

# 2020 - 2030 USF Master Plan Updates

Data Collection & Analysis

# Element 11: Capital Improvements & Academic Facilities

UNIVERSITY OF SOUTH FLORIDA

ST PETERSBURG CAMPUS

#### **TABLE OF CONTENTS:**

**Appendix B Data Collection and Analysis (DCA)** 

**Element 11 Capital Improvements** 

**Element 11A Academic Facilities** 



# St Petersburg Capital Improvements



#### **Element 11 Capital Improvements**

#### Information Sources

USF Factbook USF Website

USF St Petersburg campus Office of Facilities Planning & Construction Services

#### (1) Purpose

The purpose of this element is to evaluate the public facilities as identified in other campus master plan elements; to estimate the cost of any improvements for which the University has fiscal responsibility; to analyze the fiscal capability of the University to finance and construct improvements and to schedule the funding and construction of improvements in a manner necessary to ensure that capital improvements are provided when required based on needs identified in the other campus master plan elements.

#### (2) Data Requirements:

#### Data A A Summary of Facility Needs and Requirements to Meet Future Needs Identified in the Land Use Plan

The methodology for developing facilities needs has not changed from the description in the 1995 Master Plan. The program's anticipated funding requirements can be found in Table II-14-a, at the end of this section.

#### Data B Inventory of Existing and Anticipated Revenue Sources Available for Capital Improvement Funding

		Total	\$ 73.3 million	100.00%
7.	Other Sources (bonds) Housing (P3)	\$1.1 million	1.5%	
6.	State and Local Grants and Contracts	0	0%	
5.	Auxiliary Enterprises - Sales & Services	0	0%	
4.	Federal Grants and Contracts	\$2.0 million	2.7%	
3.	Private Gifts, Grants and Contracts (ACH)	\$2.0 million	2.7%	
2.	Student Tuition and Fees (CITF)	\$2.0 million	2.7%	
1.	State Appropriations (PECO)	\$66.2 million	90.4%	

#### Data C Inventory of Operations and Maintenance Costs for Campus Grounds and Existing Facilities

- Plant Expenditures (FY 2022-2023)\*
- Utilities: \$2,400,000
- Maintenance and Repairs: \$1,240,935
- Custodial and Grounds: \$358,014 (grounds) + \$1,436,597 (custodial)
- Admin and Other Services: \$454,464
- Transportation: None

\*Note: These costs do not include facilities operated by USF Auxiliary Functions or facilities located on sub-leased lands (Table IIa in Element 4)

Source: USFSP Office of Facilities Planning & Construction Services

#### (3) Analysis Requirements:

#### Analysis A Practices that guide timing and location of construction and increases the capacity of University facilities.

The University will seek increases in alternative revenue sources to increase fiscal self-sufficiency following the mission and greater emphasis on research.



#### Analysis B Estimate of cost of future capital improvements

The estimated cost of future capital improvements can be found in Table II-14-a, which lists capital projects in priority order.

#### Analysis C Cost of future capital improvements off-campus

There is no change to the description of how future off-campus capital improvements are made.

#### Analysis D Basis for cost estimates

There is no change to the methodology that the University follows to determine cost estimates.

#### Analysis E Assessment of the University's ability to finance capital improvements

There are no significant changes in the University's ability to finance capital improvements since the 1995 Master Plan.

Infrastructure improvements are driven/limited by funds available.

Table II-11-a: Capital Improvements Projects (CIP-2) 2022-2023

Proper ty No.	Project	2022-2023	2023- 2024	2024- 2025	2025- 2026	2026- 2027	Total
1	Environmental & Oceanographic Sciences Center	\$ 60,000,000					\$ 60,000,00 0
	Total	\$ 60,000,000					\$ 60,000,00

Also, the following additional projects are planned but not yet on the 5 year CIP:

PECO funded: Chiller Plant

BONDED projects: Student Residential Facility (900 Beds) Phases IV, V - \$ 60M SLC Addition - \$10M Union Expansion - \$8M Parking Garage - \$16M

## **Element 11A:**

## **St Petersburg Academic Facilities**



#### **Element 11A Academic Facilities**

#### Information Sources

State University System of Florida Facts and Figures, June 30, 2006 USF Factbook, 2004-2005

Sasaki Associates, Inc., interview notes, April 2000, November 2001, Spring 2002, March 2007, and July 2007 Information provided by the University, 2004, 2005, 2006, 2007, 2011, 2015 and 2023.

USFSP Space Utilization Study prepared by Paulien and Associates, August 2015

State Requirements for Educational Facilities, 2014, Florida Department of Education Office of Educational Facilities

#### (1) Purpose

This element aims to ensure the provision of academic facilities to meet University needs during the planning period.

#### (2) Data and Analysis Data Requirements:

#### Data A Projections of future student enrollment

USF St. Petersburg is targeting a total projected enrollment for 2025 of 10,000 students (headcount), based on the following projections: 4,971 undergraduate FTE 559 graduate FTE, 148 non-degree seeking, and

355 system students.

Data B Inventory of Existing Building Space for Academic Functions (NSF and GSF)

USFSP	Academic Use (nsf)	CMS/HSC at St. Petersburg	Combined
Classroom	54,871	398	55,269
Teaching Laboratory	24,408	2,978	27,386
Research Laboratory	10,846	79,104	89,950
Office	86,778	49,090	135,868
Study/Library	46,065		46,284
Gym	0	0	0
Aud Exh	16,161	8,203	24,364
Media Production	2,021	0	2,021
Student Acad Support	977	1,006	1,983
Total	242,127	140,998	383,125

Note: categories above contain substantial amounts of support space also.

Source: SUS Factbook

http://www.flbog.org/resources/factbooks/2007-2008/xls/t02\_00\_0708\_F.xls
Also, USF St Petersburg campus Building Area by Function provided July 2015

<sup>\*</sup>GSF data for CMS/HSC not available



Category	Room Capacity	St. Petersburg
Seminar	0-25 capacity	2
General	26-99 capacity	35
Lecture	100+ capacity	0
TOTAL:		37

**Teaching Laboratory** 

13

TOTAL CLASSROOM+TEACHING LAB

50

This information is for general classrooms and teaching laboratories only and does not include open computer labs.

#### Data C Existing Space Utilization (Room and Station)

Classroom utilization averages 30 weekly room hours (WRH) and 54% student station occupancy (SSO), based on Spring 2021 semester data. This compares to State Requirements for Educational Facilities (SREF) guidelines of 40 WRH and 60% SSO. The average section size is 25 students. Teaching laboratory utilization averages 25 weekly room hours and 76% student station occupancy, compared to SREF guidelines of 30 WRH and 80% SSO.

#### Data D Space Use Standards for the Classroom, Teaching Laboratories, Research Laboratories, and Library Space (ASF)

State Requirements for Educational Facilities (SREF) indicate a range of 20 to 24 NSF per occupant for classrooms. Current facilities (not including the College of Business Building) average 19 NSF per occupant. Right-sizing of classrooms with appropriate seating will improve the learning environments but reduce classroom capacity on campus. The Paulien assessment found 30,061 NSF of space on campus dedicated to classroom use. Though student station occupancy is below State standards, NSF per student station is deficient. For this plan update, classroom NSF will be based on 7.5 NSF / FTE. Actual NSF to be constructed should be verified by program planning when the next academic project is undertaken.

The Paulien assessment of existing space found 14,879 NSF assigned for teaching laboratories on campus. The new space provided by the College of Business Building and the Warehouse will increase that total to about 23,000 NSF. The Paulien report found utilization of teaching laboratories to be approaching State guidelines. The 2015 FTE of 3,920 indicates approximately 5.9 NSF / FTE. For this plan update, classroom NSF will be based on 6 NSF / FTE. Actual NSF to be constructed should be verified by program planning when the next academic project is undertaken.

The previous SREF for research laboratories ranges from 375 NSF per full-time faculty for Psychology to 450 NSF per full-time faculty for Anthropology, Biology, and Environmental Science & Policy. At these ratios, the previous SREF standards suggested 6,975 NSF is needed on campus for research laboratories. The existing space dedicated to research laboratories of 10,846 NSF according to IFIS reports exceeds the margin required according to the previous SREF standards. However, the Paulien study found that additional space may be needed. The uniqueness of research on a case by case creates a different need for space than might be indicated by the general guidelines. The Paulien study found 8,380 NSF of research laboratory space on campus. For this plan update, the current NSF dedicated to research as determined by the Paulien report is being extrapolated by total graduate FTE growth for bulk NSF estimates. Actual NSF to be constructed should be verified by program planning when the next academic project is undertaken.

Space need for library/study space is measured by 12,100 NSF plus an additional 11 NSF for each FTE greater than 1,000. For the current FTE of 3,920, this indicates 44,220 NSF for library/study space. The existing space dedicated to Study on campus based on IFIS data is 46,284 NSF.

#### Sources:

State Requirements for Educational Facilities, 2014, Florida Department of Education, Department of Educational Facilities 2014-2015 Fact Book for USF System

Paulien and Associates 2015 Space Utilization Study



#### Data E Existing Total Credit Hours for St. Petersburg Campus by College

#### **Credit Hours by Level**

Lower Level	37,186
Upper Level	69,572
Grad I	10,343
Grad II	33
TOTAL	117,134

Source: USF e-Profile, Academic Year 2014-2015, Final Enrollment Profile, Fundable Student Credit Hours (Funding Campus) http://usfweb3.usf.edu/infocenter/?report\_category=STU\_Accessed: 7/20/2015

#### Data F Existing Space Utilization for the Classroom, Teaching Laboratories, Research Laboratories, and Library Space

Refer to Data C above for existing classroom and teaching laboratory utilization. According to the Paulien Study, research utilization is not an accurate illustration of the types and amounts of space needed to research USFSP. The space guideline does not account for some research's specialized nature that may require additional space or service areas or circumstances in which research is supported by prep areas assigned to other space categories.

Space utilization data for library/study space is not available. Space need for library/study space is measured by 12,100 NSF plus an additional 11 NSF for each FTE greater than 1,000. For the current FTE of 3,920, this indicates 44,220 NSF for library/study space. The existing space dedicated to Study on campus based on IFIS data is 46,284 NSF.

Source: Paulien and Associates 2015 Study

IFIS Data provided July 2015.

State Requirements for Educational Facilities, 2014, Florida Department of Education Office of Educational Facilities

#### (3) Analysis Requirements:

#### Analysis A Projection of Future Student Credit Hours Distributed by Campus or Satellite Facility.

Based on USF St Petersburg's projected enrollment for 2025, future student credit hours are projected at 181,000 for the 2025/2026 academic year.

#### Analysis B Projection of Future Weekly Student Contact Hours Distributed by Campus or Satellite Facility.

Refer to the table below for updated projections.

### Analysis C Projection of Assumptions about Future Space Utilization for Space Types Identified in the Data Requirements Section

Utilization assumptions have not changed since the 2000-2004 master plan update.

The University space standards for the classroom, teaching laboratories, research laboratories, and library spaces are as follows:

Space Standards for St. Petersburg								
Classrooms	7.5 NSF / FTE							
Teaching Labs	6 NSF / Total FTE							
Research Labs	23 NSF / Graduate FTE							
Library / Study	12,100 NSF + [(FTE – 1,000) x 11]							



### Analysis D Projection of future net academic space needs based on future WSCH and ASF distributed by campus or satellite facility.

						One L	ISF							
			En	rollment Proj	ections from	SEM by Enrol	lment Camp	us (Non Degre	e Excluded)					
	Drop/Add													
Student Type	202108	202201	202205	202208	202301	202305	202308	202401	202405	202408	202501	202505	202508	20260
Undergraduate			7777							77777				
1-FTIC	20,905	19,491	13,702	21,579	19,882	13,942	21,893	20,159	14,112	22,116	20,355	14,232	22,274	20,49
2-FCS AA Transfer	8,035	7,839	4,853	8,469	8,165	5,037	8,716	8,372	5,155	8,874	8,506	5,230	8,977	8,59
3-Other AA Transfer	999	927	597	1.042	954	613	1.067	977	627	1.090	998	641	1.113	1,01
4-Other Undergraduates	6,058	5.900	3.783	6,040	5,903	3.791	6.049	5.916	3.804	6,065	5.935	3,821	6.086	5,95
5-Post-Baccalaureate	856	889	662	948	965	705	1,000	1,010	731	1,033	1,040	749	1,057	1,06
Graduate	200000													
6-Masters	7,274	6.879	4.260	7,538	7.122	4,405	7.763	7.332	4.531	7,963	7.512	4.642	8.133	7,66
7-Research Doctoral	2,268	2.174	1,434	2,259	2,166	1,430	2,256	2.165	1,429	2,259	2,168	1,431	2,266	2,17
8-Professional Doctoral	1,614	1.591	859	1,617	1.594	861	1,623	1,601	865	1,633	1,610	870	1.644	1,62
Grand Total	48,009	45,691	30,151	49,491	46,751	30,784	50,367	47,531	31,254	51,033	48,124	31,618	51,550	48,593
Undergraduate Total	36,853	35,046	23,597	38.078	35,869	24,088	38,725	36,434	24,429	39,179	36,833	24,674	39,507	37,12
Graduate Total	11,156	10,644	6,554	11,413	10,883	6,696	11,642	11,097	6,825	11,854	11,291	6,943	12,043	11,46
Grand Total	48,009	45,691	30,151	49,491	46,751	30,784	50,367	47,531	31,254	51,033	48,124	31,618	51,550	48,593
Statia Total	40,003	45,051	50,151	45,451	40,731	30,704	30,307	47,551	31,234	31,033	40,224	31,010	31,330	40,555
				scn.	Drainetians h	v Course Cam	nus (Non Do	gree Included	1					
				эсп	riojections b	y Course Carr	pus (Non De	gree included	)					
	Drop/Add													
Student Level	202108	202201	202205	202208	202301	202305	202308	202401	202405	202408	202501	202505	202508	20260
Undergraduate Total	457,357	442,269	160,243	479,579	452,068	163,541	487,335	458,839	165,827	492,776	463,634	167,470	496,707	467,14
Graduate Total	85,675	79,334	36,628	86,976	81,213	37,473	88,800	82,885	38,235	90,476	84,374	38,924	91,956	85,71
Grand Total	543,032	521,603	196,871	566,556	533,281	201,014	576,135	541,724	204,061	583,252	548,008	206,394	588,663	552,862
Annual FTE UG		3.		36396	111		36990		.,	37408			37711	
Annual FTE GR				8534			8715			8879			9025	
Total Annual FTE				44930			45705			46286			46736	

#### Analysis E Projection of future academic gross building area needs. (From 2015)

Space Category	Academ	ic Year								
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-34	2024-25	2025-26
Classrooms	31,200	32,500	33,857	35,280	36,761	38,312	39,933	41,627	43,394	45,249
Teaching Labs	24,960	26,000	27,086	28,224	29,409	30,650	31,947	33,301	34,715	36,199
Research Labs	8,280	8,652	9,041	9,448	9,873	10,318	10,783	11,269	11,778	12,309
Library/Study	46,860	48,767	50,757	52,843	55,017	57,291	59,669	62,153	64,745	67,465

#### Analysis F Analysis is translating future net and gross building area requirements into building "increments."

Table II-5-c below indicates the approximate year of occupation anticipated.

#### Table II-5-c:

Graduate

\*Data Updated on 9/9/2021 for Fall 2021 Drop/Add Bench

Proposed Facility	USF St Petersburg campus (GSF)	Estimated Occupancy
Science and Technology Phase II	52,800	2020/25
Renovate existing space for Study (Student Success)	20,000	2020/25