **Policy 3C-2:** Identify and eliminate non-sewer connections to the collection system, such as roof drains, yard drains, etc.
- **Policy 3C-3:** Replace older clay pipes with new PVC pipe
- **Policy 3C-4:** Maintain leak detection and repair program for existing lines. Monitor meter readings for abnormal data.

LEGEND

- LIFT STATION
- FUTURE LIFT STATION
- UPGRADE LIFT STATION
- SEWAGE GRAVITY LINE
- - - FUTURE SEWAGE GRAVITY LINE
- SEWAGE PRESSURE LINE
- - - FUTURE SEWAGE PRESSURE LINE
- ▶ CONNCETION TO CITY COLLECTION SYSTEM



Figure 9.3 Sanitary Sewer

10 utilities

CHILLED WATER

GOAL 1: To provide efficient, reliable, chilled water service to all buildings on campus via district energy distribution system

The FAU Boca campus consists of central loop plants, and dedicated housing/athletics plants at various locations. A breakdown of the plant capacities is as follows:

Building 5:

- Two (2) 1500-ton Trane Centrifugal (approximately 7 years old)
- One (1) 1500-ton Trane Centrifugal (approximately 23 years old)
- One (1) 1280-ton Trane Centrifugal (approximately 27 years old)

Satellite Plant:

- Two (2) 750-ton York water cooled centrifugal (approximately 20 years old)
- One (1) 1500-ton Trane Centrifugal (approximately 15 years old)

Building 67: (Not connected to loop)

- One (1) 300-ton Trane water cooled centrifugal (approximately 4 years old)

Building 38: (Not connected to loop)

- One (1) 300-ton Trane water cooled centrifugal (approximately 2 years old)

The engineering and utilities (E&U) loops consist of the main building 5 distribution and the satellite plant distribution loops. These plants serve the majority of the buildings on campus with the exception of the housing facilities.

Proposed facility growth to year 2028 indicates a potential increase in chilled water demand of approximately 6000 tons, including housing which is estimated at 2,000,000 sq-ft. Without the housing component the proposed facility growth is approximately 1800 tons.

Objective 1A: Provide adequate chilled water capacity and redundancy for existing and future needs.

- **Policy 1A-1:** The current net connected load should not exceed the plants ability to provide cooling to the campus in the event of a chiller failure (N+1 redundancy). The current net load with 20% diversity is approximately 3200-tons, which is within the limits of this policy.

- **Policy 1A-2:** Increase total available plant capacity to accommodate future growth. The proposed facility growth to year 2028 with 20% diversity is approximately 5000-tons.

Objective 1B: Provide adequate chilled water capacity and redundancy for existing and future needs.

- **Policy 1B-1:** Connect Satellite and building 5 plants near the intersection of university drive FAU boulevard. This loop connection will increase the available capacity and satisfy the requirements of policy 1A-2.

GOAL 2: Extend chilled water to the Henderson School.

Objective 2A: Provide the Henderson School with a reliable and constant cooling source while eliminating excess maintenance and lowering life cycle cost.

- **Policy 2A-1:** Provide extension of the main chilled water loop across East University for service to Henderson School. Chilled water would route below grade from the main loop over to the existing chiller plant and connect to the buildings existing primary pumps.

GOAL 3: To provide efficient operation and maintenance of building systems through a centralized intelligent building automation system.

Objective 3A: Develop a state of the art building automation platform that includes integration of work order management and other enhancements to improve the efficiency of campus operations.

- **Policy 3A-1:** Upgrade building automation systems so they integrate with work order management systems.
- **Policy 3A-2:** Upgrade building automation systems so they include automatic fault detection, trending of key performance indicators, and alarm management.

GOAL 4: Independent housing chiller plants.

Objective 4A: Maintain the current independent operations of stand-alone chiller plants that serve the student housing facilities.

- **Policy 4A-1:** Continue to provide independent, reliable, and efficient cooling plants for the housing facilities on campus through third party operations providers.

SITE NOTES

- 1 BUILDING 5 CHILLER PLANT: 4,280 TONS
- 2 SATELLITE PLANT: 3,000 TONS
- 3 BUILDING 38 PLANT: 300 TONS
- 4 BUILDING 67 PLANT: 300 TONS
- 5 A.D. HENDERSON SCHOOL
- 6 A.D. HENDERSON SCHOOL CENTRAL LOOP EXTENSION
- 7 PROPOSED CROSS-CONNECT
- 8 DEVELOP NEW LOCALIZED HOUSING CHILLED WATER DISTRICT
- 9 NEW MIXED USE DEVELOPMENT TO HAVE STAND-ALONE COOLING SYSTEMS

GENERAL NOTES

- 1 PER POLICY IC-1, HOUSING IS TO REMAIN DEDICATED AND INDEPENDANT OF E&U CENTRAL PLANTS, AND ARE NOT SHOWN ON THIS EXHIBIT
- 2 ONLY MAIN DISTRIBUTION PIPING SHOWN, BUILDING BRANCHES OMITTED FOR CLARITY

LEGEND

- BUILDING 5 LOOP CHWS / R (EXISTING)
- BUILDING 5 LOOP CHWS / R (NEW)
- SATELLITE PLANT LOOP CHWS / R (EXISTING)
- SATELLITE PLANT LOOP CHWS / R (NEW)

ENLARGED VIEW

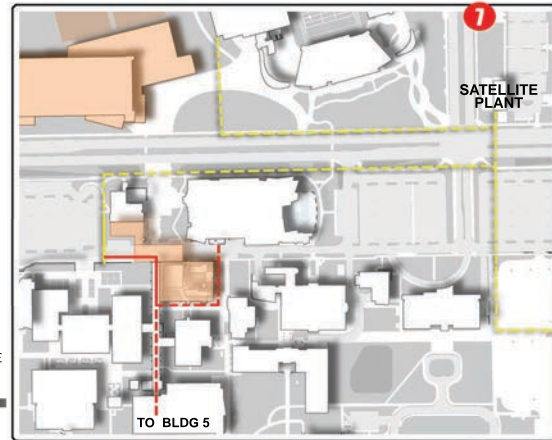


Figure 10.1 Chilled Water

ELECTRICAL POWER

GOAL 1: It is the goal to provide cost effective, efficient, and reliable electric power to meet the needs of the existing and future campus facilities.

Boca Campus Electrical Distribution

The Boca campus is primary metered at the FP&L substation on campus property at Glades Road. Distribution within the campus is owned by FAU and operated and maintained by the FAU Engineering & Utilities division. This arrangement has served the campus well and the broad goal stated above includes the expectation that the campus primary power system will be expanded over time to supply the electric needs of future campus facilities.

Objective 1A: Update and expand the campus 15kV primary power distribution network to improve capacity, serviceability and overall reliability.

- **Policy 1A-1:** Develop capital renewal projects to gradually replace all obsolete switchgear and PILC 15kV cables with newer switchgear and cable technologies.
- **Policy 1A-2:** Develop capital renewal projects to add more sectionalizing capability to the 15kV network to reduce the need to shut down large areas of campus when performing system maintenance.
- **Policy 1A-3:** Maintain demand loads on primary feeders to within 50% of their rated capacity to allow for redundancy and flexibility in feeder switching during routine maintenance operations.
- **Policy 1A-4:** Develop additional primary feeder capacity over time in conjunction with planned growth of campus facilities. This includes expansion of service to the eastern region of campus to interconnect with housing facilities and the Henderson School.
- **Policy 1A-5:** Develop capital renewal projects to improve the life span of the existing utility tunnels that are utilized for electrical distribution. Resolve water intrusion issues and remove cables that have been taken out of service.

Objective 1B: Provide standby power generation capability on the campus to serve as a redundant power source for critical building loads.

- **Policy 1B-1:** Evaluate opportunities to reduce the number of individual building level standby generators and provide a more centralized approach to providing back up power

- **Policy 1B-2:** Evaluate opportunities with FP&L to provide centralized power generation capability on the campus to serve as a redundant power source and allow for peak-shaving to reduce electrical demand charges.

Objective 1C: Optimize the efficiency of building level electrical systems through the application of modern technologies and through standardization of components.

- **Policy 1C-1:** Develop capital renewal projects to gradually replace antiquated lighting fixtures across the campus with new solid state LED high efficiency fixtures and provide automatic controls.
- **Policy 1C-2:** Develop campus standards for major electrical products that are installed within new buildings to improve consistency and allow for more efficient operations and maintenance.
- **Policy 1C-3:** Continue use of standardized digital electrical submeters within each building to allow for monitoring of building power consumption. Expand integration of these meters with the campus-wide building automation system to allow for remote monitoring, trending and reporting.

GOAL 2: It is the goal to meet the electrical demands for the campus with sustainably derived energy.

Objective 2A: Explore renewable energy purchase agreements with FP&L and other utilities to reduce the reliance on energy generated from fossil fuels.

- **Policy 2A-1:** Evaluate campus-wide long term solar power purchase agreements to derive up to 50% of the campus energy supply from off-campus solar power installations.
- **Policy 2A-2:** On new building projects and major building renovations, evaluate long term solar power purchase agreements to derive up to 50% of the building level energy supply from off-campus solar power installations.

Objective 2B: Explore opportunities to integrate solar power and other alternative energy sources in to the design of new projects on the campus.

- **Policy 2B-1:** Evaluate the feasibility and life cycle cost for adding solar power on each new building so that a minimum of 10% of the building energy is derived from the building level solar installation.
- **Policy 2B-2:** Evaluate the feasibility and life cycle cost for integrating solar power with new parking structures and covered walkways.

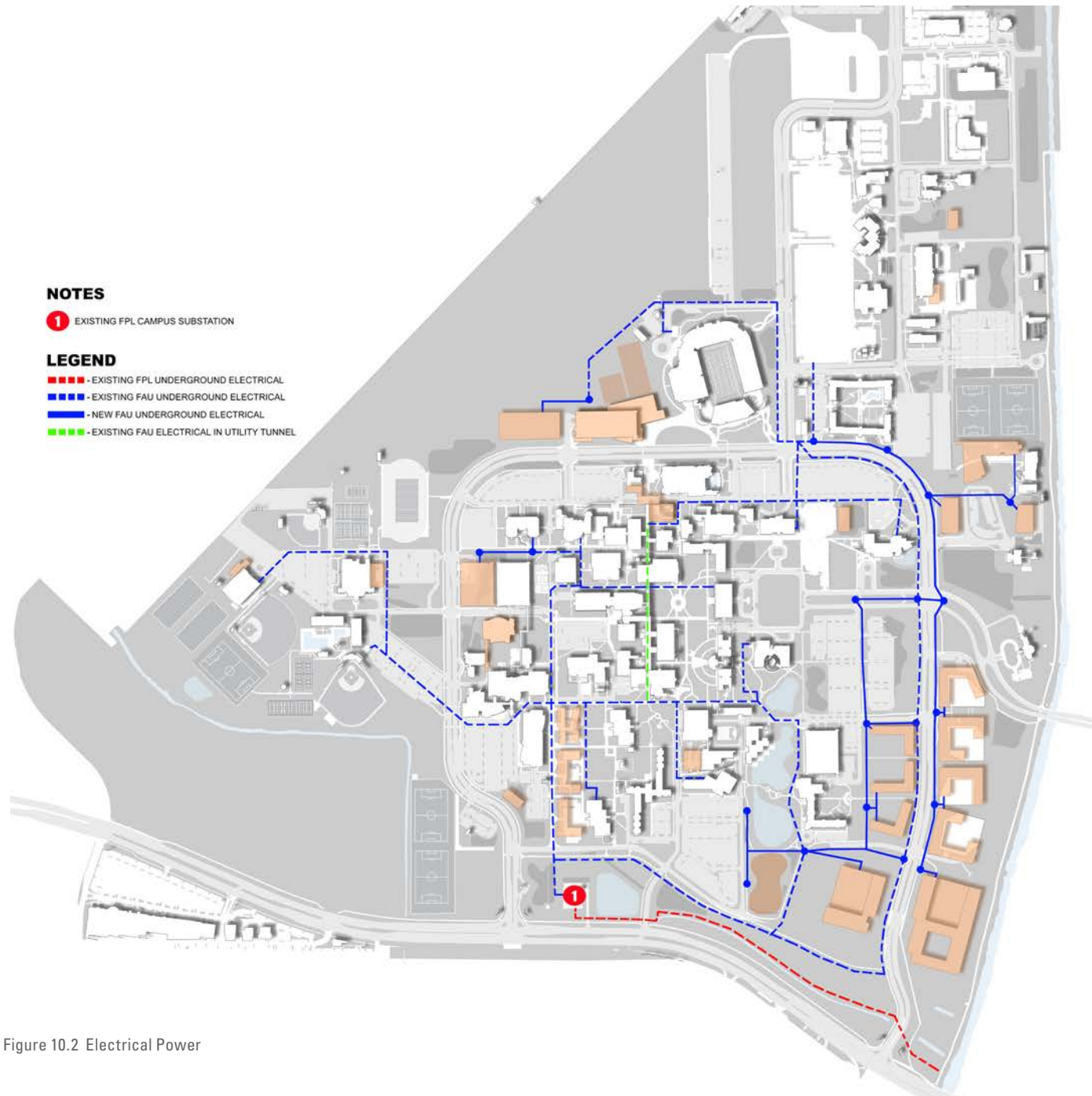


Figure 10.2 Electrical Power

TELECOMMUNICATIONS

GOAL 1: Maintain appropriate levels of network service to existing buildings and ensure new buildings meet levels of service required by current campus standards.

Boca Campus Communications Infrastructure

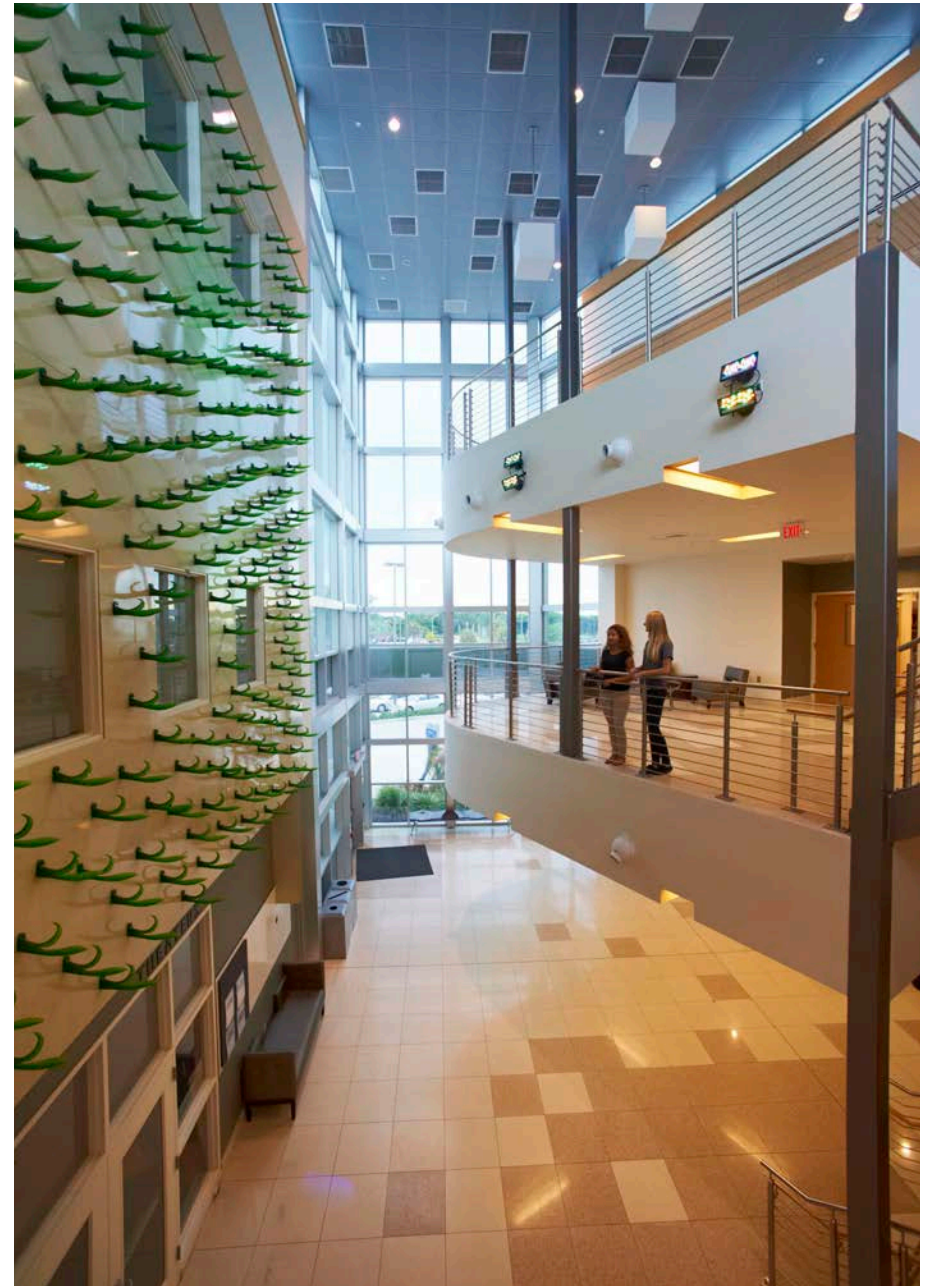
The Boca campus has a core data center in building 22, a secondary data center in building 96 and a hub for telephone connectivity in building 5. Current campus distribution consists of a main network service tunnel that runs north-south adjacent to the core data center and a system of duct banks containing 4" conduit. Each building requires a connection to the primary and secondary data centers as well as adjacent buildings with single mode fiber.

Objective 1A: Expand the campus local area network infrastructure to accommodate new construction.

- **Policy 1A-1:** Evaluate opportunities to update existing building backbone and horizontal cabling infrastructure to meet or exceed current campus standards.
- **Policy 1A-2:** Explore the opportunity to add a new secondary data center to the southern end of the Boca campus to prepare for future construction of the Campus Gateway.
- **Policy 1A-3:** Evaluate the feasibility of cleaning and revitalizing the existing campus main-network service tunnel.
- **Policy 1A-4:** Extend the existing communications duct bank to southeast corner of campus for new development.
- **Policy 1A-5:** Coordinate the requirements and projects of the Master Plan to AT&T and Comcast so they may tailor their services to accommodate the Boca Campus needs.

Objective 1B: Design and install voice, data and video transport systems that prepare the campus for future growth and for the adoption of newer technologies.

- **Policy 1B-1:** Develop campus standards for wirelessly connected devices how they impact the campus network bandwidth.
- **Policy 1B-2:** Develop campus standards for emergency responder radio enhancement systems, cellular distributed antenna systems and campus mass notifications systems.



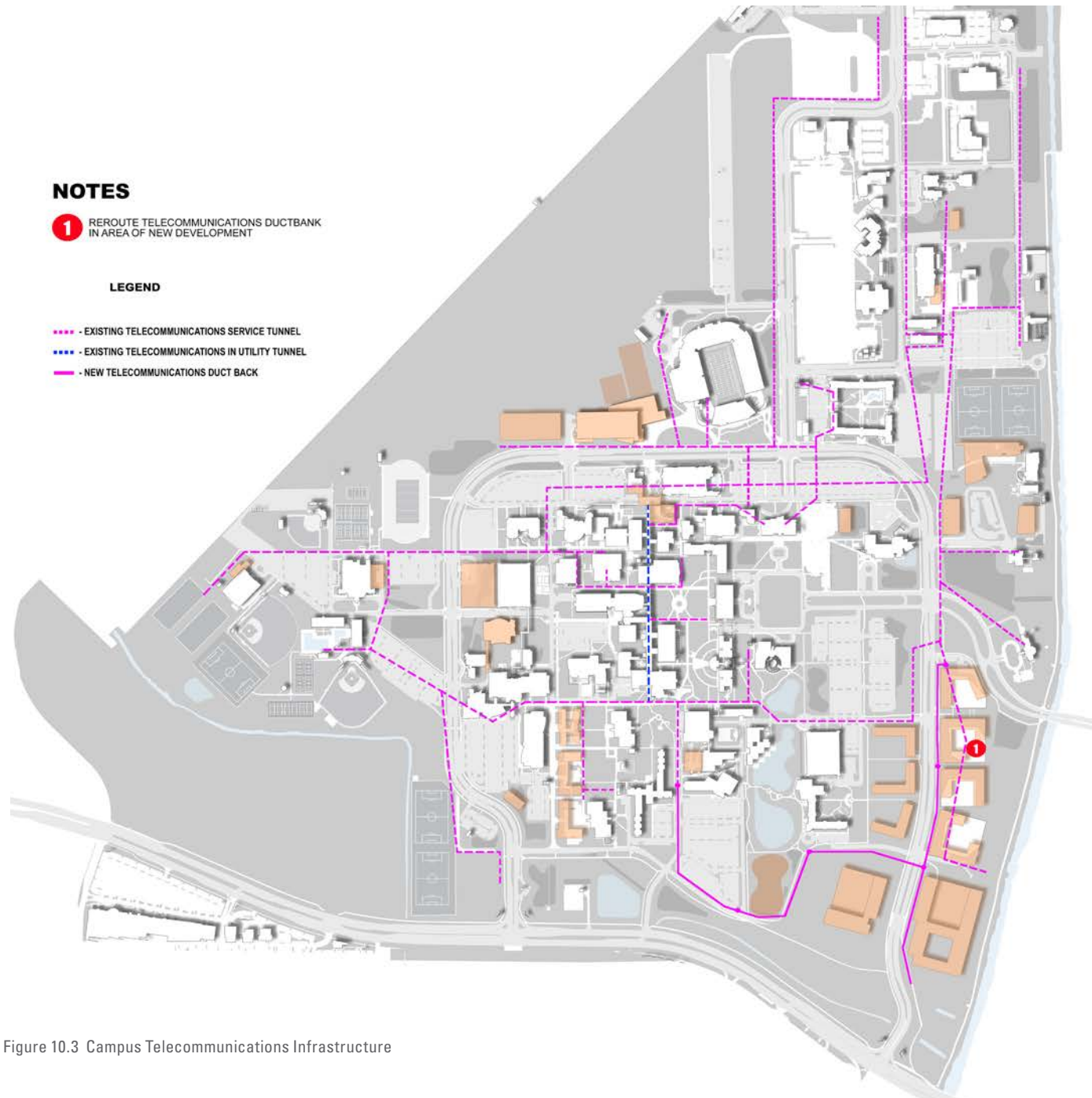


Figure 10.3 Campus Telecommunications Infrastructure

11 transportation

GOAL 1: To provide and promote an efficient, safe and cost-effective transportation system that enhances the mission of the University.

Objective 1A: In order to provide alternative modes of transportation, reduce traffic volumes, and reduce parking demand, FAU will continue to identify, evaluate and implement appropriate transit services through the following policies:

- **Policy 1A-1:** Conduct a comprehensive (campus-wide) transit study/survey detailing current University-related shuttle, PalmTran and Tri-Rail user characteristics data, such as: auto ownership; socioeconomic; demographics; mode choice reasoning; origin-destinations; out of vehicle travel time; temporal distribution; and frequency of usage.
- **Policy 1A-2:** Using the results of the comprehensive transit study, the University shall conduct a feasibility study regarding enhancement of the intracampus shuttle system.

Objective 1B: Based on the results of the feasibility studies, the University will identify revenue streams to fund enhanced intracampus shuttle service.

- **Policy 1B-1:** Amend the adopted campus master plan as necessary to incorporate the results and recommendations of the transit studies.
- **Policy 1B-2:** Continue to coordinate operational and planning efforts with South Florida Regional Transportation Authority (SFRTA) and PalmTran to provide efficient and convenient transit connections with the University.
- **Policy 1B-3:** Coordinate with the City of Boca Raton, Palm Beach County and PalmTran regarding a campus multimodal center.
- **Policy 1B-4:** Coordinate with the City of Boca Raton, Palm Beach County, PalmTran and other agencies on proposed transit routes to serve the campus, such as dedicated shuttles, Fast Bus service, and the proposed Tri-Rail Coastal Link service.
- **Policy 1B-5:** Provide shelter at the most highly utilized and most exposed shuttle stops on campus.
- **Policy 1B-6:** Review transit related objectives and policies regarding implementation schedules on a regular basis, amending the adopted master plan accordingly.

Objective 1C: In order to mitigate impacts to the surrounding areas while continuing to plan and provide for safe, efficient and enhanced vehicular access to the campus, FAU will coordinate future land uses and transportation systems with Boca Raton and surrounding jurisdiction. FAU will implement the following policies:

- **Policy 1C-1:** Enhance the West University Drive entrance to FAU by maintaining an architectural element that will serve as a focal point along Glades Road.
- **Policy 1C-2:** Continue and enhance coordination efforts with the City of Boca Raton, Palm Beach County, the Transportation Planning Agency, and the Florida Department of Transportation regarding transportation improvements and development plans by designating University representation and conducting regularly scheduled meetings.
- **Policy 1C-3:** Continue to develop a comprehensive database for analyzing historical and documenting future vehicular and non-vehicular incidents both within the campus and context areas, in a joint effort with the City, County and State agencies.
- **Policy 1C-4:** Continue to monitor and address the impacts within FAU and on surrounding roadways during University-related special events and athletic events.
- **Policy 1C-5:** At regular intervals associated with the Master Plan, the University will update the previously prepared traffic impact analysis for the campus, upon establishing an agreed-upon methodology with the City of Boca Raton and Palm Beach County.

Objective 1D: In order to facilitate the safe movement of automobiles, transit vehicles, bicycles and pedestrians, FAU shall continue to promote and develop an internal campus roadway network as a low speed, moderate capacity facility through the following policies.

- **Policy 1D-1:** Consider the closure of NE 8th Avenue between Palm Beach State College Drive and University Drive to discourage cut-thru traffic from Spanish River Blvd to Glades Road (Figure 11.2).
- **Policy 1D-2:** Consider limiting vehicular access to Dade Ave between Lot 20 and Indian River Street to necessary delivery vehicles only.
- **Policy 1D-3:** Provide turnout areas near main entrances to all new buildings with potential for pick-up/ drop-off demand. Add turnout areas near main entrances of existing buildings with high pick-up/ drop-off demand, such as Innovation Village Apartments.
- **Policy 1D-4:** Ensure the safe movement of pedestrians and bicycles and discourage higher vehicular speeds on campus by limiting internal campus roadways to no more than four lanes in width.
- **Policy 1D-5:** Evaluate the internal campus roadway system and identify appropriate improvements to roadways and intersections that will enhance internal traffic circulation.

Existing Transit Services
(2040 LRTP)

- Route 1
- Route 3
- Route 91
- Route 92
- Route 94
- Route 2
- Bus Stop
- Bus Stop and Shelter

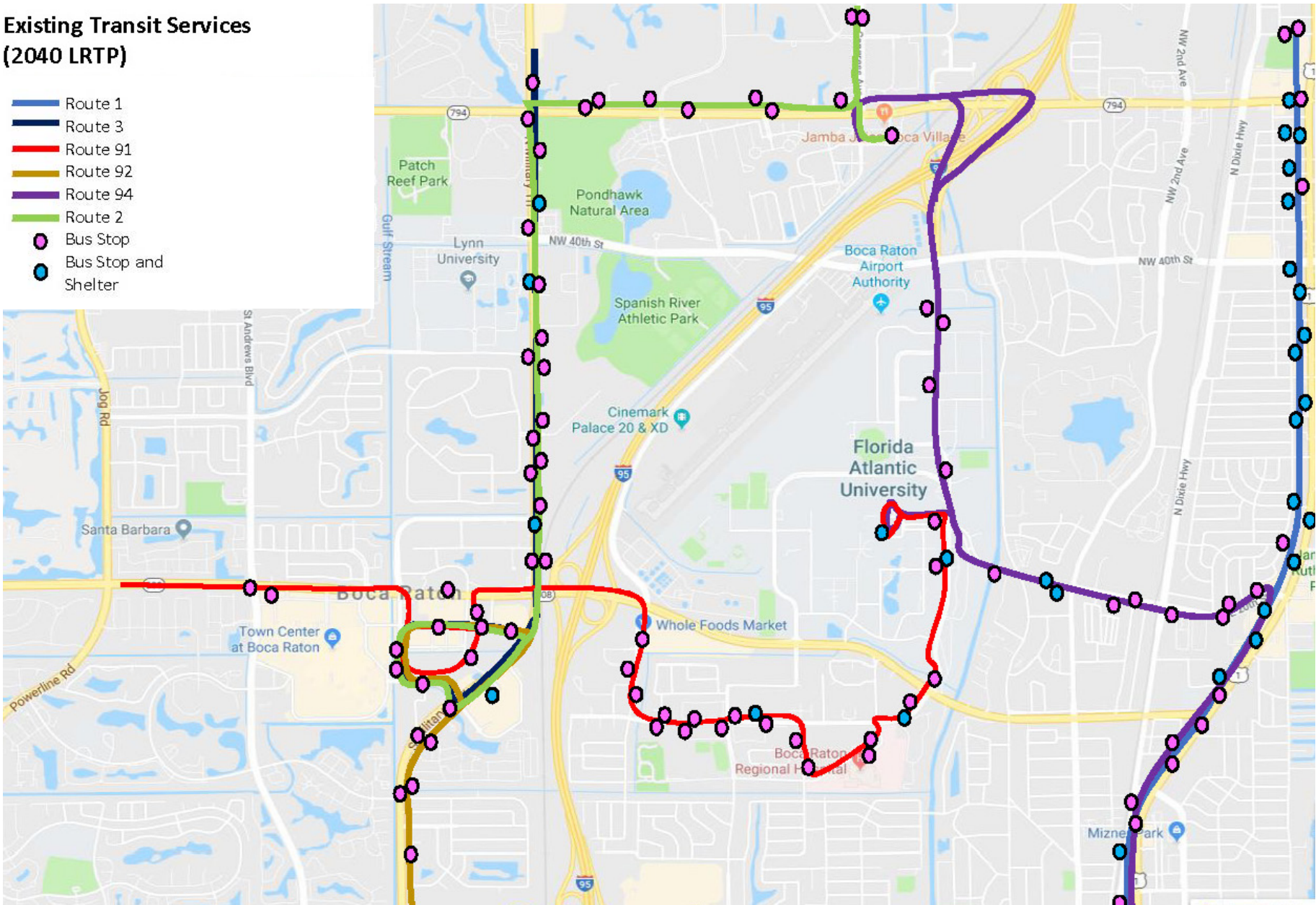


Figure 11.1 Existing Transit Services

Objective 1E: FAU will promote the reduction of dependence on the single-occupant automobile and encourage alternative modes of travel through the following policies:

- **Policy 1E-1:** Continue to implement Transportation Demand Management (TDM) strategies. These strategies may include, but not be limited to:
 - Improved utilization of public or University provided transit services;
 - Improved pedestrian and non-vehicular facilities;
 - Increasing the number of students living on campus;
 - Academic scheduling modifications; and
 - Operational improvements to the on-campus roadway system.
- **Policy 1E-2:** Establish a high-occupancy vehicle parking incentive program which provides preferential parking treatment for automobiles carrying three or more persons. Evaluate the potential uses of distance learning as a technique to reduce the need for students to travel to the University.
- **Policy 1E-3:** Coordinate with Boca Raton and County transportation planners to evaluate other options and strategies for reducing the dependence on the personal automobile. These options shall include, but not be limited to: park and ride operations from locations off-campus; carpooling and ridesharing programs; and special FAU feeder bus (shuttle) services. If any of these options proves to be economically feasible and practical, FAU shall amend the adopted campus master plan as needed to incorporate these strategies.
- **Policy 1E-4:** Develop a Parking Facts brochure describing the true costs of parking and transit service in an effort to educate the University community on the merits of self-supportive parking and transit systems.
- **Policy 1E-5:** Enhance the current web-based application and tracking for parking supply available in each surface parking lot and garage as well as tracking of on-campus shuttles.

Objective 1F: FAU will provide and support safe, sufficient, cost-effective and accessible parking facilities for students, faculty, staff and visitors to FAU through the following policies:

- **Policy 1F-1:** Maintain the “Code Blue” emergency phone system and expand the system to include all new parking facilities.
- **Policy 1F-2:** Provide parking facilities which maintain sufficient and energy efficient lighting at all facilities used after dusk.

- **Policy 1F-3:** Develop and maintain an inventory and replacement program for existing lighting features to include the use of high efficiency illumination materials.
- **Policy 1F-4:** Continue to evaluate new technologies regarding surveillance and wayfinding systems and adopt those that are found to be most appropriate to enhance security.
- **Policy 1F-5:** Identify, evaluate and implement appropriate funding mechanisms for wayfinding and electronic surveillance systems such as CCTV to monitor parking areas.
- **Policy 1F-6:** Establish and follow administrative procedures and coordination mechanisms for the comprehensive review of development plans and their impact on the transportation, parking and transit systems. Representatives from the following University departments and organizations should be involved with the review of development plans: grounds, police, parking, faculty, facilities planning, student affairs and transportation.
- **Policy 1F-7:** Refine parking lot design criteria regarding the number of access points, landscaping and lighting, and refine the implementation program for existing and future facilities. Dedicate, at a minimum, 10 percent of all vehicular parking areas as landscaped non-parking areas not including pervious parking surfaces.
- **Policy 1F-8:** Continue to identify, evaluate and implement appropriate revenue streams needed to support the parking facilities servicing the University.

Objective 1G: FAU will continually monitor and analyze the demand/supply relationship of parking while providing convenient facilities for students, faculty, staff and visitors. Unless superseded by a parking management program that identifies alternative parking management solution, FAU will:

- **Policy 1G-1:** Target parking space to enrolled student ratios of .65 to 1 for commuter students and .35 to 1 for residential students.
- **Policy 1G-2:** Maintain sufficient visitor parking at strategic campus locations.
- **Policy 1G-3:** Consolidate surface parking lots, especially underutilized ones, into structured parking garages
- **Policy 1G-4:** Prioritize campus parking facility and enhancement projects based on a phased Master Plan development schedule.
- **Policy 1G-6:** On a regular basis, review parking related objectives and policies regarding implementation schedules contained herein and amend the master plan accordingly.
- **Policy 1G-7:** Prior to construction of new parking facilities or structures, the University will perform an overall parking study to evaluate the potential impacts of the new facility.

LEGEND

- ROADS AND SURFACE PARKING
- PARKING GARAGE

PROJECTED PARKING

2018: 11,791 parking spaces

2028: 13,033 parking spaces

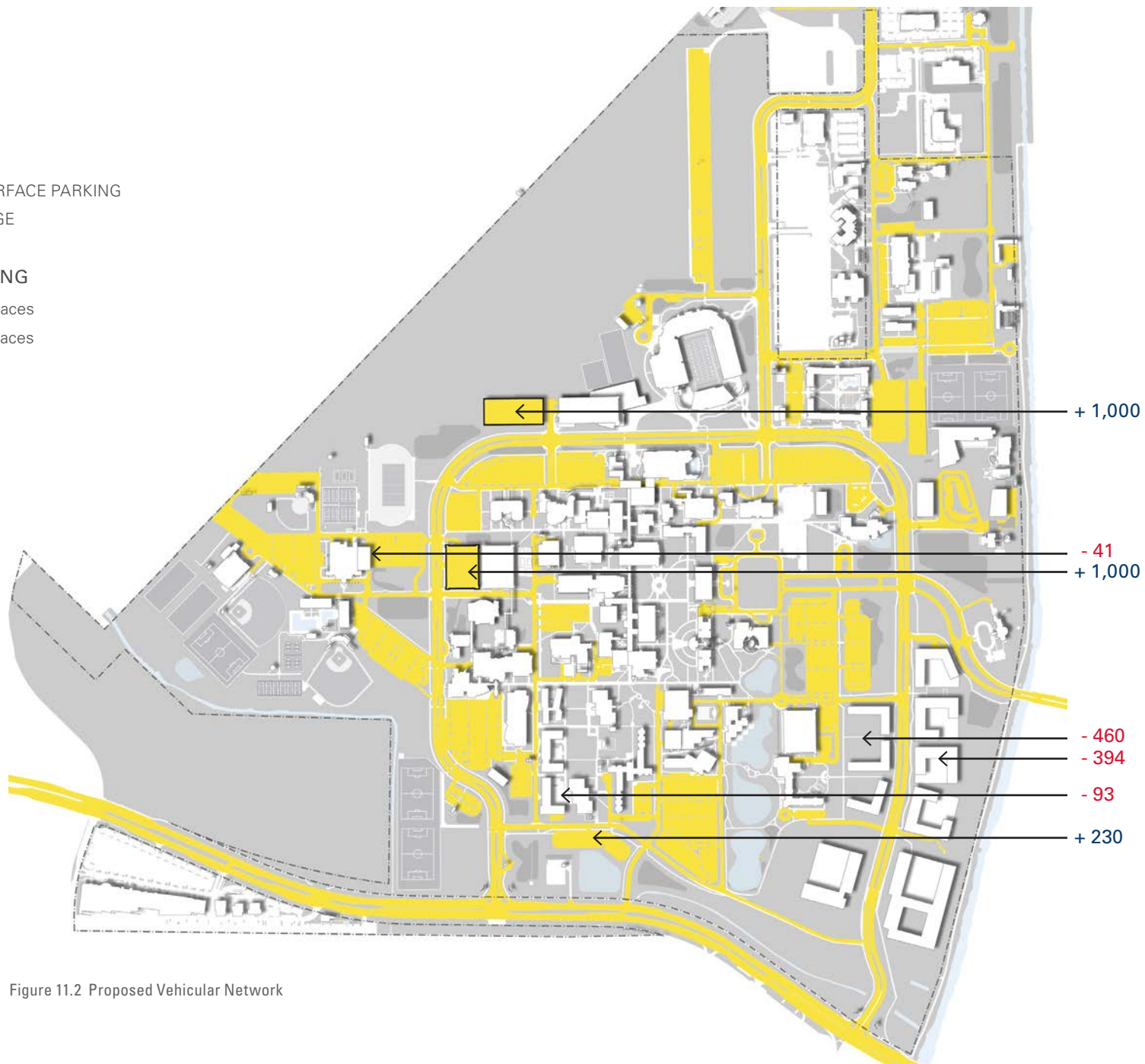


Figure 11.2 Proposed Vehicular Network

GOAL 2: To provide and promote an efficient, safe and cost-effective bicycle and pedestrian facilities system that enhances the mission of the University.

Objective 2A: FAU will provide adequate, efficient, safe, convenient and cost effective pedestrian facilities on campus to meet the future needs of the University through the following policies.

- **Policy 2A-1:** Maintain and improve the existing covered pedestrian way (commonly known as the Breezeway) that links the College of Business Complex to the Student Services Building.
- **Policy 2A-2:** Construct, maintain, and improve additions to the existing covered pedestrian way extending to the Student Union and to the new Athletic Plaza north of North University Drive.
- **Policy 2A-3:** Construct, maintain, and improve additions to the uncovered pedestrian walkway system as is necessary to connect new facilities with existing structures.
- **Policy 2A-4:** Maintain and improve existing uncovered pedestrian ways on campus, including the walkways south of the Library and south of the Student Union.
- **Policy 2A-5:** Maintain and improve sources of natural shade to shield all existing and proposed uncovered pedestrian ways within the University campus.
- **Policy 2A-6:** Construct, maintain, and improve uncovered pedestrian ways on campus, including major new connections to new residential areas.

Objective 2B: FAU will provide adequate, efficient, safe, convenient and cost-effective bicycle facilities on campus to meet the future needs of the University through the following policies.

- **Policy 2B-1:** Evaluate the feasibility of converting existing core campus parking lots into open green spaces and/or bicycle parking lots, to promote the pedestrian ambience of the campus.
- **Policy 2B-2:** Expand the “Code Blue” emergency phone system to include new pedestrian and bicycle paths on campus.
- **Policy 2B-3:** Coordinate the locations for future pedestrian and bicycle circulation facilities.
- **Policy 2B-4:** Coordinate the locations for additional lighting along campus pedestrian and bicycle circulation routes.





- **Policy 2B-5:** Provide and maintain bicycle paths on the campus.
- **Policy 2B-6:** Include clear and visible signage with bicycle path extensions to encourage campus bicycle utilization.
- **Policy 2B-7:** Provide convenient and covered bicycle parking with facilities to ensure that bicycles can be kept in a locked position.
- **Policy 2B-8:** Include provisions for bicycle parking facilities in all new construction and renovation projects.
- **Policy 2B-9:** Establish and maintain levels of service for transit, bicycle facilities and sidewalks in coordination with the City of Boca Raton and Palm Beach County.
- **Policy 2B-10:** Coordinate with the City of Boca Raton to ensure that the University's proposed pedestrian and bicycle facilities network coincides with the facilities proposed in the City's comprehensive plan.

12 intergovernmental coordination

GOAL 1: Florida Atlantic University will strive to achieve the goals of the master plan through the use of joint processes for collaborative planning, decision making, and development review with the host city, host county, and other regional, state, federal, and special authority agencies. The University is concerned with the impact of its campus development on its context area, as well as the impact of development within the context area on the campus. The context area for the FAU Boca Raton Campus is defined to be the area bounded by Palmetto Park Road on the south, Federal Highway on the east, Yamato Road on the north, and Military Trail on the west (Figure 12.1).

Objective 1A: The University will endeavor to establish a process for the reciprocal review of University campus master plans and local government comprehensive plans and their amendments. In order to accomplish this, FAU will implement the following policies:

- **Policy 1A-1:** The Vice President of Administrative Affairs or delegate shall arrange a series of meetings with the host local government planning officials for the purpose of negotiating the terms and conditions of this reciprocal review process. Every effort shall be made to formalize these terms and conditions through an interlocal agreement or memorandum of understanding.
 - **Policy 1A-2:** Proposed amendments to the adopted campus master plan which exceed the thresholds established in s. 1013.30, F.S., should be submitted to the appropriate local, regional, and state agencies for review.
 - **Policy 1A-3:** Proposed amendments to the adopted campus master plan which do not exceed the thresholds established in s. 1013.30, F.S. and have the potential effect of impacting off-site facilities, services, or natural resources should be submitted to the appropriate local, regional, and state agencies for a courtesy review.
 - **Policy 1A-4:** Proposed amendments to local government comprehensive plans which have the potential effect of changing land uses or policies that guide the development of land within the designated context area, affect the provision of local services, or otherwise impact University facilities and resources should be submitted to the Vice President of Administrative Affairs or delegate for review.
 - **Policy 1A-5:** University planning officials shall continue to meet with officials from the host city and host county on a regular basis, or as the need arises, for the purpose of coordinating planning activities. Other agencies shall be invited to participate in these meetings as necessary.
- Objective 1B:** The University will endeavor to establish a process for the reciprocal review of proposed development activities both on-campus and in the campus context area. The following policies should be implemented:
- **Policy 1B-1:** Upon adoption of the campus master plan update, the University shall negotiate and enter into a campus development agreement as established in s.1013.30, F.S. University planning officials shall cooperate with local officials in the review of proposed campus development to assess potential impacts on local, regional, and state resources and facilities until execution of the campus development agreement.
 - **Policy 1B-2:** Once the campus development agreement is executed, all campus development may proceed without further review by the host local government if it is consistent with the adopted campus master plan and associated campus development agreement.
 - **Policy 1B-3:** The University and host local government will coordinate to plan for and implement compatible development along the boundaries of the campus. Compatibility issues include land use, aesthetics and signage, and development restrictions.
 - **Policy 1B-4:** FAU shall be informed of and permitted opportunities for review and comment on proposed development activities within the University's context areas to assess potential impacts on University resources and facilities.
 - **Policy 1B-5:** Within the negotiated Interlocal Agreement or Memorandum of Understanding shall be provisions requiring the city to transmit to the Vice President of Administrative Affairs or delegate any application for development order or construction permit within the designated context area which exceeds criteria or standards established therein.
 - **Policy 1B-6:** The Vice President of Administrative Affairs or delegate shall assess the potential impacts of proposed projects on FAU facilities and resources. Findings and proposed mitigation of any impacts noted shall be reitted in writing to the appropriate local government planning and development department.

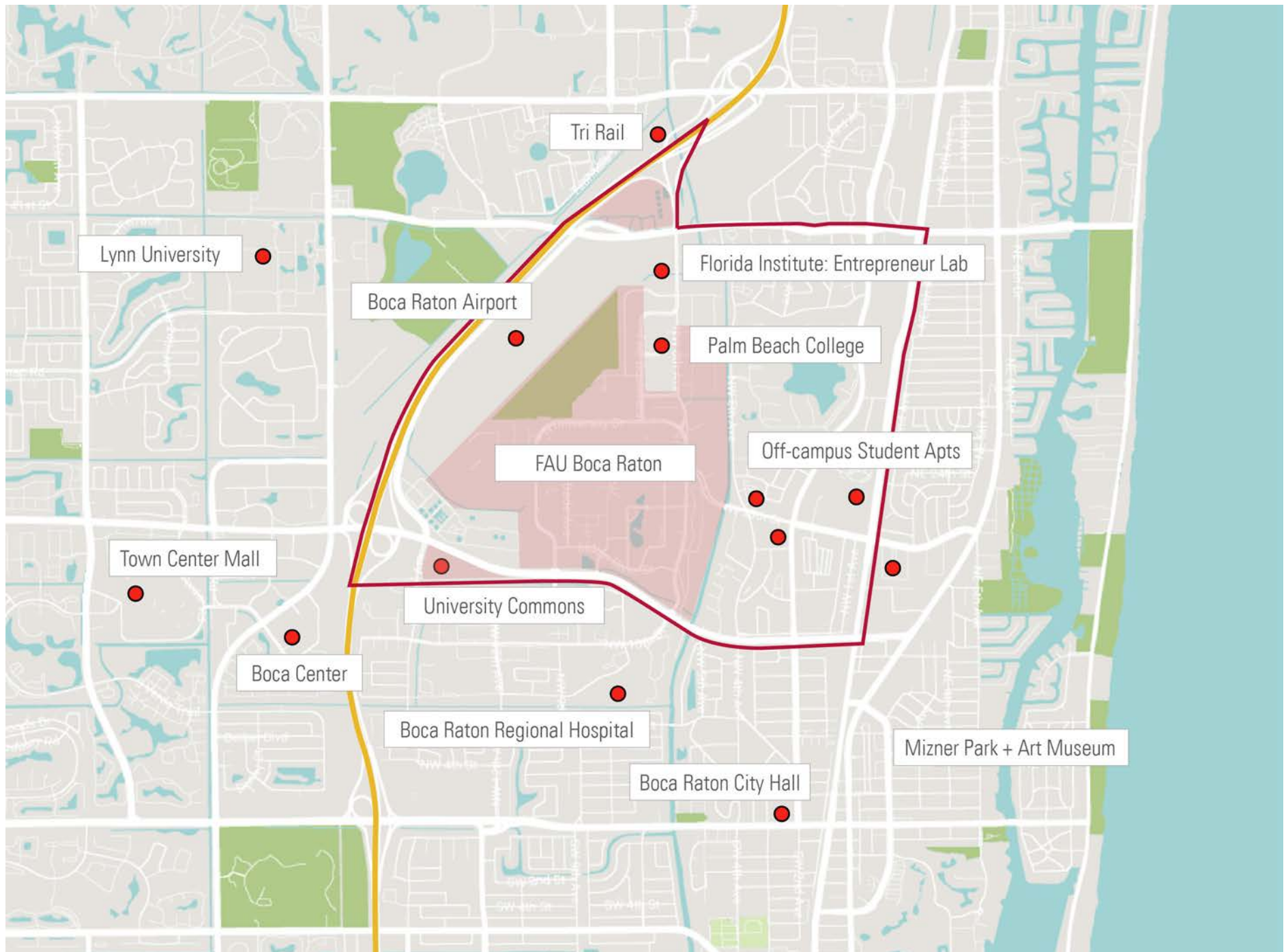


Figure 12.1 Campus Context Area

- **Policy 1B-7:** University and local officials shall cooperate in the identification of appropriate strategies to mitigate the impacts of campus development on local, regional, and state resources and facilities, and to mitigate the impacts of proposed development within the context area on University resources and facilities.
- **Policy 1B-8:** Any dispute between the University and a host local government regarding the assessment or mitigation of impacts shall be resolved in accordance with the process established in s.1013.30, F.S.

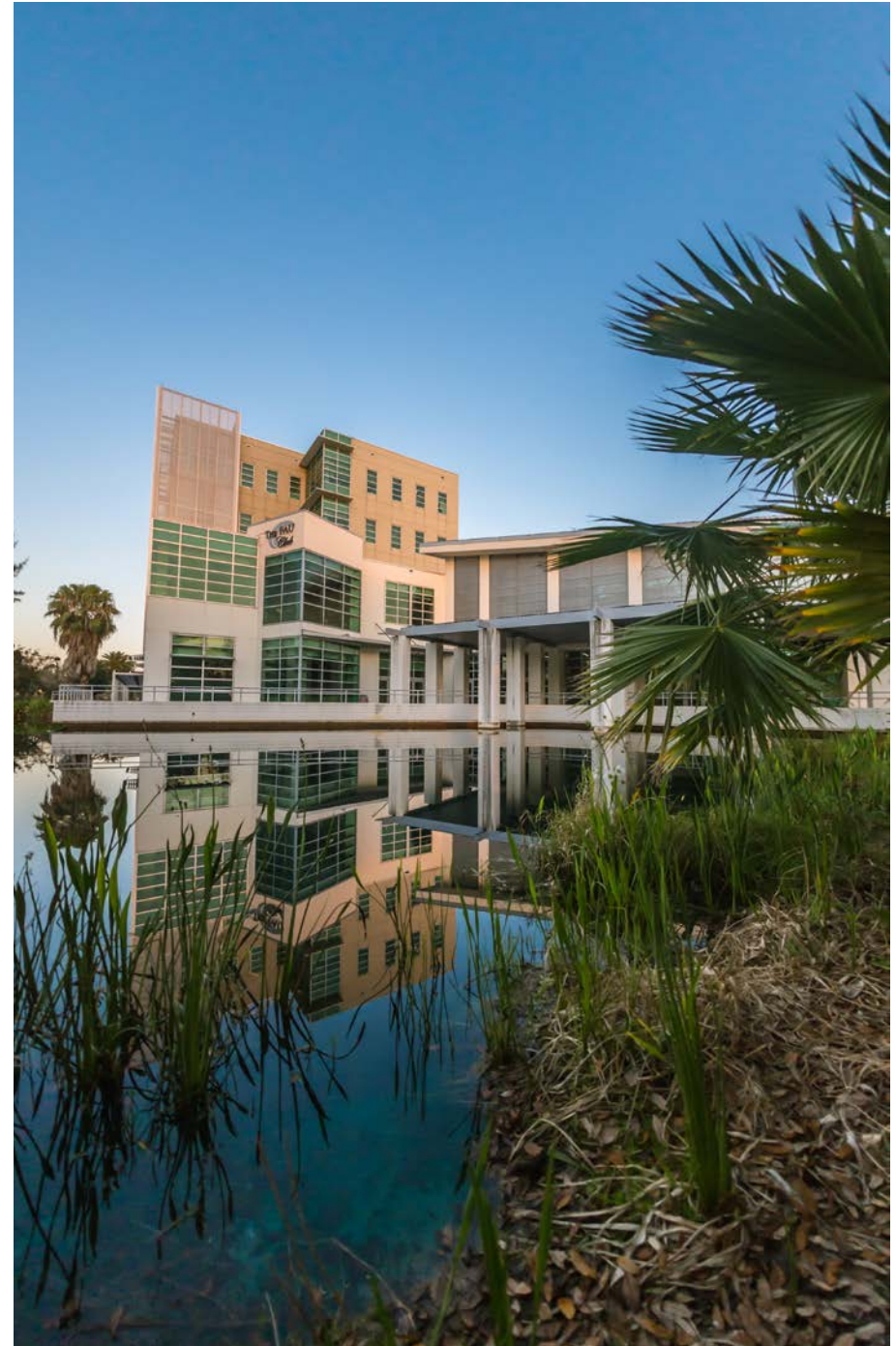
INFRASTRUCTURE AND PUBLIC SERVICES

Objective 1C: FAU will endeavor to ensure adequate infrastructure services are coordinated with local government providers to support University functions and facilities.

- **Policy 1C-1:** The University shall participate when requested with local government advisory groups, citizens committees, task forces, local regulatory authorities, and similar groups where issues relating to general infrastructure are considered in order to ensure that University interests are coordinated with local entities.
- **Policy 1C-2:** The appropriate University representatives shall meet with representatives of local and state utilities to resolve issues relating to the maintenance and operation of the utility and infrastructure distribution system and provisions for future capacity.

Objective 1D: FAU will establish level of service standards and concurrency requirements for public facilities, services that interconnect with City facilities, and services for which the City has operational and maintenance responsibility, which are not in conflict with the host city's level of service standards.

- **Policy 1D-1:** These standards shall include the following items (Standards are established in Element 9, General Infrastructure):
 - Stormwater quantity (Stormwater Management Sub-element)
 - Stormwater quality (Stormwater Management Sub-element)
 - Potable water capacity (Potable Water Sub-element)
 - Sanitary sewage collection and treatment capacity (Sanitary Sewer Sub-element)
 - Solid waste collection and disposal facility capacity (Solid Waste Sub-Element)





PUBLIC USE OF CAMPUS FACILITIES

Objective 1E: FAU shall continue to coordinate with civic and local government groups concerning the use of University facilities for recreational, entertainment, and other public service events.

- **Policy 1E-1:** The University will continue to support events consistent with availability of resources and facilities.
- **Policy 1E-2:** The University shall continue its policy to recover the cost of special events sponsored by non-University groups, except in those cases where it is determined by the Vice President of Administrative Affairs that the event is of benefit to and in the best interests of the University and the expenditure of University resources is appropriate.

TRANSPORTATION

Objective 1F: The University will endeavor to provide an effective multi-mode transportation system for the University community in cooperation with appropriate local and state government agencies. See element 11, Transportation for further guidance.

SAFETY

Objective 1G: FAU endeavors to provide a safe campus environment for students, faculty, staff, and visitors.

- The University will coordinate long-range planning efforts with fire, public safety, and environmental departments and agencies to maintain and enhance the safety of the campus and its population.

13 conservation

GOAL 1: It is the goal of the University to ensure the conservation, protection, and wise use of all natural ecosystems and natural resources on University property.

NATURAL ECOSYSTEM

The Florida Atlantic University (FAU) campus, in particular the areas identified by the University as conservation areas, serves as a habitat for a variety of species, including two protected species: the gopher tortoise (*Gopherus polyphemus*) and the Florida burrowing owl (*Athene cunicularia*). According to the latest Protected Species Assessment conducted by Miller Legg in August 2018, there is an estimated population of 154 gopher tortoises and 24-28 burrowing owls on campus within the identified Management Units.

Objective 1A: FAU's Conservation Committee has identified priority areas for protection due to their environmental sensitivity and significance as wildlife habitats (Figure 13.1). In order to realize the University's objective to conserve, protect, and appropriately utilize native vegetative communities and significant wildlife habitats, FAU will continue to implement the following policies:

- **Policy 1A-1:** Areas identified as Conservation Areas shall be set aside as open space preserves for gopher tortoises, burrowing owls, native plant communities, and other plant and animal species that are listed as endangered, threatened, rare, or as species of special concern by federal, state, regional, or local agencies. These areas shall remain protected from development and all other activities that may diminish their natural value and functions.
- **Policy 1A-2:** Continue to perform regular Protected Species Assessments and Habitat Assessments to track protected species population trends and inform habitat management practices.
- **Policy 1A-3:** Continue to follow a management plan for the protection of campus native wildlife, including all endangered, threatened, and species of special concern. This plan is to be coordinated with the FAU Conservation Committee, Florida Fish and Wildlife Conservation Committee, and other appropriate governmental entities to ensure proper management of species found in Florida's Endangered and Threatened Species List.



- **Policy 1A-4:** Continue to follow a management plan for the protection of native plant communities and endangered, threatened, and rare plant species. This plan is to be coordinated with the FAU Conservation Committee and other appropriate governmental entities to ensure the proper management of plant species which are listed as endangered, threatened, and commercially exploited by the Florida Department of Agriculture and Consumer Services.
- **Policy 1A-5:** Continue to remove all non-native invasive plants identified in the Florida Exotic Pest Plant Council List of Invasive Plant Species from the campus grounds.





Figure 13.1 Conservation & Natural Buffer Areas

WATER

Objective 1B: To conserve and protect current and future water sources, FAU will continue to implement the following policies:

- **Policy 1B-1:** Continue to use exclusively reclaimed wastewater (gray water) for irrigation.
- **Policy 1B-2:** Conserve water resources and reduce chemical use through the use of xeriscape design principles including use of drought tolerant non-invasive and native plant material, zoned irrigation systems, low volume irrigation systems, moisture sensors and rain switches, drought tolerant ground cover, and soil amendments and mulch to retain soil moisture. See Element 16, Landscape Design Guidelines for further guidance.
- **Policy 1B-3:** Continue to comply with South Florida Water Management District (SFWMD) water conservation program requirements and implement voluntary initiatives when feasible.
- **Policy 1B-4:** Complete a basic water usage audit with the help of resources such as the SFWMD Self-Assessment Guide for Commercial and Institutional Water Efficiency Improvement.
- **Policy 1B-5:** Implement water-saving measures requirements for new building construction such as use of ultra-low volume fixtures and xeriscape landscaping procedures. See Element 15, Architectural Design Guidelines for further guidance.
- **Policy 1B-6:** Protect water quality in campus lakes by providing vegetated littoral zones composed of native vegetation.

Objective 1C: In order to mitigate University-generated stormwater and minimize stormwater-born pollutants, FAU will implement the following policies:

- **Policy 1C-1:** Establish procedures to properly dispose of contaminants and guard against accidental dumping or spillage of soils, solvents, paints, or other byproducts by Physical Plant.
- **Policy 1C-2:** Minimize the development of facilities within the floodplain.
- **Policy 1C-3:** Continue to implement Best Management Practices for Stormwater. See Element 9, General Infrastructure, Sub-Element Stormwater Management for further guidance.

EROSION CONTROL

Objective 1D: In order to protect and conserve the natural functions of soils, FAU will implement the following policies:

- **Policy 1D-1:** Require construction practices that minimize soil erosion. Such practices may include the use of erosion screens; sod, seed, or mulch; phasing and limiting the removal of vegetation; minimizing the amount of land area that is cleared; or wetting soils to prevent wind-borne erosion. Strategies for minimizing soil erosion shall be included in the Soil and Water Resources Protection Guidelines.

AIR QUALITY

Objective 1E: In order to reduce air emissions and preserve the quality of air on campus, FAU will implement the following policies:

- **Policy 1E-1:** Reduce use of single occupant internal combustion vehicles for commuting to and from campus and encourage the use of public transportation by the campus community. Continue to provide shuttle services to mitigate single occupant vehicle trips within campus. See Element 11, Transportation for further guidance.
- **Policy 1E-2:** Transition FAU's vehicle fleet to less polluting fuels (i.e. electric, LNG, hydrogen, etc) by 2028.
- **Policy 1E-3:** Encourage walking, biking, and skateboarding as the preferred forms of transportation within the campus by providing appropriate infrastructure, shade, and landscape elements that encourage these forms of travel. See Element 16, Landscape Design Guidelines for further guidance.
- **Policy 1E-4:** Continue to increase the number of trees on campus. See Element 16, Landscape Design Guidelines for further guidance.
- **Policy 1E-5:** Design and maintain facilities that use exhaust ducts for air discharge to minimize the discharge of pollutants. Install appropriate filtering devices on fume hoods and minimize the storage and use of volatile and hazardous materials in campus buildings.
- **Policy 1E-6:** Implement a program for the monitoring of indoor and outdoor air quality. Indoor sampling shall occur at chemistry laboratories, kitchens, and other sites where fumes are produced. Outdoor sampling sites shall include parking

lots and congested intersections. Failure to meet air quality standards established by the Florida Department of Environmental Protection (FDEP) shall result in an assessment of the probable cause and the preparation and implementation of a plan to improve and maintain air quality.

ENERGY

Objective 1F: To conserve and appropriately use energy, FAU will implement the following policies:

- **Policy 1F-1:** Continue to reduce campus-wide energy consumption expenditures through a combination of reducing the cost of the energy consumed and reducing total energy usage to comply with State and Federal mandates for energy use reductions.
- **Policy 1F-2:** Invest in energy conservation measures such as those outlined in 1013.23, F.S.
- **Policy 1F-3:** Continue to use campus-wide Energy Management Control System to monitor, control, and optimize energy usage.
- **Policy 1F-4:** Transition all campus lighting to LED technology.
- **Policy 1F-5:** Require all new buildings to incorporate energy conservation fixtures, systems, and other energy use and management techniques. See Element 15, Architectural Design Guidelines for further guidance.
- **Policy 1F-6:** Institute review procedures for mechanical and electrical equipment replacement that guarantee improved energy efficiency with the incorporation of new equipment.
- **Policy 1F-7:** Upgrade campus chillers and boilers to more efficient equipment.
- **Policy 1F-8:** Pursue cogeneration of electricity and steam from waste heat where it can be demonstrated that energy savings will result.
- **Policy 1F-9:** Pursue grants to assist in the implementation, study, and development of renewable energy and energy conservation technologies and procedures (e.g. The Renewable Energy and Energy Efficient Technologies Grant Program)
- **Policy 1F-10:** Consider use of photovoltaics in the development of new facilities and implement when appropriate.



MATERIAL RECOVERY

Objective 1G: To maximize on-campus reclamation of consumer products and hazardous materials:

- **Policy 1G-1:** Determine and implement appropriate measures to assist compliance by all University community members with the Florida Solid Waste Management Act (SWMA), including efforts to expand, enhance, and promote existing programs to recycle suitable materials collected on campus.
- **Policy 1G-2:** Integrate facilities to accommodate collection, storage, and disposal of recycled materials in all new buildings.
- **Policy 1G-3:** Coordinate on-campus recycling programs with those of local government in regard to materials collected, and disposal/ collection procedures.
- **Policy 1G-4:** Provide on-campus facilities for the collection and storage of hazardous materials as required by federal, state and local regulations.
- **Policy 1G-5:** Implement hazardous materials handling and storage procedures to include as a minimum the proper containerization, classification and labeling of all hazardous waste.
- **Policy 1G-6:** Utilize licensed hazardous waste transportation and disposal companies.

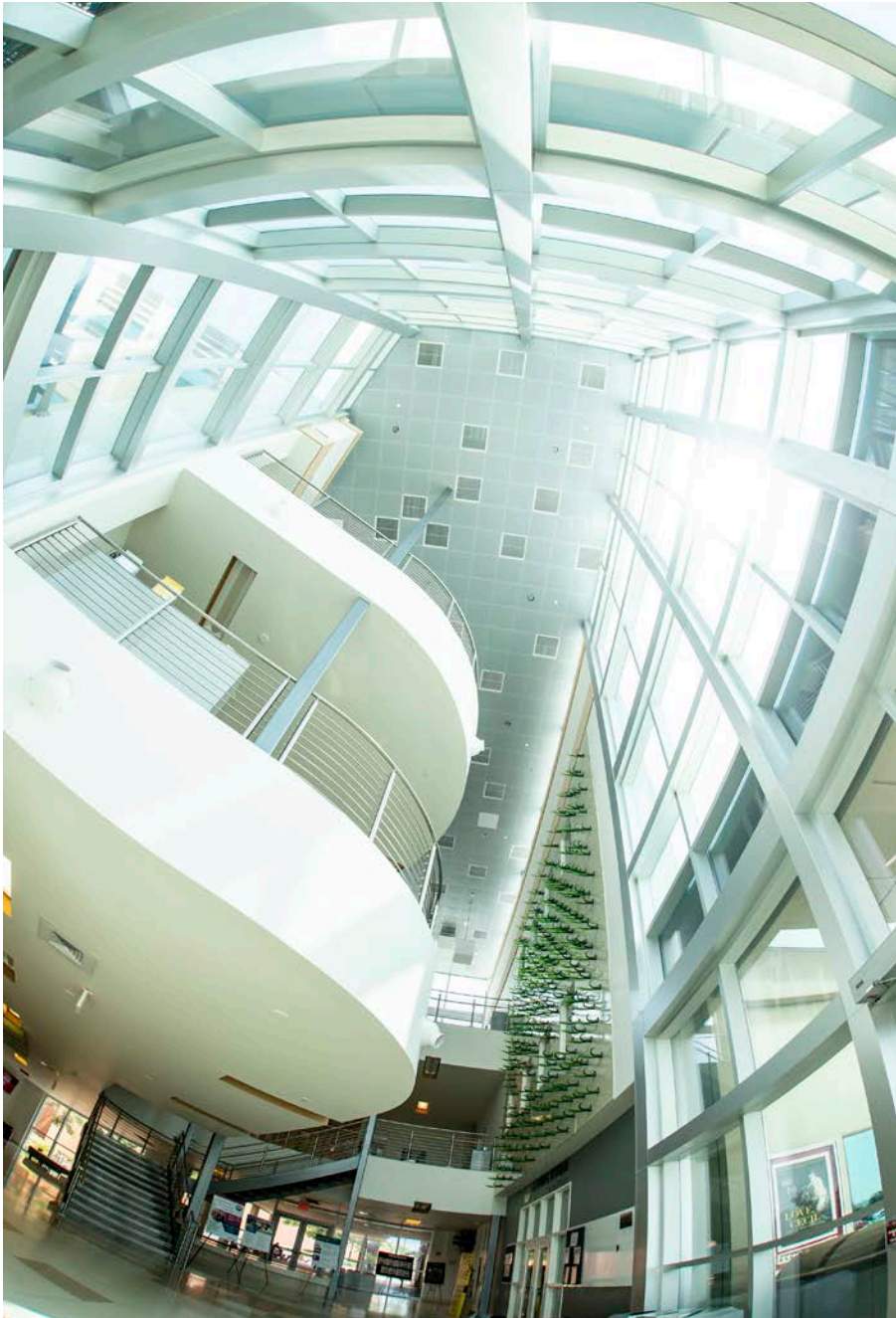
14 capital improvements

GOAL 1: Florida Atlantic University is committed to the provision of a plan for facilities consistent with needs established by its mission and concomitant with sound financial planning.

Objective 1A: To provide facilities necessary to accommodate future growth, replace obsolete facilities, and correct existing deficiencies as identified in the Five-Year Capital Improvement Plan, FAU will implement the following policies:

- **Policy 1A-1:** The University, in cooperation with the State University System's Board of Governors and in conformance with the priorities outlined in this element of the master plan, shall schedule and fund capital improvements identified in the University's Capital Improvement Plan.
- **Policy 1A-2:** The University Board of Trustees, in conjunction with the University President and the Vice President of Administrative Affairs, shall evaluate, rank, and revise as necessary the order of priorities for facilities and projects set forth in the University's Capital Improvement Plan.
- **Policy 1A-3:** The following criteria should be utilized to evaluate and rank proposed capital improvements in order of priority:
 - Elimination of existing capacity deficits as determined by the level of service standards adopted as part of this plan
 - Consistency with the frameworks established as part of this master plan
 - Locational placement consistent with the Future Land Use Element adopted as part of this plan
 - Consideration and consistency with approved development agreements and plans of other entities that use facilities at FAU
 - Identification and availability of adequate funding for the project
 - Incorporation of additional study findings regarding the replacement, renewal and construction of capital facilities (e.g. educational plant survey, housing master plan)





Objective 1B: The University will continue to incorporate in its facility planning the elements necessary to ensure annual review of capital renewal, ADA, fire safety, and other projects related to code compliance and health and safety matters. The following policies will be implemented to support this objective:

- **Policy 1B-1:** Facilities Management will continue to provide an annual submission of Minor Projects that lists refurbishing, renovation, and remodeling projects to correct existing deficiencies, accommodate growth, and replace worn out facilities as part of the University facility planning process.
- **Policy 1B-2:** Individual projects shall continue to be recommended through established procedures for special appropriation consistent with established University priorities and goals.
- **Policy 1B-3:** Emergency projects or unanticipated projects resulting from enrollment or programmatic changes shall be reviewed using the same process as the annual budget, stressing participation and communication.

Objective 1C: The University shall create a participative environment for review of facility plans on an annual basis, incorporating input from all appropriate segments of the University community to ensure operational capabilities are consistent with facility plans:

- **Policy 1C-1:** The operational needs for each facility, whether new construction or remodeling/ renovation of an existing facility, shall be incorporated in the annual fiscal/ educational planning process.

Objective 1D: In order to ensure adherence to sound fiscal policies in providing the capital improvements identified in this campus master plan, the University shall not proceed with new capital improvements, expansions, or replacements until adequate funding sources have been identified and committed:

- **Policy 1D-1:** FAU shall continue to follow established University policies to integrate capital improvements funding in its annual budgeting process.

15 architectural guidelines

Architectural Design Guidelines are focused on design principles as opposed to prescriptive standards. The intent is to guide strategic future growth that creates long term value and rich campus experiences through functional and inspiring architectural responses to climate, context, and program. The design of future facilities should aspire to embody the six goals of the strategic plan: Boldness, Synergy, Place, Quality, Brand, and Strategy in the interest of creating a sustainable and cohesive civic realm where the unique identity of the whole is greater than the sum of its parts. The Guidelines describe design principles associated with developing the Civic Realm of campus and are related to Element 3: Urban Design. They also describe principles related to the Architectural Character of campus buildings.

GOAL 1: Enhance and expand the function and aesthetics of the Civic Realm

Objective 1A: Promote stewardship of valued natural, built and historic resources.

- **Policy 1A-1:** Preserve historic landscapes and structures.
- **Policy 1A-2:** Promote the installation of historic markers or other exhibits telling the story of the history of the FAU Boca Raton Campus.
- **Policy 1A-3:** Preserve conservation lands.
- **Policy 1A-4:** Promote the notion of the campus as living lab through outdoor classrooms, interpretive educational exhibits, and signage.

Objective 1B: Buildings and landscape should positively relate to the surrounding context

- **Policy 1B-1:** Campus edge development should be compatible to adjacent community development.
- **Policy 1B-2:** Functional building design should be compatible with district level framework and service needs.
- **Policy 1B-3:** Campus buildings should front open spaces and contribute to the campus open space network.

- **Policy 1B-4:** Campus buildings should be designed to offer functional and aesthetic compatibility with neighboring buildings.
- **Policy 1B-5:** Accessibility across campus and into the surrounding community should be a priority.

Objective 1C: Utilize Place-making concepts to create a memorable and coherent campus

- **Policy 1C-1:** Site buildings to reinforce edges to open space with consistent setbacks: retain larger setbacks along important landscapes like the Glades Road frontage.
- **Policy 1C-2:** Utilize smaller setbacks to reinforce more intimate courtyards. Consistent building setback will be critical to creating an “urban street” in the Gateway District on E University Road.
- **Policy 1C-3:** Increase campus density through infill to create more cohesiveness and more defined open spaces.
- **Policy 1C-4:** Promote a variety of space typologies that are functional, safe, and beautiful.
- **Policy 1C-5:** Transitional spaces are important for continuity and connections on campus.

Objective 1D: Shape the campus civic framework experience through hierarchy

- **Policy 1D-1:** Utilize size, shape, and formality of open spaces to project hierarchy at appropriate locations.
- **Policy 1D-2:** Site icon buildings at positions of prominence and fronting major spaces within the campus framework.
- **Policy 1D-3:** Site infill buildings to provide a background to campus space.
- **Policy 1D-4:** Preserve and shape views to spaces and architectural elements to aid orientation.
- **Policy 1D-5:** Variety in building heights will help reinforce hierarchy and orientation.



GOAL 2: Foster a contemporary Architectural Character that remains contextual through consistent application of design principles

Objective 2A: Build on the legacy of the original campus architecture promoting climatically responsive and connected facilities that balance built form and open space.

- **Policy 2A-1:** Promote architectural qualities associated with permanence.
- **Policy 2A-2:** Design facilities to be sustainable and promote healthy lifestyles.
- **Policy 2A-3:** Site, orient and shape buildings to create and enhance outdoor campus spaces.
- **Policy 2A-4:** Reflect building typology in architectural form through strategic use of mass, proportion, fenestration, and detail.
- **Policy 2A-5:** Design facilities to be inviting and clearly organized.

Objective 2B: Incorporate environmentally responsive design elements

- **Policy 2B-1:** Follow The 2018 Florida Statutes for Education Facilities 1013.23 Energy efficiency contracting recommending investment in energy conservation measures and reinvestment of savings.
- **Policy 2B-2:** Implement low-energy use design, solar energy systems as described in s.1013.44 including: high efficiency chillers and boilers, thermal storage tanks, solar energy systems, waste heat recovery systems, and facility load management systems.
- **Policy 2B-3:** Implement passive design elements as defined in s.1013.01 (15) including: building orientation, landscaping, earth bermings, insulation, thermal windows and doors, overhangs, skylights, thermal chimneys, and other design elements.
- **Policy 2B-4:** Utilize shading strategies on building envelope and in open spaces to reduce mechanical loading and provide a more comfortable environment. Architectural elements include: building setbacks and overhangs, columns, floor slabs, balconies, arcades, and attached aluminum sunshades.



- **Policy 2B-5:** Balance window and wall composition and shade devices on building façades to maximize daylighting.
- **Policy 2B-6:** Balance the building's envelope efficiency with the indoor air quality. Be cautious of making too tight a building which could cause the so-called "sick building" syndrome because of high humidity levels.
- **Policy 2B-7:** Shade campus walkways using architectural structures or tree canopy.

Objective 2C: Incorporate design strategies for height and mass

- **Policy 2C-1:** Building mass for facilities housing larger footprint programs should be "broken down" to articulate functional program zones.
- **Policy 2C-2:** Consider "breaking down" mass to provide identifiable base, middle and top to buildings.
- **Policy 2C-3:** Height and mass should relate to the building's status as an icon or supporting structure.

Objective 2D: Incorporate design strategies to promote appropriate scale and proportion

- **Policy 2D-1:** Utilize elements to relate to human scale at the ground level – fenestration, materials, and datum lines.
- **Policy 2D-2:** Activate the building base with transparency at the ground floor and public spaces generally to connect inside and outside.
- **Policy 2D-3:** Provide flexible study and collaboration spaces with views to the outdoors.
- **Policy 2D-4:** Promote visibility to and from collaboration spaces and activities, particularly adjacent to pedestrian circulation areas such as the Breezeway.

Objective 2E: Strategically incorporate architectural elements to reinforce the campus framework and aid in orientation.

- **Policy 2E-1:** Clearly articulate building entries through the use of overhead canopies, transparency, signage and detail. Connect to the walkway system.
- **Policy 2E-2:** Utilize porches or arcades to create a usable threshold between outdoor space and indoor lobby space.
- **Policy 2E-3:** Develop covered walkways which architecturally respond to building entries, activity spaces, and landscape architecture. Covered walkways should follow the overall scale of the existing system but should explore and exploit shade and shadow.
- **Policy 2E-4:** Utilize "architectural lanterns" to mark building entry and terminate walkways. Explore shade and shadow expression for daytime interest and lighting strategies at night.
- **Policy 2E-5:** Roofs should be generally flat. Articulated roof lines and other compatible architectural elements may be used to highlight important buildings, axes or spaces.
- **Policy 2E-6:** Incorporate visual interest in the ground plane with paving material; particularly in small courtyard spaces.

Objective 2F: Incorporate consistent use of materials and color to promote a unified campus and to maximize resource efficiency

- **Policy 2F-1:** Materials should be durable, with minimal maintenance needs. The basic building material is concrete, either cast-in-place architectural, pre-cast architectural, concrete with a plaster finish or a ground face concrete masonry unit.
- **Policy 2F-2:** Continue the use of light-colored building materials for consistency and climate response. Concrete mix should be developed to achieve a color range from a light cream to a bright white. When natural stones are used, they also should be limited to light-colored stones such as limestone. The FAU pallet of approved colors for building exteriors are as follows:



- Primary Neutral Colors: SW6385 – Dover White, SW6139 – Netsuke, SW7690 – Townhall Tan, SW7543 – Avenue Tan, SW6136 – Harmonic Tan, SW7713 – Towner Tan.
- Secondary Accent & Trim Colors: SW7655 – Stamped Concrete, SW6340 – Baked Clay, SW6144 – Dapper Tan, SW2834 – Birdseye Maple, SW6179 – Artichoke, SW7513 – Sanderling. Additional colors recommended by the architect or engineer may be considered through the Vice President of Administrative Affairs.
- **Policy 2F-3:** Added color should be limited to ground plane materials such as brick paving or colored concrete and to building accents such as entry canopies, handrails, graphics, and site furniture.
- **Policy 2F-4:** Glass should be clear or tinted, but not reflective or mirrored finish, and should not be so heavily tinted that it becomes opaque. Tinted or lightly tinted glass may need additional shading by using exterior shading devices and interior shades. Tinted glass on buildings should be of green tint set within clear anodized aluminum mullions. Additional colors recommended by the architect or engineer may be considered through Vice President of Administrative Affairs.

GOAL 3: Establish policies and procedures to protect the long-term rights of the University for all non-owned facilities constructed on University land.

- **Policy 3A-1:** Facilities to be built by non-University entities on land leased from the University will comply with all codes and standards applicable to the University's own facilities.
- **Policy 3A-2:** All facilities to be built by non-University entities on land leased from the University will be reviewed and approved by the University for compliance with University guidelines.

16 landscape design guidelines

GOAL 1: To enhance the existing landscape character and landscape structure of the campus, by providing a sense of place, introducing more shade and drought-tolerant plants, and creating a safe environment for students.

PLANTING

The Boca Raton campus boasts a wide variety of canopy trees that offer character to the center of the campus and provides shade, even if some mature trees were lost during the passage of Hurricane Irma in 2017. A well-defined network of pedestrian paths connects the academic buildings. The campus also includes a system of lakes to the southeast that add interest to the campus grounds, and act as an integral part of the stormwater infrastructure. All of these qualities are to be enhanced and are a priority initiative.

Objective 1A: In order to improve and expand upon the campus aesthetic, experience, and identity, FAU will implement the following policies:

- **Policy 1A-1:** The University shall promote conservation and reduce environmental impacts by complementing the existing plant palette with more native and drought tolerant plants.
- **Policy 1A-2:** Group plants in the landscape according to their water requirements so their irrigation system shall not over or underwater some plants at the expense of others.
- **Policy 1A-3:** Reduce campus water needs by reducing the amount of turf on campus and replacing it with drought tolerant species wherever possible.
- **Policy 1A-4:** Avoid planting grass and other turf in areas that are too shady, dry, wet, or steep to be mowed safely. Use ground covers and other plants better suited to these areas.
- **Policy 1A-5:** Planting beds should be added around foundations of buildings for aesthetic improvement of the campus.
- **Policy 1A-6:** Enhance campus wayfinding and create focal points by placing planting beds with more ornamental plants around building entrances and main thoroughfares.
- **Policy 1A-7:** Use mulch in the plant beds to decrease water evaporation and reduce watering frequency.



Precedent photography exemplifies the strategies described in the accompanying policies

- **Policy 1A-8:** Use a cohesive plant palette throughout the campus.
- **Policy 1A-9:** Strive to incorporate campus-wide stormwater management into the overall landscape improvements.
- **Policy 1A-10:** Screen utilities by using hedges.
- **Policy 1A-11:** Non-native, unique, or other plants not listed below can be added in an effort to diversify the campus planting palette with prior approval from FAU. Planting should include but is not limited to the list below:

TREES AND PALMS

Cabbage Palm	<i>Sabal palmetto</i>
Gumbo Limbo	<i>Bursera simaruba</i> (In large open spaces only)
Pigeonplum	<i>Coccoloba diversifolia</i>
Satin Leaf	<i>Chrysophyllum oliviforme</i>
South Florida Slash Pine	<i>Pinus elliottii</i>
Strangler Fig	<i>Ficus aurea</i>
Virginia Live Oak	<i>Quercus virginiana</i>

SHRUBS AND GROUNDCOVERS

Wax Myrtle	<i>Myrica cerifera</i>
American Beautyberry	<i>Callicarpa americana</i>
Coontie	<i>Zamia pumila</i>
Eastern Gamagrass	<i>Tripsacum dactyloides</i>
Firebush	<i>Hamelia patens</i>
Giant Leather Fern	<i>Acrostichum danaeifolium</i>
Saw Palmetto	<i>Serenoa repens</i>
Shiny-leaved Wild Coffee	<i>Psychotria nervosa</i>
Swamp Lily	<i>Crinum asiaticum</i>
Adam's Needle	<i>Yucca filamentosa</i>
Cocoplum	<i>Chrysobalanus icaco</i>

- **Policy 1A-12:** Plants listed as prohibited and invasive in Palm Beach County shall not be used on campus, and any existing such plants shall be removed. Following is the list of Palm Beach County Prohibited Plants:

Air Potato	<i>Dioscorea bulbifera</i>
Australian Pine	<i>Casuarina spp.</i>
Brazilian Pepper	<i>Schinus terebinthifolius</i>
Carrotwood	<i>Cupaniopsis anacardioides</i>
Earleaf acacia	<i>Acacia auriculiformis</i>
Kudzu	<i>Pueraria montana var. lobata</i>
Old World Climbing Fern	<i>Lygodium microphyllum</i>
Melaleuca	<i>Melaleuca quinquenervia</i>
Queensland Umbrella Tree	<i>Schefflera actinophylla</i>


















- For more information on Palm Beach County invasive species, refer to the following links:

<http://discover.pbcgov.org/erm/Publications/ProhibitedPlantsBrochure.pdf#search=invasive>
<http://discover.pbcgov.org/parks/NaturalAreas/InvasivePlants.aspx>

- **Policy 1A-13:** For campus gateways, preserve and enhance the existing landscape, using Royal palms as vertical accents, as well as other trees, palms and shrubs. The University shall work in partnership with the Research Park to create a visible gateway at the north entrance to the campus. The entrance near Palm Beach State College shall be diversified to include Royal Palms and flowering trees.
- **Policy 1A-14:** For the main intersection of the campus loop road with the entrance drives, use flowering or shade tree accents, in conjunction with signage to highlight a sense of arrival. The planting layout shall be complemented by hardscape treatments such as concrete pavers and decorative crosswalks to reduce traffic speed. Signage shall also be added.
- **Policy 1A-15:** For the loop road and access roads, use a consistent planting palette, with shade trees on both sides of the road, and palm trees, flowering or shade trees in the median.

- **Policy 1A-16:** For primary pedestrian promenades, use a continuous row of drought-tolerant shade trees along primary pedestrian promenades, to provide a pleasant walking environment throughout the year. The walk shall be complemented with site furniture and updated lighting fixtures.
- **Policy 1A-17:** For secondary pedestrian promenades, use a continuous row of drought-tolerant shade trees or palms.
- **Policy 1A-18:** For formal spaces on campus, use planting layouts with a strong geometric structure. The planting palette should be drought tolerant and easy to maintain. The hardscape areas can include special treatments, such as pavers or natural stone.
- **Policy 1A-19:** For the residential areas, the landscape shall provide shaded areas, but also flowering trees and shrubs and plants with year-round interest. Plants shall not block lines of site and shall not create unsafe spaces. A variety of site furniture should also be provided.
- **Policy 1A-20:** The hammock areas shall be preserved, and new native trees shall be planted in the areas where trees have been lost due to the hurricane.
- **Policy 1A-21:** The outdoor study and dining spaces shall include plants that provide shade a pleasant environment for study.
- **Policy 1A-22:** Preserve and enhance the buffer planting areas located to the south of the campus and along the side edges.
- **Policy 1A-23:** Enhance campus safety by following CPTED (Crime Prevention Through Environmental Design) planting guidelines:
 - 2' maximum growncover height along pedestrian pathways
 - 3' maximum shrub height (placed minimum 6' away from walks)
 - 7'-8' minimum tree canopy clearance
- **Policy 1A-24:** General Planting Notes:
 - All planting materials shall be Florida Fancy or Florida Grade #1 as defined by the "Florida State Plant Board Standards for Nursery Stock" and "Grades and Standards for Nursery Plants," State of Florida, Department of Agriculture.



-  GATEWAY
-  MAJOR ROAD LANDSCAPE
-  MAJOR INTERSECTION TREATMENT
-  FORMAL SPACES
-  PRIMARY PEDESTRIAN PROMENADE
-  SECONDARY PEDESTRIAN PROMENADE
-  LAKE
-  LAKE BANK PLANTING
-  RECREATION AREAS
-  PARKING AREAS
-  CONSERVATION AREAS
-  RETENTION AREAS
-  RESIDENTIAL OPEN SPACE
-  COVERED WALKS
-  HAMMOCK AREAS
-  OUTDOOR STUDY AREAS
-  DINING AREAS

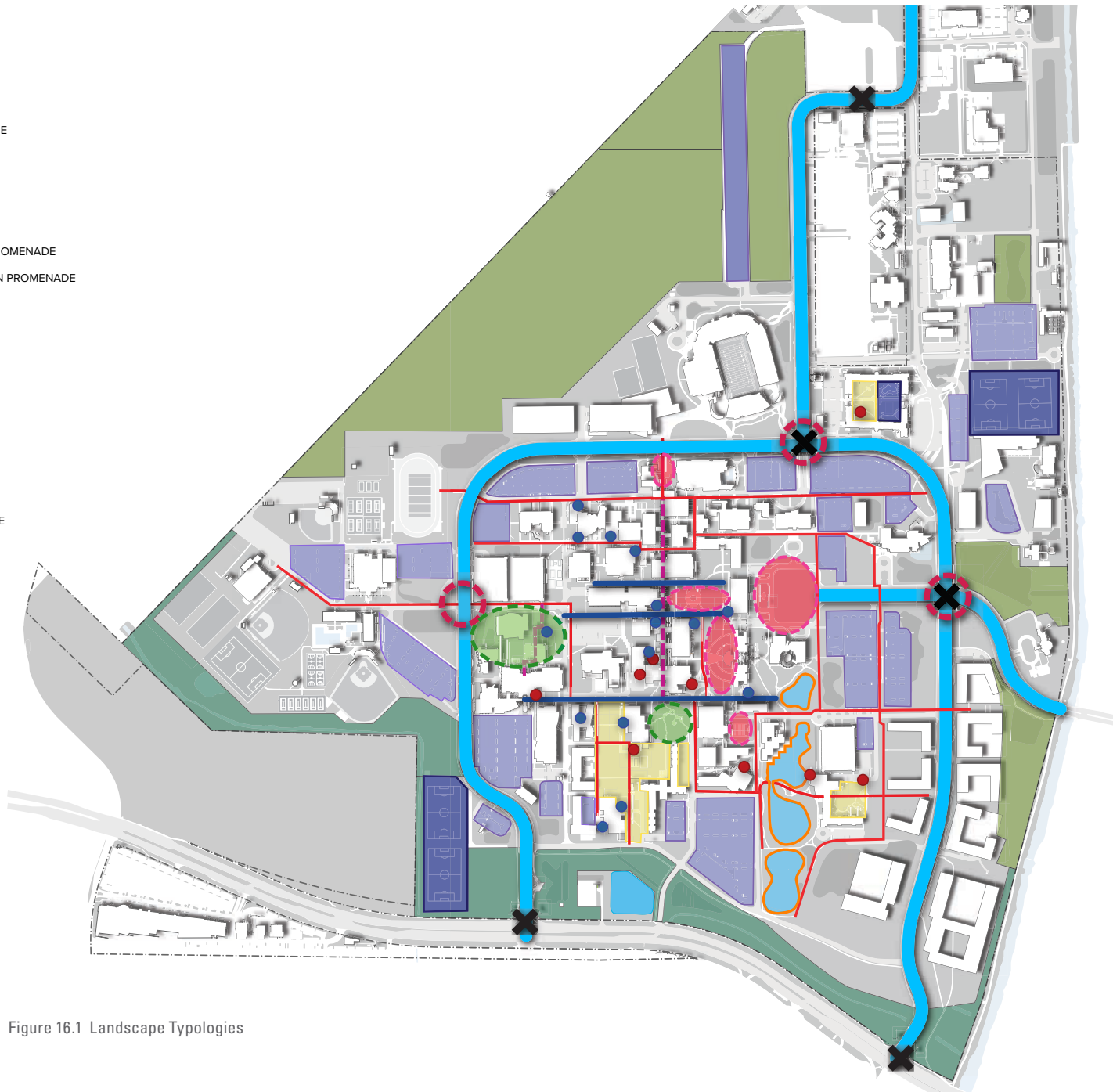
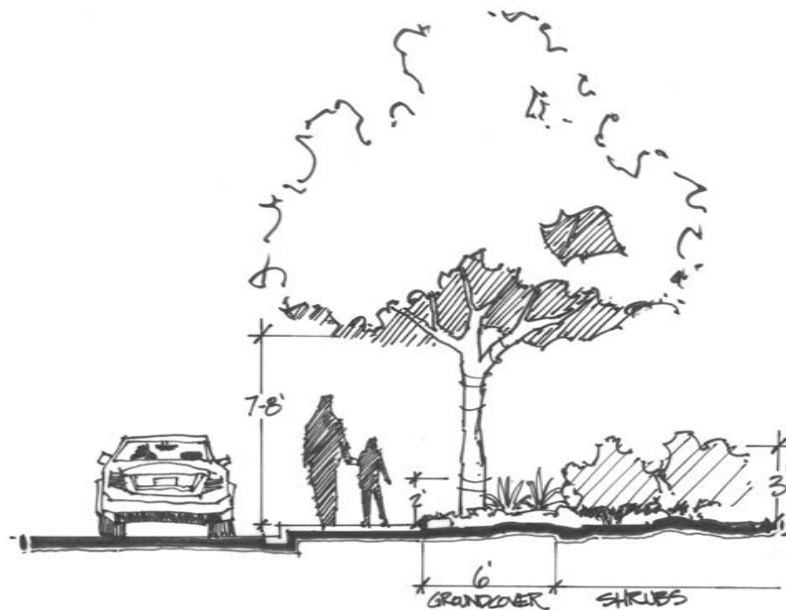


Figure 16.1 Landscape Typologies

- All trees are to be planted according to the following standards:
 - a. Shade trees must be installed at least 4 feet away from all hardscape areas.
 - b. Palm trees must be installed at least 2 feet away from hardscape areas
- Planting soil mix for trees, shrubs, and groundcover shall consist of a thoroughly blended mixture of:
 - a. Palms:
 - 90% clean D.O.T. sand
 - 10% approved topsoil/Florida Peat mixture
 - b. Royal Palms:
 - 60% clean D.O.T. sand
 - 40% approved topsoil/Florida Peat mixture
 - c. Trees/Shrubs/Groundcover
 - 70% clean D.O.T. sand
 - 30% approved topsoil/Florida Peat mixture



**Please refer to CPTED policy for more information*



Precedent photography exemplifies the strategies described in the accompanying policies

SHADING

Objective 1B: In order to enhance the outdoor experience, FAU will implement the following policies:

- **Policy 1B-1:** The University shall enhance outdoor experience and learning by providing ample shade opportunities by using planting and overhead features (covered walk, trees, shade sails, etc.).
- **Policy 1B-2:** Maximize canopy cover in all surface parking lots to create a comfortable outdoor environment and to reduce the urban heat island effect. This can be achieved by locating islands every 10 spaces and at the ends of the parking aisles, and plant with a canopy tree and groundcover.
- **Policy 1B-3:** Replenish canopy lost during Hurricane Irma in 2017 and add trees along primary and secondary pedestrian promenades.

LAKES, WATERWAYS & STORMWATER PONDS AND CANALS

The Boca Raton Campus includes a series of lakes that shall be a part of the proposed campus greenway. The land along the water's edge is called the riparian zone and is often a wetland.

Objective 1C: In order to enhance and protect the water quality, FAU will implement the following policies:

- **Policy 1C-1:** Establish shoreline vegetation to attract native wildlife and reduce erosion.
- **Policy 1C-2:** Use native aquatic plants in the riparian zone, and remove invasive, exotic species.
- **Policy 1C-3:** Establish a 'no maintenance' zone 10' back from the riparian zone to protect water from runoff and keep the waterways healthy. This area will not be mowed, fertilized, or have pesticides applied.
- **Policy 1C-4:** Use plants for riparian and 'no maintenance' zones that do well without fertilization or irrigation after establishment.
- **Policy 1C-5:** The lakes are lined and the types of plants along the lake edge shall be carefully chosen so the falling leaves do not impact water quality.
- **Policy 1C-6:** A study of the wildlife in the greenway corridor shall be performed.



- **Policy 1C-7:** Plant native, flood-tolerant species that are known to help reduce contaminants in water, to include:

Arrow Arum	<i>Peltandra virginica</i>
Golden Canna	<i>Canna flaccida</i> **
Lemon Bacopa	<i>Bacopa caroliniana</i>
Blue-Eyed Grass	<i>Sisyrinchium angustifolium</i>
Cardinal Flower	<i>Lobelia cardinalis</i>
Duck Potato	<i>Sagittaria lancifolia</i>
Mexican Water Lily	<i>Nymphaea Mexicana</i> **
Fragrant Water Lily	<i>Nymphaea odorata</i> **
Skyflower	<i>Hydrolea corymbosa</i>

**=Species that clean contaminants from the water

- **Policy 1C-8:** Implement more seating and study areas along the waterways, along with trellises or shade sails to provide shade.



FURNITURE AND LIGHTING

Objective 1D: In order to create a unified campus brand, FAU will implement the following policies:

- **Policy 1D-1:** The University shall implement standardized, consistent furniture throughout the campus to unify the campus brand.
- **Policy 1D-2:** Using similar materials and colors of furniture shall promote campus identity.
- **Policy 1D-3:** Outdoor study areas shall include a variety of seating options (study cabanas, benches, lounge furniture, tables with chairs and umbrellas, etc.), which also include charging stations and/or solar charging stations.
- **Policy 1D-3:** The University shall use the same types of lighting fixtures throughout the campus to create a cohesive feel for the campus.
- **Policy 1D-4:** The light fixtures should be optimized for efficiency and be full cut-off in order to respond to the night sky policy.



Precedent photography exemplifies the strategies described in the accompanying policies

PUBLIC ART AND SIGNAGE

Objective 1F: FAU has a tradition of using public art to create a unique and iconic campus experience and has a strong cohesiveness in its signage installations. In order to preserve these features, FAU will implement the following policies:

- **Policy 1E-1:** Continue to use public art installations and signage to create campus focal points as a method of wayfinding and hierarchy of spaces.
- **Policy 1E-2:** Introduce historical markers, signage and art in areas of the campus that would benefit from its presence.
- **Policy 1E-3:** Maintain signage standards to create cohesive signs both across the campus and throughout all campuses.
- **Policy 1E-4:** Use art and signage at main entrance to create sense of place and draw people into the center of campus.



CAMPUS SAFETY

Objective 1F: In order to enhance safety on campus, FAU will implement the following policies:

- **Policy 1F-1:** The University shall follow CPTED (Crime Prevention Through Environmental Design) principles in all aspects of design improvements on campus. The principles of CPTED are as follows:
 - Territoriality: Clearly delineating public and private space
 - Natural surveillance: Keeping intruders under observation
 - Access control: Decreasing criminal accessibility
 - Activity support: Presence of planned activity for the space
 - Maintenance: Maintain spaces to avoid neglected-looking areas which attract criminal activity
- **Policy 1F-2:** The CPTED principles shall be accomplished through the following recommendations:
 - A choice of paths to get to one destination
 - Adequate lighting
 - Conveniently placed emergency telephones
 - Creation of an escort service on campus
 - Transport service
 - Campus patrols
 - Safe access to buildings
 - Placement of parking in a way that increases safety and visibility

17 facilities maintenance

GOAL 1: Florida Atlantic University endeavors to ensure the provision of attractive buildings, with properly functioning components and systems, that are properly maintained and that provide conditions conducive to quality instruction and learning.

Objective 1A: The University aims to identify and correct facility deficiencies and needs through periodic review of existing systems and system components. To achieve this, FAU will continue to implement the following policies:

- **Policy 1A-1:** Inspect and assess the interior, exterior, and systems of all campus buildings as required to ensure compliance with applicable standards and codes, and to ensure the proper planning of repairs and replacements of building components needed to provide fully functional and efficient buildings at all times.
- **Policy 1A-2:** Ensure all campus building envelopes are inspected a minimum of once per year and components needing repairs and replacement are identified.
- **Policy 1A-3:** Ensure all campus building interior spaces and structural components are inspected on a regular basis and components needing repairs and replacement are identified.
- **Policy 1A-4:** Ensure all building systems (including but not limited to electrical, plumbing, HVAC, voice data, fire, security, and signage) are inspected as deemed appropriate by recognized industry standards for each respective system and components needing repairs and replacement are identified.
- **Policy 1A-5:** Determine priorities for maintenance and improvement projects annually based on availability of funding and review of Capital Improvement Plan. General work priorities and budget allocations shall be determined in the following order:
 - (1) health, fire safety, code requirements, universal accessibility
 - (2) instruction/research needs
 - (3) student needs
 - (4) administrative support function needs
 - (5) other needs



- **Policy 1A-6:** Develop annually a schedule for eliminating deficiencies related to conformance of University facilities with current standards based on the availability of funding and the priorities of work identified in Policy 1A-5.

Objective 1B: FAU strives to maintain all campus buildings at a level that ensures facilities that are aesthetically pleasing, clean, sanitary, and safe. To achieve this, the University will continue to implement the following policies:

- **Policy 1B-1:** Establish and follow routine and preventative maintenance procedures for all building envelope components which ensures the continued integrity of each, prevents moisture intrusion, and provides adequate insulation values throughout.
- **Policy 1B-2:** Establish and follow routine and preventative maintenance procedures for all interior components necessary to ensure aesthetically pleasing, clean, sanitary, and safe environments.
- **Policy 1B-3:** Establish and follow routine and preventative maintenance procedures for all building systems to ensure the full and efficient operation of each upon demand.

- **Policy 1B-4:** Continue to utilize a scheduled maintenance program for mechanical and electrical components and systems.
- **Policy 1B-5:** Prioritize and fund maintenance and improvement projects required to maintain adopted level of service standards and to correct any identified code or standards deficiencies based on the following criteria in order of importance:
 - (1) safety
 - (2) impact on instructional activities
 - (3) impact on administrative functions
 - (4) impact on student activities

Objective 1C: FAU strives to manage facilities in a manner which minimizes usage conflicts, overcrowding, and retrofit costs. To achieve this, the University will continue to implement the following policies:

- **Policy 1C-1:** Limit facility use changes which involve uses with significantly different operational, spatial, or mechanical requirements.
- **Policy 1C-2:** Space Utilization and Analysis will coordinate the use and capacity of buildings on a continuous basis. As requirements for additions, deletions, or renovations are made known, Space Utilization and Analysis will coordinate with the University Space Committee to identify the scope of work required, its relative priority, and the best means and method to accomplish it to ensure adequate space is available and space is being used to the best benefit of the University.

Objective 1D: The University aims to ensure the availability of sufficient funding and other resources to support projected facility maintenance requirements. To achieve this, the University will continue to implement the following policies:

- **Policy 1D-1:** Include a request for funds necessary to correct identified facility deficiencies and ensure the proper operation and maintenance of University facilities in annual Capital Improvement Plan.
- **Policy 1D-2:** Incorporate within building construction programs and funding requests projected life cycle maintenance expenses.

- **Policy 1D-3:** Pursue adequate staffing and funding necessary to provide for the maintenance of landscaping activities to ensure a reasonable appearance is presented for campus visitors.
- **Policy 1D-4:** Update the adopted campus master plan as necessary to reflect changes in maintenance priorities as identified by inspections, assessments, availability of funding, etc.



18 coastal management

GOAL 1: Florida Atlantic University endeavors to assist local agencies in protecting public health, safety, and property from the harmful effects of natural disasters.

Objective 1A: The University will, to the best of its ability, provide suitable space in University facilities for students, faculty, and employees expected to require shelter prior to and during a disaster. The University will implement the following policies:

- **Policy 1A-1:** The University recognizes that none of its current facilities are suitable for use as emergency shelters and shall continue to work with local agencies to accommodate students, faculty, and staff expected to require shelter prior to and during a disaster. Palm Beach County has been deemed to have sufficient shelters per the 2018 Statewide Emergency Shelter Plan.
- **Policy 1A-2:** In accordance with s. 1013.372 F.S., FAU is located in an area that does not have a hurricane evacuation shelter deficit. The university should continue monitoring updates to the Statewide Emergency Shelter Plan to determine if a deficit is noted in future years.
- **Policy 1A-3:** The University will make available appropriate areas of the University for use by emergency management agencies as staging areas for supplies and equipment. The University shall designate large open areas such as parking lots, recreational fields, and undeveloped fields for this use.
- **Policy 1A-4:** Information regarding University facilities suitable for use as emergency shelters and areas designated for use as staging areas by emergency management agencies shall be made available to local emergency management agencies.
- **Policy 1A-5:** The University shall incorporate procedures for the management and operation of University emergency shelters in its Comprehensive Emergency Management Plan.





appendix a: space needs analysis summary

Space Use Category	2017 Student Headcount = 23,698 Student FTE = 16,413				Future Horizon 2028 Student Headcount = 28,715 Student FTE = 22,660			
	Current ASF	Calculated Space Requirement	Difference	Percent Difference	Future Built ASF	Calculated Future Space Requirement	ASF Difference	Percent Difference
Academic & Academic Support								
Classrooms	118,477	146,615	(28,138)	(24%)	118,477	172,670	(54,193)	(46%)
Teaching Laboratories	174,459	183,270	(8,811)	(5%)	174,459	215,835	(41,376)	(24%)
Research Laboratory	122,093	236,150	(114,057)	(93%)	122,093	384,650	(262,557)	(215%)
Office-Computer	453,165	376,960	76,205	17%	453,165	433,050	20,115	4%
Study/Library	131,888	181,640	(49,752)	(38%)	131,888	250,360	(118,472)	(90%)
Gymnasium	25,363	84,240	(58,877)	(232%)	25,363	102,980	(77,617)	(306%)
Instructional Media	5,077	16,210	(11,133)	(219%)	5,077	19,330	(14,253)	(281%)
Auditorium/Exhibition	46,293	49,240	(2,947)	(6%)	46,293	67,980	(21,687)	(47%)
Campus Support	31,707	63,715	(32,008)	(101%)	31,707	82,340	(50,633)	(160%)
Residential Facilities	593	593	0	0%	593	593	0	0%
Other Assignable	26,313	26,313	0	0%	26,313	26,313	0	0%
Subtotal	1,135,428	1,364,946	(229,518)	(20%)	1,135,428	1,756,101	(620,673)	(55%)
Auxiliary & Auxiliary Support								
Classrooms	1,684	1,684	0	0%	1,684	1,684	0	0%
Teaching Laboratories	7,246	7,246	0	0%	7,246	7,246	0	0%
Research Laboratory	6,715	6,715	0	0%	6,715	6,715	0	0%
Office-Computer	34,411	34,411	0	0%	34,411	34,411	0	0%
Study/Library	6,961	6,961	0	0%	6,961	6,961	0	0%
Gymnasium	187,344	190,000	(2,656)	(1%)	187,344	210,000	(22,656)	(12%)
Instructional Media	483	483	0	0%	483	483	0	0%
Auditorium/Exhibition	22,672	22,672	0	0%	22,672	22,672	0	0%
Student Center	126,125	213,282	(87,157)	(69%)	126,125	258,435	(132,310)	(105%)
Campus Support	8,003	29,980	(21,977)	(275%)	8,003	33,490	(25,487)	(318%)
Parking Garage	516,061	516,061	0	0%	516,061	516,061	0	0%
Residential Facilities	939,309	938,700	609	0%	939,309	2,063,700	(1,124,391)	(120%)
Other Assignable	106,167	106,167	0	0%	106,167	106,167	0	0%
Subtotal	1,963,181	2,074,362	(111,181)	(6%)	1,963,181	3,268,025	(1,304,844)	(66%)
TOTAL	3,098,609	3,439,308	(340,699)	(11%)	3,098,609	5,024,126	(1,925,517)	(62%)

Figure A.1 Space Needs Analysis Summary: Boca Raton Campus

The space needs analysis above was performed by applying normative space guidelines using data provided by FAU. Reliability of the findings of any space needs study depends on several factors, including the quality of the data, the appropriateness of the space standards used, and the validity of the enrollment projections. The analysis utilized space needs generation factors, formulas and standards for Florida Colleges as dictated by the State Board of Education when available. The analysis has not been validated and is not intended for use in determining project funding.