Board of Governors
Facilities Committee Workshop
October 9, 2013

St. Petersburg College of Business

STEM Learning Center

USF Health Morsani College of Medicine Facility

USF
UNIVERSITY OF SOUTH FLORIDA
SYSTEM

Judy Genshaft

USF System President

USF
UNIVERSITY OF SOUTH FLORIDA
SYSTEM

USFSP College of Business

The Building of Our Future

University of South Florida St. Petersburg

Sophia Wisniewska, Ph.D.

Regional Chancellor

USF
UNIVERSITY OF SOUTH FLORIDA
SYSTEM

Our Project by the Numbers

State funding: $27.3 million

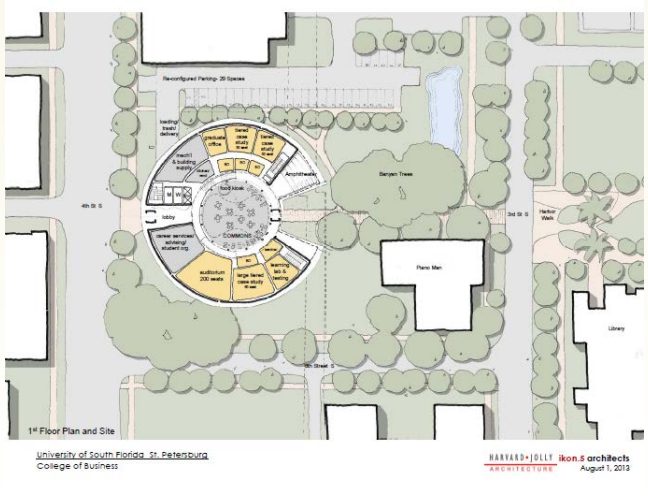
Private funding: $2.5 million

Total Budget: $29.8 million

Construction Jobs: 1,250

Annual operating cost: $934,402

Completion: Fall 2016



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The Importance of Funding This Project

- Creates a home and a hub: Synergy not silos
- Maintains status among elite programs:

  Protects AACSB Accreditation
- Promotes jobs, supports economic development:

  Fills educational gap in high-demand, high-paying financial services industry

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What Our Business Partners Say

“The College of Business is an economic driver for our entire community. I’m seeing them make a difference.”
Chris Steinocher -- President and CEO, St. Petersburg Area Chamber of Commerce

“All of our accountants either graduated from USF St. Pete or have gotten their master’s degree here. They are very well prepared.”
Mary Anne Reilly - Partner, Reilly, Fisher & Solomon

“Since I graduated, I’ve started a few different businesses. We’re looking at bringing on over 200 employees in the next two to three years.”
Reuben Pressman -- First USFSP Entrepreneurship Program graduate

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Meeting Strategic Goals

We are committed to excellence in teaching, research, community engagement, key partnerships and meeting important workforce needs.

Source: USF St. Petersburg SUS Work Plan 2012-2013

	SUS Strategic Plan 2005-2013	USFSP Strategic Plan 2005-2013	USFSP SUS Work Plan 2012-2013
Programs	✓	✓	✓
Research	✓	✓	✓
Community Partnerships	✓	✓	✓
Workforce Needs	✓	✓	✓

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Consequences of Delaying Construction

- Endangers student recruitment, retention and success
- Hinders ability to meet identified demands in financial services industry
- Reduces job creation by our Entrepreneurship graduates
- Places AACSB accreditation at risk

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USF Tampa
STEM Learning Center

University of South Florida

Ralph Wilcox, Ph.D.

Provost

USF
UNIVERSITY OF
SOUTH FLORIDA
SYSTEM

STEM Learning Center

Total Project Budget: $49,194,568 (135,000 GSF)

Annual operating costs: $1,421,550

- Operations and Maintenance = $4.83/GSF = $652,050
- Purchased Utilities: $5.70/GSF = $769,500

Completion: 2017

USF Tampa Campus

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Benefits to the State/Region

- Graduate more students to meet increased statewide demand for high-skilled & high-salaried STEM jobs in business & industry
  - Tech Data, Jabil Circuit, WellCare, Nielsen, Raymond James, TECO are all among Florida's Top 30 companies with growing need for STEM graduates
- 89% of new STEM jobs will require postsecondary education/training
- Preserve/enhance USF's top national rankings in:
  - Computer Science & Engineering — #40 nationally; #1 in FL (*National Research Council*)
  - Entrepreneurship — #11 nationally (*The Princeton Review*)
  - Information Systems and Decision Sciences — #25 nationally (*Business Week*)

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Return on Investment — Performance Metrics

- USF is the #2 producer of STEM graduates in the state at 24% of degrees
- USF's Work Plan projects 2,900 STEM graduates annually by 2015-16 — an increase of 11% over 2012-13. Support for new high-demand, innovative programs in Computer Science, and Strategy & Information Analysis ("Big Data")
- Improved Student Success — enhanced access/retention/ progression/graduation rates in STEM and reduction in excess hours/indebtedness.
- USF is #2 in Florida for both federal and total research expenditures, and #1 in patents and licensing
- Supports continuing growth in research productivity

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Expanding New Job Creation

- 1,500 construction jobs
- Will accommodate an increased number of business and engineering faculty, researchers, technicians and students by 2016
- Florida expects a growing demand for 411,000 additional STEM jobs by 2018 (4th highest in U.S.)
- USF is #1 in Florida for bachelors graduates employed in the state (70%) and #2 for degrees in areas of strategic emphasis
- USF's Work Plan projects an 11 percent increase in annual STEM graduates by 2015-16 for high-paying jobs.
  - Average starting salaries: Computer Science — $58K; Engineering — $62K; Management Information Systems — $57K

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Risks to Delaying Construction

- Without timely construction USF will likely **not** be able to accomplish Work Plan goals including:
  - meeting market demand for increased STEM graduates,
  - achieving STEM degree growth projections,
  - improving access, retention & graduation rates, and reducing excess hours & student debt, and
  - expanding our nationally competitive research profile.

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USF Health Morsani College of Medicine Facility

University of South Florida Health

Dr. Alicia Monroe, MD

Chief Academic Officer

USF
UNIVERSITY OF SOUTH FLORIDA
SYSTEM

Morsani College of Medicine Facility

Total Project Budget: $63.4M
Annual operating costs: $2.1M
Completion: March 2017

Specifications:

- 142,000 gsf
- 94,000 nsf
- **79,000 nsf Teaching Space**
- 15,000 nsf Offices and Student Support

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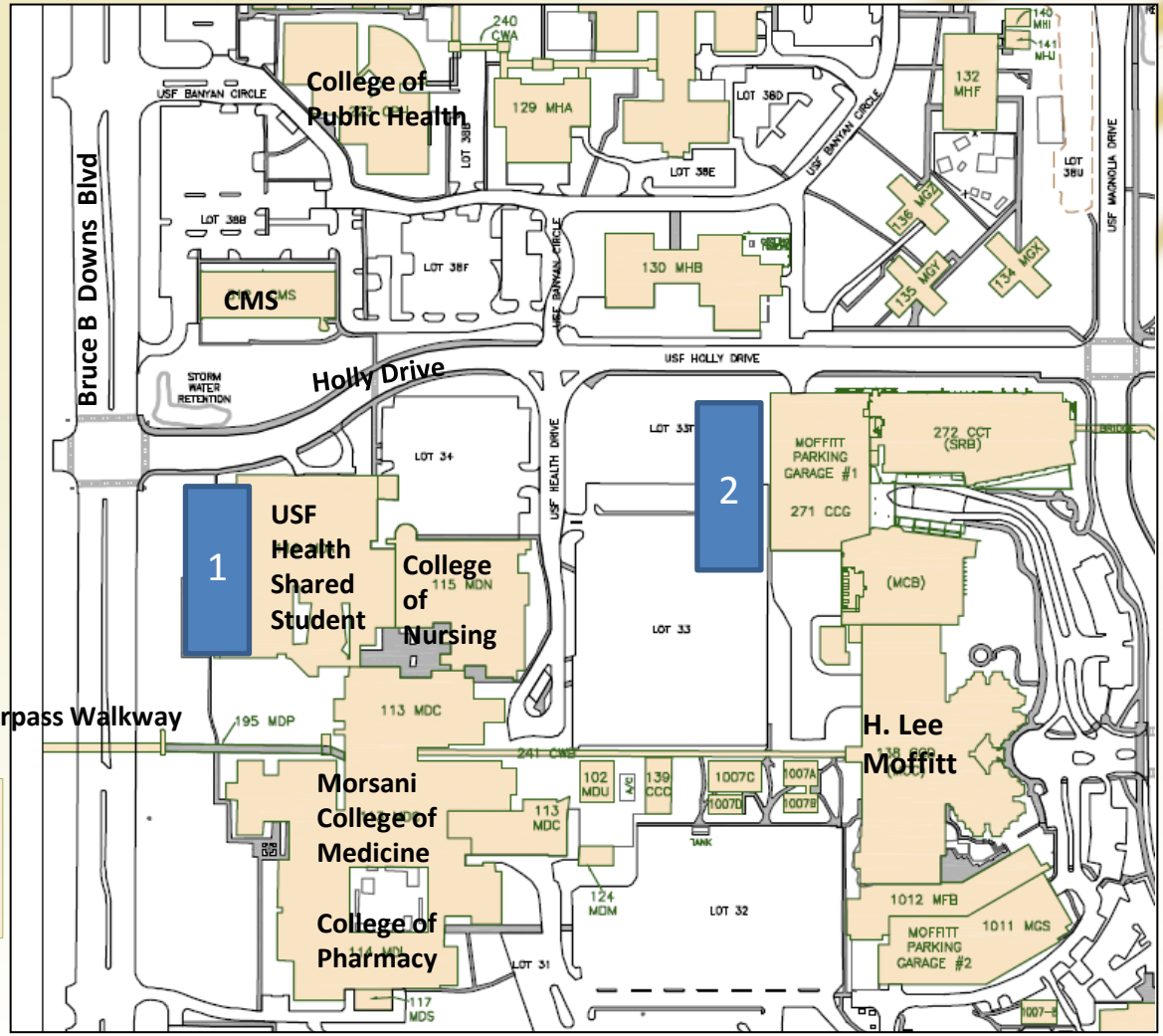
Morsani College of Medicine Facility



Existing Facilities:

- **40 year old building**
- 575,000 gsf houses:
  - College of Medicine
  - College of Nursing
  - College of Pharmacy
  - Physician's Assistant Program
  - Library
  - Shared Student Services
  - Teaching Labs
- **42,000 gsf of classroom space**

USF UNIVERSITY OF SOUTH FLORIDA SYSTEM

Benefits and Projected Enrollment

- Aging facilities
- Significant enrollment growth to date and new space is needed for program expansion
- Changing educational model requires increase reliance on inter-professional education

On Site Headcounts			
	FY 04/05	FY 12/13	FY 18/19*
MCOM Grad Ed	146	549	554
MCOM UME	445	554	800
MCOM PA			96
MCOM DPT		108	124
Nursing	1,915	2,631	2,763
Pharmacy		119	400
Total	**2,506**	**3,961**	**4,737**

* Projected

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Meeting Strategic Goals

- Increase science and health professional graduates to support workforce development

- Support student success:
  - Improves access to health careers
  - Expand training facilities to support learning outcomes
  - Increase graduation of trained professionals

- Provide the highest quality, interdisciplinary and inter-professional educational programs

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Consequences of Delayed Funding

- Constricts economic impact
- Curtails enrollment
- Compromises accreditation
- Contributes to Florida graduates leaving the state

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Job Creation/Workforce Development

- Est. **1,500-1,900** construction jobs over the life of the project
- Est. **200-265** businesses involved during the life of the project
- Est. **35-50** additional faculty and staff jobs created
- Est. **1,200** additional high wage earners trained for entry into Florida's various health professional fields
- Loss of economic impact of 1,200 workers with the average salary of $100,000

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University of West Florida

Board of Governors Facilities Committee

Provost Martha Saunders - Dr. Susan Stephenson – Dr. Jim Barnett

October 9, 2013 – Tampa, Florida

University of West Florida

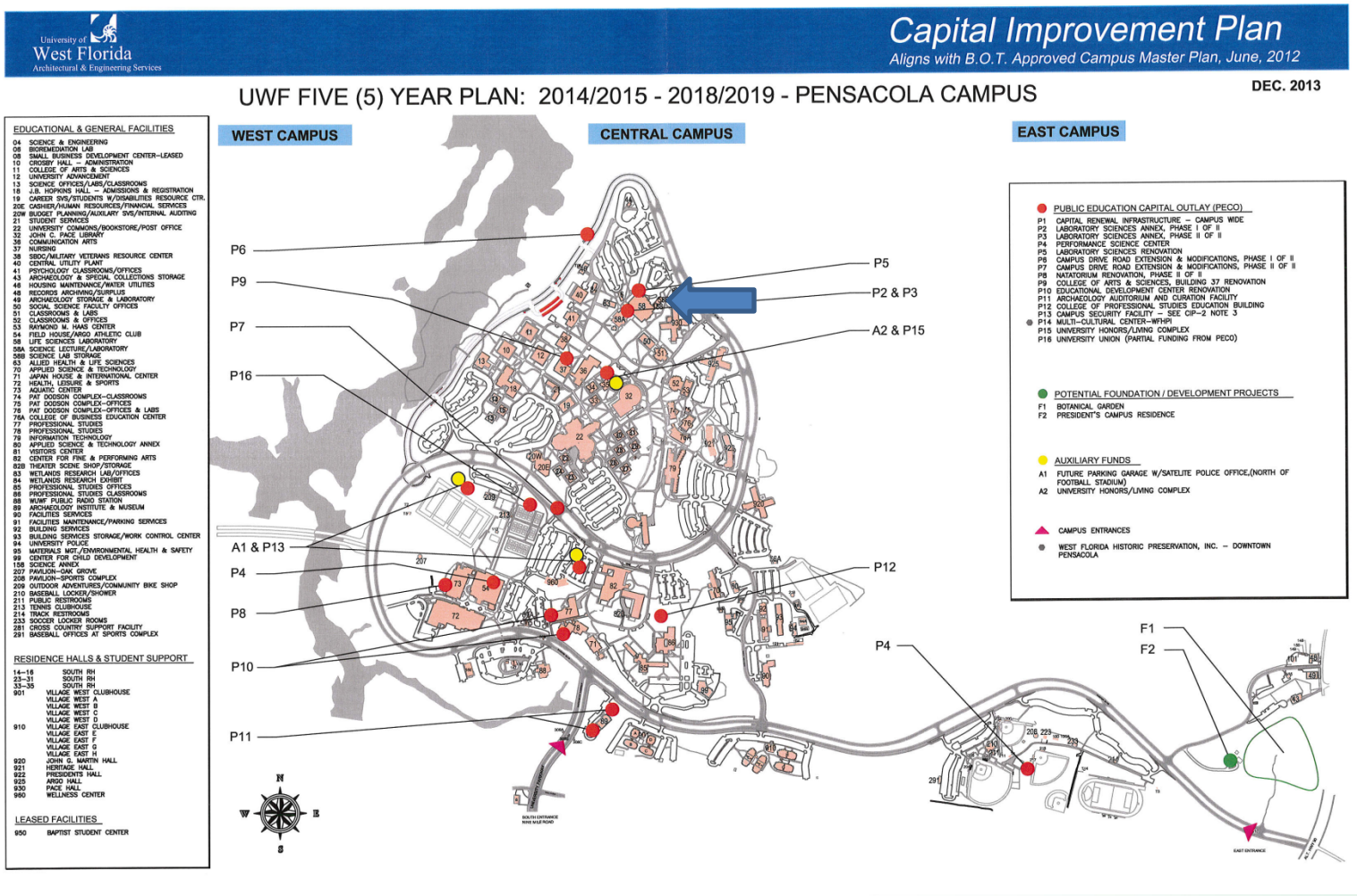
Laboratory Sciences Annex

This project meets the following BOG Strategic Priorities, Key Performance Indicators and UWF Strategic Plan Goals:

- Increase the number of STEM degrees
- Increase research activity and external support
- Strengthen quality and reputation of research
- Average time to degree
- Increase % of undergraduate seniors participating in a research course
- Enhance student access, progression, and learning and development
- Distinctive teaching, scholarship, research and professional contributions

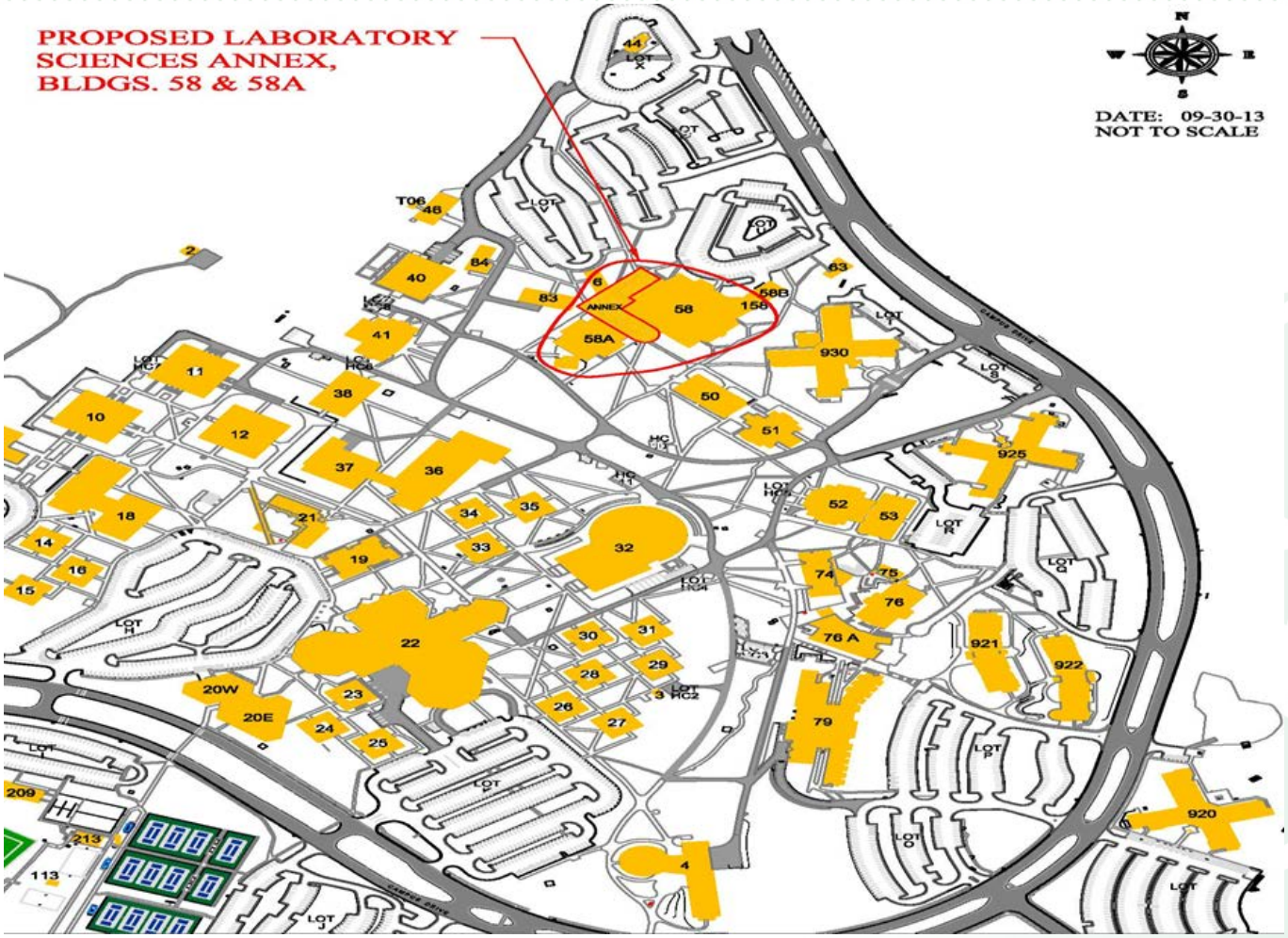
University of West Florida

Laboratory Sciences Annex



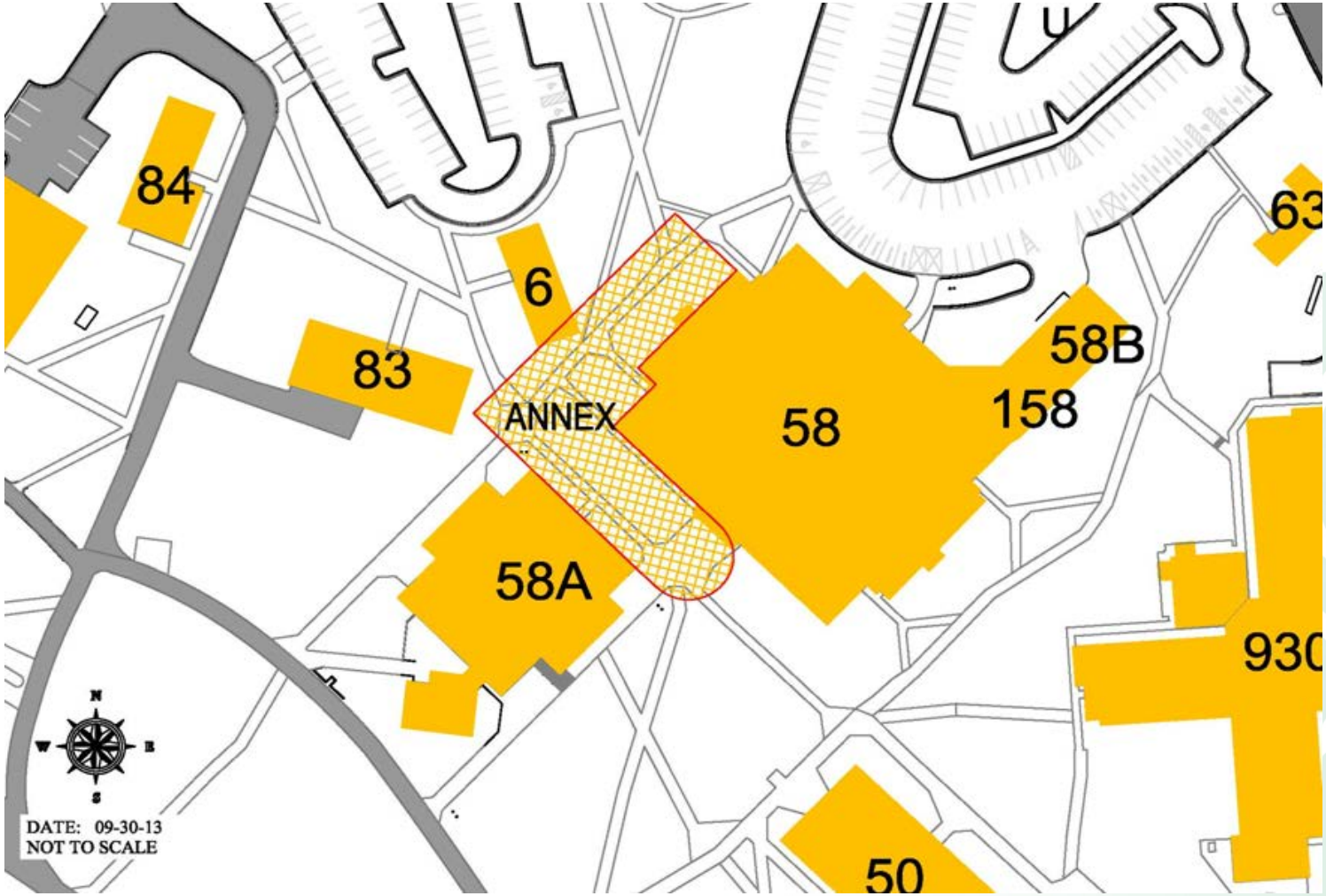
University of West Florida

Laboratory Sciences Annex



University of West Florida

Laboratory Sciences Annex



University of West Florida

Laboratory Sciences Annex

University of West Florida

Laboratory Sciences Annex

Laboratory Sciences Annex Phases I and II, Bldgs. 58 & 58A

New Gross Square Feet =	37,295
Project Budget =	$19,900,000
Annual P.O.M. Budget =	$438,000
Occupy =	January, 2017

- Center Atrium – Link Two Current Bldgs.
- Research labs = 10,200 GSF
- Study areas = 1,850 GSF
- Demolish Building 6 Mobile Unit

QUESTIONS?

University of West Florida

Laboratory Sciences Annex

Summary - Laboratory Sciences Annex, Phases I and II										Rev. Oct.7, 2013. MH.JRB
	Classrm.	Teach Lab	Research Lab	Study	Office	Conf. Rms.	Student Support	Workshop /Storage	Campus Support	Total N.A.S.F.
A. Reception Atrium - 1st Floor				1,250	625	1,000		300		**3,175**
Qty. of Each Space Type				1	4	2				
B. Dept. of Allied Health					1,025					**1,025**
Qty. of Each Space Type					10					
C. Program Growth					800					**800**
Qty. of Each Space Type					8					
D. Program Research			9,000		3,000					**12,000**
Qty. of Each Space Type			11		20					
G. Doctor of Physical Therapy					488	300				**788**
Qty of Each Space Type					4	1				
I. General Use			1,200	600	600		1,000			**3,400**
Qty. of Each Space Type			2	1	6		2			
J. Campus Support									750	**750**
Total N.A.S.F. by Space Type	**0**	**0**	**10,200**	**1,850**	**6,538**	**1,300**	**1,000**	**300**	**750**	**21,938**
Gross Square Feet										**37,295**

UNIVERSITY OF NORTH FLORIDA

SKINNER JONES HALL NORTH

SKINNER JONES HALL SOUTH

UNF
UNIVERSITY of NORTH FLORIDA

- Total project budget for Skinner Jones Hall North is $12 million of which $4 million has been received

- Total project budget for Skinner Jones Hall South is $12 million.

- These two buildings were part of the original buildings built when UNF was formed back in the early 70s. They have been in continuous use since then.


SKINNER-JONES HALL
SKINNER-JONES HALL


Skinner Jones Hall North (Building 4)
Skinner Jones Hall South (Building 3)

New College
THE HONORS COLLEGE of Florida

Heiser Natural Sciences Complex Building Addition Project

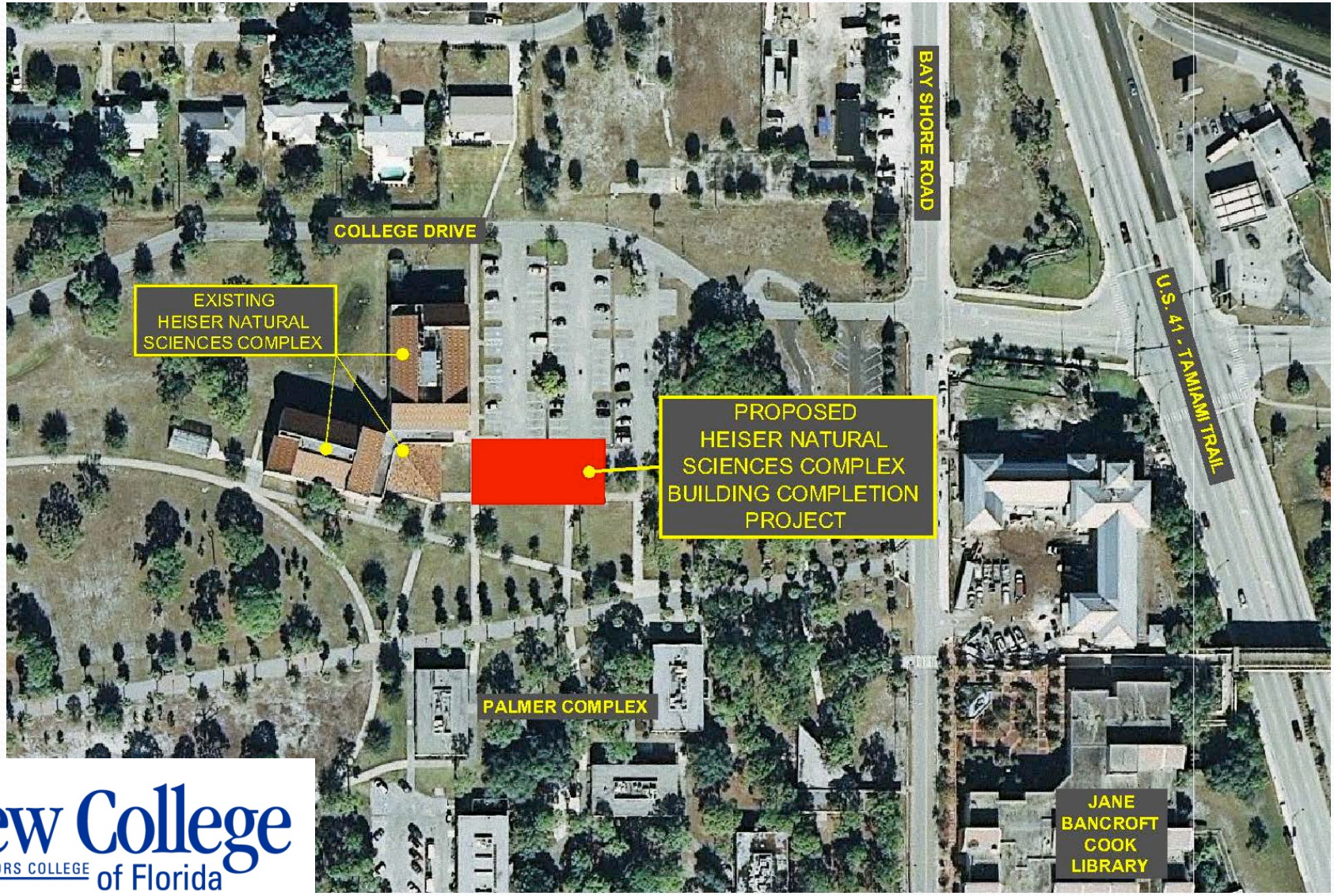
State University System of Florida
Board of Governors Facilities Committee Workshop
October 9, 2013

New College of Florida

Roland V. Heiser Natural Sciences Complex

New College
THE HONORS COLLEGE of Florida

Project Location Map



New College
THE HONORS COLLEGE of Florida

Heiser Natural Sciences Program: 21,975 gross/14,650 net square feet

- 3 large modules, each including: *teaching lab, research lab, faculty offices, support space*
- 3 small modules, each including: *teaching lab, research lab, faculty offices*
- Support space including: *lobby, restrooms, elevator, mechanical, custodial, electrical, IT, data,* circulation

New College
THE HONORS COLLEGE of Florida

Statewide Significance of Project

- Implements SUS goal to increase the number of degrees awarded in STEM fields
  - *This project will increase access and success in New College science and mathematics programs.*
- New College has the second highest SUS percentage of bachelor's degrees awarded in STEM disciplines
  - *25% undergraduate degrees in STEM disciplines ranks NCF on par with percentages at SUS Research One universities*

New College
THE HONORS COLLEGE of Florida

5-Year Strategic Plan/Work Plan Goals Tied to Project

- BOG Strategic Priority to increase number of STEM degrees
  - *New College of Florida Work Plan sets goal to increase undergraduate degrees in STEM from 25% to 35% by 2016.*
  - *Project is consistent with goals in the New College of Florida Campus Master Plan, Strategic Plan, and Academic Master Plan.*

New College
THE HONORS COLLEGE of Florida

Negative Consequences of Delayed Funding

- Expansion of STEM student learning will be limited by inadequate laboratory teaching and research facilities.
  - *We lack research and teaching labs for bioinformatics, molecular biology, earth science, bioorganic chemistry and biology/environmental studies.*
  - *Data science and analytics initiative requires new facilities*
  - *We are unable to house additional faculty needed to meet increasing student enrollment in STEM laboratory courses.*

New College
THE HONORS COLLEGE of Florida

Proposed Project Schedule

- Reasonably Aggressive 25 Months
- July 2014 – Begin Design Phase
- July 2015 – Begin Construction Phase
- August 2016 – Occupy Building

New College
THE HONORS COLLEGE of Florida

Total Project Budget

- Estimated Project Costs
  - Design Phase $ 655,000
  - Construction Phase $5,776,788
  - Equipment & Furnishings $ 817,000
- Total Estimated Project Cost $7,248,788

New College
THE HONORS COLLEGE of Florida

Estimated Annual Operational Costs

- BOG Facility Class E – General Science Building
- *Utilities Funding* $237,000
- *Operations & Maintenance Funding* $109,000
- *Total Annual Operating Costs* **$346,000**

New College
THE HONORS COLLEGE of Florida

Estimated Number of Jobs Created by This Construction Project

- New College Jobs - 9
  - *2 operation and maintenance*
  - *5 faculty*
  - *2 lab technicians*
- Construction Jobs - 63
  - *Direct Jobs = 63 estimated*

New College
THE HONORS COLLEGE of Florida

Additional Considerations

- New College is nationally ranked #5 among Public Liberal Arts Colleges by US News; this project allows us to maintain and advance the College's national stature.
- The SUS space formula does not match up well with an institution as small as New College.
- Plans for Heiser Natural Sciences were scaled back by 30% prior to 1998 construction.
  - *Planned space for future expansion was lost.*
  - *This project will complete the 1998 project and meet current and future needs for STEM teaching and research.*

New College
THE HONORS COLLEGE of Florida

Four Projects

- UCF Valencia College Classroom Building
- Arts Complex Phase II
- Engineering Building Renovation
- Interdisciplinary Research and Incubator

UCF Valencia Classroom Building

UCF Valencia Classroom Building

Background

- Osceola County is rapidly growing and has an increased demand for higher education services.
- Valencia College is meeting that demand and constructed the classroom building on its Osceola campus.
- Through our successful partnership with Valencia College, UCF agreed to contribute $7.5 million toward expanding the building's size to accommodate the growing number of UCF students enrolled on that campus.
- This request is to recoup those dollars, half of which has been paid to Valencia; the other half is due in 2014.

UCF Valencia Classroom Building

1. Total project budget: $7.5 million
2. Rendering of the project
3. Site plan: Valencia's Osceola campus
4. Specific goals: Provide access for undergraduate education
5. Negative consequences of delayed funding:
   - Loss of $7.5 million to UCF's general operating budget
6. POM costs: Funded by Valencia College

UCF Valencia Classroom Building

7. Number of construction and permanent jobs:
   - 15 permanent jobs

8. Completion of the facility: already constructed

9. Facility would be completed: already constructed

10. Other considerations:
    - Funding will reimburse UCF budget $3.75 million for 2011 payment, and pay Valencia $3.75 million due in 2014

Arts Complex Phase II (Performance)

Arts Complex Phase II (Performance)

Background

- This project is the second of a three-phased center for the Arts.
- Phase I, completed in 2011, provides classrooms, support, and studio office space for theatre and music.
- Phase II will provide performance space for both units.
- UCF currently has only one performance space, the 150-seat Rehearsal Hall.
- Phase II will include a 600-seat concert hall, a 263-seat recital hall, a 520-seat proscenium theatre, and a 225-seat black box theatre.

Arts Complex Phase II (Performance)

1. Total project budget:
   - $50 million state funding
   - $17 million private funding

2. Rendering and photo of the project

3. Site plan

Current photo, Phase I

Site plan

Rendering

Arts Complex Phase II (Performance)

4. Specific goals:
   - Support existing graduate and undergraduate programs in the performing arts with adequate entertainment spaces

5. Negative consequences of delayed funding:
   - Graduates will not have been given the opportunity to benefit fully from their experience in the music and theatre programs

6. POM costs: $1,248,218 annually

7. Number of construction and permanent jobs:
   - 316 construction jobs
   - 39 permanent jobs

Arts Complex Phase II (Performance)

8. Compelling reason to construct:
   - Job creation to aid the state economy
   - Interdisciplinary benefits in the undergraduate experience
   - UCF's contribution to the professional talent pool serves Florida's vital tourism industry

9. Completion of the facility: January 2017

10. Other considerations:
    - UCF has world-class talent in its music and theatre students and faculty
    - Phase II performance venues will provide the educational spaces to continue to recruit, retain, and graduate world-class talent

Engineering Building I Renovation

Engineering Building I Renovation

Background

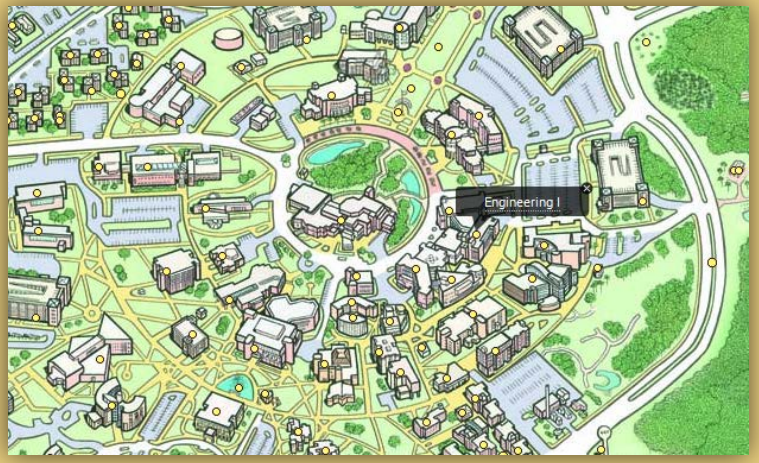
- Engineering Building I is almost three decades old, and it has seen continuous and heavy use.
- The facility houses classrooms, labs, clean rooms, and other support space for critical STEM programs such as Mechanical and Aerospace Engineering, Applied Material Processing and Analysis, and Electrical and Computer Engineering.
- Due to its age, the building needs major attention to its building systems, including electrical, HVAC, lighting, controls, and upgrades to its chilled water systems, fire alarm systems, elevators, and interior and exterior lighting.
- In the last PECO allocation, UCF received $3,620,723 million of the $18.5 million budget.

Engineering Building I Renovation

1. Total project budget:
   - $18.5 million of which $3,620,723 has been appropriated

2. Photo of the project

3. Site plan



4. Specific goals:
   - Continue to provide essential instruction in the STEM disciplines
   - A renovated facility will enhance the quality of the academic programs and research

Engineering Building I Renovation

5. Negative consequences of delayed funding:
   - Students and researchers lack modern facilities, which is a detriment to attracting the best students and faculty
   - Lack of state-of-the-art facilities limits sponsored research opportunities

6. POM costs:
   - No increase in current state funding; however, a renovated facility will be more energy efficient

7. Number of construction and permanent jobs:
   - 118 construction jobs
   - Same permanent jobs as currently exist

Engineering Building I Renovation

8. Most compelling reasons to construct:
   - Ability to produce excellent graduates in the STEM disciplines, and allow for more sophisticated research activities

9. Completion of the facility:
   - If funded in 2014, renovations could be complete by January 2017

10. Other considerations:
    - Delaying renovation does not help current students and researchers optimize their experience
    - Excessive energy use and expensive stop-gap repairs will continue to be required

Interdisciplinary Research Facility

Interdisciplinary Research Facility

Background

- UCF has a critical need for research space to accelerate scientific discovery in a collaborative environment, support STEM, help drive Florida's economy, and assist our state in producing high-paying jobs.
- This building was partially funded by the Legislature in 2010-11 for $5,924,183.
- The total project budget is $45.7 million.
- When funding was not received to complete construction of the Classroom II building, the funds were transferred in the 2013-13 budget to finish funding the Classroom II project.

Interdisciplinary Research Facility

Background (continued)

- This facility will house programs in nano-science technology, advanced materials processing and analysis, optics and lasers, and energy research. It will also support the UCF business incubator program, which just graduated its 100th company.

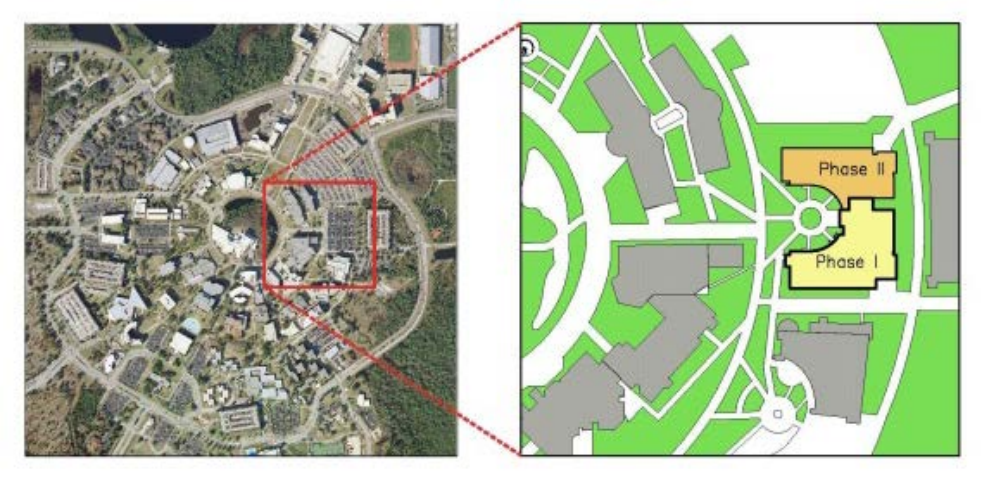
- The average salary of graduates from the incubator program is $67,541.

Interdisciplinary Research Facility

1. Total project budget: $45,700,836

2. Rendering of the project

3. Site plan



Interdisciplinary Research Facility

4. Specific goals:
   - Increase research funding
   - Increase STEM graduates

5. Negative consequences of delayed funding:
   - Research will be impacted, as space is critical
   - Research faculty lines cannot be filled as there is no available research space to accommodate the additional faculty
   - Current faculty are falling behind in progress on current contracts due to inadequate space
   - UCF's ability to increase its output of STEM graduates is affected

6. Annual POM costs: $1,632,900

Interdisciplinary Research Facility

7. Number of construction and permanent jobs:
   - 350 construction jobs
   - 83 permanent jobs

8. Most compelling reason to construct:
   - Increased research in STEM areas
   - Increased output for business incubator program
   - The dollar value of the project to the local economy will be $10.6 million in the first year, $61 million in the second year, and recurring $10.6 million in the third year and beyond, estimates Dr. Sean Snaith, director of the UCF Institute for Economic Competitiveness.

Interdisciplinary Research Facility

9. Completion of the facility:
   - If planning and construction funding were provided in 2014, the facility could be complete in mid-2017

10. Other considerations:
    - UCF is severely hampered in research activities by the lack of adequate research space. To date, the state has provided 407,000 net assignable square feet, half the space needed as calculated by the state's formula.
    - Programs to be located in this facility currently produce $26 million in external funding. Subsequent funding should increase dramatically with this new space.

UCF Valencia College Classroom Building

Engineering Building I Renovation

Arts Complex Phase II

Interdisciplinary Research and Incubator

Board of Governors Facilities Workshop

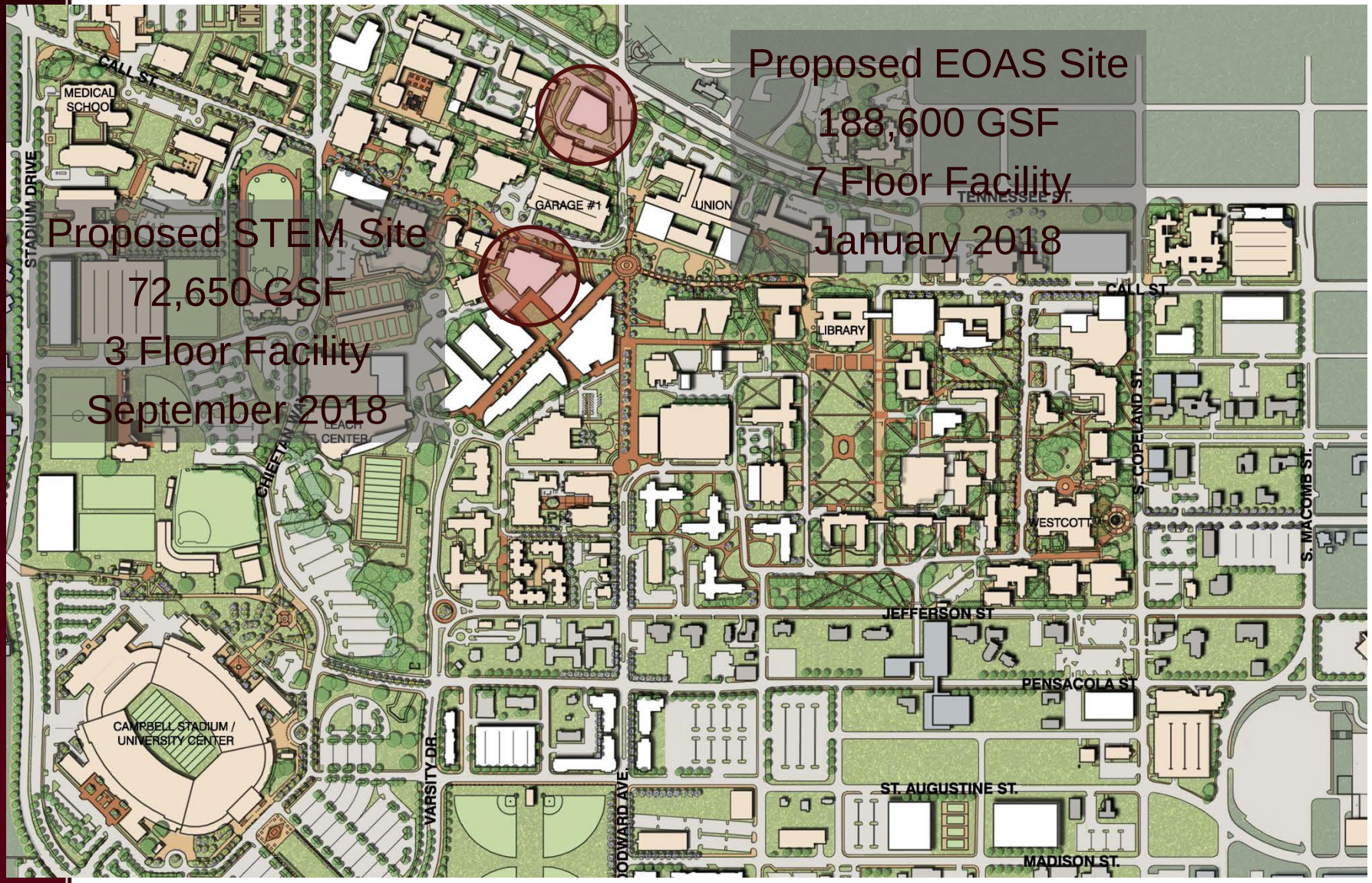
October 2013

THE FLORIDA STATE UNIVERSITY

FSU Projects

- Earth Ocean Atmospheric Sciences Building
- STEM Teaching Lab Building
- FAMU-FSU College of Engineering III – Joint Use

FSU Master Plan



Earth Ocean Atmospheric Sciences Building (EOAS)

EOAS: 1. Cost 2. Rendering

1. Total Project Budget, including non-state funding.
   Total Cost - $64.9 million

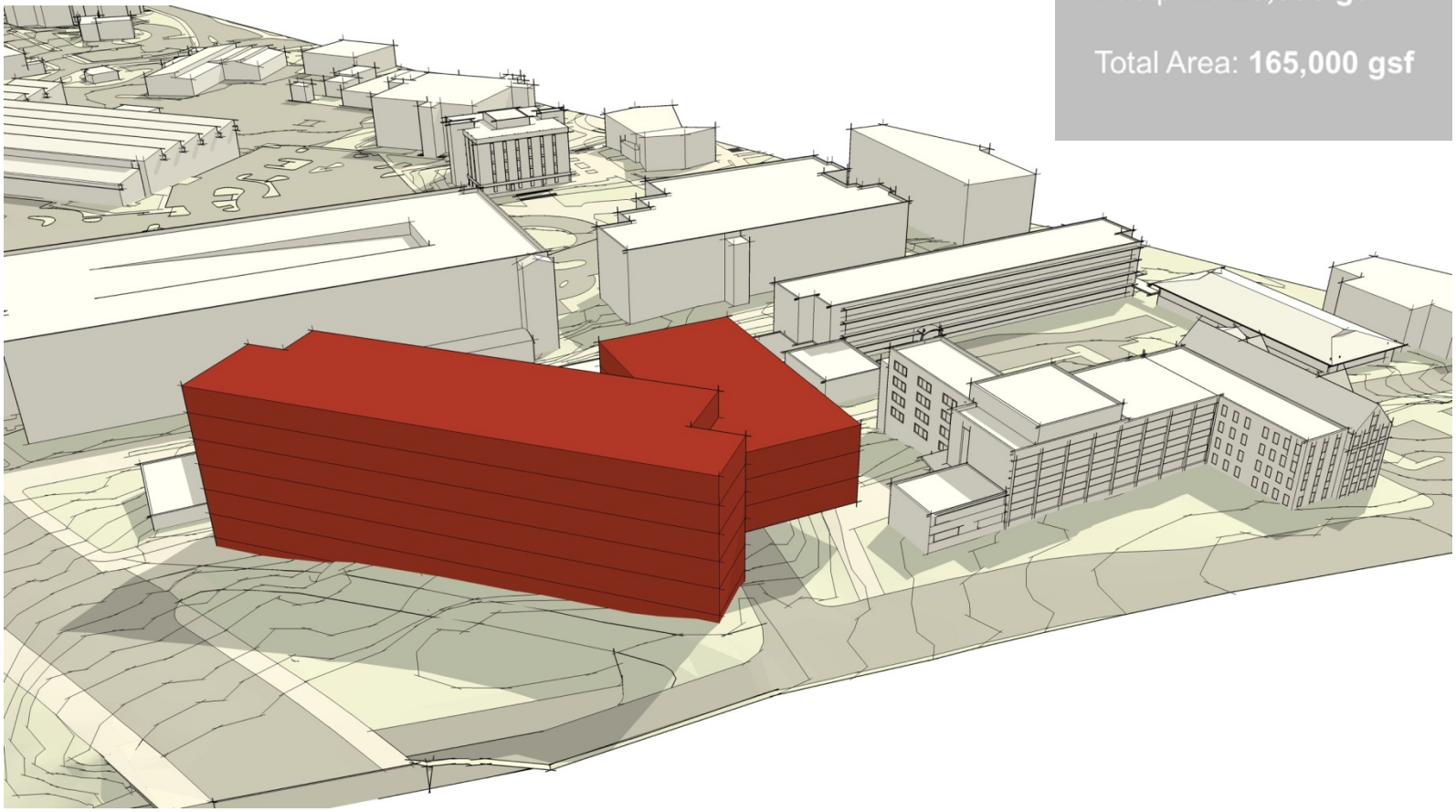
2. Photos/renderings of the project.

Massing Profile:

7 Floors

Footprint: **28,900 gsf**

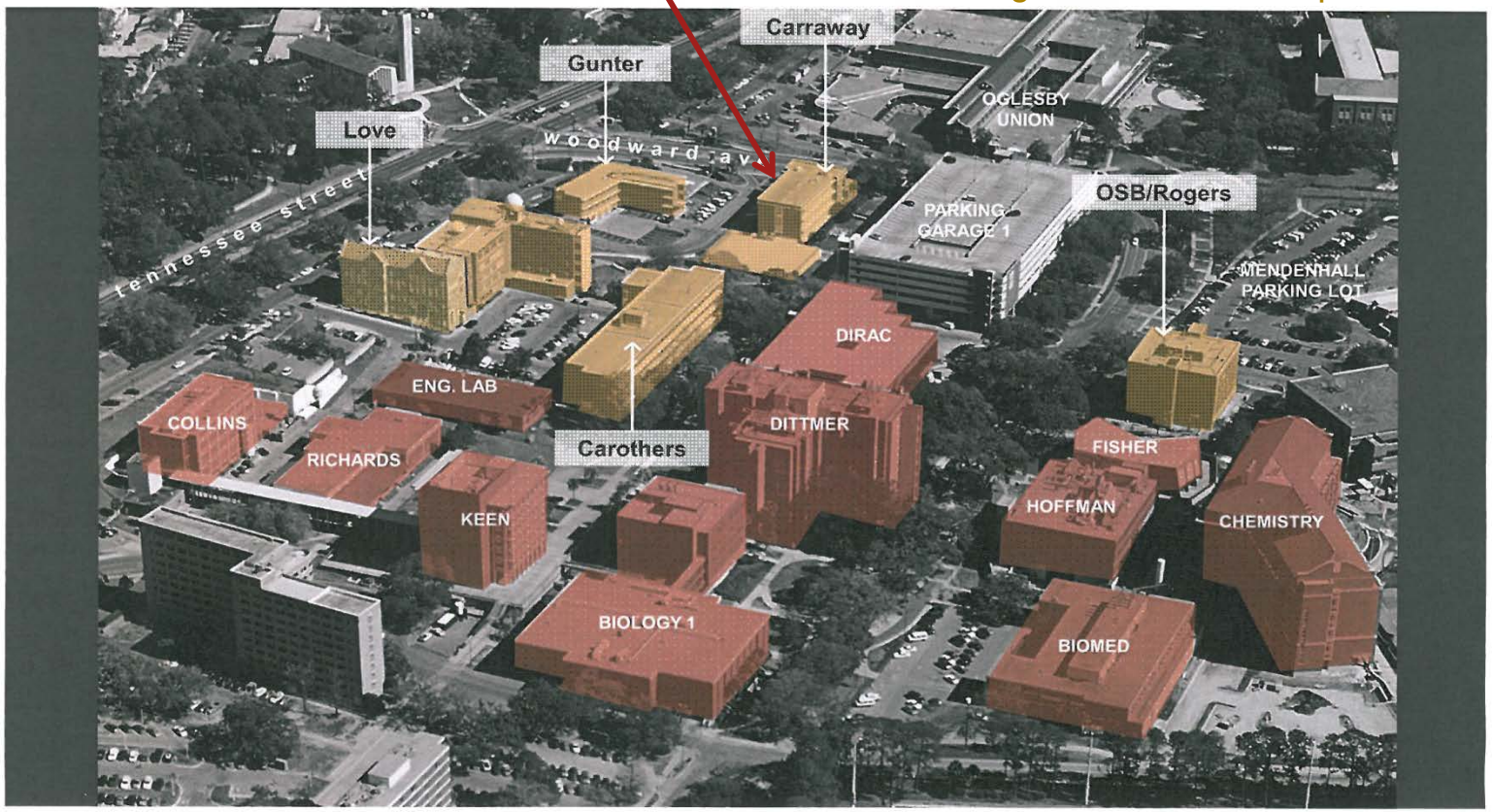
Total Area: **165,000 gsf**



EOAS: 3. Site Map

To be demolished

Gold buildings house EOAS departments



OVERVIEW

EOAS: 4. Goals OVERVIEW

- Increase the # of STEM degrees and increase external funding
- Redevelop and renovate an aging 1.2 million square feet of science and research buildings.
- Merged 3 departments to save money, provide innovation in teaching, and increase research potential
- The # of undergraduate majors in EOAS has increased by 250% since 2010, making it the fastest growing program in Arts and Sciences.
- Investing Preeminence funding to attract high quality faculty
- Huge research opportunities - $13.9 million in external funding expected to at least double (e.g. BP funding)
  - Geophysical Fluid Dynamics Lab
  - Center for Oceanic-Atmospheric Prediction Studies

EOAS Building: Specifics #4

4. The specific goals or metrics in the 5 Year strategic plan and/or work plan goals tied to the project.

- This building aligns with the BOG Strategic Plan goals to increase the number of degrees awarded in STEM and other areas of strategic emphasis and to increase federal and private funding for collaborative research that targets STEM initiatives.
- The construction of the EOAS project is a cornerstone of the University's ambitious long-range plans to advance its scientific and technical presence beginning with efforts to redevelop and renovate its inventory of more than 1.2 million square feet of science and research buildings.
- Initially, severe budget cuts provided the impetus for Florida State University to develop a much more efficient approach to the Earth-related sciences. The University merged three separate departments– Geology, Oceanography, and Meteorology – to form a new department called the Earth Ocean and Atmospheric Sciences (EOAS) Department. Administrative expenditures were reduced, significant changes in staff occurred, and a new curriculum was developed.
- The number of undergraduate majors in EOAS has increased by 250% since 2010, making it the fastest growing program in Arts and Sciences. These students have been drawn to EOAS because of innovative majors that were put into place after the merger, as well as to our traditional highly rated meteorology degree. The EOAS graduate program is among the largest in the College of Arts and Sciences.
- EOAS is further enhanced by Florida State's Geophysical Fluid Dynamics Institute (GFDI) and Center for Oceanic-Atmospheric Prediction Studies (COAPS). Research expenditures from external contract and grant funding, for EOAS and its affiliated institutes, GFDI and COAPS, reached $13.9 million in fiscal year 2012, the most recent year of available data. Since then COAPS has added significant external funding by becoming a major component of the Florida Climate Institute (a partnership institute created by UF and FSU) and assuming a leadership position for managing the expenditures of the $20 million BP research funding initiative. The potential to expand research funding to help address, through academic and practical research, issues of state and national need, is tremendous. The ground work is in place to move forward.

EOAS: 5. Delay Negatives OVERVIEW

OVERVIEW

- EOAS operates in 7 buildings – two on Southwest campus – untenable for research interaction; severely hampers integration of the departments designed to save money and promote research and teaching.
- The addition of 9 faculty through Preeminence funding puts great pressure on an already inadequate space
- The three original departments operate primarily in the Love, Rodgers, and Carroway Buildings – on average more than 40 years old - plagued by building envelope and system issues
- Old and obsolete instructional space for one of our fastest growing undergraduate majors
- Existing buildings represent more than $100 million in deferred maintenance
- Holds back productivity and efficiency, when it has all the potential to be a truly premier program.
- EOAS building - benefit of reducing overall utility and maintenance costs.

EOAS: Specifics for #5

5. Identify the anticipated negative consequences of delaying funding.

- The Department of EOAS and allied centers are currently housed in seven buildings, two of which are located on the Southwest campus. By the nature of their research, faculty in EOAS use interdisciplinary approaches through collaborations with their colleagues. Complex problems and questions require a broad array of techniques and experimental paradigms to solve/answer. Collaborations are seeded and developed by daily interactions of faculty housed in the same building. This is so-called “breaking the bread” phenomenon is described in the 2002 National Research Council report on Interdisciplinary Research. Delay in construction of the EOAS Building will further hamper the integration of the founding departments (Geological Science, Meteorology and Oceanography) and clearly prevent the kinds of interactions needed to fully develop collaborative research and education among the faculty. Note that a major university-wide initiative is underway to hire as many as nine faculty in the area of coastal and marine research. A subset of the faculty will be in EOAS putting great pressure on the limited space available. As the programs of these faculty grow, the space demands will become unmanageable without additional space.
- The three original departments that were combined currently operate most substantially in three separate buildings (Love, Rogers, and Carraway) that are plagued by building envelope and building system issues that compromise ongoing research efforts and contain old, technologically obsolete instructional space. The current buildings do not provide engaging education for students or innovative, technologically sophisticated research facilities for faculty. This situation induces a downdraft on all productivity measures. There can be little doubt of the robust benefit that would be delivered by a common facility for EOAS, GFDI, and COAPS. The units would operate much more efficiently and would be placed in the position to vastly improve their products. Many of the opportunities for growth into a truly premier program depend on increasing the cohesiveness and collaboration among these science units.
- The three buildings that house the original three departments are on average, more than 40 years old and collectively represent more than $100 million in deferred maintenance costs. Importantly, because of the University’s construction standards, the EOAS building will also have the benefit of reducing overall utility and maintenance costs.

EOAS: 5. Costs 6. Jobs OVERVIEW

OVERVIEW

- BOG Formula – operating costs $1.4M
- Significant impact on construction and permanent jobs.
  - Nearly $14 Million awarded in contracts and grants – expect to grow significantly with BP funding and growth in faculty
  - Graduated 135 students last year
  - Bureau of Labor Statistics – job growth in EOAS fields will increase “faster than average” – 14-19% in geosciences and meteorology; 18% geosciences and hydrologists, more than 20% in environmental science
  - Considerable demand within Florida (climate and weather forecasting)
  - BOG Economic Impact Study – 1,451 jobs

EOAS: Specifics for # 6 and 7

6. Identify the annual operational costs (POM costs) of the facility.

- Using the BOG formula for new space, the annual operating costs associated with the facility will be apx. $1.4m.

7. Number of construction and permanent jobs.

- Last year more than $13,753,840 was awarded in contract and grants to faculty who will be housed in this building. It is expected that with researchers consolidated into one building the research productivity will increase. In addition, the EAOS program graduated 135 students last year.

- Using the January 2013 Economic Impact study prepared for the Board of Governors, the construction of the new EAOS building will directly generate 1,451 jobs (direct, indirect and induced).

- Degree offerings at all levels are predicted to enjoy plentiful employment opportunities. According to the Bureau of Labor Statistics, jobs in the geosciences and meteorology are expected to increase "faster than average", meaning 14% to 19%, over the next decade. Jobs in environmental science are expected to increase "much faster than average," meaning 20% or more, over the next decade. Demand should also grow for private weather forecasting firms, especially to Florida based, climate-sensitive industries such as farmers, commodity investors, insurance companies, utilities, transportation and construction firms. The Bureau of Labor Statistics further projects employment growth of 18% for geoscientists and hydrologists over the next decade which is again faster than other occupations. The growth in these areas will be driven by the need for energy, and responsible land and water management. Job growth in the private sector is likewise predicted to grow as more geoscientists find work as consultants. EOAS includes all of these degree tracks.

EOAS: 8. Compelling, 9. Completion, 10. Other Considerations OVERVIEW

OVERVIEW

- The Department of Earth, Ocean and Atmospheric Science has no counterpart in the State of Florida.
- Research is critical to the State
- Majors with high job potential
- Co-location of faculty and students is critical to success
- Will free up 63,448 gsf of space from buildings built in 1952, 1959 and 1961. Carroway in very poor condition – will be demolished as part of construction; creates EOAS space
- Completion January 2018
- Most compelling – Raises the stature of a very strong program to the position of an elite program in the nation

EOAS: Specifics for # 8, 9, and 10.

8. From a statewide perspective, the most compelling reason to construct the project.

- The Department of Earth, Ocean and Atmospheric Science has no counterpart in the State of Florida. The research and education purview of the department encompasses issues critical to the economic wellbeing of the State and the health of its citizens including water, food, climate variability and extreme weather events. To exercise this research and education agenda, faculty and students work collaboratively. Co-localization of the players is critical to success. Thus, construction of the new EOAS Building will greatly facilitate the fulfilling of this unit's mission in addressing the challenges faced by the State.
- The new building will free up 63,448 gsf of space from buildings built in 1952, 1959 and 1961. Due to the condition of one of the buildings and the small amount of physical space on campus, the Carraway Building will be demolished in order to provide space for part of the EOAS building.

9. If all state funding was provided in the amount and year requested, when would the facility be completed?

- Provided funding was provided in 2014-15, the building could be completed by January 2018.

10. Other considerations – for example, will it allow a program to advance or maintain its national or regional stature?

- EOAS faculty and allied programs such as the Center for Ocean-Atmospheric Prediction Studies are nationally acclaimed. The construction of the EOAS Building will support maintaining this standing and provide a vehicle for it joining the handful of elites in the nation.

Existing Lab Space in Buildings that House EOAS Depts.

Carraway Building

Love Building

GFDI Building

STEM Teaching Lab Building

STEM Teaching Lab

1. Total Project Budget, including non-state funding.
   - Total Cost - $35.1 million

2. Photos/renderings of the project.
   - None available

3. Site plans or map, showing the project's location.
   - See Slide #3 – Master Plan

The picture is of one of our studio physics rooms to illustrate a facility that accommodates a research-based pedagogy.

STEM Teaching Lab: 4. Goals OVERVIEW

OVERVIEW

- Increase the # of STEM degrees and external funding
- GOAL to be Top 25 public university is tied to significant investment in STEM fields.
- $3 million in current year Preeminence funding focused on STEM faculty; this is in addition to significant investments last year
- Last year - $4 million to renovate labs – space is a major recruiting hurdle to attract faculty
- The STEM Teaching Lab building is designed to pull some of the teaching lab activities out of old, deficient science buildings (e.g., Keen, Dittmer, and Bio Unit 1) and renovate the space to house the new STEM faculty.
- Lessens demand for future new space
- Lessons need for teaching labs in every new building
- Common use creates efficiencies, enables modern teaching
- Critical to house new faculty with their colleagues in Chemistry, Physics and Biology

STEM Teaching Lab: Specifics for # 4

4. The specific goals or metrics in the 5 Year strategic plan and/or work plan goals tied to the project.

- This building aligns with the BOG Strategic Plan goals to increase the number of degrees awarded in STEM and other areas of strategic emphasis and to increase federal and private funding for collaborative research that targets STEM initiatives.

- One of FSU's key initiatives and investment as listed in the 2013 Workplan is to become a national top 25 public university. Advancing in the national rankings is highly dependent on FSU's investment in STEM fields. We have targeted over $3 million of the preeminence funding towards the recruitment of STEM faculty. This is on top of a significant investment last year in STEM faculty recruitment. In order to provide space for new faculty in many of the STEM areas, we have had to spend in excess of $4 million dollars to renovate labs. A significant, if not the major recruitment hurdle is the lack of quality research space for STEM faculty.

- The STEM Teaching Lab building is designed to pull some of the teaching lab activities out of what is today a collection of old, deficient science buildings (e.g., Keen, Dittmer, and Bio Unit 1) and renovate the space to house the new STEM faculty. Having the new faculty in the buildings with current faculty will enhance the overall academic performance of departments such as Chemistry, Physics, and Biology. Equally important is the possibility that a STEM Teaching Lab building will lessen some of the future space needs in new buildings constructed for departments such as these. By centralizing some of the teaching lab activity into a common-use facility, it will help eliminate the need to recreate teaching labs in every new science building. This space would be built so that it could be easily modified to accommodate various types of activities.

STEM Teaching Lab: 5. Delay Negatives

OVERVIEW

OVERVIEW

- Aging teaching facilities that are substandard (40 to 50 years old)
- Inefficient space utilization
- Challenge of providing labs for new faculty co-located in departments
- Challenge of recruiting the best faculty
- Impact on recruiting students into STEM fields and retaining them to meet the projected demand of an additional 1 million STEM professionals in the U.S. expected for the next decade
- Demonstrated success through new teaching efforts (e.g. Studio Physics) – space does not match
- Demonstrated success – offer diversified teaching approaches to meet student needs

STEM Teaching Lab: Specifics for # 5

5. Identify the anticipated negative consequences of delaying funding.

- Negative consequences of not building the STEM Teaching Center: Currently, the STEM teaching laboratories and classrooms are distributed throughout campus under the control of academic departments. Some of these teaching laboratory spaces were constructed in the late 60's and early 70's. Extensive renovation will be necessary to bring much of this space up to modern standards. Construction of the STEM Teaching Center would allow multiple use of teaching labs by different departments thereby achieving an economy of scale and maximizing flexibility. Furthermore, vacated teaching labs could then be retrofitted for research space which is greatly constrained, especially in the physical sciences. If the STEM Teaching Center is delayed it will be necessary to renovate piece meal departmental teaching space rather than focusing on development of quality STEM teaching space at a global level.

- Recruitment of STEM faculty will continue to be challenging since quality lab space will have to be renovated to attract the best faculty. New buildings will continue to be built with specific teaching lab space to accommodate growth. Funds will be spent remodeling existing labs to accommodate current needs.

- Economic projections point to a need for approximately 1 million more STEM professionals than the U.S. will produce at the current rate over the next decade if the country is to retain its historical preeminence in science and technology. To meet this goal, the United States will need to increase the number of students who receive undergraduate STEM degrees by about 34% annually over current rates.

- Currently the United States graduates about 300,000 bachelor and associate degrees in STEM fields annually. Fewer than 40% of students who enter college intending to major in a STEM field complete a STEM degree. Increasing the retention of STEM majors from 40% to 50% would, alone, generate three-quarters of the targeted 1 million additional STEM degrees over the next decade. Many of those who abandon STEM majors perform well in their introductory courses and would make valuable additions to the STEM workforce. Retaining more students in STEM majors is the lowest cost, fastest policy option to providing the STEM professionals that the nation needs for economic and societal well-being, and will not require expanding the number or size of introductory courses, which are constrained by space and resources at many colleges and universities.

STEM Teaching Lab: Specifics for # 5 (continued)

5. Identify the anticipated negative consequences of delaying funding (continued)

- The reasons students give for abandoning STEM majors point to the retention strategies that are needed. For example, high-performing students frequently cite uninspiring introductory courses as a factor in their choice to switch majors. And low-performing students with a high interest and aptitude in STEM careers often have difficulty with the math required in introductory STEM courses with little help provided by their universities. Moreover, many students, and particularly members of groups underrepresented in STEM fields, cite an unwelcoming atmosphere from faculty in STEM courses as a reason for their departure.

- Better teaching methods are needed by university faculty to make courses more inspiring, provide more help to students facing mathematical challenges, and to create an atmosphere of a community of STEM learners. Traditional teaching methods have trained many STEM professionals, including most of the current STEM workforce. But a large and growing body of research indicates that STEM education can be substantially improved through a diversification of teaching methods. These data show that evidence-based teaching methods are more effective in reaching all students—especially the “underrepresented majority”—the women and members of minority groups who now constitute approximately 70% of college students while being underrepresented among students who receive undergraduate STEM degrees (approximately 45%). This underrepresented majority is a large potential source of STEM professionals.

STEM Teaching Lab: 6. Costs 7. Jobs, and 8. Compelling Reasons; OVERVIEW

- BOG formula estimate of operating costs is $878,524.
- BOG Economic Impact study indicates generation of 785 jobs
- Compelling reasons:
  - Addresses a critical shortage of teaching lab space (underbuilt compared to growth over last 10-15 years)
  - Significant amount of inventory is over 25 years of age – doesn't match up with innovative teaching
  - Critical to address workforce needs

STEM Teaching Lab: Specifics for # 6 and 7

6. Identify the annual operational costs (POM costs) of the facility.

- Using the BOG formula for new space, the annual operating costs associated with the facility will be apx. $878,524.

7. Number of construction and permanent jobs.

- Last year more than $13,753,840 was awarded in contract and grants to faculty who will be housed in this building. It is expected that with researchers consolidated into one building the research productivity will increase. In addition, the EAOS program graduated 135 students last year.

- Using the January 2013 Economic Impact study prepared for the Board of Governors, the construction of the new EAOS building will directly generate 1,451 jobs (direct, indirect and induced).

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STEM Teaching Lab: Specifics for # 8

8. From a statewide perspective, the most compelling reason to construct the project.

- This project seeks to address a critical shortage of teaching lab space on the Main Campus. Enrollment growth over the past 10 to 15 years, especially in undergraduate divisions, has outstripped the University's ability to provide and maintain an adequate teaching lab inventory. Though the University currently has a substantial number of teaching labs in its inventory, it is nevertheless under-built in this category.

- Another factor that aggravates the lack of teaching labs is the fact that a significant amount of the existing inventory is over 25 years of age; therefore, the quality of the educational environments in many areas hinders instructional activities. These teaching labs are typically undersized and cannot be effectively used to their greatest potential. Many of them lack components of modern instructional systems, such as basic projection systems, access to the Internet, and other electronic tools. Though the University has undertaken a series of limited renovations over the past few years, this effort alone will not meet the University's overall instructional needs. If enrollment continues to increase, then the need for comfortable, adequately sized, and properly equipped teaching labs will continue to grow as well. Therefore, this project will construct a new teaching lab building which will be focused on the STEM disciplines of science, technology, engineering and mathematics.

- There is a need for increasing the number of STEM graduates to fill gaps in the workforce. Hands on experiences in teaching laboratories and in small recitation sections are critical in the pedagogy of contemporary STEM education. FSU is greatly deficient in space for such educational experiences. Furthermore, STEM education crosses disciplinary lines. Thus, having a centralized facility will allow different academic units to more easily collaborate in developing experiences that cross disciplinary lines.

STEM Teaching Lab

9. If all state funding was provided in the amount and year requested, when would the facility be completed?

- If funds were provided so that we could open the bids on September 1, 2016, the building could be occupied by August 2018.

10. Other considerations – for example, will it allow a program to advance or maintain its national or regional stature?

- FSU is undergoing a substantial growth in STEM faculty and programs. While the University has national stature in research and doctoral education in many science and engineering disciplines, there is a commitment to build a stronger reputation in undergraduate STEM programs. The proposed STEM Teaching Building will be a vehicle to support this effort.

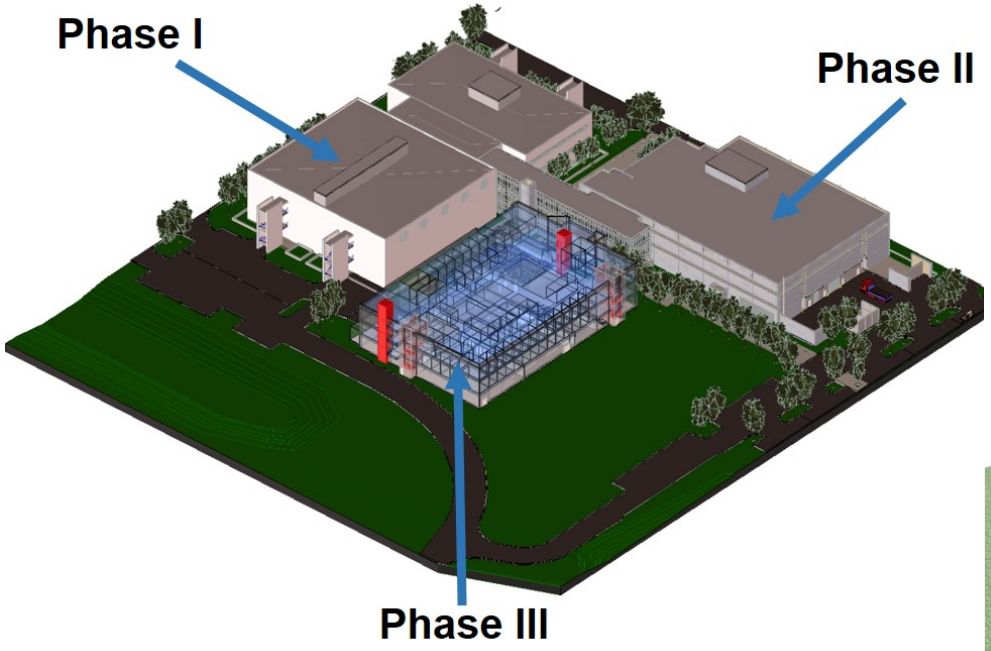
FAMU-FSU College of Engineering III – Joint Use

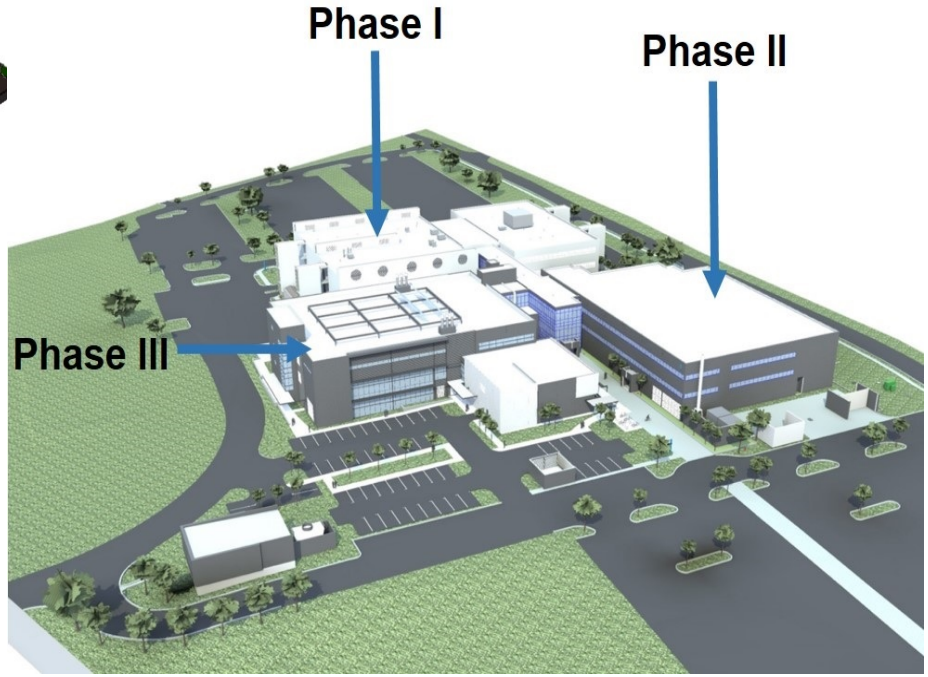
(Two Universities-One College-Twice the Opportunities)

October 2013

10 Elements for FAMU-FSU College of Engineering III

1. Total Project Budget, including non-state funding.
   - $36,250,466
2. Photos/renderings of the project.

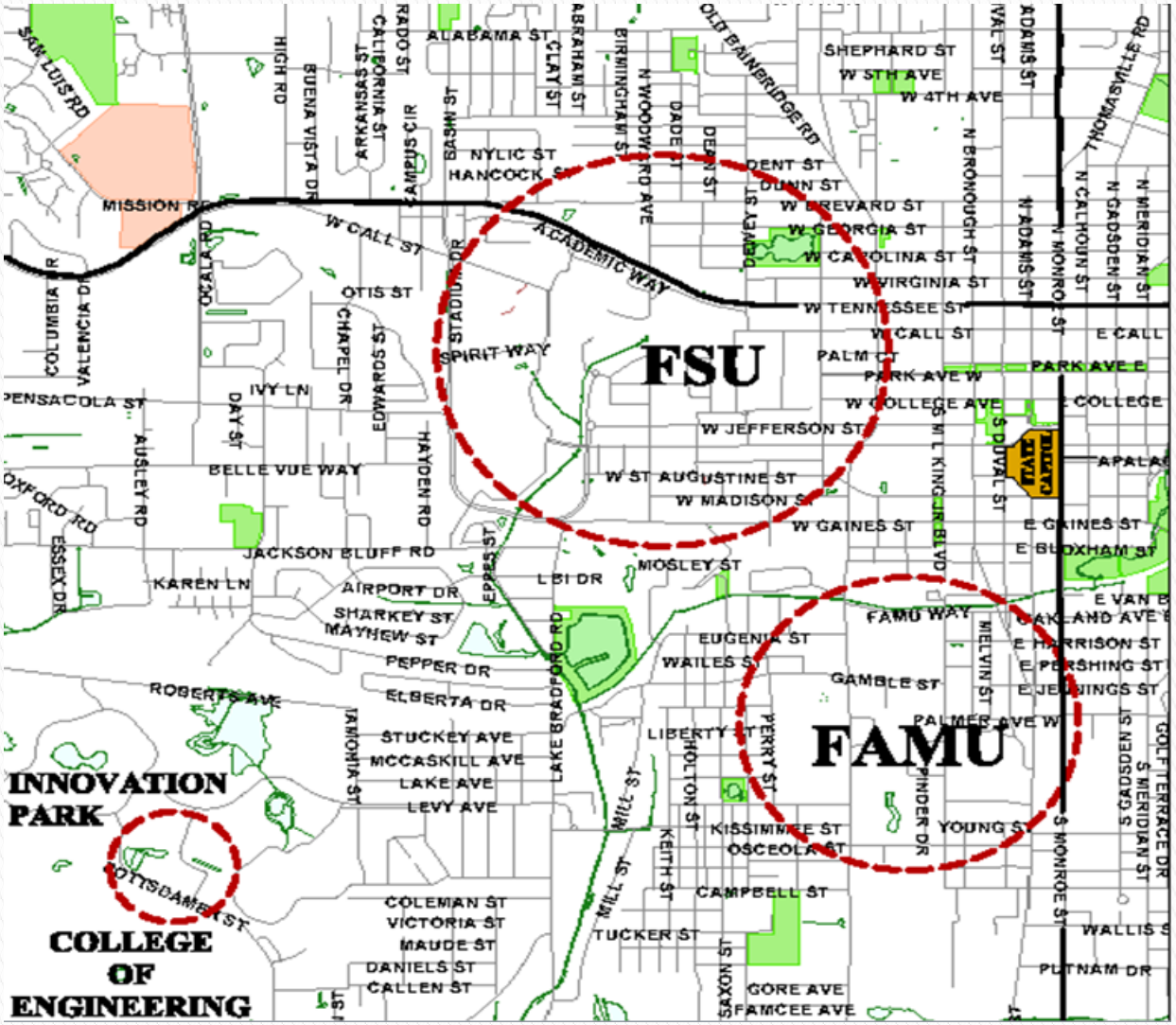




Phase I: Building A (1988)
Phase II: Building B (1998)
Phase III: Project Building (C)

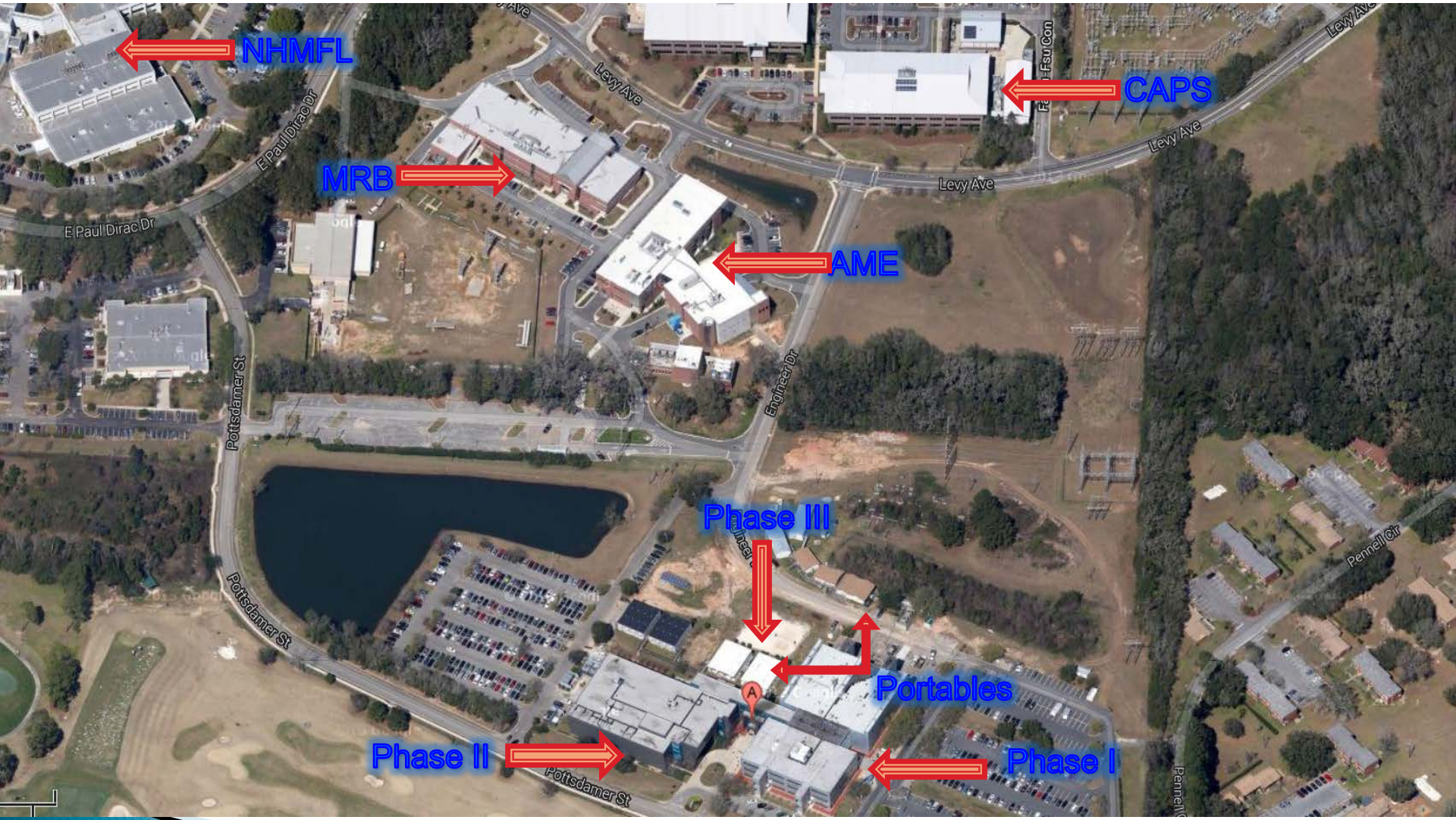
10 Elements for FAMU-FSU College of Engineering III

3. Site plans or map, showing the project's location.



10 Elements for FAMU-FSU College of Engineering III

3. Site plans or map, showing the project's location (cont'd.).

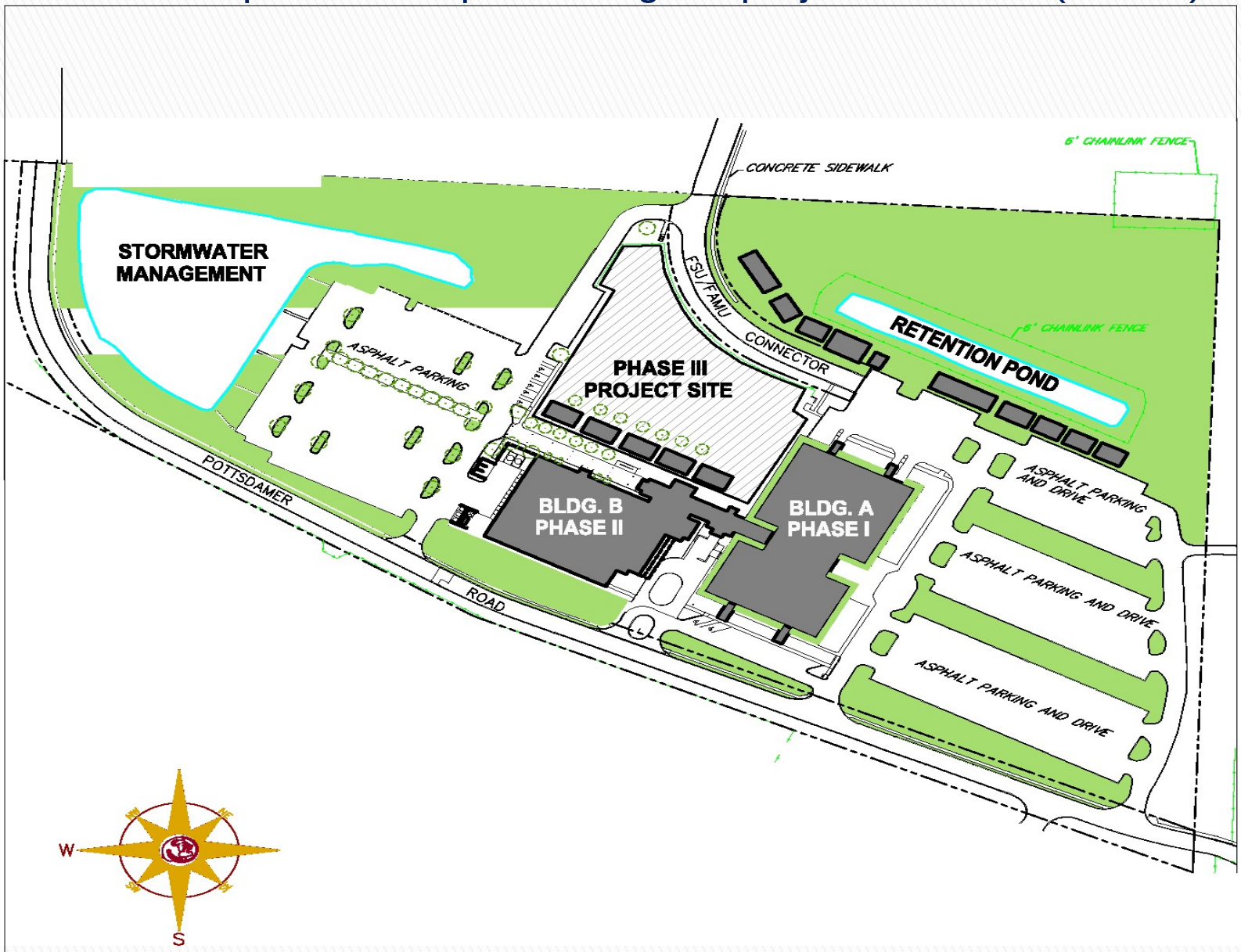


Phase I: Building A (1988)
Phase II: Building B (1998)
Phase III: Project Building (C)

AME: Aero-Propulsion, Mechatronics & Energy Center
CAPS: Center for Advanced Power Systems
MRB: Materials Research Building
NHMFL: National High Magnetic Field Laboratory

10 Elements for FAMU-FSU College of Engineering III

3. Site plans or map, showing the project's location(cont'd.).



10 Elements for FAMU-FSU College of Engineering III

4. The specific goals or metrics in the 5 Year strategic plan and/or work plan goals tied to the project.
   - Increase (double) engineering enrollment to 10% of the total FAMU and FSU student populations.
   - Double annual research expenditure of College of Engineering faculty to $40 million.
   - Improve national ranking of the College of Engineering and all its degree programs to first within the top 50 and then top 25.
   - Have a strong impact on the local and State economies through the creation of startup companies and job opportunities. The goal is to make the College of Engineering the engine!
   - Enhance the development and industrial relation/partnership potential of the College of Engineering to promote career placement.
5. Identify the anticipated negative consequences of delaying funding.
   - Recruitment of quality engineering faculty will continue to be challenging since quality lab and office spaces are necessary to attract the best faculty.
   - Loss of prospective talented engineering students due to inadequate and outdated educational facilities including the current use of several temporary and dilapidated trailers/portables (see next slide).
   - Potential decrease in the quality of instructional delivery, retention, graduation and career placement opportunities.
   - Will severely stymie our progress towards achieving the goals of #4. above.

10 Elements for FAMU-FSU College of Engineering III

5. Identify the anticipated negative consequences of delaying funding (Cont'd.).

Current Outdated Trailers / Portables used for Laboratories

6. Identify the annual operational costs (POM costs) of the facility.

Using the BOG formula for new space, the annual operating costs associated with the facility will be approx. $513,193.

10 Elements for FAMU-FSU College of Engineering III

7. Number of construction and permanent jobs.
   - Using the January 2013 Economic Impact study prepared for the Board of Governors, the construction of the new FAMU-FSU College of Engineering building **will directly generate 810 jobs** (direct, indirect and induced).
   - In 2011-2012 academic year the College graduated **332 bachelors**, **65 masters** and **21 doctoral** degree students. The goal is to double these numbers and retain majority of them in the State with enhanced opportunities in startups and established statewide companies. We intend to **create a powerful economic engine around the location of the College**.

8. From a statewide perspective, the most compelling reason to construct the project.
   - **Engineering is critical for startups, job creation and the overall health of the state economy.** To help the State meet its **goal of producing more entrepreneurial and quality engineers**, the College of Engineering will need the additional facility. **The College has far outgrown its existing facilities.** The **College relies on outdated modular units** to temporarily meet its space needs. **Since the College is isolated from both main campuses it is difficult to share the resources of the libraries, auditorium, information and other student-centered facilities**. **The need for additional space was recommended in the Quality Enhancement Review as well as the Graduate Policy review** of the College. The reviews indicated a need in all the departments in instruction, graduate research and the library. The investment is bound to pay off significantly with the **production of high quality and entrepreneurial students who will positively impact Florida's economy and workforce**.

10 Elements for FAMU-FSU College of Engineering III

9. If all state funding was provided in the amount and year requested, when would the facility be completed?
    - Within two years. The architectural drawings were completed in 2010.

10. Other considerations – for example, will it allow a program to advance or maintain its national or regional stature?

- Will **strengthen the quality and reputation** (national and international rankings) of all our seven degree programs in biomedical, chemical, civil, computer, electrical, industrial, and mechanical engineering.
- Will enable us to **provide the highest quality engineering education** and **produce technically sound, entrepreneurial and diverse graduates.**
- Will help to **increase our productivity and efficiency** through enhancements in retention, progression, graduation and career placement.
- Will **promote transition to commercialization** of the product and process inventions from research.
- Will enable us to continue to **live by our motto, "Quality, Growth and Diversity". The College won the ABET award for Diversity in 2009.**

FLORIDA GULF COAST UNIVERSITY

Board of Governors Facilities Workshop

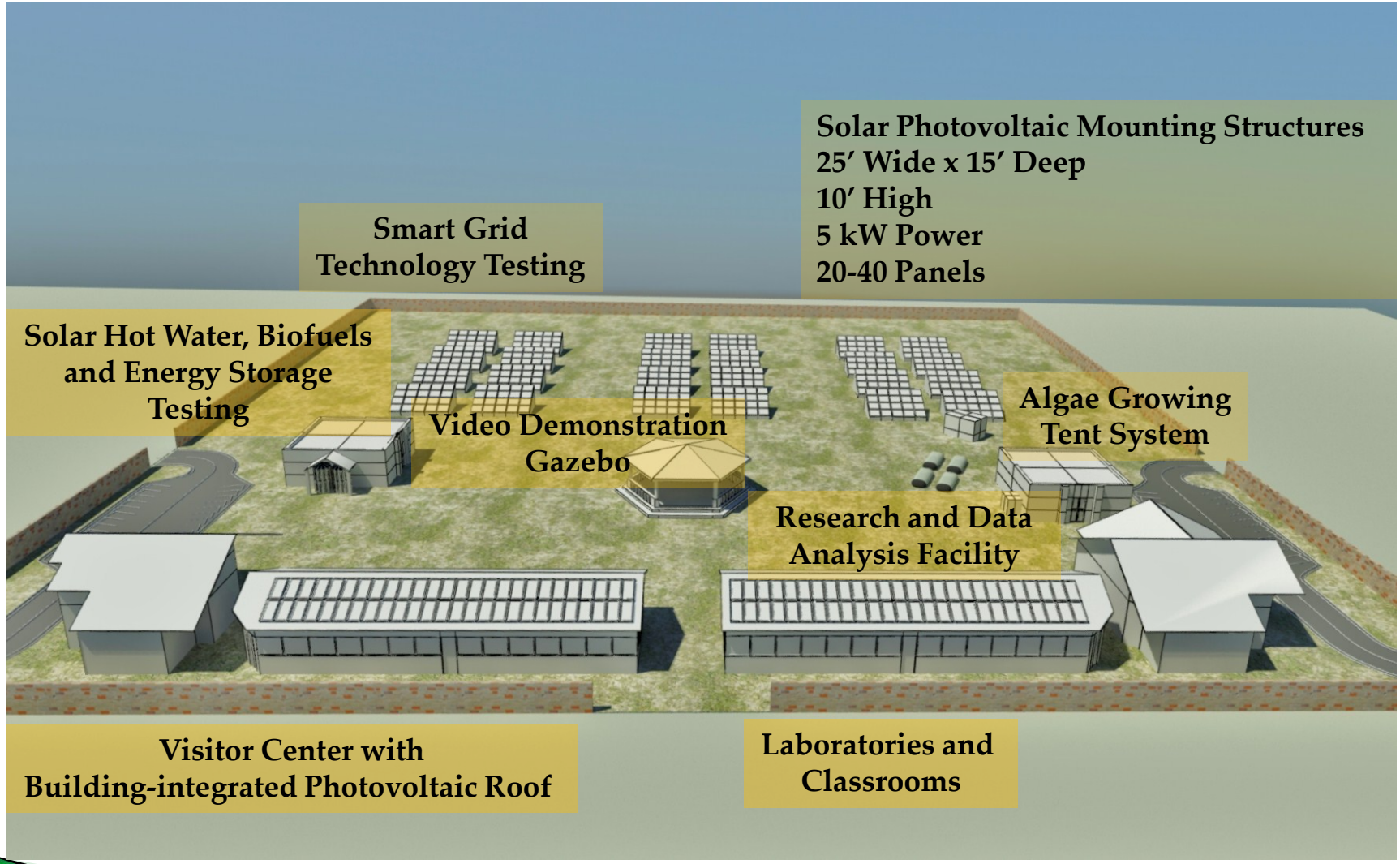
October 9, 2013

Innovation Hub Research

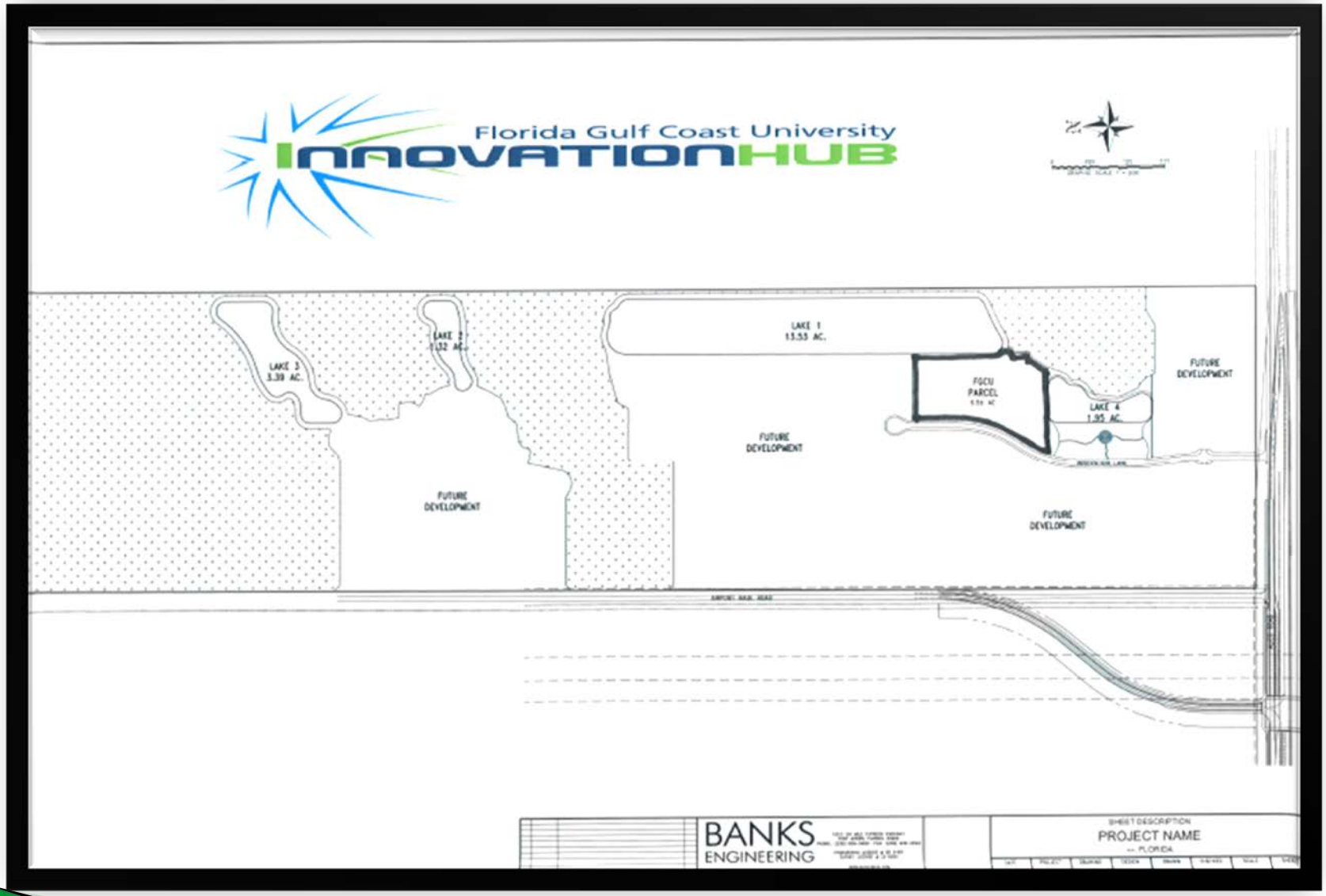
Total Project Budget

- $12.5 million
- $4.7 already approved (~40%)

Innovation Hub Research



Innovation Hub Research



Innovation Hub Research

(Conceptual Model)

Innovation Hub Research

Goals & Metrics of Five-Year Strategic Plan/Work Plan

- Research in:
  - Renewable energy
  - Sustainable environmental practices
  - Smart grid
  - Power generation
  - Ground & runoff water control
  - Efficient building design & sustainability
- Support engineering degree program in renewable energy
- Student internships/cooperative education opportunities
- Job creation
- Economic development

Innovation Hub Research

Economic Impact

- Total FGCU impact to the region would be about $21 million
- Total IHUB impact to the region would be about $131 million

	Construction Jobs	Permanent Jobs
FGCU	90	71
IHUB	568	444

Innovation Hub Research

Negative Consequences of Funding Delay

- Negative impact on regional economic development
- Delay in mounting of renewable energy engineering degree program
- Postponement of unique SUS asset as only renewable energy park

PO&M Costs of Facility

- $409,000

Innovation Hub Research

Reasoning from a State-wide Perspective

- Will uniquely serve as a catalyst for education and job creation in the emerging and critically needed field of renewable energy that will help diversify the economic base of the Southwest Florida region

Facility Completion Date

- June 2015

Program Advancement and Stature

- Would serve as a magnet nationally to attract and propagate renewable energy industries such as super capacitors, thin films, smart grid, and battery storage

Academic Building 9
STEM Labs & Classrooms

Total Project Budget

- $44.7 million

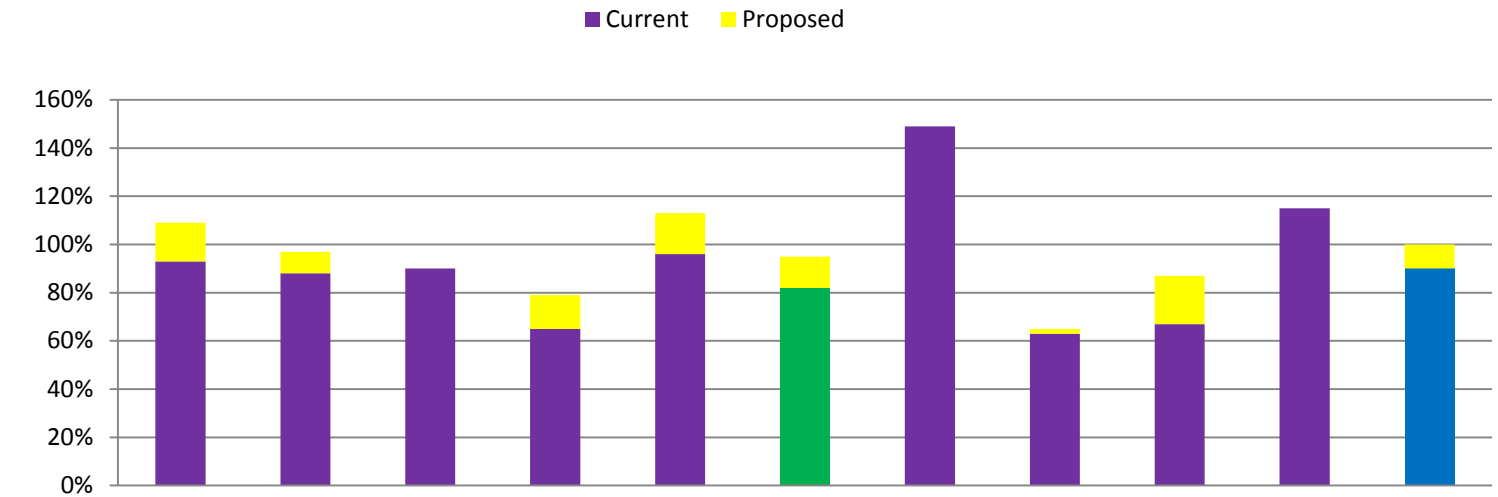
Photos/Renderings/Site Plan

- Not applicable

Academic Building 9
STEM Labs & Classrooms

State University System of Florida Board of Governors
Impact of Proposed New 2014-2015 Fixed Capital Outlay Projects
Current = Existing Facilities & Facilities Under Construction Proposed = Other Facilities Recommended for Construction Funding

Classrooms

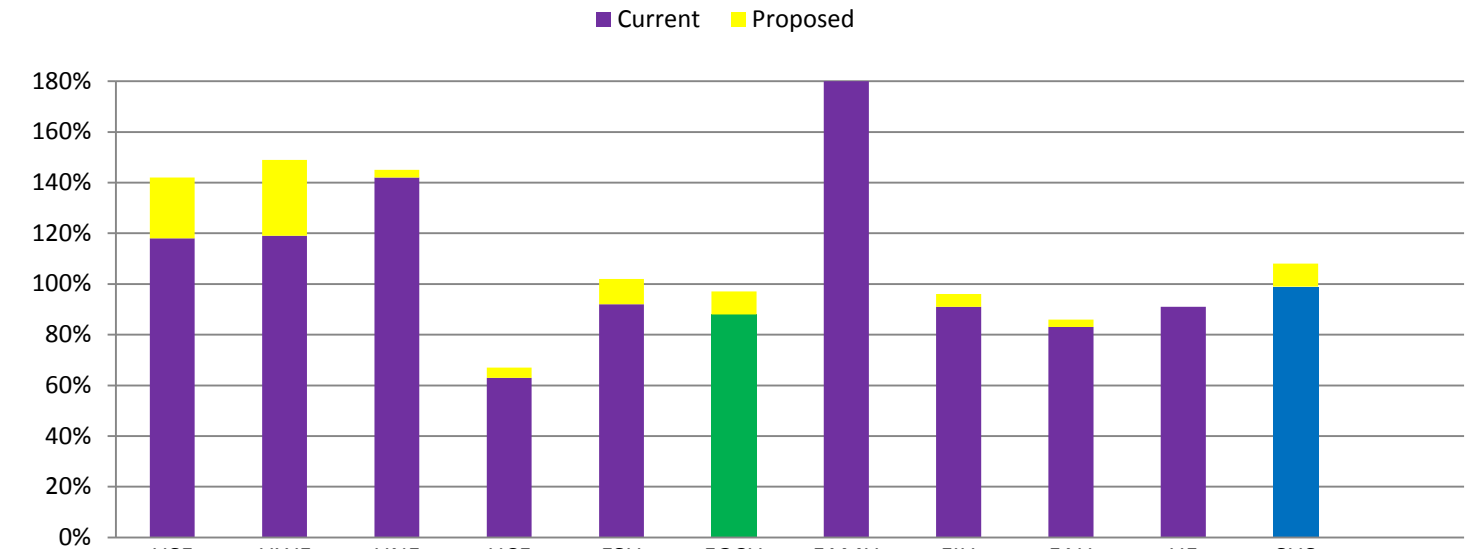


	USF	UWF	UNF	UCF	FSU	FGCU	FAMU	FIU	FAU	UF	SUS
Total	109%	97%	90%	79%	113%	95%	149%	65%	87%	115%	100%
Proposed	16%	9%	0%	14%	17%	13%	0%	2%	20%	0%	10%
Current	93%	88%	90%	65%	96%	82%	149%	63%	67%	115%	90%

Academic Building 9
STEM Labs & Classrooms

State University System of Florida Board of Governors
Impact of Proposed New 2014-2015 Fixed Capital Outlay Projects
Current = Existing Facilities & Facilities Under Construction Proposed = Other Facilities Recommended for Construction Funding

Teaching Labs



	USF	UWF	UNF	UCF	FSU	FGCU	FAMU	FIU	FAU	UF	SUS
Total	142%	149%	145%	67%	102%	97%	194%	96%	86%	91%	108%
Proposed	24%	30%	3%	4%	10%	9%	0%	5%	3%	0%	9%
Current	118%	119%	142%	63%	92%	88%	194%	91%	83%	91%	99%

Academic Building 9
STEM Labs & Classrooms

Goals & Metrics of Five-Year Strategic Plan/Work Plan

- Promote STEM enrollments and degree production
- Maintain ABET accreditation in engineering
- Obtain ACS accreditation in chemistry
- Produce additional health personnel
- Enhance connection between education and work world

Academic Building 9
STEM Labs & Classrooms

Economic Impact

- Total impact to the region would be about $75 million

	Construction Jobs	Permanent Jobs
AB9	323	253

Academic Building 9
STEM Labs & Classrooms

Negative Consequences of Funding Delay

- Lack of space will limit STEM enrollment growth and degree production, contrary to the growing needs of the State
- Potential negative affects on current and future accreditations in the STEM disciplines

PO&M Costs of Facility

- $1,227,000

Academic Building 9
STEM Labs & Classrooms

Reasoning from a State-wide Perspective

- Produce an educated STEM workforce

Facility Completion Date

- December 2016

Program Advancement and Stature

- FGCU ABET-accredited engineering programs were ranked among the top 160 undergraduate-only engineering programs nationally, by US News in the 2012 Edition, within seven years of the establishment of the engineering program. The new building will allow us to expand our growing reputation.

Summary Points

- FGCU has consistently ranked among the leaders in the SUS regarding Florida employment of graduates and those continuing their education in Florida
- A new co-op education/internship office will create 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
- FGCU scored highly on recent performance funding criteria
- Demonstrated employment rankings and performance scores make FGCU a ‘sure bet’ for a high return on capital investments
- The STEM building is essential because it will house “bench” courses and research in the lab sciences which demand hands-on components for learning and scholarly attainment

FLORIDA GULF COAST UNIVERSITY

Board of Governors Facilities Workshop

October 9, 2013

FLORIDA A&M UNIVERSITY

PRESENTATION ON

STUDENT AFFAIRS BUILDING

William Hudson, Vice President
Student Affairs

October 9, 2013

www.FAMU.edu

FLORIDA A&M UNIVERSITY

1. TOTAL PROJECT BUDGET

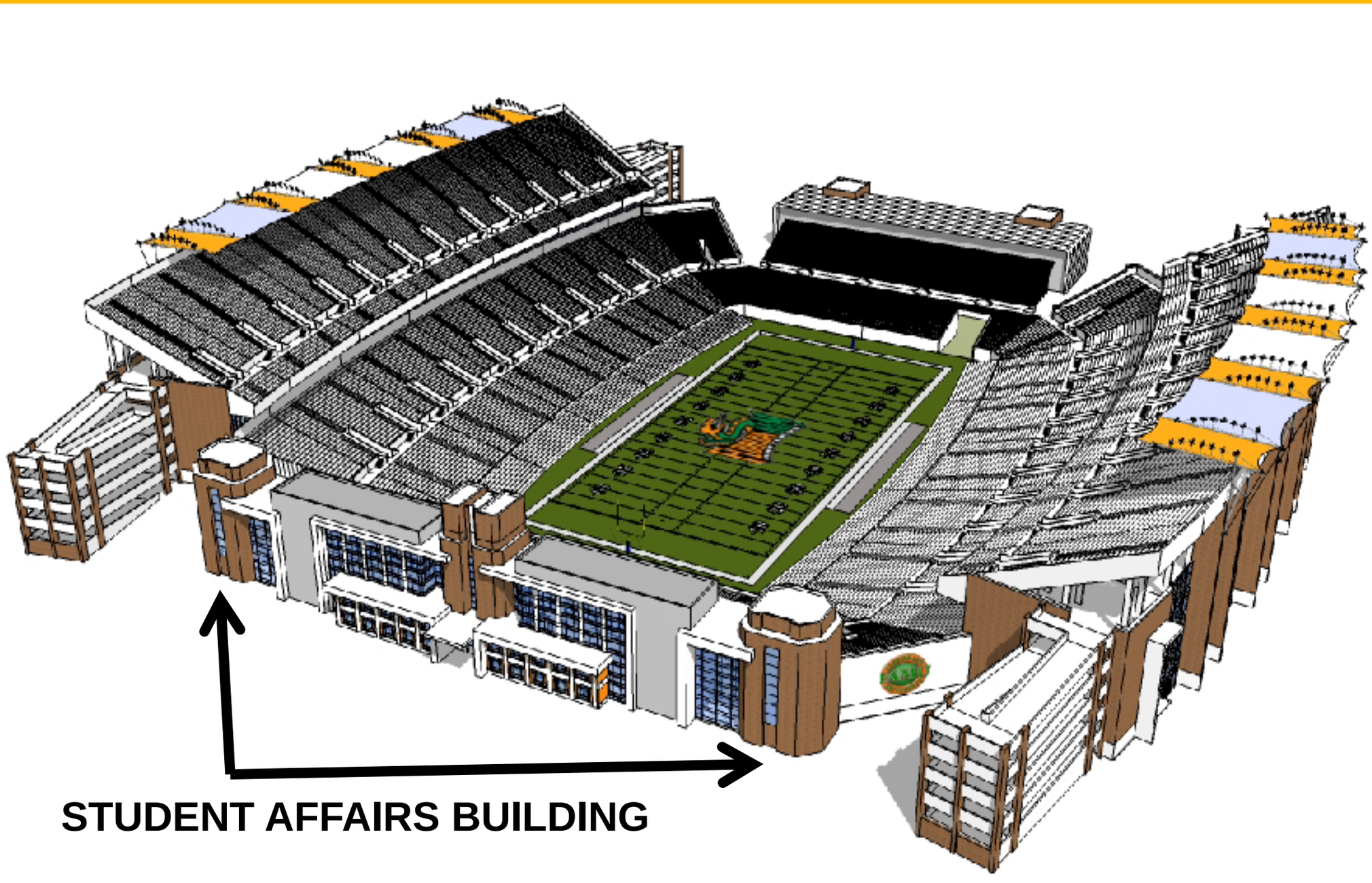
$36,574, 160

FLORIDA A&M UNIVERSITY

2. PHOTOS/RENDERINGS

FLORIDA A&M UNIVERSITY

2. PHOTOS/RENDERINGS



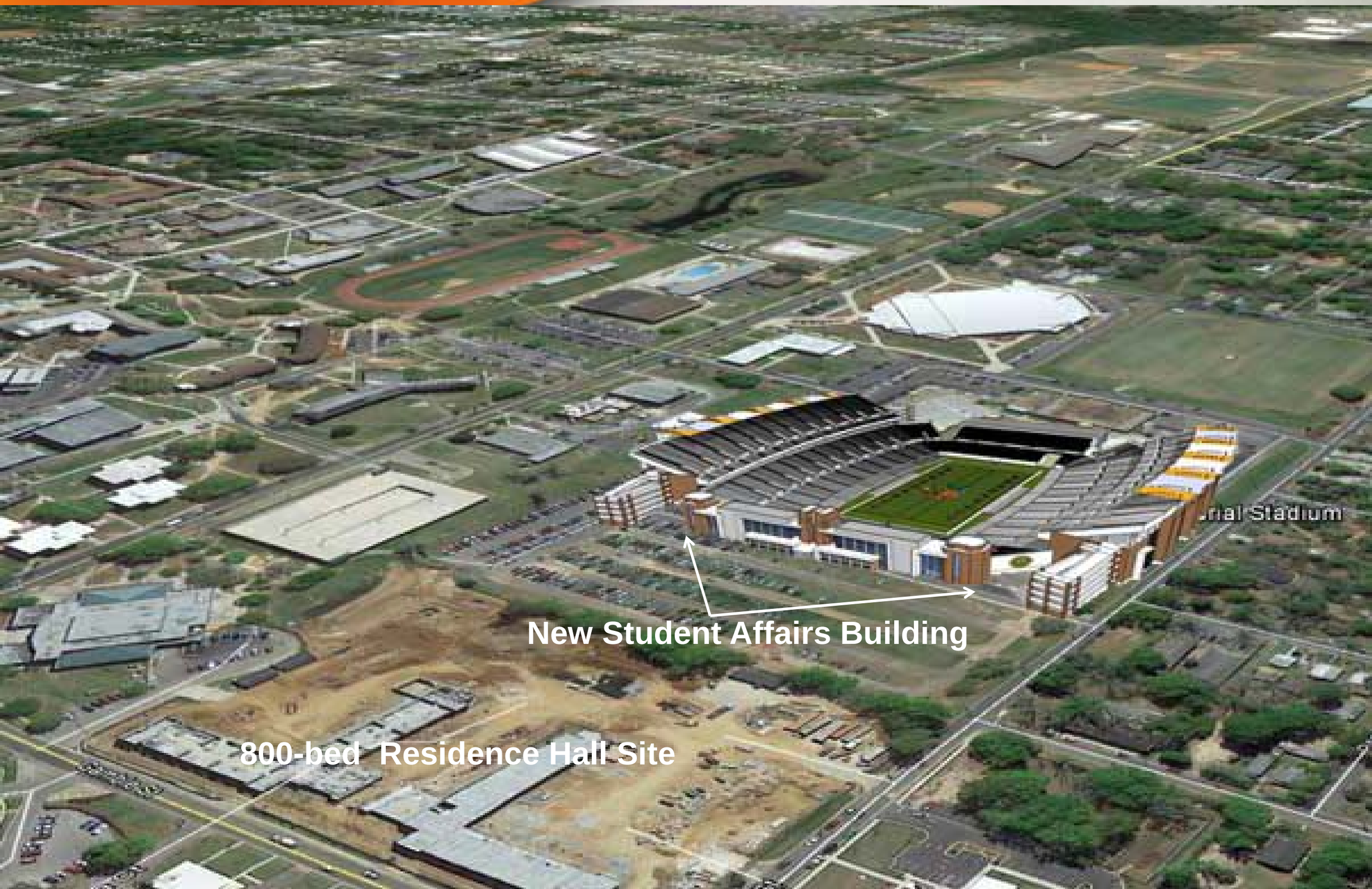
STUDENT AFFAIRS BUILDING

FAMU

FLORIDA AGRICULTURAL AND MECHANICAL UNIVERSITY

FLORIDA A&M UNIVERSITY

3. SITE PLAN



FLORIDA A&M UNIVERSITY

4. SPECIFIC GOALS IN THE 5 YEAR STRATEGIC PLAN AND/OR WORK PLAN GOALS TIED TO THE PROJECT

Strategic Plan's "Student Profile"

- *Students are the "best and the brightest"*
- *Students are diverse in terms of their demographic profiles, attitudes, learning styles, and interpersonal communication styles*
- *Students are technologically savvy, "multi-taskers," engaged in research and service activities*

FLORIDA A&M UNIVERSITY

4. SPECIFIC GOALS IN THE 5 YEAR STRATEGIC PLAN AND/OR WORK PLAN GOALS TIED TO THE PROJECT

Strategic Plan's "Physical Profile"

- *The campus facilities are technologically equipped, environmentally responsible, sustainable, and energy efficient*
- *The campus facilities have multi-purpose functions that enhance teaching and learning*
- *The campus facilities are maintained and will promote wellness and safety*

FLORIDA A&M UNIVERSITY

4. SPECIFIC GOALS IN THE 5 YEAR STRATEGIC PLAN AND/OR WORK PLAN GOALS TIED TO THE PROJECT

Strategic Plan's Strategic Initiative 2

- *Strategy 2.3.3: Improve customer relations in serving students.*

FLORIDA A&M UNIVERSITY

4. SPECIFIC GOALS IN THE 5 YEAR STRATEGIC PLAN AND/OR WORK PLAN GOALS TIED TO THE PROJECT

Strategic Plan's Strategic Initiative 3:

- *Goal 3.5: Maintain and enhance functional, culturally relevant, sustainable, environmentally friendly and aesthetically pleasing campus facilities, infrastructure, and resources.*

FLORIDA A&M UNIVERSITY

4. SPECIFIC GOALS IN THE 5 YEAR STRATEGIC PLAN AND/OR WORK PLAN GOALS TIED TO THE PROJECT

Work Plan's Key Initiatives & Investments :

2. Increase the persistence/retention rate of undergraduate students, leading to increased graduation rates

FLORIDA A&M UNIVERSITY

5. ANTICIPATED NEGATIVE CONSEQUENCES

- *Adverse impacts on recruiting, retention, and graduation*
- *Adverse impacts on customer service to students, parents, visitors*
- *Adverse impacts on employee morale*
- *Adverse impacts on energy efficiency*
- *Continued federal government finding that the existing Financial Aid facilities are inadequate***

*

**** An Institutional Title IV Assessment site visit from the U.S. Department of Education Minority Serving and Under Resourced Schools Division (December 2012), resulted in a recommendation the FAMU immediately begin exploring a more centralized and up to date facility for the provision of key services to students. The assessment concluded that a technology savvy environment with an opportunity for students to self-serve and address routine administrative processes and processes and procedures would add great value to the overall student/customer experience at the university.**

FLORIDA A&M UNIVERSITY

6. ANNUAL OPERATIONAL COST

$869,407*

*FACILITY "B" - FACILITY CLASSIFICATION FOR ENERGY CONSUMPTION

FLORIDA A&M UNIVERSITY

7. NUMBER OF CONSTRUCTION AND PERMANENT JOBS

Construction Jobs: 632* (direct, indirect, and induced)

Permanent Jobs: 11

*IMPLAN Software, ARRA & APTA average

FLORIDA A&M UNIVERSITY

8. Most compelling reason for the project

- *Existing facility aged (built in 1951 as a hospital, renovated in 1974 with no major renovations since), not functional, not energy efficient, esthetically unpleasant, neither student, parent, staff, nor visitor-friendly, coupled with desperate need for office space.*

FLORIDA A&M UNIVERSITY

9. COMPLETION DATE

DECEMBER, 2017

FLORIDA A&M UNIVERSITY

OTHER CONSIDERATIONS

- *Provides desperately needed Office Space (FAMU currently has 53% of required office space; new space will bring total to 57% - 2010-15 Educational Plant Survey)*
- *Existing facilities compare poorly with Student Affairs buildings at other SUS and peer institutions*
- *Needed to provide favorably response to recommendation from federal assessment.*

FLORIDA INTERNATIONAL UNIVERSITY

Strategic Land Acquisition

Modesto A. Maidique Campus

FIU

Project Budget

- Total Project Cost: To Be Determined
- Land expansion totaling 86 acres contiguous to main campus
- FIU's Main Campus is the second smallest in size and has the highest FTE and Headcount per acre in the SUS

Institution	Acres	Headcount /Acre	FTE /Acre
FIU	342	104	59
UF	2050	24	13
UWF	1666	7	4
USF	1493	24	16
UCF	1415	42	22
UNF	1170	14	8
FGCU	765	18	11
FAU	746	41	20
FSU	447	92	59
FAMU	423	29	18
NCF	119	7	6

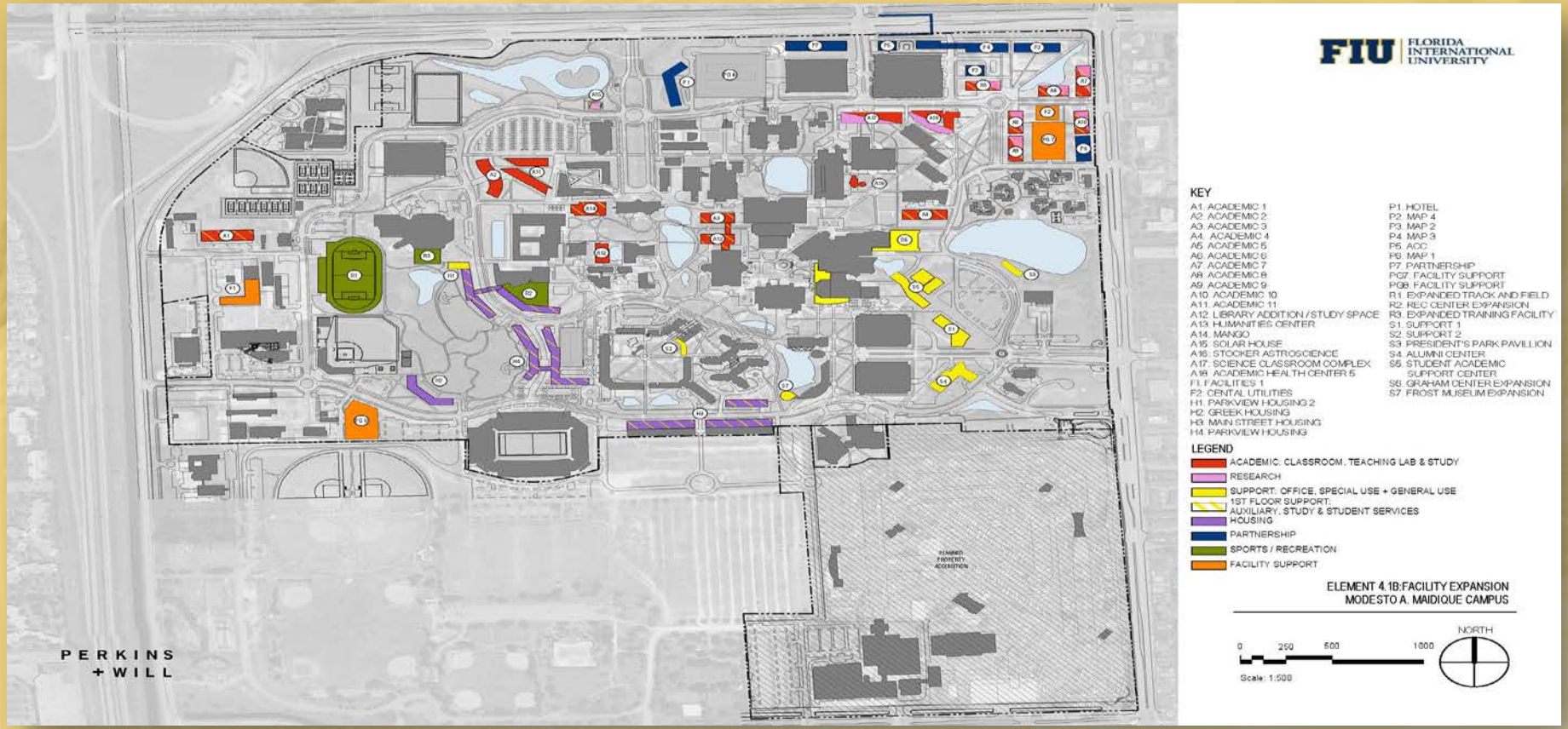
- FIU, Miami-Dade County, and the Miami Dade County Fair and Expo have been working together since 2010 to develop FIU expansion and Fair relocation plans
- FIU has the highest space utilization rate in the SUS, achieving 160 percent statutory requirements

FIU

Photographs / Renderings

FIU

Site Plan / Map



Vision Plan Includes

- Academic space for instruction, research, service and community engagement—focus on jobs and ties to the business community
- Space for wet and dry labs to support research and student training
- Research space is essential for the Academic Health Center in terms of clinical, translational and commercialization initiatives
- Partnership space for business, industry and governmental involvement to promote development and commercialization of research
- Undergraduate student housing to support 2000 additional beds through Public-Private Partnerships
- Total construction cost of $900 million
- Economic Impact: $1.9 billion non-recurring and $541 million recurring (2013 Expansion and Relocation Study by Markin Consulting)

FIU

Specific Goals or Metrics in the 5 Year Strategic Plan / Work Plan Goals

- Increase bachelors degrees in STEM
- Increase graduate degrees in STEM
- Increase percentage of graduates employed in Florida
- Improve student retention and graduate rates
- Increase research expenditures
- Increase patents, licenses and start-up companies

FIU

Annual Operational Costs

- Annual operating costs for the land will be minimal

- Projected annual operational costs (POM) are estimated to be $7 million for approximately 600,000 square feet of future educational and general space only

Number of Construction and Permanent Jobs

- Construction jobs are estimated at 15,300 using IMPLAN methodology of 17 jobs per $1 million of construction spending

- Permanent jobs are estimated at 8,000 over the development period based upon improved student retention and faster graduation rates and approximately 2.4 million square feet of Partnership and Auxiliary space

FIU

Completion Date

- Land acquisition will be completed as quickly as possible depending upon funding and the timeline for the relocation of the Miami-Dade County Fair and Exposition

FLORIDA INTERNATIONAL UNIVERSITY

Humanities Center
Arts & Sciences

FIU

Humanities Center –Arts and Sciences
Project and Budget

- Total Project Cost: $29,370,000
- Total Square Feet: 48,500 Net Square Feet; 77,600 Gross Square Feet
- Facility Program Includes:
  - Classrooms
  - Teaching Labs (Math / Writing / English)
  - Study and service areas
  - Research Labs
  - Offices/Computer Labs
- Last facility to support Humanities was completed in 1973

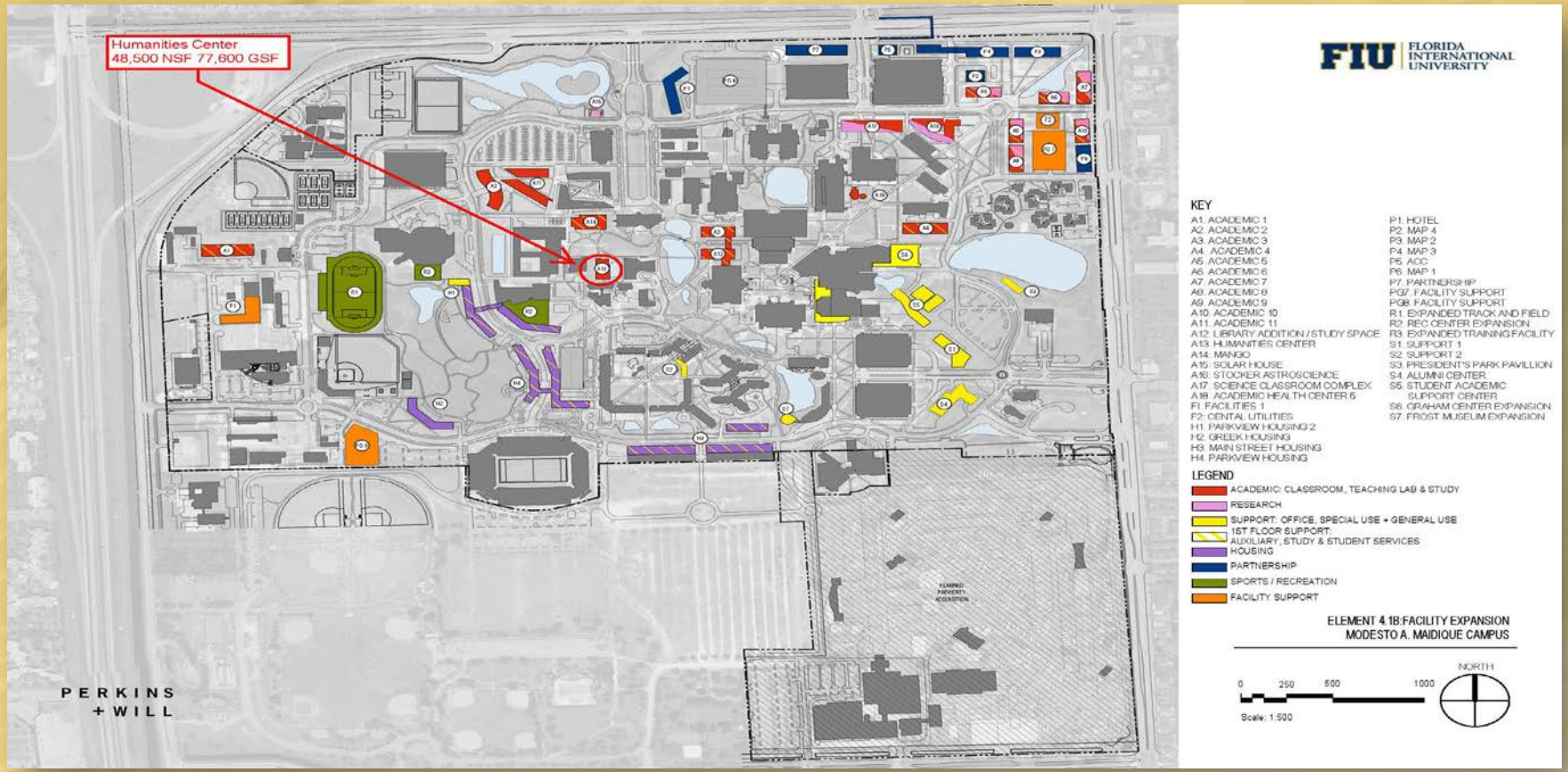
FIU

Photographs / Renderings

- Not completed at this time
- Architectural and engineering drawings will begin upon project funding

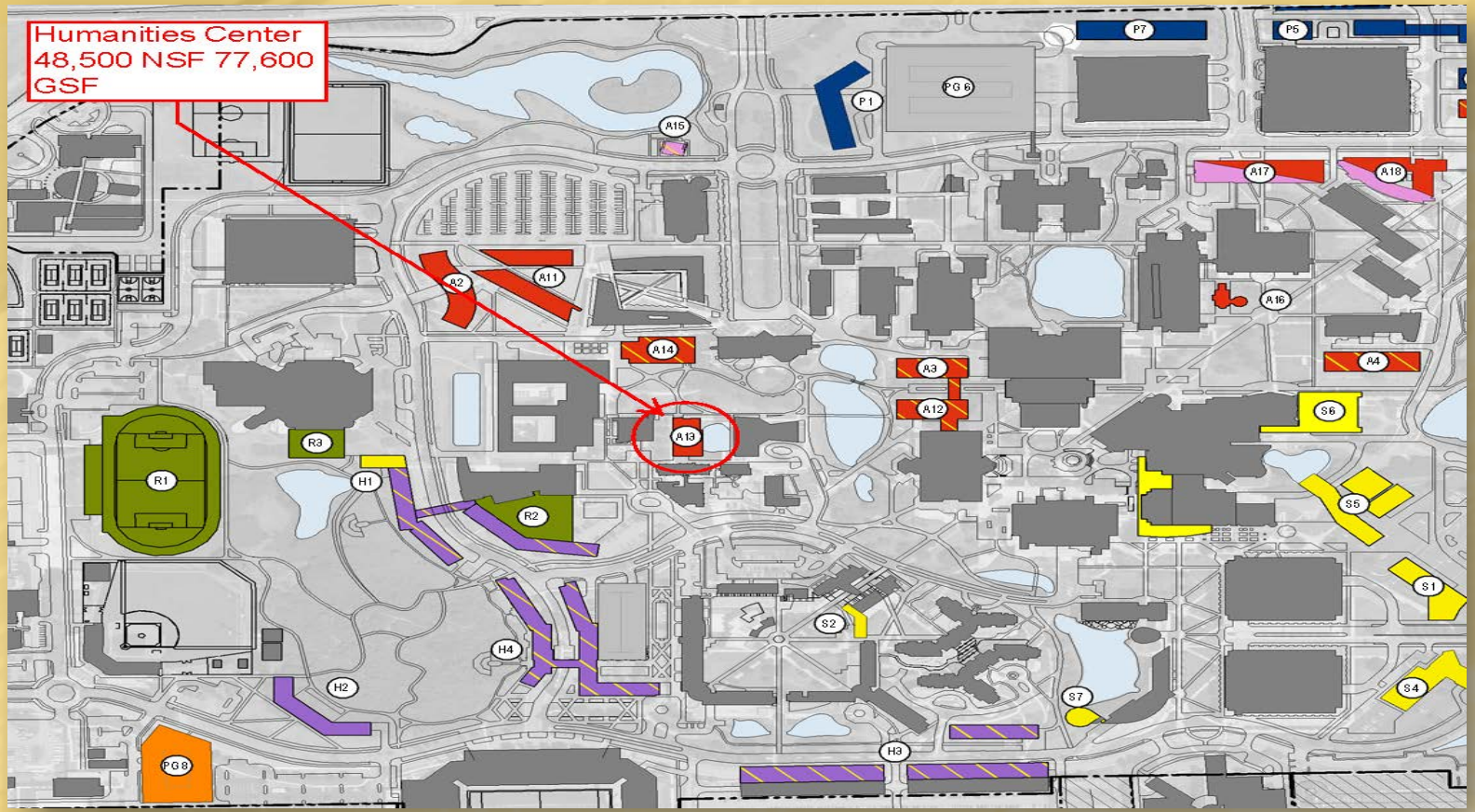
FIU

Site Plan / Map



FIU

Site Plan / Map



FIU

From a Statewide Perspective, the Most Compelling Reason to Construct the Project

- Common core courses in English Composition, History, Humanities, Social Science and the Arts help STEM and Non-STEM students think creatively, analytically, critically and express their knowledge and ideas
- Employers consistently express the need for universities to improve the problem-solving, critical-thinking and communication skills of their graduates
- Humanities and the Arts are an important component of STEM (STEAM)
- Credit hours in these programs increased by 32 percent from 2008-09 to 2012-13, reflecting an average annual increase of over 7 percent
- Innovative, problem-solving, and job creating leaders include Dean Colson (History), Philip Frost (French Literature), Michael Eisner (English and Theatre), Nobel Laureate and former NIH Director Harold Varmus (English), Ted Turner (Classics), Norman Tripp (Economics), Sherwin-Williams CEO Christopher Connor (Sociology) and Barnes & Noble Stephen Riggio (Anthropology)

FIU

Anticipated Negative Consequences of Delaying Funding

- FIU currently has the highest space utilization rate in the SUS, achieving 160 percent of statutory requirements
- FIU has the largest percentage of classes with 30 or more students, the smallest percentage of classes with less than 30 students, and the second highest percentage of classes with 100+ students
- Insufficient course offerings and excessively high class sizes have hindered the student progress and graduation and retention rates

FIU

Specific Goals or Metrics in the 5 Year Strategic Plan / Work Plan Goals

- Improve retention and graduation through greater course availability and reduced class sizes
- Increase bachelor degrees awarded
- Reduce percentage of degrees with excess hours
- Reduce average time to degree to get graduates into the workforce more quickly
- Enhance the quality of education through state-of-the-art facilities

FIU

Annual Operational Costs of the Humanities Center

- Projected annual operational costs (POM) are estimated to be $1 million based upon 77,600 gross square feet

Number of Construction and Permanent Jobs

- Construction jobs are estimated at 400 using IMPLAN methodology of 17 jobs per $1 million of construction spending

- Permanent jobs are estimated at 200 based upon improved student retention and faster graduation rates

Completion Date

- Upon receipt of full funding, the facility is expected to be completed by July 1, 2017

GENERAL CLASSROOM – PHASE II

meeting the needs of future students

Making Waves

BOARD OF GOVERNORS – FACILITIES WORKSHOP

OCTOBER 9, 2013

BOG requested elements:

1. Total Project Budget - (*slide 9)*
2. Project Photos / Renderings - *(slide 11)*
3. Site Plans / Maps – Project Location - *(slides 5 & 6)*
4. Specific Goals or Metrics in Strategic Plan / Work Plan - *(slide 3)*
5. Negative Consequences in Delayed Funding - *(slide 15)*
6. Annual PO&M Costs - *(slide 12)*
7. Number of Construction Jobs & Permanent Jobs - *(slide 12)*
8. Most Compelling Reason to Construct the Project - *(slides 4 & 13)*
9. Projected Completion Date - *(slides 10 & 11)*
10. Other Considerations (programmatic impacts) - *(slides 14)*

GENERAL CLASSROOM – PHASE II
PLANNING AND APPROVAL

PLANNING DOCUMENT	APPROVAL DATE
General Classroom Phase II - Program Approval	December - 2010
Educational Plant Survey	June 15, 2011
FAU BOT Approved Strategic Plan Goal IV: *Leverage momentum toward achieving FAU's strategic goals by being good stewards of its human, technological, physical and financial resources.* Objective *E.6:* *Provide functional and attractive state-of-the-art facilities to support the academic and research mission of the University* Metrics: *Identify and plan for additional square footage of academic space to accommodate new programs*	March - 2012
Capital Improvement Plan	August 19, 2013

GENERAL CLASSROOM – PHASE II

EDUCATIONAL PLANT SURVEY NEEDS – FORM B

Main Campus (Boca Raton)

Net Assignable Square Feet Eligible for Fixed Capital Outlay Budgeting

UPDATED - September 30, 2013

17,309

On-Line FTE= 0

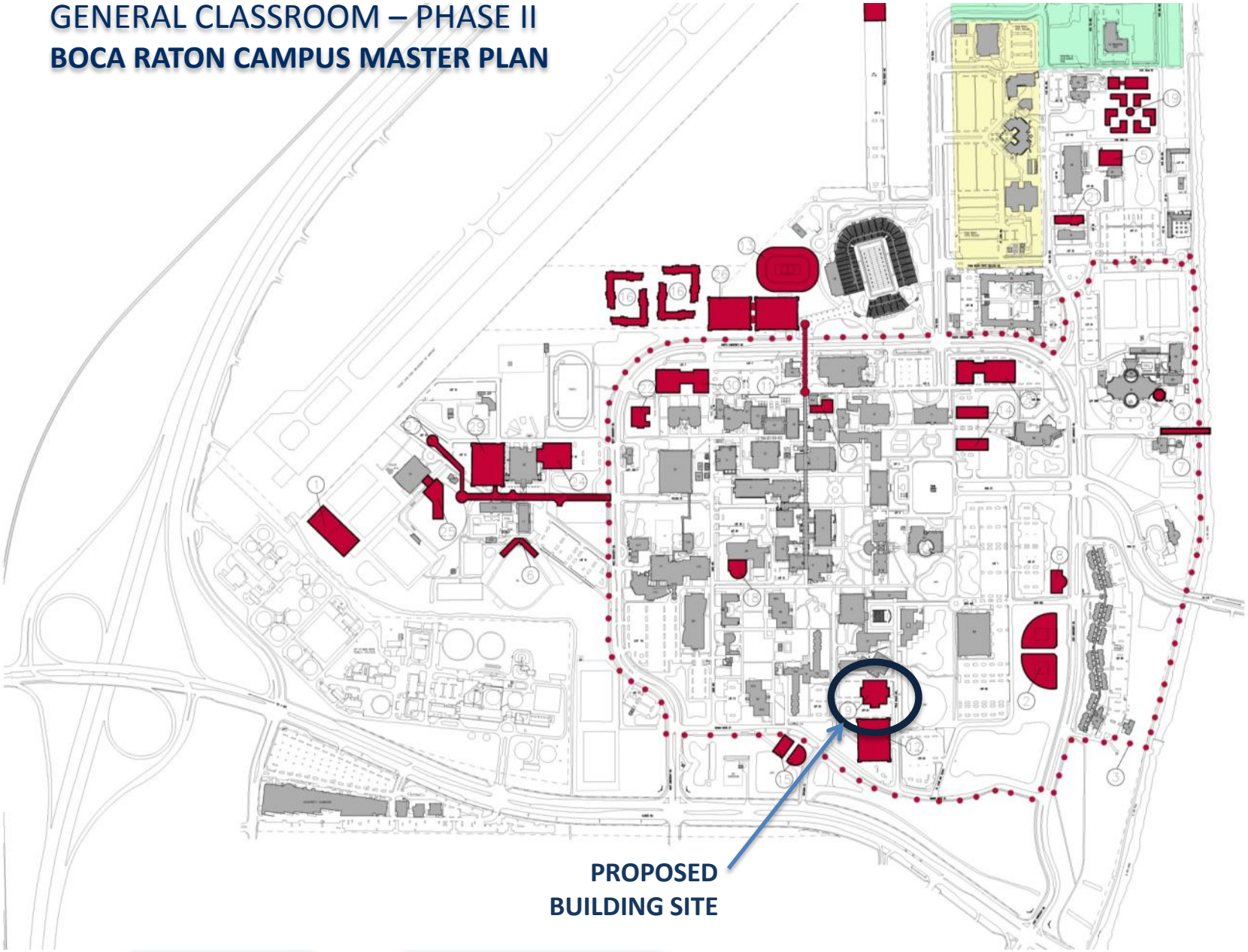
TOTAL FTE= 17,309 **2015-16**

			Class-room	Teaching Lab	Study	Research Lab	Office	Audi/ Exhib.	Instruct. Media	Student Academic Support	Gym	Campus Support Services	Total NASF
Space Needs by Space Type*:	**2015-2016**		**203,900**	**283,002**	**370,240**	**392,049**	**513,558**	**51,927**	**18,001**	**10,385**	**92,949**	**83,949**	**2,019,960**
1) Current Inventory as of:		**June-13**											
	A)	Satisfactory Space	112,381	184,537	135,747	133,007	478,356	29,474	4,404	280	25,285	31,656	1,135,127
	B)	Unsatisfactory Space to be Remodeled	302	8,896	0	3,401	1,645	0	765	0	0	2,908	17,917
	C)	Unsatisfactory Space to be Demolished/Terminated	0	0	0	0	0	0	0	0	0	0	0
	D)	**Total Under Construction**	0	0	0	0	0	0	0	0	0	0	0
TOTAL CURRENT INVENTORY:			112,683	193,433	135,747	136,408	480,001	29,474	5,169	280	25,285	34,564	1,153,044
Net Space Needs			91,217	89,569	234,493	255,641	33,557	22,453	12,832	10,105	67,664	49,385	866,916
Percent of Space Needs			55.26%	68.35%	36.66%	34.79%	93.47%	56.76%	28.72%	2.70%	27.20%	41.17%	57.08%
3) Projects Funded for Planning													
Proj. 1)		None	0	0	0	0	0	0	0	0	0	0	0
4) CIP Projects													
Proj. 1)		Capital Renewal / Envelope Enhancement	0	0	0	0	0	0	0	0	0	0	0
Proj. 3)		College of Science & Engineering Bldgs. 36, 43, & 55 (RENOVATION)	0	0	0	0	0	0	0	0	0	0	0
Proj. 4)		**General Classroom Facility Phase II**	**33,775**	**6,125**	**0**	**0**	**8,170**	**4,000**	**0**		**0**	**0**	**52,070**
		Sub Total Net Space Needs	57,442	83,444	234,493	255,641	25,387	18,453	12,832	10,105	67,664	49,385	814,846
		Sub Total Percent	71.83%	70.51%	36.66%	34.79%	95.06%	64.46%	28.72%	2.70%	27.20%	41.17%	59.66%

Making Waves

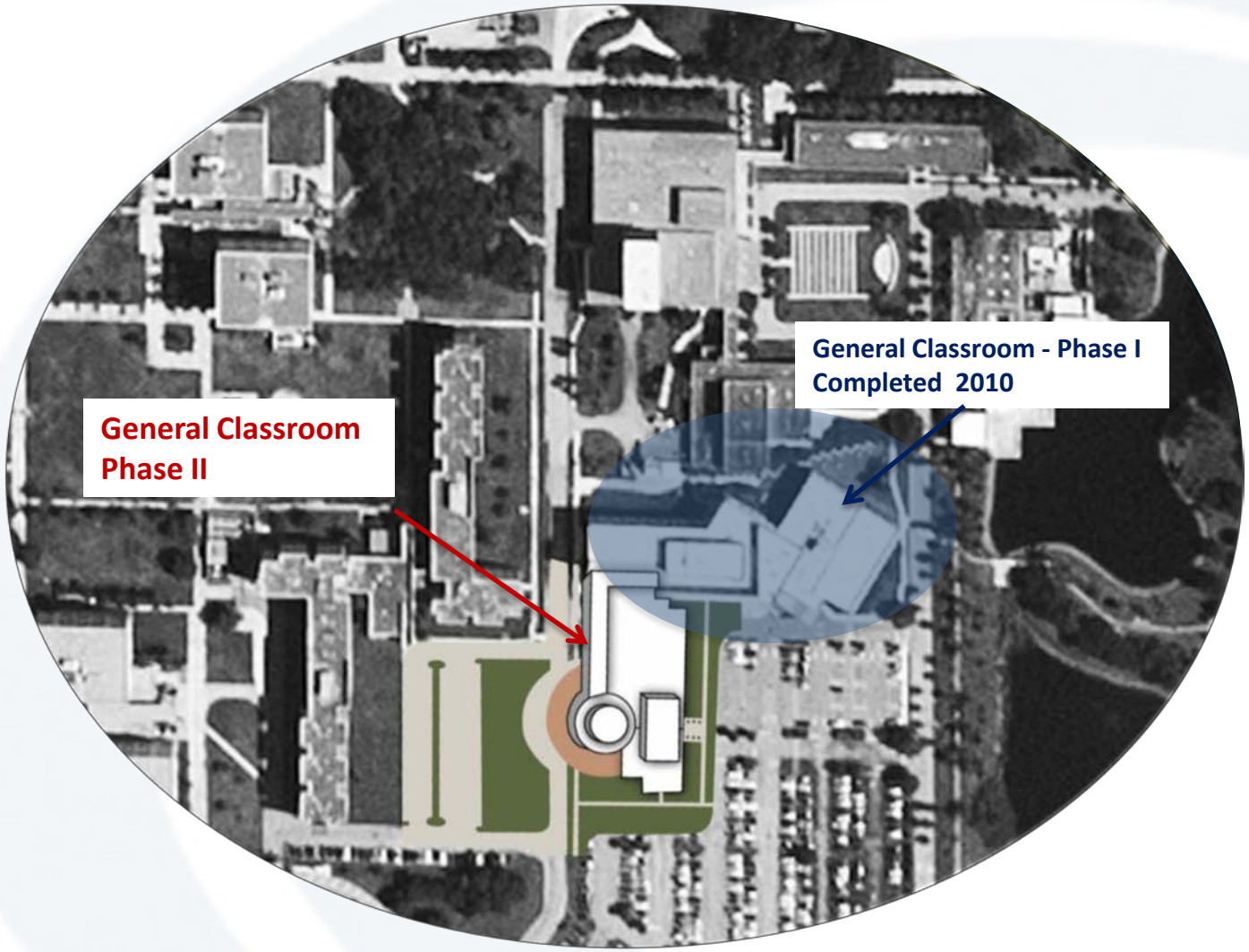
GENERAL CLASSROOM – PHASE II

BOCA RATON CAMPUS MASTER PLAN



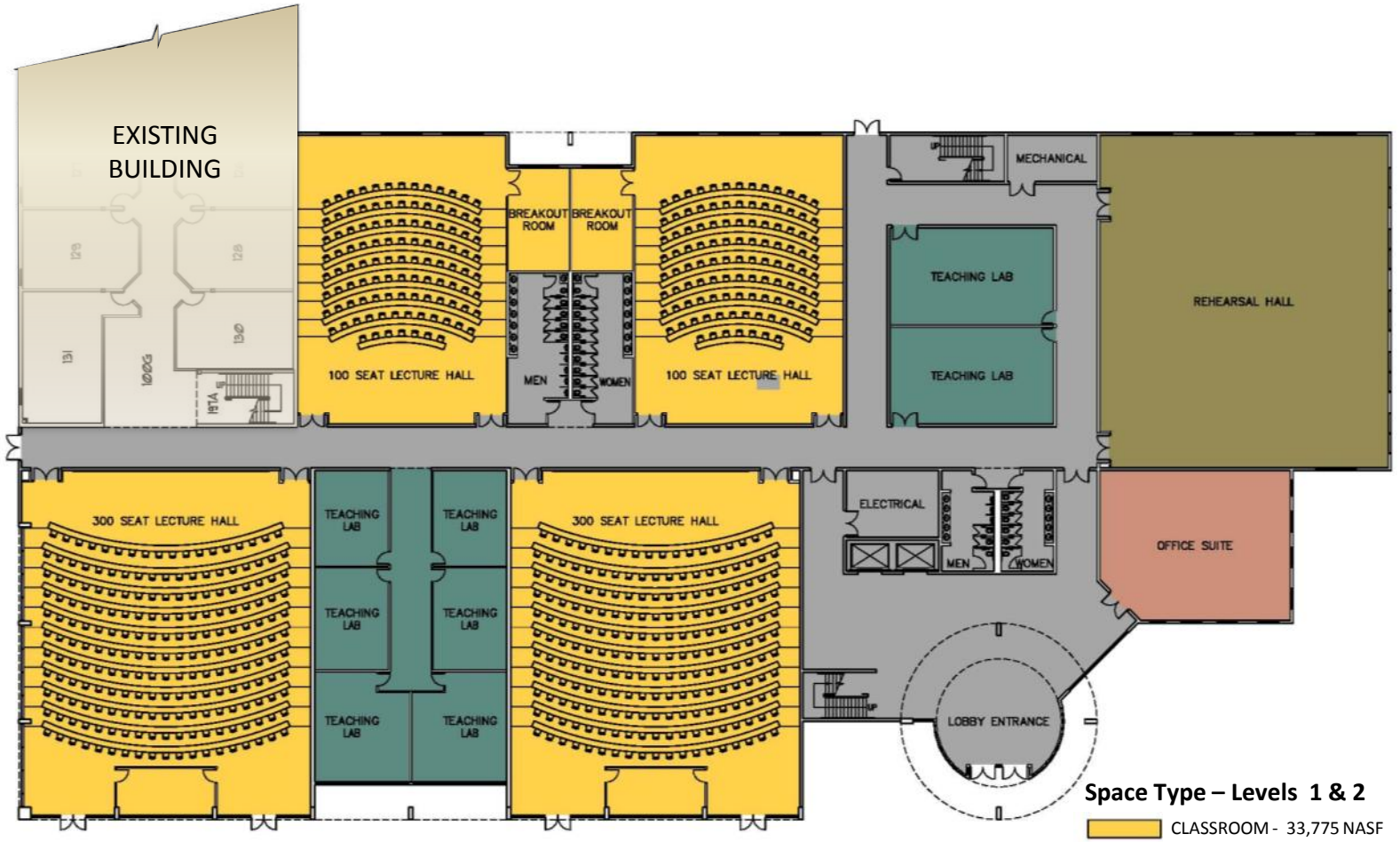
GENERAL CLASSROOM – PHASE II

CAMPUS AERIAL – PROJECT SITE PLAN



GENERAL CLASSROOM – PHASE II

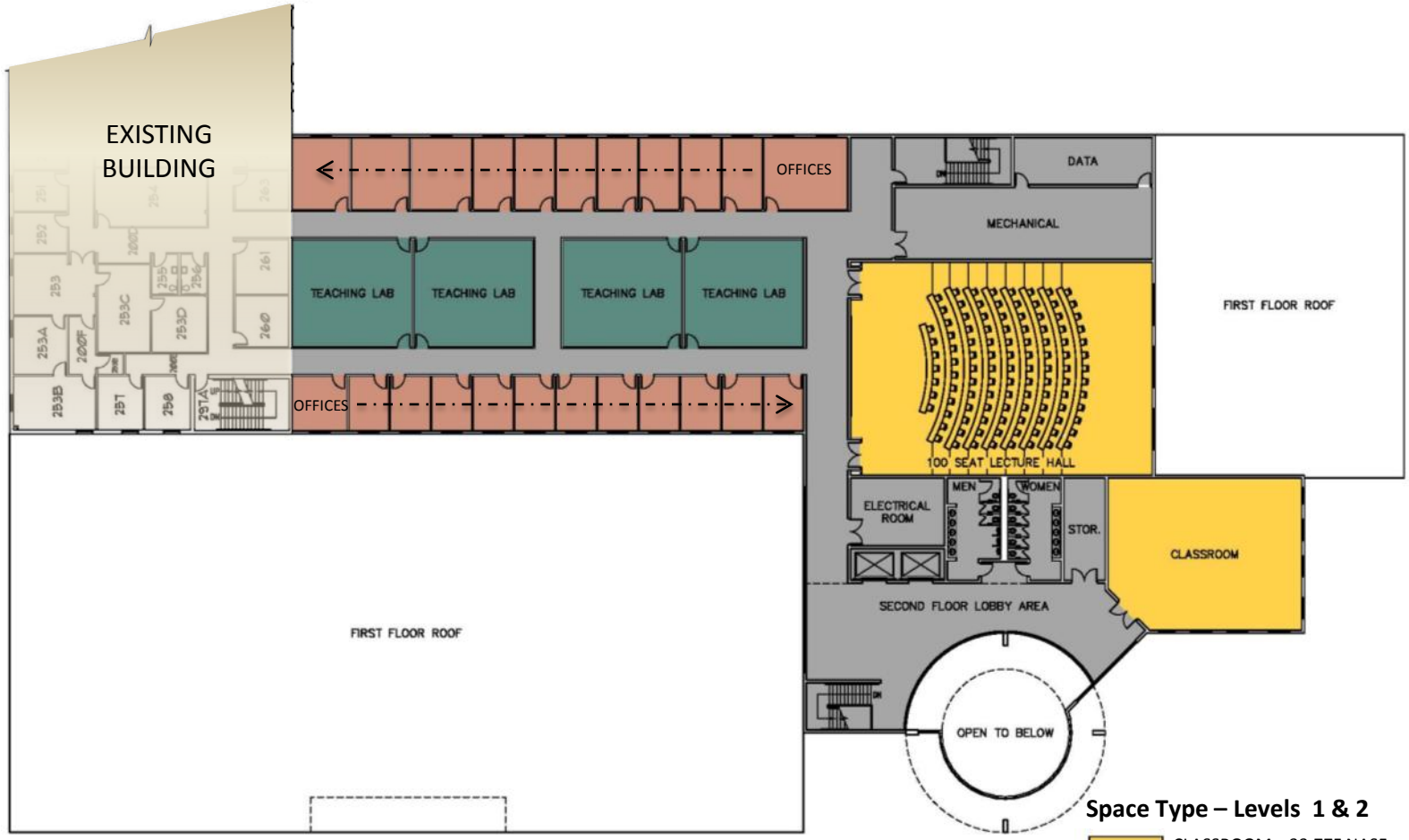
FIRST FLOOR PLAN



Space Type – Levels 1 & 2

- CLASSROOM - 33,775 NASF
- TEACHING LAB – 6,125 NASF
- OFFICE - 8,170 NASF
- AUDITORIUM – 4,000 NASF
- NON ASSIGNABLE SPACE

GENERAL CLASSROOM – PHASE II
SECOND FLOOR PLAN

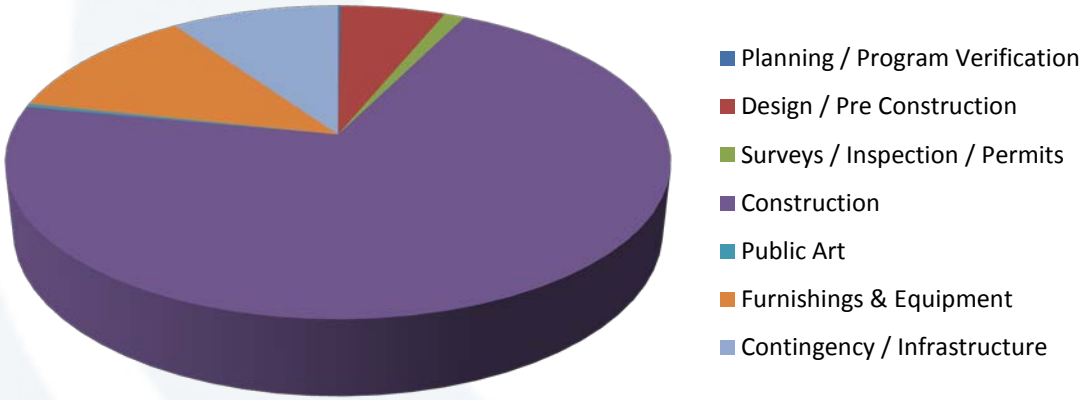


GENERAL CLASSROOM – PHASE II

PROJECT BUDGET

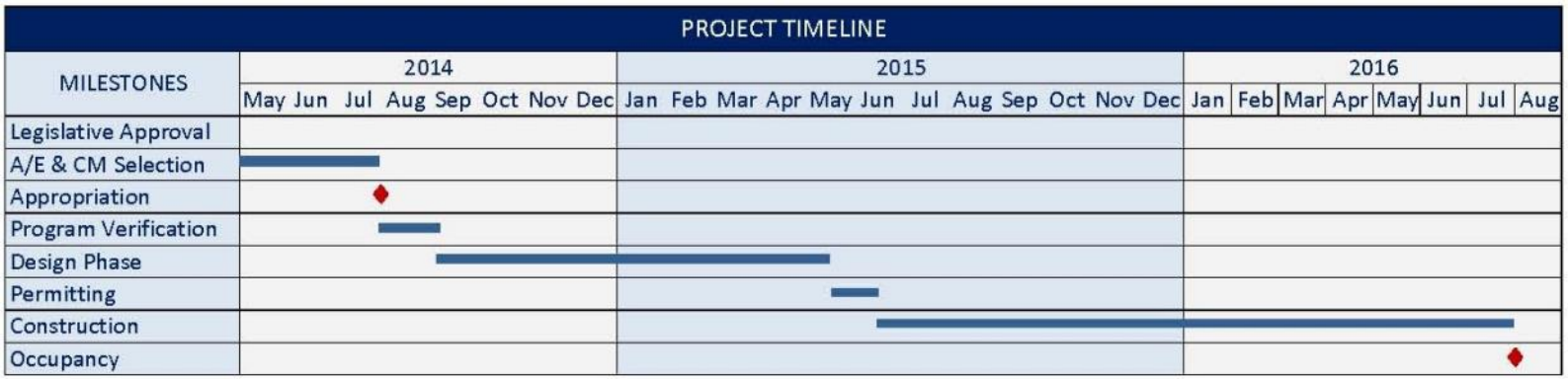
Planning / Program Verification	$	40,000
Design / Pre Construction	$	1,606,800
Surveys / Inspection / Permits	$	316,300
Construction	$	18,789,800
Public Art	$	93,900
Furnishings & Equipment	$	3,185,800
Contingency / Infrastructure	$	2,569,200
TOTAL PROJECT COST	**$**	**26,601,800**

Project Cost Per GSF: $ 330



GENERAL CLASSROOM – PHASE II

PROJECT TIMELINE



CLASSES SCHEDULED - FALL 2016!!

GENERAL CLASSROOM – PHASE II

CONCEPTUAL RENDERING

OCCUPANCY DATE – FALL 2016

GENERAL CLASSROOM – PHASE II
PO&M and JOB CREATIONS

PO&M - PLANT OPERATIONS & MAINTENANCE	
Building Classification – General Classroom	Facility Class C
2013-14 PO&M Rate / Sq. Ft. – Class C	$10.46
Building Gross Square Footage	80,400 GSF
Total Projected PO&M	$840,980

JOB CREATIONS	
Construction Jobs $26,603,000 Project / 1 job for every $40,000	Approx. 665 Jobs

GENERAL CLASSROOM – PHASE II

MEETING THE NEEDS FOR FUTURE STUDENTS

Most Compelling Reason to Construct the Project:

- **Lack of large classrooms to meet enrollment demand**
  Currently at 14,500 FTE (Fall, 2013) with goal to increase to 17,300 FTE per FAU's SRATEGIC PLAN 2013-2018 (20% increase)

- **Current large classrooms are used >50 hours per week at >92% capacity**
  By 2015 will go to all day Saturday as an Instructional Day

- **PHASE II of General Classroom Building to provide additional teaching lab space to support FAU QEP: Discovery/Inquiry**
  Undergraduate research/inquiry a large part of FAU's mission as well as strategies to increase retention and graduation and provide for greater student success.

GENERAL CLASSROOM – PHASE II

MEETING THE NEEDS FOR FUTURE STUDENTS

Other Considerations (programmatic impacts)

To meet several BOG/SUS Strategic Plan Goals:

GOAL: Increase Degree Productivity and Program Efficiency

- *provide ability for increased scheduling of classes, especially Intellectual Foundations Program (IFP) courses, to meet student demand*

GOAL: Increase the Number of Degrees Awarded in STEM and Other Areas of Strategic Emphasis

- *frees up large classrooms close to Science Complex for STEM classes*

GOAL: Increase Levels of Community and Business Engagement

- *provides teaching lab space for development of programs directly involved with community and business related activities, (e.g. Music Commercialization and Studios, and Film Production)*

GENERAL CLASSROOM – PHASE II

MEETING THE NEEDS FOR FUTURE STUDENTS

Negative Consequences in Delayed Funding:

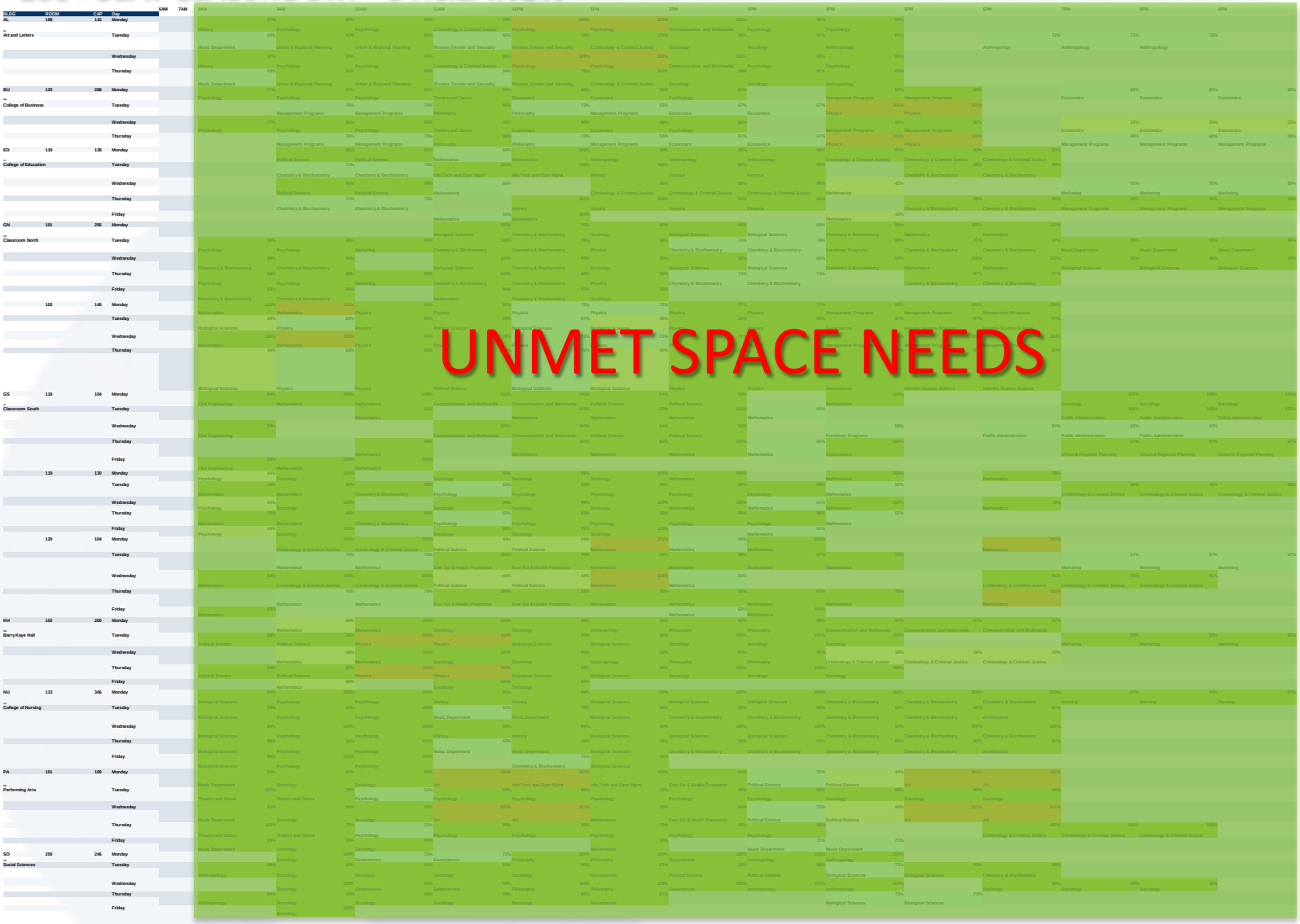
- Loss of use of the University Theatre for theatrical productions and training since it is currently used for large IFP classes. The Theatre needs to come offline for renovation of necessary equipment (lights, sound, etc.) to prepare it for better use in theatre production instruction.

- Lack of adequate rehearsal space for music department and programs, university orchestras and bands

- Current large classrooms at capacity and maximal assignment. Without additional large classrooms, retention and graduation rates will be impacted through lack of ability to schedule classes in timely fashion, especially IFP classes, as enrollment grows.

GENERAL CLASSROOM – PHASE II

100+ SEAT CLASSROOM - UTILIZATION



GENERAL CLASSROOM – PHASE II

MEETING THE NEEDS FOR FUTURE STUDENTS

Thank You!

Questions & Answers

Making Waves

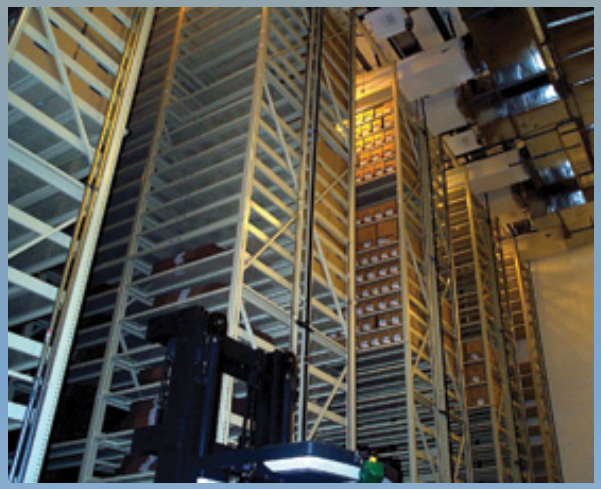
High-Density Library Storage Facility for the SUS

Summary for the Board Facilities Workshop

October 9, 2013

Judy Russell
Dean of University Libraries
University of Florida

Project Purpose



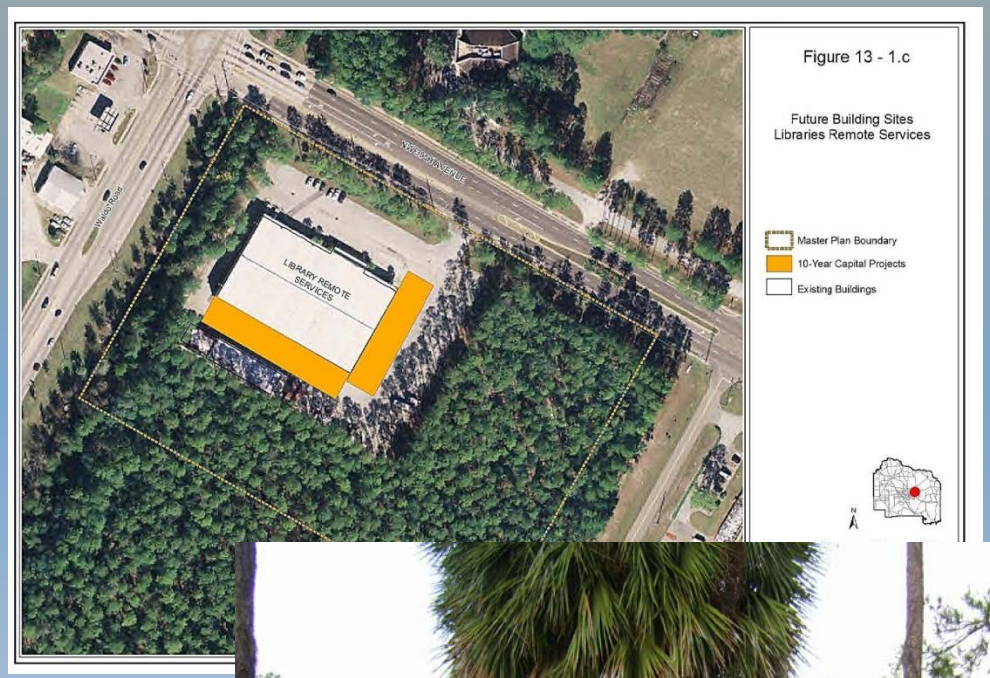
~30,000 GSF high-density facility (HDF) to provide archival storage for 5.2 million volumes of library materials for benefit of all (12) State Universities

Maximize capacity through storing volumes by size and retrieving by bar code

Renovation & expansion of existing ~42,000 GSF facility and ~10,000 GSF new construction will:

- Provide loading dock, processing, and updated facade for the new HDF
- Co-locate digital, conservation, and preservation services
- Install bathrooms, break room and staff/facility support
- Retain ~10,000 GSF for UF-only materials (with shelving provided by UF)

Location



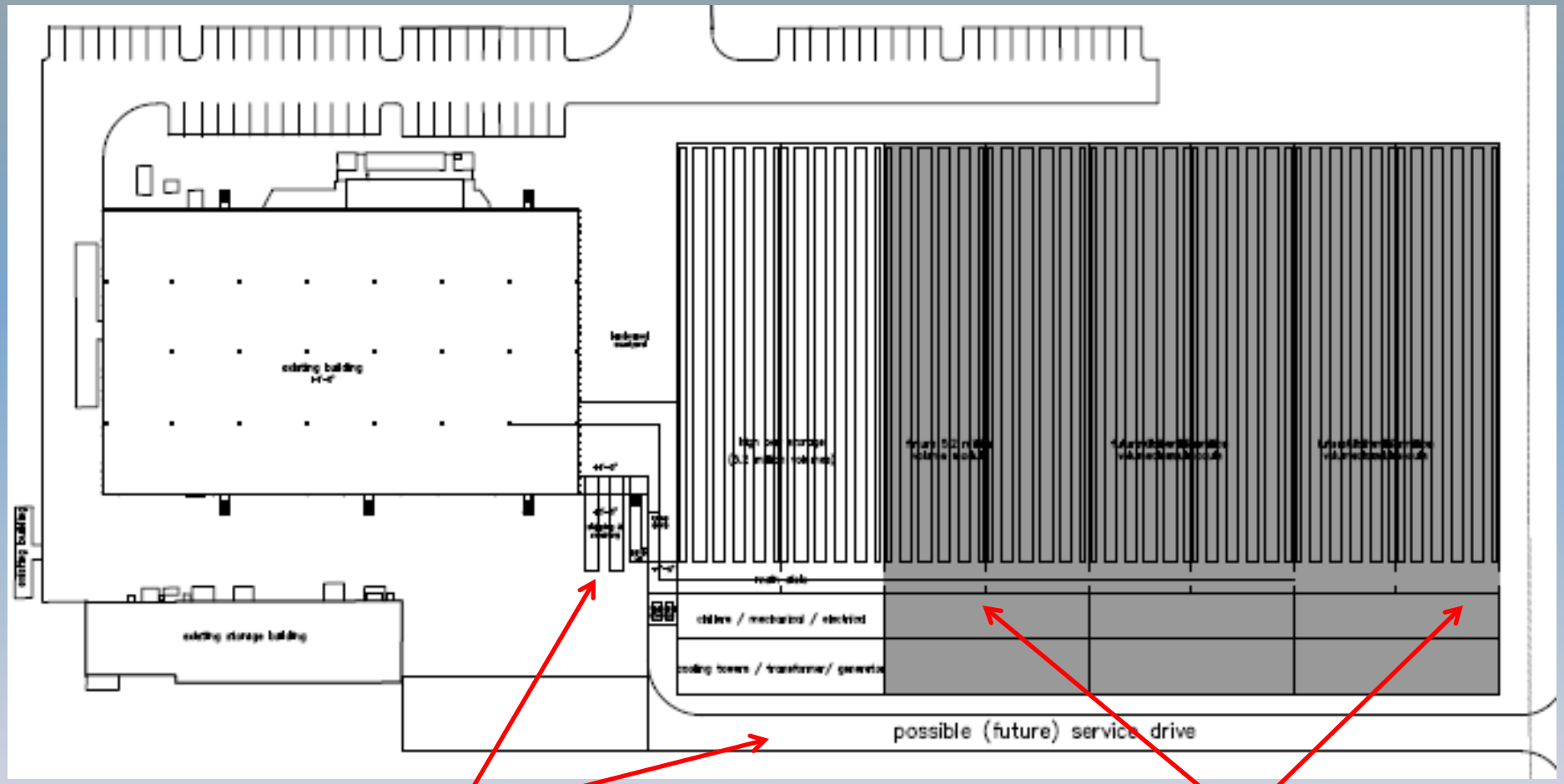
SE corner of Waldo Road and 39th Ave.
(~5 miles from UF)

Early 1970s FDOT warehouse acquired by UF in 2003

Ideal location at mid-point of State

Currently provides off-campus housing for 1.2 million volumes of UF library materials that will be the initial collection

Site and Master Plan



Efficient flow of materials, with delivery traffic separated from other traffic

Ultimate build-out would house 20.8M volumes

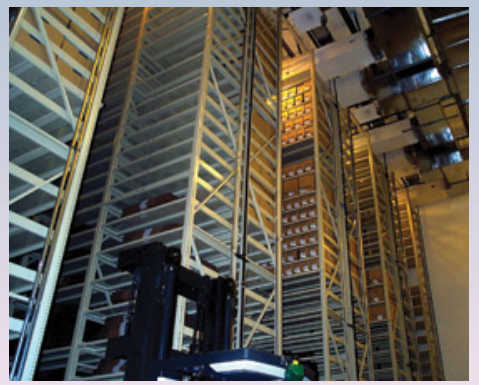
Goals & Requirements

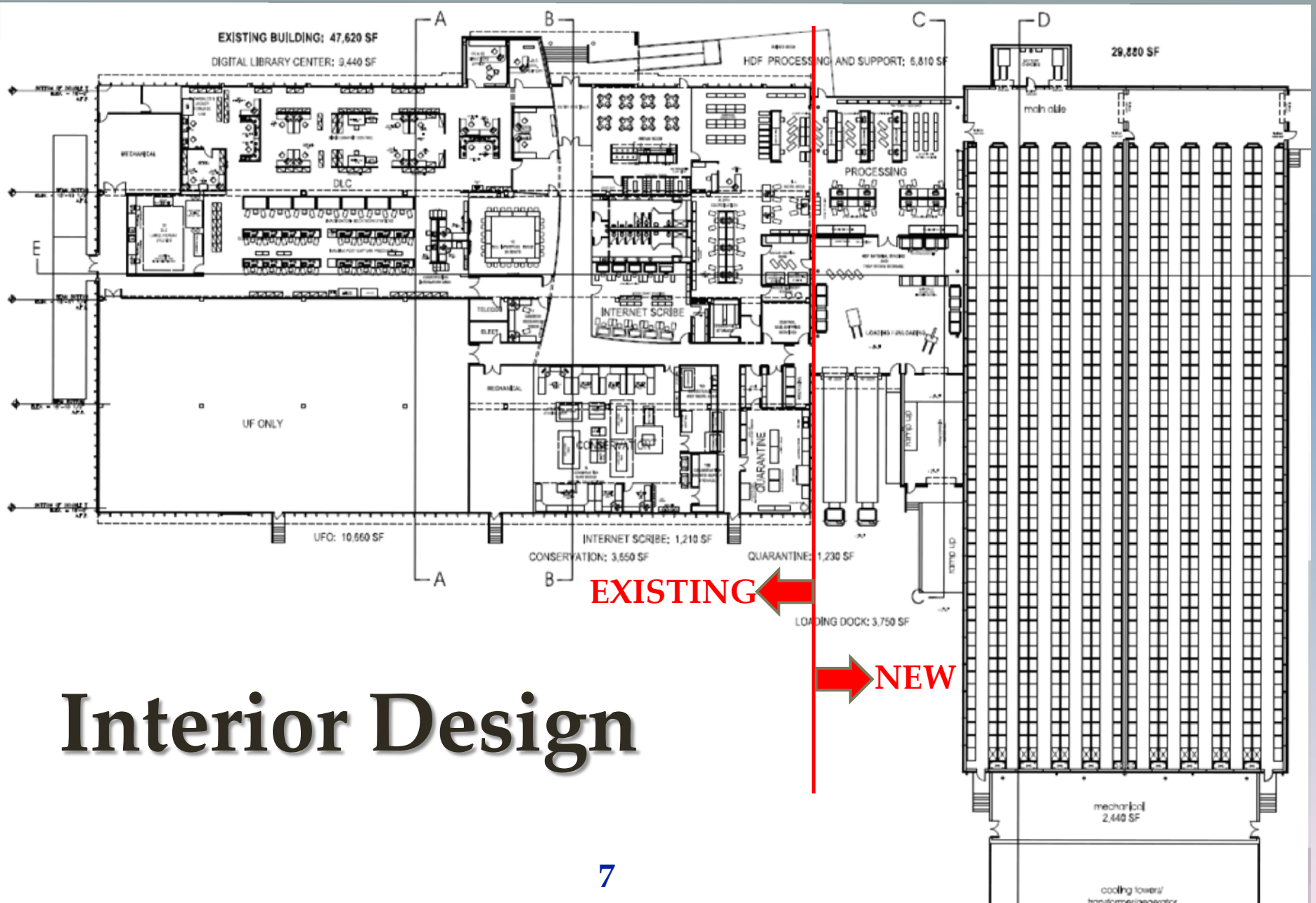
- Preserve FLorida Academic REpository (FLARE) shared collection and allow for efficient retrieval and use of library materials
- "Shovel ready" and seeking 2014/2015 funding
- Designed for future expansion through construction of additional storage modules as needed
- Maintain environment through storms or power loss; harden building against severe storms
- Maximize energy efficiency and *strive* for LEED certification

Special HDF Considerations

NARA 1571 – Archival Storage Standards

- 50º F, 35% RH for optimum preservation environment
- Gas/carbon filtration to eliminate airborne contaminants
- Redundancy for air handling, dehumidification system, and chiller plant
- Early Suppression Fast Response fire sprinkler system
- Emergency generator for mechanical system
- "Superflat" slab for high shelving and order picker
- Hardened, insulated, and waterproof envelope
- Possible future use of solar panels on roof





Interior Design

Budget / Costs

- Original CIP request approved by BOG in 2007 for funding in 2010-2011 was for $6.9M construction / $11.2M project (47,000 GSF, 2.6 million volumes)
- Current estimate based on completed design is $17.1M construction / $26M project (82,000 GSF, 5.2 million volumes) based on August 2014 start and 15-month duration

Budget / Costs

- Cost impacts include
  - Higher capacity facility (additional shelving, increased book preparation/moving)
  - Compliance with NARA standards
  - Mechanical system capacity and redundancy
  - Soils & structure for rigid settlement criteria
  - Hardening storage facility for extreme storm conditions
  - Additional GSF for processing & loading based on site visits to comparable facilities
  - Delay in construction increases volume of materials to be moved from 1.2 million to 2.6 million

Status & Schedule

- Design is complete through 100% Construction Documents
- All internal and external (GRU, SFM) reviews complete
  - Defer final bid documents, permitting, and bidding until funds are appropriated
- Earliest start = August 2014; earliest completion = November 2015
  - Interim storage facility leased by UF addresses immediate space needs of SUS Libraries, but increases volume of materials to be moved
  - Developing the shared collection now allows removal of duplicate and low-use materials while permanent facility is under construction
  - Access to the FLARE collection will continue during construction

Impact of Joint Use Facility

- **Creates Opportunities for Removal of Low Circulation Books and Journals from SUS Libraries**
  - **Substantial opportunity to relocate volumes that continue to have research value, but are now infrequently used**
  - **Bound journals are already being consolidated in storage**
  - **Over 5.8 million books in SUS campus libraries *could* be relocated to storage or discarded based on volumes already in storage**
  - **Potential to clear an estimated 230,000 square feet for other high demand library services**
  - **Removal of books is labor intensive, since each volume must be evaluated, discarded or transferred to storage, its cataloging record updated, and the remaining collection consolidated to regain the vacant shelf space**

Impact of Joint Use Facility

- Reduces need for construction of new or expanded libraries on campus
- Less expensive than operating multiple individual library storage facilities
- Provides a shared research collection for all SUS students and faculty

Impact of Joint Use Facility

- **EXAMPLE: Clearing the Ground Floor of UF Science Library**
  - **Move 810,000 volumes to storage and relocate map library**
  - **Clear 26,000 square feet for a student learning commons seating 700 students and adding over 20 group study rooms**
  - **Estimated cost of $6 million**
  - **Estimated completion time of 12 months**
  - **Phase 1 (21,000 square feet) available within 6 months**
  - **Phase 2 (5,000 square feet) available within 12 months (after relocation of the map library)**

High-Density Library Storage Facility for the SUS

QUESTIONS?

Judy Russell
Dean of University Libraries
University of Florida

Barry Baker
Director of Libraries
University of Central Florida

Board of Governors
Facilities Committee Workshop
October 9, 2013

Florida Institute of Oceanography
Research Vessel

William T. Hogarth, Ph.D., Director

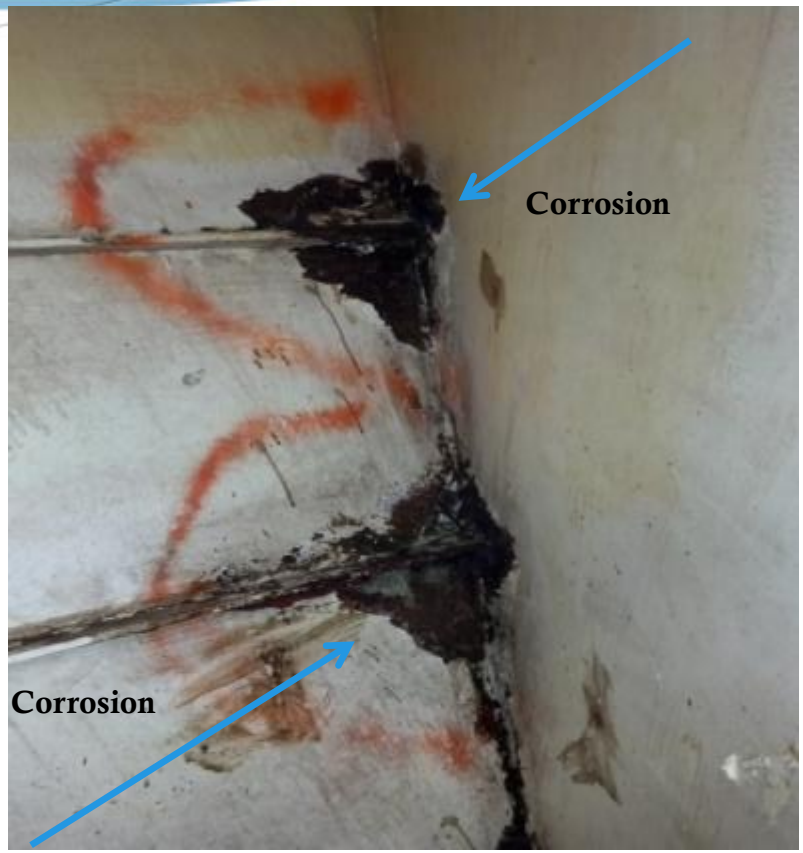
Replacement of the 44 Year Old Research Vessel Bellows

- Total Project Budget: $2.85 million
- Home port: University of South Florida in St. Petersburg
- Annual operating costs: No additional operating costs. A saving of several hundred thousands of dollars for maintenance and repairs is expected.
- In Service Date: Anticipated 12-18 months from date of funding

STATE OF FLORIDA INSTITUTE OF OCEANOGRAPHY FIO

Current Condition of the Research Vessel Bellows

View: R/V Bellows Forepeak Bulkhead looking aft



View: R/V Bellows Forepeak Bulkhead looking aft stbd

Why Fund Project FIO Research Vessel?

- Safety:
  - Survey performed by Redshaw Marine Survey (Jan, 2012), the RV Bellows is described as having structural deterioration of steel, essentially "dying from the inside out"
- SUS faculty needs the vessel for STEM teaching and research
- Without RV Bellows, FIO loses $500,000 - $750,000 (equivalent to 100 - 150 days) in revenue each year, and a potential loss of large grants such as Gulf Of Mexico Research Initiative (GOMRI) Consortia and RESTORE Act opportunities
- Strengthen the SUS's competitive position in securing higher levels of R&D investment from the federal and state government and industry
- Elevating the SUS's status as a global hub of world-class oceanographic education and research and supporting Florida's emergence as the preeminent state in the nation for understanding ocean processes

Consequences of Delaying Funding

- FIO's vision, mission and goals to align with BOG's Strategic Plan is not achieved:
  - access to and production of degrees;
  - meeting statewide professional and workforce needs; and
  - building world-class academic programs and research capacity
- Elimination of State-supported STEM program diminishes the goal of optimizing the BOG's expectation of FIO
- Lose field experience which inspires students to continue in STEM fields and to apply for higher paying and skilled jobs
- Lose competitive advantage in securing major grants (i.e. GOMRI Consortia and RESTORE Act funds). RV Bellows provides different research and teaching opportunities than the RV Weatherbird II
- Impact on 23 different universities and institutions that have utilized the RV Bellows since 2008

Florida Jobs

- If a suitable used vessel is not available, there are several shipbuilding businesses that can construct vessel(s) in Florida which:
  - Sustains skilled jobs in the shipbuilding industry in Florida
  - Retains revenue in Florida's economy