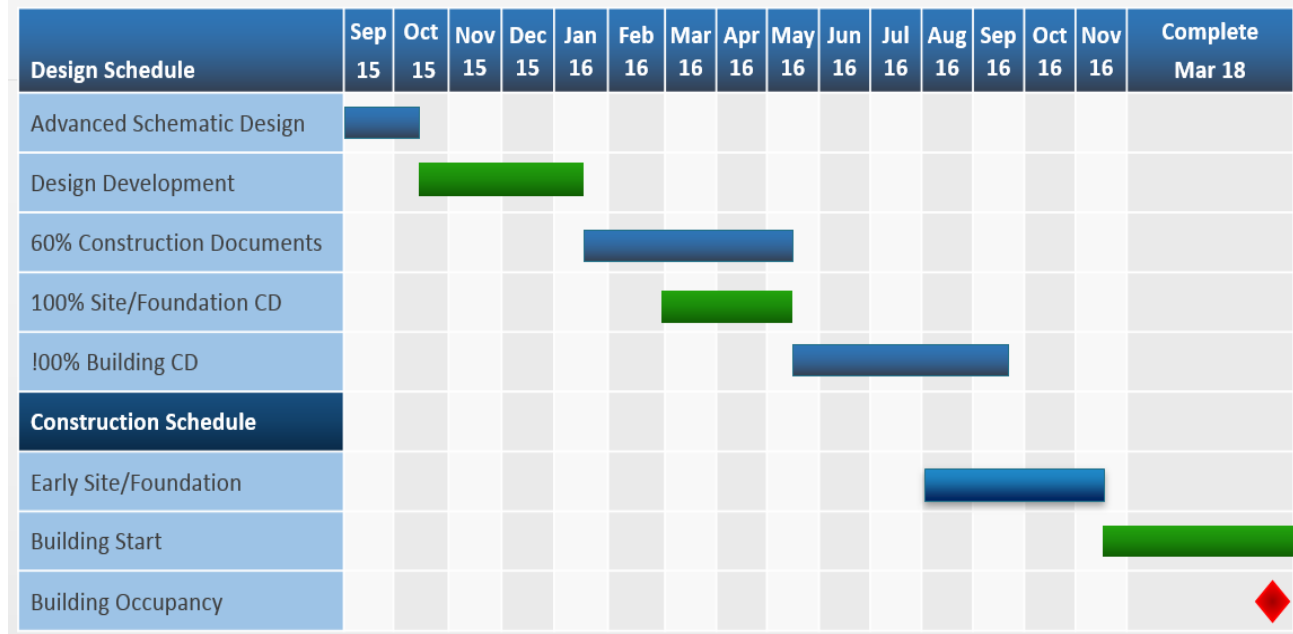




UF Engineering Innovation NEXUS Renovation & Addition to Nuclear Sciences Building \$25 M



Design/Construction Schedule





UF Engineering Innovation NEXUS Renovation & Addition to Nuclear Sciences Building \$25 M

RETURN ON INVESTMENT (ROI)

- ✓ Will double engineering startup companies from 5 to 10 per year
- ✓ Five-year forecast of \$4 million increase in industry research funding
- ✓ \$10 million increase in multidisciplinary research funding
- ✓ Will provide necessary infrastructure and focus to recruit and support high-tech companies in Florida (Engineering Experiment Station)
- ✓ Will improve state economic competitiveness
- ✓ Renovations to 50-year old facility and new utility infrastructure core will increase efficiencies and reduce costs



UF Engineering Innovation NEXUS Renovation & Addition to Nuclear Sciences Building \$25 M

DEMAND METRICS

- ✓ Projected five-year increase of 300 engineering degrees through retention and recruiting
- ✓ Will increase STEM research in Biotechnology and Advanced Manufacturing
- ✓ Facilities to transform engineering education, involving Global Innovation Network of alumni, experts and student/faculty teams in pursuing real-world team approach to innovation
- ✓ Updating the university's 50-year old facility will re-purpose existing space, providing for cutting-edge education and research opportunities and increasing the number of students earning engineering degrees



UF Engineering Innovation NEXUS Renovation & Addition to Nuclear Sciences Building \$25 M

REQUEST

Total project budget:		<u>\$53M</u>
UF Funds		\$4M
Appropriated	2015-16	\$6M
Request for	2016-17	\$25M
Request for	2017-18	\$18M

- ✓ Anticipated construction start date: August 2016
- ✓ Estimated completion date: March 2018



NORMAN HALL REMODELING/CONFERENCE CENTER ADDITION

\$24.4 M





NORMAN HALL REMODELING/CONFERENCE CENTER ADDITION

\$24.4 M

STATEWIDE IMPACT

- ✓ Impact in every public high school and all 67 major school districts across state, enhancing learning of 1 million 6th–12th grade math students and providing professional development to 10,000 math teachers via *Algebra Nation* and *Math Nation*
- ✓ Empowering 55,000 early learning teachers serving 400,000 children across entire state with *FL Early Learning Florida Initiative*
- ✓ Improving effectiveness of teachers and school leaders serving students with disabilities across Florida and 14 other states via \$25M federally-funded *CEEDAR Center*
- ✓ Producing outstanding teachers for state's classrooms while blazing the trail for improved educator preparation via FLDOE-funded *Center of Excellence in Elementary Teacher Preparation*



STATEWIDE IMPACT (cont)

- ✓ One in 3 children are not prepared to learn when starting kindergarten; college hosting *For the Life of a Child: Early Childhood Health, Education, & Policy National Summit* to produce solutions for all young children
- ✓ *Online Learning Institute* supporting effectiveness of UF Online's statewide mission
- ✓ Employment outlook: Very high demand due to teacher shortage; exceptionally high demand for STEM, special education, and language specialties. Strong overall employment forecast = 20% growth over next 5 years
- ✓ Starting salaries: Undergraduate = \$36K (9-month), graduate = \$56K



RETURN ON INVESTMENT (ROI)

- ✓ College ranked #1 among COEs in Florida, #1 among public institutions in southeastern region of nation, and #20 among all public universities in nation.
Five Top 20 academic programs
- ✓ 84 projects summing to \$86.3M in active externally-funded projects, renovations will increase capacity for greater funded research and training
- ✓ Growing research output requires improved laboratories and infrastructure
- ✓ Expansion of e-learning/distance outreach to FL students and educators requires updated production space
- ✓ Ability to host statewide professional development seminars supporting educational leadership and reform
- ✓ Implement learning/teaching supports for next generation curriculum areas



ROI - CONTINUED

- ✓ Create secure facilities for confidential state and federal educational policy analyses e-databases
- ✓ Provide demonstration site for solving statewide critical shortage areas of STEM, foreign language, and special education educators
- ✓ Facility gains significant energy efficiencies and reduced operational costs via upgraded mechanical systems and building envelope (roof, windows, brick) repairs
- ✓ Eliminate significant critical deferred maintenance backlog for 82-year-old facility, with renovated facility complying with fire code and ADA standards
- ✓ Cost savings from renovation, with existing facility transformed into modern, efficient space
- ✓ Listed on National Historic Registry, Norman Hall is cornerstone of UF; restoration/upgrades will enable continued service in support Florida's critical educational needs



NORMAN HALL REMODELING/CONFERENCE CENTER ADDITION

\$24.4 M

DEMAND METRICS

- ✓ Constructed as K-12 school in 1934, facility is outdated and hazardous—unsuitable for preparing top educators, leaders, reformers, & innovators
- ✓ Current enrollment: 2,800 across 28 undergraduate and graduate programs
Projected enrollment growth: 27% over five years
- ✓ COE develops innovations in STEM education and advances technology-assisted instruction addressing needs of all learners across the state (e.g., *Algebra Nation*, *Math Nation*, *Early Learning Florida*, and *Online Learning Institute*)
- ✓ Home to national centers including: Lastinger Center for Learning; Anita Zucker Center for Excellence in Early Childhood Studies; Center for Disability Studies & Outreach; Institute for Higher Education; and Collaboration for Effective Educator Development, Accountability & Reform Center
- ✓ Continuing growth in externally-funded research currently at \$86.3M, outstanding 99% growth over last 4 years



NORMAN HALL REMODELING/CONFERENCE CENTER ADDITION

\$24.4 M

REQUEST

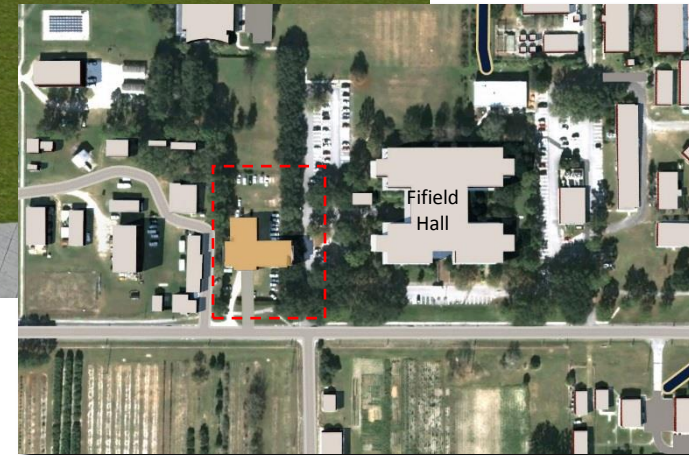
Total project budget:	<u>\$24.4M</u>
Request for 2016-17	\$8M

Anticipated construction start date: April 2017

Estimated completion date: August 2019



IFAS SCIENCE ACADEMIC BUILDING \$15.8 M



New building space: 25,125 SQ FT
Renovation of existing space: 8,600 SQ FT



IFAS SCIENCE ACADEMIC BUILDING \$15.8 M

RETURN ON INVESTMENT (ROI)

- ✓ Recovery of more than 3,200 credit hours lost each year in STEM majors due to teaching lab and classroom deficiencies
- ✓ Projected 5-year increase of 200 degrees in STEM majors through increased credit hours, faculty retention, and recruiting
- ✓ Addition of new teaching space and repurpose of existing space will provide for maximization of usage, increasing the number of degree-earning STEM students, and creation of cutting-edge education and research opportunities
- ✓ Creation of quality wet laboratory research space will greatly enhance competitive recruitment of preeminence faculty

Lost tuition
value of 3200
STEM credit
hours =
\$477,568



IFAS SCIENCE ACADEMIC BUILDING \$15.8 M

Florida
agriculture
industry
employment
increased 8.7%
over previous
year; total
\$148.5B in sales

DEMAND METRICS

- ✓ Space quality issues – including a need for larger lecture-style classrooms and modern teaching laboratories – limit the type and number of classes now offered for STEM majors
- ✓ AgCareers.com reports 15% increase in national job postings in 2014; more than 7000 jobs posted in southeast; USDA expects 57,900 average annual job openings in agriculture and related fields
- ✓ UF departments of horticulture science, plant pathology, environmental horticulture, and microbiology and cell science (all in BOG Strategic Programs of Emphasis of Economic Development-STEM and Performance Funding Metrics) have outgrown space for teaching and research



IFAS SCIENCE ACADEMIC BUILDING \$15.8 M

REQUEST

Total project budget:	<u>\$15.8M</u>
Request for 2016-17	\$8M

- ✓ Anticipated construction start date: March 2017
- ✓ Estimated completion date: April 2018



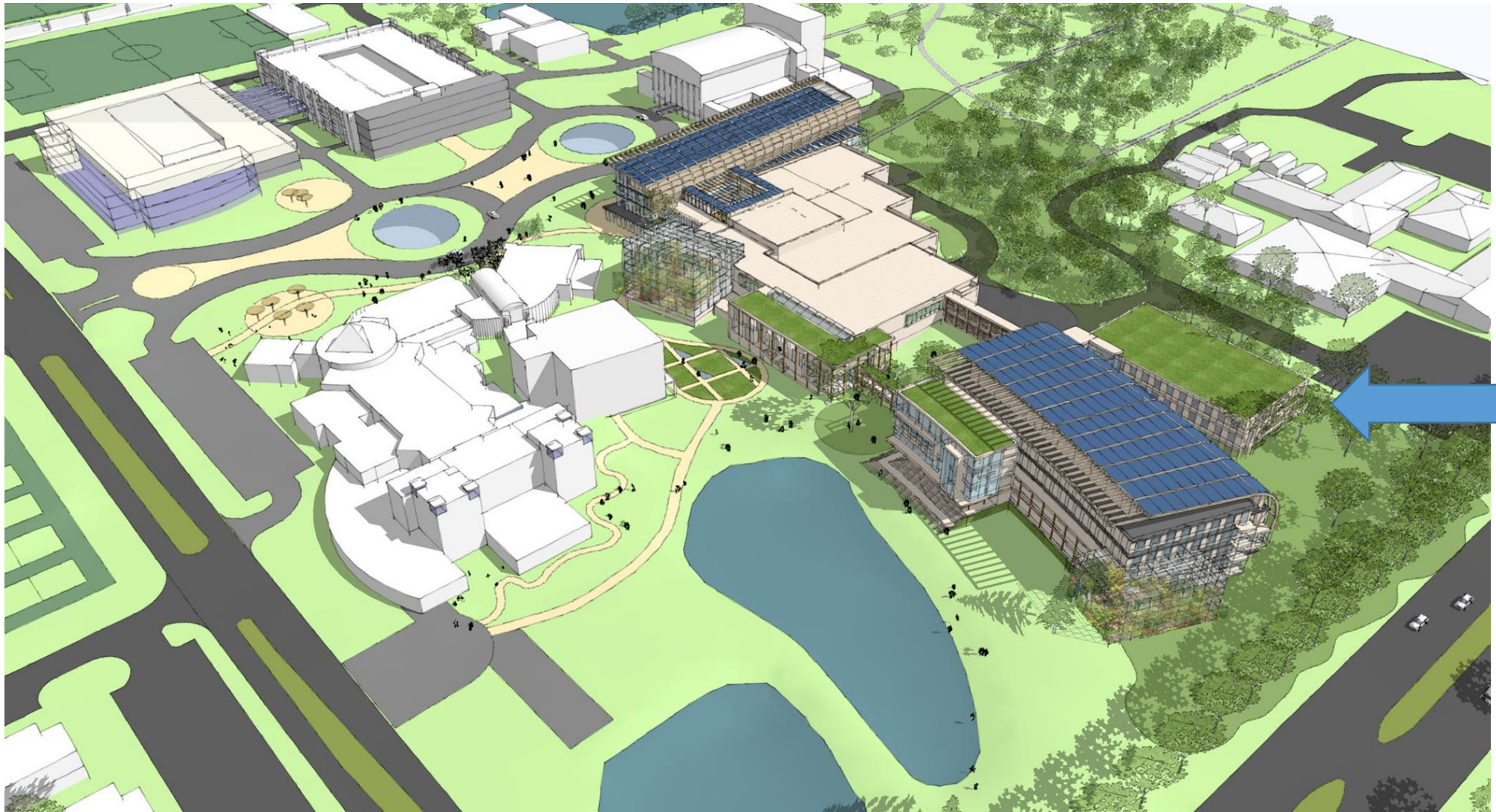
UF/Florida Museum of Natural History Special Collections and Research Building \$32.8 M



UF
UNIVERSITY of
FLORIDA



UF/Florida Museum of Natural History Special Collections and Research Building \$32.8 M





UF/Florida Museum of Natural History Special Collections and Research Building \$32.8 M

FLORIDA MUSEUM IMPACT DATA

- ✓ **\$74 million annual economic impact** on Florida
- ✓ **Top 3 university-based science museum in the US** (Harvard, Yale, UF)
- ✓ 40 million specimens/objects; **top 5 largest** collection in US, **top 10 worldwide**
- ✓ **#1 in the US in Bioinformatics**; leads NSF initiative to create a national repository of digitized biological collections
- ✓ Museum faculty manage over **\$30 million in grant-funded projects/year**
- ✓ Museum faculty train over **250 graduate students/year** for careers in industry, scientific research, higher education and government service





UF/Florida Museum of Natural History Special Collections and Research Building \$32.8 M

MAJOR THREATS

- ✓ Current facility **out of compliance** with State Fire Marshal codes; cannot be corrected
- ✓ **Health and safety** of students and employees at risk
- ✓ State natural history **collections at risk**
- ✓ Potential **loss of national accreditation**
- ✓ **Acute space shortage** for research collections results in multiple off-site warehouse leases

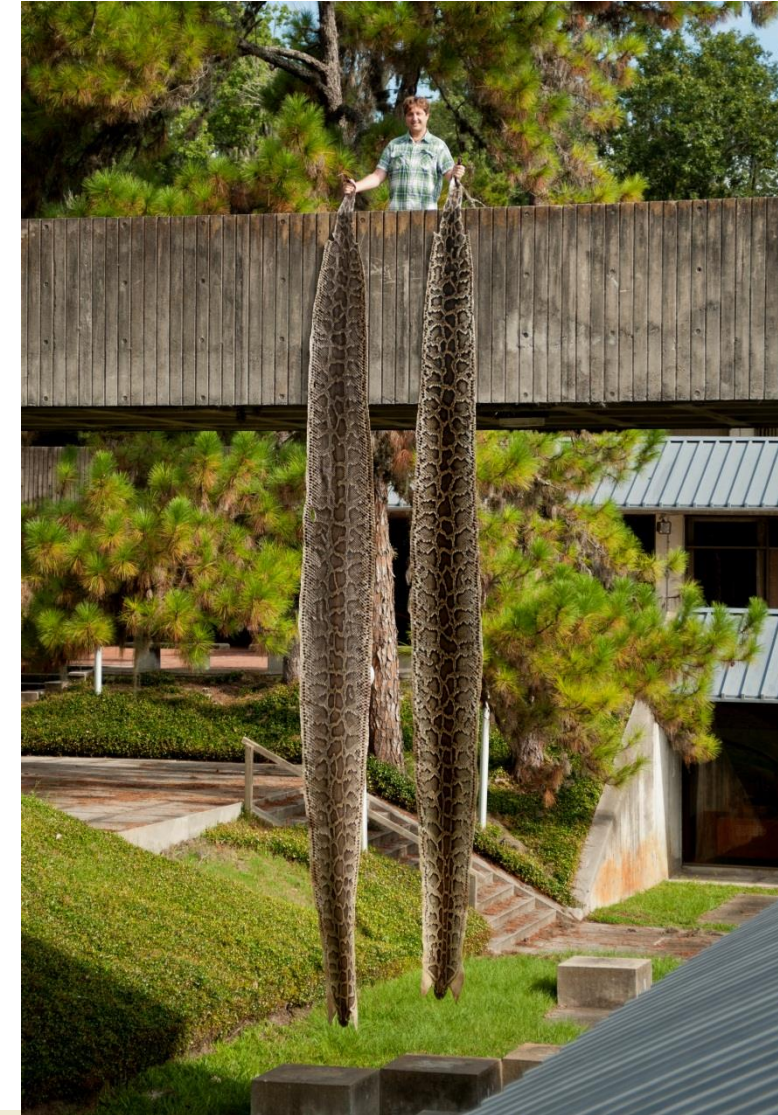




UF/Florida Museum of Natural History Special Collections and Research Building \$32.8 M

RETURN ON INVESTMENT (ROI)

- ✓ **State-of-the-art facility** for Florida's biological/genetic collections used by government agencies and in scientific research
- ✓ **Support research affecting Florida industries:** water/reef quality, ocean health, crop pests, agricultural/natural pollinators, invasive species
- ✓ **Support STEM research programs** and increase graduate training by **UF Preeminence hires** in Biodiversity and Big Data
- ✓ **\$10 million increase in research funding** in 5 years
- ✓ **Remedy a serious threat to the health and safety** of UF students, faculty and staff





UF/Florida Museum of Natural History Special Collections and Research Building \$32.8 M

RETURN ON INVESTMENT (ROI)

- ✓ **5-year increase of 100 STEM graduate degrees** in emerging fields of Bioinformatics, Molecular Biology/Genetics
- ✓ **Enhance STEM research on global issues:** biodiversity, environmental health, climate/ecosystem change
- ✓ **State-of-the-art labs and technology** facilitate multidisciplinary teams conducting cutting-edge research with international colleagues in real time
- ✓ **Allow FLMNH to re-purpose existing space** for new UF Biodiversity Institute, iDigBio NSF project and expanding collections; create additional space for students conducting collections-based research





UF/Florida Museum of Natural History Special Collections and Research Building \$32.8 M

REQUEST

Total project budget request \$32.8M

Request for 2016-17 \$10M

Request for 2017-18 \$22.8M

- ✓ Anticipated construction start date: September 2017
- ✓ Estimated completion date: December 2019

