4.0 FUTURE LAND USE ELEMENT

(1) DATA AND ANALYSIS REQUIREMENTS

a) Inventory and Assessment of existing and projected space and building needs, existing land uses and developments on university property, and land use as defined by the University's own land use categories, inventory approximate acreage and general range of uses of structures.

EXISTING & PROJECTED FUTURE SPACE AND BUILDING NEEDS ON THE MODESTO A. MAIDIQUE CAMPUS (MMC), ENGINEERING CENTER (EC), AND BISCAYNE BAY CAMPUS (BBC)

Projections for future net academic/research space, support space and building area needs for each campus location are depicted in Table 4.1-4.3 (Attached large format). Projections represent university wide calculated deficiencies or surpluses, determined through analysis using the State of Florida Space Use Standards (national standards used where State of Florida standards do not exist) and enrollment projections provided by FIU. See Chapter 2, Table 2.3, Table 2.8 and Table 2.9 for Full Time Equivalent (FTE) and Headcount (HC) projections. The analysis identifies total deficiency and surplus space required to meet the projected enrollment growth for the years 2025 and 2030. In addition to building needs, this analysis will be used to develop an understanding for future land required to accommodate growth in student enrollment that may occur in a longer time horizon.

Translating Future Net and Gross Building Area Requirements into Building "Increments"

FIGURES 4.1, 4.2 and 4.3 are graphic representations of the overall campus space needs projected for 2025 and 2030. These were determined by the campus-level Space Needs Analysis. Future facility planning modules, including previous capital improvement planning projects, are shown to the scale and massing of current campus construction. To develop these modules, the needed assignable square footage per campus space type has been multiplied by an appropriate grossing factor that meets university standards and best national higher education practices. The scale of these modules reflects the most efficient use of internal space - with appropriate floor widths and lengths for student-centered learning environments – as well as sustainable design criteria for each type of building use classification.

Facility planning modules are organized around the following uses. Modules may be stacked and/or integrated to create a compact campus core, preserve limited open space, strengthen campus walkability, and reinforce sustainability concepts:

- Academic: 75 feet wide; six stories
- Research: 85 feet wide; six stories
- Clinical: 85 feet wide; three stories
- Support: sized per specific use; three stories
- Housing: 60 feet – six stories on MMC, 100+ feet – 10 to 12 stories on BBC
- Sports & Recreation: sized per NCAA and NIRSA standards

Although the facility planning modules are colored to reflect their primary use as each facility construction project is further defined, it will encompass a variety of functions in addition to its primary use. The proposed scale and massing flexibly incorporate multi-purpose facilities and changed building usage over time.

The diagram indicates both Capital Improvement Projects (CIP) and the University's projected space needs for 2025 and 2030. The CIP projects are assumed to be priority projects. The additional modules needed to meet projected needs are dependent on continued successful

funding strategies, partnerships, and enrollment growth.

EXISTING LAND USES AND DEVELOPMENTS ON UNIVERSITY PROPERTY

MODESTO A. MAIDIQUE CAMPUS

During World War II, Miami-Dade County purchased a 640-acre parcel located some 11 miles west of the City of Miami limits for the development of an airport intended for student instruction and general (non-commercial carrier) aviation. The airport was built with three runways in 1947 and by 1958 there were 1,100 to 1,300 flight operations per day requiring the placement of a control tower, which was relocated from Miami International Airport and placed in service in 1959. By 1960, Tamiami Airport ranked as the third busiest in the nation, behind O'Hare and Miami International. This very high level of, mostly student pilot, flight activity coupled with conflicts with Miami International air traffic led to the closure of the airport and the construction of the New Tamiami Airport in Southwest Miami-Dade County. After its closure, 342.2 acres of the site were donated to the State of Florida for the construction of FIU. The remaining 300 acres were retained for development of Tamiami Park and later, the Miami-Dade County Fair and Exposition.

Since it opened its doors to the public, the name of the campus has changed several times. Below is a list of the various names:

- Tamiami Park
- South Campus
- University Park
- Modesto A. Maidique

BISCAYNE BAY CAMPUS

Biscayne Bay Campus was also part of a scheme to build an airport during World War II. In 1945, the 1,707-acre Graves Tract was purchased for the construction of a major metropolitan airport. The airport plans subsequently shifted to the Pan American Airways field for development of what is now Miami International Airport. A large portion of the Graves tract was sold in 1951 to the Interama Authority for the creation of the world's first permanent international trade and cultural exposition center. Clearing, dredging, and filling of this environmentally sensitive site continued into the 1960's, but by the end of the decade the project was abandoned. The only remnant of the project, other than hundreds of acres of filled bayfront wetlands, is the original Trade Center building that is now Hospitality Management at Biscayne Bay campus. The property was divided between the City of North Miami, Miami-Dade County for a regional park and the State of Florida for the creation of Oleta River State Recreation Area and for a north (Bay Vista) campus of FIU. In 1975, FIU opened the Biscayne Bay Campus, then named the “Bay Vista” Campus, and development proceeded rapidly over the next 18 years.

Since 1975, the name of the campus has changed several times. Below is the list with the various names:

- Bay Vista Campus
- North Miami Campus
- North Campus
- Biscayne Bay Campus

ENGINEERING CENTER (EC)

The Engineering Center (EC) is located on 36 acres approximately one mile from

Modesto A. Maidique Campus. The site is located at the northeast intersection of West Flagler Street and SW 107th Avenue, accommodating engineering students and faculty. The campus facility resides in 3 buildings including a 245,000 square foot building that houses research centers, teaching laboratories, faculty offices, study areas, computing facilities and research laboratories. The second building is the construction lab which is adjacent to the central plant. The third major building is the 2009 “Wall of wind” wind lab building on the east side of the site. The original two buildings and site were purchased from biomedical company Cordis in 1997. The Construction Lab was added to the Operations and Utility (OU) building, as a second addition about 1999 following an addition to the OU previously done by Cordis in 1984.

This facility has had several names over the years. Below is the list of the various names:

- Engineer and Applied Science
- The Engineer Center
- Engineer Center
- Engineering Center

Table 4.1 Modesto Maidique overall Inventory and projected space analysis

Modesto A. Maidique Campus Fall 2019

	HC	FTES / FTE	COFTE
Undergraduate	24,289	16,794	
Graduate	5,333	3,687	
Total Students	29,622	20,481	22,598
E-Learning Students	18,869	13,046	
Faculty	3,198	3,070	
Staff	4,470	4,101	
Student Empls	3,291	1,379	
Total F&S&S	10,959	8,550	

WSCH (Classroom)	193,568
WSCH (VocationalLab)	11,182
WSCH (NonVocationalLab)	55,242
Planned Head Count (used for Food Service)	
Students (HC) w meal cards	2,313
Students (HC) w/o meal cards	27,309
FT Faculty & Staff	7,171

		2012 FTES: 19417								2025 FTES: 20481		2030 FTES: 20481	
		2012 CMP GUIDELINE		FALL 2019 GUIDELINE		CAMPUS TOTALS		PLANNED PROJECTS	SURPLUS / (DEFICIT)	2025 PROJECTED	SURPLUS / (DEFICIT)	2030 PROJECTED	SURPLUS / (DEFICIT)
Space Use Category	*Room Use Codes (FICM)*	NASF per FTE	Total ASF	NASF per FTE	Total ASF	NASF per FTE	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET
Classrooms	100 (all)	12.08	234,323	9.00	184,329	8.64	176,893	51962	44,526	184,329	44,526	184,329	44,526
Teaching Labs & Service	210,215	13.77	267,372	11.25	230,411	7.02	143,705	46107	(40,599)	230,411	(40,599)	230,411	(40,599)
Open Labs*	220,225	5.00	97,085	3.70	75,780	5.59	114,539		38,759	75,780	38,759	75,780	38,759
Research Labs & Service	250	9.88	191,840	18.75	244,613	11.94	182,296	51229	(11,088)	244,613	(11,088)	244,613	(11,088)
Study	400 (all)	17.54	340,574	13.50	276,494	9.04	185,198	137513	46,218	276,494	46,218	276,494	46,218
Subtotal ASF of ACADEMIC / RESEARCH SPACE		58.27	1,131,194	56.20	1,011,626	42.23	802,631	286,811	77,816	1,011,626	77,816	1,011,626	77,816
Offices	300(all)	29.00	563,093	22.50	460,823	38.50	788,429	91200	418,807	460,823	418,807	460,823	418,807
Special Use*	530,550-590	1.81	35,145	6.60	124,934	2.38	48,804	35389	(40,741)	124,934	(40,741)	124,934	(40,741)
Athletics (Teaching Gymnasiu	520, 523, 525	5.77	112,036	4.50	92,165	6.75	138,208		46,044	92,165	46,044	92,165	46,044
Clinic*	540,541,545	1.31	14,815	0.40	8,192	0.37	7,560		(632)	8,192	(632)	8,192	(632)
General Use	610,620,650,660,680,690	11.31	219,606	7.48	153,198	10.40	213,023		59,825	153,198	59,825	153,198	59,825
Food Service	630	8.10	165,995	3.61	73,874	2.61	53,518		(20,356)	73,874	(20,356)	73,874	(20,356)
Recreational	670	1.50	29,126	1.50	30,722	3.97	81,286		50,565	30,722	50,565	30,722	50,565
Support	700	7.08	137,472	4.24	86,788	2.96	60,616	8930	(17,242)	86,788	(17,242)	86,788	(17,242)
Central Storage (in 700)	730, 735									0	0	-	0
Vehicular Storage	740, 745				2,995,980	146.28	2,995,980		0	2,995,980	0	2,995,980	0
Health Care	800 (all)	0.30	5,825	0.28	5,696	0.81	16,513		10,817	5,696	10,817	5,696	10,817
Student Residential	900				705,833	34.46	705,833		0	705,833	0	705,833	0
Inactive / alteration	050, 060								0	0	0	-	0
Total ASF		124.46	2,414,307	107.30	5,749,830	291.72	5,912,401	422,330	584,901	5,749,830	584,901	5,749,830	584,901

Table 4.2 Engineering Center overall Inventory and projected space analysis

Engineering Center Fall 2019

	HC	FTES / FTE	COFTE
Undergraduate	1,863	1,288	
Graduate	353	244	
Total Students	2,216	1,532	1,623
Faculty	78	77	
Staff	65	63	
Student Empls	69	32	
Total F&S&S	212	172	

WSCH (Classroom)	14,094
WSCH (VocationalLab)	-
WSCH (NonVocationalLab)	5,384
Planned Head Count (used for Food Service)	
Students (HC) w meal cards	
Students (HC) w/o meal cards	
FT Faculty & Staff	

2025 FTES: 1532 2030 FTES: 1532

		2012 CMP GUIDELINE		FALL 2019 GUIDELINE		CAMPUS TOTALS		PLANNED PROJECTS	SURPLUS / (DEFICIT)	2025 PROJECTED	SURPLUS / (DEFICIT)	2030 PROJECTED	SURPLUS / (DEFICIT)
Space Use Category	*Room Use Codes (FICM)*	NASF per FTE	Total ASF	NASF per FTE	Total ASF	NASF per FTE	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET
Classrooms	100 (all)	12.08	12,744	9.00	13,788	8.57	13,124		(664)	13,788	(664)	13,788	(664)
Teaching Labs & Service	210,215	13.77	14,527	11.25	17,235	15.61	23,913		6,678	17,235	6,678	17,235	6,678
Open Labs*	220,225	5	5,275	3.70	5,668	2.91	4,455		(1,213)	5,668	(1,213)	5,668	(1,213)
Research Labs & Service	250	9.88	10,423	18.75	28,725	53.18	81,471		52,746	28,725	52,746	28,725	52,746
Study	400 (all)	17.54	18,505	13.50	20,682	1.86	2,848		(17,834)	20,682	(17,834)	20,682	(17,834)
Subtotal ASF of ACADEMIC / RESEARCH SPACE		58.27	61,474	56.20	86,098	82.12	125,811		39,713	86,098	39,713	86,098	39,713
Offices	300(all)	29	30,595	22.50	34,470	42.18	64,624		30,154	34,470	30,154	34,470	30,154
Special Use*	530,550-590	1.73	1826	6.60	10,111	0.00	0		(10,111)	10,111	(10,111)	10,111	(10,111)
Athletics (Teaching Gymnasiu	520, 523, 525	0	0	4.50	6,894	0.00	0		(6,894)	6,894	(6,894)	6,894	(6,894)
Clinic*	540,541,545	0.4	422	0.40	613	0.00	0		(613)	613	(613)	613	(613)
General Use	610,620,650,660,680,690	11.31	12461	7.48	11,459	4.07	6,232		(5,227)	11,459	(5,227)	11,459	(5,227)
Food Service	630	8.02	12280	3.61	5,526	1.13	1,725		(3,801)	5,526	(3,801)	5,526	(3,801)
Recreational	670	1.50	1583	1.50	2,298	0.00	0		(2,298)	2,298	(2,298)	2,298	(2,298)
Support	700	7.08	7469	4.24	6,492	7.43	11,381		4,889	6,492	4,889	6,492	4,889
Central Storage (in 700)	730, 735		0			0.00				0	0	-	0
Vehicular Storage	740, 745		0		0	30.14	46,178		46,178	0	46,178	-	46,178
Health Care	800 (all)	0.3	317	1.24	1,906	0.00	0		(1,906)	1,906	(1,906)	1,906	(1,906)
Student Residential	900				0	0.00	0		0	0	0	-	0
Inactive / alteration	050, 060				0	0.00	0		0	0	0	-	0
Total ASF		117.61	128,427	108.27	165,868	167.07	255,951	0	90,083	165,868	90,083	165,868	90,083

Table 4.3 Biscayne Bay overall Inventory and projected space analysis

Biscayne Bay Campus Fall 2019

	HC	FTES / FTE	COFTE
Undergraduate	3,046	2,106	
Graduate	372	257	
Total Students	3,418	2,363	2,307
Faculty	87	85	
Staff	251	241	
Student Empls	87	38	
Total F&S&S	425	364	

WSCH (Classroom)	19,404
WSCH (VocationalLab)	296
WSCH (NonVocationalLab)	7,692
Planned Head Count (used for Food Service)	
Students (HC) w meal cards	
Students (HC) w/o meal cards	
FT Faculty & Staff	

2025 FTES: 2363 2030 FTES: 2363

Space Use Category	*Room Use Codes (FICM)*	2012 CMP GUIDELINE NASF per FTE	2012 CMP GUIDELINE Total ASF	FALL 2019 GUIDELINE NASF per FTE	FALL 2019 GUIDELINE Total ASF	CAMPUS TOTALS NASF per FTE	CAMPUS TOTALS ASSIGNABLE SQUARE FEET	PLANNED PROJECTS ASSIGNABLE SQUARE FEET	SURPLUS / (DEFICIT) ASSIGNABLE SQUARE FEET	2025 PROJECTED ASSIGNABLE SQUARE FEET	SURPLUS / (DEFICIT) ASSIGNABLE SQUARE FEET	2030 PROJECTED ASSIGNABLE SQUARE FEET	SURPLUS / (DEFICIT) ASSIGNABLE SQUARE FEET
Classrooms	100 (all)	11.84	34,277	9.00	21,267	13.06	30,859		9,592	21,267	9,592	21,267	9,592
Teaching Labs & Service	210,215	9.73	28,168	11.25	26,584	11.54	27,278		694	26,584	694	26,584	694
Open Labs*	220,225	5.00	14,475	3.70	8,743	10.83	25,597		16,854	8,743	16,854	8,743	16,854
Research Labs & Service	250	13.08	37,867	18.75	44,306	15.18	35,862		(8,444)	44,306	(8,444)	44,306	(8,444)
Study	400 (all)	17.54	50,778	13.50	31,901	17.99	42,504		10,604	31,901	10,604	31,901	10,604
Subtotal ASF of ACADEMIC / RESEARCH SPACE		57.19	165,565	56.20	132,801	68.60	162,100		29,299	132,801	29,299	132,801	29,299
Offices	300(all)	26.00	75,270	22.50	53,168	46.32	109,446		56,279	53,168	56,279	53,168	56,279
Special Use*	530,550-590	1.10	3,186	6.60	15,596	0.65	1,528		(14,068)	15,596	(14,068)	15,596	(14,068)
Athletics (Teaching Gymnasiu	520, 523, 525	0.00	0	4.50	10,634	4.17	9,861	1600	828	10,634	828	10,634	828
Clinic*	540,541,545	0.40	1,158	0.40	945	0.01	25		(920)	945	(920)	945	(920)
General Use	610,620,650,660,680,690	11.31	43,660	7.48	17,675	37.16	87,814		70,139	17,675	70,139	17,675	70,139
Food Service	630	15.39	36,365	3.61	8,523	6.25	14,773		6,250	8,523	6,250	8,523	6,250
Recreational	670	1.50	4,343	1.50	3,545	0.71	1,667		(1,878)	3,545	(1,878)	3,545	(1,878)
Support	700	7.08	20,497	4.24	10,013	2.95	6,977		(3,036)	10,013	(3,036)	10,013	(3,036)
Central Storage (in 700)	730, 735		0				18,274			0	18,274	-	18,274
Vehicular Storage	740, 745		0		137	0.06	137		0	137	0	137	0
Health Care	800 (all)	0.42	869	0.88	2,073	0.51	1,211		(862)	2,073	(862)	2,073	(862)
Student Residential	900						195,599			0	195,599	-	195,599
Inactive / alteration	050, 060									0	0	-	0
Total ASF		120.39	350,913	107.90	255,108	167.39	609,412	1,600	142,031	255,108	355,904	255,108	355,904

LAND USE AS DEFINED BY THE UNIVERSITY'S OWN LAND USE CATEGORIES

The following land use categories will apply to all FIU campuses. The designations are based on topography, soil conditions, adjacent land uses, existing space utilization and utility locations, proximity to existing and planned multimodal transportation systems, and existing development patterns:

ACADEMIC AND RESEARCH USE

This land use designation identifies areas on each campus which include buildings with classrooms, faculty and departmental offices, assembly space, exhibit spaces, and library spaces, where academic activities take place.

Indoor Research: This refers to existing areas on the campus designated for research, including laboratories, offices, assembly spaces, exhibit spaces, and library spaces.

Outdoor Research: This land use designation identifies existing outdoor areas onthe campus that are used for environmental studies and any research related to outdoor plant and wildlife.

MODESTO A. MAIDIQUE

There are twenty facilities that serve academic functions (see Figure 4.1:Campus Land Use Map):

- Deuxieme Maison
- Viertes Haus
- Green Library
- Owa Ehan
- Chemistry & Physics
- Chemistry & Physics addition
- CASE Building
- Ryder Business Building
- Sanford and Dolores Ziff Education Building
- Health and Life Science
- Health and Life Science Phase Two
- Paul Cejas School of Architecture
- Sculpture Building
- Ceramics Building & Artist Studio
- Athletics Academic Fitness Center (Dedicated to providing classrooms, tutoring space, and academic support for student-athletes)
- College of Law
- Graduate School of Business (Phase One)
- Social Science Building
- Academic Health Science Center 3
- College of Business -Mango Building

Indoor Research Facilities:

- Management and Advanced Research Center
- Biology Greenhouse
- Academic Health Science Center 4
- Academic Health Science Center 5
- Stocker Astroscience Center

Outdoor Research Use

- Natural Preserve: Environmental Studies has a continuing conservation project at the preserve.
- Hennington Island: Lake on the northwestern quadrant of the campus has a small

island used for environmental studies

BISCAYNE BAY CAMPUS

There are five major academic facilities and four trailers that serve academic functions (See Figure 4.3a: Campus Land Use Map):

- The Library
- Academic One
- Academic Two
- Hospitality Management
- Marine Biology Research Center

Indoor Research Facilities:

- Ecology Lab
- Marine Biology Fish Tanks

Outdoor Research Use

- Mangrove habitat restoration areas.

ENGINEERING CENTER (EC)

This is a facility with some academic use.

Indoor Research: This mixed-use facility includes research use.

Outdoor Research: Construction experiment space east of OperationUtilities

SUPPORT USE

This land use designation identifies existing areas on the campus where non- academic administrative offices, student services, and physical plant spaces are concentrated.

MODESTO A. MAIDIQUE

Support facilities include:

- Labor Center,
- Duplicating Center
- Tower (original Tamiami Airport Control Tower) – Veteran's Center
- The University Health Service Complex
- Campus Support Complex-Shops
- Campus Support Complex-Administration
- Central Utilities/ Chillers
- Career Service Building
- UP Information Center
- Children's Creative Learning Center

BISCAYNE BAY CAMPUS

Support facilities include:

- Student Health Clinic
- Wellness Center
- Public Safety
- Grounds
- Central Receiving

ENGINEERING CENTER (EC)

There is one two story building at the site serving as a support function.

- Operations and Utility (OC) building

RESIDENTIAL USE

This land use designation identifies existing areas on the campus that include student housing and other housing facilities.

MODESTO A. MAIDIQUE

Facilities designated for housing include:

- Parkview Housing: a housing and parking complex, at 6 stories and with 4-bedroom (single occupancy) units.
- Parkview 2 Housing: UPDATE
- University Park Apartments/Student Housing: an apartment complex of ten buildings located along the eastern perimeter of Modesto A. Maidique Campus.
- Panther Residence Hall: a four-story state of the art building.
- University Towers: This six-story facility is comprised of three sections, North Tower, South Tower, and the West Wing; clustered along the southern edge of campus.
- Everglades Residence Hall: This facility is comprised of three wings.
- Lakeview Residence Hall: Completed in 2006, this two-building facility provides housing and residential life functions.

BISCAYNE BAY CAMPUS

Facilities designated for housing include:

- Bayview Housing:
- Bay Vista Housing: Four-story apartment style housing with five wings, located on the northeastern corner of the campus, that is currently being used by Royal Caribbean Cruise Line (RCCL) employees in partnership with FIU

ENGINEERING CENTER (EC)

There is no residential housing provided at this site.

RECREATION AND OPEN SPACE USES

This land use designation identifies existing areas on the campus that are adequate for active and passive recreation. Active recreation includes sports, athletics, organized sporting events, gymnasiums, and workout facilities. Passive recreation refers to plazas, courtyards, pedestrian malls and other open areas for the passive enjoyment of nature.

MODESTO A. MAIDIQUE

Recreational and open space is primarily found in buffer areas along the northern and western edges of Modesto A. Maidique Campus. Major recreational facilities include:

- Ocean Bank Convocation Center (OBCC)
- Baseball Stadium
- Softball Stadium
- Ricardo Silva Community Stadium
- R. Kirk Landon Field House
- Athletics Tennis Center

- Beach Volleyball Courts
- Golf Short Game Pitching and Putting Practice Area
- Track Throws Cage
- Recreation Fields (north, south, and east turf fields, basketball courts, and additional tennis courts)

BISCAYNE BAY CAMPUS

Recreational and open space is primarily found along the perimeters of developed areas for Biscayne Bay Campus. They are located north and south of the campus academic core along the Oleta River and Biscayne Bay shoreline and include:

- Aquatics Center
- Outdoor Recreation Facilities: Basketball courts, basketball court, soccer field, sand volleyball court, and tennis courts
- TRAC Ropes Course

ENGINEERING CENTER (EC)

The site offers no organized recreational facilities. The site consists approximately 10 acres of open space for potential use as recreation and open space.

UTILITIES USE

This land use designation refers to areas on campus that provide all the infrastructure necessary to support the University's electrical, storm water, sanitary sewer, potable water, chilled water, steam, natural gas, telecommunication, and solid waste systems.

Utility provisions at Modesto A. Maidique Campus, Biscayne Bay Campus, the Engineering Center, and The Wolfsonian are accounted for under the Support Facilities land use designations. Refer to 9.0 General Infrastructure Element and 10.0 Utilities Element for further discussion of campus utilities.

MODESTO A. MAIDIQUE

Utilities Facilities within the campus include:

- Physical Plant
- Plant Support
- Central Utilities

PARKING USE

This land use designation identifies those areas on campus that are appropriate for general parking in surface lots or garage structures.

Existing parking structures at Modesto A. Maidique Campus are accounted for within the Mixed-Use category. Surface parking at all three campuses is accounted for amongst other land use categories.

MODESTO A. MAIDIQUE

Existing parking facilities include surface parking areas and seven parking garages:

- Gold Parking Garage (PG-1)
- Blue Parking Garage (PG-2)
- Panther Parking Garage (PG-3)
- Red Parking Garage (PG-4)
- Market Station (PG-5)

- Tech Station (PG-6)
- Parkview Parking Garage (resident-only parking)

Surface parking is primarily located along the northern and western edges of the campus core and along the southern perimeter adjacent to Tamiami Park and Miami-Dade Youth Fair and Exposition. Two parking garages (Gold and Blue) and two additional surface parking lots are in the southeastern quadrant of the campus.

BISCAYNE BAY CAMPUS

Parking facilities are comprised of existing surface parking areas west of the academic zone of the campus. Additional surface parking is associated with Kovens Center located south of the campus core.

ENGINEERING CENTER (EC)

Surface parking is provided beneath the main building and at the center and eastern portions of the site and the north gravel lot.

CONSERVATION AREAS

This land use designation identifies existing areas on the campus that shall be preserved and managed to protect natural features including topography, soil conditions, archaeological sites, plant and animal species, wildlife habitats, heritage trees and wetlands.

MODESTO A. MAIDIQUE

Modesto A. Maidique Campus is designated as a Wildlife Sanctuary by an agreement between FIU and the Audubon Society and, therefore, vegetative communities that serve as wildlife habitat are protected. However, no areas have been officially designated by the State for conservation. The area known as the “Natural Preserve” has been set aside by the University for Environmental Studies and natural open space. The latest environmental inspection conducted in 2001 revealed that most of the land on campus and in the preserve does not contain threatened or endangered fauna or protected wildlife.

BISCAYNE BAY CAMPUS

There are a number of habitat enhancement/mitigation projects that have been or will be completed along the shoreline of the Oleta River. Additional mitigation work is in progress on Sandspur Island, an island immediately south of Biscayne Bay Campus.

The estuary at the north end of Biscayne Bay Campus has been designated as the Biscayne Bay Aquatic Preserve. The planting of mangroves at the southwestern end of campus was required as compensatory mitigation for the trimming of mangroves adjacent to Kovens Center. This mitigation site at the southwestern end of campus should be designated as a potential mitigation bank to prevent conflicts with future developments in this area.

ENGINEERING CENTER (EC)

No lands are designated for conservation.

COMMUNITY INTERFACE USE

This land use designation identifies those areas within the campus that are operated by non-FIU organizations.

MODESTO A. MAIDIQUE

Existing land use areas designated as Other Public Facilities for Modesto A. Maidique Campus include:

- The Hurricane Center (NOAA)
- Dr. Carlos J. Finlay Elementary School
- Frost Art Museum
- The Herbert and Nicole Wertheim Performing Arts Center

BISCAYNE BAY CAMPUS

Existing land use areas designated as Other Public Facilities for Biscayne Bay Campus include:

- Kovens Conference Center
- Wolfe University Center
- Royal Caribbean Cruise Ltd. (RCCL)
- Marine Academy of Science and Technology (MAST)

ENGINEERING CENTER (EC)

No land use areas have been designated as Other Public facilities at this site.

MULTI-USE

Multi-use has been added as a land use designation. This category identifies precincts within the campus that incorporate multiple facility types as well as facilities that include more than one use. Examples include facilities and districts that mix academic, research and support space; housing neighborhoods that include support facilities; sports districts that include academics and housing; structured parking with retail and other occupied spaces; and open space with ancillary functions.

Nationally and locally, these types of facilities and campus precincts are used to both provide opportunities for partnerships as well as meet multiple needs within an era of constrained public funding. They are a hallmark of urbanizing campuses - where developable land has a premium value and facilities are developed to a higher density and taller massing. FIU anticipates that the “multi-purpose” designation will be used increasingly as a designation at each campus.

(2) INVENTORY OF APPROXIMATE ACREAGE AND GENERAL RANGE OF USES OF STRUCTURES

The approximate acreage for each existing designated land use for university-owned property for Modesto A. Maidique and Biscayne Bay Campus is shown in Table 4.4.

Table 4.4 Associated Land Use Acreage by Campus

MODESTO A. MAIDIQUE

NAME	Acre	% of Total Acres
Academic + Research	59.6	17%
Multi-use	112.52	33%
Parking	14.43	4%
Recreation and Open Space	83.25	24%
Residential	38.1	11%
Support	25.18	7%
Other (non-university)	9.12	3%
TOTAL	**342.2**	**100%**

ENGINEERING CENTER

NAME	Acre	% of Total Acres
Academic + Research	15.43	43%
Multi-use	7.66	21%
Recreation and Open Space	8.17	23%
Residential	0	0%
Support	4.74	13%
TOTAL	**36**	**100%**

BISCAYNE BAY CAMPUS

NAME	ACRE	% OF TOTAL ACRES
Academic + Research	49.57	25%
Conservation	39.27	20%
Multi-use	38.63	19%
Recreation and Open Space	48.37	24%
Residential	12.49	6%
Support	10.27	5%
TOTAL	**198.6**	**100%**

b) Inventory and Assessment of Existing and Projected Vacant, Open or Underdeveloped University Controlled Lands to determine potential opportunities for meeting the needs show above. Existing Plans for the redevelopment of underutilized or inconsistent character, density, or future land use goals of the university. Existing plans for the release of surplus lands

ASSESSMENT/ SUITABILITY OF EXISTING AND PROJECTED VACANT, OPEN OR UNDERDEVELOPED UNIVERSITY CONTROLLED LANDS

MODESTO A. MAIDIQUE

Campus development will need to occur within existing surface parking areas and by intensification of the campus core. Refer to 13.0 Conservation Element for further information concerning the suitability of existing vacant land.

Future campus expansion will not be adversely impacted by existing soils, topography natural resources and historic and archaeological resources.

At the Modesto A. Maidique Campus a need for redevelopment is anticipated during this planning period. Places to be considered for redevelopment at MMC are in existing parking and open space uses as well as sites where buildings have outlived their usefulness.

BISCAYNE BAY CAMPUS

Gross vacant and undeveloped land at Biscayne Bay Campus is approximately 40.5 acres. Refer to 13.0 Conservation Element for further information concerning the suitability of undeveloped land.

Future campus expansion campus will not be adversely impacted by existing soils, topography, and historic and archaeological resources. There is an environmental impact buffer along Biscayne Bay, an enhanced mangrove wetland area in front of Kovens Center a mitigation zone at the southwest corner of the property that are not

available for campus expansion.

At Biscayne Bay there are some opportunities for campus expansion within the open space between the campus core and the Kovens Center, north of the existing academic buildings and west of Academic Two and the Kovens Center.

ENGINEERING CENTER

At the Engineering Center, there is room for further expansion in the open space that surrounds the site.

LAND REQUIRED TO ACCOMMODATE PLANNED FUTURE ENROLLMENT

MODESTO A. MAIDIQUE

The categories of land use and the estimated gross acreage for each category are shown in Table 4.5.

Table 4.5 Projected Land Requirements 2020– MODESTO A. MAIDIQUE

MODESTO A. MAIDIQUE

NAME	ACRE	% OF TOTAL ACRES
Academic & Research		
Community Interface		
Conservation		
Mixed Use		
Parking		
Recreation and Open Space		
Residential		
Support		

ENGINEERING CENTER

The categories of land use and the estimated gross acreage for each category are shown in Table 4.6.

Table 4.6 Projected Land Requirements 2020 – ENGINEERING CENTER

ENGINEERING CENTER

NAME	ACRE	% OF TOTAL ACRES
Academic & Research		
Community Interface		
Conservation		
Mixed Use		
Parking		
Recreation and Open Space		
Residential		
Support		

BISCAYNE BAY CAMPUS

The categories of land use and the estimated gross acreage for each category are shown in Table 4.6.

Table 4.7 Projected Land Requirements 2020– BISCAYNE BAY CAMPUS

NAME	ACRE	% OF TOTAL ACRES
Academic & Research		
Community Interface		
Conservation		
Mixed Use		
Parking		
Recreation and Open Space		
Residential		
Support		

ASSESSMENT OF SURPLUS UNIVERSITY PROPERTY

Due to limited land resources, it is not recommended that any portion of property at MMC, BBC and EC be declared surplus for release as surplus by FIU or the Florida Board of Education, Division of Colleges and Universities.

c) Properties within Study Area where Title Interest is Held

A legal description and title search of FIU properties can be found on file at the Facilities Management office.

d) Properties within the Planning Study Area which may Meet Existing and Future Needs

Due to limited land resources FIU may need to look outside their land holdings to find land that could meet existing and future needs. The Miami Dade County Fair and Exposition site, located immediately south of Modesto A Maidique campus, is one of the possible sites that may meet existing and future needs.

e) Existing Natural, Archeological and Historic Resources within the Planning Study Area

MODESTO A. MAIDIQUE

Modesto A. Maidique Campus is in close proximity to sites that have natural, archaeological or historic resources on them:

- Tamiami Park and Miami-Dade County Fair and Exposition (located immediately south of Modesto A. Maidique)
- Three canals (bordering Modesto A. Maidique, Tamiami Park and Miami-Dade County Fair and Exposition to the north, west and south)

According to FIU and other applicable agencies this campus is not within an aquatic preserve nor is it designated or under consideration for designation as an area under critical state concern.

Modesto A. Maidique contains relatively few naturally vegetated areas. The Natural Preserve represents the most valuable natural feature of Modesto A. Maidique with its botanicals. However, as part of a previous campus master plan update, an inspection revealed that there were no threatened or endangered fauna or nests in the Preserve. Given these findings, future campus expansion will consider retention of the most sensitive portions of the preserve for conservation and botanical study.

Potential impacts for surface waters, wildlife habitat, utility requirements and easements and

stormwater management all must be considered for all future campus expansion, but at this time there appears to be no major constraints that would limit future land use development. There are no areas on university-controlled land identified by the host community comprehensive plan to be developed for a particular land use.

There are relatively few wetland areas on site. Potential wetland areas include lake littoral zones, low lawn areas and a portion of the preserve. No jurisdictional determination has been done for the campus. Campus expansion without a jurisdictional determination might result in need for mitigation or restoration that may not be necessary with prior jurisdictional determination. There are no floodplains on campus or within the context area.

ENGINEERING CENTER (EC)

The Engineering Center (EC) is not in close proximity to sites that may have natural, archaeological or historic resources on them.

According to FIU and other applicable agencies this campus is not within an aquatic preserve nor is it designated or under consideration for designation as an area under critical state concern.

BISCAYNE BAY CAMPUS

Biscayne Bay Campus is in close proximity to sites that may have natural, archaeological or historic resources on them:

- Oleta River State Recreation Area (Borders the campus to the east and north. (This 1,048-acre park is one of Florida's significant urban waterfront parks. The campus shoreline has an unobstructed view to the state recreational area.)
- Oleta River Harbor (The shoreline makes up the southern boundary of the campus)
- Biscayne Bay Estuary and the Florida Intercoastal Waterway

Biscayne Bay Campus is in an aquatic preserve and has a designated area of state concern. The following provides a description:

Biscayne Bay and all-natural waterways (including the Oleta River and the estuary at the north end of the Biscayne Bay Campus) tidally connect to Biscayne Bay and are designated as the Biscayne Bay Aquatic Preserve, a Miami-Dade County preserve. Biscayne Bay Campus is bordered to the north and east by Oleta River State Recreation Area and adjacent to Biscayne Bay along the southern edge of the campus. The most environmentally sensitive site on Biscayne Bay Campus consists of mangrove lined shores along Oleta River and Biscayne Bay. The mangrove management plan is a high priority, and the Department of Environmental Resources Management prescribes maintenance standards. To compensate for the construction of an access road in a mangrove-dominated canal and mangrove trimming in front of Kovens Center, mangrove mitigation projects have been constructed near the impacted area and at the southwestern end of campus.

There are several areas with sensitive vegetation that must not be disturbed by planned campus expansion. The mangrove forests on Biscayne Bay Campus are classified as jurisdictional wetlands. An environmentally sensitive site with mangroves exists along the shores of the Oleta River and Biscayne Bay. In addition, a mangrove mitigation site has been planted at the southern portion of the campus. An additional existing enhanced mangrove area is located immediately west of Kovens Center.

The principal concern regarding potential surface water and development conflicts involves the need to ensure that development of the campus does not negatively impact the habitat of wildlife on site. The entire Biscayne Bay Campus is within the 100- year flood plain and is characterized as a special flood hazard area. Potential conflicts regarding floodplains are primarily concerned with flooding of the campus and flood protection for buildings and structures. Building design should respond to state-of- the-art data and modeling, not to out-of-date studies.

Potential impacts wildlife habitat, utility requirements and easements and stormwater management all must be considered for all future campus expansion, but at this time there appears to be no major constraints that would limit future land use development. There are no areas on campus identified by the host community comprehensive plan to be developed for a particular land use.

f) Facilities on University-Controlled Lands not Under Jurisdiction or Operation of the State University System

MODESTO A. MAIDIQUE

- Herbert and Nicole Wertheim Performing Arts Center
- Hurricane Center (NOAA)
- Carlos Finlay Elementary School
- Patricia and Phillip Frost Museum
- Richard Silva Community Stadium

The stadium, located partially on FIU property and partially on Tamiami Park property, was originally built as a joint venture between FIU, Miami-Dade County Public Schools, Miami- Dade Parks, and the Miami-Dade County Youth Fair.

BISCAYNE BAY CAMPUS

The Munisport Landfill was a landfill site located in the City of North Miami, adjacent to Biscayne Bay Campus now located beneath the Sole Mia development west of the Campus.. Landfill operations were halted in 1981 after evidence of leachates and contamination was discovered in the soil, sediments, ground water, and Biscayne Bay. The Munisport Landfill site was categorized as an indeterminate public health hazard. Though it posed no threat to human health, it did pose a significant threat to aquatic organisms in the adjacent wetlands. Based on these findings, EPA and the City of North Miami entered a Consent Decree for the cleanup in 1992. Mitigation included groundwater remediation, wetland restoration, and landfill closure and capping. As a result of these actions, the site was removed from EPA's National Priorities List in September 1999 and regulatory authority for the landfill closure was transferred to the state and county.

Under the approval of Environmental Protection Act (EPA) and Miami-Dade County, the City of North Miami is currently in the process of transforming 193 acres of the former landfill into a mixed-use development project, known as Sole Mia Project. The proposed reuse project will include a mix of residential, commercial, retail and recreation facilities, —with full build-out projected by 2022. The developers of the project, Turnberry and LeFrak, are responsible for the site’s agreement with the City of North Miami.

g) Existing and Projected Land Uses, Goals, Objectives, Policies and Zoning as Defined in the Local Governments Comprehensive Plan

MODESTO A. MAIDIQUE

The principal land uses adjacent to the campus and extending out a mile radius is primarily low density, single family residential development, much of which occurred in the 1960's and 1970's. Suburban character strip commercial development as well as higher density multifamily residential is clustered along portions of the main roadway arterials in the vicinity of the campus. Arterial streets adjacent to Modesto A. Maidique Campus include Tamiami Trail (SW 8th Street) to the north, SW 107th Avenue to the east and Coral Way (SW 24th Street) and Bird Road (SW 40th Street) to the south.

ENGINEERING CENTER (EC)

The principal land uses adjacent to the site and extending out a mile radius is primarily low density, single family residential development to the south and commercial and industrial use to the north. Strip commercial development and higher density multifamily residential is clustered along SW

107th Avenue and West Flagler Street.

BISCAYNE BAY CAMPUS

The principal land use type in the context area immediately surrounding Biscayne Bay is open space categorized as Parks and Recreation (Oleta River State Recreation Area) and environmentally protected parks. The latter category includes the extensive wetland area of Oleta River and Biscayne Bay shoreline. In addition, there are substantial public facilities that exist nearby, including two schools directly adjacent to the Biscayne Bay property, a City of North Miami sewage treatment plant and portions of the Munisport landfill area that are currently closed. Approximately 193 acres of the former landfill site has been designated for mixed-use development by the City of North Miami. The proposed reuse project, known as Sole Mia Project, will include a mix of residential, commercial, retail and recreation facilities and is partially completed at the time of this writing.

Beyond the zone of public open space, extensive single-family residential development extends to the south and west. Strip commercial development and multifamily development occurs along the two principal arterials in the context area, Federal Highway and Sunny Isles Boulevard. To the east, across Biscayne Bay, a major regional activity generator, Haulover Park and Marina; as well as the Sunny Isles hotel/motel corridor lines the beachfront.