



Item: SP: A-1

Tuesday, June 27, 2017

**SUBJECT: APPROVAL OF THE FLORIDA ATLANTIC UNIVERSITY
2018-19 FIVE-YEAR CAPITAL IMPROVEMENT PLAN**

PROPOSED BOARD ACTION

Approval of the Florida Atlantic University 2018-19 Five-Year Capital Improvement Plan (CIP-2) and Back-of-the-Bill (BOB) Legislative approval action forms.

BACKGROUND INFORMATION

The State University System (SUS) requires each university to submit an updated Capital Improvement Plan (CIP) to the Board of Governors. The plan identifies projects to be included on the Public Education Capital Outlay list and provides information to the State Board of Education for its request for capital project funding for 2018-19.

Additionally, Board of Governors procedures require any proposed language for the 2017-2018 Back of the Bill (BOB) Appropriations concerning the following legislative approval actions to be submitted with the CIP request on August 1, 2017.

BOB 1 – includes projects to be constructed, acquired, and financed with approved debt by university or university direct support organization.

BOB 2 – includes projects requiring general revenue funds to operate and maintain.

BOB 3 – includes changes in previous appropriations.

IMPLEMENTATION PLAN/DATE

Upon Board approval and final Legislative appropriations.

FISCAL IMPLICATIONS

N/A

**Supporting Documentation: 2018-19 Five-Year Capital Improvement Plan (CIP-2 – CIP3)
BOB 1, BOB 2 and BOB 3**

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STATE UNIVERSITY SYSTEM
Five-Year Capital Improvement Plan (CIP-2) and Legislative Budget Request
Fiscal Years 2018-19 through 2022-23

University FLORIDA ATLANTIC UNIVERSITY - DRAFT

PECO-ELIGIBLE PROJECT REQUESTS

Priority No.	Project Title	2018-19	2019-20	2020-21	2021-22	2022-23	Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Educational Plant Survey Recommended Date / Rec No.	Approved by Law - Include GAA reference	
		Year 1	Year 2	Year 3	Year 4	Year 5								
1	CAPITAL RENEWAL/ENVELOPE ENHANCEMENTS / INFRASTRUCTURE (P,C)	\$7,930,000	\$8,167,000	\$8,412,000	\$8,412,000	\$8,412,000	\$41,333,000	Physical Plant	-	-	-	-	1.2/2.1	
2	JUPITER STEM / LIFE SCIENCES BLDG. (C)(E)	\$17,893,000	\$3,202,000				\$21,095,000	All Acad. Programs	42,500	68,000	\$33,976,000	\$500	3.4	SB 2500 - Sec. 2-21
3	MEDICAL BUILDING (Charles E. Schmidt College of Medicine - Expansion) (P)(C) (E)	\$3,350,000	\$35,007,000	\$3,973,000			\$42,330,000	College of Medicine	46,875	75,000	\$42,330,000	\$564	N/A	
4	BOCA LIBRARY RENOVATION (P)(C) (C,E)	\$3,920,000	\$16,000,000	\$20,480,000			\$40,400,000	All Acad. Programs	131,500	160,000	\$40,400,000	\$253	2.5	
5	COLLEGE OF SCIENCE AND ENG. BLDGS. 36, 43 & 55 RENOVATION (P,C,E)	\$15,200,000					\$15,200,000	All Acad. Programs	44,000	80,000	\$15,200,000	\$190	2.2/2.3/2.4	
6	CULTURE & SOCIETY BUILDING PHASE II (P)(C)(E)		\$2,452,000	\$28,813,000	\$3,873,000		\$35,138,000	All Acad. Programs	52,070	80,402	\$35,138,000	\$437	3.1	
7	SOCIAL SCIENCE BUILDING 44 RENOVATION (P)(C)(E)		\$2,718,000	\$18,682,000	\$3,840,000		\$25,240,000	All Acad. Programs	64,103	96,154	\$25,240,000	\$262	2.6	
8	CENTRAL / SATELLITE UTILITY PLANT (P)(C)(E)		\$661,000	\$6,050,000	\$416,000		\$7,127,000	Physical Plant	1,260	7,890	\$7,127,000	\$903	3.2	
9	ARTS & LETTERS BUILDING 9 RENOVATION & ADDITION (P,C,E)					\$6,700,000	\$6,700,000	All Acad. Programs	12,000	18,000	\$6,500,000	\$361	3.3	
10	REALIGNMENT OF INDIAN RIVER BLVD. (P,C,E)					\$5,356,000	\$5,356,000	All Acad. Programs	N/A	N/A	\$5,356,000	NA	1.2	
TOTAL		\$48,293,000	\$65,755,000	\$57,597,000	\$12,668,000	\$20,468,000								

CITF PROJECT REQUESTS -

Priority No.	Project Title	Year 1	Year 2	Year 3	Year 4	Year 5	Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Prodi. Cost/ GSF)	Committee Approval Date
1	STUDENT UNION RENOVATION & EXPANSION PHASE II - Boca Raton Campus (P,C,E)	\$8,500,000					Student Life	84,000	118,000	\$25,000,000	TBD	May 4, 2016
1	BREEZEWAY EXPANSION PHASE I - NORTHERN CONNECTION, Boca Raton Campus (P,C,E)	\$6,500,000					Student Life	NA	NA	\$6,500,000	TBD	TBD
2	BREEZEWAY EXPANSION PHASE II, SOUTHERN CONNECTION Boca Raton Campus (P,C,E)			\$8,500,000			Student Life	NA	NA	\$8,500,000	TBD	TBD
TOTAL		\$6,500,000	0	\$8,500,000	0	0						

REQUESTS FROM OTHER STATE SOURCES

Priority No.	Project	2018-19 Year 1	2019-20 Year 2	2020-21 Year 3	2021-22 Year 4	2022-23 Year 5	Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)
1	A.D. HENDERSON UNIVERSITY SCHOOL (P)(C)(E)	\$3,974,000	\$34,756,000	\$2,770,000			College of Education	92,580	131,500	\$41,500,000	\$316
2	SOCIAL WORK BUILDING (P)					\$1,500,000	All Acad. Programs	42,855	64,283	\$23,300,000	\$362
TOTAL		\$3,974,000	\$34,756,000	\$0	\$0	\$1,500,000					

REQUESTS FROM NON-STATE SOURCES, INCLUDING DEBT

Project	Year 1	Year 2	Year 3	Year 4	Year 5
HOTEL & CONFERENCE CENTER (P,C,E)	\$45,000,000				
TOTAL	\$45,000,000	0	0	0	0

Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Expected Source of Funding (if known)	Master Plan Approval Date
All University Programs		200,000	\$45,000,000	\$225	P3	TBD

DRAFT

STATE UNIVERSITY SYSTEM
Fixed Capital Outlay Projects Requiring Board of Governors Approval
to be Constructed, Acquired and Financed by a University or
a University Direct Support Organization with Approved Debt
BOB-1 - DRAFT FOR BOT APPROVAL

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Month Of Board Approval Request	Estimated Annual Amount For Operational & Maintenance Costs Amount Source	
FAU	Hotel / Conference Center	200,000	250 Rooms and Meeting Spaces	Boca Raton	\$45,000,000	P3	TBD	TBD	P3

STATE UNIVERSITY SYSTEM
Fixed Capital Outlay Projects that may Require Legislative Authorization
and General Revenue Funds to Operate and Maintain
BOB-2 - DRAFT FOR BOT APPROVAL

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Annual Amount For	
							Operational & Maintenance Costs Amount	Source
FAU	Schmidt Family Complex - Academic Support Center & College of Business EMBA Program	40,000	Classrooms and office space to support the Executive MBA program within FAU's College of Business	Boca Raton, FL	\$15,000,000	University	\$437,880	General Revenue

STATE UNIVERSITY SYSTEM
Fixed Capital Outlay Legislative Budget Request
Changes in Previous Appropriations
BOB-3

University: FLORIDA ATLANTIC UNIVERSITY
Required Change: N/A

CIP-3 SHORT-TERM PROJECT EXPLANATION

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AGENCY Florida Atlantic University
BUDGET ENTITY SUS
PROJECT TITLE Capital Renewal Envelope
Enhancement / Infrastructure

AGENCY PRIORITY 1
DATE BLDG PROGRAM
APPROVED N/A

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

Project History

FAU owns and operates an extensive array of physical assets ranging from classrooms, laboratories, and libraries, to housing, gymnasiums, water lines and utility plants. These assets represent a "facilities portfolio" and with few exceptions, the single largest group of assets owned by this university. This "facilities portfolio", valued at over \$1,009,157,775 (based on Florida Property Insurance Trust Fund) is essential for the effective fulfillment of FAU's mission.

Despite the importance of this ever-growing portfolio of assets, identifying sufficient funds for facilities renewal and condition assessment continues to be a challenge. Higher education management nationwide has shown deferred maintenance to be one of the top five priorities, and a major focus of attention in such publications as APPA's Facilities Manager. In addressing the problem of deteriorating campus facilities and infrastructure, our portfolio management is changing from a facilities to a financial lexicon, and concepts such as "facilities equilibrium" and "protection of capital assets" is evolving into a comprehensive strategy to deal with the overwhelming problems of renewing capital assets.

Unmet financial needs represent a major liability for FAU's campuses, especially those for capital renewal and deferred maintenance. The result is a compounding of deficiencies that further threaten financial stability and handicap FAU's ability to satisfy its missions of teaching, research, and community service. Moreover, as the university must increasingly compete for students, faculty, and staff, the attractiveness of the campus, and its ability to provide modern services, becomes even more important. Capital renewal is an act of survival.

The Sightlines report on Return-on-Physical-Assets (ROPA) study for FAU's Boca Raton Campus completed in 2016; identified an annual funding target need of \$11.5 million to address lifecycle needs over the next ten-year horizon. This figure does not truly reflect FAU's total capital renewal needs as the Sightlines report captures data for FAU's main campus and does not account for the backlog associated with the additional 1 million gross square feet of E&G facilities distributed among FAU satellite campuses and sites.

Specific Objectives of the Proposed Projects are:

The facilities internal audit process provides a rudimentary basis for determining capital needs to avoid further facility and infrastructure deterioration. This process has allowed determination of project priorities, and funding planning based on facilities and infrastructure needs assessment. The following provides an overview of the funding requirements:

A. CAPITAL RENEWAL

a) UTILITIES: Four of the five cooling towers which service approximately 90% of the academic buildings on the Boca Raton Campus are in critical need of structural and mechanical replacement. The replacement of these units is mission critical to the university. This year's PECO appropriation of \$3.5 million will address this urgent need and reduce the number of emergency repairs and associated costs with the current system.

Five of the nine existing sewer lift stations have reached the end of their useful life and need to be modernized due to changing master plan and campus growth.

Replace and retrofit deteriorated chilled water and service water valves and systems, and replace air-handling units in multiple locations throughout the campus.

b) ELECTRICAL SYSTEMS: Much of the electrical infrastructure high-voltage feeders from the FPL's Atlantic substation to the FAU network is in need of replacement. In 2014 FAU installed an alternate feeder, but a recent study of the electrical transmission lines identified an estimated \$1.5 million is needed to prevent failure of the main feeders. Given the critical need for this project and the limited funds for infrastructure and capital renewal, FAU is exploring entering into an ESCO agreement to fund this dire need. In the event the investment grade audit does not support the project or if the University elects not to proceed with the ESCO, funding from the PECO is required to fund this critical project. Other electrical systems projects consist of: replace, upgrade or install new site; lighting and emergency generators to adequately service Life Safety requirements provide Information Resource

CIP-3 SHORT-TERM PROJECT EXPLANATION

Management (IRM) critical electrical support and redundancy for telecommunication switches and computer backbone; replace lighting in various facilities and utility areas to reduce power consumption in accordance with EPA and State mandates, and comply with life safety requirements; install remotely-readable electrical meters for assessment and monitoring of campus loads; continue ongoing survey of the FAU primary electrical distribution system to support future growth and maintenance.

- c) **STRUCTURAL SYSTEMS:** Replace and repair existing sealant at joints of structures and utility tunnel distribution system to stop water intrusion, and provide waterproofing sealant to selected facilities to further reduce water penetration, deterioration of exterior and interior materials. Remove and replace carpeting in selected facilities campus-wide to correct deteriorated and deplorable conditions. All the structural systems work will reduce maintenance cost, improve appearances, and reduce indoor air quality problems.
- B. **BUILDING ENVELOPE ENHANCEMENT:** Assess, repair and/or replace deteriorating building exteriors while jointly enhancing appearance for a more uniform campus appearance. Replace roofing systems which have reached their life expectancy to reduce further deterioration of facilities structures and interior installations and equipment, thus reducing growing campus-wide facility maintenance cost; restore deteriorating facilities structural systems to further reduce interior damage, and eliminate life safety hazards of weak or falling materials.
- C. **DEFERRED MAINTENANCE:** Fund unmet needs in the area of deferred maintenance and capital renewal. The current total 10-year facility renewal need is estimated to be \$121,364,961 and the overall condition needs index is 0.16 (which is listed as "poor").
- D. **ROADWAY IMPROVEMENTS:** The University has proposed a new initiative to prioritize road improvements throughout the campus. A third-party roadway assessment was completed and presented to the Parking & Roadway Committee for their consideration; however, due to lack of funding this initiative has not been implemented. Future appropriations for capital renewal will address this need and allow for prioritization and funding for roadway improvements. Associated parking improvements will be funded by Traffic and Parking auxiliary.

History

Much of the infrastructure, and the water and sewer lines, as well as some of the buildings, are original components of the U.S Army Air Force Base constructed around 1942-'44, and are still in service today. FAU began constructing buildings in the early 1960's, converting some of the existing U. S. Army facilities and using much of the water, sewer, storm drainage and parking infrastructure. Most of these are now in poor condition, need extensive renovation or replacement, and are not in compliance with codes and other State and Federal regulations. The mechanical and electrical systems must be replaced or substantially renovated as they approach end of their life cycle, as the majority are over 30 years old. Additionally, with State and Federal mandates for energy use reductions, coexisting with the budget restraints, replacement of major components will be needed and unavoidable. Many projects will reduce FAU's utilities operational cost in the long term and are worthy investments in the University's future.

STATISTICAL JUSTIFICATION

The Statistical Justification portion of the CIP-3 is not required this year.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

GEOGRAPHIC LOCATION: All Campuses

COUNTY: Varies

PROJECT DESCRIPTION/TITLE: Capital Renewal Envelope Enhancement/Infrastructure

PROJECT BT No. N/A

PROJECT (see CIP 3A for additional information)	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY 22-23	TOTAL
Envelope Enhancement *	\$ 1,250,000	\$ 1,800,000	\$ 1,600,000	\$ 1,950,000	\$ 2,500,000	\$ 9,100,000
Irrigation System Upgrades/ associated Sodding	\$ 100,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 400,000
Landscape/Hardscape Enhancement/Walks/Decks	\$ 500,000	\$ 250,000	\$ 250,000	\$ 50,000	\$ 50,000	\$ 1,100,000
Lift Station / Upgrade Sanitary Piping	\$ 100,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 400,000
Elevator Rehabilitation	\$ 400,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ -	\$ 1,000,000
Energy Management Control System	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
Critical Deferred Maintenance/Capital Renewal**	\$ 3,730,000	\$ 4,717,000	\$ 5,162,000	\$ 5,162,000	\$ 4,812,000	\$ 23,583,000
Sidewalks	\$ 300,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 900,000
Card Access	\$ 100,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 300,000
Site Lighting	\$ 400,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,200,000
Signage	\$ 100,000	\$ 100,000	\$ 100,000	\$ 50,000	\$ 50,000	\$ 400,000
Branch Campuses	\$ 600,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 1,800,000
Information Technology Infrastructure	\$ 300,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 900,000
TOTAL	\$ 7,930,000	\$ 8,167,000	\$ 8,412,000	\$ 8,412,000	\$ 8,412,000	\$ 41,333,000

* Includes the following buildings: Not Prioritized

	BUILDING NAME
1	Utilities Building
2	Library
3	Field House
4	Williams Administration Building
5	Social Science Building
6	Instructional Services
7	Science
8	Engineering West
9	Tunnel System

** - Reference attached Critical Deferred Maintenance list for project description and estimated costs.

Infrastructure/Capital Renewal projects proposed to be supported by Annual Appropriation for maintenance include:

- Irrigation
- Card Access
- Site Lighting
- ADA Issues
- Flooring

Note: If annual appropriation is not sufficient to cover the above items, these projects may be funded through capital renewal/envelope enhancement/infrastructure funding.

STATE UNIVERSITY SYSTEM OF FLORIDA

Critical Deferred Maintenance List For: FLORIDA ATLANTIC UNIVERSITY

Developed based on internal assessment process and consulting engineering reports

- | | |
|---|--|
| A. Roofing Repairs or Reroofing Required | E. Mechanical/Air Conditioning/Heating Exhaust Systems/Fume Hoods/ Site Piping |
| B. Outside Walls, Windows, Doors | F. Supply &Waste Plumbing & Fixtures/Showers/Acid Waste Systems/Other Building Piping |
| C. Structural Frame, Foundations | G. Electrical/Lighting/Transformers/Phone Systems/Telecommunications Systems/Site Electrical |
| D. Building Interior Spaces (ceilings, walls, floors, etc.) | H. Other Building System Items/Built-in Furnishings & Equipment/Building Security Systems |

Building Number	Description	GSF	Year Occupied	Last Year Renovated	Estimated Cost									Totals
					Replacement Cost**	A	B	C	D	E	F	G	H	
0003	Library	161,686	1964		\$44,590,250		\$109,956		\$362,208	\$2,159,000	\$457,417	\$64,680	\$388,080	\$3,541,341
0004	Instructional Services	33,469	1964		6,386,520	460,000	800,000	155,232	258,720	646,800	323,400	45,276	19,404	\$2,708,832
0005	Utility	42,084	1964		7,915,500	1,030,000	103,488			49,157	161,700	64,680	517,440	\$1,926,465
0009	Arts & Letters- Univ. Theatre	110,366	1966	2000	20,848,690		210,000	\$262,500	262,500			315,000		\$1,050,000
0010	Administration	95,299	1966		15,769,890		439,824		113,400	1,293,600	323,400	129,360	258,720	\$2,558,304
0011	Field House	10,869	1965		1,580,290	206,976	310,464		258,720	129,360	323,400	103,488	-	\$1,332,408
0028	Gazebo	700	1967		32,980	5,304	-							\$5,304
0033	Pool Mechanical	372	1970		0	-	-			-	38,808	-	38,808	\$77,616
0036	Engineering West	59,419	1982		11,154,600	600,000	38,808		388,080	905,520	187,572	142,296	45,276	\$2,307,552
0038	Arena	70,464	1983		11,153,970					1,050,000				\$1,050,000
0039	Ritter Art Gallery	4,425	1982		705,540	200,000	19,404							\$219,404
0043	Science	128,250	1990		23,997,910	582,120	-		129,360	892,500	-	-	77,616	\$1,681,596
0044	Social Science Building	102,973	1990		18,902,350	700,000	210,000	105,000	210,000	1,200,000				\$2,425,000
0047	College of Education	93,187	1993		14,715,800	1,200,000	1,000,000		210,000	315,000				\$2,725,000
T005	Property Management	9,100	1964		1,134,700	38,808	19,404		129,360	36,221	129,360	64,680		\$417,833
T006	Art Off & Classroom	9,100	1964		1,134,700	38,808	19,404		129,360	36,221	129,360	64,680		\$417,833
T010	Arts & Letters	7,455	1968		870,760	38,808	14,230		64,680	38,808	64,680	38,808		\$260,014
T011	Psychology	7,324	1968		868,430	38,808	14,230		129,360	38,808	129,360	38,808		\$389,374
NA	Tunnels		1965				970,200							970,200
TOTALS		946,542			\$181,762,880	\$5,139,632	\$4,279,411	\$522,732	\$2,645,748	\$8,790,994	\$2,268,457	\$1,071,756	\$1,345,344	\$26,064,074
													Total Plus 3% Inflation Factor	\$26,845,996

These projects are included as part of major project renovations on the CIP 2 project list. If funding is appropriated through the major projects, cost for these items will not be included as part of deferred maintenance.

**Replacement costs from Florida State Office of Insurance Regulations.

CIP-3 SHORT-TERM PROJECT EXPLANATION

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AGENCY Florida Atlantic University
BUDGET ENTITY SUS
PROJECT TITLE Jupiter STEM / Life Sciences
Building

AGENCY PRIORITY 2
DATE BLDG PROGRAM
APPROVED

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

The Jupiter Campus Research (MC-17) and Research Expansion (MC-19) Buildings were constructed through a partnership with Palm Beach County to provide temporary facilities for The Scripps Research Institute on the John D. MacArthur Campus. With the completion of The Scripps Research Institute's permanent facilities in January 2009 Scripps vacated both MC-17 and MC-19 by early 2009. Soon after, FAU leased the MC-19 and a portion of MC-17 to the Max Planck Florida Center as their temporary until the construction of their new 100,000 GSF building on the MacArthur Campus which completed in June 2012. As part of the user agreement with Max Planck, funding was provided to FAU to modify the buildings to accommodate university academic and research needs. These modifications were designed and completed and FY2012/13.

This proposed project will renovate a portion of MC17 to modify research space for the Honors College Chemistry and Biology programs with the majority of the funds being directed towards design and construction of a 72,000 GSF STEM/Life Behavioral Science Building at the John D. MacArthur Campus. Jointly these facilities will support FAU's STEM Life Sciences Initiative which will capitalize on the nearly one billion dollars that taxpayers have invested to attract world class biomedical research institutions to our region.

FAU, Max Planck Florida Institute, and Scripps Research Institute have recently entered into a formalized agreement that will build on their existing programs that will attract the best and brightest students and transform FAU's John D. MacArthur Campus in Jupiter into a hub of scientific inquiry, innovation, and economic development. The initiative will allow students to work, study, and conduct research alongside some of the world's leading scientists, while a shared facilities environment will provide faculty and students access to state-of-the-art scientific equipment. Together, FAU, Max Planck, and Scripps will train the scientific leaders of tomorrow.

Extraordinary construction costs for this project have been included to account for the additional expansion of campus utilities (chilled water, electrical distribution, emergency generator, etc.) that need to be upgraded as a result of this new building. Extraordinary telecommunication costs will extend necessary external conduit from the main telecommunication hub and additional internal wiring to support this building.

The Education Plant Survey was conducted and approved by FAU BOT on May 17, 2016. Survey recommendation number 3.4 supports the need for this project.

STATISTICAL JUSTIFICATION

The Statistical Justification portion of the CIP-3 is not required this year.

GEOGRAPHIC LOCATION: **Boca Raton, FL**

COUNTY: Palm Beach County

PROJECT TITLE: **Jupiter STEM / Life Sciences**

PROJECT BT No. (if assigned): _____

CIP-3, B - PROJECT DESCRIPTION							
Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Research Labs	17,500	1.6	28,000	373.17	\$ 10,448,760	Aug-18	Dec-19
Teaching Labs	16,000	1.6	25,600	312.52	\$ 8,000,512		
Offices	7,415	1.6	11,864	305.45	\$ 3,623,859		
Classrooms	4,000	1.7	6,692	292.95	\$ 1,960,421		
Totals	<u>44,915</u>		<u>72,156</u>		<u>24,033,552</u>		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation	<u>20,000</u>		<u>60</u>		<u>1,200,000</u>		
Total Construction - New & Rem./Renov					<u>25,233,600</u>		
						Space Detail for Remodeling Projects	
						BEFORE	
						AFTER	
						Space Type	Net Area (NASF)
						Space Type	Net Area (NASF)
						Total	<u>0</u>
						Total	<u>0</u>

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS		ESTIMATED COSTS						
	Funded to Date	Year 1	Year 2	Year 3	Year 4	Year 5	Funded & In CIP	
1. BASIC CONSTRUCTION COSTS								
a. Construction Cost (from above)	\$8,735,000	\$16,498,600					\$25,233,600	
Add/Extraordinary Const. Costs								
b. Environmental Impacts/Mitigation							\$0	
c. Site Preparation							\$0	
d. Landscape/Irrigation		\$75,000					\$75,000	
e. Plaza/Walks		\$75,000					\$75,000	
f. Roadway Improvements							\$0	
g. Parking ___ spaces							\$0	
h. Telecommunication		\$350,000					\$350,000	
i. Electrical Service	\$175,000						\$175,000	
j. Water Distribution	\$75,000						\$75,000	
k. Sanitary Sewer System	\$75,000						\$75,000	
l. Chilled Water System	\$750,000						\$750,000	
m. Storm Water System	\$40,000						\$40,000	
n. Energy Efficient Equipment							\$0	
Total Construction Costs	\$ 9,850,000	\$ 16,998,600	\$ -	\$ -	\$ -	\$ -	\$ 26,848,600	
2. OTHER PROJECT COSTS								
a. Land/existing facility acquisition							\$0	
b. Professional Fees	\$2,185,800						\$2,185,800	
c. Fire Marshall Fees	\$65,000						\$65,000	
d. Inspection Services	\$234,900						\$234,900	
e. Insurance Consultant							\$0	
f. Surveys & Tests	\$30,000						\$30,000	
g. Permit/Impact/Environmental Fees	\$3,000						\$3,000	
h. Artwork		\$100,000					\$100,000	
i. Moveable Furnishings & Equipment			\$3,202,000				\$3,202,000	
j. Project Contingency	\$512,547	\$793,653					\$1,306,200	
Total - Other Project Costs	\$ 3,031,247	\$ 893,653	\$ 3,202,000	\$ -	\$ -	\$ -	\$ 7,126,900	
ALL COSTS 1+2	\$ 12,881,247	\$ 17,892,253	\$ 3,202,000	\$ -	\$ -	\$ -	\$ 33,975,500	

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2016-17	\$ 3,031,247				
PECO	2017-18	\$ 9,850,000				
TOTAL		<u>\$ 12,881,247</u>	TOTAL		<u>0</u>	<u>33,975,500</u>

Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: Florida Atlantic University, Jupiter Campus
Project: Jupiter STEM / Life Sciences Building
Total Project Cost: \$ 33.9 M
Previous Funding (State): \$ 12,881,247
Current Request: \$ 17,892,253
STEM (Yes or No): YES
Contact Person (Name, Position, Office and Cell Phone No., Email):

Ryan Britton
Director of State Relations
Florida Atlantic University
561.297.2583 o
954.579.7669 c
Rbritto2@fau.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)
Explanation:
 - a. **This project will positively impact degree productivity in the fast-growing industry of Professional, Scientific, and Technical Services (Letters "c" and "d" below)**
 - i. Adding 1,425 STEM undergraduates at FAU in Jupiter by 2025
 - ii. Adding 80 STEM graduate students at FAU in Jupiter by 2025
 - b. **Department of Economic Opportunity (DEO) ranks Professional, Scientific, and Technical Services industry (DEO Data, 2014)**
 - i. 2nd most new jobs in the state by 2022
 - 90,714 new jobs, which is a 19% increase over 8 years
 - ii. 3rd most new jobs in Palm Beach County by 2022

- 7,270 new jobs, which is a 17% increase over 8 years

c. **High average annual wage for all occupations in the Professional, Scientific, and Technical Services industry**

- i. \$75,570 annually (Source: US Department of Labor, Bureau of Labor Statistics, 2014).

2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc)

Explanation:

a. **Increases FAU's overall production of STEM degrees**

- Jupiter will increase FAU's STEM and health undergraduate degrees awarded from 31% in 2015 to more than 40% by 2025
- Plan increases STEM graduate degrees from 18% to 30% by 2025

b. **More honors STEM students will increase 4-year completion rates**

- Jupiter plan calls for recruitment of high-achieving students with aspirations to pursue medical/graduate school in the life sciences.
- Faculty from Scripps and Max Planck will participate in these STEM programs, supporting students with world-class mentors.

c. **Expands Biotechnology and Business programming**

- Professional Science Masters (PSM) in Biotechnology, which requires 2 internships in biotechnology companies.

3. Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:

a. **Research infrastructure will encourage collaboration and cooperative grants between FAU faculty and Scripps and Max Planck faculty**

- Current annual funding levels for STEM faculty in Jupiter is \$60,000 per faculty member (total of \$750,000 annually)
- By 2025, annual funding levels for STEM faculty in Jupiter will increase to \$100,000 per faculty member (total of \$7.5M annually)
- According to the NIH, \$7.5M in annual research funding exerts \$19.65M/year of regional economic impact

4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation:

a. Project is in an Area of Strategic Emphasis as Determined by Department of Economic Opportunity

- Florida's Targeted Industry Clusters includes *Life Sciences* and *Infotech* (Source: DEO Workforce Estimating Conference 2013)
- DEO's Strategic Areas of Emphasis includes *Emerging Technologies* (Source: Bureau of Labor Market Statistics 2013)

b. In addition to job production of STEM graduates, project will directly provide new research labs and office/support space for additional hires:

- Creates 45 regular/research faculty members
- Creates 35 postdoctoral fellowship positions
- 500+ construction jobs

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

a. Improves on two Performance Funding Model Metrics by providing instructional research space needed to support enrollment

- Bachelor's degrees in areas of strategic emphasis (STEM)
- Graduate degrees in areas of strategic emphasis (STEM)

b. Improves on two Performance Funding Model Metrics by positively impacting degree productivity in the fast-growing industry of Professional, Scientific, and Technical Services (See 1 a., b. and c.)

- Percent of bachelor's graduates employed and/or continuing their education further
- Average wages of employed baccalaureate graduates

6. Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

a. Increases business partnerships with both Scripps Florida and the Max Planck Florida Institute (MPFI) for Neuroscience

- Scripps Florida offers opportunities for graduate research, postdoctoral training, and fellowships.
- MPFI offers post-doctorate positions, post-baccalaureate research experiences, undergraduate research scholars program, as well as partnerships throughout FAU's Integrative Biology and Neuroscience (IBAN) Ph.D. program.

7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

- a. **Renovates existing labs in Building MC17 to maximize the number of labs for additional research activities**

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation:

- a. The STEM Life Science Initiative will create a shared facilities environment, which will allow faculty and students access to state-of-the-art scientific equipment at both Scripps Florida and MPFI.

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation: N/A

Other Pertinent Information not included above:

- **The Jupiter Research Building is part of FAU's STEM Life Sciences Initiative**, which will capitalize on the nearly one billion dollars that taxpayers have invested to attract world class biomedical research institutions to our region. FAU, Max Planck Florida Institute, and Scripps Research Institute have recently entered into a formalized agreement that will build on their existing relationships to create collaborative, one-of-a-kind STEM focused education programs that will attract the best and brightest students and transform Florida Atlantic University's John D. MacArthur Campus in Jupiter into a hub of scientific inquiry, innovation, and economic development. The initiative will allow students to work, study, and conduct research alongside some of the world's leading scientists, while a shared facilities environment will provide faculty and students access to state-of-the-art scientific equipment. Together, FAU, Max Planck, and Scripps will train the scientific leaders of tomorrow.
- **Request is for new project and renovation of an existing STEM lab building**, which will allow for expansion of collaborative research in these targeted areas:
 - Neuroscience
 - Biotechnology
 - Bioengineering
 - Bioinformatics/data science

- Chemistry
- **Proposal will increase licensing activity of intellectual property and “spinout” companies based on FAU intellectual property**
 - 4 patents already awarded to STEM faculty in Jupiter
 - Patents have been licensed by 2 local Biotech startups

GEOGRAPHIC LOCATION: **FAU Boca Raton Campus** COUNTY: _____
PROJECT DESCRIPTION/TITLE: **Medical Building Phase I - Charles E. Schmidt College of Med. Expansion** PROJECT BR No. (if assigned): _____

CIP-3, B - PROJECT DESCRIPTION							
Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Teaching Labs	15,000	1.7	25,500	312.52	7,969,260	Jul-19	Oct-20
Offices/Exam	35,000	1.7	59,500	305.45	18,174,275		
Research Labs	12,000	1.7	20,400	373.17	7,612,668		
Space Detail for Remodeling Projects							
				BEFORE		AFTER	
				Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Totals	<u>62,000</u>		<u>105,400</u>		<u>33,756,203</u>		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation	<u>20000</u>		<u>60</u>	0	<u>1,200,000</u>		
Total Construction - New & Rem./Renov					<u>34,956,200</u>	Total	<u>0</u>
						Total	<u>0</u>

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS							ESTIMATED COSTS		
Funded to									
1. BASIC CONSTRUCTION COSTS	Date	Year 1	Year 2	Year 3	Year 4	Year 5	Funded & In CIP	Additional Funding Beyond CIP	
a. Construction Cost (from above)			27,343,500				27,343,500	7,612,700	
Add'l/Extraordinary Const. Costs									
b. Environmental Impacts/Mitigation							-		
c. Site Preparation			300,000				300,000		
d. Landscape/Irrigation			300,000				300,000		
e. Plaza/Walks			150,000				150,000		
f. Roadway Improvements			450,000				450,000		
g. Parking _300 spaces			1,650,000				1,650,000		
h. Telecommunication			1,335,000				1,335,000	300,000	
i. Electrical Service			500,000				500,000		
j. Water Distribution			100,000				100,000		
k. Sanitary Sewer System			100,000				100,000		
l. Chilled Water System			750,000				750,000		
m. Storm Water System			200,000				200,000		
n. Energy Efficient Equipment			100,000				100,000		
Total Construction Costs	0	-	33,278,500	-	-	-	33,278,500	7,912,700	
2. OTHER PROJECT COSTS									
a. Land/existing facility acquisition							-		
b. Professional Fees		2,948,300					2,948,300	591,200	
c. Fire Marshall Fees		81,100					81,100	20,800	
d. Inspection Services		267,200					267,200	66,500	
e. Insurance Consultant		20,400					20,400	5,300	
f. Surveys & Tests		30,000					30,000		
g. Permit/Impact/Environmental Fees		3,000					3,000		
h. Artwork			100,000				100,000		
i. Moveable Furnishings & Equipment				3,973,000			3,973,000	998,100	
j. Project Contingency			1,628,500				1,628,500	405,400	
Total - Other Project Costs	0	3,350,000	1,728,500	3,973,000	-	-	9,051,500	2,087,300	

ALL COSTS 1+2 0 3,350,000 35,007,000 3,973,000 0 0 42,330,000 10,000,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
			Donor*	2019-20		\$ 10,000,000
TOTAL		<u>0</u>	TOTAL		<u>0</u>	<u>\$ 52,330,000</u>

*FAU is Perusing Capital Campaign for Potential Donor Funds to Supplement PECO Funding for this project.

Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: Florida Atlantic University
Project: Medical Building - Charles E. Schmidt College of Medicine Expansion
Total Project Cost: \$ 42.33 M
Previous Funding (State): \$ -
Current Request: \$ 3.35 M
STEM (Yes or No): YES
Contact Person (Name, Position, Office and Cell Phone No., Email):

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Florida Atlantic University
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954.579.7669 c
Rbritto2@fau.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)
Explanation:

FAU's class of 64 medical students could be doubled with adequate square footage in a new facility, which would mean an additional 64 doctor of medicine degrees awarded annually. Each year, more than 4,000 applicants seek admission to this limited number of seats, showcasing the interest amongst future doctors. FAU currently maintains a 100% placement rate for these students in their residencies. In the first year of placement, roughly half of FAU's graduates matched within the state of Florida.

2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc)
Explanation:

Adequate space would eventually create a path for FAU to build medical school enrollments to more than 500 students. Currently enrollments are just below 250 students.

3. Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:

The Charles E. Schmidt College of Medicine is currently restricted in terms of growth due to limited space. The addition of this facility would enable the college to expand its current medical enrollments, existing research programs, add new residency programs, and increase clinical operations on the Boca Raton campus. This will in turn lead to increased research expenditures. As an example, in the Department of Biomedical Science, FAU employs 18 tenured and tenure-earning faculty who each produced an average of more than \$140,000 in sponsored research expenditures in academic year 2013-14 (latest available data). If space was available to increase the size of the faculty by only 10 faculty, then the expectation would be that the university could eventually produce an additional \$1.4M each year.

4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation:

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

6. Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

Partnering with the FAU Consortium for Graduate Medical Education, consisting of the Boca Raton Regional Hospital, Bethesda Healthcare, and Tenet HealthCare system's Delray Medical Center, St. Mary's Medical Center and West Boca Medical Center, FAU offers a growing number of fully accredited residencies committed to excellence in education and patient care. These partnerships would grow as a result of increased capacity.

7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation:

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation:

Other Pertinent Information not included above:

GEOGRAPHIC LOCATION: FAU Boca Raton Campus

COUNTY: Palm Beach

PROJECT DESCRIPTION/TITLE: Boca Library Renovation

PROJECT BR No. (if assigned): _____

CIP-3, B - PROJECT DESCRIPTION							
Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
			0		0	Jul-19	Feb-21
			0		0		
			0		0		
			0		0		
			0		0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation			160,000	\$ 155.00	24,800,000		
Total Construction - New & Rem./Renov					24,800,000	Total	0
						Total	0

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS								ESTIMATED COSTS			
	Funded to Date	Year 1	Year 2	Year 3	Year 4	Year 5	Funded & In CIP				
1. BASIC CONSTRUCTION COSTS											
a. Construction Cost (from above)			\$13,300,000	\$11,500,000			24,800,000				
Add/Extraordinary Const. Costs											
b. Environmental Impacts/Mitigation							0				
c. Site Preparation							0				
d. Landscape/Irrigation							0				
e. Plaza/Walks							0				
f. Roadway Improvements							0				
g. Parking ___ spaces							0				
h. Telecommunication			\$600,000				600,000				
i. Electrical Service							0				
j. Water Distribution							0				
k. Sanitary Sewer System							0				
l. Chilled Water System							0				
m. Storm Water System							0				
n. Energy Efficient Equipment			\$800,000				800,000				
Total Construction Costs	0	0	14,700,000	11,500,000	0	0	26,200,000				
2. OTHER PROJECT COSTS											
a. Land/existing facility acquisition							-				
b. Professional Fees		2,543,600					2,543,600				
c. Fire Marshall Fees		68,900					68,900				
d. Inspection Services		270,500					270,500				
e. Insurance Consultant		17,800					17,800				
f. Surveys & Tests		117,200					117,200				
g. Permit/Impact/Environmental Fees							-				
h. Artwork			100,000				100,000				
i. Moveable Furnishings & Equipment				8,500,000			8,500,000				
j. Project Contingency		902,000	1,200,000	480,000			2,582,000				
Total - Other Project Costs	0	3,920,000	1,300,000	8,980,000	-	-	14,200,000				
ALL COSTS 1+2	0	3,920,000	16,000,000	20,480,000	0	0	40,400,000				

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
TOTAL		0	TOTAL		0	40,400,000

Higher Educational Facilities Return on Investment

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: Florida Atlantic University, Boca Raton Campus

Project: Boca Library Renovation

Total Project Cost: \$ 40.4 M

Previous Funding (State): \$ 0.0 M

Current Request: \$ 3.9 M

STEM (Yes or No): YES (Indirectly as the Library supports all programs)

Contact Person (Name, Position, Office and Cell Phone No., Email):

Ryan Britton

Director of State Relations

Florida Atlantic University

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954.579.7669 c

Rbritto2@fau.edu

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)
Explanation:
2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc)
Explanation:
3. Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:
4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

6. Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

Replacement of old building systems with new energy efficient equipment will greatly improve operational cost for the facility consisting of over 160,000 GSF. Additionally, the repurposing of antiquated stack areas to programmatic space to support instructional needs will provide new space for academic programs.

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation:

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation:

Constructed in 1964 the library is one of the oldest buildings on FAU's campus. Even with recent minor renovations, the facility is in dire need for maintenance to address building envelope, outdated building systems and integration of new technology. The proposed renovation will not only address both critical and deferred maintenance it will also repurpose the existing facility to address the changing technology and maximize the building square footage to address current programmatic needs.

Other Pertinent Information not included above:

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY Florida Atlantic University
BUDGET ENTITY SUS
PROJECT TITLE Colleges of Science & Engineering
 Bldgs. 36, 43 & 55 Renovation

AGENCY PRIORITY 5
DATE BLDG PROGRAM _____
APPROVED _____

PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

This project consists of renovation to three buildings that support STEM programs offered through the College of Engineering and Computer Sciences and the Charles E. Schmidt College of Science. In 2010, after the completion of Engineering East, engineering programs previously housed in buildings 43 were located to the new building, allowing for the consolidation and expansion of several existing programs for the College of Science within the facility.

Specific to the Science Building (43), the College of Science has expanded the department of Geosciences, provided additional space for the Math Department, and consolidated student advising in the college within the dean's office. Although these moves have been accommodated through numerous minor projects, the overall facility needs to be renovated to provide a cohesive learning environment for the programs. The main lobby of this building serves as a central study space for the students and this year project funding has been increased to allow for inclusion of collaborative study spaces with upgraded technology needed for student success.

As a result of consolidating the Geosciences Department to the renovated Science Building (43), the space vacated in the Physical Sciences Building (55) may now be converted back to its original use as chemistry teaching and research labs. Similarly, the classrooms relocated to Engineering East have allowed for the addition of new research and teaching labs in Engineering West (36). The installation of new research and teaching labs in bldg. 36 have necessitated an overhaul of the HVAC system as the current unit could not provide adequate cooling and humidity control within the building. Lack of proper temperature and humidity control within the building has resulted in indoor air quality issues and necessitated emergency repairs to the buildings HVAC system. Although this project is currently underway, additional funding is needed to address interior upgrades and programmatic changes within building 36.

Due to the age of all three buildings a significant amount of the allocated budget will be directed towards upgrading building systems to include: asbestos abatement; electrical; HVAC; lighting; Information Technology; fire controls; elevator upgrades; etc.

Due to potential unforeseen conditions associated with renovation of older facilities, the university has identified 5% contingency for this project.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in May, 2016. Although the three buildings are included as a single project request, the survey team recommended each project independently under recommendation nos.

- 2.2 - Colleges of Science & Engineering Buildings - Engineering West (#36) Renovation
- 2.3 – Colleges of Science & Engineering Buildings – Science Building (#43) Renovation
- 2.4 – Colleges of Science & Engineering Buildings – Physical Science (#55) Renovation

STATISTICAL JUSTIFICATION

The Statistical Justification portion of the CIP-3 is not required this year.

GEOGRAPHIC LOCATION: FAU, Boca Raton Campus COUNTY: Palm Beach
PROJECT DESCRIPTION/TITLE: Colleges of Science & Engineering Bldgs. 36, 43, & 55 Reno PROJECT BR No. (if assigned): _____

CIP-3, B - PROJECT DESCRIPTION							
Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
			0		0	May-18	Apr-19
			0		0		
			0		0		
			0		0		
			0		0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation			177,412	\$ 65.00	\$ 11,531,780		
Total Construction - New & Rem./Renov					11,531,780	Total	0

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS		ESTIMATED COSTS					
	Funded to Date	Year 1	Year 2	Year 3	Year 4	Year 5	Funded & In CIP
1. BASIC CONSTRUCTION COSTS							
a. Construction Cost (from above)		11,531,800					11,531,800
Add'l/Extraordinary Const. Costs							
b. Environmental Impacts/Mitigation							0
c. Site Preparation							0
d. Landscape/Irrigation							0
e. Plaza/Walks							0
f. Roadway Improvements							0
g. Parking ___ spaces							0
h. Telecommunication		500,000					500,000
i. Electrical Service							0
j. Water Distribution							0
k. Sanitary Sewer System							0
l. Chilled Water System							0
m. Storm Water System							0
n. Energy Efficient Equipment							0
Total Construction Costs	0	12,031,800	0	0	0	0	12,031,800
2. OTHER PROJECT COSTS							
a. Land/existing facility acquisition							0
b. Professional Fees		966,300					966,300
c. Fire Marshall Fees		28,800					28,800
d. Inspection Services		107,600					107,600
e. Insurance Consultant		12,200					12,200
f. Surveys & Tests		12,000					12,000
g. Permit/Impact/Environmental Fees		3,000					3,000
h. Artwork							-
i. Moveable Furnishings & Equipment		1,000,000					1,000,000
j. Project Contingency		838,300					838,300
Total - Other Project Costs	0	2,968,200	0	0	0	0	2,968,200

ALL COSTS 1+2 0 15,000,000 0 0 0 0 15,000,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
TOTAL		0	TOTAL		0	15,000,000

GEOGRAPHIC LOCATION: FAU Boca Raton Campus
PROJECT DESCRIPTION/TITLE: Social Science Bldg. 44 Renovator

COUNTY: Palm Beach
PROJECT BR No. (if assigned):

CIP-3, B - PROJECT DESCRIPTION

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date	Space Detail for Remodeling Projects			
								BEFORE		AFTER	
						Jul-20	Jun-21	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
			0		0						
			0		0						
			0		0						
			0		0						
Totals	0		0		0						
*Apply Unit Cost to total GSF based on primary space type											
Remodeling/Renovation			102,973	\$ 175.00	18,020,300						
Total Construction - New & Rem./Renov					18,020,300	Total	0	Total	0		

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	Year 1	Year 2	Year 3	Year 4	Year 5	Funded & In CIP
1. BASIC CONSTRUCTION COSTS				18,020,300			18,020,300
a.Construction Cost (from above)				18,020,300			18,020,300
Add'l/Extraordinary Const. Costs							0
b.Environmental Impacts/Mitigation							0
c.Site Preparation							0
d.Landscape/Irrigation							0
e.Plaza/Walks							0
f.Roadway Improvements							0
g.Parking ___ spaces							0
h.Telecommunication							0
i.Electrical Service							0
j.Water Distribution							0
k.Sanitary Sewer System							0
l.Chilled Water System							0
m.Storm Water System							0
n.Energy Efficient Equipment							0
Total Construction Costs	0	0	0	18,020,300	0	0	18,020,300
2. OTHER PROJECT COSTS							-
a.Land/existing facility acquisition							-
b.Professional Fees			1,747,000				1,747,000
c.Fire Marshall Fees			45,000				45,000
d.Inspection Services			357,000				357,000
e.Insurance Consultant			3,400				3,400
f.Surveys & Tests			82,100				82,100
g.Permit/Impact/Environmental Fees			3,000				3,000
h.Artwork							-
i.Moveable Furnishings & Equipment					3,840,000		3,840,000
j.Project Contingency			480,500	661,700			1,142,200
Total - Other Project Cost	0	-	2,718,000	3,840,000	3,840,000	-	7,219,700
ALL COSTS 1+2	0	0	2,718,000	21,860,300	3,840,000	0	25,240,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
TOTAL		0	TOTAL		0	25,240,000

GEOGRAPHIC LOCATION: **FAU Boca Raton Campus**
PROJECT DESCRIPTION/TITLE: **Central/Satellite Utility Plant**

COUNTY: **Palm Beach**
PROJECT BR No. (if assigned): _____

CIP-3, B - PROJECT DESCRIPTION

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date	Space Detail for Remodeling Projects	
Office	260	1.5	390	305.45	\$ 119,126	Jul-20	Jun-21		
Campus Support	1000	1.5	1500	279.54	\$ 419,310				
			0		-			BEFORE	AFTER
			0		-			Space Type	Net Area (NASF)
			0		-			Space Type	Net Area (NASF)
Totals	1260		1,890		538,436				
*Apply Unit Cost to total GSF based on primary space type									
Remodeling/Renovation			0		0				
Total Construction - New & Rem./Renov					\$ 538,400	Total	0	Total	0

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS

	ESTIMATED COSTS						
	Funded to Date	Year 1	Year 2	Year 3	Year 4	Year 5	Funded & In CIP
1. BASIC CONSTRUCTION COSTS							
a. Construction Cost (from above)				538,400			538,400
Add'l/Extraordinary Const. Costs							
b.Environmental Impacts/Mitigation							-
c.Site Preparation							-
d.Landscape/Irrigation							-
e.Plaza/Walks							-
f.Roadway Improvements							-
g.Parking ___ spaces							-
h.Telecommunication				81,600			81,600
i.Electrical Service				300,000			300,000
j.Water Distribution							-
k.Sanitary Sewer System							-
l.Chilled Water System				4,500,000			4,500,000
m.Storm Water System							-
n.Energy Efficient Equipment				250,000			250,000
Total Construction Costs	0	-	-	5,670,000	-	-	5,670,000
2. OTHER PROJECT COSTS							
a.Land/existing facility acquisition							-
b.Professional Fees			542,300				542,300
c.Fire Marshall Fees			14,000				14,000
d.Inspection Services			71,000				71,000
e.Insurance Consultant			3,600				3,600
f.Surveys & Tests			24,500				24,500
g.Permit/Impact/Environmental Fees			5,000				5,000
h.Artwork							-
i.Moveable Furnishings & Equipment					416,000		416,000
j.Project Contingency				380,600			380,600
Total - Other Project Costs	0	-	660,400	380,600	416,000	-	1,457,000
ALL COSTS 1+2	\$ -	\$ -	\$ 660,400	\$ 6,050,600	\$ 416,000	\$ -	\$ 7,127,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
TOTAL		0	TOTAL		0	\$ 7,127,000

GEOGRAPHIC LOCATION: **FAU Boca Raton Campus** COUNTY: Palm Beach
PROJECT DESCRIPTION/TITLE: **Arts & Letters Building 9 Renovation & Additior** PROJECT BR No. (if assigned):

CIP-3, B - PROJECT DESCRIPTION							
Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
			0		0	Mar-23	Apr-24
			0		0		
			0		0		
			0		0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
			23000	200	4,600,000		
Total Construction - New & Rem./Renov							
					4,600,000	Total	0
						Total	0

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS								ESTIMATED COSTS	
	Funded to Date	Year 1	Year 2	Year 3	Year 4	Year 5	Funded & In CIP		
1. BASIC CONSTRUCTION COSTS									
a. Construction Cost (from above)						4,600,000	4,600,000		
Add'l/Extraordinary Const. Costs									
b. Environmental Impacts/Mitigation									-
c. Site Preparation									-
d. Landscape/Irrigation									-
e. Plaza/Walks						250,000	250,000		
f. Roadway Improvements									-
g. Parking ___ spaces									-
h. Telecommunication						200,000	200,000		
i. Electrical Service									-
j. Water Distribution									-
k. Sanitary Sewer System									-
l. Chilled Water System									-
m. Storm Water System									-
n. Energy Efficient Equipment									-
Total Construction Costs	0	0	0	0	0	0	5,050,000	5,050,000	
2. OTHER PROJECT COSTS									
a. Land/existing facility acquisition									-
b. Professional Fees						650,000	650,000		
c. Fire Marshall Fees						12,000	12,000		
d. Inspection Services						100,000	100,000		
e. Insurance Consultant						3,400	3,400		
f. Surveys & Tests						50,000	50,000		
g. Permit/Impact/Environmental Fees						3,000	3,000		
h. Artwork									-
i. Moveable Furnishings & Equipment						500,000	500,000		
j. Project Contingency						331,600	331,600		
Total - Other Project Costs	0	0	0	0	0	0	1,650,000	1,650,000	
ALL COSTS 1+2	0	0	0	0	0	0	6,700,000	6,700,000	

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
TOTAL		0	TOTAL		0	6,700,000

GEOGRAPHIC LOCATION: **FAU Boca Raton Campus**
PROJECT DESCRIPTION/TITLE: **Indian River Blvd. Realignment**

COUNTY: **Palm Beach**
PROJECT BR No. (if assigned): _____

CIP-3, B - PROJECT DESCRIPTION

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date	Space Detail for Remodeling Projects			
								BEFORE		AFTER	
			0		0	Jan-23	Aug-23	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Totals	0		0		0						
*Apply Unit Cost to total GSF based on primary space type											
Remodeling/Renovation			0		0						
Total Construction - New & Rem./Renov					0	Total	0	Total	0		

CIP-3, C - SCHEDULE OF PROJECT COMPONENTS

	ESTIMATED COSTS							Funded & In CIP
	Funded to Date	Year 1	Year 2	Year 3	Year 4	Year 5		
1. BASIC CONSTRUCTION COSTS								
a. Construction Cost (from above)							-	-
Add'l/Extraordinary Const. Costs								
b. Environmental Impacts/Mitigation								-
c. Site Preparation								-
d. Landscape/Irrigation								-
e. Plaza/Walks								-
f. Roadway Improvements							4,600,000	4,600,000
g. Parking ___ spaces								-
h. Telecommunication								-
i. Electrical Service								-
j. Water Distribution								-
k. Sanitary Sewer System								-
l. Chilled Water System								-
m. Storm Water System								-
n. Energy Efficient Equipment								-
Total Construction Costs	0	0	0	0	0	0	4,600,000	4,600,000
2. OTHER PROJECT COSTS								
a. Land/existing facility acquisition								-
b. Professional Fees							414,000	414,000
c. Fire Marshall Fees								-
d. Inspection Services							75,000	75,000
e. Insurance Consultant								-
f. Surveys & Tests							35,000	35,000
g. Permit/Impact/Environmental Fees								-
h. Artwork								-
i. Moveable Furnishings & Equipment								-
j. Project Contingency							232,000	232,000
Total - Other Project Costs	0	0	0	0	0	0	756,000	756,000
ALL COSTS 1+2	0	0	0	0	0	0	5,356,000	5,356,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
TOTAL		0	TOTAL		0	5,356,000

CIP-3 SHORT-TERM PROJECT EXPLANATION

AGENCY Florida Atlantic University
BUDGET ENTITY State University System
PROJECT TITLE Breezeway Expansion (Phase I & 2)

Page 1 of 3
LAS/PBS BUDGET ENTITY CODE
APPROPRIATION CATEGORY CODE CITE
AGENCY PRIORITY 1 & 2
PROJECT CATEGORY SPEF
AFP CODE
STATE PLAN CODE

TO BE CONSTRUCTED BY CONTRACT X **FORCE ACCOUNT**

PURPOSE NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES

A central feature to the Boca Raton Campus is the covered pedestrian system that extends from north to the south and creates a spine which connects the major academic buildings. This iconic element, also referred to as the “Breezeway,” does more than just provide protection from South Florida’s blistering sun and torrential rains. This exterior corridor provides places for informal meetings, collaboration, student gatherings, socializing, and other activities that promote student life.

The proposed project will extend the Breezeway from the current northern terminus, past the Recreational and Wellness Center, the Alumni Building to provide a safe pedestrian overhead crosswalk from the academic core to the future Schmidt Academic and Athletic Complex. Envisioned as a new hub for students and student athletes, the academic space within this complex will serve as nationally recognized center for student success and will be a bookend to the Student Union located on the southern portion of the Boca Raton Campus.

A future phase envisions extending the Breezeway to the south along the primary east-west pedestrian walkway (known as “Diversity Way”) to provide a continuous corridor of student activity terminating at the Student Union. When complete, this pedestrian spine will be a half mile long corridor connecting two major student hubs (the Student Union to the south and the Schmidt Academic and Athletic Complex to the north) with access to major academic buildings and serving as an outdoor living/learning community for FAU’s students, faculty, researchers and administrators.

This project will be funded through the Capital Improvement Trust Fund and will engage student involvement in all phases of project programming, selections and design.

**Higher Educational Facilities
Return on Investment**

This is a tool developed by a collaborative group of stakeholders designed to facilitate the identification of return on investment metrics for higher education facilities. Check any box(es) that apply, provide a quantitative explanation, and identify the term or years in which ROI information is provided.

Institution: Florida Atlantic University/Department of Education

Project: Henderson Developmental Research (Lab) School

Total Project Cost: \$ 41.0 M

Previous Funding (State): N/A

Current Request: \$ 7.8 M

STEM (Yes or No): YES

Contact Person (Name, Position, Office and Cell Phone No., Email):

Check any box(es) that apply and provide a quantitative explanation. Identify the term or years in which ROI information is projected.

1. Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc)

Explanation: N/A

2. Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc)

Explanation:

- a. Model professional development training site to increase the instructional capacity of K-12 educators throughout the State of Florida in STEM related fields
- b. Facilitation site to increase student female involvement and participation in STEM-related career fields
- c. The project will provide state-of-the-art classrooms and labs to complement and enhance the curriculum, research, and teacher training in meeting the school's primary mission of providing a first class education to primary and secondary students.

3. Amount of Additional Research Funding to be Obtained; Patents Awarded

Explanation: N/A

4. Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast

Explanation: N/A

5. Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation: N/A

6. Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

- a. Serves as the statewide STEM Robotics Demonstration and Competition Site (Underwater ROVs, Unmanned Aerial Vehicles, and Terrestrial-based Autonomous Robots)

7. Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

- a. 2013 facilities assessment report highlighted concerns related to the age of the mechanical systems, the presence of asbestos laden materials, ADA accessibility issues, aging roof membrane, and insufficient space for adequate programmatic and instructional needs.
- b. Further review and analysis of the site conditions through a master planning study necessitated the expansion of the project to include:
- i. replace the middle school portable classrooms
 - ii. reconfigure site to address issues associated with traffic flow, safety concerns with dropoff/pick-up zones
 - iii. upgrade utility infrastructure (chiller, power connections)

8. Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation: N/A

9. Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)

Explanation:

- a. Replaces existing 47,000 GSF building and associated infrastructure constructed in 1967, approved by DOE September 22, 2014
- b. Upon review of the Castaldi Analysis, dated June 2013 and revised November 2013 (prepared by Zyscovich Architects), DOE recommends the razing and replacement of Building 26 as a more economical option than rehabilitating the existing structure.

Other Pertinent Information not included above:

FAU Henderson School has initiated an aggressive fund raising campaign and will be poised to raise and identify an additional \$7.8 million in funding to match the amount appropriated by the State.

STATE UNIVERSITY SYSTEM
Summary of Capital Improvement Fee Projects
2018-19 Fixed Capital Outlay (FCO) Legislative Budget Request

University FLORIDA ATLANTIC UNIVERSITY

Project Name	Total Project Cost
Breezeway Expansion Phase I - Norther Connection	\$ 6,500,000
Total	\$ 6,500,000

**STATE UNIVERSITY SYSTEM
2018-19 CAPITAL IMPROVEMENT FEE PROJECT LIST
PROJECT INFORMATION SHEET**

University: FLORIDA ATLANTIC UNIVERSITY

Site Name: BOCA RATON – MAIN CAMPUS
(Main Campus, Branch Name, etc.)

Project Name: BREEZEWAY EXPANSION – PHASE I

Project Description:

(Should include the name of the building, work to be accomplished, whether the project is remodeling, renovation, expansion or site improvement as well as the programs or activities to benefit from the project)

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This project will engage student representatives in all phases of project programming, selections and design.

Project Funding:

Extraordinary or unusual on-site/off-site cost(s) included in project cost (item & cost)

Project Cost Detail:	<u>Amount</u>
Construction	\$5,360,000
Professional Fees	600,000
Resident Supervision	
Artwork (if applicable)	
Equipment	
Contingency	<u>540,000</u>
Total Project Cost	<u><u>\$6,500,000</u></u>

Gross Square Feet: 500 LF
 Net Assignable Square Feet: N/A
 (Indicate total NASF and report by type on space inventory form)
 Construction Cost per GSF: N/A
 Project Cost per GSF: N/A

Operational Funding for Facility*: Student Fees

*Identify the specific revenue source that will be made available to fund the cost of operating any additional facilities provided by the proposed **2017-2018** appropriation.

Funding by Year

Fiscal Year	Source	Amount
2018-19	CITF	\$6,500,000
	Total	\$6,500,000

Key Project Schedule Dates:

<u>June, 20168</u>	Submission of Building Program
<u>July, 2018</u>	Advertisement for Design Contract
<u>January, 2019</u>	Advertisement for Construction Contract
<u>June, 2019</u>	Issue Purchase Orders for Furniture and Equipment
<u>September, 2019</u>	Occupancy

Private Activity Space:

(Please include if more than 5% of space includes Unrelated Business Income {UBI})

Description: _____

Project Private Activity Cost: _____

Name of Private User: _____

STATE UNIVERSITY SYSTEM
2018-19 Capital Improvement Fee Appropriation
Worksheet for Calculation of Private Activity Project Cost

Private Activity Space is defined as space contracted to private vendors for operation of specified auxiliary functions such as food service facilities or bookstores. If a university plans to have contracted private activity space within a project/facility, this form must be completed to document the basis for determination of private activity project cost.

Private Activity Space Calculation

Project Name Breezeway Expansion Phase I – Norther Connection

Project NASF N/A
(Establish maximum NASF if project details are not available)

Project GSF Approximately 500 LF

Private Activity NASF N/A

Private Activity NASF Percent N/A

Private Activity GSF _____
(Private Activity NASF Percent X Project GSF)

Project Cost per GSF \$ _____

Project Private Activity Cost \$ _____
(Private Activity GSF X Project Cost per GSF)

NOTE: This information is needed for any proposed bond sale to finance Capital Improvement Fee appropriated projects.