
SUPPORTING DATA

4 Future Land Use

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**. The academic campuses extend in a linear fashion north to south, all within easy access of Interstate 95. The service area for Florida Atlantic, according to Board of Regents guidelines, includes the three counties mentioned above plus Indian River, Martin, and Okeechobee. The databases and planning processes for University properties in Boca Raton and Broward County were provided in prior documentation dated 15 September 95 and for the Northern Palm Beach Campus in Jupiter dated 10 July 98. This study is focused on the Treasure Coast Campus in St. Lucie West. Refer to **Figure 4.2**.

1.b. Facilities Within the Host Community

The Treasure Coast Campus of Florida Atlantic University is located within the St. Lucie West planned community in St. Lucie County. The 50-acre campus is easily accessible from all the major north-south highways (i.e. US 1, Interstate 95, and the Florida Turnpike). Refer to **Figure 3.4** for the location of the site within the context area. The campus is currently not accessible from any secondary roadways from the north. University Drive and California Blvd. form the southern and eastern borders of the site. Refer to **Figure 3.5** for location of the campus and land uses in the surrounding area.

1.c. Student Enrollment Projections

Refer to **Element 2**.

SUPPORTING DATA**4 Future Land Use****1.d. Legal Descriptions of How Lands Acquired**

The Legal Description of the property from Exhibit "A" of the Lease Agreement is as follows:

A parcel of land lying in Sections 23, 24, 25, and 26, Township 36 South, Range 39 East, St. Lucie County, Florida being more particularly as follows:

Begin at the Southeast corner of Parcel 29A, as shown on St. Lucie West Plat No. 1, Prima Vista Boulevard, as recorded in Plat Book 26, Pages 8, 8A, through 8G, Public Records of St. Lucie County, Florida; thence run North 03°20'05" West along the Easterly line of said Parcel 29A a distance of 1328.73 feet; thence run North 80°04'07" East a distance of 886.64 feet; thence run North 89°19'33" East a distance of 628.92 feet; thence run South 00°40'27" East a distance of 634.29 feet to point of Curvature; thence run Southwesterly along the arc of a curve concave to the Northwest with a radius of 1456.74 feet and a central angle of 30°40'27" a distance of 779.89 feet to a point of reverse curvature; thence run Southwesterly along the curve concave to the Southeast with a radius of 1576.74 feet and a central angle of 11°51'49" a distance of 326.48 feet to a point of reverse curvature; thence run Southwesterly along the arc of a curve concave to the Northwest with a radius of 25.00 feet and central angle of 77°10'49" distance of 33.68 feet to a point of compound curvature; thence run Northwesterly along the arc of a curve concave to the Northeast with radius of 3744.72 feet and central angle of 08°34'36" a distance of 560.55 feet to a point of tangency; thence run North 76°06'24" West a distance of 192.72 feet to a point of curvature; thence run Northwesterly along the arc of a curve concave to the Southwest with a radius of 3858.28 feet and central angle of 05°08'14" a distance of 345.95 feet to the Point of Beginning.

Also known as Parcel 27C, Tract 27G, Conservation/Buffer Zone Tracts 41B, 42B, and 44, St. Lucie West Plat No. 34-Parcel 27-Phase 1, according to the Plat thereof on file in the Office of Clerk of Circuit Court in and for St. Lucie County, Florida recorded in Plat Book 34, Page 2, and 2A through 2E; said land situate, lying and being in St. Lucie County, Florida.

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- 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, wetlands and the like. Information relating to these easements can be found in the Appendix in the Plat.
- 1.f. Designated Management**
All property assigned to Florida Atlantic University for the Treasure Coast Campus is designated as a single use and that use is educational.
- 1.g. Alternative (Non-Educational) Use of Leased 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**
Indian River Community College (IRCC) is north and adjacent to the Treasure Coast University campus.
- 1.i. University Property Within an Aquatic Preserve or Area of Critical State Concern**
In accordance with the University's State Lands Management Plan, the Treasure Coast Campus is not located within an aquatic preserve or a designated area of critical state concern.
- 1.j. Existing Land Uses and Zoning Off Campus (Context Area)**
Existing land uses in the context areas immediately adjacent to the Campus are shown in **Figure 4.2**. These land uses coincide with the Comprehensive Plan, and are not anticipated to change in the near future. Generally, they are as follows:
- Residential
 - Commercial
 - Recreation and Open Space
 - Industrial

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1.k. Existing Land Uses

The existing site contains one educational building, the balance of the site is vacant or undeveloped. (See Figure 3.2)

1.l. Other Optional Categories of Land Use

None required.

1.m. Acreage and Density of Land Uses

Since there is no existing campus, approximate acreages and general ranges of density or intensity of use do not exist, therefore this data requirement does not apply.

1.n. Natural Resources

Wetland areas on campus have been identified as natural resource areas. See Element 13, Figures 13.1, 13.2 and 13.5.

1.n.1 Beaches and Shores

None

1.n.2 Surface Waters

Surface waters exist on-site. See Element 13 for their discussion.

1.n.3 Wetlands

Wetlands have been identified on-site. See Element 13 for further discussion.

1.n.4 Native Vegetative Areas

The majority of the undeveloped site consists of pine flatwood with small pockets of shrub wetland.

1.n.5 Minerals and Soils

The soil conditions on the campus are defined in the Appendix in the Soils Report. In general, the characteristics of the soils are: nearly level, poorly drained, and sandy throughout. See also Element 13, Figures 13.1, 13.2 and 13.5.

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1.o. Historic and Archeological Resources

None

2. Future Needs/Requirements

2.a. Analysis of the Amount of Land that will be Required to Accommodate the Planned Future Enrollment of the University

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

Since there is no significant development on the Treasure Coast site, no land use densities can be reported. However, for the master plan of the Boca Raton Campus completed in 1995, a study of the land uses and densities expressed in Floor Area Ratios (FARs) resulted in a methodology and parameters that FAU has adopted for general application on all campuses. **Table 4.1** is excerpted from the Boca Raton Campus Master Plan.

SUPPORTING DATA**4 Future Land Use****Table 4.1 Existing Campus Land Use Floor Area Ratios - Boca Raton Campus**

	Total Building G.S.F.	Ground Floor Coverage S.F.	Total Land Use S.F.	Average Number of Floors	Floor Area Ratio
Academic	1,238,919	843,706	1,824,255	1.5	0.68
Support	341,745	261,912	3,184,192	1.3	0.11
Residential	243,019	100,080	403,338	2.4	0.60
Recreation & Open Space	840	840	2,462,402	1	0.0003
Utilities	4,410	4,410	42,589	1	0.10
Parking	-	-	2,943,294	-	-
Vacant or Undeveloped Land	-	-	17,975,690	-	-
Research	4,386	4,386	15,000	1	0.29
Conservation Areas	-	-	3,645,000	-	-
Total	1,855,746	1,219,808	32,495,760 (746 acs)	1.5	0.06

Source: FAU Physical Plant, January 1993; FAU Building Information, May 1993

2.a.2. Estimated Gross Acreage

As part of the master plan research, the following tabulations (See **Table 4.2**) have been established for allocating the 50 acres among the recognized land uses.

SUPPORTING DATA**4 Future Land Use****Table 4.2 Land Use Summary**

CATEGORY	ACRES	PERCENT
Academic	3.5	7.0
Support	2.5	5.0
Recreation and Open Spaces	16.0	32.0
Parking	10.0	20.0
Roadways and Circulation	2.0	4.0
Buffers/Setbacks/Easements	8.0	16.0
Jurisdictional Wetlands	3.0	6.0
Open Water	5.0	10.0
TOTAL	50.0	100.0

Source: Concept Plans FAU Treasure Coast Branch Campus July 1998

2.a.3. Description of Methodology

To be able to apply Floor Area Ratios (FAR's) to proposed land use zones as a means of estimating the development capacity of the land, it was first necessary to define the desired FAR. The following description of the methodology is excerpted from the Boca Raton Master Plan Supporting Documents. FAR parameters appropriate for the St. Lucie West context will be adopted for the Treasure Coast Campus and reported in the G.O.P.'s.

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 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.

It was determined that by using the average F.A.R. from the existing Core/Library South Area, a reasonable test of the amount of land needed for the known building needs could be made and that by inspection an estimate of future suitability could result. It was clear that

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there is adequate land for the proposed development and recognizing that "real" recommended F.A.R.'s would be higher than the test case, it was concluded that FAU could achieve the desired densities for future development. The future inner campus character would include buildings arranged along pedestrian walkways or courtyards with ample green open spaces and seating areas all within easy walking distances.

2.b. Projected Future Academic Space Needs

Refer to **Table 4.3** below for future net academic space need projections (1999, 2004 & 2009). These are described more fully in **Academic Facilities Element 5**.

Table 4.3 Future Academic Space Needs - Net Area

Year	Academic Space
1999	(20,356)
2004	(16,624)
2009	(12,734)

Source: FAU Facilities Planning, Approved projections 3/29/02.

Note: Construction of 3 new facilities on the Treasure Coast Campus was completed during the mater plan process. The addition of the new facilities is reflected in the surplus of existing space.

2.c. Projected Future Support Space Needs

Refer to **Table 4.4** below for future net support space need projections (1999, 2004 & 2009). These are described more fully in **Support Facilities Element 6**.

Table 4.4 Future Support Building Space Needs - Net Area

Year	Support Space
1999	(12,460)
2004	(11,319)
2009	(10,096)

Source: FAU Facilities Planning, Approved projections 3/29/02.

Note: Construction of 3 new facilities on the Treasure Coast Campus was completed during the mater plan process. The addition of the new facilities is reflected in the surplus of existing space.

Refer to **Table 4.5** below for a projection of future Athletic and Recreation Facility needs.

SUPPORTING DATA**4 Future Land Use****Table 4.5 Future Athletic and Recreation Facility Needs**

Facility	Number
Basketball	1
Tennis	1
Sand Volleyball	1

Source: Worksession and FAU Administration

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

All areas of the 50-acre campus site are suitable for the projected uses of the University.

2.d.1 Gross Vacant or Undeveloped Land Area

From the survey, it was determined that the total site has 50 acres. The usable site area after subtracting wetlands is 42 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 Treasure Coast Campus is very flat, with very little change in grade. The entire campus is approximately +25' above MSL.

2.d.4 Natural Resources

Areas on campus (i.e., wetlands) have been identified as natural resource areas. See **Element 13** for further discussion.

2.d.5 Historic and Archaeological Resources

Not applicable to this site.

2.e. Opportunities for Redevelopment and for Elimination of Uses that are Inconsistent with the University's Character and Proposed Future Land Uses

Since there is no existing Campus, opportunities for redevelopment and for elimination of inconsistent uses do not exist, therefore this data requirement does not apply.

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2.f. 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 a pedestrian campus is highly desired.

2.g. Future Additional Land Requirements

No additional land is required to meet the projected future needs.

2.h. Assessment of any Surplus Lands

There is no surplus property on the Campus. As shown in the recommended Concept Plan Scenario the site utilization is maximized to allow for continued long-term expansion of the university beyond this planning time frame.

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

Not applicable to this site.

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

Not applicable to this site.

2.k. On-Campus Constraints

Refer to **Figure 4.3** showing On-Campus Constraints for the Treasure Coast Campus.

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

Refer to Element 13, Conservation. An environmental review is needed to determine if any protected vegetative or wildlife exists on campus.

2.k.2. Federal Development Restrictions

The U.S. Army Corps of Engineers (COE) has claimed the platted wetlands and the man-made lake. These areas are restricted and cannot be developed or impacted by future adjacent development.

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

Refer to Element 9, Stormwater Management Sub-Element.

2.k.4. Drainage/Utility Easements

A title search is needed to determine Drainage and Utility Easements on the Campus.

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2.k.5. Host Community Land Uses

Refer to **Figure 3.5** for land use designation in the context area.

2.k.6. Hazard Areas

None.

2.k.7. Building Encumbrances

None.

2.l. Off-Campus Constraints to Campus Development

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

As part of the St. Lucie West DRI Development Order, the local utilities serving the site have pledged adequate utilities and services to the University and the anticipated traffic capacity on roadways within the context area is sufficient to support the planned growth of the University

2.l.2. Traffic Capacity

Off-campus constraints that may limit the amount or location of future campus development are defined by an analysis of traffic capacity on roadways within the context area. Refer to **Element 11**.

2.l.3. Others

None.

2.m. Host Community Goals Affecting the University

None.