FLORIDA POLYTECHNIC UNIVERSITY

Board of Governors Facilities Workshop 2019

Applied Research Center

FLORIDAPOLY

Applied Research Center

- FY2020-21 LBR ($12.8M)
- Prior funding ($27.9M)
  - Appropriation ($7.0M)
  - Carryforward ($20.9M)
- Total project budget ($40.7M)
- Projected PO&M ($2.0M)
- Educational Plant Survey approved
- Proposed completion date (8/2021)
- Project size
  - NASF (60,786)
  - GSF (85,100)

• Proposed Site/Current Status

FLORIDAPOLY

Return on Investment

- Essential to achieving all aspects of the University's mission tied to education, research, and economic development
- Growth in research presence by having the facilities that support industry and federal grants
- Poly faculty and students currently collaborate with industry on projects
- 100% STEM programs address BOG programs of strategic emphasis
- Support for projected enrollment growth
  - Space for complex real world industry projects
  - Laboratory space that supports "hands-on" activities and traditional teaching labs
  - Research labs to support growing critical areas of expertise in the university

Board of Governors Facilities Workshop 2019

MULTI-PURPOSE BUILDING SUPPORTING ENROLLMENT GROWTH

New College
THE HONORS COLLEGE of Florida

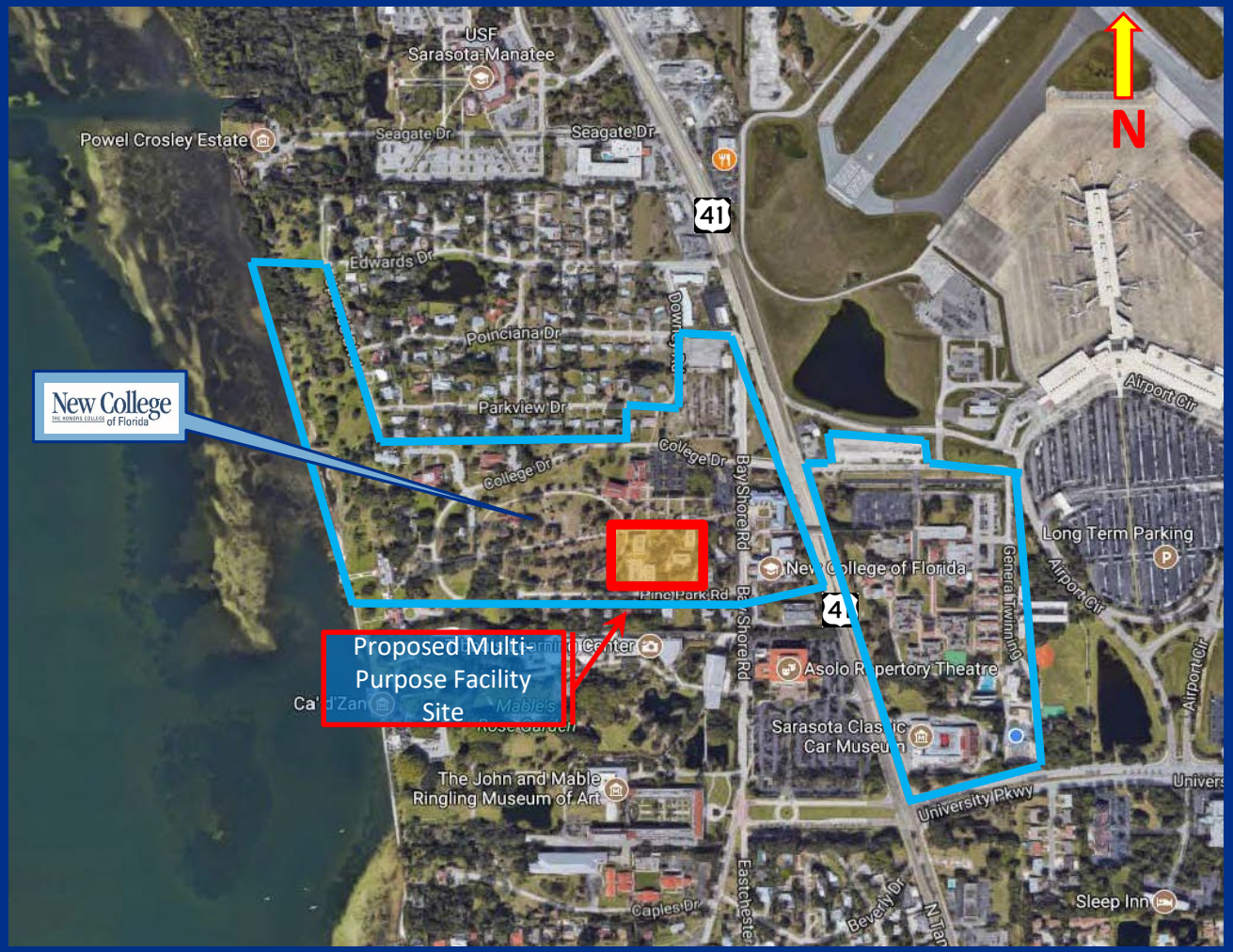
2020-21 LBR: $6 M

Multi-Purpose Facility Supporting Enrollment Growth

Prior Funding	$0
Future Request	
Phase 1:	
2020-21 Request	$6M
2021-22 Request	$17.4M
Phase 2:	
2023-24 Request	$4.3M
2024-25 Request	$22.7M
Total Project Budget	**$50.4 M**

NCF is prepared to establish the required 1% Maintenance Escrow utilizing existing funds.

Approved BOG Survey Dated: 04/23/2019



Proposed Site

Estimated Project Phase 1 Design Period: **18 months commencing July 2020**

Estimated Project Phase 1 Construction Period: **24 months commencing October 2021**

Multi-Purpose Facility Supporting Enrollment Growth

Project Size:		
	NET	GROSS
Phase 1	30,563	42,786
Phase 2	45,842	64,180
TOTAL	**76,405** ft²	**106,966** ft²

Return on Investment (ROI)

Additional Degrees and Certificates

- This multi-purpose building is a key component of a growth plan to increase student enrollment by 40%. This will result in an additional 100 degrees produced each year.

- The facility supports growth by providing essential spaces which help to attract and retain top Florida students:
  - Academics
  - Student Development
  - Administrative Support

Improve Ranking of Preeminent Program

- Targeted to improve New College's performance on two closely-related Performance Funding Model metrics:
  - Six-year FTIC Graduation Rate
  - Academic Progress Rate; Improvements in academics and student development (including improved residential life programming) will positively influence student retention.

Multi-Purpose Facility Supporting Enrollment Growth

Improve Graduation Rate to 80%

Investing in infrastructure for our students.

Return of Investment (ROI)

Help Retain the Exceptionally Talented Florida Students New College Already Attracts

- The 4-year graduation rate at New College is currently 54%
- Through investments in academics, student development, and infrastructure, we will increase our graduation rate to 80% (in-line with other top liberal arts colleges) and our retention rate beyond 90%.
- Achieving these graduation and retention rate goals — rather than the more costly option of increasing student recruitment — will lead to New College reaching its goal to enroll 1,200 students.

Board of Governors Facilities Workshop 2019

FLORIDA GULF COAST UNIVERSITY

INTEGRATED WATERSHED AND COASTAL STUDIES

(PREV. CLASSROOMS/OFFICES/LABS – ACADEMIC 9)

Integrated Watershed and Coastal Studies

Prior Funding

2016-17 Appropriation (P)	$3.8 M
2017-18 Appropriation (C)	$12.7 M
2018-19 Appropriation (C)	$14.0 M
2019-20 Appropriation (C)	$9.0 M

Current Request

2020-21 Request (C)	$11.9M
FGCU Funding	**$2.0 M**

Future Request

2020-21 Request (E)	$4.5 M
Total Project Budget	$57.9 M

Projected PO&M Costs $700,000

Proposed Location and Construction Start Date

2020

Design in Progress

Proposed Completion Date

November 2021

FGCU Project Priority # 1

Integrated Watershed and Coastal Studies

Project Size:

Net Assignable Square Footage	77,670
Gross Square Footage	116,505

Educational Plant Survey Approved by the Board of Governors: June 2007
March 2013
November 2017

Return on Investment (ROI)

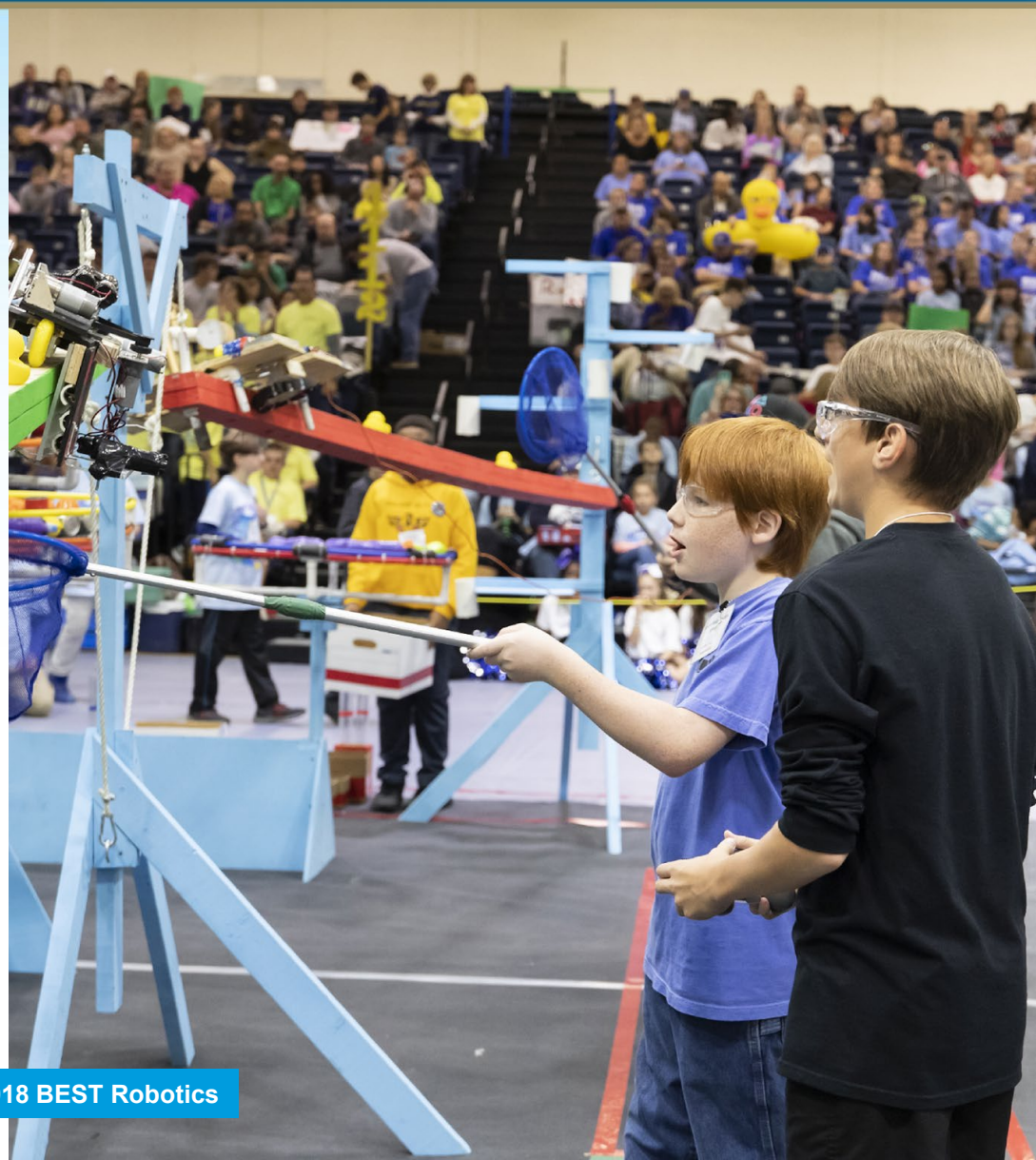
- The STEM building is essential because it will house “bench” laboratory courses and research in the lab and clinical sciences which demand hands-on components for learning and scholarly attainment
- Over the last decade (since 2008-2009), we have increased our percentage of **baccalaureate degrees** in programs of strategic emphasis from 31% to 48%, as compared to all baccalaureate degrees in order to provide an educated workforce that drives economic development
- Our new office of internships and co-op programs is creating stronger connections between the world of work and our STEM disciplines, while equipping students with the general and technical skills in greatest demand by corporate and business leaders
- Within the SUS, Florida Education and Training Placement Information Program data ranks FGCU among the top in **Bachelors and in Masters degrees** for employment and/or continuing education of our graduates in Florida. Academic Building 9 is integral to FGCU maintaining its high ranking and realizing further extraordinary growth
- Increase **STEM degree production** from 556 to over 750 within 3 years of building occupancy
- **Job Creation** – 253 Permanent jobs within local community

Board of Governors
Facilities Committee
2020-2021 PECO Workshop

October 3, 2019

Building 54, Fire Code Mitigation - $6.25 million

- Occupied in 1970, this building is in the heart of campus.
- One of only two large floor spaces available.
- **Primary campus facility** for large academic events including:
  - Convocation
  - BEST Robotics
  - Science Olympiad
  - Graduation
- Recent Life Safety Study **limited capacity from 3,000 to 1,000**.



2018 BEST Robotics

Building 54, Fire Code Mitigation - $6.25 million

- **Renovations required:**
  - Building-wide automatic sprinkler
  - Adjustments to egress routes
  - Modifications to interior and exterior walls
  - Modification to roof
  - Critical air-conditioning replacement
- **UWF invested $1,090,347** of carryforward funds.
- Reduce use of off-campus facilities.

2019 Student Convocation

Board of Governors Facilities Workshop 2019 October 3, 2019

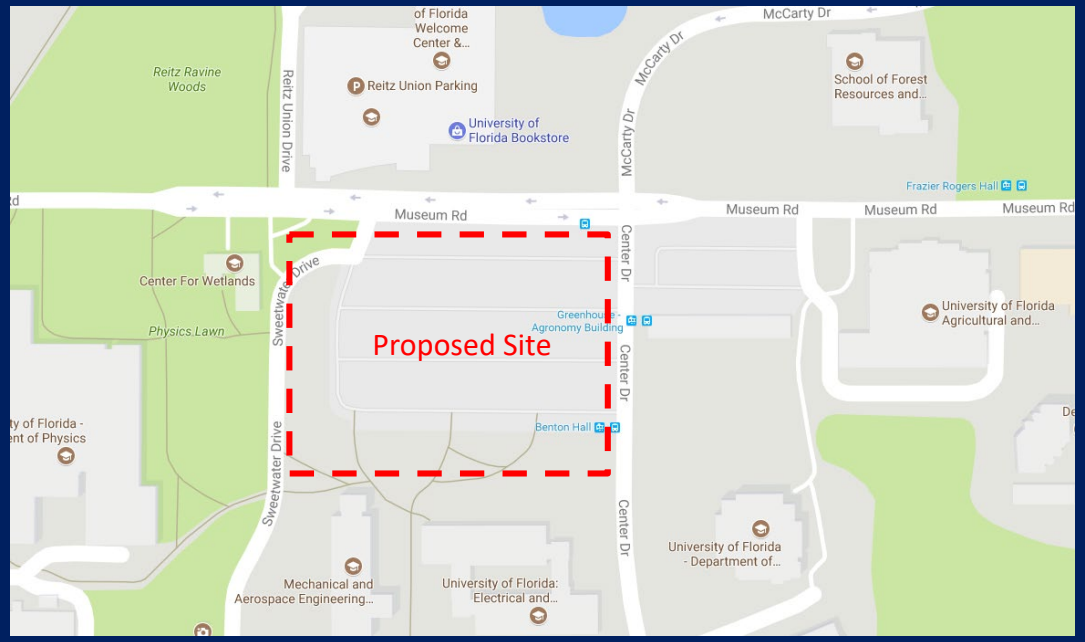
UF DATA SCIENCE AND INFORMATION TECHNOLOGY BUILDING

2020-21 LBR: $35 M

Data Science and Information Technology Building-
PECO Priority #1

Prior Funding	$75M
Future Request	
2020-21 Request	$35 M
Other – (UF/Private Donor)	$25 M
TOTAL PROJECT BUDGET	**$135M**
Projected PO&M Costs	$3.5 M

Proposed Site or Actual Start Date **2020** **Status as of 9/13/19** **Design Proceeding**



Proposed Completion Date **10/2022**

Data Science and Information Technology Building-

Project Size:

Net Square Footage	150,000
Gross Square Footage	260,000

Educational Plant Survey Approved by the Board of Governors: **6/13/2019**

Return on Investment (ROI)

Money Generated

- 100% increase in research funding for Computer Engineering areas over 10 years ($16M to $33M)
- 33% increase in research funding for selected Health Care areas over 10 years ($27M to $36M)
- Over 300% increase in research funding for interdisciplinary Informatics Institute over 4 years ($1.2M to $5M)

Graduation Statistics

- 5-year projected increase in Engineering degrees: 120
- 5-year projected increase in Biomedical Informatics and Health Outcomes Degrees: 120
- Number of students per year enrolled in data science and software carpentry certificate programs, short courses and tutorials offered by the Informatics Institute for students outside of computer science or computer engineering: 500

Data Science and Information Technology Building

Project Size:

Net Square Footage	150,000
Gross Square Footage	260,000

Educational Plant Survey Approved by the Board of Governors: **6**/13/2019

Return on Investment (ROI)

Jobs Created (Anticipated)

- Employment Opportunities: 4,200 current openings in Florida (127,000 nationwide) in Biomedical Informatics and 1,238(26,000 nationwide) openings for majors in health outcomes/population science in Florida
- Employment Opportunities: 10,000 current openings in Florida(350,000 nationwide) for majors in electrical engineering, computer engineering and computer science
- Creating 21st Century Data Capabilities for clinical research and the translation of scientific discoveries into treatment advances will capitalize on UF strengths, and position UF to compete nationally and internationally for new opportunities
- Additional space is needed to co-locate faculty, students, and professional staff in a setting with state-of-the-art teaching classrooms, data centers to support hands-on experiences with health care data, and collaboration areas for faculty, student, and professional staff to interact and foster team-science

Data Science and Information Technology Building

Project Size:

Net Square Footage	150,000
Gross Square Footage	260,000

Educational Plant Survey Approved by the Board of Governors: **6**/13/2019

Return on Investment (ROI)

Academic Areas Impacted

- For College of Engineering ECE and CISE majors, the proposed building will facilitate, support an increase in the university's performance on all preeminent university metrics specified in s.1001.7065, F.S. related to freshmen qualifications and retention and graduation rates; national academy memberships for faculty; annual research expenditures; numbers of patents awarded; national rankings for ECE and CISE programs; annual award of doctoral degrees; number of postdoctoral appointees; and endowment funding

- For the Health Care Programs, the proposed building will enhance the university's performance on all of the preeminent university metrics specified in s.1001.7065, F.S. related to national academy memberships for faculty; annual research expenditures; national rankings for biomedical informatics and health outcomes/population science programs; annual award of doctoral degrees; number of postdoctoral appointees; and endowment funding

- As a multidisciplinary cross-college initiative, the Informatics Institute will enhance the annual research expenditures, number of patents awarded, annual award of doctoral degrees, and number of postdoctoral appointees for a ranges of colleges

Data Science and Information Technology Building

Project Size:

Net Square Footage	150,000
Gross Square Footage	260,000

Educational Plant Survey Approved by the Board of Governors: **6**/13/2019

Return on Investment (ROI)

Degree Programs to be Expanded:

- Programs in the Engineering field: Electrical and Computing Engineering; Computer Engineering; Computer Science and Engineering.
  - Focused on technological growth areas including human centered & reconfigurable computing, intelligent healthcare, cybersecurity, & application in artificial intelligence
- Degree Programs in the Health Care field: Biomedical Informatics; Health Outcomes/Population Science; Pharmacy
  - Focused on development of novel clinical trials and precision population health initiatives
  - Translation of findings into clinical practice-"implementation science".
  - Novel approaches for acquiring, validating, enriching, and linking health care data
  - Development & application of "mHealth" technology- use of wireless technology
  - Programs in Pharmacoepidemiology and Pharmacoeconomics focusing on the evaluation of drugs post-approval in real-world populations to ensure drug safety, refine information on drug effectiveness for tailored treatment approaches, and conduct economic evaluations to enhance value-based pharmacy benefit design

Data Science and Information Technology Building

Project Size:

Net Square Footage	150,000
Gross Square Footage	260,000

Educational Plant Survey Approved by the Board of Governors: **6**/13/2019

Return on Investment (ROI)

Correction of Existing Problems

- A number of the academic programs which will occupy the new building presently reside in multiple facilities throughout the main campus. Many of these locations have inadequate HVAC and electrical infrastructure needed to support the complex nature of the technical and climate controlled environments that will be required

- Over 80% of the faculty, students and professional staff in the Department of Health Outcomes and Policy are located in trailers. These trailers have no collaborative space and are not acceptable for hosting health care leaders from health systems, industry, and funding agencies. There is inadequate HVAC and electrical infrastructure needed to support the data collaborative areas and mHealth laboratories that are vital for the Advanced Center for Data Capabilities in Health Care

- Within the Department of Pharmaceutical Outcomes and Policy, due to space constraints, only half of the current PhD students have permanent desks, which limits collaboration among students and between students and faculty and research staff

2012-21 LBR: $4.9 M

Roy Lassiter Hall Renovations

Prior Funding	$ 0 M
2020-21 Request	$4.9 M
Carry Forward Funding (2%)	$0.1 M
Total Budget	$5.0 M

No Additional PO&M Funding

Building Location

- Central campus building constructed in 1974
- 2nd floor renovation for English Department
- Classrooms, faculty offices and infrastructure in dire need of updating

UNF Project Priority # 1

Roy Lassiter Hall Renovations

Project Size:

Net Square Footage: 8,644

Gross Square Footage: 16,424

Education Plant Survey:

Supplemental Survey

Recommended August 2017

Return on Investment (ROI)

Improved Academic Utilization

- Improved learning environment
- Enhanced collaboration and academic support
- Modern classroom technology

Reduces Future Deferred Maintenance Cost and Extends the Life of the Building:

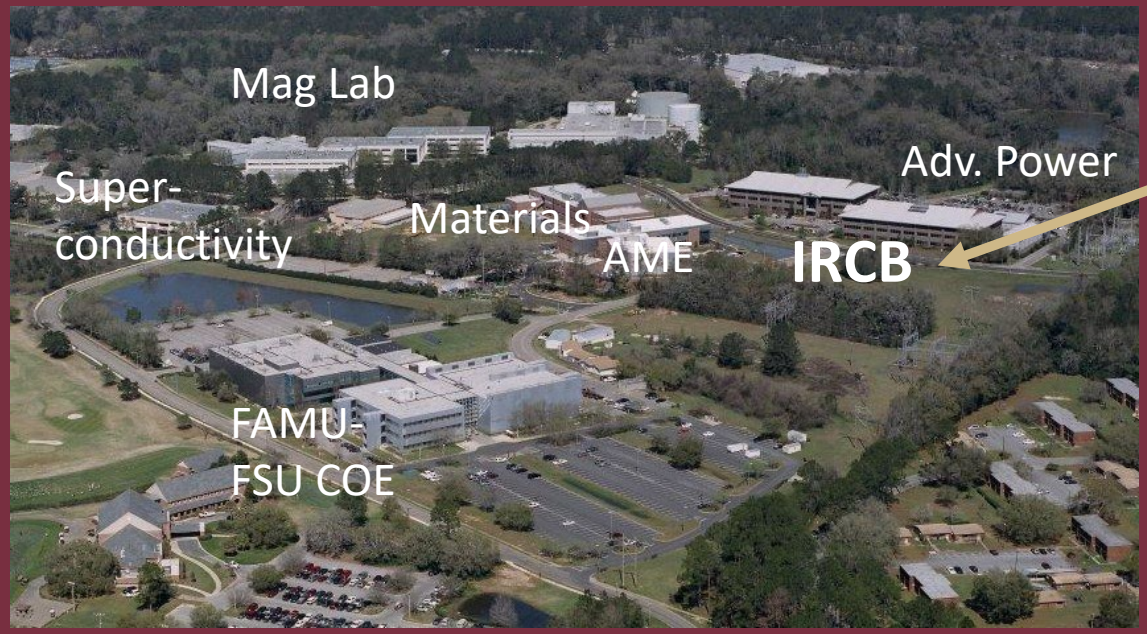
- Urgent need to address to Indoor Air Quality (IAQ)
- Minimal improvements since original construction in 1974; old interior finishes
- Roof requires replacement
- Systems have reached obsolescence
- Replace HVAC to meet current ventilation requirements & improve building efficiency
- ADA Compliance
- Replace lighting with high efficiency LED

Board of Governors Facilities Workshop 2019

PRESIDENT JOHN THRASHER ▪ OCTOBER 3, 2019

Interdisciplinary Research & Commercialization Building (IRCB)

Proposed Start Date: 2020
Proposed Completion Date: Fall 2022



Site

Interdisciplinary Research & Commercialization Building (IRCB)

Project Information

Prior State Funding	$	20,507,914
Future Funding Requests		
FY 2020-2021	$	18,492,086
FY 2021-2022	$	5,000,000
Other Sources (FSU)		
Prior	$	9,863,658
Future	$	34,136,342
Total Project Budget	$	88,000,000
Projected PO&M Costs	$	1,800,000

Net Square Footage	75,000
Gross Square Footage	114,200

Interdisciplinary Research & Commercialization Building (IRCB)

Return on Investment (ROI)

Money Generated

- Facility will house up to 30 interdisciplinary faculty research groups within the academic areas listed below. These groups will have the potential aggregate external research funding of $10.5M per year
- It is anticipated that these groups will generate as many as 64 discovery/invention disclosures and up to 16 patents per year
- IRCB will leverage proximity to major research assets, such as the Mag Lab, to create unique synergies for pursuit of external funding

Academic Area Impacted

- Facility will accommodate approximately 72 undergraduate, 145 graduate and 26 postdoctoral researchers in disciplines ranging from Physical Science to traditional Engineering disciplines
- At full capacity the facility will contribute to the production of 30-40 additional degrees in STEM disciplines per year (degree programs- Physics, Chemistry, Materials Science & Engineering, Computational Science and at least five Engineering programs)
- The above disciplines fall with the Areas of Strategic Emphasis

Correction of Existing Problems – It is anticipated over the next five year there will be significant growth in STEM faculty for which current space is insufficient to hire the best and the brightest candidates.

Board of Governors Facilities Workshop 2019

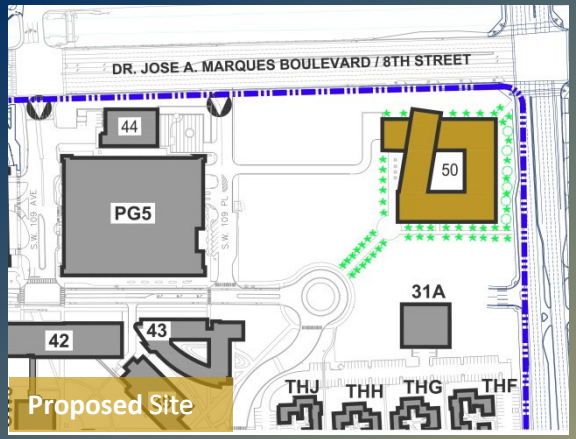
ENGINEERING BUILDING – Phase I & II

FIU

2020-21 LBR: $35.5 M

ENGINEERING BUILDING
Phase I & II

Prior Funding	$30.6 M
Future Request	
2021-22 Request	$38.9 M
Other – (Private)	$45 M
Total Project Budget	$150 M
Projected Annual PO&M Costs	$4.9 M



Phase I Completion - June 2022

Phase II Completion – June 2023

FIU Project Priority #1

ENGINEERING BUILDING
Phase I & II

Project Size:

Net Square Footage	161,655
Gross Square Footage	258,648

Educational Plant Survey Approved by the Board of Governors: 1/20/2016*

*Recommendation 12) section 3.6 may be adjusted in the 2021-2025 survey update

FIU

Return on Investment (ROI)

Money Generated

- The addition of 109 full-time faculty along with current tenured/tenure-earning engineering faculty are expected to increase research expenditures by $30 million annually, bringing total CEC research to over $60M to align us to reach top 50 Universities.

- **Graduation Statistics**
  4-yr and 6-yr graduation rates have been increasing, with the 4-yr graduation rate almost doubling from 15% for the 2013 cohort to 27% in 2018. With the new facilities and the new pedagogical approaches these facilities allow, it is expected that the 4-yr graduation rate will readily surpass 45%.

- **Jobs Created (Anticipated)**
  Based on national data, each additional million dollars in research expenditures generates 18.2 jobs thus creating 550 high quality jobs in South Florida. Projected increase in research expenditures will generate 27 additional patent applications per year and result in the establishment of one new company based on university intellectual property every other year.

- **Academic Areas Impacted**
  Biomedical Engineering, Electrical and Computer Engineering, Mechanical and Materials Engineering as well as Computer Science have strong ongoing and future collaborations with the colleges of Medicine, Nursing and Health Sciences, Public Health and Social Work, Arts and Sciences

- **Correction of Existing Problem**
  Current EC Building is overly occupied and does not allow for faculty and research growth. Programs such as "Accelerated Bridge Construction University TransSelf-Powered Systems of Integrated Sensors and Technologies (ASSIST)," "Wall of Wind Facility," "Applied Research Center,' and the new NSF Engineering Research Centers on "Nanosystems for Cellular Metamaterials (CELL-MET)," and Precise Advanced Technologies and Health Systems for Underserved Populations (PATHS-UP)," and others at the existing Engineering Center will grow in the space freed up by the relocation of some research and education to the new building.

2020-21 LBR: $23.5 M

Coggin College of Business & Honors Hall

Prior Funding	$ 0 M
2020-21 Request	$23.5 M
Carry Forward Funding (2%)	$ 0.5 M
Total Budget	$24.0 M

- CCB is the fastest growing college with graduate enrollment growth of 80% since 2015
- Connects CCB with Honors Hall to provide additional classroom, research labs, instructional media and study space
- Supports current programs of strategic emphasis in Logistics, Accounting, Finance and International Business

UNF Project Priority # 2

Coggin College of Business & Honors Hall

Project Size:

Net Square Footage:

18,500 New / 29,000 Reno

Gross Square Footage:

27,750 New / 40,600 Reno

Education Plant Survey:

Survey Recommended

March 2015

Return on Investment (ROI)

Additional Degrees & Jobs for Graduates

- M.S. in Management - established in 2016 in direct response to employers' feedback with 200 active students
- Masters in Logistics & Supply Chain Management - one of the 4 major economic super-sectors for NE FL. Expected to generate > 12,500 new jobs by 2022
- Forthcoming undergraduate and graduate programs in Analytics/Business Intelligence; Median base salary $95,000

Area of Strategic Emphasis

- Additional instructional space for initiatives in logistics and analytics

Improves Performance Metrics

- Bachelors & Graduate Degrees in Areas of Strategic Emphasis; Employment Rates; Median Wages

Increased Business Partnerships – Guaranteed Internships

- Future workforce for big-data analytics companies

Reduces Future Deferred Maintenance Cost and Extends the Life of the Building

- Major mechanical, plumbing and electrical systems are >25 years old; modernization will reduce energy footprint.

Howard Phillips Hall Renovation

Prior Funding:	$0 M
Current Request:	
2020-21 Request	$12.4 M
Total Project Budget:	$12.4 M

Howard Phillips Hall Renovation

Project Size:

33,577 Net Square Feet

64,619 Gross Square Feet

Educational Plant Survey Approved by the Board of Governors:

June 2016, revised May 2019

Return on Investment (ROI)

Money Generated

Graduation Statistics

- Supports student success through a variety of student support services

Jobs Created (Anticipated)

Academic Areas Impacted

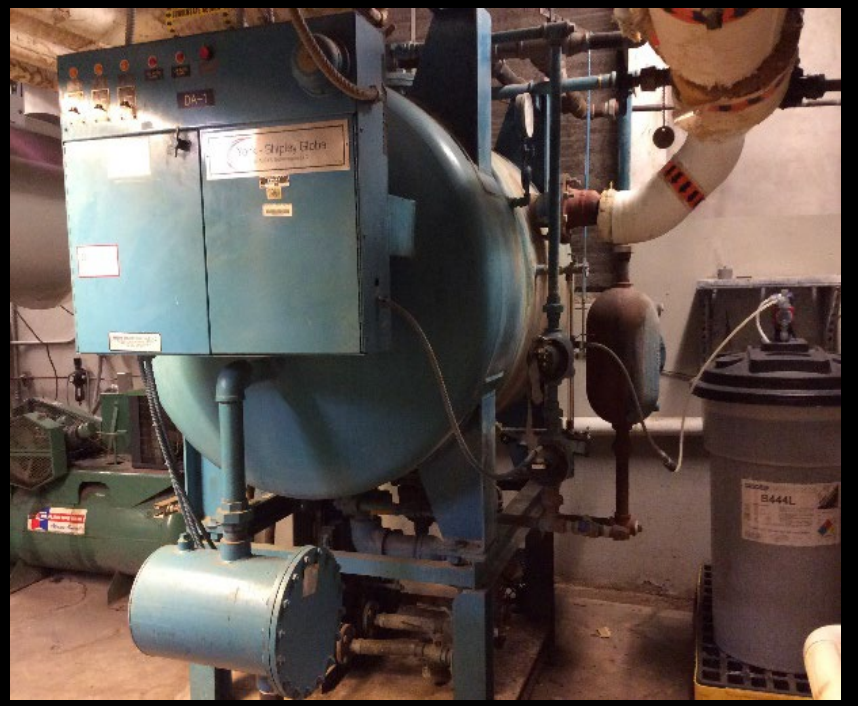
- Houses the College of Sciences' Anthropology, Sociology, and Political Science departments; Global Perspectives; and student support services such as the First Year Advising and Exploration, the University Testing Center, and the Student Academic Resource Center (tutoring)

Correction of Existing Problems

- Modernizes and optimizes the existing building HVAC system, including controls, compressors, distribution equipment, water heaters, and exhaust fans. Building envelope repairs/brick resealing, exterior door replacement, duct recoating, and carpet and ceiling grid replacement are also necessary for air quality improvements.

Biological Sciences Renovation

Prior Funding:	$0 M
Current Request:	
2020-21 Request	$2.2 M
Future Requests:	
2021-22 Request	$17.3 M
2022-23 Request	$2.1 M
Total Project Budget:	$21.6 M



Biological Sciences Renovation

Project Size:

68,769 Net Square Feet

116,607 Gross Square Feet

Educational Plant Survey Approved by the Board of Governors:

June 2016, revised May 2019

Return on Investment (ROI)

Money Generated

- $12.5 M in sponsored-research grants within the past three years

Graduation Statistics

- Produces thousands of undergraduate students in a wide range of careers including botanists, zoologists, ecologists, and health professionals
- Provides excellent broad-based curriculum preparation for post-graduate education, e.g., medical, dental, veterinary, and graduate school

Jobs Created (Anticipated)

- Produces graduates who are consistently employed at state and federal agencies, colleges, universities, environmental consulting firms, and non-governmental organizations

Academic Areas Impacted

- Meets critical needs of the Department of Biology, the 8th largest undergraduate program on campus, with 1,871 student in Fall 2018
- Supports the Burnett School of Biomedical Sciences, Genomics and Bioformatics Cluster, and Kinesiology and Physical Therapy

Correction of Existing Problems

- Increases the useful life span of a 44-year old aging building and modernizes, provides accessibility improvements, and optimizes its aging HVAC and vertical transport systems

Board of Governors Facilities Workshop 2019 October 3, 2019

UF MUSIC BUILDING RENOVATION AND ADDITION

2020-21 LBR: $10.0M

UF Music Building Renovation & Addition PECO Priority #2

Prior Funding	$5.9 M
Future Request	
2020-21 Request	$10.0 M
2021-22 Request	$22.5 M
TOTAL PROJECT COST	$38.4M

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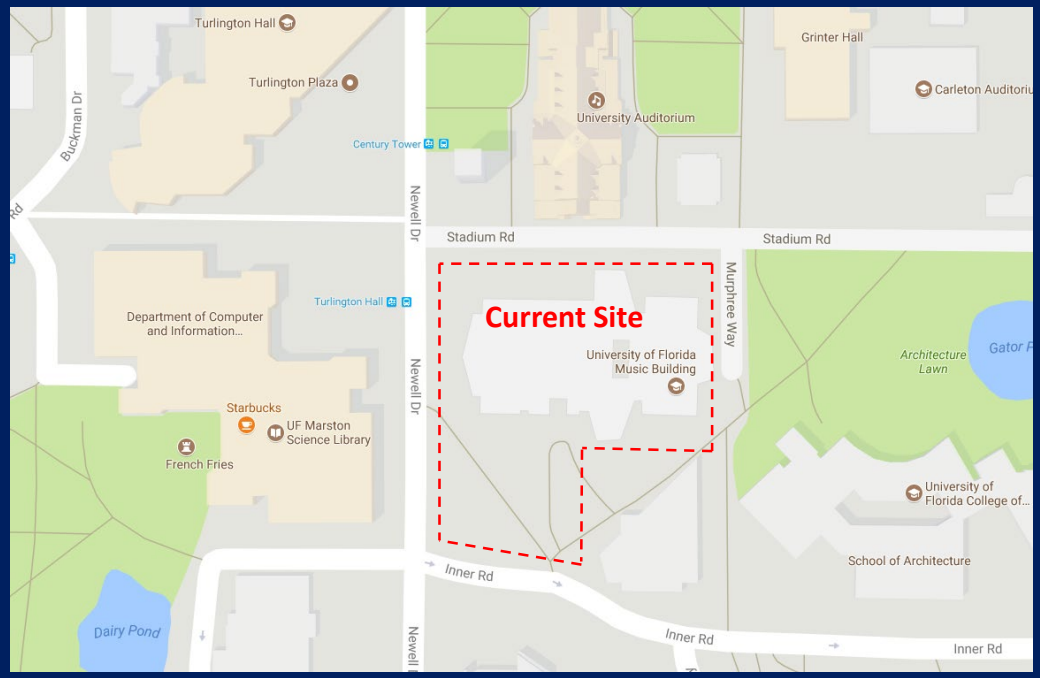
1)Renovates 49,760 NASF for a building originally constructed in 1970;
2)Expands the capacity by 33,500 NASF to provide safe, modern and efficient Teaching Labs and Studio Space.
3) Total GSF 119,256

Proposed Site or Actual Start Date **2019**

Status as of 9/13/2019

Facility Program Development



Proposed Completion Date **TBD**

UF Music Building Issues:

- Significant Deficiencies, related to space usage and needs, power supply infrastructure, safety, accessibility, HVAC, ADA, and major acoustic issues related to UF's School of Music Instructional programming and Infrastructure have been cited by the National Association for Schools of Music(NASM), the professional accrediting body for schools of music in higher education. This proposal will address those issues.
- UF's Music Building, constructed in 1970, using a unique open-air design, allows for the intrusion of weather elements into the core of the building, causing health and safety issues for faculty, staff, and students and also jeopardizes the storage and protection of valuable musical instruments/equipment.
- Most prominently, the HVAC system is significantly inadequate to control the climate within the building, as a considerable number of spaces open into hallways and patios that are not closed off from the outside elements. Additionally, slippery floor surfaces are common due to the open-air structure.
- As an integral part of UF' Pre-eminence Strategic Plan, with the proposed infrastructure improvements, the Music School will be expanding degree program offerings in Music and Technology & Music and Business Courses, thus increasing new industry partnerships, student internships, and job opportunities.
- Additionally, the nationally-recognized Center for Arts in Medicine, which delivers a Music and Medicine Graduate Certificate in collaboration with the School of Music, will have a new permanent home in this facility.

CORRECTION OF EXISTING PROBLEMS:

- Eliminates a significant critical deferred maintenance backlog for a 49-year old building (addressing building envelope, fire code, HVAC, ADA, electrical, space, and programmatic deficiencies).
- Addresses weather intrusion with corrective actions that will include enclosure and conditioning of the open air spaces for stabilization of the building envelope and interior environment.
- Addresses student, faculty, staff and visitor's health and safety issues.
- Addresses building acoustics that are extremely inadequate as sound from music studios and classrooms permeate throughout the building.
- Extends and enhances the life of the facility, as well as providing cost savings from the renovation(49,760 NASF) and expansion(33,500 NASF/49,610 GSF), with the transformation of the facility into 21st Century, modern, efficient space, thereby expanding and improving the educational and outreach missions. Current, unusable space will be re-purposed for the Music program.
- Provides for a recital hall, currently not in this facility, new practice rooms, & climate-controlled spaces to store and utilize very valuable musical instruments and equipment.

Music Building Renovation and Addition

-Project Size:

Net Square Footage	83,260
Gross Square Footage	119,256

Educational Plant Survey Approved by the Board of Governors: **6**/13/2019

Return on Investment (ROI)

Money Generated

- The new lecture hall will support increased enrollment in courses thus increasing educational opportunities for 400-800 students per semester; will provide community engagement for students/faculty/staff and Florida citizens thru access to cultural outreach events at the university increasing box office revenue; increased fundraising activities will be actively pursued.

Graduation Statistics

- The Florida Department of Economic Opportunity's 2015-23 Occupational Forecast identifies Music Education as one of the "Fastest Growth" occupations in Florida; UF's Music Education Program has a 100% job placement rate. 48% of Music School course enrollment is attributable to students enrolled in one of 11 of UF's other Colleges, including Business, Engineering, Liberal Arts and Science, Education, & a variety of Health areas.
- Undergraduate/graduate interdisciplinary Music Degrees combine Music with STEM and Business disciplines across the campus, producing UF graduates, IN 4 YEARS, who are well rounded and competitive in the job market.

Jobs Created (Anticipated)

- Florida Department of Economic Opportunity's 2017-25 Occupational Forecast projects growth in Music Education at 13.7% in Florida, with a median income of $75,824.
- Future plans for the school include the offering of Music and Technology and Music and Business courses, expanding student opportunities, and leading to new industry partnerships, internships, and jobs.

Music Building Addition and Renovation

Project Size:

Net Square Footage	83,260
Gross Square Footage	119,256

Educational Plant Survey Approved by the Board of Governors: **6**/13/2019

Return on Investment (ROI)

Academic Areas Impacted

WHEN COMPLETED, this facility will provide modern and efficient teaching labs and studios, allowing the School of Music to fully support its current and future-planned programs, expanding the number of students seeking undergraduate & graduate degrees in various music disciplines, & also providing other non-music-majors the opportunity to participate in their desired arts & cultural programs at UF.

- Projected dedicated lecture hall will allow an increase in live large-enrollment course offerings in the school and across the college, resulting in 400-800 additional seats each semester.
- The proposed project will enable the School of Music to offer Music and Technology as well as Music and Business courses, both of which will expand enrollment opportunities and lead to new industry partnerships, internships, and jobs.
- Proposed expansion will allow the School of Music to provide rehearsal and performance space to dozens of registered student organizations and non-music majors.
- A permanent home will be provided for the Center for Arts in Medicine faculty which will facilitate better collaboration among the Music and associated Medical faculty for which a new graduate certificate program in Music and Medicine is being developed.

Overall Benefit of the Arts in the State of Florida- Florida Cultural Alliance Facts: ROI

- Building Businesses: International studies show that the winners will be communities that offer an abundance of Arts and Culture opportunities.
- Drives Tourism: Arts and Culture is the #1driver for in-state tourism, and the #2 driver for out-of-state tourists.
- Impacts the Economy: Florida's Arts and Culture not-for-profit industry generates over $3.1B in local economic activity.
- Engages Millions: Over 45.6M Floridians and tourists participate annually in Arts and Culture activities.
- Arts and Culture= JOBS: Florida is home to 54,994 arts-related businesses that employ 185,138 people.
- Return on Investment: a $5 return for every $1 invested by the state in local and state government treasuries. State Investment returns over $446.5M

Board of Governors Facilities Workshop 2019

PRESIDENT JOHN THRASHER ▪ OCTOBER 3, 2019

College of Business Legacy Hall

College of Business Legacy Hall

Project Information

Prior State Funding	$	13,500,000
Future State Funding Requests		
FY 2020-2021	$	17,000,000
FY 2021-2022	$	10,000,000
FY 2022-2023	$	3,500,000
Other Sources (Private)	$	44,000,000
Total Project Budget	$	88,000,000
Projected PO&M Costs	$	2,800,000

Net Square Footage	124,193
Gross Square Footage	218,392
Proposed Completion:	**Fall 2022**

College of Business Legacy Hall

Return on Investment (ROI)

- Six departments, 10 research centers, 6,000+ students, faculty and staff
- Leverages funds provided through private donations
- Provides a 44% increase in instructional, collaborative, and innovation space to enhance degree production in *Programs of Strategic Emphasis* including accounting, finance, human resources and insurance. This will enhance corporate recruiting, job placement and starting salaries expected from the growth in demand for business graduates.
- Expands FSU's innovation space to create new programs and research activities that will draw in the business community and significantly impact economic development in the region.
- Creates incredible synergies with a new conference hotel and conference center in the Arena District, which, along with the College of Law, creates a major professional and innovation hub for the region.
- Total request includes all costs of design, site development (including on-site parking), construction and furnishings/equipment.

Board of Governors Facilities Workshop 2019

JUPITER STEM / LIFE SCIENCES BUILDING

A.D. HENDERSON LAB SCHOOL

2020-21 LBR: $11.05 M

Jupiter STEM / Life Sciences

Project Priority #1

Prior Funding:

2016-17	$ 3.03 M
2017-18	$ 9.85 M
2019-20	$11.00 M

Current Request:

2020-21	$11.05 M

Future Request: None

Total Project Budget **$ 35 M**

Projected PO&M Costs $1.3 M / Yr.

The STEM/LS Building will create a **Life Science focused STEM campus** and will allow FAU to become an equal partner on the Jupiter campus with Scripps and Max Planck.

west elevation

site plan

floor plans

interactive lobby

anticipated completion date:
Fall 2021

Jupiter STEM / Life Sciences

Project Size:

Net Square Footage	37,400
Gross Square Footage	58,000

Educational Plant Survey Approved by the Board of Governors: June 23, 2016

Additional Space Needs:

- Research Labs and offices
- Teaching Labs
- Collaborative study spaces

Return on Investment (ROI)

- **Increased STEM Enrollment:**

The STEM/LS Building will provide for increased enrollment of students in the STEM fields of Biology, Bioengineering, Bioinformatics, Chemistry, Computational Biology, Engineering and Neuroscience.

- **Job Creation:**
  - 20 Principal Investigators/regular faculty positions
  - 20+ research faculty and postdocs
  - 40+ graduate students
  - 60+ undergrads

- **Additional Research Funding:**

The STEM/LS building will allow for expansion of collaborative research in the STEM areas, especially in specific targeted areas such as neuroscience, biotechnology, bioengineering, bioinformatics/data science, chemistry.

Increased research funding is estimated at a total $10 million:

- $7 million of research funding
- $3 million of admin/training funding

Board of Governors Facilities Workshop 2019

OLD CAPLES HOUSE & CARRIAGE HOUSE RENOVATION AND REMODEL

New College
THE HONORS COLLEGE of Florida

2022-23 LBR: $1.2 M

Old Caples House & Carriage House Renovation and Remodel

Prior Funding	$0
Future Request	
2022-23 Request	$1.2 M
2023-24 Request	$9.1 M
Total Project Budget	$10.3 M

Project Size:

Net	5,071 ft²
Gross	8,154 ft²

Approved BOG

Survey Dated: 04/23/2019

Old Caples House & Carriage House Renovation and Remodel

Early 1920s historic building part of the Ringling Historic District.

View of Sarasota Bay from Old Caples House porch

- The Caples Estate consisting of the main house and the carriage house was designed and built for developer Ralph Caples in the early 1920s. The architect was Alfred Clas, a prominent architect at the time and responsible for the design of the Charles Ringling and Sanford houses. Both Caples buildings are contributing structures to the Ringling Estates Historic District.

- The renovation and remodeling project will focus on upgrading various building infrastructure systems (HVAC, life safety, ADA accessibility, utilities, building envelope) plus various interior repairs and remodeling to improve functionality supporting academic programs.

- The main house is currently vacant pending completion of interior repairs being funded from E&G carryforward.

Old Caples House & Carriage House Renovation and Remodel

Improving academic programs, graduation rates, and enrollment growth by renovating & remodeling.

Return on Investment (ROI)

This project supports growth by providing essential spaces which help to attract and retain top Florida students:

- Academics
- Student Development (Waterfront programming)
- Community Involvement

The project will Help Retain the Exceptionally Talented Florida Students New College Already Attracts

- The 4-year graduation rate at New College is 54% currently
- Through investments in academics, student development, and infrastructure, we project improving our graduation rate to 80% and retention rate beyond 90% (in-line with other top liberal arts colleges).
- Increasing student retention – rather than the more costly option of increasing student recruitment – will lead to New College reaching its goal to enroll 1,200 students.

Improve Ranking of Preeminent Program

- Targeted to improve New College's performance on two closely-related Performance Funding Model metrics:
  1. Six-year FTIC Graduation Rate
  2. Academic Progress Rate
  3. Percent of FTIC graduates completing 3+ High-Impact Practices

2020-21 LBR: $8.3M

P.K. Yonge

Developmental Research School at the University of Florida- Phase 2 - Secondary Facility serving grades 6-12

Prior PECO Funds	**$11.5M**	
PK Yonge & UF Funds	**$ 8.2M**	**29%**
2020-21 LBR	**$ 8.3M**	

Total Project Cost **$28.0M**

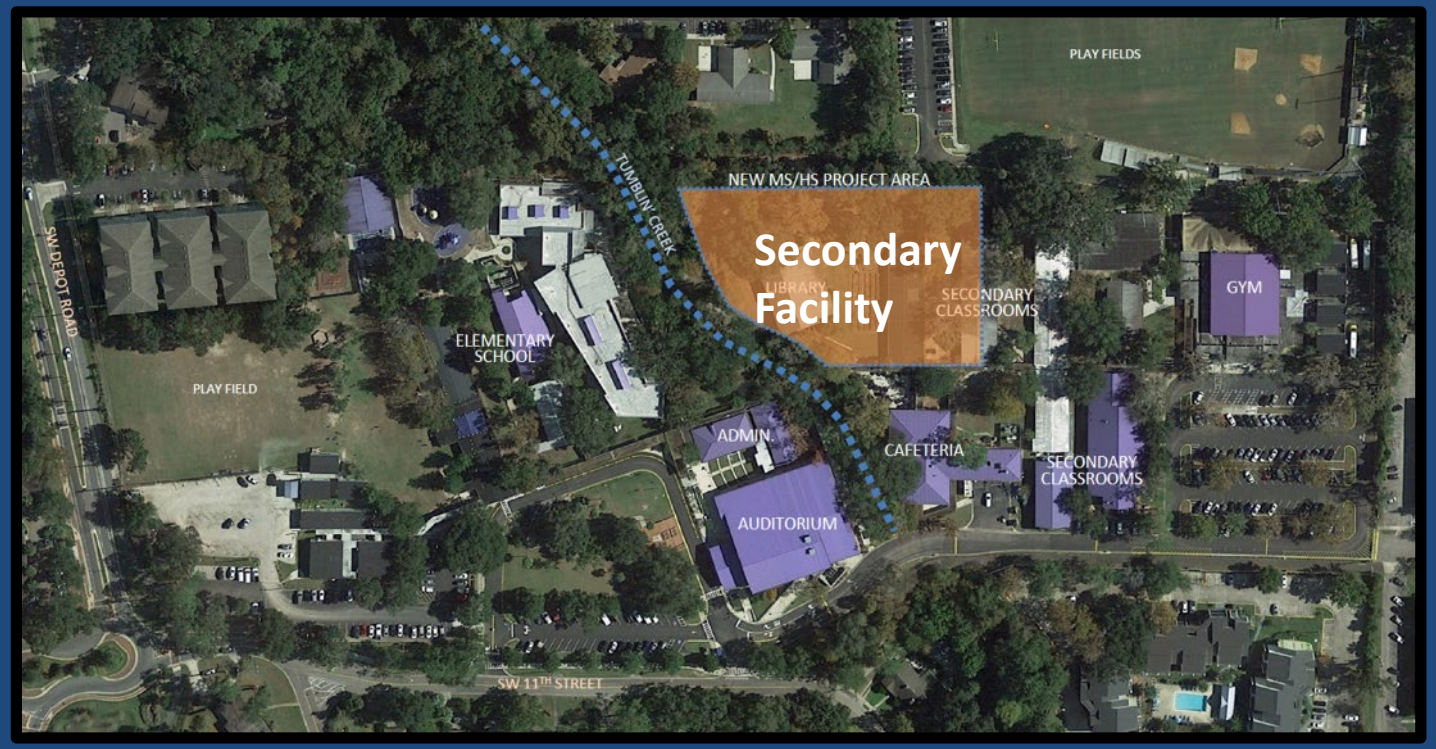
Project Size: DOE Standards

Net Square Footage	50,168
Gross Square Footage	74,241

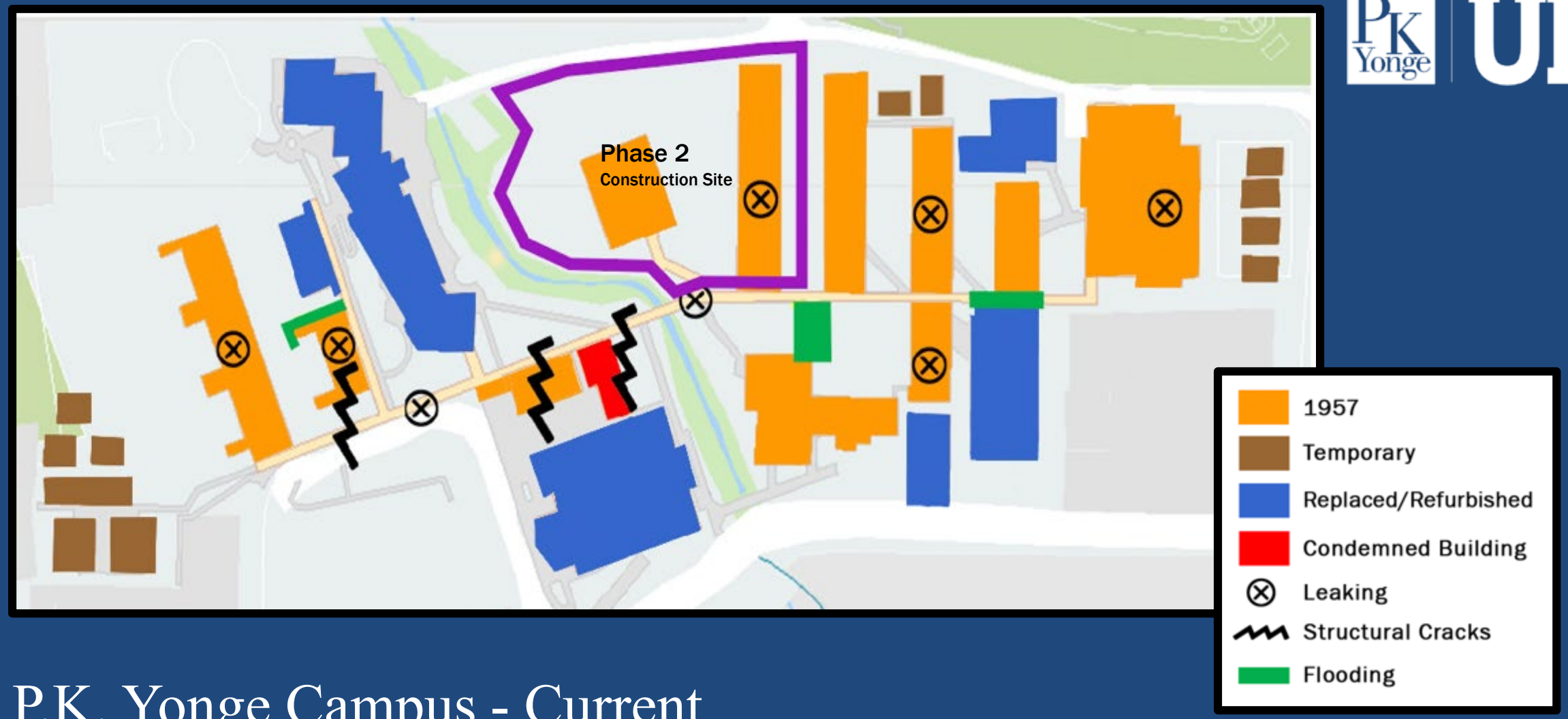
Educational Plant Survey Approved by the Department of Education 2007 & May 2015

Phase 2 - Secondary Facility

Construction Time Frame: 2019-2020

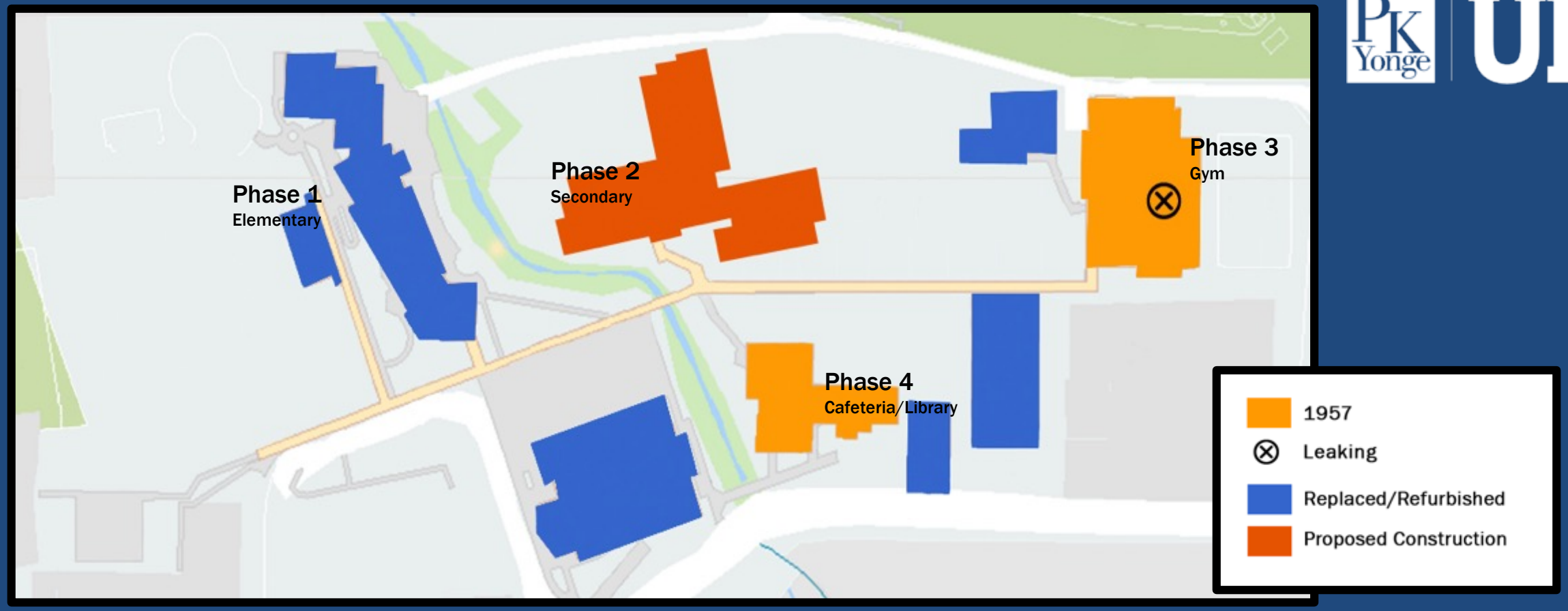


This campus opened in 1957. The majority of the constructed buildings are 62 years old & are plagued with deficient and unsafe conditions for students, faculty, staff, and visitors.



P.K. Yonge Campus - Current

A Public School of Choice since 1934. Rated an A School since 2002. Top 1% among FL high schools; ranked in top 10% by U.S. News & World Report. Serving 1155 students in Grades K-12 randomly selected to represent the State's diverse population: 52% non-white; 38% economically disadvantaged. 99.1% graduation rate; 96% enroll in Postsecondary Ed.



P.K. Yonge Campus – Future Campus Transformation:
Proposed facility improvements will support an additional 200 students.

Modern and safe facilities will advance the school's mission: To design, test, and disseminate innovations in K-12 education in affiliation with UF's College of Education. P.K. Yonge annually hosts more than 300 educators from across the state and nation; prepares more than 100 educators-in-training; and partners in 25 or more specialized research and training initiatives.

Exterior Rendering

P.K. Yonge

Developmental Research School
at the University of Florida

Construction of New Building

- Removes 10 outdated/high risk buildings
- Removes 12 temporary buildings; 9 installed in 2000
- Removes 62 HVAC units (installation dates: 1990s/2000)
- Resolves electrical grid issues - temporary fix: 2015
- Resolves roofing issues in 15 buildings
- Reduces square footage, construction, maintenance costs
- Resolves outdated fire alarm system
- Addresses ADA compliance issues
- Resolves irreparable plumbing issues, lack of restrooms
- Enhances security, student safety, life-safety systems
- Reduces annual utility costs by 28%

P.K. Yonge

Developmental Research School
at the University of Florida

Return on Investment (ROI)

Enhances role as incubator for K12 innovation and research with the University of Florida – enacting the school's and the university's missions

Supports distinctive educator preparation programs

Provides a model (curriculum, facilities, systems) for a personalized, mastery-based learning experience graduating college- and career-ready young adults

Enhances opportunities for STEM education/research in visible state-of-the-art science and engineering labs

Impacts 300+ educators,100+ preservice educators, 15,000 K12 students annually

Increases number of students served by 200

Board of Governors Facilities Workshop 2019

JUPITER STEM / LIFE SCIENCES BUILDING

A.D. HENDERSON LAB SCHOOL

2020-21 LBR: $15 M

A.D. Henderson Lab School

(K- 8 Building)

Project Priority #2

Prior Funding:

2019-20	$11.5 M

Current Request:

2020-21	$15.0 M

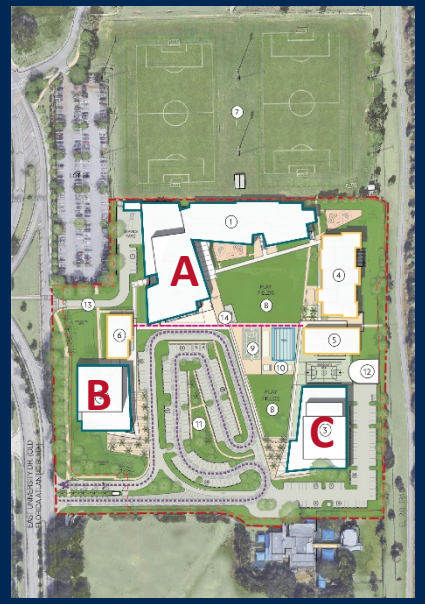
Other Sources: $ 9.3 M

A. D. Henderson Private Donors	$2.0 M
A. D. Henderson millage equivalent (PECO)	$5.0 M
A. D. Henderson FEFP carryforward	$2.3 M

Total Project Budget **$ 35.8 M**

Projected PO&M Costs $1 M / Yr.

existing complex



proposed complex

Proposed New Complex

A.	K-8 Bldg.	$ 35.8 M
B.	Gymnasium	$ 7.4 M
C.	Auditorium	$ 9.3 M

conceptual rendering – k-8 building

conceptual rendering – bird's-eye view

anticipated completion date: Spring 2022

A.D. Henderson Lab School

K- 8 Building

Project Size:

Net Square Footage	70,539
Gross Square Footage	104,145

Educational Plant Survey Approved by Dept. of Education: August - 2014

Return on Investment (ROI)

- **Increased Students Served:**
  - New facility will allow for additional 200 student stations, further increasing student access
  - Provides additional school choice options for families within the South Florida community
- **Additional Research Funding:**
  - 409 students from the lab school have participated in research programs
  - Students have produced 36 peer-reviewed research publications, 3 pending-patents (translational medicine)
  - 104 grants generating $225,000 funding secured by students for research
  - Building on success, multiple winners:
    - Broadcom Masters
    - International Science and Engineering Fair (translational medicine)
    - Forbes 30 under 30
    - 3M/Discovery – America's Top Young Scientist
- **Developing Student Opportunities in High-Yield STEM Design Occupations:**
  - Facility serves as statewide rapid-design and prototype demonstration and competition site:
    - Underwater ROVs (Department of Naval Research)
    - Autonomous Vehicles (Drones and Vehicles)
    - Computational Science and Artificial Intelligence (AI)
- **Beyond Schoolhouse Gates**
  - Training teachers and students throughout the State of Florida and nation (215 schools and over 13,000 students, parents, teachers, and community members)

Board of Governors Facilities Workshop 2019

UNIVERSITY OF SOUTH FLORIDA

JUDY GENSHAFT HONORS COLLEGE

RENOVATE SYSTEM CENTRAL PLANTS (BOILERS, CHILLERS)

2020-21 LBR: $8,063,098

Renovate System Central Plants

Prior Funding	$0.00
2020-21 Pending	$8,063,098
Future Request	
2021-22 Request	$0.00
Other – (Identify Funding Sources)	
None	$0.00

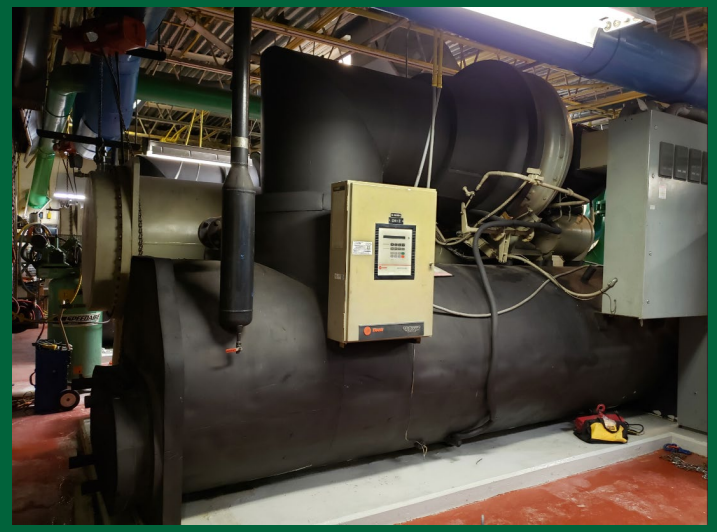
USF Boiler	$3,439,455
USF Chiller	$3,698,120
USF Chiller	$925,523
Total Project Budget	$8,063,098

Projected PO&M Costs N/A

USF Boiler

Proposed Start Date: August 2020

Proposed Completion Date: 18-24 months



USF Chiller

USF Chiller

USF UNIVERSITY OF SOUTH FLORIDA

*USF Project Priority # 2

Renovate System Central Plants

Project Size:

Conditioned Square Footage	6,673,481

Educational Plant Survey Approved by the Board of Governors:	April 2017
EPS Recommendation Number	1.3a

Return on Investment (ROI)

USF Boiler- Critical Steam / HW. Boiler-5 Has Failed: Redundancy Lost. The Steam Boiler System produces central heating and reheat hot water throughout campus. Replacing the system is paramount to maintaining this necessary service. The System provides central heating and reheat hot water for 68% of the conditioned space of the campus including many Critical Research, Medical and Health Facilities. **For greater energy efficiency we are converting the boilers from steam to condensing hot water.** The range of savings for Boiler Replacement is $350,000 - $400,000 per year.

USF Chiller- Two of the four centrifugal chillers in the central utility plant are 23 years old and will reach the end of their useful lives in the next 18 months. These two chillers have become very costly to maintain. **This request will dramatically improve our reliability and increase capacity to attain the desired N+1 condition. Improved technology will result in significant efficiencies and energy savings when the new machines are operational**. The request includes increasing the size of the two replacement chillers from 1,000 tons each to 1,200 – 1,300 tons each. The anticipated range of operational savings is $80,000- $100,000 per year.

USF Chiller- Replacement of Chiller #2 and associated chilled water system improvements to support the glycol (Ice Making) system. Chiller has reached the end of its useful life and requires substantial maintenance investment on a recurring basis. The project will replace the existing 280-ton chiller with a 320-ton chiller **for increased capacity and efficiency.** Additionally, a glycol pump and heat exchanger will be added to provide full redundancy for the glycol cooling system. Upon completion, the chilled water system will have USF System Standards N+1 redundancy and reduce the risk of operating the chillers during peak utility cost periods. The anticipated range of operational savings is $20,000- $30,000 per year.

USF UNIVERSITY OF SOUTH FLORIDA

Board of Governors Facilities Workshop 2019

INFRASTRUCTURE-CENTRAL PLANT IMPROVEMENTS

Current Central Steam and Chilled Water Plant

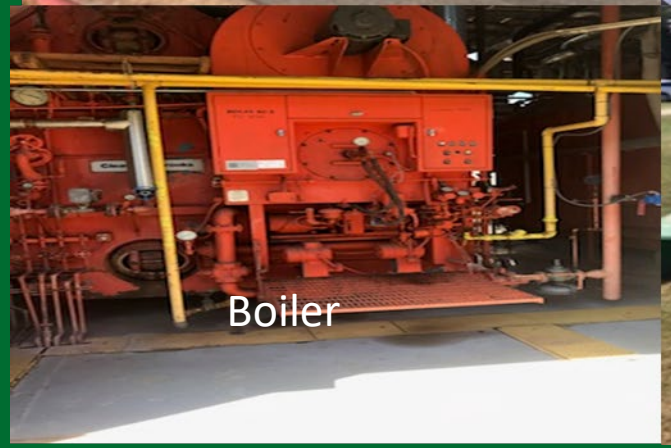
Year 1 Total – $5.14M
Replace chiller #2 ($2.86M)
Add a satellite Central Utility Plant to the southern portion of campus ($1.38M)
Campus controls replacement ($90K)

Year 2 Total – $4.66M
Boiler #2 replacement ($1.484M)
Expand east chilled water loop tie-In ($1.27M)
Add a partial north chill water loop for the School of Business and Industry ($1.38)
Replace steam plant make-up tank ($53K)

Year 3 Total – $11.32M
Expand partial northern chilled water loop along Gamble Street ($1.584M)
Expand chilled water research loop ($1.584M)
Complete northern chilled water loop ($1.440M)
Boiler #3 Replacement ($2.304M)
Add research bypass loop ($1.224M)
Add a secondary chilled water return well ($1.224M)
Add a chilled water distribution system to southern portion of campus ($1.961M)

Total Project Cost: $21,126,000

Current Central Steam and Chilled Water Plant



*FAMU Project Priority # 1

Infrastructure Central Plant Improvements

Current Status

- The Steam Plant and Chiller Plant were originally constructed in 1940 and 1995 respectively.
- As the university grow and expands, so does the need for chilled water to efficiently cool all buildings throughout campus.
- Decentralized chillers associated with various buildings throughout campus are failing.
- There is limited chill water capacity to accommodate cooling demands campus wide.
- Limited chill water redundancy hinders our ability to meet demands when failures occur.

*FAMU Project Priority # 1

Infrastructure Central Plant Improvements

Primary Benefits

- Expands central plant capacity and creates redundancy in the event of a chiller failure.
- Connects decentralized facilities to a centralized chilled water distribution system.
- Accommodates future growth on the southern portion of campus and creates the redundancy required in the event of mechanical failure.
- Upgrades existing non-functioning environmental control systems with new state of the art digital control systems in research buildings.
- Allows integration of the new control system into exiting centralized control systems network.

"At FAMU, Great Things Are Happening Every Day."

established 1887

Board of Governors Facilities Workshop 2019

UNIVERSITY OF SOUTH FLORIDA

JUDY GENSHAFT HONORS COLLEGE

RENOVATE SYSTEM CENTRAL PLANTS (BOILERS, CHILLERS)

2020- 21 LBR: $32,793,869

Judy Genshaft Honors College

Prior Funding for Original Project (PECO)	$0.00
Future Request	
2020-21 Request	$32,793,869
Private and Other Sources	$26,995,800
Total Project Budget	$59,789,669
Projected PO&M Costs	$1,100,000

Honors Rendering

USF UNIVERSITY OF SOUTH FLORIDA

*USF Project Priority # 1

Judy Genshaft Honors College

Project Size:

Net Square Footage	58,024
Gross Square Footage	86,131

Educational Plant Survey Approved by the Board of Governors: TBD

Return on Investment (ROI)

The USF Honors College consists of more than 2,200 high-achieving, cross-disciplinary scholars who are part of a close community that provides specialized experiences and advanced educational opportunities. With the new building the College expects to grow to 3,000 students within the next five years.

21% of our 2019 freshman class is either international or out-of-state. We intend to increase this to 35% international and out-of-state. The new building will be critical to meeting this goal by attracting more high ability out-of-state and international students. With a state-of-the-art honors building, we can compete for these students with any institution in the country.

This building will positively affect the quality of the incoming class, as measured by weighted HS GPA, ACT/SAT scores, and the number of National Merit Scholars. The 2019 Honors freshman class has an average GPA or 4.35; an average ACT score of 30.8; average SAT score of 1385; and we have 34 National Merit Scholars. The new building will expand and improve the pool of applicants from across the state, the nation, and the world. Our five-year goals are to increase those averages to a GPA of 4.5; ACT score of 33; SAT score of 1450, and 75 National Merit Scholars.

These numbers are attainable only by offering these excellent students the same level, or better, of facilities, technology, amenities, and status that they are offered at the best honors colleges in the country.

USF UNIVERSITY OF SOUTH FLORIDA