

Future Land Use Supporting Data

The purpose of the Land Use Element is to describe the existing and future land use patterns to be developed on the University and to address how this land use pattern will be coordinated with that planned by the host community.

1. Inventory and Analysis of Existing Conditions

1.a. Facilities Within the State

Florida Atlantic University owns and leases properties in Palm Beach County, Broward County, and St. Lucie County. Refer to **Figure 4.1** and **4.2**. The academic campuses extend in a linear fashion north to south, all within easy access of Interstate 95. The service area for Florida Atlantic University, according to the Guidelines of the Board of Trustees, includes the three counties mentioned above plus Indian River, Martin, and Okeechobee. The database and planning process for University properties other than Davie will be provided in future documentation as developed by the University. Sites other than the David Campus include:

- **Main Campus, Boca Raton:** This Main Campus is located at 777 Glades Road in Boca Raton. The Campus was founded in 1964 on an old airfield. This Campus is the main seat for FAU Administration and Academic Programs. This Campus continues to grow steadily in all aspects including academics, housing, and recreation facilities.
- **MacArthur Campus: (North Palm Beach) 5353 Parkside Drive, Jupiter, Florida.** Containing the FAU Honors College, this campus is located within Abacoa, a traditional neighborhood development. The college contains dormitory space, classroom buildings, a library and dining facility. This campus will continue to develop with a growth in enrollment.
- **Treasure Coast Campus, Port St. Lucie.** Located at 500 N.W. University Blvd., Port St. Lucie, Florida. This campus and facilities such as the library are shared with the local community college, Indian River Community College. This campus is also strictly a commuter campus.

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- **Commercial Campus:** Located at 1515 West Commercial Boulevard in northern Ft. Lauderdale. There are two permanent buildings on four acres of land which has been leased by the University from the City of Ft. Lauderdale for a period of 50 years, ending in 2020. This campus has continuing education as its main focus.
- **Pine Jog Environmental Sciences Center:** Located at 6301 Summit Boulevard in West Palm Beach. There are 5 permanent buildings on 60 acres of land, and this facility is dedicated to environmental science education for children and adults.
- **Downtown Ft. Lauderdale Campus University Tower, Ft. Lauderdale:** Located on 111 Las Olas Boulevard. The Rubin Askew Tower is a 10-story structure on less than 1 ½ acres which, was funded by the Florida Legislature as a joint-use facility to house academic programs offered by Florida Atlantic University and Broward Community College.
- **Ocean Beach Laboratory Special Instructional Site:** Located on South Ocean Boulevard in Boca Raton, this site is the location for studies which are conducted on the impact of the marine environment on corrosion, corrosion-resistant materials, and protective deposits which are created by seal life. There are no buildings on the site.
- **Gumbo Limbo Environmental Education Center (Marine Biology):** Located in a unique public-educational complex in Red Reef Park in Boca Raton. FAU occupies a building dedicated to Marine Biology. Other facilities not part of FAU include classrooms, interpretive displays, aquariums, and a boardwalk through a native vegetation preservation zone.

Discussion of the Davie Campus**1.b. Facilities Within the Host Community – Davie Campus**

The Davie Campus consists of 13 modular buildings, two permanent academic buildings, a wellness center and various support spaces some of which, such as the Library and childcare center, are shared with BCC.

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The Davie Campus has always consisted of 18 acres leased from Broward Community College. The difference in land area between the previous 1995 Master Plan and this current plan is the acquisition of 20 acres of property from US/IFAS. This brings the total FAU Davie Campus to 38 acres.

1.c. Student Enrollment Projections

Refer to **Table 2.7** in Element 2.

1.d. Legal Descriptions of How Lands Acquired

The Office of Space Utilization and Analysis in conjunction with the Office of the University Architect and Legal Counsel (re: legal descriptions) maintain a database of property assigned to Florida Atlantic University (e.g. leases, easements) that includes legal descriptions.

1.e. Title Interest Held by the Board of Trustees of the Internal Improvement Trust Fund

There are no known reservations or encumbrances on University property other than those easements granted to outside parties such as local governments that involve utility right-of-way, road projects, and the like. Information relating to these easements can be found in the State Lands Management Plan.

1.f. Designated Management

Generally speaking, all property assigned to Florida Atlantic University is designated as a single use and that use is educational.

1.g. Alternative (Non-Educational) Use of Lease Property

All property assigned to Florida Atlantic University is utilized in support of the University's educational, research and public enterprises.

1.h. Proximity of University Property to Other Significant Local, State or Federal Land or Water Resources

The designation of lands adjacent to the University as "Significant" has not been perceived for the Davie Campus. The campus is bounded on all sides by other educational institutions. S.W. 30th Street runs along the southern boundary of the new

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western portion of the campus. College Avenue runs north to south, bisecting the campus.

1.i. University Property Within an Aquatic Preserve or Area of Critical State concern

The existing campus is not in or adjacent to an aquatic preserve. It is not within a designated area of critical state concern nor an area under study for such designation.

1.j. Existing Land uses and Zoning Off Campus (Context Area)

The Davie campus sits in the center of the South Florida Educational Center and is surrounded by other schools on all sides. Existing land uses in the context area immediately adjacent to the Davie Campus are shown in **Figure 4.3**. These land uses coincide with the Town of Davie Comprehensive Plan (1998), and are not anticipated to change in the near future. Generally, they are follows:

- Institutional

1.k. Existing Land Uses on Campus

The existing land use pattern at the FAU Davie Campus has evolved in response to two main factors: the presence of old airfield pavement pattern now used for parking and vehicular circulation and the original BCC Campus. There are no housing facilities and no recreation facilities at this Branch Campus. The core campus, as it currently stands, is well within convenient pedestrian scale limitations, and it is favorably laid out to permit a tighter concentration of elements, rather than to continue to sprawl outward past the parking facilities.

Refer to **Figure 4.4** for a description of existing land uses at the Davie Campus, broken down into the following classifications:

- Academic Areas – Zones primarily occupied by or designated for classrooms, teaching laboratories, research laboratories, and library spaces.
- Recreational Areas and Open Space – None existing or planned.
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- Utilities – Central and satellite utility plants for chilled water, steam and hot water, electricity, and related activities and facilities.

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- Parking – Land areas used for automobile parking – both surface lots and garages.
- Vacant or Undeveloped – Land for which no use has been determined.

1.l. Other Optional Categories of Land use

None required.

1.m. Acreage and Density of Land Uses

See discussion under **Section 2.a** of this element.

1.n. Natural Resources

No areas on campus have been identified as natural resource areas.

1.n.1. Beaches and Shores

None

1.n.2. Surface Waters

None

1.n.3. Wetlands

None

1.n.4. Native Vegetative Areas

The Palm Grove area located on the former UF/IFAS property contains many plants that are native to the South Florida environment. This area needs careful attention and management during the planning horizon.

1.n.5. Minerals and Soils

No soil information has been determined at this time.

1.o. Historic and Archaeological Resources

None

2. Future Needs/Requirements**2.a. Analysis of the Amount of land that will be Required to Accommodate the Planned**

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Future Enrollment of the University

With the acquisition of the additional 20 acres, the FAU Davie Campus will be able to accommodate future projected growth.

TABLE 4.1 Comparison of Florida Universities

	UF	FSU	FAM U	USF	FAU	UW F	UCF	FIU	UNF	FGC U	NC F
Acres	2,081	473.9 w/branch campus	419	1,920. 9 Total (1,481 main)	1,100	1,600	1,415 (1,455.3 w/branch campus)	573.4	1,000	760	140
Headcount	47,963	36,720	12,467	39,375	23,996	9,452	38,795	33,799	13,460	5,236	650
Head/Acre	23.0	77.48	29.75	20.50	21.81	5.91	26.65	58.94	13.46	6.89	4.64

Source: State University System Website 2004.

The moderate densities on campus give a feeling of open spaces with many low profile buildings. Despite the positive aspects of a moderate density, such as the room for expansion of recreation facilities, parking, and academic and support buildings, there is a universal desire on campus to create a compact pedestrian oriented campus. Being a commuter school, parking is a major issue and walking distance is a real concern for students. Keeping densities at their present level as more facilities are added is not going to help this situation. Therefore, the following guidelines are apparent to permit increased building area and densities without decreasing the pedestrian and open space character of the campus:

- build more facilities within the inner academic campus zone;
- redevelop underdeveloped areas up to desirable levels of density;
- preserve the open space character on the perimeter of campus with the addition of nature preserves in these areas;
- develop academic courtyards or quadrangles;
- provide shade for the hot Florida sun and protection from blowing rain.
- provide sufficient campus water management.

Table 4.1 shows the comparable size and densities of other Florida Universities.

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2.a.1. Categories of Land Uses and Their Densities

Refer to **Table 4.2** for existing campus land use and densities. For the purposes of this table and since FAU has no need for the existing facilities on the former UF/IFAS property, such property has been calculated as vacant. **Figure 4.4** locates the existing campus land uses by zone.

TABLE 4.2 Existing Campus Land Use Floor Area Ratios

	Total Building G.S.F.	Ground Floor Coverage S.F.	Total Land Use S.F.	Average Number of Floors	Floor Area Ratio
Existing East Campus	200,047	66,185	784,080	1.35	.26
West Campus	0	0	871,200		
Conservation Areas					
Total			1,655,280		

Source: Educational Plant Survey April 16-18, 2001.

2.a.2. Estimated Gross Acreage

The Davie Campus, including both the existing leased space and the newly acquired property consists of 38 acres.

2.a.3. Description of Methodology

To reach the goal of applying Floor Area Ratios (F.A.R.) to proposed land use zones as a means of estimating the development capacity of the land, it was first necessary to examine existing conditions on campus.

By comparing the F.A.R. and G.C.R. of a zone with the reported perceptions of that area, it was determined that these density factors fairly represented and consistently measured

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what the commenters felt about the spatial quality desired for the University. It is assumed that by applying these factors to the various building zones, an appropriate capacity can be determined and allocated. Of course, the success of the buildings and spaces ultimately depends on the quality of design by the architect.

TABLE 4.4 Future Campus Ground Coverage Ratio and Floor Area Ratio Comparison (2014-2015)

	Total Building G.S.F.	Total Ground Floor S.F.	Total Land Use S.F.	Average Floors	Floor Area Ratio
East Campus	730,647	128,750	784,080	3.85	.93
West Campus	423,600	105,900	871,200	4.3	.48
Total	1,154,247	234,650	1,655,280	4.1	.71

Source: PGAL Master Plan 2004

2.b. Projected Future Academic Space Needs

Refer to **Table 4.5** below for future net academic space need projections (2014-2015). These are described more fully in **Academic Facilities Element 5** and **Table 5.7**.

TABLE 4.5 Future Net Academic Space Needs – Davie (For Fall 2014)

	Classrooms	Teach Labs	Research Labs	Study
Davie Campus	7,243	14,668	(2,495)	25,637

Source: Analysis of Space Needs by Category – Form B; Rec'd from R. Richman 9/29/04.

Projected Future Space and Building Needs for Academic Facilities

Refer to **Table 4.6** for future Academic Building area needs.

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TABLE 4.6 Future Academic Building Area Needs – Davie

Project	Renovation/Addition /New Construction	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)
FAU/UF Joint-Use Facility	N	110,000	165,000
Academic Building III	N	50,000	75,000
USGS Joint-Use Facility	N	31,250	50,000
Academic Building	N	43,300	65,000
Academic Building	N	43,300	65,000

Source: CIP 7/22/04 / Davie MP CIP 6/30/04
 GSF = NASF x 1.5

2.c. Projected Future Support Space Needs

Refer to **Table 4.7** below for future net support space need projections (2014-2015). These are described more fully in **Support Facilities Element 6** and **Table 6.7**.

TABLE 4.7 Projection of Future Support Building Area Needs – Davie

	Instructional Media Facilities	Student z Academic Support	Campus Support Services
Davie Campus	1,551	1934	12,548

Source: Analysis of Space Needs By Category – Form B; Sept. 2003 Davie Campus Form

Projected Future Space and Building Needs for Support Facilities

Refer to **Table 4.9** for Future Athletic and Recreation Facility needs. **Table 4.13** identifies future Support Gross Building area needs.

Projection of Future Athletic Facility Needs – Davie

No facilities are projected; however, general use fields have been requested by students.

TABLE 4.8 Projection of Future Recreation Facility Needs – Davie

Field/Court	Number
Jogging Trail	1
Wellness Center	1

Source: PGAL Master Plan 2004, FAU Administration

2.d. Suitability for Use of Existing Vacant or Undeveloped Land on Campus

The FAU Davie campus is a low density campus. In order to enhance a pedestrian oriented inner campus, facilities will need to be located in the existing vacant land areas near the center of campus. Infill projects should be developed along pedestrian spines or located as to reinforce the courtyard concept.

Existing campus constraints which will have an impact on future development as shown in **Figure 4.5** include the roadways and institutions adjacent to the University that limit further expansion.

2.d.1. Gross Vacant or Undeveloped Land Area

From **Table 4.3** it was determined that FAU has a total of 1,655,280 G.S.F. or 22.4 acres. This acreage should be more than enough for campus expansion in the foreseeable future.

2.d.2. Soils

There are no problem soils affecting the master plan.

2.d.3. Topography

The Davie Campus is very flat, with very little change in grade. The entire campus is 10 feet (+ 5”) above MSL, with a maximum elevation of 14 feet.

2.e. Consistency with the State Lands Management Plan

The recommended Concept Plan Scenario is consistent with the *Land Management Plan*. Recommended campus growth should occur in the academic core and the creation of pedestrian campus is highly desired. It is also desired to retain the natural environmental preserve. Land uses proposed are consistent and in compliance with the original planned use of the FAU property.

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There are no surplus properties at the Davie Campus. As shown in the recommended Concept Plan Scenario the site utilization is maximized for the existing campus to allow for continued long term expansion of the university beyond this planning time frame.

2.g. Potential Land Areas for Expansion in the Context Area

Not applicable to this site.

2.g.1. Existing Land Use

Refer to **Figure 4.3** for the present land use in the context area.

2.g.2. Property values

Not applicable to this site.

2.g.4. Future Planned Land Use

Future planned land use will be consistent with the current land use categories.

2.g.5. Building Conditions

The buildings on the Davie Campus are all relatively new and in good condition with the exception of the modular buildings which were not intended to be permanent facilities and although maintained, are not in satisfactory condition for prolonged use.

2.g.6. Property Ownership

FAU leases the 18 acre existing campus from BCC. FAU has acquired from UF/IFAS an additional 20 acre property across the street from the existing campus.

2.g.7. Potential Acquisition and Relocation Costs

FAU will incur the cost of relocation and replacement of the UF/IFAS Palm Grove. UF/IFAS estimates this cost to be \$250,000 at this time. FAU has also agreed to provide UF/IFAS with academic space in future buildings.

2.h. Identify and Evaluate Alternatives to Additional Land Acquisition

There is no additional land currently contiguous to the campus that is available for future expansion.

SUPPORTING DATA**MASTER PLAN****4 Future Land Use****2.h.1. Potentials for Increasing Height, Intensity or Density on Campus**

An increase in building height above the existing four stories is not recommended. Increasing the intensity and density of the campus is recommended for expansion. The greater density will enhance the overall campus appearance and sense of place.

2.h.2. Potentials for Increasing the Utilization of Existing and Future Academic Spaces to Reduce Future Facility Needs in order to fit within Existing Land Resources

All facilities are appropriately utilized as required.

2.h.3. Potentials for Reducing the Planned Future Student Enrollment

Reduction of future student enrollment does not seem possible or necessary.

2.h.4. Potentials for Transfer of Programs to Existing University Satellite Sites

The Davie Campus is a satellite site; however, many courses have already been transferred to the downtown campus.

2.h.5. Transfer of Programs to other Existing Institutions (Community Colleges, etc.) which may have Excess Land Development Capacity

FAU coordinates with BCC when necessary for 2+2 programs where students attend BCC courses for the first two years and finish their degree at the University.

2.i. On-Campus constraints

Refer to **Figure 4.5** showing On-Campus Constraints for the Davie campus.

2.i.1. Protected Vegetative/Wildlife/Wetlands/Waters

It is recommended that FAU attempt to preserve the UF/IFAS plantings for campus enhancement.

2.i.3. FEMA-Defined Flood Hazard Areas

The campus is in the 100-year floodplain. The campus routinely floods during heavy rainfall. Refer to **Figure 4.5** and **Figure 13.1**. This area makes up approximately 100% of the FAU Campus. Increased water management is necessary.

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Refer to **Elements 9 and 10** in this report for Drainage and Utility Easements on the FAU Campus.

2.i.5. Host Community Land Uses**2.i.6. Hazard Areas**

Not applicable to this site.

2.i.7. Building Encumbrances

Not applicable to this site.

2.i. Off-Campus Constraints to Campus Development

Adjacent businesses and institutions are currently under a moratorium on expansion until a traffic mitigation and roadway upgrade program is funded and in place.

2.j.1. Availability of Public Facilities and Services

A public shuttle bus services this campus daily. A shuttle from the nearest Tri-rail station also serves the Campus.

2.j.2. Traffic Capacity

College Avenue is at or beyond capacity. The Town of Davie is currently working to improve the roadway.

2.j.3. Others

None

2.k. Town of Davie Goals Affecting the University

The Town of Davie is currently working with the members of the South Florida Education Center to enhance the immediate area and promote the value of the location of multiple institutions at one location.