
From: William Merck
Sent: Wednesday, July 27, 2016 1:09 AM
To: Dale Whittaker
Subject: Fwd: Board item FF-4 and five year capital plan

Dale, Dave had a bad address for you so you didn't get the initial message. This should catch you up. I'll address the new question he asks later. It is a very insightful. Bill

Sent from my iPhone

Begin forwarded message:

From: David Walsh <walsh@takotagroup.com>
Date: July 26, 2016 at 11:57:35 PM EDT
To: William Merck <William.Merck@ucf.edu>
Cc: Lee Kernek <Lee.Kernek@ucf.edu>, Thad Seymour <Thad.Seymour@ucf.edu>, "Dale.whitaker@ucf.edu" <Dale.whitaker@ucf.edu>, Rick Schell <Rick.Schell@ucf.edu>
Subject: Re: Board item FF-4 and five year capital plan

From: William Merck <William.Merck@ucf.edu>
Sent: Tuesday, July 26, 2016 5:37 PM
To: David Walsh
Cc: Lee Kernek; Thad Seymour; Dale.whitaker@ucf.edu; Rick Schell
Subject: RE: Board item FF-4 and five year capital plan

Bill....Deeply appreciate the clarifications. A few comments principally echoing my understanding.....one final question at the end.

Trustee Walsh: I will address your questions in the order presented below. Colbourn Hall will not be demolished until the new Trevor Colbourn Hall (approved by the Board of Trustees prior to your joining the board) is complete and the current occupants of Colbourn Hall are relocated into the new building. The projected cost of the demolition is \$300,000. This amount is incorporated in the project budget for Trevor Colbourn Hall. Following state procedures, demolition will occur following a state-sponsored survey recommendation.

Pretty complete summary, thanks Bill. Would suggest to have the above thoughts verbalized in respect to the demolition budget and schedule, along with the critical path activity of the State Survey recommendation when FF-4 is presented.

The capital improvement plan is a little complicated. The short answer is yes, the plan is tied to the strategic plan, as well as the state's required educational plant survey, with added elements. The first item on the list for state funding is maintenance money to maintain what we already have. This is followed by a request for a building to support our current and growing research needs, a high priority in our strategic plan. It is so important to UCF that we are using internal funds to move forward now. If the state funds these projects, it will be a major budget relief that will allow us to move on to the next academic priority. The Colbourn Hall project is one that is timing-related. The building is in bad shape, not unsafe, but its remaining useful time is limited. It houses approximately 300 faculty and other related academic programs.

The three above mentioned specific projects appear essentially important without question. Most particularly the first one mentioned.

We can't modify the format for the capital improvement plan we submit to the state as it is their form. However, we can provide the trustees with an internal document that cross-references the strategic plan. Good idea.

Thanks much Bill.....this cross referencing would tie it all together.

As for a capital improvement amount (capex) we cannot live without, I think that would be problematic because the state is going to decide how much we get, regardless of what we request. In our discussions with the Board of Trustees, we can specify what we believe we need in the upcoming three year period to meet our strategic plan goals. Thus challenging us to find ways to generate the funds that the state doesn't provide. An example of meeting a current need the state would have funded prior to the 2008-2009 recession is our newly completed Global Building. We funded this project using gains on our investments and auxiliary overhead dollars.

In addition to the PECO list, which is funded by the state (if they choose to do so), the rest of the capital improvement plan lists revenue-generating projects that we may fund ourselves through bond issues when the necessity arises. Opportunistic projects that may be funded from philanthropy or the private sector will have legislative approval in place. Lastly, projects that could come from state sources other than PECO are also listed should the legislature choose to fund them. The legislature doesn't fund anything we don't have on a list that has received approval from the Board of Trustees and the Board of Governors. All of this makes our list a long one.

We are always looking for opportunities for the private sector to pay for some of our projects. This funding model could be used on any projects on our list. However, these opportunities come up on a case-by-case basis and are difficult to predict when we are composing our capital list. Again, the project must be on the list because if we use developer financing as an alternative to bonds or state financing, we must still meet the Board of Governors' P-3 guidelines.

Developer funded investmentclearer now, I think you're saying these need to be listed due to the underlying financial commitment they represent (similar to a lease), even if not direct capital in that case.....got it.

I think overall it was clearly mentioned in Committee that you, Dr. Hitt, and Dale had already culled out a number of capital concepts submitted Departmentally, so the list does fairly represent a somewhat reduced/refined Senior management consensus.

I suppose one remaining question then.....if the entire \$2.6B were approved, based on our anticipated five year student census growth projection, would the resulting added debt service (for the non state funded and non-donor projects), depreciation, and particularly ongoing maintenance costs associated with the proposed capital programs imperil our cost structure and related overall efforts to reduce cost per credit hour?

Another relativistic measure might be what's been spent over the past five years, as a gauge of the overall magnitude of the request summary.

If you wish to discuss any of this further, please let me know.

William F. Merck II

Vice President

Administration and Finance

Chief Financial Officer

From: David Walsh [<mailto:walsh@takotagroup.com>]

Sent: Monday, July 25, 2016 3:20 PM

To: William Merck <William.Merck@ucf.edu>

Cc: Lee Kernek <Lee.Kernek@ucf.edu>; Thad Seymour <Thad.Seymour@ucf.edu>;
Dale.whitaker@ucf.edu; Rick Schell <Rick.Schell@ucf.edu>

Subject: Board item FF-4 and five year capital plan

Bill and Lee:

Several observations regarding the meeting materials prepared for this week's board meeting Thursday. Please pass to Chairman Marchena and Finance and Facilities Committee Chair Martins as necessary.

Item FF-4, razing of building 18:

Assume this project is contingent upon subsequent approval of the new Coburn Hall building requisition, and that related demolition actions would not commence until then?

Also, what is the stand-alone specific cost of the demolition being approved? While discussed in the budget committee meeting, not clear from the brief summary material provided for the overall board.

Suggestion.....if too late to add to the brief summary on this, both above being verbalized when presented would make more clear to the Board.

Five year capital plan:

Discussed at budget committee meeting, the following follow-up points to that discussion:

Has the overall summary of state, and requests for non-state sourced projects been cross related to the Collective Impact Strategic Plan just completed and approved? Would suggest a new column is introduced to integrate how each project relates or ties in to which specific strategic imperative.

The Collective Impact Strategic Plan contains five Promises.....as subsets of each of these, there are collectively some 84 discrete “strategies to achieve” listed.

A simple cross reference to each of the prioritized capital programs would be useful to provide a visual to capture integration of the capex plan with the strategic plan.

Second topic addressed in Committee.....Board of Trustees approval is a critical checkpoint or guidepost. In this context, can we not develop an aggregate five capex value that we cannot live without, once tied to the strategic plan, in terms of essential replacement and new capacity projects being taken into consideration. Overall, the “feel” of the process is “this is a wish list we hope to attain BOG approval for some of.....let’s see what we get”. The BOT owes a higher standard than this to capex approval.....there ought to be a value related to the \$2.4Billion five year listing that UCF cannot live without, and at the same time, supports our operational strategic and growth plans. I’m not sure this is being presented. The board, I think, has a fiduciary obligation extending beyond what might otherwise be characterized as passing along to the BOG a “wish list” five year value. Is UCF leadership putting forward that if 60 or 70% of this is ultimately approved we’re satisfied? Not clear.

Last question, a more detailed one within the plan.....some \$114M in parking related facilities are listed (no doubt much needed) in the capex planning process.....if for example on these, developer financing and owning of these were pursued (such as the great platform example of our approved on campus hotel).....would such projects necessarily require being listed as capex....or is this perhaps a separate designation we should highlight for alternate approach than state or university funded projects?

If my takeaway on the five year capex process is imprecise.....let’s discuss ahead of the meeting for clarification.

Dave Walsh

From: Christina Tant
Sent: Wednesday, July 06, 2016 3:55 PM
To: Rebeca Richards
Cc: Donna DuBuc
Subject: E&G Budget Transfer - Colburn Hall

Rebeca – please distribute the remaining amount of the central E&G commitment (\$10,000,000) for the Colburn Hall/Trevor Colburn project. Please transfer this to the E&G department that received the previous transfers and then IDI transfer the funds to the project (92010022), effective June 2016.

Let me know if you have any Qs.

Thank you,

Christy Tant, CPA

Director University Budgets, Office of Budget, Planning, and Administration



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University of Central Florida

	University							University Reserves			
	Academic Affairs	Admin & Finance	President's Division	SMCA	Communications and Marketing	University Relations	All Divisions	Recurring	Non-Recurring	Medical School	Grand Total
2015-16 Operating Budget											
2014-15 End of year total budget, including all allocations	\$ 495,607,658	\$ 117,415,054	\$ 22,335,459	\$ 1,445,979	\$ 7,140,093	\$ 2,534,517	\$ 646,478,760	\$ 26,876,619	\$ -	\$ 57,083,904	\$ 730,439,283
PERMANENT Beginning of Year Allocations											
State funding											
Performance funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,717,871	\$ -	\$ -	\$ 14,717,871
Center for Reading- Istation	500,000	-	-	-	-	-	500,000	-	-	-	500,000
Florida Center for Nursing	450,000	-	-	-	-	-	450,000	-	-	-	450,000
Institute for Human and Machine Cognition	(440,000)	-	-	-	-	-	(440,000)	-	-	-	(440,000)
Plant, operations, and maintenance for new space	-	297,472	-	-	-	-	297,472	-	-	-	297,472
Risk management insurance	-	(465,636)	-	-	-	-	(465,636)	-	-	-	(465,636)
Pension and health adjustments	-	-	-	-	-	-	-	55,451	-	(8,805)	46,646
Chron's and Colitis Research	-	-	-	-	-	-	-	-	-	337,000	-
Technical transfer	-	-	-	-	-	-	-	73,878	-	(73,878)	-
University designated											
2014-15 Salary increases (annualized)	518,147	151,451	47,794	-	17,797	5,554	740,743	(740,743)	-	-	-
CS&T information security risk audit (annualized)	53,257	-	-	-	-	-	53,257	(53,257)	-	-	-
2014-15 Faculty/instructor promotional increases (annualized)	15,053	-	-	-	-	-	15,053	(15,053)	-	-	-
OEM camera and access control systems	-	206,810	-	-	-	-	206,810	(206,810)	-	-	-
OEM new key/camera/alert positions (annualized)	-	54,742	-	-	-	-	54,742	(54,742)	-	-	-
President's Office support	-	-	500,000	-	-	-	500,000	(500,000)	-	-	-
EOAA position	-	-	90,000	-	-	-	90,000	(90,000)	-	-	-
Provost's budget office salary	(373,198)	373,198	-	-	-	-	-	-	-	-	-
New 100 faculty funding (2 lines) - COM	(270,600)	-	-	-	-	-	(270,600)	-	-	270,600	-
Permanent division to division transfers	20,000	-	(20,000)	-	-	-	-	-	-	-	-
Tuition and fees:											
Allocate 2014-15 differential for need-based aid held in reserve	1,016,546	-	-	-	-	-	1,016,546	(1,016,546)	-	-	-
National Merit (waivers replacement)	1,001,500	-	-	-	-	-	1,001,500	(1,001,500)	-	-	-
2015-16 tuition budget increase held in reserve	-	-	-	-	-	-	-	5,311,088	-	-	5,311,088
2015-16 projected differential for need-based aid held in reserve	-	-	-	-	-	-	-	396,512	-	-	396,512
Projected increase in interest	-	-	-	-	-	-	-	1,000,000	-	-	1,000,000
Projected decrease in DPT tuition	(100,000)	-	-	-	-	-	(100,000)	-	-	-	(100,000)
Projected increase in FIEA tuition	88,454	-	-	-	-	-	88,454	-	-	-	88,454
Medical school increase in enrollment	-	-	-	-	-	-	-	-	-	1,432,186	1,432,186
Total permanent allocations	\$ 2,479,159	\$ 618,037	\$ 617,794	\$ -	\$ 17,797	\$ 5,554	\$ 3,738,341	\$ 17,878,129	\$ -	\$ 1,957,103	\$ 23,234,573

University of Central Florida

	University							University Reserves			
	Academic Affairs	Admin & Finance	President's Division	SMCA	Communications and Marketing	University Relations	All Divisions	Recurring	Non-Recurring	Medical School	Grand Total
TEMPORARY Beginning of Year Allocations											
Reverse 2014-15 temporary allocations and carryforward	\$ (102,399,479)	\$ (41,092,374)	\$ (11,002,053)	\$ (1,445,979)	\$ (3,082,813)	\$ (505,615)	\$ (159,528,313)	\$ 4,430,753	\$ -	\$ (18,379,647)	\$ (173,477,207)
Encumbrances (PO rollovers)	13,508,650	21,316,862	350,452	-	273,316	142,473	35,591,553	-	-	1,724,760	37,316,313
6/30/15 carryforward (including reallocation collection)	75,766,737	7,297,868	3,982,800	-	1,941,323	351,617	89,340,345	-	43,957,001	18,604,342	151,901,688
State funding											
Evans Community School	900,000	-	-	-	-	-	900,000	-	-	-	900,000
Lou Frey Institute	250,000	-	-	-	-	-	250,000	-	-	-	250,000
Chron's and Colitis Research	-	-	-	-	-	-	-	-	-	500,000	-
University designated											
<u>Recurring allocations from non-recurring funds:</u>											
Development - Enhancement Plan	-	-	2,000,000	-	-	-	2,000,000	-	(2,000,000)	-	-
Foundation support	-	-	1,500,000	-	-	-	1,500,000	-	(1,500,000)	-	-
Athletics compliance positions	-	-	350,000	-	-	-	350,000	-	(350,000)	-	-
Finance & Accounting operations	-	2,500,000	-	-	-	-	2,500,000	-	(2,500,000)	-	-
Convocation Center rent	-	1,000,000	-	-	-	-	1,000,000	-	(1,000,000)	-	-
Conference fees	-	600,000	-	-	-	-	600,000	-	(600,000)	-	-
Health Sciences Campus Boggy Creek assessment	-	47,000	-	-	-	-	47,000	-	(47,000)	-	-
Communications and Marketing support	-	-	-	-	1,056,500	-	1,056,500	-	(1,056,500)	-	-
<u>Non-recurring allocations:</u>											
PBS partnership	-	-	-	-	2,012,186	-	2,012,186	-	(2,012,186)	-	-
Communications and Marketing support	-	-	-	-	1,000,000	-	1,000,000	-	(1,000,000)	-	-
Development salary	-	-	236,000	-	-	-	236,000	-	(236,000)	-	-
University Innovation Alliance salary support	-	-	48,090	-	-	-	48,090	-	(48,090)	-	-
Contract management software (legal)	-	-	46,976	-	-	-	46,976	-	(46,976)	-	-
Sematech (Year 4 of 5)	500,000	-	-	-	-	-	500,000	-	(500,000)	-	-
Creative Village coordinator	61,500	-	-	-	-	-	61,500	-	(61,500)	-	-
Oracle/Cisco contract payback (Year 1 of 5)	(2,329,154)	-	-	-	-	-	(2,329,154)	-	2,329,154	-	-
Predictive analytics software agreement with EAB payback	(166,200)	-	-	-	-	-	(166,200)	-	166,200	-	-
<u>University Budget Committee allocations:</u>											
COP - Phase II of CREOL addition/expansion	4,000,000	-	-	-	-	-	4,000,000	-	(4,000,000)	-	-
SDES - Low Income SCH Enhancement Scholarships	2,025,000	-	-	-	-	-	2,025,000	-	(2,025,000)	-	-
Regional - Web course support	775,000	-	-	-	-	-	775,000	-	(775,000)	-	-
BHC - Additional honors courses & science labs	540,000	-	-	-	-	-	540,000	-	(540,000)	-	-
SDES - Predictive analytics software agreement with EAB (Years 1 - 3)	456,700	-	-	-	-	-	456,700	-	(456,700)	-	-
ITR - Data center hardware/maintenance	306,000	-	-	-	-	-	306,000	-	(306,000)	-	-
COS - GTA stipends	282,150	-	-	-	-	-	282,150	-	(282,150)	-	-
ORC - STOKES upgrade	282,150	-	-	-	-	-	282,150	-	(282,150)	-	-
ITR - Recurring library resource cost inflation	270,000	-	-	-	-	-	270,000	-	(270,000)	-	-
ORC - New Faculty Hires - IST	225,000	-	-	-	-	-	225,000	-	(225,000)	-	-
CGS - Master of Interdisciplinary Studies	110,700	-	-	-	-	-	110,700	-	(110,700)	-	-
Rosen annual maintenance and capital improvements	-	270,000	-	-	-	-	270,000	-	(270,000)	-	-
Mini vans (2) for Soldiers to Scholars/Legislative Internships	-	-	-	-	-	94,500	94,500	-	(94,500)	-	-
Total temporary allocations (including change in carry forward)	\$ (4,775,246)	\$ (8,060,844)	\$ (2,627,735)	\$ (1,445,979)	\$ 3,480,512	\$ 82,975	\$ (13,346,317)	\$ 4,430,753	\$ 23,856,903	\$ 2,449,455	\$ 168,792,482
2015-16 Beginning of year total budget	\$ 493,311,571	\$ 109,972,247	\$ 20,325,518	\$ -	\$ 10,638,402	\$ 2,623,046	\$ 636,870,784	\$ 49,183,501	\$ 23,856,903	\$ 61,490,462	\$ 771,401,650

	University						University Reserves			
	Academic Affairs	Admin & Finance	President's Division	SMCA	Communications and Marketing	University Relations	All Divisions	Recurring	Non-Recurring	Medical School

PLANNED MID-YEAR ALLOCATIONS

Note: Amounts below are estimates. Budget will be allocated based on actual cost. Allocations are subject to availability of funds.

PERMANENT allocations to be recorded during the year

2015-16 salary increase (to be allocated among divisions)	\$ 7,400,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 8,400,000	\$ (8,400,000)	\$ -		
Faculty ADI pool	700,000	-	-	-	-	-	700,000	(700,000)	-		
Faculty/instructor promotional increase	750,000	-	-	-	-	-	750,000	(750,000)	-		
TIP, RIA, SoTL	500,000	-	-	-	-	-	500,000	(500,000)	-		
Financial aid to replace Bright Futures (+\$1m funded by fin aid fee)	2,100,000	-	-	-	-	-	2,100,000	(2,100,000)	-		
Continuation of CECS team grant initiatives	1,879,462	-	-	-	-	-	1,879,462	(1,879,462)	-		
Support staff for first 100 new faculty	1,700,000	-	-	-	-	-	1,700,000	(1,700,000)	-		
E&G interest allocation	-	4,000,000	-	-	-	-	4,000,000	(4,000,000)	-		
Estimated professional fee and need-based aid allocations	549,100	-	-	-	-	-	549,100	(549,100)	-		
Title IX coordinator	-	-	120,000	-	-	-	120,000	(120,000)	-		
Total to be allocated from recurring funds	\$ 15,578,562	\$ 5,000,000	\$ 120,000	\$ -	\$ -	\$ -	\$ 20,698,562	\$ (20,698,562)	\$ -		

TEMPORARY allocations to be recorded during the year

Recurring allocations from non-recurring funds:

Undergraduate education pilot projects/ Quality Enhancement Plan	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000	\$ -	\$ (1,000,000)		
Academic advising costs (EAB Agreement)	150,000	-	-	-	-	-	150,000	-	(150,000)		
UCF Knights Success Grant	100,000	-	-	-	-	-	100,000	-	(100,000)		
Title IX investigator	70,000	-	-	-	-	-	70,000	-	(70,000)		
Enrollment management position for IKM	55,000	-	-	-	-	-	55,000	-	(55,000)		
PO&M - FSEC	-	373,000	-	-	-	-	373,000	-	(373,000)		
Health Sciences Campus PO&M	-	252,836	-	-	-	-	252,836	-	(252,836)		
Pegasus Magazine	-	-	-	-	77,000	-	77,000	-	(77,000)		
Soldiers to Scholars positions	-	-	-	-	-	132,160	132,160	-	(132,160)		
Subtotal- recurring items	\$ 1,375,000	\$ 625,836	\$ -	\$ -	\$ 77,000	\$ 132,160	\$ 2,209,996	\$ -	\$ (2,209,996)		

Non-recurring allocations:

Investment in research (Osceola)	\$ 7,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,000,000	\$ -	\$ (7,000,000)		
2015-16 Merit based scholarships	700,000	-	-	-	-	-	700,000	-	(700,000)		
Graduate fellowships to enhance retention	243,000	-	-	-	-	-	243,000	-	(243,000)		
Graduate health insurance	100,000	-	-	-	-	-	100,000	-	(100,000)		
Creative Village project liaison	188,500	-	-	-	-	-	188,500	-	(188,500)		
CECS graduate SCH growth	150,000	-	-	-	-	-	150,000	-	(150,000)		
Furniture for Global Achievement Academy building	-	1,500,000	-	-	-	-	1,500,000	-	(1,500,000)		
Re-key building	-	200,000	-	-	-	-	200,000	-	(200,000)		
Project Surface	-	-	3,500,000	-	-	-	3,500,000	-	(3,500,000)		
Foundation salary support	-	-	667,000	-	-	-	667,000	-	(667,000)		
Performance plan payments	100,000	-	100,000	-	50,000	-	250,000	-	(250,000)		
Subtotal- non-recurring items	\$ 8,481,500	\$ 1,700,000	\$ 4,267,000	\$ -	\$ 50,000	\$ -	\$ 14,498,500	\$ -	\$ (14,498,500)		
Total to be allocated from non-recurring funds	\$ 9,856,500	\$ 2,325,836	\$ 4,267,000	\$ -	\$ 127,000	\$ 132,160	\$ 16,708,496	\$ -	\$ (16,708,496)		

2015-16 Total budget after mid-year allocations	\$ 518,746,633	\$ 117,298,083	\$ 24,712,518	\$ -	\$ 10,765,402	\$ 2,755,206	\$ 674,277,842	\$ 28,484,939	\$ 7,148,407	\$ 61,490,462	\$ 771,401,650
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University						University Reserves				
Academic Affairs	Admin & Finance	President's Division	SMCA	Communications and Marketing	University Relations	All Divisions	Recurring	Non-Recurring	Medical School	Grand Total

Recommended for approval	
<i>A. Dale Whittaker</i>	<i>8-19-15</i>
A. Dale Whittaker, Provost & Vice President for Academic Affairs Date	
Approval:	
<i>John C. Hitt</i>	<i>8/19/15</i>
John C. Hitt, President	Date

COMPOSITION OF CENTRAL RESERVE

	Recurring	Non-recurring	Total
2015-16 Beginning Reserve	\$ 49,183,501	\$ 23,856,903	
Allocations to be recorded during the year	(20,698,562)	(16,708,496)	
Second 100 Faculty and support staff	(14,717,871)		
Total available reserves as of July 1, 2016	\$ 13,767,068	\$ 7,148,407	\$ 20,915,475
Prior Year estimated reserve comparables after planned allocations:			
2014-15 Estimate per allocation Document	32,895,864	(9,298,948)	23,596,916
2013-14 Estimate per allocation Document	29,298,433	6,114,864	35,413,297
2012-13 Estimate per allocation Document	11,266,268	34,377,698	45,643,966

Donna DuBuc

From: Tracy Clark
Sent: Tuesday, January 20, 2015 6:07 PM
To: Christina Tant
Subject: RE: Colbourn Hall

Yes.

Tracy Clark, CPA
Associate Vice President for Finance and Controller
UCF Finance and Accounting
12424 Research Parkway, Ste 300
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Tracy.Clark@ucf.edu

From: Christina Tant
Sent: Tuesday, January 20, 2015 3:29 PM
To: Tracy Clark
Subject: RE: Colbourn Hall

Would it be appropriate to put that in next year's column, 2015-16?

From: Tracy Clark
Sent: Tuesday, January 20, 2015 3:16 PM
To: Christina Tant
Subject: FW: Colbourn Hall

Add \$10 million to the planned items list for renovation of Colburn.

Tracy Clark, CPA
Associate Vice President for Finance and Controller
UCF Finance and Accounting
12424 Research Parkway, Ste 300
Orlando, Florida 32826
Phone: 407-882-1006
Fax: 407-882-1102
Tracy.Clark@ucf.edu

From: William Merck
Sent: Tuesday, January 20, 2015 3:15 PM
To: Lee Kernek
Cc: Dale Whittaker; Tracy Clark; Angie Carloss
Subject: Colbourn Hall

Lee: In a meeting today with the president, Dale Whittaker said the president approved moving forward with the renovation of Colbourn Hall in conjunction with the construction of Trevor Colbourn Hall. He told the president that combining the projects would add about \$10 million to the \$28 million we had originally set aside in budget for the new construction. This additional amount to the budget is a combination of the savings identified in the original budget for

the new building plus the renovation cost for the old, helped by combining of the two projects. Original estimates were \$28 million for Trevor Colbourn, and \$20 million for Colbourn renovation. The new budget is \$23 million for Trevor Colbourn and \$15 million for Colbourn, for a total of \$38 million for both. Bill

ITEM: FF-3

**University of Central Florida
Board of Trustees**

SUBJECT: Five-year Capital Improvement Plan

DATE: July 28, 2016

PROPOSED BOARD ACTION

Approve the capital improvement plan for 2017-18 through 2021-22.

BACKGROUND INFORMATION

Each year, the university must submit an updated capital improvement plan to the Board of Governors. This plan identifies projects that will be included in the three-year Public Education Capital Outlay list, and it provides information to the State Board of Education for its request for capital project funding for 2017-18.

The capital improvement plan must be submitted to the Board of Governors' staff by August 1, 2016. The attached schedules include the following:

- projects that are proposed for inclusion in the five-year capital improvement plan
- items to be included in the 2017-18 Appropriations Authorization Bill, including projects funded by bonds, direct support organization projects, and projects requiring general revenue to operate.

We request approval to submit the 2017-18 Capital Improvement Plan with the projects listed in the attached schedules.

Supporting documentation: Attachment A: 2017-18 Five-year Plan List
Attachment B: 2017-18 Fixed Capital Outlay Projects
Requiring Board of Governors Approval to
be Constructed, Acquired, and Financed by
a University or a University Direct Support
Organization with Approved Debt
Attachment C: 2017-18 Fixed Capital Outlay Projects
That May Require Legislative
Authorization and General Revenue Funds
to Operate and Maintain

Prepared by: Lee Kernek, Associate Vice President for Administration and Finance

Submitted by: William F. Merck II, Vice President for Administration and Finance
and Chief Financial Officer

Board of Trustees Meeting - New Business

Attachment A

UNIVERSITY OF CENTRAL FLORIDA FUTURE PROJECT PROJECTIONS FOR 2017-22 2017 FIVE-YEAR FIXED CAPITAL IMPROVEMENTS PLAN								
PECO PROJECTS	REVISED 06/16/2016	2017-18 YR #1	2018-19 YR #2	2019-20 YR #3	2020-21 YR #4	2021-22 YR #5	TOTALS	RANK
UTILITIES, INFRASTRUCTURE, CAPITAL RENEWAL, AND ROOFS (P,C)		\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$70,000,000	1
INTERDISCIPLINARY RESEARCH AND INCUBATOR FACILITY (P,C,E)		\$6,042,667	\$34,529,519	\$6,042,667			\$46,614,853	2
COLBOURN HALL RENOVATION (P,C,E)		\$1,092,455	\$16,419,643	\$1,092,455			\$18,612,553	3
ENGINEERING BUILDING I RENOVATION (C,E)		\$15,986,913	\$1,059,739				\$17,046,652	4
MATHEMATICAL SCIENCES BUILDING REMODELING AND RENOVATION (C,E)		\$10,784,652	\$801,965				\$11,586,617	5
TREVOR COLBOURN HALL AND COLBOURN DEMOLITION (P,C,E)		\$38,000,000					\$38,000,000	6
JOHN C. HITT LIBRARY RENOVATION PHASE II (P,C,E)		\$3,712,800	\$31,293,600	\$3,712,800			\$38,719,200	7
UCF DOWNTOWN CAMPUS ACADEMIC BUILDING (P,C,E)		\$20,000,000					\$20,000,000	8
ARTS COMPLEX PHASE II (PERFORMANCE) (P,C,E)		\$6,472,794	\$51,782,356	\$6,472,794			\$64,727,944	9
CHEMISTRY RENOVATION (P,C,E)			\$630,848	\$11,469,981	\$630,848		\$12,731,677	10
FLORIDA SOLAR ENERGY CENTER RENOVATION (P,C,E)			\$10,000,000				\$10,000,000	11
INFRASTRUCTURE CHILLED WATER REPLACEMENT (P,C)			\$5,100,000	\$10,200,000	\$7,401,120		\$22,701,120	12
COLLEGE OF NURSING AND ALLIED HEALTH (P,C,E)				\$7,330,000	\$58,800,000	\$7,330,000	\$73,500,000	13
RESEARCH BUILDING I (P,C,E)				\$6,058,800	\$48,470,400	\$6,058,800	\$60,588,000	14
VISUAL ARTS RENOVATION AND EXPANSION (P,C,E)				\$3,505,732	\$28,045,855	\$3,505,732	\$35,057,319	15
WASTEWATER, WATER, NATURAL GAS REPLACEMENT (P,C)				\$7,140,000	\$10,200,000	\$12,780,600	\$30,120,600	16
MILLICAN HALL RENOVATION (P,C,E)				\$1,327,019	\$10,616,158	\$1,327,019	\$13,270,196	17
BUSINESS ADMINISTRATION RENOVATION (P,C,E)				\$577,278	\$11,073,255	\$577,278	\$12,227,811	18
FACILITIES & SAFETY COMPLEX RENOVATION (P,C,E)				\$5,674,889			\$5,674,889	19
RESEARCH BUILDING II (P,C,E)				\$6,609,600	\$52,876,800	\$6,609,600	\$66,096,000	20
MULTI-PURPOSE RESEARCH AND EDUCATION BUILDING (P,C,E)				\$3,247,693	\$25,981,577	\$3,247,697	\$32,476,967	21
UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)					\$77,717,325		\$77,717,325	22
TOTAL		\$116,952,281	\$164,817,670	\$95,341,708	\$345,813,338	\$55,456,726	\$778,381,723	
CITF PROJECT REQUESTS								
		2017-18 YR #1	2018-19 YR #2	2019-20 YR #3	2020-21 YR #4	2021-22 YR #5	TOTALS	RANK
JOHN C. HITT LIBRARY RENOVATION PHASE I (C,E)		\$6,854,569					\$6,854,569	1
JOHN C. HITT LIBRARY RENOVATION PHASE II (P,C,E)			\$38,719,200				\$38,719,200	2
TOTAL		\$6,854,569	\$38,719,200	\$0	\$0	\$0	\$45,573,769	
REQUESTS FROM OTHER STATE SOURCES								
		2017-18 YR #1	2018-19 YR #2	2019-20 YR #3	2020-21 YR #4	2021-22 YR #5	TOTALS	RANK
PARTNERSHIP IV (C,E)		\$14,000,000					\$14,000,000	1
INTERDISCIPLINARY RESEARCH AND INCUBATOR FACILITY PHASE II (P,C,E)		\$16,614,853					\$16,614,853	2
CREOL EXPANSION PHASE II (P,C,E)		\$6,784,228					\$6,784,228	3
STADIUM VIDEO AND SOUND (P,C,E)		\$5,000,000					\$5,000,000	4
UCF DOWNTOWN CAMPUS COMBINED HEAT AND POWER PLANT (P,C,E)		\$15,118,758					\$15,118,758	5
INTERDISCIPLINARY RESEARCH AND INCUBATOR FACILITY (P,C,E)		\$3,000,000					\$3,000,000	6
COLBOURN HALL RENOVATION (P,C,E)		\$16,000,000					\$16,000,000	7
TREVOR COLBOURN HALL (P,C,E)		\$23,000,000					\$23,000,000	8
CENTER FOR EMERGING MEDIA BUILD-OUT (P,C,E)		\$6,747,048					\$6,747,048	9
CAMPUS ENTRYWAYS		\$6,642,054					\$6,642,054	10
WELCOME CENTER EXPANSION (P,C,E)			\$7,899,794				\$7,899,794	11
CIVIL AND ENVIRONMENTAL ENGINEERING (P,C,E)			\$1,994,601	\$16,621,674	\$1,994,601		\$20,610,876	12
HOWARD PHILLIPS HALL RENOVATION (P,C,E)			\$8,257,047				\$8,257,047	13
FERRELL COMMONS (E AND G SPACE) RENOVATION (P,C,E)			\$6,534,929				\$6,534,929	14
CLASSROOM BUILDING III (P,C,E)				\$2,749,594	\$21,996,749	\$2,749,594	\$27,495,937	15
FACILITIES AND SAFETY BUILDING AT LAKE NONA (P,C,E)				\$6,873,984			\$6,873,984	16
RECYCLING CENTER (P,C)				\$2,635,027	\$21,080,218	\$2,635,027	\$26,350,272	17
HUMANITIES AND FINE ARTS II (P,C,E)				\$3,176,185	\$19,545,750	\$3,176,185	\$25,898,120	18
SOCIAL SCIENCES FACILITY				\$2,749,594	\$21,996,749	\$2,749,594	\$27,495,937	19
UTILITY INFRASTRUCTURE AND SITE WORK LAKE NONA CLINICAL FACILITIES (P,C)				\$11,456,640			\$11,456,640	20
COASTAL BIOLOGY STATION				\$5,728,320			\$5,728,320	21
UCF HEALTH EXPANSION AND WELLNESS CENTER (P,C,E)				\$1,145,664	\$9,165,312	\$1,145,664	\$11,456,640	22
UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)					\$77,717,325		\$77,717,325	23
TECHNOLOGY COMMONS II RENOVATION (P,C,E)					\$3,406,913		\$3,406,913	24
COLLEGE OF SCIENCES BUILDING RENOVATION (P,C,E)					\$3,686,124		\$3,686,124	25
SIMULATION AND TRAINING BUILDING (P,C,E)					\$2,715,608	\$21,092,103	\$23,807,711	26
BUSINESS ADMINISTRATION III BUILDING (P,C,E)					\$1,815,335	\$14,099,700	\$15,915,035	27
EDUCATION BUILDING II (P,C,E)					\$2,187,739	\$16,542,203	\$18,729,942	28
BAND BUILDING II INFRASTRUCTURE (P,C)					\$521,329	\$3,208,179	\$3,729,508	29
ARTS COMPLEX III (P,C,E)					\$1,702,096	\$12,608,120	\$14,310,216	30
INTERDISCIPLINARY RESEARCH BUILDING II (P,C,E)					\$2,637,120	\$22,784,718	\$25,421,838	31
THEATER BUILDING RENOVATION (P,C,E)						\$3,908,410	\$3,908,410	32
SUSTAINABILITY CENTER (P,C,E)						\$5,728,320	\$5,728,320	33
WET TEACHING LAB AND EXPANDED STEM FACILITY (P,C,E)						\$14,258,248	\$14,258,248	34
TOTAL		\$111,906,941	\$24,686,371	\$53,136,682	\$192,168,968	\$126,686,065	\$508,585,027	
REQUESTS FROM NON-STATE SOURCES, INCLUDING DEBT								
		2017-18 YR #1	2018-19 YR #2	2019-20 YR #3	2020-21 YR #4	2021-22 YR #5	TOTALS	RANK
ROSEN STORAGE SHED (P,C,E)		\$225,000	\$225,000				\$225,000	1
ROSEN EDUCATIONAL FACILITY (P,C,E)		\$17,000,000	\$17,000,000				\$17,000,000	2
STUDENT UNION EXPANSION (P,C,E)		\$14,000,000					\$14,000,000	3
DISTRICT ENERGY IV PLANT (P,C,E)		\$13,000,000					\$13,000,000	4
UCF DOWNTOWN CAMPUS ACADEMIC BUILDING (P,C,E)		\$40,000,000					\$40,000,000	5
UCF DOWNTOWN CAMPUS COMBINED HEAT AND POWER PLANT (P,C,E)		\$15,118,758					\$15,118,758	6
INTERDISCIPLINARY RESEARCH AND INCUBATOR FACILITY (P,C,E)		\$27,000,000					\$27,000,000	7
INSTITUTE FOR HOSPITALITY IN HEALTHCARE AT LAKE NONA (P,C,E)		\$15,300,000					\$15,300,000	8
UCF DOWNTOWN CAMPUS GARAGE I (P,C,E)		\$15,300,000					\$15,300,000	9
UCF DOWNTOWN CAMPUS GARAGE II (P,C,E)		\$15,300,000					\$15,300,000	10
USTA-AMERICAN TENNIS AT LAKE NONA - COLLEGIATE TENNIS (P,C,E)		\$6,500,000					\$6,500,000	11
HOTEL AND CONFERENCE CENTER (P,C,E)		\$76,500,000					\$76,500,000	12
SPECIAL PURPOSE HOUSING AND PARKING GARAGE (P,C,E)		\$27,540,000					\$27,540,000	13
SPECIAL PURPOSE HOUSING II (P,C,E)		\$8,812,800					\$8,812,800	14
PARKING DECKS (P,C,E)		\$18,727,200					\$18,727,200	15
GRADUATE HOUSING (P,C,E)		\$55,080,000					\$55,080,000	16
REFINANCE UCF FOUNDATION PROPERTIES		\$37,410,000					\$37,410,000	17
STUDENT HOUSING (P,C,E)		\$55,080,000					\$55,080,000	18
GARAGE EXPANSION (P,C,E)		\$12,117,600					\$12,117,600	19
REGIONAL CAMPUSES MULTI-PURPOSE BUILDINGS (P,C,E)		\$30,844,800					\$30,844,800	20
PARTNERSHIP GARAGE (P,C,E)		\$7,711,200					\$7,711,200	21
WAYNE DENSCH SPORTS CENTER EXPANSION (P,C,E)		\$5,100,000					\$5,100,000	22
BASEBALL STADIUM EXPANSION PHASE II (P,C,E)		\$3,060,000					\$3,060,000	23
SOFTBALL STADIUM EXPANSION AND ENHANCEMENTS (P,C,E)		\$1,020,000					\$1,020,000	24
BRIGHT HOUSE NETWORKS STADIUM EXPANSION AND IMPROVEMENTS PHASE I (P,C,E)		\$14,790,000					\$14,790,000	25
BASEBALL CLUBHOUSE EXPANSION AND RENOVATION (P,C,E)		\$1,020,000					\$1,020,000	26
BRIGHT HOUSE NETWORKS STADIUM EXPANSION AND IMPROVEMENTS PHASE II (P,C,E)		\$39,662,000					\$39,662,000	27
FOOTBALL BUILDING (P,C,E)		\$14,737,500					\$14,737,500	28
PARKING DECK (ATHLETIC COMPLEX)		\$5,100,000					\$5,100,000	29
TENNIS CENTER (P,C,E)		\$1,430,000					\$1,430,000	30
MULTI-PURPOSE MEDICAL RESEARCH AND INCUBATOR FACILITY (P,C,E)		\$126,817,515					\$126,817,515	31
HEALTH SCIENCES CAMPUS PARKING GARAGE I (P,C,E)		\$15,300,000					\$15,300,000	32
BIO-MEDICAL ANNEX RENOVATION AND EXPANSION (P,C,E)		\$13,056,000					\$13,056,000	33
OUTPATIENT CENTER (P,C,E)		\$82,620,000					\$82,620,000	34
CAMPUS ENTRYWAYS		\$6,642,054					\$6,642,054	35
CIVIL AND ENVIRONMENTAL ENGINEERING (P,C,E)			\$1,356,330	\$20,258,909	\$1,356,330		\$22,971,569	36
DENTAL SCHOOL (P,C,E)			\$73,000,000				\$73,000,000	37
FACILITIES AND SAFETY BUILDING AT LAKE NONA (P,C,E)				\$6,873,984			\$6,873,984	38
PARKING GARAGE VII (P,C,E)				\$22,913,280			\$22,913,280	39
UTILITY INFRASTRUCTURE AND SITE WORK LAKE NONA CLINICAL FACILITIES (P,C)				\$11,685,775			\$11,685,775	40
COASTAL BIOLOGY STATION (P,C,E)				\$5,728,320			\$5,728,320	41
UCF HEALTH EXPANSION (P,C,E)				\$1,145,664	\$9,165,312	\$1,145,664	\$11,456,640	42
UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)					\$77,717,325		\$77,717,325	43
SUSTAINABILITY CENTER (P,C,E)						\$5,728,320	\$5,728,320	44
WET TEACHING LAB AND EXPANDED STEM FACILITY (P,C,E)						\$14,258,248	\$14,258,248	45
TOTAL		\$820,397,427	\$91,581,330	\$68,605,930	\$88,238,967	\$21,132,232	\$1,089,955,886	
GRAND TOTAL		\$1,056,111,218	\$319,804,571	\$217,084,320	\$626,221,273	\$203,275,023	\$2,422,496,405	

Projects to be programmed

Projects with approved building programs

Project may be a Joint Use Facility with Valencia College, which would result in shared funding

Remodeling denotes change in space usage.

Renovation denotes no change in space usage.

Attachment B

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

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Month Of Board Approval Request	Estimated Annual Amount For Operational and Maintenance Costs	Source
UCF	Special Purpose Housing and Parking Garage	160,000	425 beds and 500 parking spaces	UCF, Orlando	\$ 27,540,000	Rental income	July	\$2,400,000	Auxiliary
UCF	Special Purpose Housing II	32,000	Fraternity, sorority, and organization housing	UCF, Orlando	\$ 8,812,800	Rental income	July	\$480,000	Auxiliary
UCF	Parking Garage VII	447,000	1,600 spaces	UCF, Orlando	\$ 22,913,280	Decal fees, traffic fines, and Transportation Access Fee	July	\$6,705,000	Auxiliary
UCF	Parking Decks	168,000	1,800 spaces	UCF, Orlando	\$ 18,727,200	Decal fees, traffic fines, and Transportation Access Fee	July	\$2,520,000	Auxiliary
UCF	Graduate Housing	150,000	Land and 600 beds	UCF, Orlando	\$ 55,080,000	Rental and retail income	July	\$2,250,000	Auxiliary
UCF	Refinance UCF Foundation properties	432,250	Consolidation and refinancing of existing UCF Foundation properties	UCF, Orlando	\$ 37,410,000	Rental and retail income	July	\$0	N/A
UCF	Student Housing	224,000	800 beds	UCF, Orlando	\$ 55,080,000	Rental income	July	\$3,360,000	Auxiliary
UCF	Garage Expansion	50,837	400 additional spaces	UCF, Orlando	\$ 12,117,600	Decal fees, traffic fines, and Transportation Access Fee	July	\$762,555	Auxiliary
UCF	Wet Teaching Lab and Expanded Stem Facility	249,450	Classrooms, labs, and offices	UCF, Orlando	\$ 142,582,482	Donations and partnerships	July	\$3,741,750	General Revenue
UCF	Facilities and Safety Building, Lake Nona	34,586	Offices, storage, and support space	UCF, Orlando	\$ 6,873,984	Donations and partnerships	July	\$518,790	General Revenue
UCF	Regional Campuses Multi-Purpose Buildings	60,000	Classrooms, labs, and offices	UCF, Orlando	\$ 30,844,800	Donations and partnerships	July	\$900,000	General Revenue
UCF	Partnership Garage	60,000	600 spaces	UCF, Orlando	\$ 7,711,200	Decal fees and revenue income	July	\$0	Auxiliary
UCF	UCF Downtown Campus Garage I	200,000	600 spaces	UCF, Orlando	\$ 15,300,000	Decal fees, traffic fines, and Transportation Access Fee	July	\$3,000,000	Auxiliary
UCF	UCF Downtown Campus Garage II	200,000	600 spaces	UCF, Orlando	\$ 15,300,000	Decal fees, traffic fines, and Transportation Access Fee	July	\$3,000,000	Auxiliary
UCF	Wayne Densch Sports Center Expansion	36,000		UCF, Orlando	\$ 5,100,000		July	\$540,000	DSO
UCF	Baseball Stadium Expansion Phase II		300 seat club, enhancements	UCF, Orlando	\$ 3,060,000	Donations	July	\$0	DSO
UCF	Softball Stadium Expansion and Renovation		400 to 600 additional seats, shade structure over grandstand, new press box	UCF, Orlando	\$ 1,020,000	Donations	July	\$0	DSO
UCF	Bright House Networks Stadium Expansion and Improvements Phase I	21,337	Additional club seating, suites, and operational booths	UCF, Orlando	\$ 14,790,000	Donations	July	\$320,055	DSO
UCF	Baseball Clubhouse Expansion and Renovation		New playing field, chair backs, audio, and lighting upgrade	UCF, Orlando	\$ 1,020,000	Donations	July	\$0	DSO
UCF	Bright House Networks Stadium Expansion and Improvements Phase II	80,000	Additional seating up to 20,000	UCF, Orlando	\$ 39,662,000	Donations	July	\$1,200,000	DSO
UCF	Football Building	45,000	Offices, storage, and support space	UCF, Orlando	\$ 14,737,500	Donations	July	\$675,000	Auxiliary
UCF	Parking Deck (Athletic Complex)	168,000	600 parking spaces	UCF, Orlando	\$ 5,100,000	Decal fees, traffic fines, and Transportation Access Fee	July	\$2,520,000	Auxiliary
UCF	Tennis Center	7,470	Championship-caliber outdoor courts and 864 grandstand seats	UCF, Orlando	\$ 1,530,000	Donations	July	\$142,050	DSO
UCF	Multi-Purpose Medical Research and Incubator Facility	200,000	Classrooms, labs, and offices	UCF, Orlando	\$ 126,817,515	Donations and partnerships	July	\$3,000,000	General Revenue
UCF	Health Sciences Campus Parking Garage	402,000	1,300 spaces	UCF, Orlando	\$ 15,300,000	Decal fees and traffic fines	July	\$6,030,000	Auxiliary
UCF	Bio-Medical Annex Renovation and Expansion	32,000	Classrooms, labs, and offices	UCF, Orlando	\$ 13,056,000	Donations and partnerships	July	\$480,000	General Revenue
UCF	Outpatient Center	237,520	Health care facilities, offices, 38 beds	UCF, Orlando	\$ 82,620,000	Donations and partnerships	July	\$3,562,800	General Revenue
UCF	Dental School	166,750	Classrooms, labs, auditorium, health care facilities, offices	UCF, Orlando	\$ 73,000,000	Donations and partnerships	July	\$2,501,250	Revenue
UCF	Utility Infrastructure and Site Work, Lake Nona Clinical Facilities		3,080 spaces	UCF, Orlando	\$ 11,685,773	Income and energy savings	July		General Revenue
UCF	UCF Health Expansion and Wellness Center	254,150	Labs, offices	UCF, Orlando	\$ 11,456,640	Donations and partnerships	July	\$3,812,250	General Revenue

Attachment C

STATE UNIVERSITY SYSTEM
Fixed Capital Outlay Projects That May Require Legislative Authorization
and General Revenue Funds to Operate and Maintain
BOB-2

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Annual Amount For Operational and Maintenance Costs	
							Amount	Source
UCF	Downtown Campus Building-I	165,000	Offices	UCF-Orlando	\$57,750,000	PECO	\$2,475,000	General Revenue
UCF	Institute for Hospitality in Healthcare at Lake Nona	36,000	Offices, Classrooms, Teaching Labs	UCF-Orlando	\$15,000,000	Grant, Private	\$540,000	General Revenue
UCF	Creative School	8,351	Classrooms, Offices	UCF-Orlando	\$5,000,000	CITF	\$125,265	General Revenue
UCF	Library Expansion Phase-I	12,609	Automatic Retrieval Center	UCF-Orlando	\$21,366,592	CITF	\$189,135	General Revenue
UCF	CREOL	2,756	Research Labs	UCF-Orlando	\$1,406,000	E&G	\$41,340	General Revenue
UCF	Center for Public Safety - Hazardous Materials Bldg.	1,400	Research Lab, Offices	UCF-Orlando	\$9,084,000	PECO	\$21,000	General Revenue
UCF	Arts Complex II Performance	2,728	Teaching Lab, Offices	UCF-Orlando	\$964,411	PECO	\$40,920	General Revenue
UCF	Business and Professional Women Building	4,038	College of Education Marriage and Family Research Institute	UCF-Main Campus	\$275,000	E&G	\$69,750	General Revenue
UCF	Florida Advanced Manufacturing Research Facility	81,750	Research Labs, Wet Labs, Collaboration Rooms, Offices	UCF - Osceola	\$75,000,000	PECO	\$1,339,850	General Revenue
UCF	Optical Materials Lab Addition	5,530	Research Labs	UCF-Orlando	\$1,640,000	E&G	\$90,634	General Revenue
UCF	Library Expansion Phase I	8,800	Automatic Retrieval Center	UCF-Orlando	\$10,771,963	CITF	\$144,228	General Revenue
UCF	Trevor Colbourn Hall	135,600	Offices, Classrooms	UCF-Orlando	\$20,000,000	E&G	\$2,222,430	General Revenue
UCF	Coastal Biology	3,000	Research	Melbourne Beach	\$2,500,000	E&G	\$49,169	General Revenue
UCF	Partnership IV Phase I and II	92,529	Office, Research Labs	UCF-Orlando	\$42,000,000	PECO	\$1,516,513	General Revenue
UCF	Florida Solar Energy Center Renovation	42,986	Offices, Research Labs	UCF-Orlando	\$10,000,000	PECO	\$704,523	General Revenue
UCF	Interdisciplinary Research and Incubator Facility	97,482	Offices, Labs	UCF-Orlando	\$46,614,853	E&G	\$1,597,691	General Revenue
UCF	Arboretum Green House	800	Teaching Lab	UCF-Orlando	\$400,000	E&G	\$13,112	General Revenue
UCF	Band Building	6,000	Teaching Labs, Offices	UCF-Orlando	\$5,000,000	E&G	\$98,338	General Revenue

**Minutes
Board of Trustees Meeting
University of Central Florida
July 28, 2016**

Chairman Marcos Marchena called the meeting of the Board of Trustees to order at 1:00 p.m. in the Live Oak Event Center on the UCF Orlando campus.

The following board members attended the meeting: Chairman Marcos Marchena, Vice Chair Robert Garvy, Ken Bradley, Clarence Brown, Christopher Clemente, Joseph Conte, Keith Koons, Beverly Seay, David Walsh, and William Yeargin. Trustees Ray Gilley and John Sprouls attended via teleconference.

WELCOME

Chairman Marchena reminded the board that the meeting was covered by the Florida Sunshine Law and that the public and press were invited to attend.

He welcomed the board members and called on Rick Schell, Associate Corporate Secretary, to call the roll. Schell determined that a quorum was present.

Marchena announced that special guest, Senate President Andy Gardiner, was in the audience and recognized him for all that he has done for UCF and the Orlando community. Marchena called on John C. Hitt who invited Senator Gardiner to join him and Chairman Marchena. Hitt remarked that UCF's successes of late are the direct results of several factors:

- location, location, location! Orlando and Central Florida destinations speak for themselves;
- a truly dedicated, motivated, and brilliant faculty who, in turn, attract a student body of talent, loyalty, and promise for the future;
- and, perhaps the most envied partnership in Florida with our local officials and elected members of the Legislature, led by Senator Gardiner and UCF alumnus Speaker of the House, Steve Crisafulli. Hitt stated that their representation of UCF's best interests through the legislative process is unprecedented!

Marchena thanked Senator Gardiner for his service to the state and Central Florida and for his support of UCF, adding that he is the type of public official who represents the very best of what we want in government.

Hitt invited Senator Gardiner to speak. Senator Gardiner said that in politics timing is everything and that we as a community had been fortunate with the type of partnerships we had formed. He was grateful to be Senate President when there were so many incredible opportunities for UCF

and our community. He expressed his gratitude to be able to serve the Florida Senate and the community, and he thanked UCF for the recognition.

Hitt presented Senator Gardiner with a framed certificate and thanked him for his representation in the Florida Senate and for all that he has done for UCF.

PUBLIC COMMENTS

Messrs. Jimmy Briggs, Jeffrey Koeppel, Justin Hemlepp, and Nicholas Bagma commented on Educational Programs item EP-4c, Amendment to University Regulation UCF 5.0021 Student Government and Registered Student Organizations.

Sean Lavin reported that he is a graduate of UCF who participated in student government and the student press and had covered UCF over the last ten years for local media. He said that he plans to attend law school at University of Florida and thanked members of UCF and the board for their service.

Marchena responded and thanked the commentators. Marchena stated that, with Trustee Clemente's modifications to item EP-4c at the Educational Programs Committee meeting held earlier in the morning, the concerns that had presented had been addressed. Trustee Garvy advised the commentators that the regulation had been amended clarifying that the Student Government Association would control the expenditures of the funds.

MINUTES

Marchena called for approval of the May 13, 2016; May 31, 2016; June 14, 2016; and July 7, 2016; meeting minutes, which were approved.

Marchena called on President John C. Hitt for remarks and introductions.

REMARKS

Hitt reported that according to the National Academy of Inventors, the University of Central Florida ranked number 19 in the nation among public universities and number 40 in the world for the number of U.S. patents it secured in 2015.

Hitt reported that UCF had secured 50 patents for invention from the U.S. Patent and Trademark Office in 2015. He stated that UCF, the University of Florida, and the University of South Florida, which together represent the Florida High Tech Corridor, had 245 U.S. patents, exceeding the Research Triangle universities—Duke University, North Carolina State University, and the University of North Carolina—which had 131 patents.

Hitt called on A. Dale Whittaker, Provost and Executive Vice President, who introduced Elizabeth Klonoff, the new Vice President for Research and Dean of the College of Graduate Studies.

Whittaker introduced and welcomed Jeff Moore, the new Dean of the College of Arts and Humanities.

Hitt called on William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer, who introduced Maureen Binder, the new Chief Human Resources Officer.

Hitt called on Danny White, Vice President and Director of Athletics, who introduced Florida native Greg Lovelady, UCF's new baseball coach.

INTRODUCTIONS

Hitt acknowledged and congratulated the following UCF faculty and staff members.

A. Faculty

Michael Chini, a post-doctoral associate in the Physics Department, was recognized by the Oak Ridge Associated Universities with a 2016 Ralph E. Powe Junior Enhancement Award in physical sciences. Recipients are given an unrestricted \$5,000 research award, which is matched by the home institution. Hitt presented him with an ORAU plaque.

Alexander Katsevich, a professor of mathematics, has received the highest international honor by the forestry industry: the 2016 Marcus Wallenberg Prize. Katsevich is well known for "The Katsevich Algorithm" and other groundbreaking techniques. His co-recipient applied Katsevich's approach to forestry. The prize comes with an award of approximately \$246,000.

College of Medicine researcher Shadab Siddiqi identified for the first time a tiny liver protein that when disrupted can lead to the nation's top killer, cardiovascular disease, as well as fatty liver disease, a precursor to liver cancer. His finding was the cover story of the June 10 edition of *The Journal of Biological Chemistry*. An associate professor in the Burnett School of Biomedical Sciences, Siddiqi's latest discovery was funded by the National Institutes of Health.

B. Employee of the Month

The Employee of the Month for May was Lindell Jones, a teacher's assistant at the Creative School for Children for almost 18 years.

The Employee of the Month for June was Susan Terrill, an office assistant in the John C. Hitt Library.

Hitt gave a special thanks to Greg Gromak for initiating and creating the lighting display on Millican Hall to honor the Pulse Nightclub victims and presented him with a framed photo of the Millican Hall lights.

REPORTS

Marchena stated that earlier this summer, Orlando was the site of the worst mass shooting in modern U.S. history. UCF was a leader in its response to the tragedy, and we continue to help the community. Marchena called on Maribeth Ehasz, Vice President for Student Development and Enrollment Services, and Grant Heston, Vice President for Communications and Marketing, who gave a report on the following, including videos.

- INFO-1 UCF's Response to the Pulse Nightclub Tragedy

Marchena welcomed Chair *Emeritus* Rick Walsh and Michael Morsberger, Vice President for Alumni Relations and Development and CEO, UCF Foundation, Inc., who reported on the following.

- INFO-2 IGNITE The Campaign for UCF

Marchena thanked Chair *Emeritus* Rick Walsh for his continued involvement with the university.

Marchena recognized Nelson Marchioli, Chair of the UCF Foundation Board, and thanked him for his dedication and contribution of time.

ADVANCEMENT COMMITTEE REPORT

Clarence Brown, Chair of the Advancement Committee, reported the highlights from the committee meeting held earlier in the day.

- Heston provided an overview of social media strategy and its impact in engaging students, alumni, and the community. Heston announced that a new UCF license plate will be available through the Department of Motor Vehicles, and it is the first new UCF design in 29 years. All license plate revenue comes to the university for the benefit of students.
- Dan Holsenbeck, Senior Vice President for University Relations, reported that his team is working with the university's general counsel to develop appropriation agreements for the distribution of funds that are approved for this year's budget. Holsenbeck stated that many legislative campaigns were underway and reminded the board of the policies and regulations surrounding lobbying at a state university, and that the university must remain neutral in all campaign activity.
- Holsenbeck introduced Greg Schuckman, Assistant Vice President for University Relations and Director of Federal Relations, who lobbies on behalf of UCF in Washington, D.C. Schuckman also works on coalitions with other universities on higher education issues.
- Michael Morsberger, Vice President for Alumni Relations and Development and CEO, UCF Foundation, Inc., presented a review of fiscal year 2015-16 and provided an update on the progress of the IGNITE campaign. The campaign has reached the halfway mark in of its fundraising towards the \$500 million goal. September 16 is the public launch of the campaign.

Marchena stated that before proceeding with the next committee report, he wished to note that at the last board meeting he had commented on the Governor Rick Scott's Degrees to Jobs Summit, and had acknowledged Hitt's and Walsh's participation on panels. Marchena then recognized Trustee Sproul's participation at the Summit as the keynote speaker at one of the luncheons.

COMPENSATION AND LABOR AD HOC COMMITTEE REPORT

John Sprouls, Chair of the Compensation and Labor Ad Hoc Committee, reported the highlights from the committee meeting held earlier in the day.

- Sprouls stated the committee reviewed the annual presidential performance and compensation review cycle and guidelines. The results will be delivered to the full board this fall.

Sprouls presented the following items for board approval.

- CL-1 Amendment to University Regulations UCF-3.0031 Employee Tuition Free Course Enrollment and UCF-9.004 UCFAA Employee Tuition Free Course Enrollment—A motion was made and unanimously passed by the board approving Amendments to University of Central Florida Regulations UCF-3.0031 and UCF-9.004.
- CL-2 Amendment to University Regulation UCF-3.0262 Meritorious Service Awards—A motion was made and unanimously passed by the board approving amendment to University of Central Florida Regulation UCF-3.0262.

EDUCATIONAL PROGRAMS COMMITTEE REPORT

Robert Garvy, Chair of the Educational Programs Committee, reported the highlights from the committee meeting held earlier in the day.

- Whittaker reported on the conferral of degrees for summer 2016.
- Whittaker reported on the Path to Preeminence, a Five-year Benchmarking Plan.
- Whittaker announced a new degree program, Master of Science in Genetic Counseling, and stated that the program will meet the standards of the Accreditation Council of Genetic Counseling. John Weishampel, Associate Dean, College of Graduate Studies, presented the program.
- Garvy summarized the amendments stated in the consent agenda items EP-4a Chapter 2 Regulations and EP-4b Chapter 5 Regulations. Marchena requested that EP-4c University Regulation UCF-5.0021 be set aside in order that the board could consider it separately.
- Whittaker reported on tenure with hire.
- Garvy noted that the bulk of the Provost's report was deferred to the next meeting due to time constraints.

FINANCE AND FACILITIES COMMITTEE REPORT

Robert Garvy, Vice Chair of the Finance and Facilities Committee, reported highlights from the committee meeting held earlier in the day.

- William F. Merck II, Vice President for Administration and Finance and Chief Financial Officer, advised the board of an upcoming item to be heard at the next Finance and Facilities Committee meeting regarding the Nicholson Fieldhouse, and he provided an overview and description of the non-air-conditioned facility. Hitt noted that he would like to have more information collected on what reasonable uses of the space there may be and the full cost of preparing the space so a rational decision could be made.

Garvy presented the following items for board approval.

- FF-1 Release of Unrestricted UCF Stadium Corporation Revenues—A motion was made and unanimously passed by the board approving the release of revenues above budgeted obligations from the UCF Stadium Corporation to the UCF Athletics Association for 2016-17.
- FF-2 2016-17 Direct Support Organizations' Budgets—A motion was made and unanimously passed by the board approving the 2016-17 operating budgets for the UCF Athletics Association, UCF Convocation Corporation, UCF Finance Corporation, UCF Foundation, UCF Research Foundation, and UCF Stadium Corporation.
- FF-4 Razing of Building 18—A motion was made and unanimously passed by the board approving the demolition of building 18, contingent upon the Educational Plant Survey recommendation, and authorizing the president to make necessary adjustments.

CONSENT AGENDA

A motion was made to accept the amended consent agenda removing EP-4c, and members of the board unanimously approved the following actions.

- **EP-1** Conferral of Degrees—Approval of the conferral of degrees at the Summer commencement ceremonies

2,973 baccalaureate degrees
496 master's degrees
159 doctoral and specialist degrees
3,628 Total
- **EP-2** Path to Preeminence—Five-year Benchmark Plan—Approval of path to preeminence: five-year benchmarking plan

- **EP-3** New Degree Program–Master of Science in Genetic Counseling–Approval of a master of science degree in genetic counseling
- **EP-4a** Amendment to Chapter 2 University Regulation–Approval of amendment to the following Chapter 2 university regulations:
 - UCF-2.001 Undergraduate Admissions
 - UCF-2.003 Admission of Graduate Students
 - UCF-2.0121 Limited Non-Degree-Seeking Applicants
 - UCF-2.0031 Post-baccalaureate Non-Degree-Seeking Applicants
- **EP-4b** Amendment to Chapter 5 University Regulation–Approval of amendment to university regulations relating to student conduct rules, student organization conduct rules, and review proceedings for violations of the conduct rules by students or student organizations. The Chapter 5 regulations to be amended are:
 - UCF-5.006 Student Rights and Responsibilities
 - UCF-5.007 Office of Student Conduct; Scope; Definitions; Student Conduct Records; Special Student Panels
 - UCF-5.008 Rules of Conduct
 - UCF-5.009 Student Conduct Review Process; Sanctions
 - UCF-5.010 Student Conduct Appeals
 - UCF-5.011 Scope; Authority; Principles of Group Responsibility; Violations of Law and Rule of Conduct Violations; Definitions; Student Organizational Conduct Records
 - UCF-5.012 Organizational Rules of Conduct
 - UCF-5.013 Organizational Conduct Review Process; Sanctions; Appeals
 - UCF-5.015 Student Academic Behavior Standards
- **EP-5** 2016-17 Tenure with Hire–Approval of tenure with hire

Marchena then presented EP-4c for the board to consider separately. He stated that the vote is to approve item EP-4c with the amendment approved by the committee, which was presented by Trustee Clemente. The amended text is as follows:

Through its own constitutional procedures and in accordance with Section 1009.24(10)(b), Florida Statutes, Student Government may determine the allocation and expenditure of that portion of University fees fixed by law and designated as Activity and Service Fees. The University must review the Activity and Service Fee budget, and the President may veto any particular line item in the budget.

- **EP-4c** Amendment to University Regulation UCF-5.0021 Student Government and Registered Student Organizations–A motion was made and unanimously passed by the board approving the amendment to university regulations relating to student government allocation and expenditure of fees with the amendment introduced by Trustee Clemente.

NEW BUSINESS

Marchena stated that he received a request from Chairman Thomas Kuntz of the Florida Board of Governors for a report on delegated authority to the president and vice presidents and advised the board that the report was ready to send. In conjunction with that response, Marchena will notify Chair Kuntz that the Nominating and Governance Committee is undertaking a review of that delegation authority.

Marchena reported that Holsenbeck and he traveled to Tallahassee to meet with the Governor's staff to discuss ongoing issues related to UCF Downtown.

ANNOUNCEMENTS AND ADJOURNMENT

Marchena announced the following upcoming meetings:

Commencement	August 6, 2016 (CFE Arena)
Football Kickoff Luncheon	August 19, 2016 (Contact Rick Schell if you would like to attend)
Board of Trustees meeting	September 15, 2016 (FAIRWINDS Alumni Center)
Board of Governors meeting	September 21-22, 2016 (New College of Florida)

Marchena adjourned the board meeting at 3:10 p.m.

Respectfully submitted: _____ Date: _____

John C. Hitt
Corporate Secretary

July 28, 2016 Board of Trustees Meeting Transcript

Speaker	Dialogue
1:37:24 - 1:48:35	
GARVY	FF-3, uh, seeking approval of five year capital improvement plan. Um, the improvement plan options for 2017 and 18 through 21 and 22. This is updated annually and submitted to the board of governors, due on August 1 st of 2016. This plan identifies projects included in the three year public education capital outlay that PECO, uh, lists and provides information to the state board of education for its request for capital project funding. If there are questions, uh, we can take them now. . .
MARCHENA	Are there any questions on this lengthy but generally pretty clear report, we can do it in the form or charts.
WALSH	Yeah, I had, uh, if I may.
GARVY	Sure, Trustee Walsh
WALSH	...Chairman, some comments, um, <i>[clears throat]</i> . . .The five year capital plan is probably one of the more important things brought before the board, uh, periodically. . .um. . . <i>[pause]</i> it. . .while the process appears to be one of. . .you know we have the ability to adjudicate project by project over essential projects individually as they arise. In the aggregate, <i>[clears throat]</i> I think there's a duty to look at the, uh, I think the aggregate amount is about 2.6 billion . . .
UNIDENTIFIED SPEAKER	Mmm hmm
WALSH	. . . in change of the five year, five year plan, um . . . it is significantly, um, larger than the past history of the Capex at the university and it's also . . . I thi- . . . probably needs to be tightly integrated with this strategic plan that we just, we just approved. And, and wrapped in to that for fitness and, and, and, and relevance to the strategic plan. And also for the five year operating budget based on our expected enrollment, growth and enrollment and our cost profile on a per credit hour basis to ensure that the, the five year plan being recommended is, you know, rational in the respect to the, the cost profile that we're looking at on a five year basis. So I, uh, just as a comment, um, I think giving its size and magnitude and recognizing that generally I think we're certainly competing with the, the other state institutions probably submitting, on the same basis, a very large request and you know, um, in, in terms of perhaps let's see what uh, let's see what sticks, if you will, let's see what flies. I do think we have a duty of uh, of uh, you know, relating the size of the "ask" to what we're budgeting for the next five years in terms of growth and also the uh, the fundraising, the Ignite plan, you know how that fits in, the quantum that we've scheduled for that. Does it relate to the Cap Ex plan because a lot of the funding would ultimately come out of that program . . . for, for its sizing and how its, how it's sized overall. So just the, those comments, uh and I think Bill ha-, had some, we'd had some dialogue over the prior week but how this, uh, you know, in, in terms of how of it would uh, relate to . . . is it, you know, a-, a-, a reasonable total "ask"? No-, without questioning one by one by one the projects in it.
MARCHENA	But both comments are, very, very appropriate comments, uh, and I think because of the magnitude of this report, you know, it generally

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Speaker	Dialogue
	comes to us, sort of, as we're in the process of having to get these final approvals 'cause they have to be submitted, um, and I know that, obviously it is impacted by whatever the legislature does. So there's sort of, you got some tight bookends. I would like for us to begin this project earlier next year, Bill, uh so that we can have a little bit more time to digest this information to specifically do not just what we normally do, but to address those two issues. Is the size of the "ask", uh, appropriate, uh, and, and carefully focused on us trying to reach the goals that we've set for ourselves and our strategic plan.
MERCK	I think that's entirely appropriate. I was just thinking listening to this what we might want to do is, uh, is as the year progresses take the current plan that we've submitted and in several of the meetings through the course of the year go back to, to update the, uh, financing and facilities committee on what, uh, projects have been funded and are moving forward and in relation to . . . we do that anyway but do it in relation to the list.
MARCHENA	Mmm hmm
MERCK	And then talk about the, some of the things that we might be considering putting it on, putting on it in the next year or some of the things we might consider taking off through the course of the year so that when we get down to the time we have to submit it, uh, there will already have been a lot of discussion through the course of the year about the things going on and off so that it'll be fairly routine at that point. I think that's a good idea.
MARCHENA	Great. Any other comments or questions? Yes sir.
HITT	As we think about the elements that wo-, would be included in evaluating the list, I, I would hope we'd find a way to include the results of the plant survey of showing an enormous deficit in space against state standards. We're short according to their methodology, uh, if, if they would suddenly miraculously find a way to fund everything we're down. Uh, I think it would be about equivalent to half of the uh, uh buildings at the University of Florida. So you know it's, we do have a big list. Some of those things are on there that are, we-, we're, we'll only build if we raise independent funds for, uh, the, the, the size of the list overall is impacted by the fact that we have very very uh, short allocations of space on this campus.
MARCHENA	Uh, uh, I, I think you know that, I think we are the most efficient in, of the universities in terms of space, uh, per student. And, uh, . . .
UNIDENTIFIED SPEAKER	Already . . .
MARCHENA	I've mentioned to Dr. Hitt to be careful because we've become so efficient at some point we just don't need a campus... <i>[laughing]</i>
HITT	There are those who would really relish that. . . <i>[laughing]</i> <i>[inaudible]</i> Mr. Chairman . . . <i>[laughing]</i>
MARCHENA	Other comments on this issue?
MERCK	Could I, we add one more thing . . .
MARCHENA	Yes sir.
MERCK	Trustee Walsh and I had some discussion about some of these items and one point that's probably worth following up on too is um, the

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Speaker	Dialogue
	deferred maintenance that, the first item that's on the list that we ask for and we're usually um, funded at a much lower number such that our deferred maintenance is grown to something in the neighborhood of a 160 million.
UNIDENTIFIED SPEAKER	Right.
MERCK	It was higher than that but um, uh, I know using carryforward funds and some other things Lee Kernek in her operation have managed to bring that down considerably in the last few years but it's still con-, keeps growing back. Um, it, it's something that's of concern to all of the state universities. Each time we have one of our meetings with the vice presidents for administration and finance from the different universities that always comes up. It's an issue state wide. And we've had a lot of conversations with the Board of Governors too to help try to get that through when legislative appropriations are being made. Unfortunately, maintenance is not something that gets people super excited like a brand new building, um, in somebody's home territory. So it's a constant battle trying to get money to take care of the buildings we have.
MARCHENA	I-, it is a constant battle but it is a battle that I think we can help in and as we talk to, uh, Board of Governors members . . . mention this issue 'cause it did not just come from the staff. They recognize the importance of this issue from the board. As you talk to legislatures that you know, uh, mention it to them so that they know it's important to us and we're looking for them to assist us, uh, with these types of deficits.
GARVY	Mr. Chairman?
MARCHENA	Yes sir.
GARVY	If I may comment on this as well, yea I, I, I consider this to be a very, very critical issue, because this deferred maintenance now in the area of 150 million dollars or more, at some point you reach a tipping point. .
MARCHENA	Mmm hmm.
GARVY	. . . and you cannot catch up. And the state university system . . . all the universities, I don't, I don't, I don't know what the total number is for all the universities but, clearly it's a very, very large number, uh, certainly over a half a billion and maybe approaching a billion dollars. This is a very serious item because you, you saw some of the pictures that were in the report, that were provided to us.
MARCHENA	Mmm hmm.
GARVY	Um, you know we have, we have uh, uh, buildings that are deteriorating significantly and if we're not able to maintain them, you know we're gonna reach a point that's, uh, uh, uh, a very serious problem for us. So I fully support and endorse your, your comments here and wo-, actually would like to see us develop an action plan, to move, move this up, uh, uh , on the uh, attention, um, um scale for our legislatures because it is a, it is a key issue.
MARCHENA	Any other comments or questions on this issue? Thank you very much uh, uh just for bringing up this issue.
WALSH	One, if I could reinforce that the deferred maintenance, I think we all

July 28, 2016 Board of Trustees Meeting Transcript

Speaker	Dialogue
	share that's a huge, huge need and probably should it's appropriate it's front and center on top of the list and maybe the number could even be bigger for what we're, we're requesting in that area. When we get to FF-4, I think we see that, Colbourn Hall is kind of a poster child for the need to be spending and keeping up with deferred maintenance spending as we go forward.
MARCHENA	So I'm looking for a motion to approve FF-3.
GARVY	Yes, <i>[clears throat]</i> I'd like to make a motion to approve uh, FF-3
MARCHENA	Is there a second?
UNIDENTIFIED SPEAKER	Second.
MARCHENA	There's a second, any further questions or comments? Hearing none, all of those in favor of the motion please signify by saying aye.
MULTIPLE SPEAKERS	Aye . . . aye.
MARCHENA	All of those opposed like sign? The motion carries.
GARVY	Thank you Mr. Chairman. FF-4 is approval of razing of building 18, uh, the approval was provided by the committee and recommend approval to the full board. Uh, building 18 is also known as Colbourn Hall. Due to poor condition and problems costing in excess of 15 million dollars, which is greater than 60% of, of the building cost to correct, staff has requested a spot education plant survey to obtain recommendation for demolition for the Board of Trustees to review and approve and then transmit to the Board of Governors for validation. I'd just like to note that the statute referenced in FF-4 in the action item is actually incorrect. The correct reference should be, uh, Board of Governor's regulation 9.004, just for the record.
MARCHENA	Great. Thank you. Uh, would you make a motion?
GARVY	I make a motion to approve FF-4.
MARCHENA	Is there a second?
UNIDENTIFIED SPEAKER	Second.
MARCHENA	Uh, any questions or comments on razing of building 18? Hearing none, all those in favor of approval of FF-4 please signify by saying aye.
UNIDENTIFIED SPEAKER	Aye . . . aye.
MARCHENA	All those opposed? Like sign, the motion carries.
[END OF TRANSCRIPTION]	



Fixed Capital Outlay Budget
Request

2017 - 2018



Office of the President

July 21, 2016

Mr. Tim Jones
Chief Financial Officer
Board of Governors
State University System of Florida
325 West Gaines Street, Suite 1614
Tallahassee, Florida 32399-0400

Dear Mr. Jones:

Pursuant to your request dated April 28, 2016, to the university presidents, enclosed is the University of Central Florida's Five-Year Fixed Capital Improvement Plan for the years 2017-2022.

This list revises UCF's primary priorities of previous years in accordance with the funding allocated by the Board of Governors, and it also includes additional facilities consistent with recent program developments and needs of the university. Use of existing space was considered in the prioritization of UCF's projects. We have also increased the cost of projects to reflect current construction-cost inflation.

Colbourn Hall Renovation has been deleted, subject to State approvals for the demolition of the building. The Trevor Colbourn Hall line has been revised to include the Colbourn Hall demolition, and the line item now reflects the additional costs for the demolition and added square footage.

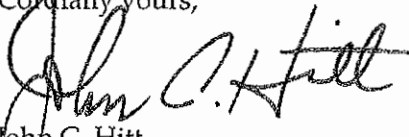
The College of Nursing is now known as The College of Nursing and Allied Health. The proposed facility has increased in square footage and cost, and it has moved from number 16 to 11 on the plan.

The following projects have been added to the three-year window: Florida Solar Energy Center Renovation; Research Building I and II; Infrastructure Chilled Water Replacement; and Wastewater, Water, Natural Gas Replacement.

The UCF Five-Year Fixed Capital Improvement Plan was reviewed and approved by the University Board of Trustees on June 27, 2016.

Please have members of your staff contact Lee Kernek at (407) 823-3812 or Gina Seabrook at (407) 823-5894 if they have questions or need additional information. Thank you.

Cordially yours,



John C. Hitt
President

Attachments

c: Mrs. Lee Kernek
Mr. William F. Merck, II
Mr. William Martin
Mrs. Gina Seabrook

Project Summary of Agency CIP
(CIP-2)

STATE UNIVERSITY SYSTEM
Five-Year Capital Improvement Plan (CIP-2) and Legislative Budget Request
Fiscal Years 2017-18 through 2022

University of Central Florida

PECO-ELIGIBLE PROJECT REQUESTS

Priority No	Project Title	2017-18 Year 1	2018-19 Year 2	2019-20 Year 3	2020-21 Year 4	2021-22 Year 5
1	UTILITIES, INFRASTRUCTURE, CAPITAL RENEWAL AND ROOFS (P,C)	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000
2	INTERDISCIPLINARY RESEARCH AND INCUBATOR FAC. (P,C,E)	\$6,042,667	\$34,529,519	\$6,042,667		
3	ENGINEERING BUILDING I RENOVATION (C,E)	\$15,986,913	\$1,059,739			
4	MATH SCIENCES BUILDING, REMODELING AND RENOVATION (C,E)	\$10,784,652	\$801,965			
5	TREVOR COLBOURN HALL AND COLBOURN DEMOLITION (P,C,E)	\$38,000,000				
6	JOHN C. HITT LIBRARY RENOVATION PHASE II (P,C,E)	\$3,712,800	\$31,293,600	\$3,712,800		
7	ARTS COMPLEX PHASE II (PERFORMANCE) (P,C,E)	\$6,472,794	\$51,782,356	\$6,472,794		
8	CHEMISTRY RENOVATION (P,C,E)		\$630,848	\$11,469,981	\$630,848	
9	FLORIDA SOLAR ENERGY CENTER RENOVATION (P,C,E)		\$10,000,000			
10	INFRASTRUCTURE CHILLED WATER REPLACEMENT (P,C)		\$5,100,000	\$10,200,000	\$7,401,120	
11	COLLEGE OF NURSING AND ALLIED HEALTH (P,C,E)			\$7,350,000	\$58,800,000	\$7,350,000
12	RESEARCH BUILDING I (P,C,E)			\$6,058,800	\$48,470,400	\$6,058,800
13	VISUAL ARTS RENOVATION AND EXPANSION (P,C,E)			\$3,505,732	\$28,045,855	\$3,505,732
14	WASTEWATER, WATER, NATURAL GAS REPLACEMENT (P,C)			\$7,140,000	\$10,200,000	\$12,780,600
15	MILICAN HALL RENOVATION (P,C,E)			\$1,327,019	\$10,616,158	\$1,327,019
16	BUSINESS ADMINISTRATION RENOVATION (P,C,E)			\$577,278	\$11,073,255	\$577,278
17	FACILITIES & SAFETY COMPLEX RENOVATION (P,C,E)			\$5,674,889		
18	RESEARCH BUILDING II (P,C,E)			\$6,609,600	\$52,876,800	\$6,609,600
19	MULTI-PURPOSE RESEARCH AND EDUCATION BUILDING (P,C,E)			\$3,247,693	\$25,981,577	\$3,247,697
20	UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)				\$77,717,325	
TOTAL		\$94,999,826	\$149,198,027	\$93,389,253	\$345,813,338	\$55,456,726

CITF PROJECT REQUESTS

Priority No	Project Title	Year 1	Year 2	Year 3	Year 4	Year 5
1	JOHN C. HITT LIBRARY RENOVATION PHASE I (P,C,E)	\$6,854,569				
2	JOHN C. HITT LIBRARY RENOVATION PHASE II (P,C,E)		\$38,719,200			
TOTAL		\$6,854,569	\$38,719,200	\$0	\$0	\$0

REQUESTS FROM OTHER STATE SOURCES

Priority No	Project	Year 1	Year 2	Year 3	Year 4	Year 5	Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)
21	INTERDISCIPLINARY RESEARCH AND INCUBATOR FACILITY PHASE II (P,C,E)	\$18,614,853					Engrg-Arts Sciences	24140	35895	16,614,853	\$ 463
22	CREOL EXPANSION PHASE II (P,C,E)	\$6,784,228					Total Campus	10208	13900	6,784,228	\$ 488
23	STADIUM VIDEO AND SOUND (P,C,E)	\$5,000,000					Total Campus	N/A		5,000,000	#DIV/0!
24	UCF DOWNTOWN CAMPUS COMBINED HEAT AND POWER PLANT (P,C,E)	\$15,118,758					Total Campus	11000	13000	15,118,758	\$ 1,163
25	CAMPUS ENTRYWAYS	\$6,642,054					Total Campus	N/A	N/A	6,642,054	#DIV/0!
26	WELCOME CENTER EXPANSION (P,C,E)		\$7,899,794				Total Campus	11650	16210	7,899,794	\$ 487
27	CIVIL AND ENVIRONMENTAL ENGINEERING (P,C,E)		\$1,994,601	\$16,621,674	\$1,994,601		Clge of Engr	32450	48,840	20,610,876	\$ 422
28	HOWARD PHILLIPS HALL RENOVATION (P,C,E)		\$8,257,047				Total Campus	56903	84619	8,257,047	\$ 128
29	FERRELL COMMONS (E AND G SPACE) RENOVATION (P,C,E)		\$9,534,929				Total Campus	19014	28520	6,534,929	\$ 229
30	CLASSROOM BUILDING III (P,C,E)			\$2,749,594	\$21,996,749	\$2,749,594	Total Campus	43857	85666	27,495,937	\$ 419
31	FACILITIES AND SAFETY BUILDING AT LAKE NONA (P,C,E)			\$6,873,984			Total Campus	10000	23842	6,873,984	\$ 284
32	RECYCLING CENTER (P,C,E)			\$2,635,027	\$21,080,218	\$2,635,027	Total Campus	46675	59160	26,350,272	\$ 445
33	HUMANITIES AND FINE ARTS II (P,C,E)			\$3,176,185	\$19,545,750	\$3,176,185	Clge Arts Sci	40724	61086	25,898,120	\$ 424
34	SOCIAL SCIENCES FACILITY (P,C,E)			\$2,749,594	\$21,966,749	\$2,749,594	Total Campus	45700	66150	27,495,937	\$ 416
35	UTILITY INFRASTRUCTURE AND SITE WORK, LAKE NONA CLINICAL FACILITIES (P,C)			\$11,456,640			Total Campus	N/A		11,456,640	#DIV/0!
36	COASTAL BIOLOGY STATION			\$5,728,320			Clge of Sciences	17544	26316	5,728,320	\$ 218
37	UCF HEALTH EXPANSION AND WELLNESS CENTER (P,C,E)			\$1,145,664	\$8,165,312	\$1,145,664	Clge of Medicine	14500	21750	11,458,640	\$ 527

Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Educational Plant Survey Recommended Date/Rec No.	Approved by Law - Include GAA reference
Total Campus	N/A		79000000	#DIV/0!	June-16	
Engrg-Arts Sciences	63119	93408	46614853	\$ 469	June-16	
Clge of Engineering	118186	130885	17048952	\$ 130	February-11	HB 5001 Section 2
CAS-CHPA	100368	106523	11586517	\$ 109	February-11	HB 5001 Section 2
CAS-GHPA	90515	135600	38000000	\$ 280	June-16	
Total Campus	109550	226387	38719200	\$ 171	June-16	
Total Campus	113155	149394	64727944	\$ 433	June-16	
Clge Arts Sciences	43265	49073	12731677	\$ 85	June-16	
Clge of Engineering	37777	56666	10000000	\$ 175		
Total Campus	N/A	N/A	22701120	#DIV/0!		
Clge of Nursing	119220	176250	73500000	\$ 417	June-16	
Clge of Engineering	85019	126258	60588000	\$ 480		
Clge Arts Sciences	43000	60850	35057319	\$ 576	June-16	
Total Campus	N/A		30120600	\$ 239		
Total Campus	88586	87752	13270196	\$ 218	June-16	
Total Campus	118824	121074	12227811	\$ 101	June-16	
Total Campus	17400	26100	5674889	\$ 217	June-16	
Clge of Engineering	91929	136623	66096000	\$ 484		
Total Campus	51817	77726	32476967	\$ 418	June-16	
Clge Arts Sciences	150325	222000	77717325	\$ 350		

Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Committee Approval Date
Total Campus	52627	58066	33001841	\$ 558	05/16/12
Total Campus	261487	274837	38719200	\$ 141	05/17/12

CIP2

Clege Arts Sciences	150325	222000	77,717,325 \$	350
Total Campus	6570	9555	3,406,913 \$	268
Clege Arts Sciences	19998	25497	3,686,124 \$	145
Clege of Engr	52425	52341	26,523,319 \$	506
Clege of Business	26091	41782	17,730,370 \$	424
Clege Education	33620	50430	20,917,681 \$	415
Total Campus	9587	12714	4,250,638 \$	334
Total Campus	27860	38421	18,012,312 \$	417
Engrg-Arts Sciences	38550	57825	28,025,958 \$	485
Clege Arts Sciences	22064	29469	3,908,410 \$	133
Total Campus	6060	8800	5,729,320 \$	53
Total Campus	164500	240950	142,582,482 \$	592

Project	Year 1	Year 2	Year 3	Year 4	Year 5
STUDENT UNION EXPANSION	\$14,000,000				
UCF DOWNTOWN CAMPUS COMBINED HEAT AND POWER PLANT (P,C,E)	\$15,118,758				
INSTITUTE FOR HOSPITALITY IN HEALTHCARE AT LAKE NONA (P,C,E)	\$15,300,000				
UCF DOWNTOWN CAMPUS GARAGE II (P,C,E)	\$15,300,000				
SPECIAL PURPOSE HOUSING AND PARKING GARAGE (P,C,E)	\$27,540,000				
SPECIAL PURPOSE HOUSING II (P,C,E)	\$8,812,800				
PARKING DECKS (P,C,E)	\$18,727,200				
GRADUATE HOUSING (P,C,E)	\$55,060,000				
REFINANCE UCF FOUNDATION PROPERTIES	\$37,410,000				
STUDENT HOUSING (P,C,E)	\$55,080,000				
GARAGE EXPANSION (P,C,E)	\$12,117,600				
REGIONAL CAMPUSES MULTI-PURPOSE BUILDINGS (P,C,E)	\$30,844,800				
PARTNERSHIP GARAGE (P,C,E)	\$7,711,200				
WAYNE DENSCHE SPORTS CENTER EXPANSION (P,C,E)	\$5,100,000				
BASEBALL STADIUM EXPANSION PHASE II (P,C,E)	\$3,050,000				
SOFTBALL STADIUM EXPANSION AND ENHANCEMENTS (P,C,E)	\$1,020,000				
BRIGHT HOUSE NETWORKS STADIUM EXPANSION & IMPROVEMENTS PHASE I (P,C,E)	\$14,750,000				
BASEBALL CLUBHOUSE EXPANSION AND RENOVATION	\$1,020,000				
BRIGHT HOUSE NETWORKS STADIUM EXPANSION & IMPROVEMENTS PHASE 2 (P,C,E)	\$39,652,000				
FOOTBALL BUILDING (P,C,E)	\$14,737,500				
PARKING DECK (P,C,E)	\$5,100,000				
MULTI-PURPOSE MEDICAL RESEARCH AND INCUBATOR FACILITY (P,C,E)	\$126,817,515				
HEALTH SCIENCES CAMPUS PARKING GARAGE I (P,C,E)	\$15,300,000				
BIO-MEDICAL ANNEX RENOVATION AND EXPANSION (P,C,E)	\$13,056,000				
OUTPATIENT CENTER (P,C,E)	\$82,620,000				
CAMPUS ENTRYWAYS	\$6,642,054				
ROSEN STORAGE SHED (P,C,E)		\$225,000			
ROSEN EDUCATIONAL FACILITY (P,C,E)		\$17,000,000			
CIVIL AND ENVIRONMENTAL ENGINEERING (P,C,E)		\$1,356,330	\$20,258,909	\$1,356,330	
DENTAL SCHOOL (P,C,E)		\$73,000,000			
FACILITIES AND SAFETY BUILDING, LAKE NONA (P,C,E)			\$6,873,984		
PARKING GARAGE VII (P,C,E)			\$22,913,280		
UTILITY INFRASTRUCTURE AND SITE WORK, LAKE NONA CLINICAL FACILITIES (P,C)			\$11,685,773		
COASTAL BIOLOGY STATION			\$5,728,320		
UCF HEALTH EXPANSION (P,C,E)			\$1,145,664	\$9,165,312	\$1,145,664
UCF DOWNTOWN CAMPUS BUILDING II (P,C,E)				\$77,717,325	
SUSTAINABILITY CENTER (P,C,E)					\$5,728,320
WET TEACHING LAB AND EXPANDED STEM FACILITY (P,C,E)					\$14,258,248
TOTAL	\$641,967,427	\$91,581,330	\$68,605,930	\$86,238,967	\$21,132,232

Academic or Other Programs to Benefit from Projects	Net Assignable Square Feet (NASF)	Gross Square Feet (GSF)	Project Cost	Project Cost Per GSF (Proj. Cost/ GSF)	Expected Source of Funding (if known)	Master Plan Approval Date
Total Campus	21466	32199	14,000,000	\$	435 PRIVATE	November-14
Total Campus	11000	13000	15,118,758	\$	1,369 E&G	
Total Campus	24000	36000	15,300,000	\$	425 PRIVATE/GRANT	November-14
Total Campus	N/A	200000	15,300,000	\$	77 BONDS	
Total Campus	N/A	168000	27,540,000	\$	164 BONDS	November-14
Total Campus	42857	60000	8,812,800	\$	147 BONDS	November-14
Total Campus	N/A	168000	18,727,200	\$	111 BONDS	November-14
Total Campus	107142	150000	55,080,000	\$	367 BONDS	November-14
Total Campus	N/A	432250	37,410,000	\$	87 PRIVATE	November-14
Total Campus	160000	224000	55,080,000	\$	246 BONDS	November-14
Total Campus	N/A	50837	12,117,600	\$	238 BONDS	November-14
Total Campus	133333	200000	30,844,800	\$	154 PRIVATE	November-14
Total Campus	N/A	60000	7,711,200	\$	129 BONDS	November-14
Total Campus		36000	5,100,000	\$	142 PRIVATE	November-14
Total Campus	N/A	5700	3,060,000	\$	537 PRIVATE	November-14
Total Campus	N/A		1,020,000	\$	#DIV/0! PRIVATE	November-14
Total Campus	15240	21337	14,790,000	\$	693 PRIVATE	November-14
Total Campus	5000	7000	1,020,000	\$	146 PRIVATE	November-14
Total Campus	N/A	80000	38,662,000	\$	496 PRIVATE	November-14
Total Campus	N/A	45000	14,737,500	\$	328 PRIVATE	November-14
Total Campus		168000	5,100,000	\$	30 PRIVATE	November-14
Cllge of Medicine	132018	198027	126,817,515	\$	640 PRIVATE	November-14
Total Campus		402000	15,300,000	\$	38 BONDS	November-14
Cllge of Arts & Scienc	21333	32000	13,056,000	\$	408 PRIVATE	November-14
Total Campus	78833	119750	82,620,000	\$	626 PRIVATE	November-14
Total Campus	N/A	N/A	6,842,054	\$	#DIV/0! AUXILIARY	November-14
Cllge Hospitality	838	896	225,000	\$	251 PRIVATE	November-14
Cllge Hospitality	34666	52000	17,000,000	\$	327 PRIVATE	November-14
Cllge of Engr	33450	48,840	22,971,569	\$	470 AUXILIARY	November-14
Total Campus	111166	166750	73,000,000	\$	438 PRIVATE	November-14
Total Campus	21053	31579	6,873,984	\$	218 BONDS	November-14
Total Campus	N/A	447000	22,913,280	\$	51 BONDS	November-14
Total Campus	N/A	N/A	11,685,773	\$	#DIV/0! PRIVATE	November-14
Cllge of Sciences	16544	23161	5,728,320	\$	PRIVATE	November-14
Total Campus	14500	21750	11,456,640	\$	527 PRIVATE	November-14
Total Campus	150325	222000	77,717,325	\$	350 PRIVATE	November-14
Total Campus	8800	13200	5,728,320	\$	434 PRIVATE	November-14
Total Campus	164500	240650	142,582,482	\$	592 PRIVATE	November-14

Short-Term Plan: 2017 – 2022
(CIP-3)

CIP-3
PROJECT EXPLANATION
(Expansion and Remodeling Projects)

Projects Requiring Legislative Approval

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Projects Requiring Legislative Approval

AGENCY University of Central Florida

BUDGET ENTITY SUS

PROJECT TITLE Utilities Infrastructure, Capital
Renewal, and Roofs

AGENCY PRIORITY 1

DATE BLDG PROGRAM

APPROVED

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

UCF strives to be a good steward of state funds, and as such has historically had the challenge of balancing the maintenance and operations of its buildings with the need to repair, replace and upgrade its utilities and infrastructure. In the recent past, when faced with years of legislative budget cuts and reduced funding, UCF placed its highest priority on repairs and projects related to life safety and the Americans with Disabilities Act (ADA). Consequently, a multitude of other maintenance issues were necessarily deferred, creating a backlog of utilities, infrastructure, plant modernization, capital renewal, and roofing needs.

Further delay in funding utilities infrastructure and continuing to defer maintenance will result in financial and technical risk, with unpredictable mechanical and utility failures and impacts to human health, causing operations to respond in a costlier, reactive versus proactive way.

To reduce UCF's impact on GHG emissions, building operation, and utility costs, the university owns and operates a diverse utility production and distribution network portfolio that includes: water, chilled water, thermal storage, waste-water transportation, re-use, renewable energy, and distributed generation, with an annual operating budget of \$42,000,000. Institutional ownership and operation of these assets are viable from both financial and operational perspectives. These facilities provide the majority of utility services to the main campus, or offset a fractional balance from each third-party utility provider.

One of the major challenges facing UCF's utility production and distribution portfolio is instructionally-owned utility systems that lack years of dedicated capital funding to replace long-lived and expensive utilities infrastructure in a timely manner. These utility production and distribution facilities, which are composed of unseen capital assets, directly support the mission-critical objectives of UCF's main campus, and require periodic major investments. Building and utility production and distribution systems inevitably deteriorate, become obsolete, and require replacement. Underfunding of routine repair, preventative maintenance, and capital renewal and replacement leads to a backlog of deferred maintenance, which results in unreliable infrastructure. All of this can lead to poorly functioning buildings, unsightly grounds, faulty utility production, and distribution systems that jeopardize the programmatic usability of mission-critical research and academic facilities. Additionally, energy and natural resources are wasted as these systems become less efficient over time.

Even though condition needs for UCF's infrastructure and utility operations were granted in late 2013, to operate as an auxiliary unit to support the university's mission, capital renewal remains a major constraint. With this separate auxiliary funding mechanism, UCF established perpetual "break even" utility operation models for the cost of plant production and personnel. Currently,

this model does not account for depreciation of millions of dollars of existing assets and capital replacement and renewal of plant production buildings and systems that are up to 45 years old.

In order to reduce the burden of utility peak demands or flows that negatively impact UCF's distribution systems and reliability, the university has identified key energy demand drivers through our growing campus population that are influenced by building size, complexity, occupancy, and classification. Equally important is UCF's charge to become carbon neutral by 2050 and conserve the State of Florida's precious water resources.

UCF's [Green Building Construction and Renovation Requirements](#) prescribe the minimum facility energy reduction and water conservation requirements, using ASHRAE standards as a baseline. Depending on size and building complexity, many of UCF's newly constructed buildings are LEED certified, often using 10-30% less energy and 15-35% less water than the ASHRAE baseline building, in support of the President's Climate Action Plan. While designing and constructing facilities with energy- and water-conscious features in mind to reduce UCF's utility system demands, we must remain vigilant about replacing end-of-life systems and growing infrastructure needs.

Since 2011, the university has used its 600 utility sub-meters to collect data for monitoring, billing, energy management, and cost recovery. Data analysis has provided an understanding of diversified peaks that include load factor, annual electricity, cooling units consumed, and natural gas consumed and normalized, as well as current load duration curves. The data is also used to approach new construction and facility improvement projects with a focus on reducing water and energy consumption, to help curb infrastructure and distribution demands. Within UCF's green building design, technologies are selected based on historical and current data analysis, industry best practices, and a comparison of the costs and benefits associated with environmental impact.

To summarize, deferring maintenance dramatically reduces the normal expected life cycle of materials, systems, and buildings, thus increasing operational costs in the long run. As the university continues to grow and construct facilities, an organized, systematic approach to scheduling and funding deferred maintenance is essential to protect university assets for future generations.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and

CIP-3 SHORT-TERM PROJECT EXPLANATION

design parameters achieved.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 1.3, Utilities Infrastructure Improvements.

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 4AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Interdisciplinary Research
and Incubator FacilityAGENCY PRIORITY 2, 21

DATE BLDG PROGRAM _____

APPROVED _____

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

UCF has a critical need for research space to accelerate scientific discovery in a collaborative environment, increase research funding, support Science, Technology, Engineering and Math (STEM) and increase the number of STEM graduates, and produce high-paying jobs to help drive Florida's economy. 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 the Interdisciplinary Research and Incubator Facility (IRIF) currently produce \$26 million in external funding. Subsequent funding should increase dramatically with this new space. The dollar value of the project to the local economy will be \$10.8 million in the first year, \$61.7 million in the second year, and \$10.8 million recurring in the third year and beyond, as estimated by the UCF Institute for Economic Competitiveness. Three hundred fifty construction jobs and eighty-three permanent jobs will be created.

Crosscutting research is a critical component in addressing many of the issues facing today's new economy. Traditional academic boundaries inherently slow the creative process necessary to solve today's complex issues in research and delay technology transfer and commercial exploitation. Interdisciplinary research has led the way in the discovery and creation of new disruptive technologies that have fueled economic growth and prosperity in the US. Florida is building a strong base of faculty with a broad base of technological expertise in key areas of science and technology. The ability to leverage the talents of faculty from various disciplines creates synergies, value, and opportunities well beyond the sum of the individual parts.

The IRIF is a multi-disciplinary research building with space allocated to multiple disciplines within the cluster hires (College of Arts and Humanities (CAH), College of Business Administration (CBA), College of Medicine (COM), College of Optics and Photonics (COP), College of Health and Public Affairs (COHPA), College of Sciences (COS), and the College of Engineering and Computer Science (CECS)), as well as individual researchers in the CECS and the COS. Centers and institutes from the Office of Research and Commercialization will also occupy space in the IRIF building. These groups include Nanoscience Technology Center (NSTC) and Materials Characterization Facility (MCF). All of these groups are highly collaborative, recognizing that dividing lines between various traditional disciplines are blurring and new disciplines are emerging, leading to more rapid innovation. The best way to spur this new paradigm is to provide interdisciplinary research facilities like the IRIF, where the various disciplines are housed together to create a new climate of interaction and collaboration. This facility will enable the university to cost-effectively share capital and equipment investments, enhance researcher collaboration, and reduce the time to move discoveries to commercial markets.

CIP-3 SHORT-TERM PROJECT EXPLANATION

UCF has developed a number of highly successful partnerships, research centers, and a nationally ranked technology incubator, which have resulted in expansion into the adjacent Central Florida Research Park. This growth has enabled research centers to develop in their own right. However, that physical growth has been “ad-hoc” in leased, off-campus dislocated facilities, which inhibits the fulfillment of the centers’ potential. Further, the separation of on and off-campus facilities has created limitations for crossing disciplines. By developing a research facility on the main campus that will focus on multiple disciplines, energy research will be enhanced, and the environment within the IRIF will create collaborations.

Basic and applied research by our faculty is the bedrock for the spinoff of new products to the commercial sector and the spinoff of new companies. The most impactful research advances usually involve multidisciplinary teams of researchers. This facility enables such multidisciplinary projects and advances, and positions UCF to compete for larger research projects, which in turn will generate jobs in our community and state. UCF is making great strides in implementing the cycle described herein; however, further quality research is severely limited by our desperate need for additional research space.

This facility will provide the infrastructure, atmosphere, and culture necessary to build strong interdisciplinary teams and programs in research, technology transfer, and commercialization. The IRIF will provide facilities and laboratories for multi-scale materials research and development related to innovative and efficient energy production, storage, and utilization. The facility will enable fundamental and applied interdisciplinary research, create a bridge between technology development and technology transfer and commercialization, and enable UCF to become an integral partner in economic development activities in the region and state.

As a metropolitan university serving the needs of Central Florida, the addition of this building and its associated research activities will advance the university’s goals of:

- Offering the best undergraduate education available in Florida;
- Achieving international prominence in key programs of graduate study and research;
- Providing international focus to our curricula and research programs;
- Becoming more inclusive and diverse; and
- Being America’s leading partnership university.

The building will provide researchers with laboratory space conducive for interaction, collaboration and professional development. The IRIF will promote multidisciplinary research by placing faculty, research scientists/postdocs, and students in the same building where they will interact on a daily basis, learn each other’s “language,” and build collaborations. Co-location with the facility will dramatically increase research efficiency, and potentially cut years off the time required to produce new technology.

Research labs are essential for STEM-centered research and for thesis and dissertation work by students in disciplines with active graduate programs, especially at the doctoral level. Many cases exist on campus where the same lab is used both for graduate coursework, thesis and/or

CIP-3 SHORT-TERM PROJECT EXPLANATION

dissertation work, and faculty research. Core graduate student academic work in STEM areas focuses on thesis and/or dissertation that is, in fact, mostly faculty-led research activities.

Space utilization exceeds the current statutory requirement of 60% student stations occupied at a minimum of 40 hours per week, and research labs are operating “at or above capacity.” Based on the 2015 educational plant survey analysis for space needs, the university has a shortfall of research labs, especially wet labs and teaching labs, and requires this new building to meet the current and growing demands of the university. UCF’s need for research space and a lack of state funding has forced us to reallocate the space that would’ve be assigned to the incubators in the building to our incoming new faculty. Making full use of regular academic buildings, which in some cases includes utilization of spaces designed originally for other purposes (laboratories, theaters, library study areas, etc.), the university has been forced over the past several years to rent temporary facilities both on and off campus for research.

Delayed funding of this facility would have many negative consequences. 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; and UCF’s ability to increase its output of STEM graduates is affected.

Past experience has shown that quality research facilities generate \$400 to \$500 per square foot per year in external funding, and each \$1,000,000 of additional research funding produces about one additional patent per year.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university’s mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF’s core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university’s sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will

CIP-3 SHORT-TERM PROJECT EXPLANATION

utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.1, Interdisciplinary Research and Incubator Facility.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Interdisciplinary Research and Inc. Fac.

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to		Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date				
		Gross Conversion	Gross Area (GSF)								
Classrooms		1.5	0	274	0						
Teaching Labs		1.5	0	268	0						
Research Labs	36,355	1.5	54,533	375	20,449,688						
Study		1.4	0	286	0						
Instructional Media		1.5	0	215	0						
Auditorium/Exhibition		1.2	0	310	0						
Gymnasiums		1.2	0	225	0						
Offices	14,059	1.5	21,089	284	5,989,134						
Campus Support Serv	12,705	1.4	17,787	276	4,909,212						
Totals	63,119		93,408		31,348,034						
*Apply Unit Cost to total GSF based on primary space type											
Remodeling/Renovation											
Total Construction - New & Rem./Renov.					31,348,034	Total	0	Total	0		

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & in CIP
Basic Construction Cost	-		31,348,034				31,348,034
1. a. Construction Cost (from above)	-		31,348,034				31,348,034
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation		-	245,566				245,566
d. Landscape/Irrigation			250,000				250,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication		-	362,541				362,541
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	32,206,141	0	0	0	32,206,141
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees		4,932,641					4,932,641
c. Fire Marshall Fees		94,258					94,258
d. Inspection Services		493,358					493,358
e. Insurance Consultant		20,518					20,518
f. Surveys & Tests		45,000					45,000
g. Permit/Impact/Environmental Fees		109,616					109,616
h. Artwork			100,000				100,000
i. Moveable Furnishings & Equipment				6,042,667			6,042,667
j. Project Contingency		347,276	2,223,378				2,570,654
Total - Other Project Costs	-	6,042,667	2,323,378	6,042,667	-	0	14,408,712
ALL COSTS 1+2	0	6,042,667	34,529,519	6,042,667	0	0	46,614,853

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2015-2016	0				46,614,853
TOTAL		-	TOTAL		0	46,614,853

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Interdisciplinary Research and Inc. Fac.

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs	16,935	1.5	25,403	366	9,297,315		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices	4,055	1.5	6,083	299	1,818,668		
Campus Support Serv	3,150	1.4	4,410	274	1,208,340		
Totals	24,140		35,895		12,324,323		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.					12,324,323	Total	0
						Total	0

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost	-	12,324,323					12,324,323
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation		294,072					294,072
d. Landscape/Irrigation		188,032					188,032
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication		253,030					253,030
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment		644,889					644,889
Total Construction Costs	0	13,704,346	0	0	0	0	13,704,346
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees		950,024					950,024
c. Fire Marshall Fees							-
d. Inspection Services							-
e. Insurance Consultant							-
f. Surveys & Tests							-
g. Permit/Impact/Environmental Fees							-
h. Artwork		81,687					81,687
i. Moveable Furnishings & Equipment		1,143,615					1,143,615
j. Project Contingency		735,181					735,181
Total - Other Project Costs	-	2,910,507	-	-	-	0	2,910,507
ALL COSTS 1+2	0	16,614,853	0	0	0	0	16,614,853

Appropriations to Date	Project Costs Beyond CIP Period	Total Project In CIP & Beyond
Source Fiscal Year Amount	Source Fiscal Year Amount	
PECO 0		16,614,853
TOTAL -	TOTAL 0	16,614,853

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Engineering Building I
Renovation

AGENCY PRIORITY 3
DATE BLDG PROGRAM
APPROVED

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

Engineering I, a 130,885 GSF facility, has seen continuous use since it was built 30 years ago, and is in dire need of renovation and modernization. A renovation of the building will support continued, essential instruction in the Science, Technology, Engineering, and Math (STEM) disciplines, optimize space occupancy and utilization, enhance the quality of the academic programs, allow for more sophisticated sponsored research opportunities, attract the best students and faculty, and produce excellent graduates. Further delay of the renovation is detrimental to the experience of students and researchers at UCF, as well as the reputation of the preeminent College of Engineering and Computer Science.

The facility currently houses classrooms, instructional and research labs, micro-fabrication clean rooms, offices, conference rooms, and support space for such critical STEM programs as the Engineering Leadership and Innovation Institute (ELI2); Mechanical and Aerospace Engineering (MAE); Civil, Environmental and Construction Engineering (CECE); Materials Science and Engineering (MSE); and Electrical and Computer Engineering (ECE).

MAE and MSE alone serve 2,638 undergraduate and about 200 graduate students. Significant renovation of the facility is needed to accommodate the expansion of the departments. These programs have unique facility needs and, because of the age of the facility, renovation is imperative. Research accomplished by these departments serves dozens of high technology industrial firms located throughout Florida and across the nation.

The College of Engineering and Computer Science at UCF represents the core of UCF's STEM programs. It currently enrolls 8,072 undergraduate students, making it the largest in Florida and the 9th largest in the country.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Engineering I renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's

CIP-3 SHORT-TERM PROJECT EXPLANATION

mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February 2011. See recommendation No. 2.1 Engineering Building Renovation.

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida
Project: Engineering Building I Renovation
Total Funding: \$20,667,375
Previous Funding (State and Local): \$3,620,723
STEM (Yes or No): YES
Contact Person (Name, Position, Phone No.):
Dr. Daniel Holsenbeck, Senior Vice President of University Relations
Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

1. ☒ Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)
Explanation:
The College of Engineering and Computer Science (CECS) awarded 1,685 engineering and computer science degrees in 2014-15. Florida Education & Training Placement Information Program (FETPIP) data for 2013-14 indicates that 58% of bachelor's recipients were employed in Florida, with an average salary of \$59,134; and 51% of master's recipients were employed in Florida, with an average salary of \$78,651.
2. ☒ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation:
This building houses the preeminent College of Engineering and Computer Science, the largest in Florida and 9th largest in the nation, with 8,072 undergraduate students and 1,337 graduate students.
3. ☒ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:
The renovation will allow annual research expenditures to increase by \$850,000 within two years of project completion.
4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:

All programs in the CECS are designated as STEM programs.

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

Explanation:

A newly renovated facility will allow UCF to solicit philanthropic donations, giving donors the opportunity for naming rights to the Engineering Building I. Additional philanthropic funds will be used to enhance the lab infrastructure, resulting in expanded funding opportunities from corporations and other funding agencies. Corporations that fund our research are eager to support internship opportunities for our students and potentially offer them employment upon graduation.

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

Explanation:

- a. The Engineering Building I is currently, and will remain, 130,885 GSF and 77,924 NASF.
- b. This renovation creates and upgrades classrooms, instructional and research labs, clean rooms, and ancillary spaces. It provides long-term energy efficiency and extends the life of a 30-year-old building.

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

Explanation:

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

Explanation:

- a. A cost-benefit analysis revealed that construction of a new facility would cost \$65.7M, while a renovation of the existing facility would cost \$18.5M.
- b. The renovation prevents costly, stop-gap repair measures to antiquated building systems. An independent study identified that all mechanical systems are past their lifespan, and that the building needs to be upgraded to meet current building and life-safety codes.
- c. Inevitable increases in enrollment will further stress antiquated building systems and will lead to still more costly, stop-gap repairs. An extensive renovation will substantially curtail repeated repair and deferred maintenance expenses that are due to the age and extensive use of the building.

9. ☒ Projected Facility Utilization Rate

Explanation:

Engineering I is currently, and will remain after renovation, fully utilized. All offices are assigned; in some cases employees are sharing an office. Classes are held from 7:30 am until 9:30 pm Monday through Thursday and from 7:30 am until 5:30 pm on Friday. Faculty and student researchers use the laboratories at all hours. Student teams working on design projects and other group assignments are working around the clock in the building. Enrollment growth in the College of Engineering and Computer Science regularly outpaces the growth of UCF overall. Much-needed new faculty hires are contributing to an even higher utilization of this facility.

10. ☒ Current/Projected Campus Utilization Rate

Explanation:

Based on UCF's Educational Plant Survey, which was conducted on October 6-8, 2015, the BOG is projecting that by 2020-2021, UCF will require additional square footage in all of the 9 space categories. The following estimates represent the current deficits of square footage for space categories within this building:

Classroom - 78,144 (24.54%)

Teaching Lab - 317,448 (51.89%)

Research Lab - 618,214 (67.11%)

Office - 259,853 (26.39%)

Support Services - 101,716 (54.03%)

Other Pertinent Information not included above:

- In 2013-14, UCF produced the second-largest number of STEM graduates in the State University System of Florida.
- UCF is ranked in the top 20 among the world's 100 patent-producing universities by IEEE; and the Industrial Engineering graduate program is ranked 39th in the country.
- The renovation will provide short-term impact to the local economy, as follows:
 - Year 1: \$28,963,700 93 construction jobs, 97 other sectors
 - Year 2: \$1,961,716 6 construction jobs, 13 other sectors
- The College of Engineering was ranked 7th best graduate engineering school for Hispanics by *Hispanic Business Magazine* (2014).

- Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric
 - a. Graduates of the CECS programs contribute to Metrics 6 (bachelor's degrees awarded in areas of strategic emphasis) and 8A (graduate degrees awarded in areas of strategic emphasis (includes STEM)) of the Performance Funding Model.
 - b. The UCF CECS is ranked 82nd in the nation according to US News and World Report's Best Graduate Schools 2016, and ranked 43rd among public institutions (2nd in Florida).
 - c. The completion of overdue renovations will likely have a modest impact on rankings. The views of visiting deans and distinguished faculty from other institutions, as well as officers of corporate partners and employers, are important in determining our overall ranking. When visitors see a modern, well-maintained facility, their views of the CECS can only be enhanced. Conversely, further delays in carrying out the renovations will only impact the views of visitors negatively.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

SCHEDULE OF PROJECT COMPONENTS		ESTIMATED COSTS					
	Funded to						
	<u>Date</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>Funded & In CIP</u>
Basic Construction Cost							
1. a. Construction Cost (from above)	2,632,555	12,718,411					12,718,411
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation	63,435						-
d. Landscape/Irrigation		200,000					200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication		129,500					129,500
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment		350,000					350,000
Total Construction Costs	2,695,990	13,397,911	0	0	0	0	13,397,911
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees	278,392	1,258,967					1,258,967
c. Fire Marshall Fees	7,929	39,313					39,313
d. Inspection Services	105,500	224,220					224,220
e. Insurance Consultant		8,497					8,497
f. Surveys & Tests		45,000					45,000
g. Permit/Impact/Environmental Fees	31,677	77,755					77,755
h. Artwork		-					-
i. Moveable Furnishings & Equipment			1,059,739				1,059,739
j. Project Contingency	501,235	935,250					935,250
Total - Other Project Costs	924,733	2,589,002	1,059,739	-	-	-	3,648,741
ALL COSTS 1+2	3,620,723	15,986,913	1,059,739	0	0	0	17,046,652

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
PECO	2012-13	3,620,723				3,620,723
PECO						17,046,652
TOTAL		<u>3,620,723</u>	TOTAL		<u>0</u>	<u>20,667,375</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Mathematical Sciences
Building Remodeling and
Renovation

AGENCY PRIORITY 4
DATE BLDG PROGRAM _____

APPROVED _____

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

The Mathematical Sciences Building is a 45-year old, 106,523 GSF teaching facility. Its classrooms, teaching and research labs, study rooms, offices, and conference rooms are used by nearly 30,000 students annually. This facility lays the foundation for UCF's Science, Technology, Engineering, and Math (STEM) programs, and provides limited research areas for Mathematics and other building occupants. This building requires a total renovation of its interior space to better support research applications and optimize space occupancy and classroom utilization.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Mathematical Sciences renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building

Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable

CIP-3 SHORT-TERM PROJECT EXPLANATION

building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

Research/Laboratory

Despite the fact that the predominant space classification of this building is classroom and office type, there are a number of research and teaching laboratories, and research support spaces belonging to multiple colleges. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs will be provided primarily by solar thermal energy.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted and approved in February 2011. See recommendation No. 2.2 Math Sciences Building Remodeling and Renovation (formerly known as Math and Physics Building).

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Math Sciences Building Rem and Ren

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation	100289		106523				
Total Construction - New & Rem./Renov.					10,673,348		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Teaching Labs	1,966	Teaching Labs	1,986
Research Labs	7,719	Research Labs	7,719
Offices	5,479	Offices	5,479
Total	15,184	Total	15,184

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)	2,896,788	7,806,502					10,703,290
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation	69,802	176,740					246,542
d. Landscape/Irrigation							-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System		134,667					134,667
l. Chilled Water System		37,393					37,393
m. Storm Water System		67,333					67,333
n. Energy Efficient Equipment		350,000					350,000
Total Construction Costs	2,966,590	8,572,635	0	0	0	0	11,539,225
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees	269,492	979,230					1,248,722
c. Fire Marshal Fees	8,725	22,092					30,817
d. Inspection Services	25,000	195,348					220,348
e. Insurance Consultant	1,738	4,666					6,404
f. Surveys & Tests	51,157						51,157
g. Permit/Impact/Environmental Fees	31,677	60,534					92,211
h. Artwork		-					-
i. Moveable Furnishings & Equipment			801,965				801,965
j. Project Contingency	523,496	950,147					1,473,643
Total - Other Project Costs	911,285	2,212,017	801,965	-	-	-	3,925,267
ALL COSTS 1+2	3,877,875	10,784,652	801,965	0	0	0	15,464,492

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	3,877,895				11,586,617
						3,877,895
TOTAL		3,877,895	TOTAL		0	15,464,512

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Trevor Colbourn Hall and
Colbourn Hall Demolition

AGENCY PRIORITY 5
DATE BLDG PROGRAM _____

APPROVED _____

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

The Trevor Colbourn Hall will be an academic building, intended to match the overall space categories of the existing Colbourn Hall, while adding additional square footage for departmental growth. The new building will support, as closely as possible, the academic programs and support units currently housed in Colbourn Hall, along with additional space for expanding departments on campus. The new building will be pragmatic in concept, functional, and maintainable, while maximizing useable square footage to the fullest.

From a facilities perspective, Colbourn Hall (built in 1974 with some renovation work in the early 1990s) is in poor condition. The university has calculated the Facilities Condition Index (FCI) (the cost of repairs as compared to the cost to replace the building) for the building to be 86%. From an economic perspective, buildings can be demolished when their FCI exceeds 40%. Therefore, the university proposes that Colbourn Hall be demolished.

Departments and offices moving from Colbourn Hall to Trevor Colbourn Hall are: English, Writing and Rhetoric, History, Modern Languages, Texts and Technology; Judaic Studies, Africana Studies, Women's Studies, Latin American Studies; the College of Arts & Humanities Advising Office, the College of Arts & Humanities Tech Office, College of Arts and Humanities offices, , the University Writing Center, the Center for Humanities and Digital Research, the Graduate Student Center; offices for new faculty being hired, and seven (7) classrooms. Departments and offices moving into Trevor Colbourn from various locations around main campus include: Interdisciplinary Studies; Office of Undergraduate Research; Pre-Professional Advising; Academic Advancement Programs; Burnett Honors College; First Year Advising and Exploration; Sophomore and Second Year Center; Transfer and Transition Services; and the Student Academic Resource Center.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.3, Trevor Colbourn Hall.

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: Trevor Colbourn Hall and Colbourn Hall Demolition

Total Funding: \$38,000,000

Previous Funding (State and Local): \$0

STEM (Yes or No): Yes

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

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

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

Explanation:

- a. Trevor Colbourn Hall will house the following departments that currently occupy the existing Colbourn Hall: Africana Studies, English, History, Judaic Studies, Latin American Studies, Modern Languages & Literatures, Women's Studies and Writing & Rhetoric. In 2014-15 programs in these departments awarded 669 degrees and certificates (472 bachelor's, 68 master's and 129 certificates).
- b. Based upon enrollment projections and expected growth (2%) of these programs, UCF anticipates awarding an additional 99 degrees in these programs by 2021-22.
- c. Projected growth and average annual wages for graduates in these programs include:

Occupation	Projected Growth	Mean Annual Wage
Interpreters and Translators	28.7%	\$40,700
Middle School Teachers	5.9%	\$48,550
Secondary School Teachers	5.8%	\$47,020
Writers and Authors	2.3%	\$56,070

Sources: US Bureau of Labor Statistics May 2014 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Orlando-Kissimmee-Sanford, FL, Florida Department of Economic Opportunity 2015-16 Regional Demand Occupation List

- d. The Florida Department of Education (FETPIP) data indicates that within one year of graduation UCF bachelor's graduates in English had an average salary of \$30,856 and bachelor's graduates in History had an average salary \$31,592.
2. ☒ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation:
a. Fall 2015 enrollment for the programs housed in Colbourn Hall was 1,735. There were 129 sections offered in Colbourn Hall during 2014-15 with enrollment of 2,907.
b. Based on a 2% projected university-wide enrollment growth, an increase of 219 students is expected by Fall 2021.
3. ☐ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation: N/A
4. ☐ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation: N/A
5. ☐ Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students
Explanation: N/A
6. ☐ Project Improves the Use, either Operationally or Academically, of Existing Space
Explanation: N/A
7. ☐ Contribution of Local Funds Through Matching Grants, Property Donations, etc.
Explanation: N/A
8. ☒ Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)
Explanation:
a. Trevor Colbourn Hall will be an academic building, intended to match the overall space categories and square footage of the existing Colbourn Hall, while adding an additional floor to account for departmental growth.
9. ☐ Projected Facility Utilization Rate

Explanation:

10. ☐ Current/Projected Campus Utilization Rate

Explanation:

Other Pertinent Information not included above:

- The construction will provide short-term impact to local economy, as follows:
 - Year 1: \$5,397,456 17 construction jobs, 19 other sectors
 - Year 2: \$57,906,353 182 construction jobs, 190 other sectors
 - Year 3: \$5,635,129 17 construction jobs, 19 other sectors

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: Arts Complex Phase II

Total Funding: \$64,727,944

Previous Funding (State and Local): \$0

STEM (Yes or No): No

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

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

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

Explanation:

- a. The Performing Arts Center is used by the Music and Theatre departments. In 2014-15 programs in these departments awarded 138 degrees and certificates (123 bachelor's and 15 master's).
- b. Based upon enrollment projections and expected growth (2%) of these programs, UCF anticipates awarding an additional 21 degrees in these programs by 2021-22.
- c. Projected growth and average annual wages for graduates in these programs include:

Occupation	Projected Growth	Mean Annual Wage
Music Directors and Composers	3.2%	\$51,760
Producers and Directors	9.1%	\$79,190

Sources: US Bureau of Labor Statistics May 2014 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Orlando-Kissimmee-Sanford, FL Florida Department of Economic Opportunity 2015-16 Regional Demand Occupation List

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

Explanation:

- a. Fall 2015 enrollment for the programs housed in the Performing Arts Center was 712.

- b. Based on a 2% projected university-wide enrollment growth, an increase of 90 students is expected by Fall 2021.
3. ☒ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:
a. Current Research/Grant funding is approximately \$5,000 annually, but the completion of the Arts Complex could raise this figure to \$50,000 to \$100,000 per year within five years.
b. These projections are contingent upon constructing the proper facility to attract manufacturers, publishers, researchers, and producers in the performing arts, as collaboration on new works, equipment, and research studies are impossible in the current facility.
4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:
The facility will provide spaces for motion capture; areas to train performers as avatar controllers (critical to the STEM modeling and simulation industry); video game design; and computer-assisted design within performing arts. The training of performers, practitioners and educators is needed for the tourism industry, and will aid in attracting highly-skilled workers and high-tech businesses to the Central Florida region.
5. ☒ Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students
Explanation:
The School of Performing Arts has successful partnerships with the Orlando Shakespeare Theater, the Orlando Repertory Theater, and the Orlando Philharmonic that guarantee internships and jobs to UCF students. The new facility will allow UCF to partner with additional local performing organizations, and 50 new internships are expected in the performing arts and arts education within the first two years of completion. While local organizations continue to reach out to UCF, these excellent opportunities cannot be pursued due to lack of space and limitations with current space configurations. The new facility will allow for growth of the existing programs and provide opportunities for UCF and its students to partner with new organizations.
6. ☒ Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

Phase II of the Performing Arts Complex includes state-of-the-art performance spaces, ensemble rehearsal space, and performance support spaces. The initial investment in Phase I provided UCF with state-of-the-art teaching and office spaces, and small rehearsal spaces, but those benefits cannot be maximized without constructing Phase II spaces (especially of the performance type).

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

Explanation:

The Foundation has identified willing donors and prospects to include estate planning and employer matching funds.

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

Explanation:

The current performance and rehearsal activities take place in spaces not designed for performance or rehearsal. Over the years, renovations have been made in an attempt to modify the spaces to function as performance spaces. Although some improvements have been made, not all issues have been resolved because many of the problems are inherent in the original layout and design of the buildings. Completing this project will allow UCF to vacate these spaces, returning them to the type of activities for which they were originally designed and intended.

9. ☐ Projected Facility Utilization Rate

Explanation:

10. ☐ Current/Projected Campus Utilization Rate

Explanation:

Other Pertinent Information not included above:

The arts attract residents, businesses, and investments. The density of arts organizations and prevalence of arts events may play a role in attracting residents and businesses to (re)locate to a community by improving its image and making it more appealing. This is especially true for attracting highly skilled, high-wage residents.

- Businesses, especially those that employ highly trained mobile personnel, may consider the presence of art venues when making (re)location decisions (Cwi 1980b: 18-19).

- The presence of the arts (i.e., improved image of an area) may work to enhance the impact of tax incentives for business location decisions (Costello 1998: 147-9)
- High concentrations of artists and/or high-skilled workers may produce agglomeration effects, where businesses (especially those in the fast-growing 'creative industries' (Walesh 2001)) are drawn to an area because of the availability of creative talent and/or high-skilled workers, and vice versa.

The presence of the arts within a community attracts investments by improving the community's image, whether viewed as an up and coming or secure, stable area.

The construction will provide short-term impact to local economy, as follows:

- Year 1: \$11,018,615 32 construction jobs, 29 other sectors
- Year 2: \$90,166,523 253 construction jobs, 239 other sectors
- Year 3: \$11,516,427 32 construction jobs, 29 other sectors

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

This project will provide opportunities for more students to successfully compete in the performing arts industries. The School of Performing Arts has long been a place from which Walt Disney, Universal Studios, and Sea World have recruited performers, designers, and managers. The current program is recognized by performing arts industry leaders as an outstanding program; UCF students have been cast in positions on Broadway, and performed with major symphony orchestras and within the music industry. The new facility will enhance the quality of recruitment, leading to higher retention and graduation rates (Performance Funding Metric).

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Trevor Colburn Hall and Colbourn Hall Demolition

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms	7,425	1.5	11,138	253	2,817,788		
Teaching Labs	1,975	1.5	2,963	240	711,000		
Research Labs	0	1.5	0	375	0		
Study	1,725	1.4	2,415	214	516,810		
Instructional Media		1.5	0	206	0		
Auditorium/Exhibition	0	1.2	0	275	0		
Gymnasiums	0	1.2	0	195	0		
Offices	79,390	1.5	119,085	249	29,652,165		
Campus Support Serv	0	1.4	0	223	0		
Totals	90,515		135,800		33,697,763		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.							
33,697,763							

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Total	0	Total	0

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost	-	33,697,763					33,697,763
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation		212,816					212,816
d. Landscape/Irrigation		-					-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication		248,641					248,641
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	34,159,220		0	0	0	34,159,220
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees		1,780,674					1,780,674
c. Fire Marshall Fees		73,750					73,750
d. Inspection Services		69,799					69,799
e. Insurance Consultant		17,700					17,700
f. Surveys & Tests		25,000					25,000
g. Permit/Impact/Environmental Fees		100,309					100,309
h. Artwork		100,000					100,000
i. Moveable Furnishings & Equipment		1,083,518					1,083,518
j. Project Contingency		590,030					590,030
Total - Other Project Costs	-	3,840,780					3,840,780
ALL COSTS 1+2		38,000,000	0	0	0	0	38,000,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
		0				38,000,000
TOTAL		-	TOTAL		0	38,000,000

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE John C. Hitt Library
Renovation Phase II

AGENCY PRIORITY 6
DATE BLDG PROGRAM _____

APPROVED _____

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

The John C. Hitt Library, built in 1967 when enrollment was 1,948 students, is woefully inadequate 48 years later to meet the growing needs of current and future student populations. The existing library, with a collection of over 1.2 million print volumes, is open 105 hours per week, and has a patron count of almost 1, million visits per year. During a typical midterm week 39,000 people frequent the library. The existing Library presently has 1,903 reader seats, which represents about 7% of the main campus FTE, and is significantly less than the minimum requirements recommended by the Association of College and Research Libraries.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The John C Hitt Library renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

The 21st Century Library project involves the construction of a 41,000 sq. ft. addition on the north side of the building and the complete renovation of the existing building (consisting of the original 1967 building and the adjoining 1984 addition). This project will accommodate 3,394 seats, about 10% of the main campus FTE. The new construction will consist of a four-story automated retrieval system (ARC) that will provide quick access to a computer-managed storage system with a capacity of 1,250,000 items. This will allow lesser used material to be stored in the ARC and free up valuable square footage for user space in the Library. Although approximately 75% of the materials will be housed in the ARC, library users will still have open access to more than 270,000 materials, including items within the reference collection, general collection, and government documents. The most current and heavily used items, as well as those most suited to browsing, will remain on open shelves. The retrieval system will provide the library with space to grow collections.

When completed, the renovated and expanded facility will include redesigned, more efficient and flexible interior spaces featuring greatly increased seating in information literacy classrooms; triple the number of group study rooms; a 24/7 study area; a digital initiatives center; additional Special Collections and University Archives space; and more than twice the number of technology workstations. Additional features will include dedicated graduate study space and quiet study areas. The library will integrate advances in technology seamlessly with library services and collections.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately open stack study rooms, stacks, or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.2, John C. Hitt Library Renovation, Phase II.

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: Mathematical Sciences Building Remodeling and Renovation (C, E)

Total Funding: \$15,464,512

Previous Funding (State and Local): \$3,877,895

STEM (Yes or No): Yes

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

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

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

Explanation:

The Mathematical Sciences Building is a 45-year old, 106,523 GSF teaching facility that also houses the academic and administrative office for the mathematics department, the Mathematics Assistance and Learning Lab (MALL), physics teaching labs, and the iSTEM offices. All physical anthropology teaching lab courses are also taught in the Mathematical Sciences building.

- a. The building directly supports all Math program graduates (46 in 2014-15) and Anthropology program graduates (126 in 2014-15). It also provides the required foundational and advanced mathematics courses required by all of UCF's Science, Technology, Engineering and Math (STEM) degrees (2,974 in 2014-15), and the general education mathematics courses required for all majors.
- b. Based upon enrollment projections and expected growth (2%) of the program, UCF anticipates awarding an additional 7 degrees in the Math program, 19 in Anthropology and 442 in all STEM programs by 2021-22.
- c. Mathematicians generally work in a variety of industries including the federal government, universities, and corporate research and development organizations. The U.S. Bureau of Labor Statistics (BLS) projects that mathematician's employment opportunities will increase by 21 percent through 2024. BLS also states that mathematicians have a 2015 median annual wage of \$111,110. The Florida Department of Education (FETPIP) data indicates that UCF mathematics bachelor's graduates had an average salary of \$40,404 and anthropology bachelor's graduates had an average salary of \$28,868 within one year of graduation.

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

Explanation:

- a. The Mathematics Department has a program enrollment of 311 (Fall 2015). Fall 2015 enrollment for the Anthropology department was 372. This building also serves as the main facility for all math coursework used by a variety of majors, plus coursework in biological sciences, computer sciences, engineering, statistics, and physical sciences. There were 560 sections offered in the Mathematical Sciences Building during 2014-15 with 28,754 enrollments.
- b. Based on a 2% projected university-wide enrollment growth, an increase of 2,092 STEM students is expected by Fall 2021.
- c. This building not only serves all of the undergraduate and graduate students in Mathematics, but also serves the entire undergraduate population of UCF through service courses in Mathematics for the GEP requirements.

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

Explanation:

Over the past 3 years, the Department of Mathematics has garnered over \$2.5 million dollars in new research funding. Additionally, faculty from the Department of Physics and the College of Engineering who occupy specialized laboratories in this building have brought in significant external funding. Renovation of this building's systems and facilities which support these laboratories is critical to the future of such funding opportunities.

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

Explanation:

The building directly supports STEM majors in mathematics while also providing a wide range of foundation and advanced mathematics courses required by all STEM majors.

All programs offered in the Mathematical Sciences are designated as STEM programs. The Department offers bachelors, masters and doctoral degrees in Mathematics as well as a graduate certificate degree program to better prepare K-12 teachers in Mathematics

The Building houses the Math Assistance & Learning Lab [MALL] which provides fundamental mathematics instruction to over 2600 undergraduates per year

The Building also houses the iSTEM Center, a partnership initiative between the COS and CECS

The Building also houses the STEAM initiative: the Science, Technology, Engineering, Art and Math partnership initiative.

The Building also houses the nationally recognized "Scale Up-Studio" specialized instructional classroom for teaching college Physics. Over 1500 students take Physics courses in this facility each academic year.

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

Explanation: N/A

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

Explanation:

- a. This building requires a total renovation of its interior space to better support research applications, optimize space occupancy and classroom utilization, and re-configure internal spaces to meet current and future teaching and research needs.
- b. The renovation creates and upgrades classrooms, teaching labs, research labs, study rooms, and ancillary spaces.
- c. The Mathematical Sciences building is currently, and will remain, 106,523 GSF. The NASF is 63,413 and is expected to increase with the renovations.

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

Explanation: N/A

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

Explanation:

- a. An independent study identified that the mechanical systems are past their life-span, and that the building needs to be upgraded to extend its useful life, and meet current building codes.
- b. The renovation will prevent costly stop-gap repair measures to antiquated building systems, and provide long-term energy efficiency.

9. ☐ Projected Facility Utilization Rate

Explanation:

10. ☐ Current/Projected Campus Utilization Rate

Explanation:

Other Pertinent Information not included above:

- Its classrooms, teaching and research labs, study rooms, offices, and conference rooms are used by approximately 30,000 students annually.
- Mathematics instruction in this facility provides a core foundation for UCF's Science, Technology, Engineering, and Math (STEM) students, and provides limited research areas for Mathematics and other academic programs.
- Space utilization exceeds the current statutory requirement of 60% student stations occupied at a minimum of 40 hours per week.
- A renovated facility will allow UCF to continue to produce over 7,500 Florida STEM graduates per year in Mathematical Sciences.
- The construction will provide short-term impact to local economy, as follows:
 - Year 1: \$19,538,695 63 construction jobs, 65 other sectors
 - Year 2: \$1,484,543 5 construction jobs, 5 other sectors

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

Contributes to Performance Funding Metrics 7 and 8 with an expected increase of 328 STEM bachelor's degrees and 114 STEM graduate degrees awarded by 2021-22.

Graduates from the Department of Mathematics programs contribute to Metrics 6 (bachelor's degrees awarded in areas of strategic emphasis) and 8A (graduate degrees awarded in areas of strategic emphasis (including STEM) of the Performance Funding Model.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: John C. Hill Library Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms	0	1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		

*Apply Unit Cost to total GSF based on primary space type

Remodeling/Renovation		2262387					
Total Construction - New & Rem./Renov.					0		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Classrooms	27,274		
Library/Study	134,113		
Inst Media	15,000		
Office/Computer	50,000		
Total	226,387	Total	0

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-2021	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)			25,952,806				25,952,806
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation			607,360				607,360
d. Landscape/Irrigation			500,000				500,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication			271,034				271,034
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	27,331,200	0	0	0	27,331,200
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees		2,804,627					2,804,627
c. Fire Marshall Fees		75,920					75,920
d. Inspection Services		295,790					295,790
e. Insurance Consultant		15,572					15,572
f. Surveys & Tests		150,000					150,000
g. Permit/Impact/Environmental Fees		101,101					101,101
h. Artwork		-					-
i. Moveable Furnishings & Equipment				3,712,800			3,712,800
j. Project Contingency		269,790	3,962,400				4,232,190
Total - Other Project Costs	-	3,712,800	3,962,400	3,712,800	-	-	11,388,000
ALL COSTS 1+2	0	3,712,800	31,293,600	3,712,800	0	0	38,719,200

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	0				
TOTAL		-	TOTAL		0	38,719,200

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Arts Complex Phase II
(Performance)

AGENCY PRIORITY 7
DATE BLDG PROGRAM _____

APPROVED _____

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

This project is Phase II of the Center for the Arts. Phase I, completed in 2010, provided classroom, support, and office space for Theatre and Music; Phase II will provide performance space for both units, while offering interdisciplinary benefits to the educational experience. Construction of this phase will provide the educational spaces needed to expand and support existing graduate and undergraduate programs in the performing arts, and graduate world-class talent. This facility comprising rehearsal spaces, specialized production areas, functional lab spaces, classrooms, supporting offices, and storage will attract regional community activities to campus. Construction of the facility will create three hundred and sixteen construction jobs, and thirty nine permanent jobs, as estimated by the UCF Institute for Economic Competitiveness. Future planning for Phase III will place production units in closer proximity to the performance auditoriums, and provide additional instructional and performing spaces.

Phase II is crucial to the success of the Center for the Arts, as existing entertainment spaces on campus are not suitable for the various types of performances. Currently the 150-seat Rehearsal Hall is not suitable for orchestral performances. Additionally a 450-seat auditorium in the Visual Arts Building, designed as a lecture hall not a performance venue, is used as a performance venue for concerts. Similarly, Theatre students perform in an awkwardly-shaped 300-seat house that was originally a lecture hall and in a small black box theater. None of the existing on-campus performance venues are suitable for dance performances.

This proposed Phase II project includes a 600-seat concert hall, a 263-seat recital/lecture hall, a 520-seat proscenium theatre, and a 225-seat black box theatre. These spaces are to be attractive, comfortable, technologically advanced and functional. They are to be "state-of-the-art" facilities with special emphasis given to acoustics, lighting, and stagecraft. In addition to providing performances, the facility will be designed for teaching and lab space, to include scene shops, costume shops, and welding areas. Built to professional standards that include the most advanced of technologies, these spaces can be accessed, shared, and experienced on many different platforms in addition to the traditional, live performance setting.

Phase II will enrich all UCF programs by emphasizing the critical importance of the arts, thus encouraging creativity and innovation across other academic disciplines. This convergence between the arts and other fields of study is central to the Center's contributions to UCF's vision of becoming a top-tier research university: creating opportunity through access, partnerships, interdisciplinary endeavors and community engagement. The need for the university to embrace and promote cultural activity and diversity is basic to its educational mission.

CIP-3 SHORT-TERM PROJECT EXPLANATION

The benefits of the new Performing Arts Center will be far reaching in Florida's vital tourism industry, as UCF further develops its programs, and faculty and students enter the professional talent pool. The Center will enhance collaborations with community-based industry partners such as Walt Disney World, Universal Studios and Cirque du Soleil and open the door to other artistic opportunities. Because of Orlando's prominence as an international tourist destination, the Center and all of its activities will steer UCF toward greater international recognition.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately assembly, exhibition, and classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.4, Arts Complex, Phase II.

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: Arts Complex Phase II

Total Funding: \$64,727,944

Previous Funding (State and Local): \$0

STEM (Yes or No): No

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

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

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

Explanation:

- a. The Performing Arts Center is used by the Music and Theatre departments. In 2014-15 programs in these departments awarded 138 degrees and certificates (123 bachelor's and 15 master's).
- b. Based upon enrollment projections and expected growth (2%) of these programs, UCF anticipates awarding an additional 21 degrees in these programs by 2021-22.
- c. Projected growth and average annual wages for graduates in these programs include:

Occupation	Projected Growth	Mean Annual Wage
Music Directors and Composers	3.2%	\$51,760
Producers and Directors	9.1%	\$79,190

Sources: US Bureau of Labor Statistics May 2014 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates, Orlando-Kissimmee-Sanford, FL Florida Department of Economic Opportunity 2015-16 Regional Demand Occupation List

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

Explanation:

- a. Fall 2015 enrollment for the programs housed in the Performing Arts Center was 712.

- b. Based on a 2% projected university-wide enrollment growth, an increase of 90 students is expected by Fall 2021.
- 3. ☒ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:
 - a. Current Research/Grant funding is approximately \$5,000 annually, but the completion of the Arts Complex could raise this figure to \$50,000 to \$100,000 per year within five years.
 - b. These projections are contingent upon constructing the proper facility to attract manufacturers, publishers, researchers, and producers in the performing arts, as collaboration on new works, equipment, and research studies are impossible in the current facility.
- 4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:

The facility will provide spaces for motion capture; areas to train performers as avatar controllers (critical to the STEM modeling and simulation industry); video game design; and computer-assisted design within performing arts. The training of performers, practitioners and educators is needed for the tourism industry, and will aid in attracting highly-skilled workers and high-tech businesses to the Central Florida region.
- 5. ☒ Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students
Explanation:

The School of Performing Arts has successful partnerships with the Orlando Shakespeare Theater, the Orlando Repertory Theater, and the Orlando Philharmonic that guarantee internships and jobs to UCF students. The new facility will allow UCF to partner with additional local performing organizations, and 50 new internships are expected in the performing arts and arts education within the first two years of completion. While local organizations continue to reach out to UCF, these excellent opportunities cannot be pursued due to lack of space and limitations with current space configurations. The new facility will allow for growth of the existing programs and provide opportunities for UCF and its students to partner with new organizations.
- 6. ☒ Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

Phase II of the Performing Arts Complex includes state-of-the-art performance spaces, ensemble rehearsal space, and performance support spaces. The initial investment in Phase I provided UCF with state-of-the-art teaching and office spaces, and small rehearsal spaces, but those benefits cannot be maximized without constructing Phase II spaces (especially of the performance type).

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

Explanation:

The Foundation has identified willing donors and prospects to include estate planning and employer matching funds.

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

Explanation:

The current performance and rehearsal activities take place in spaces not designed for performance or rehearsal. Over the years, renovations have been made in an attempt to modify the spaces to function as performance spaces. Although some improvements have been made, not all issues have been resolved because many of the problems are inherent in the original layout and design of the buildings. Completing this project will allow UCF to vacate these spaces, returning them to the type of activities for which they were originally designed and intended.

9. ☐ Projected Facility Utilization Rate

Explanation:

10. ☐ Current/Projected Campus Utilization Rate

Explanation:

Other Pertinent Information not included above:

The arts attract residents, businesses, and investments. The density of arts organizations and prevalence of arts events may play a role in attracting residents and businesses to (re)locate to a community by improving its image and making it more appealing. This is especially true for attracting highly skilled, high-wage residents.

- Businesses, especially those that employ highly trained mobile personnel, may consider the presence of art venues when making (re)location decisions (Cwi 1980b: 18-19).

- The presence of the arts (i.e., improved image of an area) may work to enhance the impact of tax incentives for business location decisions (Costello 1998: 147-9)
- High concentrations of artists and/or high-skilled workers may produce agglomeration effects, where businesses (especially those in the fast-growing 'creative industries' (Walesh 2001)) are drawn to an area because of the availability of creative talent and/or high-skilled workers, and vice versa.

The presence of the arts within a community attracts investments by improving the community's image, whether viewed as an up and coming or secure, stable area.

The construction will provide short-term impact to local economy, as follows:

- Year 1: \$11,018,615 32 construction jobs, 29 other sectors
- Year 2: \$90,166,523 253 construction jobs, 239 other sectors
- Year 3: \$11,516,427 32 construction jobs, 29 other sectors

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

This project will provide opportunities for more students to successfully compete in the performing arts industries. The School of Performing Arts has long been a place from which Walt Disney, Universal Studios, and Sea World have recruited performers, designers, and managers. The current program is recognized by performing arts industry leaders as an outstanding program; UCF students have been cast in positions on Broadway, and performed with major symphony orchestras and within the music industry. The new facility will enhance the quality of recruitment, leading to higher retention and graduation rates (Performance Funding Metric).

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Arts Complex Phase II (Performance)

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date			
Classrooms	25,000	1.5	37,500	287	10,762,500					
Teaching Labs	15,000	1.5	22,500	306	6,885,000					
Research Labs	0	1.5	0	366	0					
Study	0	1.4	0	290	0					
Instructional Media	0	1.5	0	216	0					
Auditorium/Exhibition	67,795	1.2	81,355	320	26,033,454					
Gymnasiums	0	1.2	0	225	0					
Offices	5,360	1.5	8,039	299	2,403,803					
Campus Support Serv	0	1.4	0	274	0					
Totals	113,155		149,394		46,084,757					
*Apply Unit Cost to total GSF based on primary space type										
						Space Detail for Remodeling Projects				
						BEFORE		AFTER		
						Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	
Remodeling/Renovation										
Total Construction - New & Rem./Renov.						46,084,757	Total	0	Total	0

ESTIMATED COSTS

	Funded to		Estimated Costs					
Basic Construction Cost	Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP	
1. a.Construction Cost (from above)			46,084,757				46,084,757	
Add'l/Extraordinary Const. Costs							-	
b.Environmental Impacts/Mitigation							-	
c.Site Preparation			300,000				300,000	
d.Landscape/Irrigation			250,000				250,000	
e.Plaza/Walks							-	
f.Roadway Improvements							-	
g.Parking ___ spaces							-	
h.Telecommunication			350,000				350,000	
i.Electrical Service							-	
j.Water Distribution							-	
k.Sanitary Sewer System							-	
l.Chilled Water System							-	
m.Storm Water System							-	
n.Energy Efficient Equipment			1,320,299				1,320,299	
Total Construction Costs	0	0	48,305,056	0	0	0	48,305,056	
<hr/>								
2. Other Project Costs							-	
a.Land/existing facility acquisition							-	
b.Professional Fees		4,333,697	788,181				5,121,878	
c.Fire Marshall Fees		129,456					129,456	
d.Inspection Services		827,344					827,344	
e.Insurance Consultant		28,916					28,916	
f.Surveys & Tests		212,722					212,722	
g.Permit/Impact/Environmental Fees		130,546					130,546	
h.Artwork		-	100,000				100,000	
i.Moveable Furnishings & Equipment				6,472,794			6,472,794	
j.Project Contingency		810,113	2,589,119				3,399,232	
Total - Other Project Costs	-	6,472,794	3,477,300	6,472,794	-	-	16,422,888	
<hr/>								
ALL COSTS 1+2	0	6,472,794	51,782,356	6,472,794	0	0	64,727,944	

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				
TOTAL		<u>-</u>	TOTAL		<u>0</u>	<u>64,727,944</u>

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Chemistry Renovation

AGENCY PRIORITY 8
DATE BLDG PROGRAM
APPROVED

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

The College of Sciences is the largest college at UCF, and its Chemistry program is one of the major participants that represent the core of UCF's STEM initiative. The existing Chemistry Building was constructed in 1969 and is in "fair" condition.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Chemistry renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements. The most critical issue in this building is the teaching labs, as all supporting lab building systems have become inadequate and require modernization to meet current safety regulations, codes and egress requirements.

Where research labs, classrooms, and teaching labs are concerned, the UCF main campus already is operating "at or above capacity." Based on the 2015 Educational Plant Survey analysis for space needs, the university has a shortfall of classroom space, research labs, and teaching labs. The university has been forced over the past several years to rent temporary research facilities both on and off campus.

Research and teaching labs are essential for thesis and dissertation work by students in disciplines with active graduate programs, especially at the doctoral level. The Chemistry Department has a doctoral program that provides exceptionally high-level training for students who subsequently enter outstanding industrial, academic, and post-doctoral positions. Many cases exist on campus where the same lab is used interchangeably for graduate coursework, thesis and/or dissertation work, and faculty research. The labs in the Chemistry Building are in poor condition but still must serve all of the functions noted.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight

CIP-3 SHORT-TERM PROJECT EXPLANATION

for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

Research/Laboratory

Despite the fact that this building's space classification is predominantly classroom and office, there are a significant number of research and teaching laboratories in the building. Laboratories should have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.5, Chemistry Renovation.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Chemistry Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
	43,265		49,073		9,126,774		
Total Construction - New & Rem./Renov.					9,126,774		
Space Detail for Remodeling Projects							
BEFORE				AFTER			
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	10,049	Offices	10,049				
Total				Total			

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)				9,126,774			9,126,774
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation				100,000			100,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	9,226,774	0	0	9,226,774
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees			479,831	418,544			896,375
c. Fire Marshall Fees			24,673				24,673
d. Inspection Services			58,183	198,139			256,322
e. Insurance Consultant			4,973				4,973
f. Surveys & Tests							-
g. Permit/Impact/Environmental Fees			63,188				63,188
h. Artwork							-
i. Moveable Furnishings & Equipment					630,848		630,848
j. Project Contingency				1,628,524			1,628,524
Total - Other Project Costs	-	-	630,848	2,243,207	630,848	-	3,504,903
ALL COSTS 1+2	0	0	630,848	11,469,981	630,848	0	12,731,677

Appropriations to Date	Project Costs Beyond CIP Period	Total Project In
Source Fiscal Year Amount	Source Fiscal Year Amount	CIP & Beyond
PECO 2012-13 0		12,731,677
TOTAL -	TOTAL 0	12,731,677

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Florida Solar Energy Center
Renovation

AGENCY PRIORITY 9
DATE BLDG PROGRAM
APPROVED

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

The Florida Solar Energy Center (FSEC) is owned and maintained by the University of Central Florida and located in Cocoa Beach, Florida. While the campus comprises many different buildings, state allocated funding is limited to three: B2001, B2002, and B2003, all built in 1995. The facility currently houses classrooms, instructional and research labs, offices, conference rooms, and support space for critical Engineering programs. Research accomplished by these departments serves dozens of high-level technology industrial firms located throughout Florida and across the nation.

B2001, the office building, is a two-story, steel-frame structure with horizontal corrugated metal siding, containing a large atrium lobby and reception area with various open plans and individual offices. There is also a single-story auditorium on its north elevation. This structure comprises 56,666 GSF.

B2002, the lab building, is a single-story, steel-frame building, housing a large warehouse and storage space, as well as various research facilities, including a fuel cell laboratory and two hydrogen laboratories. The chilled water HVAC system is being used extensively for laboratory research with a growing demand. This structure comprises 27,482 GSF.

B2003, the mechanical building, is a single-story, steel-frame building, housing two 1,000-ton chillers, associated piping, pumps, automation equipment, and electrical switchgear. Two cooling towers on the outside of the building are also used to support the chilled water production. This chiller system supports B2001 and B2002 for all HVAC needs. This structure comprises 2,080 GSF.

FSEC has seen continuous use since it was built 21 years ago, and is in dire need of a complete chilled water HVAC system replacement and modernization, and requires roof and building envelope repairs. The HVAC equipment is both obsolete and deteriorated beyond repair. A complete chilled water HVAC system replacement, including automation and air handlers, will support continued, essential instruction in the Engineering field; optimize space occupancy and utilization; enhance the quality of the academic programs; allow for more sophisticated sponsored research opportunities; attract the best students and faculty to the program; and produce excellent graduates. Further delay of the replacement is detrimental to the experience of students and researchers at UCF.

Building 2001 should be re-roofed within three years, and many corroded metal wall panels (the exterior building envelope) need to be replaced. Building 2002 requires repair of the metal wall flashings and underlayment, and Building 2003 requires repair to six curb penetrations, and coating of the entire roof.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The FSEC renovation will address both critical and non-critical issues identified in the FCA.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Florida Solar Energy Center Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
	43,285		49,073		6,980,500		
Total Construction - New & Rem./Renov.					6,980,500		
Space Detail for Remodeling Projects							
BEFORE				AFTER			
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	10,049	Offices	10,049	Offices	10,049	Offices	10,049
Total				Total			

SCHEDULE OF PROJECT COMPONENTS

	ESTIMATED COSTS						
	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)				6,980,500			6,980,500
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation				100,000			100,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication				-			-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	7,080,500	0	0	7,080,500
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees				806,292			806,292
c. Fire Marshall Fees							-
d. Inspection Services				69,806			69,806
e. Insurance Consultant				4,188			4,188
f. Surveys & Tests				-			-
g. Permit/Impact/Environmental Fees				58,135			58,135
h. Artwork				-			-
i. Moveable Furnishings & Equipment				490,000			490,000
j. Project Contingency				1,491,079			1,491,079
Total - Other Project Costs	-	-	-	2,919,500	-	-	2,919,500
ALL COSTS 1+2	0	0	-	10,000,000	-	0	10,000,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				10,000,000
TOTAL		-	TOTAL		0	10,000,000

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Infrastructure Chilled Water
ReplacementAGENCY PRIORITY 10

DATE BLDG PROGRAM _____

APPROVED _____

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

UCF strives to be a good steward of state funds, and as such has historically had the challenge of balancing the maintenance and operations of its buildings with the need to repair, replace, and upgrade its utilities and infrastructure. In the recent past, when faced with years of legislative budget cuts and reduced funding, UCF placed its highest priority on repairs and projects related to life safety and the Americans with Disabilities Act (ADA). Consequently, a multitude of other maintenance issues were necessarily deferred, creating a backlog of utilities, infrastructure, plant modernization, capital renewal, and roofing needs. Continuing to defer these maintenance issues adds risk to human health, and increases replacement and repair costs.

UCF has identified over \$22,456,000 in plant production and distribution needs that include replacing end-of-life pipe, increasing the size of existing pipes to provide additional heat transfer, capital renewal for new heat exchangers, and replacing defective valves and vaults.

Approximately 73% of the main campus is served by three centrally-located district cooling plants and one thermal energy storage tank that provide general comfort-cooling to critical research and academic buildings. The university also maintains and operates over 10,000 linear feet of chilled water distribution infrastructure, covering over 1,400 acres on the main campus. The three centrally-located district energy plants average 29.2 years old, with the main central energy plant turning 50 in 2019. Centrally-located plants reduce building energy consumption and greenhouse gas emissions, and also eliminate less-efficient standalone cooling systems at each building.

In addition to the chilled water plants, piping, controls improvements, and capital replacements, the grounding system of the chilled water and water production facilities, and associated distribution pipes are an essential part of any electrical system at the four locations where chilled water is produced and stored. Grounding systems protect both human life and facilities during normal and fault conditions by limiting step and touch potential. While the systems may have met the intent of the National Electrical Code at the time they were installed, many of the existing systems are inadequate, or are at end of life. To bring UCF's utility generation facilities up to today's code, a recent third-party licensed engineering firm estimated \$356,000 (current market conditions) of capital would be required for corrective and defective repairs and improvements.

Central Florida summers produce many short, intense afternoon lightning storms. It is imperative for UCF to be able to dissipate these lightning strikes and stabilize voltage during transient conditions to minimize the probability of flashover during these transient voltages that affect campus operations, sensitive lab equipment, communication and computer equipment to UCF's mission-critical functional units, and emergency response.

On-campus chilled water demands are rapidly increasing. The 2015 Campus Master Plan identifies

CIP-3 SHORT-TERM PROJECT EXPLANATION

future campus development, associated energy and peak cooling demands, and the supply-related facilities needed to adequately provide these services to future campus populations.

Further delay in funding chilled water infrastructure and deferred maintenance will result in financial and technical risk with unpredictable mechanical and utility failures that affect critical research.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Infrastructure Chilled Water Replacement

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation			0				
Total Construction - New & Rem./Renov.					0		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
		Offices	
Total		Total	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)							-
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation			0				-
d. Landscape/Irrigation				-			-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System			3,550,000	10,200,000	7,401,120		21,151,120
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	3,550,000	10,200,000	7,401,120	0	21,151,120
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees			1,174,790				1,174,790
c. Fire Marshall Fees			45,607				45,607
d. Inspection Services			50,000				50,000
e. Insurance Consultant			9,918				9,918
f. Surveys & Tests			45,000				45,000
g. Permit/Impact/Environmental Fees			82,304				82,304
h. Artwork							-
i. Moveable Furnishings & Equipment							-
j. Project Contingency			142,381				142,381
Total - Other Project Costs	-	-	1,550,000				1,550,000
ALL COSTS 1+2	0	0	5,100,000	10,200,000	7,401,120	0	22,701,120

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				22,701,120
TOTAL		-	TOTAL		0	22,701,120

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE College of Nursing and Allied Health

AGENCY PRIORITY 11
DATE BLDG PROGRAM _____

APPROVED _____

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

Since 2003, the College of Nursing has grown 227% in size, due in part to the addition of the following academic offerings: an accelerated baccalaureate program, two doctoral programs (PhD and DNP), a master's program, and two regional sites. The program's total headcount has grown from 1,199 in 2003 to 2,724 in 2015. Prior to 2003, there was only one nursing skills laboratory, which was inadequate at best. In 2004, a small conference room was converted to additional laboratory space to provide additional learning space for graduate students. By 2010, the College of Nursing (CON) had outgrown its space in the Health and Public Affairs Building and leased a building in the Central Florida Research Park to provide better teaching and learning facilities for its faculty and students. The College is at maximum capacity in this leased space. The total laboratory and classroom space available to teach all degree and certificate programs remains inadequate, and students frequently must practice their skills in the hallways and lunchrooms. Total enrollment has remained flat for the past 5 years, partially due to the fact that there is no room to expand the program with face-to-face classes. Therefore, growth is needed to meet community needs and address the university's strategic plan of increasing the number of graduate degrees awarded. This necessitates increased space for teaching and learning and for faculty and staff offices.

In order to provide the best educational experience for healthcare professionals, including nurses and physicians, the College of Nursing will be located in close proximity to the College of Medicine at Lake Nona. Utilizing shared facilities, nursing and medical school students can collaborate to ensure the best medical outcome and patient experience. A new CON building will provide adequate laboratory, classrooms, simulation, computer, research, and conference spaces, supporting educational and research needs as well as inter-professional education, which is now a mandate for accreditation of medical schools. While CON currently leases space in the Central Florida Research Park, suitable space is not available within a reasonable distance of the Medical City at Lake Nona.

A College of Nursing building will meet the needs of the student population, provide the highest quality educational and research programs, and allow its programs to expand and accommodate the ever-increasing needs of the community and the state of Florida. The proposed facility will also support expansion of the research programs and facilitate increased external funding for research to support doctoral students' and faculty members' research efforts.

Delays in this project will seriously limit any growth in terms of new faculty hires, new programs, the ability to teach using state-of-the art simulation, and the ability to meet the increasing demands for coursework and research.

CIP-3 SHORT-TERM PROJECT EXPLANATION

The Florida Center for Nursing predicts that there will be a shortage of 50,000 nurses by 2025. UCF needs to prepare nurses at all levels to meet these shortages, and clinical agencies are increasingly making preferential hires of nurses with baccalaureate and higher degrees.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

Research/Laboratory

The space classification is minimally laboratory type, with office type maximized. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

Page of

COUNTY: Orange
PROJECT BR No. (if assigned):

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to						
	Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a.Construction Cost (from above)					53,747,325		53,747,325
Add'l/Extraordinary Const. Costs							-
b.Environmental Impacts/Mitigation							-
c.Site Preparation					979,026		979,026
d.Landscape/Irrigation					200,000		200,000
e.Plaza/Walks							-
f.Roadway Improvements							-
g.Parking ___ spaces							-
h.Telecommunication					348,641		348,641
i.Electrical Service							-
j.Water Distribution							-
k.Sanitary Sewer System							-
l.Chilled Water System							-
m.Storm Water System							-
n.Energy Efficient Equipment					543,808		543,808
Total Construction Costs	0	0	0	0	55,818,800	0	55,818,800
2. Other Project Costs							
a.Land/existing facility acquisition							-
b.Professional Fees				4,680,895	-	147,000	4,827,895
c.Fire Marshall Fees				144,060			144,060
d.Inspection Services				999,634			999,634
e.Insurance Consultant				30,735			30,735
f.Surveys & Tests				200,000			200,000
g.Permil/Impact/Environmental Fees				138,578			138,578
h.Artwork					100,000		100,000
i.Moveable Furnishings & Equipment						7,203,000	7,203,000
j.Project Contingency				1,156,098	2,881,200		4,037,298
Total - Other Project Costs	-	-	-	7,350,000	2,981,200	7,350,000	17,681,200
ALL COSTS 1+2	0	0	0	7,350,000.00	58,800,000.00	7,350,000.00	73,500,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	0				
TOTAL		-	TOTAL		0	73,500,000

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Research Building I

AGENCY PRIORITY 12
DATE BLDG PROGRAM
APPROVED

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

UCF aspires to be recognized as a preeminent state research university and has set strategic goals to become a Top 50 research university by 2035. UCF is committed to a robust portfolio of research, scholarship, and creative activities across all disciplines, contributing to the creation of new knowledge. Specific metrics have been designed to meet preeminence, including: doubling research awards from \$133 million to \$250 million and achieving a level where at least 25% of graduate degrees awarded are research-focused. Strategies to meet these objectives include: reaching at least 200 post-doctoral research appointees; increasing by 50% undergraduate participation in some form of research; winning ten proposals per year exceeding \$1M, five of which exceed \$3M; creating 16 start-up companies annually and executing 36 licenses and options for UCF intellectual property; and achieving 200 patents awarded over three years.

UCF must accelerate the growth of its research enterprise in people, funded research expenditures, and facilities in order to expand the university's research scale and impact. According to the UCF Educational Plant Survey conducted in October 2015, a deficit of 618,214 NASF exists in laboratory space. Construction of Research Buildings I and II is necessary to reduce the current deficit, and is advantageous to UCF and the State of Florida as we strives to achieve top-tier, preeminent state research university status.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and

CIP-3 SHORT-TERM PROJECT EXPLANATION

laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Research Building I

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	274	0		
Teaching Labs		1.5	0	268	0		
Research Labs	48,255	1.5	72,383	375	27,143,438		
Study		1.4	0	286	0		
Instructional Media		1.5	0	215	0		
Auditorium/Exhibition		1.2	0	310	0		
Gymnasiums		1.2	0	225	0		
Offices	24,059	1.5	36,089	284	10,249,134		
Campus Support Serv	12,705	1.4	17,787	276	4,909,212		
Totals	85,019		126,258		42,301,784		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.					42,301,784	Total	0
						Total	0

SCHEDULE OF PROJECT COMPONENTS

	Funded to Date	ESTIMATED COSTS						Funded & In CIP
		2017-18	2018-19	2019-2020	2020-21	2021-22		
Basic Construction Cost								
1. a. Construction Cost (from above)	-				42,301,784			42,301,784
Add'l/Extraordinary Const. Costs								-
b. Environmental Impacts/Mitigation								-
c. Site Preparation		-			2,375,050			2,375,050
d. Landscape/Irrigation					-			-
e. Plaza/Walks								-
f. Roadway Improvements								-
g. Parking ____ spaces								-
h. Telecommunication		-			348,641			348,641
i. Electrical Service								-
j. Water Distribution								-
k. Sanitary Sewer System								-
l. Chilled Water System								-
m. Storm Water System								-
n. Energy Efficient Equipment					969,875			969,875
Total Construction Costs	0	0	0	0	45,995,350	0		45,995,350
2. Other Project Costs								
a. Land/existing facility acquisition								-
b. Professional Fees				4,224,897		121,176		4,346,073
c. Fire Marshall Fees				118,752				118,752
d. Inspection Services				742,889				742,889
e. Insurance Consultant				25,381				25,381
f. Surveys & Tests				100,000				100,000
g. Permit/Impact/Environmental Fees				124,660				124,660
h. Artwork					100,000			100,000
i. Moveable Furnishings & Equipment						5,937,624		5,937,624
j. Project Contingency				722,221	2,375,050			3,097,271
Total - Other Project Costs	-	-	-	6,058,800	2,475,050	6,058,800		14,592,650
ALL COSTS 1+2	0	0	0	6,058,800	48,470,400	6,058,800		60,588,000

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				60,588,000
TOTAL		-	TOTAL		0	60,588,000

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Visual Arts Building
Renovation and Expansion

AGENCY PRIORITY 13
DATE BLDG PROGRAM _____

APPROVED _____

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

The Visual Arts Building was constructed in 1991 and is in need of renovation. An expansion has also been proposed to support its educational programs.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Visual Arts renovation will address both critical and non-critical issues identified in the FCA. This renovation will require less than a complete remodel in that the utility services are adequate for the next 15 years. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, elevator modernization, asbestos abatement and remediation, HVAC modernization and air filtration system for the ceramic lab, lighting upgrades, building automation, ADA compliance, building envelope repairs for window glazing, interior finishes, and flooring. Information technology upgrades are also required in order to meet current and future technology requirements. Interior finishes and art studios are inefficient and require modernization for lighting and air quality.

The current facility is not suitably sized or outfitted to house the School of Visual Arts and Design's undergraduate studio arts activities or accommodate the high growth areas of film, and graphic design. The current configuration impedes curricular development, recruitment/retention, and learning outcomes. The expansion to the building for the visual arts will alleviate current impaction by providing: wider hallways with abundant seating, larger studios, dedicated studios for senior capstone projects, a cold-desk space for upper-division courses, flex spaces (project assembly, installations, digital projections, critiques, etc.), a spray booth, a media room, a library/study, administrative and advising spaces, offices, conference rooms, faculty offices and research labs/studios, two art galleries (one large, school-operated and one small, student-run) student retail enterprise initiative, and increased storage for supplies and projects. Depending on the size of the new facility and school-wide enrollment projections/goals for the school with current unmet needs and forecast growth, some or all of the film area (currently housed in the Nicholson School of Communication) may occupy the expansion and consolidate in VAB with graphic design. The expansion would return our Studio Art and the Computer Graduate program to the main campus with access to SVAD faculty, technical shops, and undergraduate studio labs.

If the project is not approved, parts of the building will be rendered unusable over time due to unresolved environmental health and safety issues associated with deferred maintenance.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's

CIP-3 SHORT-TERM PROJECT EXPLANATION

mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.7, Visual Arts Renovation, and No. 3.6 Visual Arts Addition.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Visual Arts Ren. & Expansion

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs	18,500	1.5	27,750	306	8,491,500		
Research Labs		1.5	0	366	0		
Study	8,000	1.4	11,200	290	3,248,000		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition	9,500	1.2	11,400	320	3,648,000		
Gymnasiums		1.2	0	225	0		
Offices	7,000	1.5	10,500	299	3,139,500		
Campus Support Services		1.4	0	274	0		
Totals	43,000		60,850		18,527,000		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
					6,426,853		
Total Construction - New & Rem./Renov.					24,953,853		
Space Detail for Remodeling Projects							
BEFORE				AFTER			
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	16,575	Offices	16,575				
Total				Total			

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost					24,953,853		24,953,853
1. a. Construction Cost (from above)							-
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation					238,000		238,000
d. Landscape/Irrigation					253,069		253,069
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication					348,641		348,641
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment					821,852		821,852
Total Construction Costs	0	0	0	0	26,615,415	0	26,615,415
2. Other Project Costs							-
a. Land/existing facility acquisition							-
b. Professional Fees				2,084,599	28,147		2,112,746
c. Fire Marshall Fees				70,115			70,115
d. Inspection Services				420,305			420,305
e. Insurance Consultant				15,484			15,484
f. Surveys & Tests				45,000			45,000
g. Permit/Impact/Environmental Fees				97,876			97,876
h. Artwork				-			-
i. Moveable Furnishings & Equipment						3,505,732	3,505,732
j. Project Contingency				772,353	1,402,293		2,174,646
Total - Other Project Costs	-	-	-	3,505,732	1,430,440	3,505,732	8,441,904
ALL COSTS 1+2	0	0	0	3,505,732	28,045,855	3,505,732	35,057,319

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0				
TOTAL		-	TOTAL		0	35,057,319

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Wastewater, Water, Natural
Gas ReplacementAGENCY PRIORITY 14

DATE BLDG PROGRAM _____

APPROVED _____

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

UCF strives to be a good steward of state funds, and as such has historically had the challenge of balancing the maintenance and operations of its buildings with the need to repair, replace and upgrade its utilities and infrastructure. In the recent past, when faced with years of legislative budget cuts and reduced funding, UCF placed its highest priority on repairs and projects related to life safety and the Americans with Disabilities Act (ADA). Consequently, a multitude of other maintenance issues were necessarily deferred, creating a backlog of utilities, infrastructure, plant modernization, capital renewal, and roofing needs. Continuing to defer these maintenance issues adds risk to human health, and increases replacement and repair costs.

These utility capital improvement projects include: replacing and increasing the size of aging water, waste-water, and natural gas pipes, valves, pumps, appurtenances, and controls; and facility improvements and modernization to generation facilities within each commodity's distribution network.

Natural Gas

The university has identified over \$380,000 of cathodic protection devices and new valves needed to support and properly isolate the system.

Other protection schema to UCF's utility distribution include upgrades to existing cathodic protection (CP) devices to UCF's natural gas and water services' circuits. Cathodic protection uses low-DC voltage techniques to control corrosion of UCF's distribution pipes by making a cathode of an electrochemical cell. By employing this technique, the cathode provides the sacrificial metal for corrosion to occur, which prevents pitting and resulting pipe leaks due to corrosion. This year, the department is evaluating capital replacement of the utility-owned CP devices to our 24,000 linear feet of low-, high-, and medium-pressure gas lines. This methodology will also apply to water and chilled water distribution circuits as funding and resources become available.

Waste / Wastewater

Many parts of the campus core's water infrastructure are approaching 40 years old, and capacity within waste water infrastructure requires upgrading pipe size and lift stations, along with purchasing additional effluent capacity. UCF's waste water capacity is currently capped at 1,000,000 gallons per day; to purchase an additional 100,000 gallons per day would exceed our existing agreement with the county by over \$875,000. UCF has identified over \$28,700,000 in capital renewal for its oldest campus commodity network.

The potable water distribution plant is outdated, and requires over \$1,000,000 in equipment and SCADA upgrades. In addition, both systems require replacement of distribution piping and isolation valves that are at end of life. The effluent transportation system was updated 14 years ago by

CIP-3 SHORT-TERM PROJECT EXPLANATION

installing a master lift station, and now requires many new mechanical floats, probes, and SCADA upgrades. Secondary lift stations require upgrading to install secondary power for emergency backup and replacement of distribution piping throughout campus, because a majority of the distribution piping has been in the ground for 25-40 years.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

GEOGRAPHIC LOCATION: University of Central Florida, Orlando

COUNTY: Orange

PROJECT DESCRIPTION/TITLE: Wastewater - Water, Natural Gas Replacement

PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation			0				
Total Construction - New & Rem./Renov.					0		

Space Detail for Remodeling Projects

BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
		Offices	
Total		Total	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost				4,419,835	9,690,000	12,141,570	26,251,405
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation			0				-
d. Landscape/Irrigation				-			-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication				-			-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	4,419,835	9,690,000	12,141,570	26,251,405
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees				2,170,544	-		2,170,544
c. Fire Marshall Fees				60,512	-		60,512
d. Inspection Services				150,000	-		150,000
e. Insurance Consultant				13,377	-		13,377
f. Surveys & Tests				45,000	-		45,000
g. Permit/Impact/Environmental Fees				91,816	-		91,816
h. Artwork					-		-
i. Moveable Furnishings & Equipment					-		-
j. Project Contingency				188,916	510,000	639,030	1,337,946
Total - Other Project Costs	-	-	-	2,720,165	510,000	639,030	3,869,195
ALL COSTS 1+2	0	0	0	7,140,000	10,200,000	12,780,600	30,120,600

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				30,120,600
TOTAL		-	TOTAL		0	30,120,600

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Millican Hall Renovation

AGENCY PRIORITY 15
DATE BLDG PROGRAM APPROVED

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

The Millican Hall administration building was built in 1969-70, and is one of the first two buildings on campus. This 87,742 GSF facility houses the Office of the President, Provost, university Vice Presidents, Academic Affairs, University Registrar, Student Development and Enrollment Services, and Administration and Finance, among others.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Millican Hall renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements. This renovation will require commissioning to a LEED Silver level in order to meet the university's sustainability requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016.
See recommendation No. 2.4, Millican Hall Renovation.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Millican Hall Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
	86783		87752				
Total Construction - New & Rem./Renov.					8,512,443		

Space Detail for Remodeling Projects

BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	87,752	Offices	87,752
Total		Total	
		87,752	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)					8,712,443		8,712,443
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation					192,741		192,741
d. Landscape/Irrigation					100,000		100,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication					150,000		150,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment					979,123		979,123
Total Construction Costs	0	0	0	0	10,134,307	0	10,134,307
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees				870,226		122,390	992,616
c. Fire Marshall Fees				24,093			24,093
d. Inspection Services				159,060			159,060
e. Insurance Consultant				5,226			5,226
f. Surveys & Tests				45,000			45,000
g. Permit/Impact/Environmental Fees				65,870			65,870
h. Artwork							-
i. Moveable Furnishings & Equipment						1,204,629	1,204,629
j. Project Contingency				157,544	481,851		639,395
Total - Other Project Costs	-	-	-	1,327,019	481,851	1,327,019	3,135,889
ALL COSTS 1+2	0	0	0	1,327,019	10,616,158	1,327,019	13,270,196

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2016-17	0				13,270,196
TOTAL			TOTAL		0	13,270,196

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Business Administration
RenovationAGENCY PRIORITY 16

DATE BLDG PROGRAM _____

APPROVED _____

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

The College of Business Administration (CBA) offers degrees at the bachelor's, master's, doctoral and executive levels. All programs, including the Kenneth G. Dixon School of Accounting, are accredited by The Association to Advance Collegiate Schools of Business (AACSB International). Only 5% of the world's 13,000 business programs have achieved such distinction through rigorous standards of achievement. AACSB-accredited schools are globally recognized for their outstanding mission, faculty contributions, operations and more. Degrees from such schools are constantly increasing in value, giving students a competitive edge.

Business Administration, a STEM facility, houses five academic units: the School of Accounting and the Departments of Economics, Finance, Management, and Marketing. The College of Business Administration serves 7,765 undergraduate and 721 graduate students. Technology plays an integral role in the curriculum through state-of-the-art computer labs, tech support, and multi-media classrooms, and students graduate with the technical knowledge and entrepreneurial skills necessary to compete in today's global marketplace. The College's core business curriculum is extremely sound, and the faculty deliver excellence and opportunity to the students. However, the aging facility must also support the College's mission and vision. In order to give future students a competitive edge, the existing building must be renovated as the world of business is changing the way students learn and receive information. The renovation will produce a state-of-the-art educational facility that cultivates a learning environment promoting collaboration, engagement, risk taking and data-driven decision making.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Business Administration I renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future technology requirements.

Space utilization exceeds the current statutory requirement of 60% student stations occupied at a minimum of 40 hours per week. Where classrooms are concerned, the UCF main campus already is operating "at or above capacity." Based on the 2011 educational plant survey analysis for space needs, the university has a shortfall of classroom space. The university has been forced over the past several years to rent temporary facilities, both on and off campus, for classrooms and other purposes. UCF students are also taking summer classes and online classes in order to meet graduation requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.3, Business Administration Renovation.

Page ____ of ____

COUNTY: Orange

PROJECT BR No. (if assigned):

ESTIMATED COSTS

2. Other Project Costs							
a.Land/existing facility acquisition						-	
b.Professional Fees		487,184	163,853			651,017	
c.Fire Marshall Fees		23,642				23,642	
d.Inspection Services			124,473			124,473	
e.Insurance Consultant		4,763				4,763	
f.Surveys & Tests		-				-	
g.Permit/Impact/Environmental Fees		61,709				61,709	
h.Artwork		-				-	
i.Moveable Furnishings & Equipment				577,278		577,278	
j.Project Contingency			1,617,739			1,617,739	
Total - Other Project Costs		-	-	577,278	1,908,065	577,278	3,060,621
ALL COSTS	1+2	0	0	577,278	11,073,255	577,278	12,227,811

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	0				
TOTAL		<u>0</u>	TOTAL		<u>0</u>	<u>12,227,811</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Facilities & Safety Complex
RenovationAGENCY PRIORITY 17

DATE BLDG PROGRAM

APPROVED

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

The Facilities and Safety Complex was constructed over a number of years, with the first building completed in 1969, and is approximately 103,286 gross square feet (GSF). The complex consists of five buildings: A) offices/shops; B) Fleet Maintenance, Landscape, and Locksmith Shop; C) Landscape; D) Housekeeping and Utilities & Energy Services; and E) Warehouse.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Facilities and Safety Complex renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as potable water and plumbing distribution systems, electrical service, HVAC modernization, lighting upgrades, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting and utility service entrance upgrades. The complex is manned 24/7, as it is integral to operations for all natural disaster mitigation. It houses the majority of all operational equipment, and does not provide adequate space for a university that ranks 2nd largest in the nation. Information technology upgrades are also required in order to meet current and future requirements. Due to the logistical importance of this facility, security requirements identified by the Department of Homeland Security are lacking and require immediate attention. Failure to provide current and functional facilities at the core of the university's operational needs will degrade current systems even further.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable

CIP-3 SHORT-TERM PROJECT EXPLANATION

building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 2.6, Facilities and Safety Complex Renovation.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando

COUNTY: Orange

PROJECT DESCRIPTION/TITLE: Facilities and Safety Complex Ren.

PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		

*Apply Unit Cost to total GSF based on primary space type

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	17,039	Offices	17,039
Total	17,039	Total	17,039

Remodeling/Renovation	103286	3619283
Total Construction - New & Rem./Renov.		4,065,377

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)				4,065,377			4,065,377
Add'l/Extraordinary Const. Costs							
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation							-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	4,065,377	0	0	4,065,377
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees				474,676			474,676
c. Fire Marshall Fees				11,957			11,957
d. Inspection Services				-			-
e. Insurance Consultant				2,439			2,439
f. Surveys & Tests				-			-
g. Permit/Impact/Environmental Fees				43,038			43,038
h. Artwork				-			-
i. Moveable Furnishings & Equipment				333,683			333,683
j. Project Contingency				743,719			743,719
Total - Other Project Costs	-	-	-	1,609,512	-	-	1,609,512
ALL COSTS 1+2	0	0	0	5,674,889	0	0	5,674,889

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	0				5,674,889
TOTAL		-	TOTAL		0	5,674,889

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Research Building II

AGENCY PRIORITY 18
DATE BLDG PROGRAM
APPROVED

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

UCF aspires to be recognized as a preeminent state research university and has set strategic goals to become a Top 50 research university by 2035. UCF is committed to a robust portfolio of research, scholarship, and creative activities across all disciplines, contributing to the creation of new knowledge. Specific metrics have been designed to meet preeminence, including: doubling research awards from \$133 million to \$250 million and achieving a level where at least 25% of graduate degrees awarded are research-focused. Strategies to meet these objectives include: reaching at least 200 post-doctoral research appointees; increasing by 50% undergraduate participation in some form of research; winning ten proposals per year exceeding \$1M, five of which exceed \$3M; creating 16 start-up companies annually and executing 36 licenses and options for UCF intellectual property; and achieving 200 patents awarded over three years.

UCF must accelerate the growth of its research enterprise in people, funded research expenditures, and facilities in order to expand the university's research scale and impact. According to the UCF Educational Plant Survey conducted in October 2015, a deficit of 618,214 NASF exists in laboratory space. Construction of Research Buildings I and II is necessary to reduce the current deficit, and is advantageous to UCF and the State of Florida as we strives to achieve top-tier, preeminent state research university status.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and

CIP-3 SHORT-TERM PROJECT EXPLANATION

laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and will look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use, and all heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

Page of

COUNTY: Orange
PROJECT BR No. (if assigned):

ESTIMATED COSTS

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				66,096,000
TOTAL		<u>-</u>	TOTAL		<u>0</u>	<u>66,096,000</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Multi-Purpose Research and
Education BuildingAGENCY PRIORITY 19

DATE BLDG PROGRAM

APPROVED

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

The Multi-Purpose Research and Education Building must be a state-of-the-art facility, capable of supporting university research and administrative functions. It will be a shared-space facility, providing general research and office space with multimedia capabilities of the highest available technological quality. The facility will house a variety of valuable services for the academic community, while also serving as a temporary space for departments while their buildings are being renovated. Extensions of campus utilities and roadways are being requested separately to meet the needs of this and other campus construction projects.

Where research labs, classrooms, and teaching labs are concerned, the UCF main campus is already operating "at or above capacity." Based on the 2015 Educational Plant Survey, the university is at a deficit for classroom space and research and teaching labs, and requires this new building to meet current and growing demands. The university has been forced over the past several years to rent temporary facilities, both on- and off-campus.

Research labs are essential for thesis and dissertation work by students in disciplines with active graduate programs, especially at the doctoral level. Many cases exist on campus where the same labs are used for graduate coursework, thesis and/or dissertation work, and faculty research.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices

CIP-3 SHORT-TERM PROJECT EXPLANATION

and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016.
See recommendation No. 3.5, Multi-Purpose Research and Education.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

ESTIMATED COSTS

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				
TOTAL		<u>-</u>	TOTAL		<u>0</u>	<u>32,476,967</u>

AGENCY University of Central Florida

BUDGET ENTITY SUS

PROJECT TITLE UCF Downtown

Building 2

AGENCY PRIORITY 20 , 38

DATE BLDG PROGRAM

APPROVED

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

The University of Central Florida is planning to expand our downtown Orlando presence in 2018 with a Type I campus that will focus on student instruction and services. The new campus will transform our current downtown offerings by strategically relocating programs from our main campus in east Orlando to downtown. The project also expands the university's long-standing partnership with Valencia College, which would relocate complementary programming and offer non-duplicated, lower-division coursework. UCF's downtown expansion will create a world-class, best-in-the-nation site for digital media, communication, public service, and health-related programs in an innovative, urban environment.

This expanded campus will allow UCF to significantly enhance the academic experience through innovative learning environments and engaged location-based education. Partnering with Valencia College will enable students to earn a bachelor's degree at a lower cost, while also providing greater opportunity for degree attainment in a historically underserved area. Finally, the expansion will help UCF to meet the needs of the city-state by creating additional space that is necessary for the university to grow in Areas of Strategic Emphasis. UCF plans to open the new campus in 2018 with the construction of a new Academic Building and the renovation of the existing Center for Emerging Media. When the campus opens, it is projected to enroll approximately 7,700 UCF and Valencia students, and when completed, Building 2 will serve approximately an additional 2,500 students from both schools.

Building 2 will build on the success of the new downtown campus, and will be home to academic programs such as advertising and public relations, emerging media and graphic design, journalism, radio/television, and film. Building 2 will add an additional 1,600 UCF students to the downtown campus. Programs that are currently planned to occupy Building 2 are in high demand and will prepare students for occupations in growing industries. The U.S. Department of Labor Bureau of Labor Statistics predicts high growth from 2012 to 2022 for the following occupations linked to this building's academic programs: 12% growth in Public Relations Specialists and 6.9% growth in Advertising and Promotions Managers. In addition to strong growth, these occupations have recorded strong annual earnings. Advertising and Promotions Managers earn an average salary of \$117,550, and Public Relations Specialists earn an average salary of \$58,650. In addition, Building 2 will serve 900 students from Valencia College in programs strategically aligned with UCF's degree programs. Valencia will relocate the Associate of Science in Graphic Design and offer additional courses to support the anticipated growth of the Associate of Arts degree within the facility.

Students studying in Building 2 will be within a 15-minute walk of many valuable experiential learning opportunities they would not find in such close proximity to UCF's main campus. For example, journalism majors could intern at the Orlando Sentinel in its digital newsroom or at the

CIP-3 SHORT-TERM PROJECT EXPLANATION

24-hour broadcast station Central Florida News 13. Additionally, the building will provide space for several of UCF's community-facing operations, such as its public radio and television stations.

Building 2 will be 222,000 gross square feet dedicated to flexible learning environments, teaching laboratories, and collaborative learning spaces that encourage interdisciplinary education and problem solving. In addition, this facility will feature state-of-the-art production studios and editing facilities to support the highly technical communication programs housed within the building. This facility will break down traditional brick-and-mortar barriers and encourage synergy among faculty, staff, and students through intentional space design. In addition, this facility will be designed to flexibly adapt to new trends related to innovative teaching and learning and flexibly share studios between all academic programs.

Building 2, as part of the UCF Downtown campus, will create a dynamic learning environment for students in strategically selected programs, in addition to meeting the needs of growing occupations within the region and across the state.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: UCF Downtown Campus Building II

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms	37,740	1.5	56,610	287	16,247,070		
Teaching Labs	38,851	1.5	58,277	306	17,832,609		
Research Labs	0	1.5	0	366	0		
Study	11,193	1.4	15,670	290	4,544,358		
Instructional Media	32,876	1.5	49,314	216	10,651,824		
Auditorium/Exhibition	7,893	1.2	9,472	320	3,030,912		
Gymnasiums	0	1.2	0	225	0		
Offices	21,772	1.5	32,658	299	9,764,742		
Campus Support Services	0	1.4	0	274	0		
Totals	150,325		222,000		62,071,515		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.							
					62,071,515	Total	0
						Total	0

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost					62,071,515		62,071,515
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							
b. Environmental Impacts/Mitigation					-		-
c. Site Preparation					728,000		728,000
d. Landscape/Irrigation					864,000		864,000
e. Plaza/Walks					512,960		512,960
f. Roadway Improvements					-		-
g. Parking ___ spaces					-		-
h. Telecommunication					2,180,000		2,180,000
i. Electrical Service					179,212		179,212
j. Water Distribution					111,489		111,489
k. Sanitary Sewer System					323,379		323,379
l. Chilled Water System					-		-
m. Storm Water System					-		-
n. Energy Efficient Equipment					-		-
Total Construction Costs	0	0	0	0	66,970,555	0	66,970,555
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees					3,449,941		3,449,941
c. Fire Marshall Fees					150,930		150,930
d. Inspection Services					147,500		147,500
e. Insurance Consultant					-		-
f. Surveys & Tests					-		-
g. Permit/Impact/Environmental Fees					315,074		315,074
h. Artwork					100,000		100,000
i. Moveable Furnishings & Equipment					3,563,431		3,563,431
j. Project Contingency					3,019,894		3,019,894
Total - Other Project Costs	-	-	-	-	10,746,770	-	10,746,770
ALL COSTS 1+2	0	0	0	0	77,717,325	0	77,717,325

Appropriations to Date	Project Costs Beyond CIP Period	Total Project In CIP & Beyond
Source Fiscal Year Amount	Source Fiscal Year Amount	
0		
TOTAL	TOTAL	77,717,325

AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE CREOL Expansion Phase IIAGENCY PRIORITY 22

DATE BLDG PROGRAM

APPROVED

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

The College of Optics and Photonics and the Center for Research & Education in Optics and Lasers (CREOL) have grown in size and in stature. A new undergraduate program offering a Bachelor of Science degree in Photonic Science and Engineering began in Fall 2013, and has already attracted more than 100 new students. Five new faculty have been added since 2014. External research funding increased from an annual average of \$11.3M in FY2011– FY2015 to \$17M in FY2016. The College contributes about 13% of UCF's total research funding. Additional growth in the areas of medical optics, biophotonics, and laser-based manufacturing is anticipated. The college has outgrown its building, which has already been expanded once (Phase I) with a 3-story addition built onto the original 2-story structure. The proposed Phase II project is another 3-story addition to the east side of the building. The project will add 13,900 additional square feet of space to the existing 103,532 square feet building. The new space will house additional labs and offices, which are necessary for the growing educational and research programs, as well as the shell of a new auditorium that will be completed later.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs will be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

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GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: CREOL Expansion Phase II

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs	3,500	1.5	5,250	366	1,921,500		
Study	0	1.4	0	290	0		
Instructional Media	0	1.5	0	216	0		
Auditorium/Exhibition	4,708	1.2	5,650	320	1,807,872		
Gymnasiums	0	1.2	0	225	0		
Offices	2,000	1.5	3,000	299	897,000		
Campus Support Services		1.4	0	274	0		
Totals	10,208		13,900		4,626,372		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.							
4,626,372							

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Total		Total	
0		0	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost		4,626,372					4,626,372
1. a. Construction Cost (from above)							-
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation		410,699					410,699
d. Landscape/Irrigation							-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication		51,100					51,100
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment		-					-
Total Construction Costs	0	5,088,171	0	0	0	0	5,088,171
2. Other Project Costs							-
a. Land/existing facility acquisition							-
b. Professional Fees		535,291					535,291
c. Fire Marshall Fees		13,867					13,867
d. Inspection Services		104,198					104,198
e. Insurance Consultant		2,934					2,934
f. Surveys & Tests		1,500					1,500
g. Permit/Impact/Environmental Fees		48,186					48,186
h. Artwork		-					-
i. Moveable Furnishings & Equipment		418,858					418,858
j. Project Contingency		571,223					571,223
Total - Other Project Costs	-	1,696,057	-	-	-	-	1,696,057
ALL COSTS 1+2	0	6,784,228	0	0		0	6,784,228

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0	PECO	2020-21		6,784,228
TOTAL		-	TOTAL		-	6,784,228

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Stadium Video and Sound

AGENCY PRIORITY 23
DATE BLDG PROGRAM
APPROVED

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

Bright House Networks Stadium and the CFE Arena will see significant upgrades and additions to the facilities' lighted electronic displays (LED) (commonly referred to as video boards) prior to the 2016-17 UCF football and basketball seasons. Daktronics has been selected to install 17 new LED displays in the two facilities.

The main LED display at Bright House Networks Stadium will measure 114 feet wide by 36 feet high (4,104 square feet). For comparison, the video display built into the current scoreboard structure is 33.6 feet wide by 19.1 feet high (641 square feet). It will feature Daktronics' 15HD pixel layout for excellent image clarity. The display also features variable content zoning, allowing it to show one large image or be divided into multiple windows to show any variety of live video, instant replays, statistics, scoring, graphics, animations, and sponsorship messages. The resolution of the new video board will be greatly enhanced in relation to the current display.

The football stadium will also see the addition of a ribbon display added to the south end zone. This display will measure more than seven feet high by 199 feet long. It will offer the opportunity to supplement content and information on the main display, while also offering unique opportunities for fan engagement and sponsor messaging.

At the CFE Arena, a nine-display center-hung configuration will be the centerpiece above the basketball court. Four main displays will each measure 14 ½ feet high by 17 ½ feet wide. These four displays will feature the same variable content zoning mentioned in the football display above, and will also feature vastly improved resolution over the current displays. Four wedge-shaped displays will fill in the corners of the center-hung configuration. Below the main displays, a lower ring measuring approximately three feet high by 58 feet in circumference will also be installed.

In addition, the arena will also see a 270-degree ribbon display, measuring 2 feet high by 659 feet in length around the inside of the facility. Five courtside scorers' tables, each measuring 2 ½ feet high by 8 feet wide will also be in use during Knights' basketball games. Both the ribbon display and scorers' tables allow the flexibility to provide supplemental game information, fan engagement opportunities, and sponsor messaging.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
		0	PECO			8,066,327
						-
TOTAL		-	TOTAL		-	8,066,327

AGENCY University of Central Florida

BUDGET ENTITY SUS

PROJECT TITLE UCF Downtown
Combined Heat and
Power PlantAGENCY PRIORITY 24
DATE BLDG PROGRAM

APPROVED

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

The University of Central Florida intends to build a campus in downtown Orlando that will ultimately enroll approximately 15,000 students at full buildout. The campus will provide new academic learning spaces and focus on the growing fields of digital media and communications, as well as public health and public affairs. Locating these programs in downtown Orlando in interactive, innovative new learning environments will provide increased experiential and internship opportunities for students in these fields, along with enhanced networking and research or collaborative academic partnerships with faculty and the professional community in downtown Orlando. Additionally, one-time investment in developing and constructing UCF Downtown facilities and related infrastructure is expected to generate \$575 million in gross economic income and 4,070 jobs, providing \$255 million in wages and salaries.¹

UCF will need to construct a centralized on-campus Central Energy Plant (CEP) in order to produce electricity, chilled water, and hot water for the UCF Downtown campus, and distribute the utilities through an underground infrastructure. The CEP will provide UCF with the ability to be 100% independent from the local electrical utility company. As long as natural gas is available to the campus, the CEP will be capable of producing all campus electrical, cooling, and heating.

The downtown campus likely will be built in a phased approach; so loads will appear over a multi-year period. The equipment must be configured in discrete units to meet campus loads as they are built. Once fully built out, the anticipated downtown spaces by type include approximately 590,000 square feet of academic/classroom/office space, a 600-bed residence hall, and a 600-space parking garage. The anticipated electrical loads based on the anticipated buildout are 4,000 KW peak demand or 10MM KWH in annual consumption. The anticipated thermal loads include 2,200 TON peak cooling load and a 100,000 THERM peak heating load.

There are two main components within the CEP: the first is a series of natural gas fired prime movers coupled to generators to produce electricity for the campus, and the second is chilled water production. The primary electrical generation component is to be configured in a combined heat and power arrangement. The waste heat from the combustion process is to be captured and used to support the thermal needs of the campus buildings. The prime mover and associated generator combinations should be of sufficient number to provide N+2 level of redundancy. Photovoltaic production should also be considered as part of the portfolio, but should not exceed 10% of the peak demand.

¹ UCF Downtown Economic Impact and Fiscal Impact Analysis, 2014. GAI Consultants.

The electrical generation components must have load-following capability. The discrete prime movers must be sized to stage on and off, to meet all campus electrical demands while maintaining a high level of thermal efficiency. An electrical storage component may be needed to modulate the production of electricity from multiple prime movers as well as photovoltaic production.

The plant should be configured in with a closed transition transfer switch. The transfer switch will allow the campus to transfer all campus electrical loads from the CEP on-site production to the local utility provider and back again, without interruption of service. The CEP is to provide primary electrical service to the campus community.

The second major component is chilled water production through a series of water-cooled electrically driven chillers. The chillers and associated ancillary equipment (towers, pumps, fans, etc.) should be of sufficient number to provide N+2 level of redundancy.

Higher Educational Facilities Return on Investment

Institution: University of Central Florida

Project: Engineering Building I Renovation

Total Funding: \$20,667,375

Previous Funding (State and Local): \$3,620,723

STEM (Yes or No): YES

Contact Person (Name, Position, Phone No.):

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

1. ☒ Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)
Explanation:
The College of Engineering and Computer Science (CECS) awarded 1,685 engineering and computer science degrees in 2014-15. Florida Education & Training Placement Information Program (FETPIP) data for 2013-14 indicates that 58% of bachelor's recipients were employed in Florida, with an average salary of \$59,134; and 51% of master's recipients were employed in Florida, with an average salary of \$78,651.
2. ☒ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation:
This building houses the preeminent College of Engineering and Computer Science, the largest in Florida and 9th largest in the nation, with 8,072 undergraduate students and 1,337 graduate students.
3. ☒ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:
The renovation will allow annual research expenditures to increase by \$850,000 within two years of project completion.
4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:

All programs in the CECS are designated as STEM programs.

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

Explanation:

A newly renovated facility will allow UCF to solicit philanthropic donations, giving donors the opportunity for naming rights to the Engineering Building I. Additional philanthropic funds will be used to enhance the lab infrastructure, resulting in expanded funding opportunities from corporations and other funding agencies. Corporations that fund our research are eager to support internship opportunities for our students and potentially offer them employment upon graduation.

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

Explanation:

- a. The Engineering Building I is currently, and will remain, 130,885 GSF and 77,924 NASF.
- b. This renovation creates and upgrades classrooms, instructional and research labs, clean rooms, and ancillary spaces. It provides long-term energy efficiency and extends the life of a 30-year-old building.

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

Explanation:

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

Explanation:

- a. A cost-benefit analysis revealed that construction of a new facility would cost \$65.7M, while a renovation of the existing facility would cost \$18.5M.
- b. The renovation prevents costly, stop-gap repair measures to antiquated building systems. An independent study identified that all mechanical systems are past their lifespan, and that the building needs to be upgraded to meet current building and life-safety codes.
- c. Inevitable increases in enrollment will further stress antiquated building systems and will lead to still more costly, stop-gap repairs. An extensive renovation will substantially curtail repeated repair and deferred maintenance expenses that are due to the age and extensive use of the building.

9. ☒ Projected Facility Utilization Rate

Explanation:

Engineering I is currently, and will remain after renovation, fully utilized. All offices are assigned; in some cases employees are sharing an office. Classes are held from 7:30 am until 9:30 pm Monday through Thursday and from 7:30 am until 5:30 pm on Friday. Faculty and student researchers use the laboratories at all hours. Student teams working on design projects and other group assignments are working around the clock in the building. Enrollment growth in the College of Engineering and Computer Science regularly outpaces the growth of UCF overall. Much-needed new faculty hires are contributing to an even higher utilization of this facility.

10. ☒ Current/Projected Campus Utilization Rate

Explanation:

Based on UCF's Educational Plant Survey, which was conducted on October 6-8, 2015, the BOG is projecting that by 2020-2021, UCF will require additional square footage in all of the 9 space categories. The following estimates represent the current deficits of square footage for space categories within this building:

Classroom - 78,144 (24.54%)

Teaching Lab - 317,448 (51.89%)

Research Lab - 618,214 (67.11%)

Office - 259,853 (26.39%)

Support Services - 101,716 (54.03%)

Other Pertinent Information not included above:

- In 2013-14, UCF produced the second-largest number of STEM graduates in the State University System of Florida.
- UCF is ranked in the top 20 among the world's 100 patent-producing universities by IEEE; and the Industrial Engineering graduate program is ranked 39th in the country.
- The renovation will provide short-term impact to the local economy, as follows:
 - Year 1: \$28,963,700 93 construction jobs, 97 other sectors
 - Year 2: \$1,961,716 6 construction jobs, 13 other sectors
- The College of Engineering was ranked 7th best graduate engineering school for Hispanics by *Hispanic Business Magazine* (2014).

- Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric
 - a. Graduates of the CECS programs contribute to Metrics 6 (bachelor's degrees awarded in areas of strategic emphasis) and 8A (graduate degrees awarded in areas of strategic emphasis (includes STEM)) of the Performance Funding Model.
 - b. The UCF CECS is ranked 82nd in the nation according to US News and World Report's Best Graduate Schools 2016, and ranked 43rd among public institutions (2nd in Florida).
 - c. The completion of overdue renovations will likely have a modest impact on rankings. The views of visiting deans and distinguished faculty from other institutions, as well as officers of corporate partners and employers, are important in determining our overall ranking. When visitors see a modern, well-maintained facility, their views of the CECS can only be enhanced. Conversely, further delays in carrying out the renovations will only impact the views of visitors negatively.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

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GEOGRAPHIC LOCATION: University of Central Florida, Orlando

COUNTY: Orange

PROJECT DESCRIPTION/TITLE: UCF Downtown Campus Combined Heat and Power Plant

PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	274	0		
Teaching Labs		1.5	0	268	0		
Research Labs	0	1.5	0	375	0		
Study	0	1.4	0	286	0		
Instructional Media	0	1.5	0	213	0		
Auditorium/Exhibition		1.2	0	310	0		
Gymnasiums	0	1.2	0	225	0		
Offices	1,000	1.5	1,500	284	426,000		
Campus Support Services		1.4	0	276	0		
Totals	0		1,500		426,000		
*Apply Unit Cost to total GSF based on primary space type							
						Space Detail for Remodeling Projects	
						BEFORE	AFTER
						Space Type	Net Area (NASF)
						Space Type	Net Area (NASF)
						Total	0
						Total	0
Remodeling/Renovation							
Total Construction - New & Rem./Renov.						426,000	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost		426,000					426,000
1. a. Construction Cost (from above)							-
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation		350,000					350,000
d. Landscape/Irrigation		200,000					200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication		200,000					200,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment		10,000,000					10,000,000
Total Construction Costs	0	11,176,000	0	0	0	0	11,176,000
2. Other Project Costs							-
a. Land/existing facility acquisition							-
b. Professional Fees		2,273,726					2,273,726
c. Fire Marshall Fees		84,330					84,330
d. Inspection Services		489,442					489,442
e. Insurance Consultant		18,747					18,747
f. Surveys & Tests		75,000					75,000
g. Permit/Impact/Environmental Fees		105,727					105,727
h. Artwork		-					-
i. Moveable Furnishings & Equipment		226,781					226,781
j. Project Contingency		669,005					-
Total - Other Project Costs	-	3,942,758	-	-	-	-	3,273,753
ALL COSTS 1+2	0	15,118,758	0	0		0	14,449,753

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0	PECO			15,118,758
TOTAL		-	TOTAL		-	15,118,758

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Campus Entryways

AGENCY PRIORITY 25
DATE BLDG PROGRAM APPROVED

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

The University of Central Florida has recognized for some time that the construction of appropriate entry features has lagged behind the university's tremendous growth. Over the past twenty years, UCF has become the largest university in Florida and the second largest university in the nation, but the campus lacks entry features that announce arrival to this major institution. Substantial, emblematic entry features are essential for announcing arrival, expressing identity, and building connections to the surrounding community. They also contribute to first impressions and wayfinding and navigation for visitors. Every major university in the state of Florida has substantial entry features at their main entrances that enhance the arrival experience and relate to the overall architectural features of their main campuses. Currently, UCF has a single, small entry feature at the University Boulevard entrance, but this attractive feature is not scaled appropriately for the large four-way intersection with Alafaya Trail, that encompasses over 30 lanes of traffic. The entry feature at this location needs to be much larger to stand out against the background of this large intersection. A revised entry gateway at University Boulevard is also viewed as an essential part of the major revisions planned by Orange County to improve pedestrian safety and traffic flow along Alafaya Trail. None of the other campus entries have notable entry features that announce arrival to the campus.

To address the important need for unified campus entry features, the university hired an architectural firm to develop conceptual designs for significant structures at each of the entrances to main campus. The conceptual elements draw inspiration from the campus architectural vernacular of buildings throughout campus, boldly display UCF lettering and the Pegasus logo, and express the five university values. The features include sweeping curved walls of brick, concrete, and steel, adjacent to widened pedestrian walkways that are set back from the road, which creates a more favorable pedestrian environment. The preferred design involves significant reworking of the entrance roadway, creating a signature element and improving traffic flow into campus. The final designs were vetted through a collaborative process, with broad input from key members of the university community. Final construction documents will be developed from the revised plans, and the entry features will be built as funds become available.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Campus Entryways

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	274	0		
Teaching Labs		1.5	0	268	0		
Research Labs		1.5	0	375	0		
Study		1.4	0	286	0		
Instructional Media		1.5	0	213	0		
Auditorium/Exhibition		1.2	0	310	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	284	0		
Campus Support Services		1.4	0	276	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.							
0							

Space Detail for Remodeling Projects

BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Total		Total	
0		0	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost		5,165,182					5,165,182
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation		200,000					200,000
d. Landscape/Irrigation		400,997					400,997
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	5,766,179	0	0	0	0	5,766,179
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees		455,044					455,044
c. Fire Marshall Fees		14,777					14,777
d. Inspection Services		26,709					26,709
e. Insurance Consultant		-					-
f. Surveys & Tests		-					-
g. Permit/Impact/Environmental Fees		31,269					31,269
h. Artwork		-					-
i. Moveable Furnishings & Equipment		-					-
j. Project Contingency		348,076					348,076
Total - Other Project Costs	-	875,875	-	-	-	-	875,875
ALL COSTS 1+2	0	6,642,054	0	0		0	6,642,054

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0	PECO			6,642,054
TOTAL		-	TOTAL		-	6,642,054

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Welcome Center Expansion

AGENCY PRIORITY 26
DATE BLDG PROGRAM
APPROVED _____

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

The expansion of the university's Welcome Center will enhance UCF's rankings in several Board of Governors Performance Funding measures. The expansion will improve the university's ability to recruit top undergraduate and graduate students, with an emphasis on encouraging students to enroll in strategic programs. The expansion will also focus on recruiting under-represented student populations and advising students how to efficiently progress toward a timely graduation. The specific Board of Governors Performance Funding measures impacted by this expansion are:

- | | |
|----------------------------------|---|
| 4. FTIC Six-Year Graduation Rate | 7. Bachelor's Degrees with Strategic Emphasis |
| 5. Academic Progress Rate | 8. Graduate Degrees with Strategic Emphasis |
| 6. University Access Rate | 10. Bachelor's Degrees Awarded Annually |

The current Welcome Center serves only undergraduate students, hosts approximately 40,000 visitors annually, and is at capacity for certain functions. Without the planned 11,000 square feet expansion, welcoming and serving graduate students and other visitors in this facility is impossible.

Located adjacent to the main UCF administration building, the expansion will allow students, families, and visitors convenient access to multiple services, including financial aid information, campus tours, housing and parking information, academic counseling, and more. The expansion will also accommodate office space for support staff and serve as a venue for alumni and fundraising events, which will encourage private donations to support the university's mission.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building

CIP-3 SHORT-TERM PROJECT EXPLANATION

Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.10, Welcome Center Addition.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

SCHEDULE OF PROJECT COMPONENTS		ESTIMATED COSTS					
	Funded to						
	<u>Date</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>Funded & In CIP</u>
Basic Construction Cost							
1. a. Construction Cost (from above)			4,924,840				4,924,840
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation			342,781				342,781
d. Landscape/Irrigation			200,000				200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication			250,000				250,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	5,717,621	0	0	0	5,717,621
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees			706,334				706,334
c. Fire Marshall Fees			30,902				30,902
d. Inspection Services			252,992				252,992
e. Insurance Consultant			6,579				6,579
f. Surveys & Tests			45,000				45,000
g. Permit/Impact/Environmental Fees			51,865				51,865
h. Artwork			38,709				38,709
i. Moveable Furnishings & Equipment			717,120				717,120
j. Project Contingency			332,672				332,672
Total - Other Project Costs	-	-	2,182,173	-	-	-	2,182,173
ALL COSTS 1+2	0	0	7,899,794	0	0	0	7,899,794

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
		0	PECO		-	-
TOTAL		<u>-</u>	TOTAL		<u>-</u>	<u>0</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

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AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Civil and Environmental
Engineering

AGENCY PRIORITY 27
DATE BLDG PROGRAM _____

APPROVED _____

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

The construction industry in Florida continues on an upswing, and industry executives in the Central Florida region report that there is a severe shortage of leaders in this field. Simply put, existing educational programs within the state will not be able to sustain and support the projected growth without an investment in additional educational resources. There are only three state universities in Florida that offer a construction management degree program, and UCF is the only school to offer a construction engineering degree program. UCF's program is one of only 16 accredited programs in the nation.

The College of Engineering & Computer Science (CECS) will soon start a capital campaign to secure external funding for its present construction engineering and anticipated construction management undergraduate programs. Part of the campaign will be for a new building to showcase the construction engineering and construction management programs.

Because of the importance of civil infrastructure and the environment and their relationship to responsible construction, it would be ideal for the new building to house the entire Department of Civil, Environmental, and Construction Engineering (CECE). A 50,000 square foot or larger structure housing multimedia classrooms, laboratories, faculty offices, and one auditorium is expected to require an investment of \$18.4 million: \$1.9 million in 2018-19, \$16.6 million in 2019-20, and \$1.9 million in 2020-21. CECS expects to raise about half of the funds for this building from campaign contributions, with the other half coming from the university.

The building will serve as the focal point of construction education and research in Central Florida. Construction, due to its very nature, is multidisciplinary. There is a unique opportunity to build a facility that serves as a "mecca" for students interested in a variety of aspects of construction, including the technical, sustainability, economic, environmental, political, and legal aspects. In addition, significant multidisciplinary research will be conducted; for example, in the areas of hurricane resistant buildings and energy efficient buildings that will benefit all Floridians.

This smart building will expose its systems to students and visitors in a "living lab" of the various systems and controls in modern buildings. It will be a model of energy efficiency, utilizing power from traditional sources in addition to wind and solar power. It will also use a variety of materials and finishes to highlight its various architectural aspects and construction details. The uniqueness and "transparency" of this building will make the academic programs offered in CECE even more attractive to prospective students. Enrollment in CECE programs is expected to increase by at least 120 undergraduate students (i.e., at least 12.9% over the 929 students in CECE programs in Fall 2015), and those students will have new opportunities for undergraduate research experiences under faculty direction and internships with key UCF partners. At the same

CIP-3 SHORT-TERM PROJECT EXPLANATION

time, new opportunities for funded research, including collaborations across disciplines, will bring greater national attention to the work done by UCF faculty and students. Increased extramural research expenditures of approximately \$2 million per year is anticipated, which will provide additional research opportunities for graduate students. When combined with the widely claimed work CECE faculty have done in the transportation and water resources and quality areas, the increased national and international visibility that UCF will enjoy will result in higher national rankings for the programs in CECE and for the entire CECS.

Florida's current and projected economic growth compound ever-present issues associated with infrastructure and the environment. Any delay of this project limits the ability of UCF CECS faculty educators to apply their knowledge, expertise, and skills for the full benefit of the State of Florida. UCF looks forward to a positive response to this important project.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved. This building will highlight UCF's commitment to sustainability and energy efficiency and serve as a "living lab" that benefits faculty, students, and UCF's partners.

Classroom/Office

Space classification will be predominately classroom and office types, with some additional space for educational laboratories and research laboratories. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.9, Civil and Environmental Engineering.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: (University of Central Florida, Orlando)
PROJECT DESCRIPTION/TITLE: Civil & Environmental Engineering

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms	13,000	1.5	19,500	287	5,596,500		
Teching Labs	10,000	1.5	15,000	306	4,590,000		
Research Labs	-	1.5	-	366	-		
Study	-	1.4	-	290	-		
Instructional Media	-	1.5	-	216	-		
Auditorium/Exhibition	4,450	1.2	5,340	320	1,706,800		
Gymnasiums	-	1.2	-	225	-		
Offices	6,000	1.5	9,000	299	2,691,000		
Campus Support Services	-	1.4	-	274	-		
Totals	33,450		48,840		14,586,300		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.							

Space Detail for Remodeling Projects

BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Total		Total	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost				14,586,300			14,586,300
1. a. Construction Cost (from above)							0
Add'l/Extraordinary Const. Costs							0
b. Environmental Impacts/Mitigation				250,000			250,000
c. Site Preparation				200,000			200,000
d. Landscape/Irrigation							0
e. Plaza/Walks							0
f. Roadway Improvements							0
g. Parking ___ spaces							0
h. Telecommunication				250,000			250,000
i. Electrical Service							0
j. Water Distribution							0
k. Sanitary Sewer System							0
l. Chilled Water System							0
m. Storm Water System							0
n. Energy Efficient Equipment				178,588			178,588
Total Construction Costs			0	15,464,888			15,464,888
2. Other Project Costs							
a. Land/existing facility acquisition							1698007
b. Professional Fees			1,486,385	211,622			41407
c. Fire Marshall Fees			41,407				288875
d. Inspection Services			254,670	34,205			8971
e. Insurance Consultant			8,971				30000
f. Surveys & Tests			30,000				79603
g. Permit/Impact/Environmental Fees			79,603				82814
h. Artwork				82,814			1994601
i. Moveable Furnishings & Equipment					1,994,601		921710
j. Project Contingency			93,565	828,145			5145988
Total - Other Project Costs		0	1,994,601	1,156,786	1,994,601	0	
ALL COSTS 1+2		0	1,994,601	16,621,674	1,994,601	0	20,610,876

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

CIP-3 SHORT-TERM PROJECT EXPLANATION

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AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Howard Phillips Hall
Renovation

AGENCY PRIORITY 28
DATE BLDG PROGRAM _____

APPROVED _____

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

Howard Phillips Hall (HPH), built in 1969, is 46 years old and was partially remodeled in 1990 and 2000. It is in poor condition and requires attention to its building systems as well as changes to existing interior space configurations. As a result of other newer buildings being completed (Health & Public Affairs Buildings I & II and the Psychology Building), some academic departments moved out, and other College of Sciences academic units now occupy the 3rd and 4th floors of this building. There are also other academic-affiliated units (such as Global Perspectives) located within in the building.

It is critical that the academic units currently housed in HPH expand. This can be accomplished by the renovation of the building with spaces being reconfigured to optimize efficiency. Once Colbourn Hall is renovated or a Social Sciences building is constructed, the renovated spaces in HPH will be reassigned to central administration units. The location of Howard Phillips Hall is especially suitable for central administrative usage, given its proximity to the existing Administration Building. If the project is not approved, the building will not effectively support the changing needs of the university.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Howard Phillips Hall renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core beliefs including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project should achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption should be at least 30% less than that of a comparable building. The project should utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating should be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Howard Phillips Hall Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation	56903		64619				
Total Construction - New & Rem./Renov.					5,915,183		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	12,461	Offices	12,461
Total	12,461	Total	12,461

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)			5,915,183				5,915,183
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation			-				-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication			-				-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	5,915,183	0	0	0	5,915,183
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees			680,454				680,454
c. Fire Marshall Fees			17,398				17,398
d. Inspection Services			-				-
e. Insurance Consultant			3,549				3,549
f. Surveys & Tests			-				-
g. Permit/Impact/Environmental Fees			52,499				52,499
h. Artwork			-				-
i. Moveable Furnishings & Equipment			485,514				485,514
j. Project Contingency			1,102,450				1,102,450
Total - Other Project Costs	-	-	2,341,864	-	-	-	2,341,864
ALL COSTS 1+2	0	0	8,257,047	0	0	0	8,257,047

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	8,257,047
TOTAL		-	TOTAL		0	8,257,047

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Ferrell Commons (E and G
Space) RenovationAGENCY PRIORITY 29DATE BLDG PROGRAM APPROVED

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

The Ferrell Commons renovation will address both critical and non-critical issues that exist within the facilities. These issues encompass deficiencies such as office design and ADA compliance, indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, interior finishes, flooring, egress, and exterior lighting. Information technology upgrades are also required in order to meet current and future requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Ferrell Commons (E & G Space) Ren.

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation	86,149		93,860		4,681,492		
Total Construction - New & Rem./Renov.					4,681,492		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	20,014	Offices	20,014
Total	20,014	Total	20,014

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

Basic Construction Cost	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
1. a. Construction Cost (from above)			4,681,492				4,681,492
Add'l/Extraordinary Const. Costs							
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation				-			-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication				-			-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	4,681,492	0	0	0	4,681,492
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees			543,574				543,574
c. Fire Marshall Fees			13,769				13,769
d. Inspection Services			-				-
e. Insurance Consultant			2,809				2,809
f. Surveys & Tests			-				-
g. Permit/Impact/Environmental Fees			47,361				47,361
h. Artwork			-				-
i. Moveable Furnishings & Equipment			384,254				384,254
j. Project Contingency			861,670				861,670
Total - Other Project Costs	-	-	1,853,437	-	-	-	1,397,493
ALL COSTS 1+2	0	0	6,534,929	0	0	0	6,534,929

Appropriations to Date	Project Costs Beyond CIP Period	Total Project In
Source Fiscal Year Amount	Source Fiscal Year Amount	CIP & Beyond
PECO 2012-13 0		
TOTAL -	TOTAL 0	6,534,929

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Classroom Building IIIAGENCY PRIORITY 30

DATE BLDG PROGRAM

APPROVED

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

Classroom Building III will provide general classrooms, faculty offices, and support services for enhanced teaching and learning. This facility will house a variety of advanced-technology classrooms and ubiquitous network access and multimedia facilities that will foster innovative teaching and learning practices. This building must be a "state-of-the-art" facility that allows for re-configuration of classrooms to accommodate varied instructional settings.

Based on the 2015 Educational Plant Survey analysis for space needs, the university has a shortage of classroom space and requires this new building to meet the growing need. UCF students are also taking summer classes in order to meet graduation requirements.

The effects of a delay in constructing Classroom Building III will limit class offerings that are needed to ensure student progress to graduation.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.8, Classroom III.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

SCHEDULE OF PROJECT COMPONENTS		ESTIMATED COSTS					
	Funded to						
	<u>Date</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>	<u>2020-21</u>	<u>2021-22</u>	<u>Funded & In CIP</u>
Basic Construction Cost							
1. a.Construction Cost (from above)					19,075,465		19,075,465
Add'l/Extraordinary Const. Costs							-
b.Environmental Impacts/Mitigation							-
c.Site Preparation					250,000		250,000
d.Landscape/Irrigation					200,000		200,000
e.Plaza/Walks							-
f.Roadway Improvements							-
g.Parking ___ spaces							-
h.Telecommunication					250,000		250,000
i.Electrical Service							-
j.Water Distribution							-
k.Sanitary Sewer System							-
l.Chilled Water System							-
m.Storm Water System							-
n.Energy Efficient Equipment					644,083		644,083
Total Construction Costs	0	0	0	0	20,419,548	0	20,419,548
2. Other Project Costs							
a.Land/existing facility acquisition							-
b.Professional Fees				1,944,620	399,360		2,343,980
c.Fire Marshall Fees				53,892			53,892
d.Inspection Services				328,429			328,429
e.Insurance Consultant				11,807			11,807
f.Surveys & Tests				45,000			45,000
g.Permit/Impact/Environmental Fees				88,987			88,987
h.Artwork					100,000		100,000
i.Moveable Furnishings & Equipment						2,749,594	2,749,594
j.Project Contingency				276,859	1,077,841		1,354,700
Total - Other Project Costs	-	-	-	2,749,594	1,577,201	2,749,594	7,076,389
ALL COSTS 1+2	0	0	0	2,749,594	21,996,749	2,749,594	27,495,937

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0				
TOTAL		<u>-</u>	TOTAL		<u>0</u>	<u>27,495,937</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Facilities and Safety Building
at Lake Nona

AGENCY PRIORITY 31
DATE BLDG PROGRAM
APPROVED

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

The Facilities and Safety Building at Lake Nona will house Facilities and Safety departments (Facilities Planning, Facilities Operations, Landscape & Natural Resources, Environmental Health & Safety, and Utilities & Energy Services), the Office of Research and Commercialization, and the Police Department, to provide optimal support to faculty, staff and students.

Delays in construction will prohibit Facilities & Safety from efficiently and effectively maintaining the Lake Nona Medical Campus.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

SCHEDULE OF PROJECT COMPONENTS		ESTIMATED COSTS					
	Funded to						
	Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a. Construction Cost (from above)				4,485,000			4,485,000
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation				152,402			152,402
d. Landscape/Irrigation				150,000			150,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication				150,000			150,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs		0	0	4,937,402	0	0	4,937,402
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees				493,757			493,757
c. Fire Marshall Fees				12,480			12,480
d. Inspection Services				68,883			68,883
e. Insurance Consultant				2,407			2,407
f. Surveys & Tests				45,000			45,000
g. Permit/Impact/Environmental Fees				46,387			46,387
h. Artwork				32,021			32,021
i. Moveable Furnishings & Equipment				640,423			640,423
j. Project Contingency				256,169			256,169
Total - Other Project Costs		-	-	1,597,527	-	-	1,597,527
ALL COSTS 1+2		0	0	6,534,929	0	0	6,534,929

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	0				
TOTAL		-	TOTAL		0	6,534,929

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Recycling CenterAGENCY PRIORITY 32

DATE BLDG PROGRAM

APPROVED

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

The State of Florida mandates a 30% recycling rate for all state institutions, and will increase this requirement to 75% by 2020. UCF's current recycling rate is 33%. An on-campus recycling center will allow the university to continue meeting, and in some cases exceeding, future mandates. This facility will house the day-to-day operations of the recycling and solid waste programs, receiving and processing all materials to be recycled or composted. Recycled materials include plastic, paper, corrugated cardboard, glass, steel, aluminum, food waste, and Styrofoam; with material-specific sorting, packaging, bailing and composting.

A delivery system will be designed and implemented within this facility that will be efficient from the moment an item is discarded to the end product, whether recycled, reused, or sold. This facility will be designed for optimum use of space with storage areas for both wet and dry materials, and room for future equipment expansion. The Recycling Center will produce compost for use on university landscape and sales to the general public.

The alternative to this facility is to continue the current labor-intensive process where totes, trailers, dumpsters, and roll-offs are handled for daily trash removal and recycling materials processing. If this facility is delayed, by 2020, the university will not achieve the 75% recycling rate mandated by the State, and millions of pounds of materials may have to be thrown unnecessarily into the landfill.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Recycling Center

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition	36,175	1.2	43,410	320	13,891,200		
Gymnasiums		1.2	0	225	0		
Offices	10,500	1.5	15,750	299	4,709,250		
Campus Support Services		1.4	0	274	0		
Totals	46,675		59,160		18,600,450		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.							
					18,600,450	Total	0
						Total	0

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost					18,600,450		18,600,450
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation					250,000		250,000
d. Landscape/Irrigation					200,000		200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication					284,100		284,100
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment					612,737		612,737
Total Construction Costs	0	0	0	0	19,947,287	0	19,947,287
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees				1,867,878		52,700	1,920,578
c. Fire Marshall Fees				51,647			51,647
d. Inspection Services				364,870			364,870
e. Insurance Consultant				11,295			11,295
f. Surveys & Tests				45,000			45,000
g. Permit/Impact/Environmental Fees				87,751			87,751
h. Artwork					100,000		100,000
i. Moveable Furnishings & Equipment						2,582,327	2,582,327
j. Project Contingency				206,586	1,032,931		1,239,517
Total - Other Project Costs	-	-	-	2,635,027	1,132,931	2,635,027	6,402,985
ALL COSTS 1+2	0	0	0	2,635,027	21,080,218	2,635,027	26,350,272

Appropriations to Date	Project Costs Beyond CIP Period	Total Project In CIP & Beyond
Source Fiscal Year Amount	Source Fiscal Year Amount	
PECO 2012-13 0		
TOTAL	TOTAL	26,350,272

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Humanities & Fine Arts IIAGENCY PRIORITY 33DATE BLDG PROGRAM APPROVED

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

A second Humanities & Fine Arts building will be necessary to accommodate the future growth of all the College of Arts and Humanities' diverse departments. We are currently meeting some of our immediate space needs with the upcoming Trevor Colbourn building; however, this building does not account for any expansion of future programs and hires, or provide for additional classroom spaces.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

SCHEDULE OF PROJECT COMPONENTS		ESTIMATED COSTS					
	Funded to						
	Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a.Construction Cost (from above)					18,170,934		18,170,934
Add'l/Extraordinary Const. Costs							-
b.Environmental Impacts/Mitigation							-
c.Site Preparation				235,096			235,096
d.Landscape/Irrigation					200,000		200,000
e.Plaza/Walks							-
f.Roadway Improvements							-
g.Parking ___ spaces							-
h.Telecommunication				250,000			250,000
i.Electrical Service							-
j.Water Distribution							-
k.Sanitary Sewer System							-
l.Chilled Water System							-
m.Storm Water System							-
n.Energy Efficient Equipment							-
Total Construction Costs	0	0	0	485,096	18,370,934	0	18,856,030
2. Other Project Costs							
a.Land/existing facility acquisition							-
b.Professional Fees				1,886,501		638,169	2,524,870
c.Fire Marshall Fees				50,760			50,760
d.Inspection Services				407,430			407,430
e.Insurance Consultant				11,093			11,093
f.Surveys & Tests				45,000			45,000
g.Permit/Impact/Environmental Fees				87,284			87,284
h.Artwork					100,000		100,000
i.Moveable Furnishings & Equipment						2,538,016	2,538,016
j.Project Contingency				203,041	1,074,816		1,277,857
Total - Other Project Costs	-	-	-	2,691,089	1,174,816	3,176,185	7,042,090
ALL COSTS 1+2	0	0	0	3,176,185	19,545,750	3,176,185	25,898,120

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
PECO	2012-13	0				25,898,120
TOTAL		<u>-</u>	TOTAL		<u>0</u>	<u>25,898,120</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Social Sciences Facility

AGENCY PRIORITY 34
DATE BLDG PROGRAM
APPROVED

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

A Social Sciences building will consolidate three College of Sciences units in a department-oriented facility, simplifying administrative functions for the College. The building will feature classrooms, teaching labs, research labs, and faculty and staff offices. Centralized and specialized Physical, Medical, and Forensic Anthropology teaching lab and research lab spaces will be needed, as current space is limited, shared, and located in multiple buildings on- and off-campus.

The Anthropology, Political Science, and Sociology departments currently occupy the two upper floors of Howard Phillips Hall, which is at maximum usage. The consolidation of these departments in the new facility will enable other departments from Academic Affairs and Student Affairs, which currently occupy the lower two floors of Howard Phillips Hall, to expand into the vacated spaces while remaining close to Millican Hall (Administration).

Delays in construction will inhibit the College in meeting university demands for teaching and research. Increased space and specific research laboratory spaces for these departments are essential to garner additional research funding and to accommodate the new and growing doctoral programs in Political Science and Sociology and a new anticipated Ph.D. degree in Anthropology.

SUSTAINABILITY AND LEED

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Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at

CIP-3 SHORT-TERM PROJECT EXPLANATION

alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Social Sciences Facility

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms	20,150	1.5	30,225	287	8,674,575		
Teaching Labs	4,000	1.5	6,000	306	1,836,000		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition	7,000	1.2	8,400	320	2,688,000		
Gymnasiums		1.2	0	225	0		
Offices	11,550	1.5	17,325	299	5,180,175		
Campus Support Serv	3,000	1.4	4,200	274	1,150,800		
Totals	45,700		66,150		19,529,550		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.					19,529,550	Total	0

Space Detail for Remodeling Projects

BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Total	0	Total	0

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost					19,529,550		19,529,550
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation					250,000		250,000
d. Landscape/Imgalton					200,000		200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication					200,000		200,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment					489,358		489,358
Total Construction Costs	0	0	0	0	20,668,908	0	20,668,908
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees				1,944,620			1,944,620
c. Fire Marshall Fees				53,892			53,892
d. Inspection Services				431,858			431,858
e. Insurance Consultant				11,807			11,807
f. Surveys & Tests				45,000			45,000
g. Permit/Impact/Environmental Fees				88,987			88,987
h. Artwork					100,000		100,000
i. Moveable Furnishings & Equipment						2,749,594	2,749,594
j. Project Contingency				173,430	1,277,841		1,451,271
Total - Other Project Costs	-	-	-	2,749,594	1,377,841	2,749,594	6,877,029
ALL COSTS 1+2	0	0	0	2,749,594	22,046,749	2,749,594	27,545,937

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2011-12	0				
TOTAL		-	TOTAL		0	27,545,937

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Utilities Infrastructure and Site
Work, Lake Nona Clinical
Facilities

AGENCY PRIORITY 35
DATE BLDG PROGRAM _____

APPROVED _____

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

The Lake Nona campus is served by the Orlando Utilities Commission (OUC), a municipally owned public utility that provides electric, water, re-claimed water, and chilled water. Coordination between OUC and the design team early in pre-design will be imperative to ensure adequate capacities and reserve demand are available for both distribution infrastructure and generation sites from the utility. Where possible, master metering should be employed for electric, water, re-claimed and chilled water to reduce cost with the serving utility providers. Utility-grade sub meters must be installed to account for consumption across the various tenants or mixed use spaces to ensure correct cost recovery from direct service organizations and auxiliaries.

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: Utilities Infrastructure

Total Funding: \$14,000,000

Previous Funding (State and Local): \$0

STEM (Yes or No): No

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

1. ☒ Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)
Explanation:
 - a. In 2014-15 UCF awarded 14,111 degrees (11,794 bachelor's and 2,317 graduate) for students who completed courses on the main campus.
 - b. Based on enrollment projections and expected growth (2%), UCF anticipates awarding an additional 1,800 degrees by 2021-22.
2. ☒ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation:
 - a. Fall 2015 enrollment at UCF main campus was 53,081.
 - b. Based on the UCF Enrollment Projection Model, there is expected to be an increase of over 5,700 students on the main campus by Fall 2021.
3. ☐ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation: N/A
4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:
 - a. In 2014-15 UCF awarded 7,269 degrees (5,785 bachelor's and 1,484 graduate) in all five areas of strategic emphasis for students who completed courses on the main campus.

Based on enrollment projections and expected growth (2%), UCF anticipates awarding nearly 1,100 additional degrees in areas of strategic

emphasis by 2021-22.

- b. In 2014-15 UCF awarded 1,227 degrees (1,131 bachelor's and 96 graduate) in Gap Programs for students who completed courses on the main campus. These programs include: Accounting with 457 degrees, Finance with 491 and Communications with 279 degrees.

Based on enrollment projections and expected growth (2%), UCF anticipates awarding over 600 additional degrees in Gap Programs by 2021-22.

- 5. ☐ Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

- 6. ☒ Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

- a. Modernization of campus utilities will address both critical and non-critical issues, and provide for greater reliability of utility distribution.
- b. Deferred maintenance throughout the campus has been verified by a third-party Facility Condition Assessment (FCA) company ISES Corp. These deferred maintenance projects include modernization of building systems, upgrades to lighting systems, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

- 7. ☐ Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation:

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

Explanation:

- a. Further delay in funding utilities infrastructure and deferring maintenance will result in unpredictable mechanical and utility failures, causing operations to respond in a more costly, reactive versus proactive way.
- b. Deferred maintenance dramatically reduces the normal expected life cycle of materials, systems, and buildings, thus increasing operational costs in

the long run. As the university continues to grow and construct facilities, an organized, systematic approach to scheduling and funding deferred maintenance is essential to protect university assets for future generations.

9. ☐ Projected Facility Utilization Rate

Explanation:

10. ☐ Current/Projected Campus Utilization Rate

Explanation:

Other Pertinent Information not included above:

- The university maintains and operates over 42,000 linear feet of commodity networks of utility distribution and collection infrastructure, covering over 1400 acres on the main campus. These utility distribution and collection systems include natural gas, electric, renewable energy sites, chilled water, transportation of effluent, and domestic water.
- Approximately 70 percent of the main campus is served by three centrally-located district cooling plants, averaging 27.2 years old, with the main central energy plant turning 50 in 2019. Centrally-located plants reduce building energy consumption and eliminate less-efficient standalone cooling at each building.
- On-campus energy demands for electricity, potable water, natural gas and chilled water are increasing. The 2015 Campus Master Plan identifies future campus development, associated energy and peak utility demands, and the supply-related facilities needed to adequately provide these services to future campus populations.
- The potable water distribution plant is outdated and requires replacement of distribution piping and isolation valves.
- The sewage distribution system was updated 10 years ago by installing a master lift station, and now requires many new mechanical floats, probes and SCADA updates. Secondary lift stations require upgrading to install secondary power for emergency backup and replacement of distribution piping throughout campus, because some piping has been in the ground for over 40 years.
- UCF owns and operates over 24,000 linear feet of natural gas distribution infrastructure. This distribution system is held to the same rigorous regulation and standards as a public gas utility since UCF is master metered with residual pressures containing low, medium and high pressures. Through annual valve exercise programs, leak detection inspections, and third party assessment of pipelines,, UCF has identified a need for new isolation valves, repair of defective cathodic protection, the addition of pressure transducers to provide critical alarming, and the need to increase the

size of the supply pipe on the west side of campus to support peak demand at an estimated cost of \$750,000.

PROJECT DESCRIPTION/TITLE: Utilities Infrastructure and Site Work Lake Nona Clinical Facilities

COUNTY: Orange
PROJECT BR No. (if assigned):

SCHEDULE OF PROJECT COMPONENTS

	Funded to						
Basic Construction Cost	Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
1. a.Construction Cost (from above)				9,006,180			9,006,180
Add'l/Extraordinary Const. Costs							-
b.Environmental Impacts/Mitigation							-
c.Site Preparation			0	250,000			250,000
d.Landscape/Irrigation				200,000			200,000
e.Plaza/Walks							-
f.Roadway Improvements							-
g.Parking ___ spaces							-
h.Telecommunication				250,000			250,000
i.Electrical Service							-
j.Water Distribution							-
k.Sanitary Sewer System							-
l.Chilled Water System							-
m.Storm Water System							-
n.Energy Efficient Equipment							-
Total Construction Costs	0	0	0	9,706,180	0	0	9,706,180
2. Other Project Costs							-
a.Land/existing facility acquisition							-
b.Professional Fees				936,220	-		936,220
c.Fire Marshal Fees				25,543	-		25,543
d.Inspection Services				82,290	-		82,290
e.Insurance Consultant				5,404	-		5,404
f.Surveys & Tests				45,000	-		45,000
g.Permit/Impact/Environmental Fees				82,304	-		82,304
h.Artwork					-		-
i.Moveable Furnishings & Equipment					-		-
j.Project Contingency				573,699			573,699
Total - Other Project Costs	-	-	-	1,750,460	-	-	1,750,460
ALL COSTS 1+2	0	0	0	11,456,640	0	0	11,456,640

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
PECO		0				11,456,640
TOTAL		<u>-</u>	TOTAL		<u>0</u>	<u>11,456,640</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

age 1 of 4AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Coastal Biology StationAGENCY PRIORITY 36

DATE BLDG PROGRAM

APPROVED

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

The UCF Marine Turtle Research Group (UCFMTRG) has conducted research at the Archie Carr National Wildlife Refuge (ACNWR), adjacent beaches, and in coastal and inland waters for over 30 years. Data collected by this program were instrumental in establishing the ACNWR in 1991. The refuge and coastal habitats support the most significant, densely nested loggerhead sea turtle rookery in the Western Hemisphere, and among the most important green turtle and loggerhead nesting habitats in North America. The UCFMTRG houses one of the longest and largest sea turtle datasets in the world. This dataset is essential to international, federal, and state managers tasked with the protection and recovery of endangered and threatened sea turtle populations, including populations utilizing central Florida's terrestrial and marine habitats.

The UCFMTRG field sites are located over 70 miles from the UCF campus in Orlando. Due to long field days, nighttime nesting beach surveys, and the storage and transport of heavy equipment (e.g., 4 boats, 4 trucks, 12+ ATVs), it is not practical or safe for students, Principle Investigators (PIs), and staff to commute between campus and the coast at all hours of the day or night. Historically, the ACNWR and Brevard County provided housing and equipment storage for the turtle program; however, given federal budgets and dwindling resources, this is no longer a viable option, nor are there other, feasible alternatives that would ensure the long-term presence and viability of a facility to support UCFMTRG activities. Additionally, the U.S. Fish & Wildlife Service has recently demolished the beach side building which has served for over 30 years as the housing and research staging facility for its UCFMTRG activities. Thus, it is critical to the continuance of this valued research program that new housing/research facilities be constructed at this location.

The continued success and survival of the UCFMTRG is dependent on the development of a dedicated coastal field station or field complex in proximity to the ACNWR. Without a strong presence on the coast, and without the resources needed to successfully fulfill federal and county contracts, the UCFMTRG may lose grants and contracts to other universities, consulting groups, and agencies. Such a loss would undermine the value of the 30+ year UCF sea turtle dataset and research program, to the detriment of sea turtle conservation as well as UCF's standing as an international leader in sea turtle research.

A coastal biology facility or complex will provide housing and equipment storage for the UCFMTRG; support coastal research (both in-water and terrestrial); and provide a hands-on, experiential education platform that can be used by K-12, undergraduate, graduate, and professional educational and training programs. Specifically, the facility will:

1) Provide housing and equipment storage for the UCFMTRG including:

- A bunkhouse to support nighttime and seasonal nesting beach research, including up to 12 UCFMTRG personnel (graduate students and undergraduate interns). This bunkhouse can be used in the off-season by visiting school groups, field classes, Research Experience for Undergraduates (REU) programs, U.S. Fish & Wildlife Service, etc.
- Additional PI and visiting scientist quarters, separate from a student bunkhouse. Visiting scientist quarters will promote national and international collaborations and broaden the research scope of the UCFMTRG.
- Storage space for boats, trucks, ATVs, nets, and other field equipment out of the elements to better preserve equipment and promote safe use of equipment in the long-term.
- A small, functional workshop to make and maintain/repair field equipment; space to properly wash and service field equipment.
- A facility will allow for new funding/grant opportunities by providing adequate housing for educational activities (e.g., REU, research staging, and secure storage of research equipment and vehicles).

2) Enhance UCF's sea turtle and coastal research programs including:

- A functional wet-lab available for use by student researchers, visiting scientists, and classes (K-12, undergraduate and graduate).
 - Lab space to also serve as temporary triage area for mass sea turtle (or other marine mammal) stranding or cold-stun events, assisting federal and state agencies during periods of unusual mortality, and conservation activities.
 - Office space with computer access to the UCF network for MTRG data entry and management, as well as for use by visiting scientists. This will facilitate scientific advisory service; and will promote the real-time reporting of nesting beach activities to federal, state, and county agencies.
 - A facility will allow for new research grant opportunities by providing adequate space and equipment for research activities.
 - Allowing for the creation of a center for "whole life history" sea turtle research in one of the world's most important nesting and foraging habitats. This will expand UCF's collaborative ties with regional, national, and international researchers and agencies.
 - Providing space (e.g., rooftop) for deployment of technologies to sample environmental data (temperature, rainfall, etc.), radio tracking listening stations, and other remote sensing equipment to enhance field data collection, and to establish a base-line coastal monitoring program to better understand the effects of storm events, coastal nourishment activities, and climate change/sea level rise over time.
-

CIP-3 SHORT-TERM PROJECT EXPLANATION

3) Enhance and expand UCF's education and research capacity, including:

- Expanding student opportunities for educational, work, and research experience for students pursuing degrees in biology, conservation, chemistry, physics, engineering, and environmental studies, among others.
- Providing space for short-term, on-location, and hands-on training programs (telemetry workshops, wildlife handling, veterinary practices, coastal ecosystem sampling, etc.) to the UCF community as well as outside groups.
- Allowing for new research grant opportunities by providing adequate space and equipment for educational activities.
- Encouraging public support and donations through educational outreach activities, elevating UCF's research and educational opportunities through public programs.
- Creating a classroom/meeting room space to provide educational opportunities for K-12, undergraduate, and graduate students, as well as professional training programs.

A new facility/complex will solidify UCF's standing as a primary sea turtle research institution. It will provide the foundation for the UCFMTRG to evolve to incorporate new technological, educational and training programs; promote international relevancy and collaborations; and provide a platform for new coastal research and educational programs. This facility will promote UCF's commitment to achieving international prominence in key areas of graduate study and research, and fulfilling its state charters in education and training.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs will be provided primarily by solar thermal energy. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

	Funded to						
	Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost							
1. a.Construction Cost (from above)				4,005,100			4,005,100
Add'l/Extraordinary Const. Costs							-
b.Environmental Impacts/Mitigation							-
c.Site Preparation				100,000			100,000
d.Landscape/Irrigation				-			-
e.Plaza/Walks							-
f.Roadway Improvements							-
g.Parking ____ spaces							-
h.Telecommunication				75,000			75,000
i.Electrical Service							-
j.Water Distribution							-
k.Sanitary Sewer System							-
l.Chilled Water System							-
m.Storm Water System							-
n.Energy Efficient Equipment							-
Total Construction Costs	0	0	0	4,180,100	0	0	4,180,100
2. Other Project Costs							-
a.Land/existing facility acquisition							-
b.Professional Fees				434,484			434,484
c.Fire Marshall Fees				11,228			11,228
d.Inspection Services				95,634			95,634
e.Insurance Consultant				2,438			2,438
f.Surveys & Tests				25,000			25,000
g.Permit/Impact/Environmental Fees				42,955			42,955
h.Artwork				28,069			28,069
i.Moveable Furnishings & Equipment				561,375			561,375
j.Project Contingency				347,037			347,037
Total - Other Project Costs	-	-	-	1,548,220	-	-	1,548,220
ALL COSTS 1+2	0	0	0	5,728,320	0	0	5,728,320

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0				
TOTAL		-	TOTAL		0	5,728,320

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE UCF Health Expansion and
Wellness Center

AGENCY PRIORITY 37
DATE BLDG PROGRAM
APPROVED

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

The UCF Health Expansion and Wellness Center is a multi-phase project, as there is a need to expand patient care offerings beyond the current clinical sites. Phase 1 will provide a basis for ambulatory and key ancillary services for patient care, and will locate doctors, allied health professionals, and learners within walking distance of the College of Medicine and other facilities at the Lake Nona Medical City. Public spaces include conference and multiple educational spaces for students, patients, and interdisciplinary opportunities in education and patient care. Future phases will address both education and patient care.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits which contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is Clinical Practice, Clinical Lab, and supporting services. There will be a need for some offices, collaborative meeting spaces for all disciplines treating patients and academic support. The project will achieve LEED certification from the U.S. Green Building Council (USGBC).

EDUCATIONAL PLANT SURVEY

As the planning year approaches, the Educational Plant Survey for this project will be addressed.

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: Interdisciplinary Research and Incubator Facility (IRIF)

Total Funding: \$46,614,853

Previous Funding (State and Local): \$5,924,883 was allocated previously but was re-appropriated to Classroom Building II/ROTC; therefore the funding stands at \$0.

STEM (Yes or No): YES

Contact Person (Name, Position, Phone No.):

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

1. ☒ Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)
Explanation:
 - a. In 2014-15, UCF awarded 2,974 STEM degrees.
 - b. The new facility will support programs in nanoscience technology, advanced materials processing and analysis, optics and lasers, and energy research.
 - c. It will enable the departments to accommodate 600 additional STEM students per year.
 - d. The facility will support an expansion of the University's incubator program, creating new companies and jobs with salaries averaging \$67,000. UCF currently supports over 150 incubator clients. One hundred companies have already graduated and become self-sufficient, accounting for 3,698 jobs (direct, indirect, and induced) in Central Florida.
2. ☐ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation: N/A
3. ☒ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:
 - a. UCF is ranked as a "highest research activity" university by the Carnegie Foundation.
 - b. Existing programs generate \$26M in external funding. While grant funding typically takes one year to secure, a significant increase in

proposals will be submitted in anticipation of acquiring the new space. A moderate influx of new funding is expected in the first year the building is operational. Within three to five years of its completion, UCF will realize \$20M in new external Research and Development (R&D) funding. UCF's ability to compete for and procure prestigious research grants will be dramatically increased with the physical availability of new space where research can be performed. UCF will then be in a position to compete successfully against international institutions that currently have state-of-the-art research facilities.

4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:
Nanotechnology MS, Optics MS, and Optics PhD programs are designated as STEM.
5. ☒ Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students
Explanation:
Business partnerships will include incubator use, businesses requiring an International Traffic in Arms Regulation (ITAR) facility, and industry support for research (estimated at 25% of the funds expended in the facility each year).
6. ☐ Project Improves the Use, either Operationally or Academically, of Existing Space
Explanation: N/A
7. ☒ Contribution of Local Funds Through Matching Grants, Property Donations, etc.
Explanation:
Within three to five years, research funding will be increased by \$20M.
8. ☐ Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)
Explanation:
9. ☒ Projected Facility Utilization Rate
Explanation:
The facility will be 100% utilized. UCF has a serious shortage of lab space and is in the process of hiring 100 additional research-oriented faculty

members. According to the state's formula, UCF has only 33% of its research space needs met.

10. ☒ Current/Projected Campus Utilization Rate

Explanation:

Based on UCF's Educational Plant Survey, which was conducted on October 6-8, 2015, the BOG is projecting that by 2020-2021, UCF will require additional square footage in all of the 9 space categories. The following estimates represent the current deficits of square footage for space categories within this building:

Research Lab - 618,214 (67.11%)

Office - 259,853 (26.39%)

Support Services - 101,716 (54.03%)

Other Pertinent Information not included above:

- 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. UCF is competing for the best and brightest faculty, and recruitment is challenging, at best, without facilities. Our programs and research activities are limited by space as top researchers have their pick of world-class facilities at other institutions. Top recruits desire two things: state-of-the-art facilities where they can thrive and succeed, and the opportunity to participate in a nationally-ranked program.
- Because of UCF's lack of high-tech research space, leading-edge research in critical areas, such as engineering, nanoscience, and mechanical sciences, has been postponed or cannot be performed at all. Faculty lines cannot be filled because of the lack of space to house their research. In many instances, recruited faculty have not been provided laboratories upon their arrival, further weakening our ability to compete for grants and recruit new top-notch researchers.
- Space comprising 57 research and incubator labs; 23 material characterization labs; and lecture halls, conference rooms, offices, and ancillary spaces are planned within the building. The new facility will create a place where collaborations occur between faculty, researchers, entrepreneurs, investors, and industry. Labs will be configured for accelerated scientific discovery in a collaborative environment, with ease of reconfiguration based on projects and evolving research requirements. The facility will also house startup incubator companies and promote other industry collaborations.

- The Interdisciplinary Research and Incubator Facility will leverage talents from different disciplines; dramatically increase research efficiency; create a core environment to serve faculty and industry partners; and optimize capital equipment investments through shared use.
- The construction will provide short-term impact to local economy, as follows:
 - Year 1: \$10,286,411 30 construction jobs, 27 other sectors
 - Year 2: \$60,091,515 169 construction jobs, 159 other sectors
 - Year 3: \$10,751,142 30 construction jobs, 27 other sectors
- The UCF business incubator program's impact to the Central Florida region has been more than \$2.5 billion in its first 15 years.
- Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric
 - Explanation:
 - The programs slated for this facility typically produce a significant number of patents, enabling UCF to remain in the top 20 universities nationally in patent production. Based on historical data, \$20M in new funding equates to approximately 20 new patents.
 - Past experience has shown that quality research facilities generate \$400 to \$500 per square foot per year in external funding.
 - Graduates of the Professional Science Master's in Nanotechnology (MS), Optics MS, and Optics PhD programs contribute to Metric 8A of the Performance Funding Model (graduate degrees awarded in areas of strategic emphasis (includes STEM)).

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: Utilities Infrastructure

Total Funding: \$14,000,000

Previous Funding (State and Local): \$0

STEM (Yes or No): No

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

1. ☒ Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)
Explanation:
 - a. In 2014-15 UCF awarded 14,111 degrees (11,794 bachelor's and 2,317 graduate) for students who completed courses on the main campus.
 - b. Based on enrollment projections and expected growth (2%), UCF anticipates awarding an additional 1,800 degrees by 2021-22.
2. ☒ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation:
 - a. Fall 2015 enrollment at UCF main campus was 53,081.
 - b. Based on the UCF Enrollment Projection Model, there is expected to be an increase of over 5,700 students on the main campus by Fall 2021.
3. ☐ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation: N/A
4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:
 - a. In 2014-15 UCF awarded 7,269 degrees (5,785 bachelor's and 1,484 graduate) in all five areas of strategic emphasis for students who completed courses on the main campus.

Based on enrollment projections and expected growth (2%), UCF anticipates awarding nearly 1,100 additional degrees in areas of strategic

emphasis by 2021-22.

- b. In 2014-15 UCF awarded 1,227 degrees (1,131 bachelor's and 96 graduate) in Gap Programs for students who completed courses on the main campus. These programs include: Accounting with 457 degrees, Finance with 491 and Communications with 279 degrees.

Based on enrollment projections and expected growth (2%), UCF anticipates awarding over 600 additional degrees in Gap Programs by 2021-22.

- 5. ☐ Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students

Explanation:

- 6. ☒ Project Improves the Use, either Operationally or Academically, of Existing Space

Explanation:

- a. Modernization of campus utilities will address both critical and non-critical issues, and provide for greater reliability of utility distribution.
- b. Deferred maintenance throughout the campus has been verified by a third-party Facility Condition Assessment (FCA) company ISES Corp. These deferred maintenance projects include modernization of building systems, upgrades to lighting systems, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

- 7. ☐ Contribution of Local Funds Through Matching Grants, Property Donations, etc.

Explanation:

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

Explanation:

- a. Further delay in funding utilities infrastructure and deferring maintenance will result in unpredictable mechanical and utility failures, causing operations to respond in a more costly, reactive versus proactive way.
- b. Deferred maintenance dramatically reduces the normal expected life cycle of materials, systems, and buildings, thus increasing operational costs in

the long run. As the university continues to grow and construct facilities, an organized, systematic approach to scheduling and funding deferred maintenance is essential to protect university assets for future generations.

9. ☐ Projected Facility Utilization Rate

Explanation:

10. ☐ Current/Projected Campus Utilization Rate

Explanation:

Other Pertinent Information not included above:

- The university maintains and operates over 42,000 linear feet of commodity networks of utility distribution and collection infrastructure, covering over 1400 acres on the main campus. These utility distribution and collection systems include natural gas, electric, renewable energy sites, chilled water, transportation of effluent, and domestic water.
- Approximately 70 percent of the main campus is served by three centrally-located district cooling plants, averaging 27.2 years old, with the main central energy plant turning 50 in 2019. Centrally-located plants reduce building energy consumption and eliminate less-efficient standalone cooling at each building.
- On-campus energy demands for electricity, potable water, natural gas and chilled water are increasing. The 2015 Campus Master Plan identifies future campus development, associated energy and peak utility demands, and the supply-related facilities needed to adequately provide these services to future campus populations.
- The potable water distribution plant is outdated and requires replacement of distribution piping and isolation valves.
- The sewage distribution system was updated 10 years ago by installing a master lift station, and now requires many new mechanical floats, probes and SCADA updates. Secondary lift stations require upgrading to install secondary power for emergency backup and replacement of distribution piping throughout campus, because some piping has been in the ground for over 40 years.
- UCF owns and operates over 24,000 linear feet of natural gas distribution infrastructure. This distribution system is held to the same rigorous regulation and standards as a public gas utility since UCF is master metered with residual pressures containing low, medium and high pressures. Through annual valve exercise programs, leak detection inspections, and third party assessment of pipelines,, UCF has identified a need for new isolation valves, repair of defective cathodic protection, the addition of pressure transducers to provide critical alarming, and the need to increase the

size of the supply pipe on the west side of campus to support peak demand at an estimated cost of \$750,000.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: UCF Health Expansion and Wellness Center

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs	5,000	1.5	7,500	306	2,295,000		
Research Labs	8,500	1.5	12,750	366	4,666,500		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices	1,000	1.5	1,500	299	448,500		
Campus Support Services		1.4	0	274	0		
Totals	14,500		21,750		7,410,000		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.					0		

Space Detail for Remodeling Projects

BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	3000	Offices	3000
Auditorium/Exb	8000	Auditorium/Exb	8000
Teaching Labs	5000	Teaching Labs	5000
Total	0	Total	16000

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost					7,410,000		7,410,000
1. a. Construction Cost (from above)							-
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation					250,000		250,000
d. Landscape/Irrigation					200,000		200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication					200,000		200,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment					447,805		447,805
Total Construction Costs	0	0	0	0	8,507,805	0	8,507,805
2. Other Project Costs							-
a. Land/existing facility acquisition							-
b. Professional Fees				790,681	152,269		942,950
c. Fire Marshall Fees				22,455			22,455
d. Inspection Services				106,263			106,263
e. Insurance Consultant				4,666			4,666
f. Surveys & Tests				45,000			45,000
g. Permit/Impact/Environmental Fees				86,779			86,779
h. Artwork				-	56,138		56,138
i. Moveable Furnishings & Equipment						1,145,664	1,145,664
j. Project Contingency				89,820	449,100		538,920
Total - Other Project Costs	-	-	-	1,145,664	657,507	1,145,664	2,948,835
ALL COSTS 1+2	0	0	0	1,145,664	9,165,312	1,145,664	11,456,640

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0				11,456,640
TOTAL		-	TOTAL		0	11,456,640

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Technology Commons II
Renovation

AGENCY PRIORITY 39
DATE BLDG PROGRAM APPROVED

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

The renovation of Technology Commons II is necessary to accommodate and meet the needs of Computer Services and Telecommunications, Computer Science, and Statistics.

A prior partial renovation of Tech Commons I and II replaced first floor air handling units, duct work, chilled water pumps, variable frequency drives, switch gear, and valves, and lighting. Second floor renovations replaced the air handling unit, outside air dampers and variable frequency drives.

The second floor requires HVAC upgrades that include new variable air volume and fan power boxes; new bathroom exhaust fans; cleaning of duct work, replacement of inside lined duct work with metal, exterior wrapped insulated ductwork exterior; lighting upgrades; complete bathroom renovation; carpeting; and standardization of exit lighting.

The wireless network needs to be upgraded with additional access points.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Technology Commons II Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
	6,570		9,855		2,400,070		
Total Construction - New & Rem./Renov.					2,400,070		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	6,570	Offices	6,570
Total	6,570	Total	6,570

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost					2,400,070		2,400,070
1. a. Construction Cost (from above)							
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation							-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	0	2,400,070	0	2,400,070
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees					367,666		367,666
c. Fire Marshall Fees					6,611		6,611
d. Inspection Services					8,353		8,353
e. Insurance Consultant					1,349		1,349
f. Surveys & Tests					-		-
g. Permit/Impact/Environmental Fees					27,611		27,611
h. Artwork					-		-
i. Moveable Furnishings & Equipment					185,472		185,472
j. Project Contingency					409,781		409,781
Total - Other Project Costs	-	-	-	-	1,006,843	-	1,006,843
ALL COSTS 1+2	0	0	0	0	3,406,913	0	3,406,913

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	0				3,406,913
TOTAL		-	TOTAL		0	3,406,913

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE College of Sciences Building
Renovation

AGENCY PRIORITY 40
DATE BLDG PROGRAM
APPROVED

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

The College of Sciences building was constructed in 1996 and is 54,644 GSF. The facility contains offices, computer rooms, support spaces, and an auditorium. The HVAC system is part of the original design and does not effectively maintain temperature and humidity in classrooms, offices, and computer server areas. A test and balance needs to be conducted. The renovation of this building will address indoor air quality issues.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The College of Sciences Building renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: College of Sciences Building Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
	16,998		25,497		2,531,818		
Total Construction - New & Rem./Renov.					2,531,818		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	16,998	Offices	16,998
Total	16,998	Total	16,998

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost					2,531,818		2,531,818
1. a. Construction Cost (from above)							
Add/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation					-		-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication					-		-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	0	2,531,818	0	2,531,818
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees					461,767		461,767
c. Fire Marshall Fees					7,152		7,152
d. Inspection Services					10,226		10,226
e. Insurance Consultant					1,459		1,459
f. Surveys & Tests							-
g. Permit/Impact/Environmental Fees					29,567		29,567
h. Artwork							-
i. Moveable Furnishings & Equipment					200,769		200,769
j. Project Contingency					443,366		443,366
Total - Other Project Costs	-	-	-	-	1,154,306	-	1,154,306
ALL COSTS 1+2	0	0	0	0	3,686,124	0	3,686,123

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO	2012-13	0				3,686,124
TOTAL			TOTAL		0	3,686,123

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Simulation & Training Building

AGENCY PRIORITY 41
DATE BLDG PROGRAM
APPROVED

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

This facility will serve as one of the research homes for the Institute for Simulation and Training (IST) simulation, modeling, and training activities, and particularly for rapidly growing programs in cyber research. For UCF and IST to be able to compete with other research institutions in the simulation field, it must be able to attract quality research faculty, provide modern research facilities, and develop training programs specific to simulation research.

UCF/IST must produce top students through cutting-edge educational and research opportunities to meet the needs of high tech industries.

The facility will:

- Expand educational and work-related opportunities for students pursuing degrees associated with modeling, simulation, team performance, advanced methods of training delivery, and future learning environments; in particular, the newly-established MS and PhD programs in Simulation and Modeling
 - Provide laboratory and office space for the rapidly expanding research and development programs, as well as multiple disciplines in modeling, simulation, and training, immersive environments and mobile learning
 - Allow UCF to fulfill its state charter as the Center of Excellence in Simulation and Training by focusing its broad range of academic and research efforts through more specialized programs and projects
 - Allow for additional outside funding opportunities by providing adequate space and equipment for basic and applied research
 - Highlight UCF's commitment to establish Central Florida as the National Center for Simulation.
 - Expand traditional modeling and simulation into new areas such as medical team simulation and international cultural dynamics, significantly impacting health care scenarios and international relations and business
 - Promote research in multimodal interaction to include multicultural speech, gestures, high level dialogue, health, counseling, and lifestyle decisions to understand probable outcomes and develop intervention scenarios
 - Create a Cultural Modeling Center of Excellence to further expand research in recognizing and simulating body language (hostility, fear, suspicion, and personal space issues) and social customs, as well as cultural aspects of the social environment for various groups. The Center will research how individuals and groups react, and foster advances in dynamic agents, robots, and autonomous vehicles.
-

Without this facility, significant research projects and programs cannot be accommodated, and research funding will be lost to other institutions. The Simulation and Training Building will be integral to the academic experience, preparing students to compete for local simulation and training jobs within the high-technology pool.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption should be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs shall be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use. All heating and reheating will be hydronic.

Classroom/Office

Despite the fact that this building's space classification is predominately research and laboratory, there is also a significant number of classrooms and offices in the building.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

Page ____ of ____

COUNTY: Orange
PROJECT BR No. (if assigned):

ESTIMATED COSTS

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0	PECO	2022-23	2,715,608	23,807,711
						2,715,608
TOTAL		-	TOTAL		2,715,608	26,523,319

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Business Administration III
BuildingAGENCY PRIORITY 42DATE BLDG PROGRAM APPROVED **PURPOSE, NEED, SCOPE, RELATIONSHIP OF PROJECT TO AGENCY OBJECTIVES**

The College of Business Administration (CBA) offers degrees at the bachelor's, master's, doctoral and executive levels. All programs, including the Kenneth G. Dixon School of Accounting, are accredited by The Association to Advance Collegiate Schools of Business (AACSB International). Only 5% of the world's 13,000 business programs have achieved such distinction through rigorous standards of achievement. AACSB-accredited schools are globally recognized for their outstanding mission, faculty contributions, operations and more. Degrees from such schools are constantly increasing in value, giving students a competitive edge.

Business Administration is a Science, Technology, Engineering, and Math (STEM) facility that houses five academic units: the School of Accounting, and the Departments of Economics, Finance, Management, and Marketing. The College of Business Administration serves 7,765 undergraduate and 721 graduate students. Technology plays an integral role in the curriculum through state-of-the-art computer labs, technology support, and multi-media classrooms, and students graduate with the technical knowledge and entrepreneurial skills necessary to compete in today's global marketplace.

Approximately 25% of all course sections are scheduled outside of Business Administration I and II, because the buildings are at capacity. The continued growth in student enrollment along with faculty size requirements mandated by AACSB will necessitate aggressive faculty hiring, and there are no available faculty offices. Since 1999 the College has experienced a serious office space-shortage for faculty and staff. Given expected continued growth in enrollment and student credit hours generated, this situation can only be alleviated in the long term by constructing a significant new facility. Delay or non-approval would be detrimental to the College's ability to best serve students studying Business Administration at the university.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Business Administration III Building

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms	14,050	1.5	21,075	287	6,048,525		
Teaching Labs	0	1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study	3,541	1.4	4,957	290	1,437,646		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices	10,500	1.5	15,750	299	4,709,250		
Campus Support Services		1.4	0	274	0		
Totals	28,091		41,782		12,195,421		

*Apply Unit Cost to total GSF based on primary space type

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Remodeling/Renovation			
Total	0	Total	0

Total Construction - New & Rem./Renov. 12,195,421

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost						12,195,421	12,195,421
1. a. Construction Cost (from above)							-
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation						250,000	250,000
d. Landscape/Irrigation						200,000	200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ____ spaces							-
h. Telecommunication						250,000	250,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment						422,369	422,369
Total Construction Costs	0	0	0	0	0	13,317,790	13,317,790
2. Other Project Costs							-
a. Land/existing facility acquisition					1,295,462	-	1,295,462
b. Professional Fees					34,752		34,752
c. Fire Marshall Fees					282,824		282,824
d. Inspection Services					7,451		7,451
e. Insurance Consultant					45,000		45,000
f. Surveys & Tests					74,265		74,265
g. Permit/Impact/Environmental Fees						86,879	86,879
h. Artwork							-
i. Moveable Furnishings & Equipment					75,581	695,031	770,612
j. Project Contingency					1,815,335	781,910	2,597,245
Total - Other Project Costs	-	-	-	-	1,815,335	781,910	2,597,245
ALL COSTS 1+2	0	0	0	0	1,815,335	14,099,700	15,915,035

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0	PECO	2021-22	1,815,335	15,915,035
TOTAL		-	TOTAL		1,815,335	17,730,370

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Education Building II

AGENCY PRIORITY 43
DATE BLDG PROGRAM
APPROVED

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

The College of Education and Human Performance (CEDHP) is fully accredited and meets the rigorous standards of the Council for the Accreditation of Educator Preparation (CAEP). The College is recognized as one of the foremost institutions of its kind, nationally and internationally. Since inception, the CEDHP has impacted nearly 3.4 million Pre-K-12 students, and has strengthened the roles of countless Central Florida educators, who in turn influence the social, economic and societal well-being of our community, the State and beyond. UCF's CEDHP is the leading source of education degrees awarded in the State of Florida. Each year the Florida Department of Education identifies subject areas that are experiencing, or are projected to experience, a critical teacher shortage. The current and projected vacancies in Florida teacher certification areas for 2014-2015 stand at 1,498 of which 880, or 58 percent, are in critical teacher shortage areas. Critical teacher shortage areas for the 2015-16 school year are identified as follows: English, Exceptional Student Education, Reading, Foreign Language, English for Speakers of Other Languages, Science, and Mathematics. UCF is recognized for its scholarly leadership in the education profession, and through curricula and partnerships strives to address teacher shortages throughout the State. UCF must continue to produce professional educators who can competently teach literacy, mathematics and science, global studies, and technology, while addressing the issues of diversity, and personal and social responsibility.

In addition to preparing and renewing professional educators, the CEDHP serves as a hub for significant state centers, programs, and collaborative projects: The Toni Jennings Exceptional Education Institute; the Morgridge International Reading Center (MIRC); the Marriage and Family Research Institute; the Technical Assistance and Training Systems for Programs Serving Pre-K Children w/ Disabilities (TATS) project; TeachLive, the School Organization and Science Achievement (SOSA) Project; and the MIRC-Istation Project (e-learning program) at UCF. These projects engage faculty, staff and students in teaching, learning, leadership, research and service, and promote partnerships with professional organizations, educational institutions, business, industry, and the community.

CEDPH requires the construction of an Education Building II in close proximity to its Education Complex to meet the demands of the State's educational system. Physical space is a critical factor in developing the potential of the CEDHP and upholding UCF's status as a major metropolitan research university. The facility will enhance the current collaborative ventures that link the CEDHP; the UCF Teaching Academy, the Morgridge International Reading Center; state colleges; and the public and private schools in the eleven-county Central Florida service area. Leased space is not available within walking distance of the main campus. In addition, the types of spaces required by the various education disciplines are generally not readily available in commercial buildings. Thus, leasing is not an option in this case.

CIP-3 SHORT-TERM PROJECT EXPLANATION

The Education Building II will feature formal and informal learning spaces, and public interactive zones that invite collaboration and spark creativity. Dedicated space for centers and special projects will also be included. This state-of-the-art environment, with full multimedia support, will inspire and enable people to engage in education that is capable of creating the future.

Delay of this project will inhibit further growth of the CEDHP. Without new space it will be impossible to hire enough new faculty lines or meet increasing demands for additional course sections. School systems are expressing the need for more organized and effective approaches to professional development. UCF has been cited as a key reason for the location of business and industry in Central Florida in recent years. Future directions in education should utilize existing resources in Central Florida and the CEDHP at UCF stands ready to meet these new needs and demands.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Education Building III

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms	17,320	1.5	25,980	287	7,456,260		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices	16,300	1.5	24,450	299	7,310,550		
Campus Support Services		1.4	0	274	0		
Totals	33,620		50,430		14,766,810		
*Apply Unit Cost to total GSF based on primary space type							
						Space Detail for Remodeling Projects	
						BEFORE	AFTER
						Space Type	Net Area (NASF)
						Space Type	Net Area (NASF)
						Total	0
						Total	0
Total Construction - New & Rem./Renov.						14,766,810	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2020	2020-21	2021-22	Funded & In CIP
Basic Construction Cost						14,766,810	14,766,810
1. a. Construction Cost (from above)							-
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation						250,000	250,000
c. Site Preparation							-
d. Landscape/Irrigation						200,000	200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication						250,000	250,000
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment						155,092	155,092
Total Construction Costs	0	0	0	0	0	15,621,902	15,621,902
2. Other Project Costs							-
a. Land/existing facility acquisition							-
b. Professional Fees					1,506,957		1,506,957
c. Fire Marshall Fees					41,015		41,015
d. Inspection Services					331,417		331,417
e. Insurance Consultant					8,871		8,871
f. Surveys & Tests					45,000		45,000
g. Permit/Impact/Environmental Fees					79,433		79,433
h. Artwork						100,000	100,000
i. Moveable Furnishings & Equipment							-
j. Project Contingency					175,046	820,301	995,347
Total - Other Project Costs	-	-	-	-	2,187,739	920,301	3,108,040
ALL COSTS 1+2	0	0	0	0	2,187,739	16,542,203	18,729,942

Appropriations to Date	Source	Fiscal Year	Amount	Project Costs Beyond CIP Period	Source	Fiscal Year	Amount	Total Project In CIP & Beyond
			0	PECO		2021-22	2,187,739	18,729,942
TOTAL			-	TOTAL			2,187,739	20,917,681

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Band Building II Infrastructure

AGENCY PRIORITY 44
DATE BLDG PROGRAM
APPROVED

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

The University of Central Florida Bands program serves nearly 400 students, and consists of three concert ensembles and two athletic bands. The program is designed to provide professional training for music education and performance majors, while also serving as a musical outlet for wind and percussion players throughout the university community regardless of major.

The Band Building is needed to provide space for this program: ensemble and individual practice rooms, instrument and uniform storage, a recording studio, a band music library, office space, and a loading dock.

There is no other space on campus that can be used for this program, and leasing additional space of the type needed is not readily available or in proximity to the campus. A new building is the only viable alternative. Delays in construction will prohibit needed space for the marching band and hinder recruitment of new band members.

Phase 2 for the Band Building Facility Upgrade will occur concurrently with Phase 1. Phase 2 will provide road and utility improvements for the existing dirt part. The existing road currently has storm water deficiencies which floods the path and prevents access after rain events. Underground utilities (storm, sanitary, water, electric, and communications) will be installed for these improvements as well as to support the new Band Building. The upgraded road will also provide for a stabilized concrete path for fire access lane which currently does not exist. As part of Phase 2, permanent site lighting will also be installed for the Band Practice Field.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately assembly and media production, classroom or office

CIP-3 SHORT-TERM PROJECT EXPLANATION

type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating should be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ___ of ___

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Band Building II Infrastructure

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	287	0		
Teaching Labs		1.5	0	306	0		
Research Labs		1.5	0	366	0		
Study		1.4	0	290	0		
Instructional Media		1.5	0	216	0		
Auditorium/Exhibition		1.2	0	320	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	299	0		
Campus Support Services		1.4	0	274	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation					2674955		
Total Construction - New & Rem./Renov.					0		

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Total	0	Total	0

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost						2,664,045	2,664,045
1. a. Construction Cost (from above)							-
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation						179,663	179,663
d. Landscape/Imp/igaiton						200,000	200,000
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	0	0	3,043,708	3,043,708
2. Other Project Costs							
a. Land/existing facility acquisition							-
b. Professional Fees					321,544		321,544
c. Fire Marshall Fees					8,224		8,224
d. Inspection Services					83,688		83,688
e. Insurance Consultant					1,605		1,605
f. Surveys & Tests					45,000		45,000
g. Permit/Impact/Environmental Fees					31,939		31,939
h. Artwork							-
i. Moveable Furnishings & Equipment							-
j. Project Contingency					29,329	164,471	193,800
Total - Other Project Costs	-	-	-	-	521,329	164,471	685,800
ALL COSTS 1+2	0	0	0	0	521,329	3,208,179	3,729,508

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0	PECO	2021-22	521,329	3,729,507
TOTAL		-	TOTAL		521,329	521,329
						4,250,836

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Arts Complex III

AGENCY PRIORITY 45
DATE BLDG PROGRAM
APPROVED

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

This project is the last phase of a three (3) phased Center for the Performing Arts in an effort to meet the growing classroom needs of the School of Performing Arts (Music and Theatre units). Arts Complex III will place production units in closer proximity to the performance auditoria, and provide additional instructional and performance spaces.

The effect, if this project is not funded, will be the inability to enhance the performing arts classes and programs at UCF, and the inability to attract cultural events and meet the needs of the Central Florida community. The possibility of leasing additional space is not feasible due to the technical requirements of these spaces.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

Page 1 of 1

COUNTY: Orange
PROJECT BR No. (if assigned): _____

ESTIMATED COSTS

2. Other Project Costs			
a.Land/existing facility acquisition			-
b.Professional Fees	1,165,271		1,165,271
c.Fire Marshall Fees	31,384		31,384
d.Inspection Services	256,727		256,727
e.Insurance Consultant	6,689		6,689
f.Surveys & Tests	45,000		45,000
g.Permit/Impact/Environmental Fees	71,488		71,488
h.Artwork		78,460	78,460
i.Moveable Furnishings & Equipment			-
j.Project Contingency	125,537	627,683	753,220
Total - Other Project Costs	-	-	2,408,239

ALL COSTS 1+2	0	0	0	0	1,702,096	12,608,120	14,310,216
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Appropriations to Date			Project Costs Beyond CIP Period			Total Project In
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	CIP & Beyond
		0	PECO	2021-22	1,702,096	14,310,216
						1,702,096
TOTAL		<u>0</u>	TOTAL		<u>1,702,096</u>	<u>16,012,312</u>

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Interdisciplinary Research
Building II

AGENCY PRIORITY 46
DATE BLDG PROGRAM
APPROVED

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

Technological innovation is the engine that drives the new economy. The ability to develop, transfer, and successfully commercialize new technological discoveries is critical to the economic prosperity of Florida and the nation. Florida enjoys low unemployment, but suffers from an over-dependence on tourism and entertainment, and the low wage jobs associated with those industries. Although the job base has been increasing significantly, the average per capita income has remained below national averages. Florida must build the infrastructure to support and enable a strong technology sector to capture a significant share of the wealth creation made possible by the new economy. Florida lags behind in creating infrastructure that enables and fosters the successful development of homegrown technology-based companies. The National Business Incubator Association reports that 82% of these homegrown companies stay in the region where they were incubated, and realize an average return on investment of 450% to these regions in the form of an increased tax base alone. Florida continues to build an outstanding university system that produces relevant, exploitable technologies in key areas. Too many of these technologies are commercialized elsewhere or simply sit on the shelf.

It was the intent of this program to build a center of excellence in technology entrepreneurship and incubation that will significantly impact economic development and technology exploitation in the region, and in Florida as a whole. The goal was to develop and integrate strong education, incubation, and technology transfer, and commercialization programs that will catalyze significant growth in the technology sector. However, UCF's need for research space and a lack of state funding has forced us to reallocate the space that would've been assigned to the incubators. Even after the Interdisciplinary Research Incubator Facility I has been completed, UCF will still be in need of over 500,000 sq. ft. of research lab space, per the 2015 Educational Plant Survey Analysis of Need (Form B), so Interdisciplinary Research Building II will be unable to assign any incubator space. This is the second of three Interdisciplinary Research Buildings envisioned to meet the growing high-tech demands of Central Florida industry.

As a metropolitan university, serving the needs of Central Florida, the addition of this building and its associated research activities will advance the university's goals of:

- Offering the best undergraduate education available in Florida;
- Achieving international prominence in key programs of graduate study and research;
- Providing international focus to our curricula and research programs;
- Becoming more inclusive and diverse; and
- Being America's leading partnership university.

The building will provide researchers with laboratory space conducive to interaction, collaboration and professional development.

CIP-3 SHORT-TERM PROJECT EXPLANATION

The possibility of leasing additional space is not feasible since it is not available within walking distance of the main campus, and spaces to support this type of research are not generally available.

The delay of this project will inhibit the necessary growth of new interdisciplinary research efforts at the university to meet a growing demand of high-tech industry in Central Florida. Key business and industry leaders have cited UCF as a key reason for their business location in Central Florida. The laboratory space, teaching labs, and associated faculty office space are vitally needed to meet the new research demands.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Research/Laboratory

The space classification is predominately laboratory type, with office type minimized. The project will achieve LEED Gold certification with the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. Laboratories will have continuous variable air flow valves with air flow reset capabilities. Domestic and laboratory hot water needs will be provided primarily by solar thermal energy. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of lab spaces and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. See recommendation No. 3.7, Interdisciplinary Research, Building II.

Higher Educational Facilities Return on Investment

Institution: University of Central Florida

Project: Interdisciplinary Research and Incubator Facility (IRIF)

Total Funding: \$46,614,853

Previous Funding (State and Local): \$5,924,883 was allocated previously but was re-appropriated to Classroom Building II/ROTC; therefore the funding stands at \$0.

STEM (Yes or No): YES

Contact Person (Name, Position, Phone No.):

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

1. ☒ Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)
Explanation:
 - a. In 2014-15, UCF awarded 2,974 STEM degrees.
 - b. The new facility will support programs in nanoscience technology, advanced materials processing and analysis, optics and lasers, and energy research.
 - c. It will enable the departments to accommodate 600 additional STEM students per year.
 - d. The facility will support an expansion of the University's incubator program, creating new companies and jobs with salaries averaging \$67,000. UCF currently supports over 150 incubator clients. One hundred companies have already graduated and become self-sufficient, accounting for 3,698 jobs (direct, indirect, and induced) in Central Florida.
2. ☐ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation: N/A
3. ☒ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation:
 - a. UCF is ranked as a "highest research activity" university by the Carnegie Foundation.
 - b. Existing programs generate \$26M in external funding. While grant funding typically takes one year to secure, a significant increase in

proposals will be submitted in anticipation of acquiring the new space. A moderate influx of new funding is expected in the first year the building is operational. Within three to five years of its completion, UCF will realize \$20M in new external Research and Development (R&D) funding. UCF's ability to compete for and procure prestigious research grants will be dramatically increased with the physical availability of new space where research can be performed. UCF will then be in a position to compete successfully against international institutions that currently have state-of-the-art research facilities.

4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:
Nanotechnology MS, Optics MS, and Optics PhD programs are designated as STEM.
5. ☒ Increase Business Partnerships Which Will Lead to Guaranteed Internships and Jobs for Students
Explanation:
Business partnerships will include incubator use, businesses requiring an International Traffic in Arms Regulation (ITAR) facility, and industry support for research (estimated at 25% of the funds expended in the facility each year).
6. ☐ Project Improves the Use, either Operationally or Academically, of Existing Space
Explanation: N/A
7. ☒ Contribution of Local Funds Through Matching Grants, Property Donations, etc.
Explanation:
Within three to five years, research funding will be increased by \$20M.
8. ☐ Reduces Future Deferred Maintenance Cost and Extends the Life of the Facility by Bringing the Project up to Existing Standards (cost-benefit analysis of renovation or new facility vs. maintenance)
Explanation:
9. ☒ Projected Facility Utilization Rate
Explanation:
The facility will be 100% utilized. UCF has a serious shortage of lab space and is in the process of hiring 100 additional research-oriented faculty

members. According to the state's formula, UCF has only 33% of its research space needs met.

10. ☒ Current/Projected Campus Utilization Rate

Explanation:

Based on UCF's Educational Plant Survey, which was conducted on October 6-8, 2015, the BOG is projecting that by 2020-2021, UCF will require additional square footage in all of the 9 space categories. The following estimates represent the current deficits of square footage for space categories within this building:

Research Lab - 618,214 (67.11%)

Office - 259,853 (26.39%)

Support Services - 101,716 (54.03%)

Other Pertinent Information not included above:

- 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. UCF is competing for the best and brightest faculty, and recruitment is challenging, at best, without facilities. Our programs and research activities are limited by space as top researchers have their pick of world-class facilities at other institutions. Top recruits desire two things: state-of-the-art facilities where they can thrive and succeed, and the opportunity to participate in a nationally-ranked program.
- Because of UCF's lack of high-tech research space, leading-edge research in critical areas, such as engineering, nanoscience, and mechanical sciences, has been postponed or cannot be performed at all. Faculty lines cannot be filled because of the lack of space to house their research. In many instances, recruited faculty have not been provided laboratories upon their arrival, further weakening our ability to compete for grants and recruit new top-notch researchers.
- Space comprising 57 research and incubator labs; 23 material characterization labs; and lecture halls, conference rooms, offices, and ancillary spaces are planned within the building. The new facility will create a place where collaborations occur between faculty, researchers, entrepreneurs, investors, and industry. Labs will be configured for accelerated scientific discovery in a collaborative environment, with ease of reconfiguration based on projects and evolving research requirements. The facility will also house startup incubator companies and promote other industry collaborations.

- The Interdisciplinary Research and Incubator Facility will leverage talents from different disciplines; dramatically increase research efficiency; create a core environment to serve faculty and industry partners; and optimize capital equipment investments through shared use.
- The construction will provide short-term impact to local economy, as follows:
 - Year 1: \$10,286,411 30 construction jobs, 27 other sectors
 - Year 2: \$60,091,515 169 construction jobs, 159 other sectors
 - Year 3: \$10,751,142 30 construction jobs, 27 other sectors
- The UCF business incubator program's impact to the Central Florida region has been more than \$2.5 billion in its first 15 years.
- Improves the Ranking of a Preeminent Program or Improves on a Performance Funding Model Metric

Explanation:

 - The programs slated for this facility typically produce a significant number of patents, enabling UCF to remain in the top 20 universities nationally in patent production. Based on historical data, \$20M in new funding equates to approximately 20 new patents.
 - Past experience has shown that quality research facilities generate \$400 to \$500 per square foot per year in external funding.
 - Graduates of the Professional Science Master's in Nanotechnology (MS), Optics MS, and Optics PhD programs contribute to Metric 8A of the Performance Funding Model (graduate degrees awarded in areas of strategic emphasis (includes STEM)).

**Higher Educational Facilities
Return on Investment**

Institution: University of Central Florida

Project: John C. Hitt Library Renovation Phase II

Total Funding: \$38,719,200

Previous Funding (State and Local): \$0

STEM (Yes or No): No

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

Dr. Daniel Holsenbeck, Senior Vice President of University Relations

Office: (407) 823-2387; Cell: (407) 247-9421; daniel.holsenbeck@ucf.edu

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

1. ☒ Number of Additional Degrees and Certificates Produced and How Those Degrees are Meeting the Needs of our State (Job Openings, Average Wages of those Job Openings, etc.)
Explanation:
 - a. In 2014-15 UCF awarded 14,111 degrees (11,794 bachelor's and 2,317 graduate) to students who completed courses on the main campus.
 - b. Based on enrollment projections and expected growth (2%), UCF anticipates awarding an additional 1,800 degrees by 2021-22.
2. ☒ Number of Additional Students Served and the Benefits/Efficiencies Created (increase graduation rate, alleviate waitlist, increase academic support, etc.)
Explanation:
 - a. Fall 2015 enrollment at UCF main campus was 53,081.
 - b. Based on the UCF Enrollment Projection Model, an increase of over 5,700 students is expected on the main campus by Fall 2021.
3. ☐ Amount of Additional Research Funding to be Obtained; Patents Awarded
Explanation: N/A
4. ☒ Project is in an Area of Strategic Emphasis as Determined by the Board of Governors' Gap Analysis or the Department of Economic Opportunity's National Occupational Forecast
Explanation:
 - a. In 2014-15 UCF awarded 7,269 degrees (5,785 bachelor's and 1,484 graduate) in all five areas of strategic emphasis for students who completed courses on the main campus. Based on enrollment projections and expected growth (2%), UCF anticipates awarding nearly 1,100 additional degrees in areas of strategic emphasis by 2021-22.

b. In 2014-15 UCF awarded 1,227 degrees (1,131 bachelor's and 96 graduate) in Gap Programs for students who completed courses on the main campus. These programs include: Accounting with 457 degrees, Finance with 491 degrees, and Communications with 279 degrees. Based on enrollment projections and expected growth (2%), UCF anticipates awarding nearly over 600 additional degrees in Gap Programs by 2021-22.

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

Explanation: N/A

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

Explanation:

The John C. Hitt Library is currently 226,506 GSF and 144,097 NASF. When completed, the renovated and expanded facility will add 42,753 GSF and an estimated 30,000 NASF. It will include redesigned, more efficient, and flexible interior spaces featuring greatly increased student seating, information literacy classrooms, triple the number of group study rooms, a 24/7 study area, a digital initiatives center, additional Special Collections and University Archives space, and more than twice the number of technology workstations. Additional features will include dedicated graduate student study space and quiet study areas.

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

Explanation:

N/A

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

Explanation:

The project involves the complete renovation of the existing building (consisting of the original 1967 building and the adjoining 1984 addition) and the construction of a 42,000 sq. ft. addition on the north side of the building.

9. ☐ Projected Facility Utilization Rate

Explanation:

10. ☐ Current/Projected Campus Utilization Rate

Explanation:

Other Pertinent Information not included above:

- The John C. Hitt Library, built in 1967 when enrollment was 1,948 students, is inadequate 49 years later to meet the growing needs of current and future student populations.
- The existing library, with a collection of over 1.2 million print volumes, is open 105 hours per week, and has a patron count of almost 1.3 million visits per year. During a typical midterm week 39,000 people frequent the library.
- The existing library has 1,903 reader seats, which represents about 7% of the main campus FTE, and is significantly less than the minimum requirements recommended by the Association of College and Research Libraries. This project will accommodate 3,394 seats, about 10% of the main campus FTE.
- The new construction will consist of a four-story automated retrieval system (ARC) that will provide quick access to a computer-managed storage system with a capacity of 1,250,000 items. This will allow lesser-used material to be stored in the ARC and free up valuable square footage for user space in the library.
- The construction will provide short-term impact to local economy, as follows:
 - Year 1: \$6,726,528 22 construction jobs, 22 other sectors
 - Year 2: \$57,928,567 182 construction jobs, 190 other sectors
 - Year 3: \$7,022,727 22 construction jobs, 22 other sectors

Page of

COUNTY: Orange

PROJECT BR No. (if assigned):

ESTIMATED COSTS

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0	PECO	2021-22	2,637,120	25,421,838
						2,637,120
TOTAL		<u>-</u>	TOTAL		<u>2,637,120</u>	<u>28,058,958</u>

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 2AGENCY University of Central FloridaBUDGET ENTITY SUSPROJECT TITLE Theatre Building RenovationAGENCY PRIORITY 47

DATE BLDG PROGRAM _____

APPROVED _____

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

The existing Theatre Building was constructed in 1968 and there is considerable capital renewal needed for health/safety issues as well as renovations for more appropriate user needs. In addition, the older performance space (auditorium) will need to be remodeled to accommodate teaching space. This facility is in fair condition.

Once Theatre occupies the new performance space in the proposed Arts Complex Phase II, the performance space in the existing Theatre Building will be unusable without renovation.

The university contracted with the ISES Corporation to conduct a Facilities Condition Assessment (FCA) to benchmark the condition of its E&G facilities. The Theatre renovation will address both critical and non-critical issues identified in the FCA. These issues encompass deficiencies such as indoor air quality, fire alarm modernization, potable water and plumbing distribution systems, electrical service, asbestos, HVAC modernization, lighting upgrades, building automation, ADA compliance, building envelope repairs, interior finishes, flooring, egress, exterior lighting, and utility service entrance upgrades. Information technology upgrades are also required in order to meet current and future requirements.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately assembly, classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Theater Building Renovation

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	274	0		
Teaching Labs		1.5	0	268	0		
Research Labs		1.5	0	375	0		
Study		1.4	0	286	0		
Instructional Media		1.5	0	215	0		
Auditorium/Exhibition		1.2	0	310	0		
Gymnasiums		1.2	0	225	0		
Offices		1.5	0	284	0		
Campus Support Services		1.4	0	276	0		
Totals	0		0		0		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
	22,064		29,469		2,778,465		
Total Construction - New & Rem./Renov.					2,778,465		
Space Detail for Remodeling Projects							
BEFORE				AFTER			
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Offices	6,045	Offices	6,045	Offices	6,045	Offices	6,045
Total	6,045	Total	6,045	Total	6,045	Total	6,045

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-20	2020-21	2021-22	Funded & In CIP
Basic Construction Cost						2,778,465	2,778,465
1. a. Construction Cost (from above)							-
Add'l/Extraordinary Const. Costs							-
b. Environmental Impacts/Mitigation							-
c. Site Preparation							-
d. Landscape/Irrigation							-
e. Plaza/Walks							-
f. Roadway Improvements							-
g. Parking ___ spaces							-
h. Telecommunication							-
i. Electrical Service							-
j. Water Distribution							-
k. Sanitary Sewer System							-
l. Chilled Water System							-
m. Storm Water System							-
n. Energy Efficient Equipment							-
Total Construction Costs	0	0	0	0	0	2,778,465	2,778,465
2. Other Project Costs							-
a. Land/existing facility acquisition						394,949	394,949
b. Professional Fees						7,584	7,584
c. Fire Marshall Fees						11,772	11,772
d. Inspection Services						1,547	1,547
e. Insurance Consultant							-
f. Surveys & Tests						31,115	31,115
g. Permit/Impact/Environmental Fees						212,876	212,876
h. Artwork						470,102	470,102
i. Moveable Furnishings & Equipment							-
j. Project Contingency						1,129,945	1,129,945
Total - Other Project Costs	-	-	-	-	-		
ALL COSTS 1+2	0	0	0	0	0	3,908,410	3,908,410

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0				3,908,410
TOTAL			TOTAL		0	3,908,410

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Sustainability Center

AGENCY PRIORITY 48
DATE BLDG PROGRAM
APPROVED

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

The Sustainability Center will provide a collaborative environment where academic, research, and operational departments will partner to accelerate scientific discovery in sustainability and energy. The center will provide the offices and conference space needed to promote the university's continued sustainable efforts, while forging strong connections with research and academics units. This facility will promote faculty, staff, and student interaction with industry partners, and provide students with a home for continued learning about this emerging field. Designed and constructed with sustainability and energy in mind, the Center will also provide research space for building and construction industry demonstrations.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits that contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classroom or office type, with laboratory or research type minimized. The project will achieve Gold LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building. The project will utilize the district cooling loop for space cooling needs and look at alternative measures to provide dehumidification with the classifications of classroom and offices and related energy use. All heating and reheating will be hydronic.

EDUCATIONAL PLANT SURVEY

The Educational Plant Survey has not been addressed for this project. As the planning year approaches, this project will be addressed.

STATE UNIVERSITY SYSTEM
CIP-3 SHORT TERM PROJECT EXPLANATION

Page ____ of ____

GEOGRAPHIC LOCATION: University of Central Florida, Orlando
PROJECT DESCRIPTION/TITLE: Sustainability Center

COUNTY: Orange
PROJECT BR No. (if assigned):

Facility/Space Type	Net Area (NASF)	Net to Gross Conversion	Gross Area (GSF)	Unit Cost (Cost/GSF)*	Construction Cost	Assumed Bid Date	Occupancy Date
Classrooms		1.5	0	274	0		
Teaching Labs		1.5	0	268	0		
Research Labs		1.5	0	375	0		
Study		1.4	0	286	0		
Instructional Media		1.5	0	213	0		
Auditorium/Exhibition		1.2	0	310	0		
Gymnasiums		1.2	0	225	0		
Offices	8,800	1.5	13,200	284	3,748,800		
Campus Support Services		1.4	0	276	0		
Totals	8,800		13,200		3,748,800		
*Apply Unit Cost to total GSF based on primary space type							
Remodeling/Renovation							
Total Construction - New & Rem./Renov.							
3,748,800							

Space Detail for Remodeling Projects			
BEFORE		AFTER	
Space Type	Net Area (NASF)	Space Type	Net Area (NASF)
Total		Total	
0		0	

SCHEDULE OF PROJECT COMPONENTS

ESTIMATED COSTS

	Funded to Date	2017-18	2018-19	2019-2021	2020-21	2021-22	Funded & In CIP
Basic Construction Cost						3,748,800	3,748,800
1. a. Construction Cost (from above)							
Add'l/Extraordinary Const. Costs							
b. Environmental Impacts/Mitigation							
c. Site Preparation						150,000	150,000
d. Landscape/Irrigation						100,000	100,000
e. Plaza/Walks							
f. Roadway Improvements							
g. Parking ____ spaces							
h. Telecommunication						125,000	125,000
i. Electrical Service							
j. Water Distribution							
k. Sanitary Sewer System							
l. Chilled Water System							
m. Storm Water System							
n. Energy Efficient Equipment						121,952	121,952
Total Construction Costs	0	0	0	0	0	4,245,752	4,245,752
2. Other Project Costs							
a. Land/existing facility acquisition							
b. Professional Fees						434,784	434,784
c. Fire Marshall Fees						11,228	11,228
d. Inspection Services						106,013	106,013
e. Insurance Consultant						2,318	2,318
f. Surveys & Tests						25,000	25,000
g. Permit/Impact/Environmental Fees						44,321	44,321
h. Artwork						28,069	28,069
i. Moveable Furnishings & Equipment						561,375	561,375
j. Project Contingency						269,460	269,460
Total - Other Project Costs	-	-	-	-	-	1,482,568	1,482,568
ALL COSTS 1+2	0	0	0	0	0	5,728,320	5,728,320

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
		0				
TOTAL			TOTAL		0	5,728,320

CIP-3 SHORT-TERM PROJECT EXPLANATION

Page 1 of 1

AGENCY University of Central Florida
BUDGET ENTITY SUS
PROJECT TITLE Wet Teaching Lab and
Expanded STEM Facility

AGENCY PRIORITY 49
DATE BLDG PROGRAM
APPROVED

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

In order to deliver a complete curriculum, the Burnett School of Biomedical Sciences has a great need for the following: six wet teaching labs; prep labs; collaborative student study space; faculty offices; and a lecture hall. From 2002 to 2015, the school has experienced an increase in majors of over 280% (754 to 2,866), and an increase in non-majors of over 340% (1,883 to 8,366). During the same time period, there has been virtually no increase in wet teaching lab space. To meet these demands, the Burnett School currently borrows classroom and wet teaching lab space from 10 buildings scattered throughout campus. Faculty offices are in four different locations, some of which are 25 miles away. Students, faculty, and staff of the university's third-most popular major are in need of one centralized location to optimize learning opportunities.

The University of Central Florida's Strategic Plan emphasizes enhanced initiatives for improving STEM programs. The Burnett School of Biomedical Sciences is a feeder program for medicine and other critical-need disciplines. To offer the best education for its students, it is essential that the program update its wet teaching lab offerings to include courses such as Virology, Mycology, Zymology, and Parasitology.

SUSTAINABILITY AND LEED

The University of Central Florida is committed to sustainability and continued reduction of energy consumption in new construction projects. As energy costs and demands continue to escalate, achieving higher levels of efficiency has become increasingly important to the university's mission. Since 2007, UCF has mandated LEED certification, with most projects achieving Gold. UCF requires specific individual LEED credits which contribute to UCF's core principles including energy efficiency, water conservation, and indoor air quality for all projects. The Facilities Planning & Construction and Utilities & Energy Services departments provide oversight for all new construction and major renovation projects, and expedite the commissioning process with the latest industry standards to ensure that the university's sustainability goals are met and design parameters achieved.

Classroom/Office

The space classification is predominately classrooms and teaching labs classification. The project will achieve LEED certification from the U.S. Green Building Council (USGBC). Energy consumption will be at least 30% less than the energy standards cited in ASHRAE 90.1-2010, and water consumption will be at least 30% less than that of a comparable building.

EDUCATIONAL PLANT SURVEY

As the planning year approaches, the Educational Plant Survey for this project will be addressed.

Page ____ of ____

COUNTY: Orange

PROJECT BR No. (if assigned): _____

Appropriations to Date			Project Costs Beyond CIP Period			Total Project In CIP & Beyond
Source	Fiscal Year	Amount	Source	Fiscal Year	Amount	
PECO		0		2022-23	114,065,986	14,258,248
				2023-24	14,258,248	128,324,234
TOTAL		<u>-</u>	TOTAL		<u>128,324,234</u>	<u>142,582,482</u>

Attachment B

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

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Month Of Board Approval Request	Estimated Annual Amount For Operational and Maintenance Costs Amount	Source
UCF	Special Purpose Housing and Parking Garage	160,000	425 beds and 500 parking spaces	UCF, Orlando	\$ 27,540,000	Rental income	July	\$2,400,000	Auxiliary
UCF	Special Purpose Housing II	32,000	Fraternity, sorority, and organization housing	UCF, Orlando	\$ 8,812,800	Rental income	July	\$480,000	Auxiliary
UCF	Parking Garage VII	447,000	1,600 spaces	UCF, Orlando	\$ 22,913,280	Decal fees, traffic fines, and Transportation Access Fee	July	\$6,705,000	Auxiliary
UCF	Parking Decks	168,000	1,800 spaces	UCF, Orlando	\$ 18,727,200	Decal fees, traffic fines, and Transportation Access Fee	July	\$2,520,000	Auxiliary
UCF	Graduate Housing	150,000	Land and 600 beds	UCF, Orlando	\$ 55,080,000	Rental and retail income	July	\$2,250,000	Auxiliary
UCF	Refinance UCF Foundation properties	432,250	Consolidation and refinancing of existing UCF Foundation properties	UCF, Orlando	\$ 37,410,000	Rental and retail income	July	\$0	N/A
UCF	Student Housing	224,000	800 beds	UCF, Orlando	\$ 55,080,000	Rental income	July	\$3,360,000	Auxiliary
UCF	Garage Expansion	50,837	400 additional spaces	UCF, Orlando	\$ 12,117,600	Decal fees, traffic fines, and Transportation Access Fee	July	\$762,555	Auxiliary
UCF	Wet Teaching Lab and Expanded Stem Facility	249,450	Classrooms, labs, and offices	UCF, Orlando	\$ 142,582,482	Donations and partnerships	July	\$3,741,750	General Revenue
UCF	Facilities and Safety Building, Lake Nona	34,586	Offices, storage, and support space	UCF, Orlando	\$ 6,873,984	Donations and partnerships	July	\$518,790	General Revenue
UCF	Regional Campuses Multi-Purpose Buildings	60,000	Classrooms, labs, and offices	UCF, Orlando	\$ 30,844,800	Donations and partnerships	July	\$900,000	General Revenue
UCF	Partnership Garage	60,000	600 spaces	UCF, Orlando	\$ 7,711,200	Decal fees and revenue income	July	\$0	Auxiliary
UCF	UCF Downtown Campus Garage II	200,000	600 spaces	UCF, Orlando	\$ 15,300,000	Decal fees, traffic fines, and Transportation Access Fee	July	\$3,000,000	Auxiliary
UCF	Wayne Densch Sports Center Expansion	36,000		UCF, Orlando	\$ 5,100,000		July	\$540,000	DSO
UCF	Baseball Stadium Expansion Phase II		300 seat club, enhancements	UCF, Orlando	\$ 3,060,000	Donations	July	\$0	DSO
UCF	Softball Stadium Expansion and Renovation		400 to 600 additional seats, shade structure over grandstand, new press box	UCF, Orlando	\$ 1,020,000	Donations	July	\$0	DSO
UCF	Bright House Networks Stadium Expansion and Improvements Phase I	21,337	Additional club seating, suites, and operational booths	UCF, Orlando	\$ 14,790,000	Donations	July	\$320,055	DSO
UCF	Baseball Clubhouse Expansion and Renovation		New playing field, chair backs, audio, and lighting upgrade	UCF, Orlando	\$ 1,020,000	Donations	July	\$0	DSO
UCF	Bright House Networks Stadium Expansion and Improvements Phase II	80,000	Additional seating up to 20,000	UCF, Orlando	\$ 39,662,000	Donations	July	\$1,200,000	DSO
UCF	Football Building	45,000	Offices, storage, and support space	UCF, Orlando	\$ 14,737,500	Donations	July	\$675,000	Auxiliary
UCF	Parking Deck	168,000	600 parking spaces	UCF, Orlando	\$ 5,100,000	Decal fees, traffic fines, and Transportation Access Fee	July	\$2,520,000	Auxiliary
UCF	Multi-Purpose Medical Research and Incubator Facility	200,000	Classrooms, labs, and offices	UCF, Orlando	\$ 126,817,515	Donations and partnerships	July	\$3,000,000	General Revenue
UCF	Health Sciences Campus Parking Garage	402,000	1,300 spaces	UCF, Orlando	\$ 15,300,000	Decal fees and traffic fines	July	\$6,030,000	Auxiliary
UCF	Bio-Medical Annex Renovation and Expansion	32,000	Classrooms, labs, and offices	UCF, Orlando	\$ 13,056,000	Donations and partnerships	July	\$480,000	General Revenue
UCF	Outpatient Center	237,520	Health care facilities, offices, 38 beds	UCF, Orlando	\$ 82,620,000	Donations and partnerships	July	\$3,562,800	General Revenue
UCF	Dental School	166,750	Classrooms, labs, auditorium, health care facilities, offices	UCF, Orlando	\$ 73,000,000	Donations and partnerships	July	\$2,501,250	Revenue
UCF	Utility Infrastructure and Site Work, Lake Nona Clinical Facilities		3,080 spaces	UCF, Orlando	\$ 11,685,773	Income and energy savings	July		General Revenue
UCF	UCF Health Expansion and Wellness Center	254,150	Labs, offices	UCF, Orlando	\$ 11,456,640	Donations and partnerships	July	\$3,812,250	General Revenue

Attachment C

STATE UNIVERSITY SYSTEM Fixed Capital Outlay Projects That May Require Legislative Authorization and General Revenue Funds to Operate and Maintain BOB-2

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Annual Amount For Operational and Maintenance Costs	
							Amount	Source
UCF	Florida Advanced Manufacturing Research Facility	81,750	Research Labs, Wet Labs, Collaboration Rooms, Offices	UCF - Osceola	\$75,000,000	PECO	\$1,339,850	General Revenue
UCF	Optical Materials Lab Addition	5,530	Research Labs	UCF-Orlando	\$1,640,000	E&G	\$90,634	General Revenue
UCF	Library Expansion Phase I	8,800	Automatic Retrieval Center	UCF-Orlando	\$10,771,963	CITF	\$144,228	General Revenue
UCF	Trevor Colbourn Hall	135,600	Offices, Classrooms	UCF-Orlando	\$38,000,000	E&G	\$2,222,430	General Revenue
UCF	Coastal Biology	3,000	Research	Melbourne Beach	\$2,500,000	E&G	\$49,169	General Revenue
UCF	Partnership IV Phase I and II	92,529	Office, Research Labs	UCF-Orlando	\$42,000,000	PECO	\$1,516,513	General Revenue
UCF	Florida Solar Energy Center Renovation	42,986	Offices, Research Labs	UCF-Orlando	\$10,000,000	PECO	\$704,523	General Revenue
UCF	Interdisciplinary Research and Incubator Facility	97,482	Offices, Labs	UCF-Orlando	\$46,614,853	E&G	\$1,597,691	General Revenue
UCF	Arboretum Green House	800	Teaching Lab	UCF-Orlando	\$400,000	E&G	\$13,112	General Revenue
UCF	Band Building	6,000	Teaching Labs, Offices	UCF-Orlando	\$5,000,000	E&G	\$98,338	General Revenue
UCF	CREOL Expansion Phase II	13,900	Research Labs, Offices	UCF-Orlando	\$6,784,228	E&G	\$227,815	General Revenue

UCF	Downtown Campus Building-I	165,000	Offices	UCF-Orlando	\$57,750,000	PECO	\$2,476,000	General Revenue
UCF	Institute for Hospitality in Healthcare at Lake Nona	36,000	Offices, Classrooms, Teaching Labs	UCF-Orlando	\$15,000,000	Grant-Private	\$540,000	General Revenue
UCF	Creative School	8,351	Classrooms, Offices	UCF-Orlando	\$5,000,000	CITF	\$126,265	General Revenue
UCF	Library Expansion Phase-I	12,609	Automatic Retrieval Center	UCF-Orlando	\$21,366,592	CITF	\$189,135	General Revenue
UCF	CREOL	2,756	Research Labs	UCF-Orlando	\$1,406,000	E&G	\$41,340	General Revenue
UCF	Center for Public Safety-Hazardous Materials Bldg.	1,400	Research Lab, Offices	UCF-Orlando	\$9,084,000	PECO	\$21,000	General Revenue
UCF	Arts Complex II Performance	2,728	Teaching Lab, Offices	UCF-Orlando	\$964,414	PECO	\$40,920	General Revenue
UCF	Business and Professional Women Building	4,038	College of Education-Marriage and Family Research Institute	UCF-Main Campus	\$275,000	E&G	\$60,750	General Revenue

University of Central Florida
2016-17 E&G Budget, Summary of Allocations and Reserve

	University Divisions						University Reserves				Medical School	Grand Total
	Academic Affairs	Admin & Finance	President's Division	Communications and Marketing	University Relations	Total Divisions	Recurring	Recurring for Facility Needs	Non-Recurring	Total Central Reserve		
2016-17 Operating Budget												
2015-16 End of year total budget, including all allocations	\$ 524,067,980	\$ 127,382,522	\$ 22,293,194	\$ 10,828,945	\$ 2,623,679	\$ 687,196,320	\$ 26,150,546	\$ -	\$ (2,777,032)	\$ 23,373,514	\$ 61,564,340	\$ 772,134,174
Less: Temporary allocations and carry forward	(106,178,754)	(49,929,765)	(10,156,124)	(6,707,486)	(576,326)	(173,548,455)	-	-	2,777,032	2,777,032	(20,829,102)	(191,600,525)
2016-17 Beginning of year base budget (excluding carry forward)	\$ 417,889,226	\$ 77,452,757	\$ 12,137,070	\$ 4,121,459	\$ 2,047,353	\$ 513,647,865	\$ 26,150,546	\$ -	\$ -	\$ 26,150,546	\$ 40,735,238	\$ 580,533,649
<u>PERMANENT Beginning of Year Allocations</u>												
<u>State funding</u>												
Performance funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,204,414	\$ -	\$ -	\$ 16,204,414	\$ -	\$ 16,204,414
Retirement adjustments	-	-	-	-	-	-	597,117	-	-	597,117	45,226	642,343
Plant, operations, and maintenance for new space-annualization	-	85,373	-	-	-	85,373	-	-	-	-	-	85,373
Dr. Phillips Center for Performing Arts	3,900,299	-	-	-	-	3,900,299	-	-	-	-	-	3,900,299
Advanced Manufacturing Sensor Project	5,000,000	-	-	-	-	5,000,000	-	-	-	-	-	5,000,000
Center for Reading- Istation	2,000,000	-	-	-	-	2,000,000	-	-	-	-	-	2,000,000
Urban Teacher Institute	250,000	-	-	-	-	250,000	-	-	-	-	-	250,000
Florida Center for Nursing	(450,000)	-	-	-	-	(450,000)	-	-	-	-	-	(450,000)
Emerging Preeminence Funding	-	-	-	-	-	-	5,000,000	-	-	5,000,000	-	5,000,000
Florida Center for Unique Abilities	8,000,000	-	-	-	-	8,000,000	-	-	-	-	-	8,000,000
<u>University designated</u>												
2015-16 salary increases (annualized)	3,557,470	457,867	136,333	58,605	15,155	4,225,430	(4,225,430)	-	-	(4,225,430)	-	-
2015-16 faculty/instructor promotional increases (annualized)	13,861	-	-	-	-	13,861	(13,861)	-	-	(13,861)	-	-
2015-16 Faculty ADI pool	(700,000)	-	-	-	-	(700,000)	700,000	-	-	700,000	-	-
2014-15 support staff for first 100 new faculty (annualized)	406,750	32,300	-	-	-	439,050	(439,050)	-	-	(439,050)	-	-
2015-16 support staff for second 100 new faculty (annualized)	163,373	-	-	-	-	163,373	(163,373)	-	-	(163,373)	-	-
Title IX coordinator (annualized)	-	-	48,527	-	-	48,527	(48,527)	-	-	(48,527)	-	-
Title IX investigator (full year)	66,495	-	-	-	-	66,495	(66,495)	-	-	(66,495)	-	-
Enrollment management position for IKM	55,000	-	-	-	-	55,000	(55,000)	-	-	(55,000)	-	-
Communications & marketing	-	-	-	1,311,500	-	1,311,500	(1,311,500)	-	-	(1,311,500)	-	-
Pegasus Magazine	-	-	-	100,000	-	100,000	(100,000)	-	-	(100,000)	-	-
<u>University Budget Committee allocations:</u>												
2016-17 new faculty lines (45)	5,600,000	-	-	-	-	5,600,000	(5,600,000)	-	-	(5,600,000)	-	-
ITR - Library materials inflationary costs	679,000	-	-	-	-	679,000	(679,000)	-	-	(679,000)	-	-
ITR - Security incident response	745,700	-	-	-	-	745,700	(745,700)	-	-	(745,700)	-	-
ITR - Divisional discretionary funds	300,000	-	-	-	-	300,000	(300,000)	-	-	(300,000)	-	-
ORC - Divisional discretionary funds	85,500	-	-	-	-	85,500	(85,500)	-	-	(85,500)	-	-
SDES - Merit-based scholarships (LEAD, Academic Enrich, Brain Bowl)	575,000	-	-	-	-	575,000	(575,000)	-	-	(575,000)	-	-
SDES - SARC Learning support services	264,000	-	-	-	-	264,000	(264,000)	-	-	(264,000)	-	-
SDES - Divisional discretionary funds	400,000	-	-	-	-	400,000	(400,000)	-	-	(400,000)	-	-
CGS - Contribution to doctoral fellowships	510,000	-	-	-	-	510,000	(510,000)	-	-	(510,000)	-	-
CGS - Graduate health insurance (in addition to \$869k in waiver authority)	265,680	-	-	-	-	265,680	(265,680)	-	-	(265,680)	-	-
CGS - Graduate stipends	669,600	-	-	-	-	669,600	(669,600)	-	-	(669,600)	-	-
A&F - Office of Security Management	-	500,000	-	-	-	500,000	(500,000)	-	-	(500,000)	-	-
A&F - Athletic scholarships for women (Title IX)	-	330,000	-	-	-	330,000	(330,000)	-	-	(330,000)	-	-
AA - Divisional discretionary funds	1,500,000	-	-	-	-	1,500,000	(1,500,000)	-	-	(1,500,000)	-	-
A&F - Divisional discretionary funds	-	800,000	-	-	-	800,000	(800,000)	-	-	(800,000)	-	-
PRES - Divisional discretionary funds	-	-	165,000	-	-	165,000	(165,000)	-	-	(165,000)	-	-
C&M - Divisional discretionary funds	-	-	-	33,000	-	33,000	(33,000)	-	-	(33,000)	-	-

University of Central Florida
2016-17 E&G Budget, Summary of Allocations and Reserve

	University Divisions						University Reserves				Medical School	Grand Total
	Academic Affairs	Admin & Finance	President's Division	Communications and Marketing	University Relations	Total Divisions	Recurring	Recurring for Facility Needs	Non-Recurring	Total Central Reserve		
C&M - UCF Branding Campaign	-	-	-	510,000	-	510,000	(510,000)	-	-	(510,000)	-	-
UR - Divisional discretionary funds	-	-	-	-	16,500	18,500	(16,500)	-	-	(16,500)	-	-
Reserve for facility needs	-	-	-	-	-	-	(1,500,000)	1,500,000	-	-	-	-
UBC allocations funded from Emerging Preeminence Funds:												
Faculty Excellence- National Academy Members	1,187,000	-	-	-	-	1,187,000	(1,187,000)	-	-	(1,187,000)	-	-
AA - Trustee chairs (5)	250,000	-	-	-	-	250,000	(250,000)	-	-	(250,000)	-	-
ORC - Research administration process & technology implementation	585,600	-	-	-	-	585,600	(585,600)	-	-	(585,600)	-	-
CGS - Doctoral & post-doctoral fellowships	1,900,000	-	-	-	-	1,900,000	(1,900,000)	-	-	(1,900,000)	-	-
Preeminence supporting initiatives	1,077,400	-	-	-	-	1,077,400	(1,077,400)	-	-	(1,077,400)	-	-
<u>Tuition and fees:</u>												
Allocate 2015-16 increase in differential for need-based aid	396,512	-	-	-	-	396,512	(396,512)	-	-	(396,512)	-	-
2015-16 tuition excess collections available to UBC	-	-	-	-	-	-	12,000,000	-	-	12,000,000	-	12,000,000
2016-17 projected tuition growth held in reserve	-	-	-	-	-	-	5,023,195	-	-	5,023,195	-	5,023,195
2016-17 projected increase in differential for need-based aid	162,253	-	-	-	-	162,253	660,756	-	-	660,756	-	823,009
Projected decrease in FIEA tuition	(126,733)	-	-	-	-	(126,733)	-	-	-	-	-	(126,733)
College of Engineering Graduate SCH Growth	513,824	-	-	-	-	513,824	(513,824)	-	-	(513,824)	-	-
Medical school increase in enrollment	-	-	-	-	-	-	-	-	-	-	791,144	791,144
Total permanent allocations	\$ 39,803,584	\$ 2,205,540	\$ 349,860	\$ 2,013,105	\$ 31,655	\$ 44,403,744	\$ 12,402,930	\$ 1,500,000	\$ -	\$ 13,902,930	\$ 836,370	\$ 59,143,044
<u>TEMPORARY Beginning of Year Allocations</u>												
Reverse 2015-16 temporary allocations and carryforward	\$ (106,178,754)	\$ (49,929,785)	\$ (10,156,124)	\$ (6,707,488)	\$ (576,326)	\$ (173,548,455)	\$ -	\$ -	\$ 2,777,032	\$ 2,777,032	\$ (20,829,102)	\$ (191,600,525)
Encumbrances (PO rollovers)	11,753,507	2,827,967	903,475	595,261	62,571	16,142,781	-	-	-	-	1,784,396	17,927,177
6/30/16 carryforward	89,493,937	7,050,239	2,037,729	2,193,543	366,582	101,162,030	-	-	36,326,012	36,326,012	15,323,181	152,811,223
<u>State funding</u>												
Dr. Phillips Center for Performing Arts	1,147,744	-	-	-	-	1,147,744	-	-	-	-	-	1,147,744
Evans Community School	1,500,000	-	-	-	-	1,500,000	-	-	-	-	-	1,500,000
Incubator	1,000,000	-	-	-	-	1,000,000	-	-	-	-	-	1,000,000
Lou Frey Institute	500,000	-	-	-	-	500,000	-	-	-	-	-	500,000
University security management technology	-	300,000	-	-	-	300,000	-	-	-	-	-	300,000
Florida FIRST Robotics Team Grant	100,000	-	-	-	-	100,000	-	-	-	-	-	100,000
Chron's and Colitis research	-	-	-	-	-	-	-	-	-	-	100,000	100,000
<u>University designated</u>												
<u>Recurring allocations from non-recurring funds:</u>												
Salary Support for Undergraduate Studies/Teaching & Learning Hiring Plan	300,000	-	-	-	-	300,000	-	-	(300,000)	(300,000)	-	-
Undergraduate education pilot projects/ Quality Enhancement Plan	700,000	-	-	-	-	700,000	-	-	(700,000)	(700,000)	-	-
Development - Enhancement Plan	-	-	2,000,000	-	-	2,000,000	-	-	(2,000,000)	(2,000,000)	-	-
Foundation support	-	-	1,500,000	-	-	1,500,000	-	-	(1,500,000)	(1,500,000)	-	-
Athletics compliance positions	-	-	350,000	-	-	350,000	-	-	(350,000)	(350,000)	-	-
Convocation Center rent	-	1,000,000	-	-	-	1,000,000	-	-	(1,000,000)	(1,000,000)	-	-
Conference entrance fees	-	600,000	-	-	-	600,000	-	-	(600,000)	(600,000)	-	-
Finance & Accounting operations	-	2,500,000	-	-	-	2,500,000	-	-	(2,500,000)	(2,500,000)	-	-
Health Sciences Campus Boggy Creek assessment	-	45,000	-	-	-	45,000	-	-	(45,000)	(45,000)	-	-
Health Sciences Campus property taxes	-	2,000	-	-	-	2,000	-	-	(2,000)	(2,000)	-	-
International and cyber insurance	-	160,000	-	-	-	160,000	-	-	(160,000)	(160,000)	-	-
Rosen maintenance costs	-	250,000	-	-	-	250,000	-	-	(250,000)	(250,000)	-	-
<u>Non-recurring allocations:</u>												
Project Surface (Tennis complex)	-	-	1,155,000	-	-	1,155,000	-	-	(1,155,000)	(1,155,000)	-	-
Investment in research (Osceola)	4,500,000	-	-	-	-	4,500,000	-	-	(4,500,000)	(4,500,000)	-	-

University of Central Florida
2016-17 E&G Budget, Summary of Allocations and Reserve

	University Divisions						University Reserves				Medical School	Grand Total
	Academic Affairs	Admin & Finance	President's Division	Communications and Marketing	University Relations	Total Divisions	Recurring	Recurring for Facility Needs	Non-Recurring	Total Central Reserve		
Sematech (Year 5 of 5)	500,000	-	-	-	-	500,000	-	-	(500,000)	(500,000)	-	-
Creative Village coordinator (final year of commitment)	250,000	-	-	-	-	250,000	-	-	(250,000)	(250,000)	-	-
PBS partnership	-	-	-	2,149,654	-	2,149,654	-	-	(2,149,654)	(2,149,654)	-	-
University Innovation Alliance liaison	-	-	48,090	-	-	48,090	-	-	(48,090)	(48,090)	-	-
Contract management software (legal)	-	-	53,934	-	-	53,934	-	-	(53,934)	(53,934)	-	-
Oracle/Cisco contract payback (Year 2 of 5)	(2,329,154)	-	-	-	-	(2,329,154)	-	-	2,329,154	2,329,154	-	-
Lab renovations (CECS)	575,000	-	-	-	-	575,000	-	-	(575,000)	(575,000)	-	-
Academic advising costs- EAB agreement (final year of commitment)	150,000	-	-	-	-	150,000	-	-	(150,000)	(150,000)	-	-
Marketing for faculty hires from AA	(55,000)	-	-	55,000	-	-	-	-	-	-	-	-
Lab decontamination (BSBS)	-	84,400	-	-	-	84,400	-	-	(84,400)	(84,400)	-	-
<u>University Budget Committee allocations:</u>												
ORC - Research administration process & technology implementation	1,973,500	-	-	-	-	1,973,500	-	-	(1,973,500)	(1,973,500)	-	-
ORC - Operating budget shortfall	2,000,000	-	-	-	-	2,000,000	-	-	(2,000,000)	(2,000,000)	-	-
ITR - Security incident response	565,680	-	-	-	-	565,680	-	-	(565,680)	(565,680)	-	-
ITR - IT database/application licenses	300,480	-	-	-	-	300,480	-	-	(300,480)	(300,480)	-	-
AA - National Academy Members (1 Full + 1 Transition)	1,719,500	-	-	-	-	1,719,500	-	-	(1,719,500)	(1,719,500)	-	-
C&M - UCF Branding Campaign	-	-	-	360,000	-	360,000	-	-	(360,000)	(380,000)	-	-
Total temporary allocations (including change in carry forward)	\$ 10,466,440	\$ (35,110,159)	\$ (2,107,896)	\$ (1,354,028)	\$ (127,173)	\$ (28,232,816)	\$ -	\$ -	\$ 15,639,960	\$ 15,639,960	\$ (3,621,525)	136,596,842
2016-17 Beginning of year total budget	\$ 574,338,004	\$ 94,477,903	\$ 20,535,158	\$ 11,488,022	\$ 2,528,181	\$ 703,367,248	\$ 38,553,478	\$ 1,500,000	\$ 12,862,928	\$ 52,918,404	\$ 58,779,185	\$ 815,062,837

PLANNED MID-YEAR ALLOCATIONS

Note: Amounts below are estimates. Budget will be allocated based on actual cost. Allocations are subject to availability of funds.

PERMANENT allocations to be recorded during the year												
2016-17 salary increase (estimated allocation)	\$ 6,273,000	\$ 807,000	\$ 240,000	\$ 103,000	\$ 27,000	\$ 7,450,000	\$ (7,450,000)	\$ -	\$ -	\$ (7,450,000)		
Faculty/instructor promotional increase	750,000	-	-	-	-	750,000	(750,000)	-	-	(750,000)		
TIP, RIA, SoTL	500,000	-	-	-	-	500,000	(500,000)	-	-	(500,000)		
Graduate health insurance	675,000	-	-	-	-	675,000	(675,000)	-	-	(675,000)		
Pool for lower paid faculty	250,000	-	-	-	-	250,000	(250,000)	-	-	(250,000)		
FY17 State retirement adjustments (to be allocated among divisions)	597,117	-	-	-	-	597,117	(597,117)	-	-	(597,117)		
2014-15 support staff for first 100 new faculty	870,599	133,600	-	-	-	804,199	(804,199)	-	-	(804,199)		
2015-18 support staff for second 100 new faculty	1,523,221	-	-	-	-	1,523,221	(1,523,221)	-	-	(1,523,221)		
E&G interest allocation	-	4,000,000	-	-	-	4,000,000	(4,000,000)	-	-	(4,000,000)		
Estimated professional/ misc fee collections	152,588	-	-	-	-	152,588	(152,588)	-	-	(152,588)		
Estimated differential tuition for need based aid allocations	660,756	-	-	-	-	660,756	(660,756)	-	-	(660,756)		
Soldiers to Scholars - Program Manager	-	-	-	-	82,160	82,160	(82,160)	-	-	(82,160)		
Soldiers to Scholars - Veteran's Housing	-	-	-	-	50,000	50,000	(50,000)	-	-	(50,000)		
Total to be allocated from recurring funds	\$ 12,052,281	\$ 4,940,600	\$ 240,000	\$ 103,000	\$ 159,160	\$ 17,495,041	\$ (17,495,041)	\$ -	\$ -	\$ (17,495,041)		
TEMPORARY allocations to be recorded during the year												
<u>Recurring allocations from non-recurring funds:</u>												
UCF Knights Success Grant	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -	\$ -	\$ (150,000)	\$ (150,000)		
Development Enhancement Plan	-	-	2,547,000	-	-	2,547,000	-	-	(2,547,000)	(2,547,000)		
PO&M - FSEC	-	373,000	-	-	-	373,000	-	-	(373,000)	(373,000)		
Health Sciences Campus PO&M	-	252,836	-	-	-	252,836	-	-	(252,836)	(252,836)		
Director of Governmental Relations	-	-	-	-	138,600	138,600	-	-	(138,600)	(138,600)		
Subtotal- recurring items	\$ 150,000	\$ 625,836	\$ 2,547,000	\$ -	\$ 138,600	\$ 3,461,436	\$ -	\$ -	\$ (3,461,436)	\$ (3,461,436)		


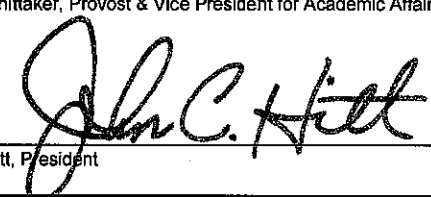
University of Central Florida
2016-17 E&G Budget, Summary of Allocations and Reserve

	University Divisions						University Reserves				Medical School	Grand Total
	Academic Affairs	Admin & Finance	President's Division	Communications and Marketing	University Relations	Total Divisions	Recurring	Recurring for Facility Needs	Non-Recurring	Total Central Reserve		
<u>Non-recurring allocations:</u>												
Furniture for Interdisciplinary Research Building	\$ -	\$ 3,000,000	\$ -	\$ -	\$ -	\$ 3,000,000	\$ -	\$ -	\$ (3,000,000)	\$ (3,000,000)		
Pipe repair at Biology Animal Center	1,500,000	-	-	-	-	1,500,000	-	-	(1,500,000)	(1,500,000)		
Development Enhancement Plan	-	-	900,000	-	-	900,000	-	-	(900,000)	(900,000)		
Re-key building	-	300,000	-	-	-	300,000	-	-	(300,000)	(300,000)		
Generator for Biology Building	-	929,000	-	-	-	929,000	-	-	(929,000)	(929,000)		
Band Building	300,000	-	-	-	-	300,000	-	-	(300,000)	(300,000)		
Strategic planning initiatives	200,000	-	-	-	-	200,000	-	-	(200,000)	(200,000)		
Chiller Plant	-	5,000,000	-	-	-	5,000,000	-	-	(5,000,000)	(5,000,000)		
HR Consulting	-	300,000	-	-	-	300,000	-	-	(300,000)	(300,000)		
Lab decontamination (BSBS)	115,600	-	-	-	-	115,600	-	-	(115,600)	(115,600)		
Subtotal- non-recurring items	2,115,600	9,529,000	900,000	-	-	12,544,600	-	-	(12,544,600)	(12,544,600)		
Total to be allocated from non-recurring funds	\$ 2,265,600	\$ 10,154,636	\$ 3,447,000	\$ -	\$ 138,600	\$ 16,006,036	\$ -	\$ -	\$ (16,006,036)	\$ (16,006,036)		

2016-17 Total budget after mid-year allocations \$ 588,655,885 \$ 109,573,339 \$ 24,222,158 \$ 11,591,022 \$ 2,825,921 \$ 736,868,325 \$ 21,058,435 \$ 1,500,000 \$ (3,143,108) \$ 19,415,327 \$ 58,779,185 \$ 815,062,837

COMPOSITION OF CENTRAL RESERVE

	Recurring	Non-recurring	Total
Central reserve after beginning of year allocations	\$ 38,553,476	\$ 12,862,928	\$ 51,416,404
Facility reserve after beginning of year allocations	1,500,000	(1,500,000)	-
Allocations to be recorded during the year	(17,495,041)	(14,506,036)	(32,001,077)
	22,558,435	(3,143,108)	19,415,327
Projected tuition growth to be allocated to colleges through College Budget Model	(5,023,195)	5,023,195	-
Total available reserves as of July 1, 2016	\$ 17,535,240	\$ 1,680,087	\$ 19,415,327

Recommended for approval:		8/31/16
A. Dale Whittaker, Provost & Vice President for Academic Affairs		
Date		
Approval:		8/31/16
John C. Hitt, President		
Date		

From: Lee Kernek
Sent: Wednesday, February 22, 2017 8:19 AM
To: David Norvell
Subject: FW: FBC Orientation Slides v2.pptx
Attachments: FBC Orientation Slides v2.pptx; 1-Budget Meeting Agenda_Feb v2.docx

[As discussed](#)

From: Tracy Clark
Sent: Tuesday, February 21, 2017 8:58 PM
To: Lee Kernek <Lee.Kernek@ucf.edu>
Subject: FBC Orientation Slides v2.pptx

Can you speak to the last slide of the PowerPoint? Bill and Dale will handle the first two and I'll handle the ones in between.

Thanks.



UCF Facilities Budget Committee Meeting

AGENDA

Date:	February 22, 2016
Time:	11:00 a.m. – 12:00 p.m.
Location:	MH-384
Facilitator:	Provost Dale Whittaker and Vice President William Merck
Voting Members:	Brian Barton, Joel Hartman, Lisa Jones, Lee Kernek, Liz Klonoff, Keith Koons, Griff Parks, Dorcas Wilkinson
Other Invitees:	Tracy Clark, Christy Tant, Mark Wray, Tera Alcala, Allen Bottorff, Christy Collier, Ronnie Korosec, Robert Taft

UCF Budget Philosophy: An effective budgeting process transforms strategic goals into achievable operating plans, and:

- ***Properly and continuously aligns resources***
- ***Employs an “all-funds” approach***
- ***Maintains fiscal responsibility with those closest to operational decisions***
- ***Increases communication, transparency, and accountability***

- - - - Agenda Topics - - - -

- | | |
|--|-------------------------------|
| 1. Welcome to Facilities Budget Committee –
§ Mission and roles | Provost Dale Whittaker |
| 2. Introductions | |
| 3. The Facilities Challenge | Vice President Bill Merck |
| 4. Capital and Operating Budgets | Associate Provost Tracy Clark |
| 5. Closing remarks | Provost Dale Whittaker |



Facilities Budget Committee

February 2017

Facilities Budget Committee

- **Mission:** Develop recommendations regarding the priority use of available funding for major capital additions, repairs and renovations that advance the goals and mission of the university.
- **Executive Sponsors:** Provost Dale Whittaker and Vice President William Merck
- **Additional voting members:**
 - VP ITR
 - Faculty Senate Chair
 - VP Research and Grad. Studies
 - Vice Provost, Strategic Planning
 - AVP Advancement
 - Assoc. Dean, Medical Affairs
 - AVP Facilities and Safety
 - Assoc. Athletic Director, Facilities and Capital Projects

The Facilities Challenge

- Aging Facilities and Infrastructure
- Growing Deferred Maintenance
- Shortage of Space – Classroom, Research, Office, and Performance space
- Increased Research and Technical Demands
- More Stringent Codes and Energy Requirements
- Standards for Life Cycle Management

Capital Budgets

Facilities and Safety Funding

1. State - Plant, Operations, and Maintenance (PO&M)
 - Base
 - Operations and Maintenance
 - Utilities
 - Phase-in New Space
2. State – Public Education Capital Outlay (PECO)
 - Specific Capital Projects
 - Utilities, Infrastructure, Capital Renewal, and Roofs
 - Minor Projects
 - Critical Deferred Maintenance
3. Capital Improvement Trust Fund (CITF)–Student fee per SCH
4. University Funds
5. Donor Funds
6. Contributions from DSOs
7. Investment Earnings

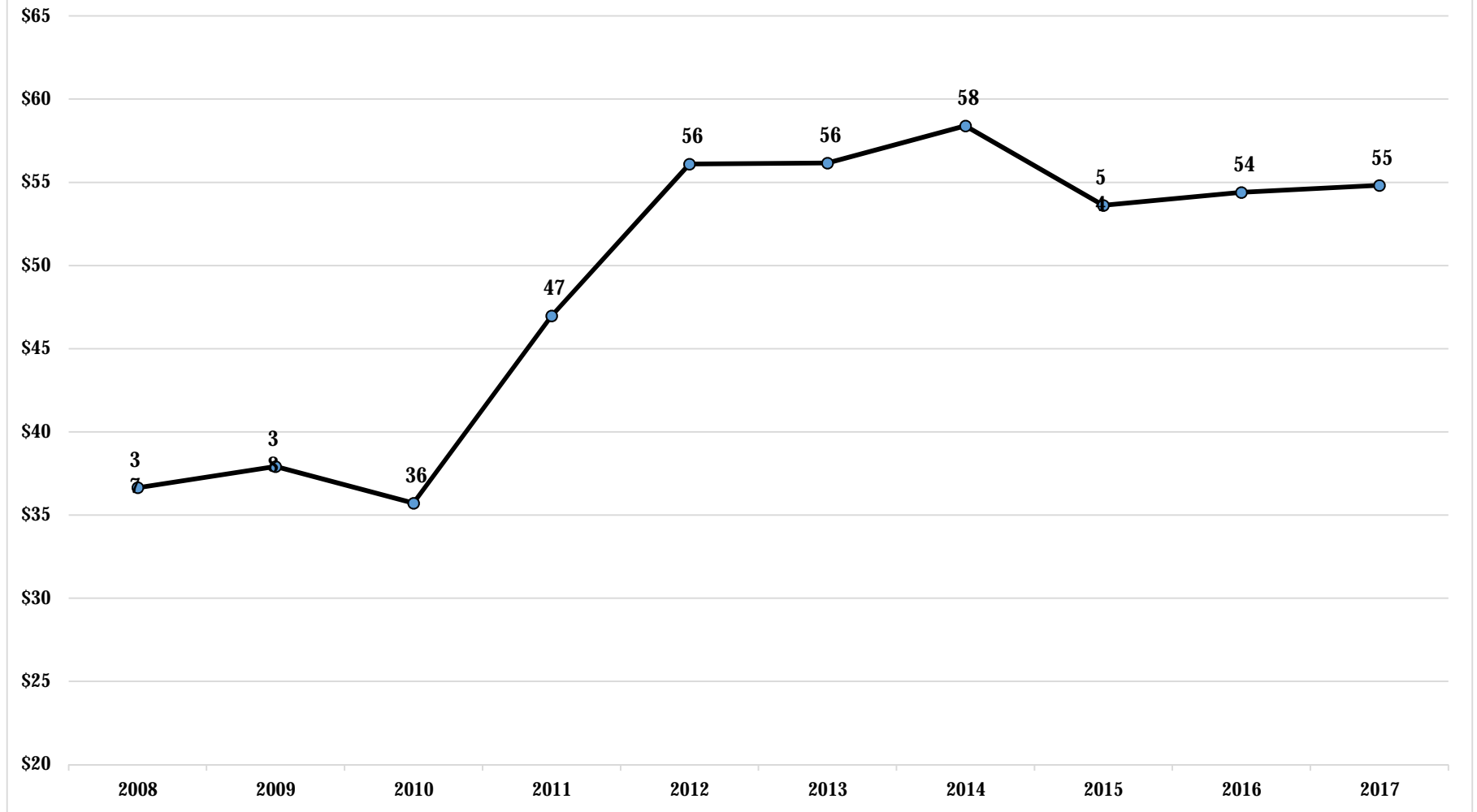
The Budget Challenge

- Lack of Plant Operations and Maintenance Growth (see next slide)
- Insufficient and Reduced Funding for New Projects
- No Recent Utilities and Infrastructure Funding from the State
- Limited Ability to Issue Debt
- Depletion of University Resources

Funding History

E&G (in millions)

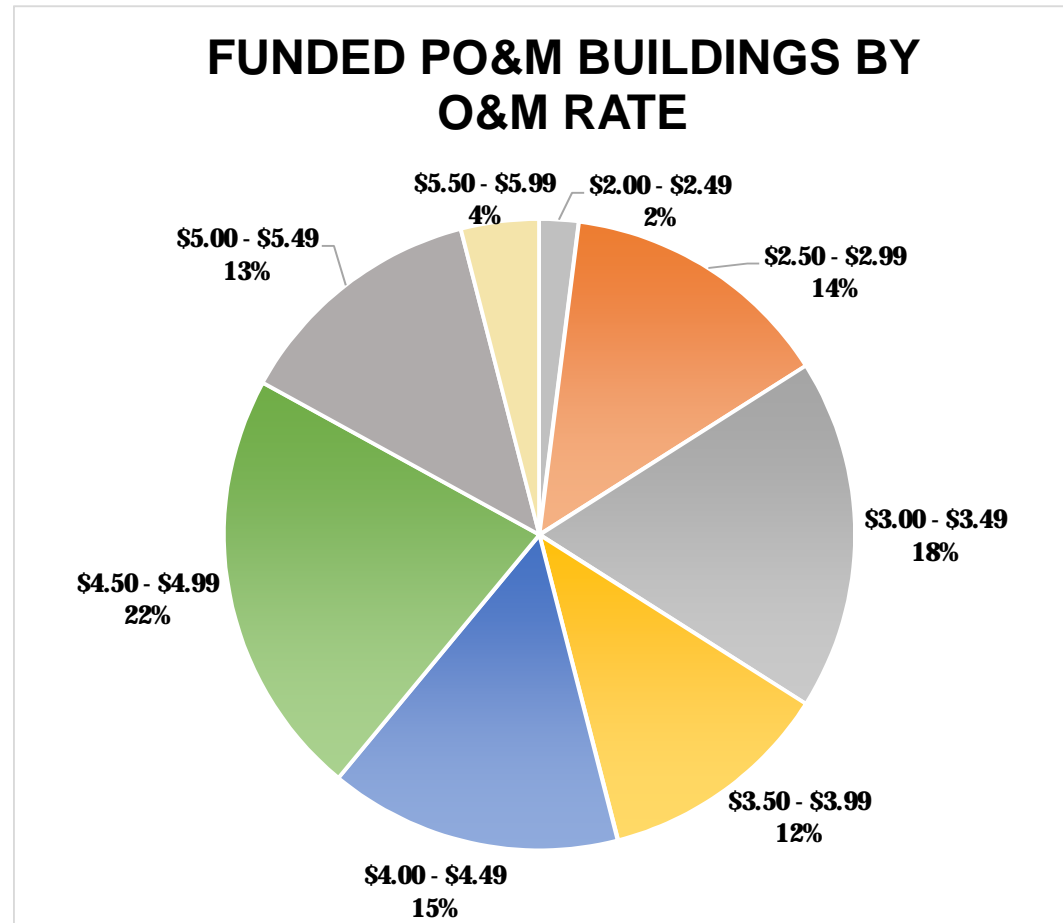
—●— Plant Operations and Maintenance



An Example of the Budget Challenge:

Plant Operations and Maintenance Overview

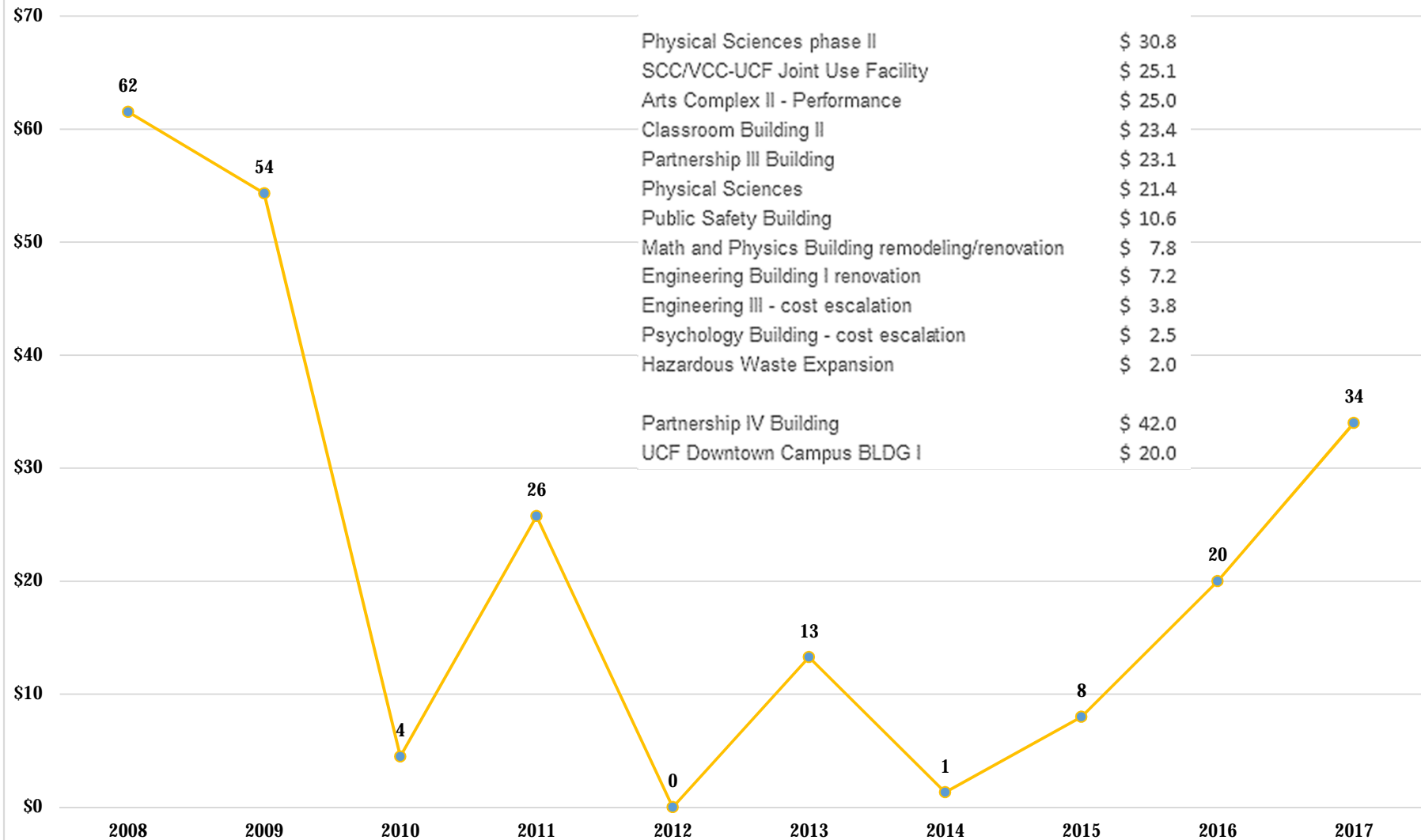
- 16% less than \$2.66/sf
- 47% less than \$4/sf
- 83% less than \$5/sf



Funding History

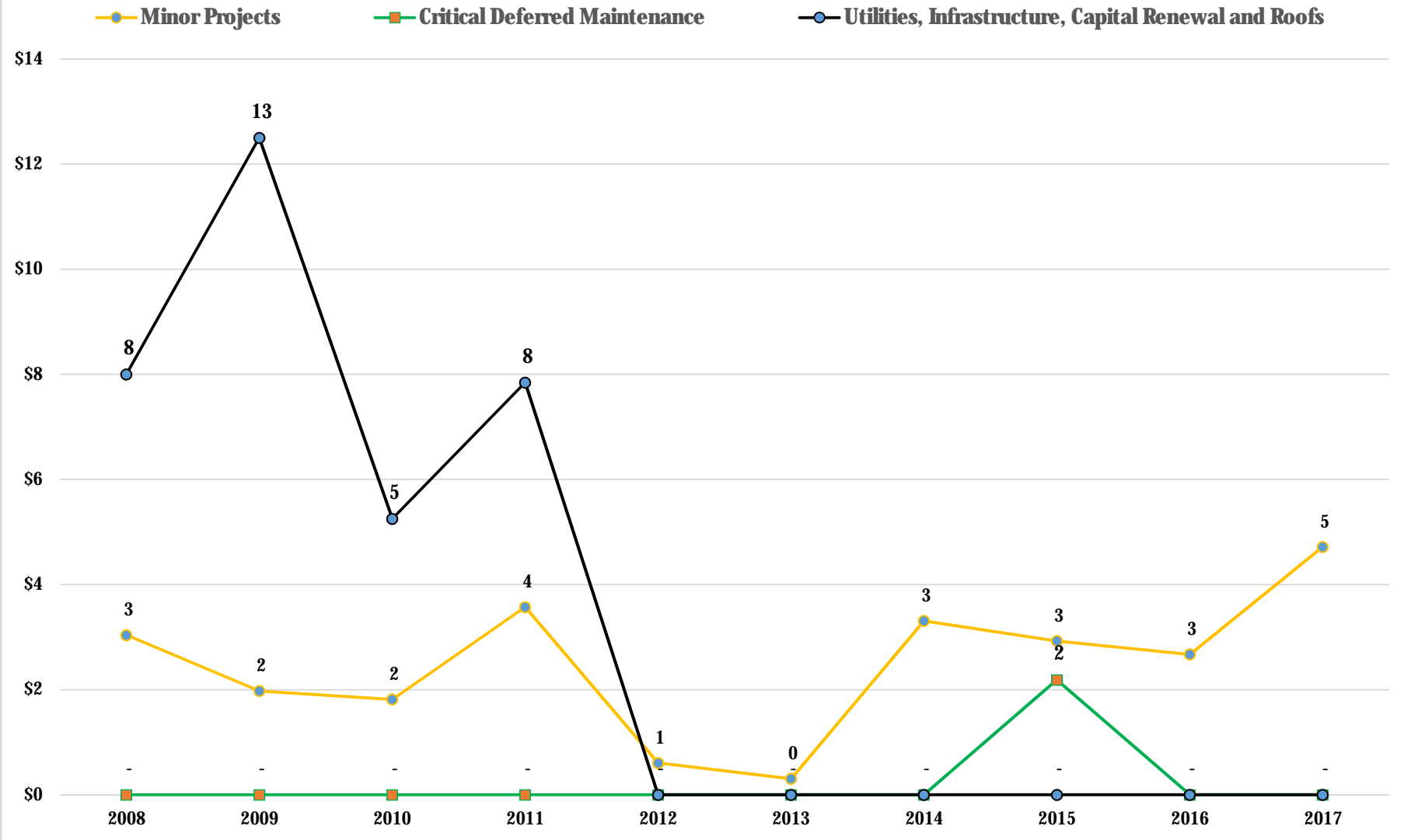
PECO (in millions)

—●— Capital Projects



Funding History

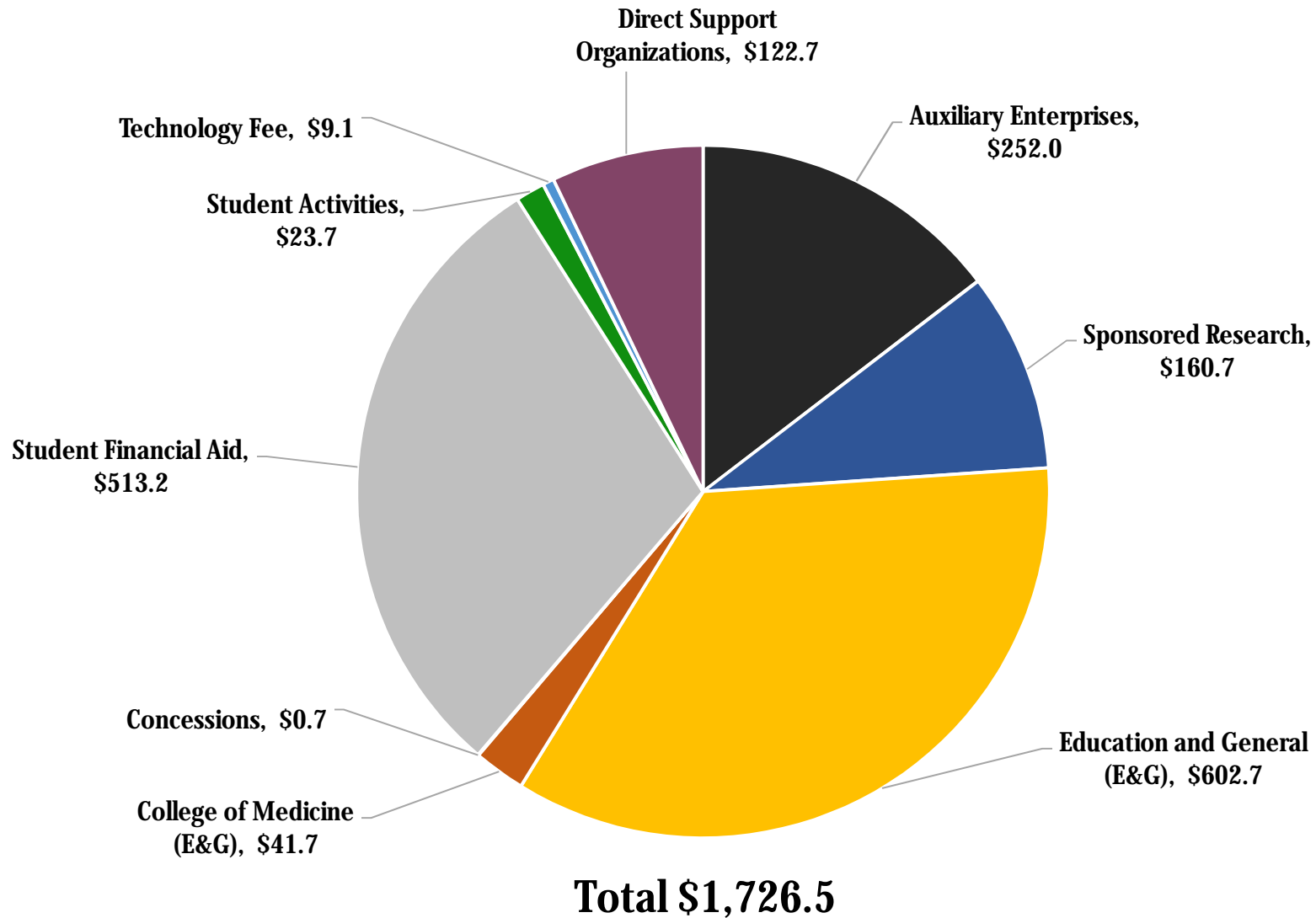
PECO (in millions)



UCF

Operating Budgets

2016-17 BOT Approved Operating Budget



University Budget Committee

- **Mission:** Develop resource allocation recommendations that transform strategic goals into achievable operating plans and optimize the use of university resources.
- **Executive Sponsors:** Provost Dale Whittaker and Vice President William Merck
- **Additional voting members:**
 - Dean, College of Sciences
 - Faculty Senate Chair
 - VP Research and Grad. Studies
 - VP SDES
 - VP Communications & Mktg
 - Vice Provost, Faculty Excellence
 - VP and Chief of Staff
 - VP Medical Affairs and Dean
 - VP Student Government
 - VP General Counsel
 - AVP Debt Management
- Meetings are held monthly, with funding request presentations held in Mar/Apr and final decisions communicated in June.

FY17 UBC Allocations

**\$13.5
MILLION**

Faculty

New faculty (45)
National Academy
Members
Trustee chairs
Salary increases,
promotions,
awards

**\$8.3
MILLION**

Graduate Research

Doctoral / Post
Doctoral Programs
Graduate waivers /
health insurance
Increase graduate
stipends
Process and
technology
implementation
Office and lab space

**\$1.9
MILLION**

Student Support

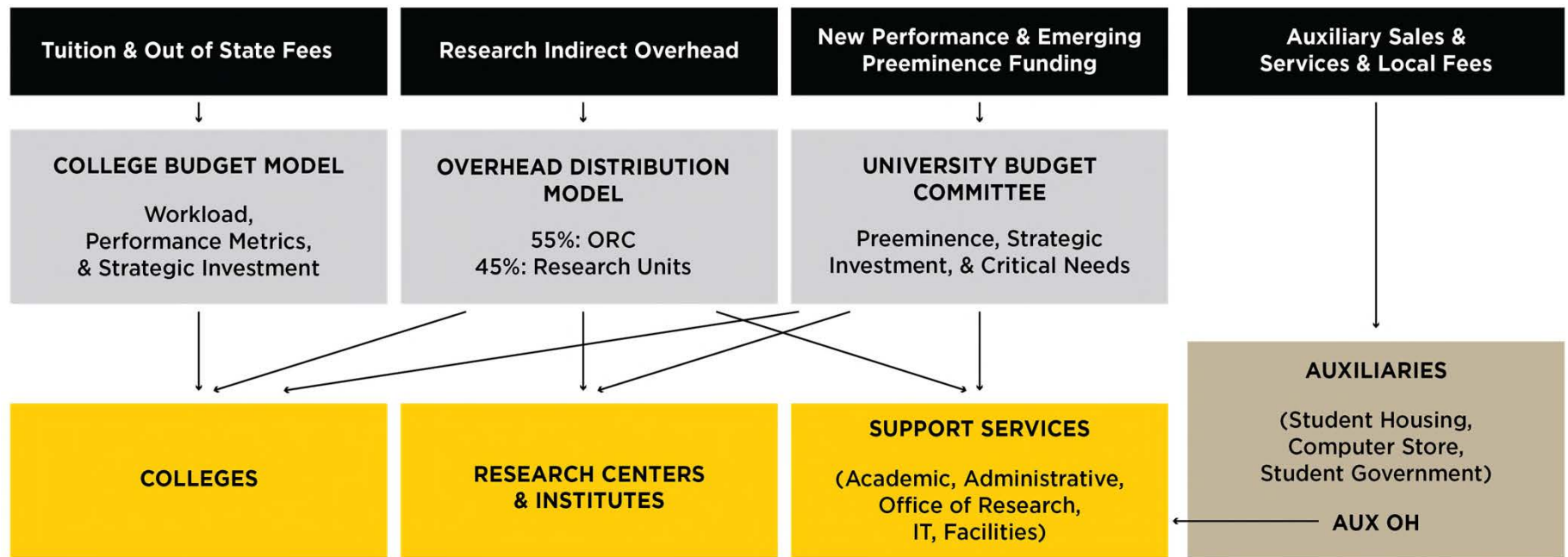
Merit-based
scholarships
Athletic scholarships
for women (Title IX)
Library materials
SARC Learning
support services

**\$9.9
MILLION**

Critical Needs

Office of Security
Management
IT security / licenses
Branding
Discretionary
divisional reserves
Staff salary increases

Allocation Models for Incremental Funding





What is UCF Doing?

UCF's Response to Challenges:

- Deferred Maintenance Planning – Critical Needs
- Carry Forward Funding
- Self-funding
- Reliability Centered Maintenance
- In-house ESCO and Commissioning
- Energy Production
- Sustainability Initiatives
- Life Cycle Cost Modeling
- Best Value Initiatives
- Quality Management and Improvement
- New Revenue Sources

A wide-angle photograph of a university campus at sunset. The sky is a deep orange and yellow, with silhouettes of tree branches hanging from the top. In the background, a large, modern building with a curved facade and many windows is visible. In the foreground, a large, circular fountain with multiple jets of water is in the center. Two people are sitting on a grassy area in the lower left, looking towards the fountain. The overall mood is serene and contemplative.

Questions?

University of Central Florida



Trevor Colbourn Hall

Building Program

UCF Main Campus

February 27, 2017

Revised March 3, 2017

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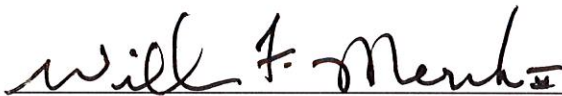
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FINAL APPROVALS

I approve the Trevor Colbourn Hall Building Program:



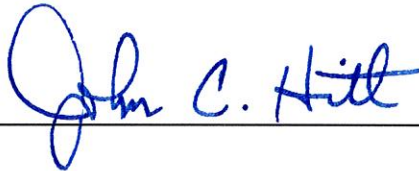
Priscilla Lee Kernek, *Associate Vice President for Administration and Finance (Facilities and Safety)*



William F. Merck II, *Vice President for Administration and Finance and Chief Financial Officer*



Dr. A. Dale Whittaker, *Provost and Executive Vice President*




Dr. John C. Hitt, *President*

PRELIMINARY APPROVALS: The Building Committee

I approve the Trevor Colbourn Hall Building Program:

End-User Representatives



Jeffrey Moore, *Dean*
College of Arts and Humanities


Maribeth Ehasz, *Vice President*
Student Development and Enrollment Services

Space Planning, Analysis, and Administration (SPAA) Representative



Joel Hartman, *Vice President for Information Technologies and Resources, and Chief Information Officer*


Facilities & Safety Representatives


Priscilla Lee Kernek, *Associate Vice President for Administration and Finance (Facilities and Safety)*


 2/27/17
Patrick Bohlen, *Director*
Landscape and Natural Resources

 3/9/17
Duane Siemen, *Director*
Facilities Operations


Renee Michel, *Director*
Environmental Health and Safety


Curt Wade, *Director*
Utilities and Energy Services

 2/27/17
COMMITTEE CHAIR
Bill Martin, *Director*
Facilities Planning and Construction


BUILDING PROGRAM EDITOR
Susan B. Hutson, *Assistant Director for Planning*
Facilities Planning and Construction

SPACE RELEASE APPROVALS

Upon occupation of Trevor Colbourn Hall, the departments and programs relocating to the new facility will release existing, assigned space to the university.

The remainder of space returned to the university will be managed by Space Planning, Analysis, and Administration (SPAA) on behalf of the university. SPAA will evaluate university space needs to determine highest and best use of released space, and will reassign space accordingly. Unassigned space will be held in reserve to accommodate future university needs - including, but not limited to, those of the departments or programs releasing space.


A total of 15,086 assigned square feet (asf) will be released, as follows:

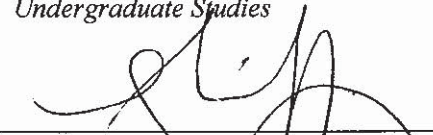
- Student Development and Enrollment Services (SDES) - 8,077 assigned square feet (asf) in Howard Phillips Hall
- Undergraduate Studies and Research (OUR) and Academic Advancement Programs (AAP) - 3,076 asf in Technology Commons II
- Interdisciplinary Studies - 2,202 asf in Classroom Building I
- Pre-Professional Advising - 1,787 asf in Ferrell Commons, Building G
- Burnett Honors College - 465 asf in Burnett Honors College
- Modern Languages - 872 asf Class Lab room 221 in Visual Arts Building

Colbourn Hall (Building 0018) will be demolished.

A 'List of Space(s) to be Released' is included in APPENDIX F - Supplemental Materials, F.2 Space(s) to be Released.

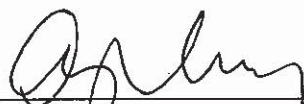
I agree to the release of space, as described herein:


Elizabeth Dooley, Vice Provost for Teaching
and Learning, and Dean of the College of
Undergraduate Studies


Elizabeth Klenhoff, Vice President for Research
and Dean of the College of Graduate Studies

Maribeth Ehasz, Vice President
Student Development and Enrollment Services

Jeffrey Moore, Dean
College of Arts and Humanities


Alvin Wang, Dean
The Burnett Honors College

SPACE RELEASE APPROVALS

Upon occupation of Trevor Colbourn Hall, the departments and programs relocating to the new facility will release existing, assigned space to the university.

The remainder of space returned to the university will be managed by Space Planning, Analysis, and Administration (SPAA) on behalf of the university. SPAA will evaluate university space needs to determine highest and best use of released space, and will reassign space accordingly. Unassigned space will be held in reserve to accommodate future university needs - including, but not limited to, those of the departments or programs releasing space.

A total of 13,181¹ assigned square feet (asf) will be released. A detailed list of rooms to be released is included in APPENDIX F - Supplemental Materials, F.2 Space(s) to be Released. Departments releasing space and from which buildings:

- Student Development and Enrollment Services (SDES) in Howard Phillips Hall
- Undergraduate Studies and Research (OUR) and Academic Advancement Programs (AAP) in Technology Commons II
- Interdisciplinary Studies in Classroom Building 1
- Pre-Professional Advising in Ferrell Commons, Building G
- Burnett Honors College in Burnett Honors College
- Modern Languages in Visual Arts Building

Colbourn Hall (Building 0018) will be demolished.

I agree to the release of space, as described herein:

Elizabeth Dooley, *Vice Provost for Teaching and Learning, and Dean of the College of Undergraduate Studies*

Jeffrey Moore, *Dean College of Arts and Humanities*

Elizabeth Klonoff, *Vice President for Research and Dean of the College of Graduate Studies*

Alvin Wang, *Dean The Burnett Honors College*


Maribeth Ehasz, *Vice President Student Development and Enrollment Services*

¹ Revised from 15,086 (3/3/2017), see revised Appendix F.1 List of Space(s) to be Released

1.0 - INTRODUCTION

- Project Overview
 - *Provide an overview of the proposed project or program.*
 - *Address the general plan for the project, as well as any specific information.*
 - Project History. *Provide a description of the project history.*
 - Project Description. *Provide a general description of the project concept and any related future projects.*
 - Project Goals and Objectives
 - *Provide a brief outline of specific project goals and objectives. Include an explanation of the needs this project will address.*
 - *Provide a brief outline of the design objectives.*
-

- **Project Overview**

- *Provide an overview of the proposed project or program.*

The University of Central Florida needs to provide offices and learning spaces (classrooms, teaching labs and study facilities) for departments, programs, and services currently located in Colbourn Hall and other programs and services from elsewhere on campus.

The university has determined that the best solution is a new 135,600 gross square foot academic building, to be known as Trevor Colbourn Hall.

- *Address the general plan for the project, as well as any specific information.*

Trevor Colbourn Hall will accommodate:

- Departments, programs and services currently assigned space in Colbourn Hall, and programs and services from Student Development and Enrollment Services (SDS), Undergraduate Studies, Interdisciplinary Studies, and The Burnett Honors College.
 - For a complete list of departments, programs and services, see 2.0 - ACADEMIC PLAN.
- Six (6) classrooms and two (2) teaching labs
- Shared conference rooms; break rooms; storage rooms; collaborative workspace; and student study, lounge, and queueing space
- ‘Occupiable Shell’ – net assignable area for growth, defined under 2.0 - ACADEMIC PLAN.

- **Project History.** *Provide a description of the project history.*

Colbourn Hall was built in 1974 under the authority of the Department of Management Services (DMS) and has been in continuous operation since it was completed. Sections

of the building were renovated in the early 1990s. Colbourn Hall contains:

- 83,957 gross square feet (GSF) - source: 2015 Educational Plant Survey (EPS)
- 72,662 net useable square feet (NSF) - source SPAA
- 41,119 net assigned square feet (NASF) - source: 2015 EPS

Colbourn Hall is in need of extensive corrections to the structure, replacement of the entire exterior skin, replacement of mechanical systems, and a comprehensive renovation of all interior spaces. The projected cost of this comprehensive renovation, and the resulting displacement of faculty and staff for the duration, have proven to be obstacles that make renovation untenable.

- **Project Description.** *Provide a general description of the project concept and any related future projects.*

Project Concept: The intent of this project is to program, design, and construct a new building to house the departments, programs, and services listed under 2.0 - ACADEMIC PLAN, including those now in Colbourn Hall; additional student programs and services from other facilities; and additional Occupiable Shell for future growth.

Related future projects: Future work includes the furnishing of Occupiable Shell as funds become available.

- **Project Goals and Objectives.**

- *Provide a brief outline of specific project goals and objectives. Include an explanation of the needs this project will address.*

The building must accommodate all space listed in APPENDIX E - Space Files, E.2 Summary of Required Spaces. The project goals include:

- Replacement of space in Colbourn Hall for the College of Arts and Humanities and the College of Graduate Studies;
- Addition of space for Student Development and Enrollment Services (SDES), Undergraduate Studies, Interdisciplinary Studies, and The Burnett Honors College;
- Addition of shared space, including conference, break, and storage rooms;
- Addition of Occupiable Shell for future growth.

Assigned space shall align with:

- University of Central Florida Collective Impact Strategic Plan 2016.
- University of Central Florida 2015 Educational Plant Survey.

Further information is provided under 8.0 - PROGRAM AREA.

Sustainability Goals: Per University Energy & Sustainability Policy 3-111.1, LEED V3.1 2009, LEED Silver, since funded before September 2015 (Gold can be achieved.)
http://www.energy.ucf.edu/sites/default/files/docs/building_construction_requirements.pdf

This project is to be designed and constructed within an aggressive time frame, and is intended to be occupied in late summer of 2018.

- *Provide a brief outline of the design objectives.*

The building needs to be practical, functional, and maintainable; maximizing space, with minimal budget, within an expedited time. The building should be pragmatic in concept to maximize *useable* square footage. Office sizes should be consistent to improve flexibility for future occupants, as well as those for whom it is planned. The location and relationship of units and offices should respond to the needs of the occupying departments.

2.0 - ACADEMIC PLAN

- Academic Program Identification. *Identify any proposed academic program that will be housed within the facility.*
 - Academic Program Reviews
 - *Provide the date and program numbers of all relevant academic program reviews.*
 - *Explain how the proposed facilities program meets the recommendations of the last Academic Program Review.*
 - List the recommendations of any review consultants.
 - Recommendations, Justification, and Variation. *Explain how the proposed facility meets the recommendations or justify any variations.*
 - Need/Justification for New Academic Programs. *If proposed academic programs are not part of an approved academic plan, provide information to explain the need and justify the establishment of a new academic program.*
-

- **Academic Program Identification.** *Identify any proposed academic programs that will be housed within the facility.*

Trevor Colbourn Hall will house:

Six (6) Degree Programs

- Department of English
- Department of Writing and Rhetoric
- Department of History
- Department of Modern Languages and Literatures
- Latin American Studies
- Interdisciplinary Studies

Other Programs and Student Services

- Africana, Judaic, and Women's Studies
 - University Writing Center
 - Writing Across the Curriculum (WAC)
 - Texts and Technology
 - Center for Humanities and Digital Research (CHDR)
 - College of Arts and Humanities Student Advising Office (CAHSA)
 - Undergraduate Studies and Research (OUR)
 - Pre-professional Advising (PPA)
 - Academic Advancement Programs (AAP)
 - The Burnett Honors College, Offices of Prestigious Awards and Honors in Majors
 - Graduate Studies
 - Student Development and Enrollment Services (SDES)
 - Student Success Center
 - Student Academic Resource Center
 - First Year Advising and Exploration
-

- Sophomore and Second Year Center
- Transfer and Transition Services

There will also be:

- Learning Spaces - Classrooms and Teaching Labs
- Additional Net Assignable Area
- Occupiable Shell to Support Departmental and University Growth

- **Academic Program Reviews.**

- *Provide the date and program numbers of all relevant academic program reviews.*

Academic Program Reviews were conducted on all degree programs in English, History, Modern Languages and Literatures, and Interdisciplinary Studies between 2010 and 2013; the resulting reports indicate a shortage of instructional space, office space, meeting space, and lab or studio space.

Department of English - All programs in the Department of English were reviewed during 2010-11 (CIP code 23.0101). Texts and Technology, and Writing and Rhetoric were reviewed with English.

During their last program review, the Department of English was found by external discipline experts to be deficient in terms of instructional space, faculty member labs or studio facilities, and office and meeting space for faculty members and students.

Department of Modern Languages and Literatures - All programs in the Department of Modern Languages and Literatures were reviewed during 2012-13, including Spanish, B.A. and M.A. (CIP code 16.0905), French, B.A. (CIP code 16.0901), and Teaching English to Speakers of Other Languages, M.A. (CIP code 13.1401).

Space was not isolated as a problem during the Department of Modern Languages and Literatures review.

Department of History - All programs in the Department of History were reviewed in 2010-2011 (CIP code 54.0101).

During their last program review, the Department of History was found by external discipline experts to be deficient in terms of instructional space, faculty member labs or studio facilities, and office and meeting space for faculty members and students.

Office of Interdisciplinary Studies - All programs in the Office of Interdisciplinary Studies were reviewed during 2012-13 (CIP code 30.0000). Interdisciplinary

studies spans the Colleges of Undergraduate Studies and Graduate Studies.

Interdisciplinary Studies undergraduate programs were found deficient in instructional space as well as office and meeting space for faculty members and students. In particular, the lack of space was cited as hampering community building among students.

Space was not isolated as a problem during the Graduate Interdisciplinary Studies review (also CIP code 30.0000).

Latin American Studies is new degree program established in 2011. Its first Academic Program Review is scheduled for 2017-18.

Academic Reviews are only performed for degree programs. All other units planned for Trevor Colbourn Hall are not degree programs; therefore no reviews or recommendations are available. The Center for Humanities and Digital Research is not a Center in the official inventory of state-recognized Centers and Institutes, so there has been no Center review.

- *Explain how the proposed facilities program meets the recommendations of the last Academic Program Review.*

The proposed Trevor Colbourn Hall will address the deficits identified in the Academic Program Reviews in the areas of instructional space, office space, and meeting space for all degree programs.

Additionally, collaborative space in the Trevor Colbourn Hall Academic Concourse should improve community building among students, a deficit identified by the Interdisciplinary Studies review.

- **List the recommendations of any review consultants.**

See Chapter 6.0 - RETURN ON INVESTMENT for academic gains from the project, in these categories:

- Degrees/Certificates Produced that meet State needs
- Students Served and Benefits/Efficiencies

- **Recommendations, Justification, and Variation.** *Explain how the proposed facility meets the recommendations or justify any variations.*

The proposed Trevor Colbourn Hall will address the deficits identified in the Academic Program Reviews in the areas of instructional space, office space and meeting space for all degree programs.

Additionally, collaborative space in the Trevor Colbourn Hall Academic Concourse should improve community building among students, a deficit identified by the Interdisciplinary Studied review.

The facility will not address the identified deficiency in faculty member labs or studio facilities for the History and English Departments. History and English did not request faculty labs or studios in Trevor Colbourn Hall. Collaborative Workspace may serve to alleviate such needs, if any.

- **Need/Justification for New Academic Programs.** *If proposed academic programs are not part of an approved academic plan, provide information to explain the need and justify the establishment of a new academic program.*

No new Academic Programs will occupy Trevor Colbourn Hall.

Trevor Colbourn Hall is meant to provide much-needed space for established academic departments, programs, and services, including those currently located in Colbourn Hall. For departments, programs, and services to be included, see APPENDIX E - Space Files, E.2 Summary of Required Spaces.

3.0 - SPACE NEEDS ASSESSMENT

- Facilities Problem Statement.
 - *Describe the facilities problem in terms of current and future facilities and space deficiencies.*
 - *Describe the analyses and recommendations of any Facilities Consultants.*
 - Proposed Solutions and Alternative Solutions.
 - *Describe the proposed solution.*
 - *Describe alternative solutions considered, such as rescheduling of classes, remodeling of existing space, jointly using facilities on or off campus, and leasing of space. Provide reasons why other alternatives were not chosen, and why a new facility is the best solution.*
 - Space Analysis.
 - *Provide a quantitative analysis indicating how the proposed amounts and types of space were determined, using the requirements of the programs to be housed.*
 - *Discuss the Educational Plant Survey recommendations, or provide a statement that a Survey is needed. Describe any differences between Survey recommendations and the proposed project.*
-

- **Facilities Problem Statement.**

- *Describe the facilities problem in terms of current and future space deficiencies.*

Academic Program Reviews for English, History, and Interdisciplinary Studies identified deficits in instructional space, office space, and meeting space, as well as labs or studios. See Academic Program Reviews in section 2.0 - ACADEMIC PLAN.

The cost of fixing physical deficits in Colbourn Hall would have diverted funding from addressing the shortage of instructional space, office space, and meeting space and from providing space for growth. The proposed Trevor Colbourn Hall will address the identified deficits in instructional space, office space, and meeting space. Collaborative workspace could alleviate lab or studio needs. Occupiable Shell space will provide room for growth.

- *Describe the analyses and recommendations of any Facilities Consultants.*

Several analyses and reports were done:

- 2011: Intelligent Systems and Engineering Services Corporation (ISES), of Duluth, Georgia, performed a site inspection of Colbourn Hall. The resulting detailed report titled: *University of Central Florida Colbourn Hall Facility Condition Assessment [Asset Code: 0018, Inspection date December 1, 2011]*, indicated the following deficits:
 - *Issues with the exterior structure include damaged and defective brick work and recommended cleaning and waterproofing all elevations to restore the watertight integrity of the exterior envelope.*
-

- *The HVAC system is outdated and inefficient in design, and a complete upgrade of the HVAC system was recommended.*
 - *The main electrical switchboard was at the end of its useful life, and that the secondary electrical distribution system is approaching the same. Lighting systems consist of original and 1990s vintage fixtures and should be upgraded.*
 - *The potable water supply and drain piping networks are at the end of their useful service life.*
- 2012: Space on the first floor was renovated and new windows were installed, requiring opening cuts through the exterior wall. This project uncovered structural and waterproofing issues related to the exterior skin of the building, and subsequently triggered a structural analysis of the building.
 - 2013: The university commissioned a structural analysis and detailed condition assessment of Colbourn Hall. The resulting report, dated February 2014, was prepared by SchenkelSchultz Architecture, Walter P. Moore Engineering, and Clancy & Theys Construction Company.

The report indicated severe deficiencies. Those areas needing correction included, but were not limited to:

- Structural corrections:
 - *reinforce CMU backup walls;*
 - *reinforce window and exterior door openings;*
 - *reinforce all corroded steel framing, supports, welds, expansion joints;*
 - *reinforce web and chord members of steel joist girders and joists.*
- Building enclosure corrections:
 - *demolish and replace the entire building skin;*
 - *provide a new vapor barrier to prevent future leaks and indoor air quality issues.*
- Life Safety corrections:
 - *add a complete fire sprinkler system, fire strobes, and fire extinguishers;*
 - *relocate fire alarm pull stations;*
 - *replace corroded handrails;*
 - *add code-compliant exit signage;*
 - *add dedicated electrical rooms;*
 - *remove combustible finish materials.*
- Americans with Disabilities (ADA) Act compliance:
 - *upgrade restrooms and drinking fountains;*
 - *replace handrails;*
 - *install non-slip stair finishes and visual alarms.*
- Mechanical corrections:

- *replace all mechanical systems, including HVAC units, ductwork, and exhaust, as required;*
 - *provide outside air to HVAC units.*
- Plumbing corrections:
 - *replace all plumbing fixtures and pumps;*
 - *replace potable water supply and drain piping networks.*
- Electrical corrections:
 - *replace all lighting;*
 - *provide dimmers and occupancy sensors, as required;*
 - *add power sub-meter, surge suppression, standby generator, and new circuiting for emergency and exit lighting;*
 - *re-wire branch circuits, upgrade fire alarm.*
- Architectural improvements:
 - *replace wall assemblies, interior, and exterior doors;*
 - *provide all new finishes (wallcovering, paint, floor covering, ceiling grid and acoustical tiles, base, etc.)*
- **Proposed Solutions and Alternative Solutions**
 - *Describe the proposed solution.*

The solution proposed is to design and construct a new building as expeditiously as possible, maximizing the area of the facility, with the minimum amount of expenditure.

Trevor Colbourn Hall will:

- Create space for the Academic Programs and Student Services listed in section 2.0 - ACADEMIC PLAN
- Address shortfalls in instructional space, office space, and meeting space
- Provide modern classrooms to support Active Learning
- Implement new workplace strategies, including the following:
 - Gained Light Officing (GLO) - A health-conscious initiative that brings daylighting to more building occupants.
 - Collaborative Workspace - Shared work space that is provided in addition to dedicated office space, to support interdepartmental and interdisciplinary collaboration.
- Introduce Shared Space, such as break rooms and conference rooms
- Create space for growth of the resident units or the addition of other units by providing Occupiable Shell.

The new building will be practical, functional, and maintainable. The design will be straightforward in order to maximize efficiency by minimizing the net-to-gross square foot ratio. The new building will be “right sized” to reduce costs.

See Space Diagrams in APPENDIX F - Supplemental Materials, F.1 Space

Diagrams

- *Describe alternative solutions considered, such as rescheduling of classes, remodeling of existing space, jointly using facilities on or off campus, and leasing of space. Provide reasons why other alternatives were not chosen, and why a new facility is the best solution.*

Option 1 - The Total Renovation of Colbourn Hall

The university investigated a complete renovation of the existing Colbourn Hall. This option required moving the current residents to trailers or finding space for them on campus during the renovation.

Option 2 - Leasing Space

The university considered leasing space.

Option 3 - Renovation and Addition to Colbourn Hall

The university investigated a two-phased project that included:

- Building a new facility called Trevor Colbourn Hall, as an *addition* to Colbourn Hall; then moving the current residents of Colbourn Hall into Trevor Colbourn Hall.
- Renovating Colbourn Hall, and correcting deficiencies to the structure and building envelope. The renovation scope included office space for student services. Upper floors were to be left as unfinished space for future growth.

Option 4 – New Construction

The university explored the option of building a single new building, Trevor Colbourn Hall, and demolishing Colbourn Hall.

The first three options considered were rejected for the following reasons:

Option 1 - The Total Renovation of Colbourn Hall

The renovation approach was determined to be too disruptive and costly. Relocating the current residents was infeasible.

Option 2 - Leasing Space

The university considered lease options. This option was not feasible because leased space:

- Would have been remote from academic resources
- Would have been substandard in quality, compared to on-campus academic space
- Would have been expensive
- Would have required extensive renovation, at university expense, to property the university does not own.

Option 3 - Renovation and Addition to Colbourn Hall

When Option 2 was fully programmed and Space Diagrams and Space Files were completed, a cost analysis indicated that the project exceeded the available funding. The following were determined to be the main reasons for the cost overrun:

- The primary cause of budget problems is the rapidly escalating cost of construction.
- Correcting the structural and building envelope issues in Colbourn Hall would add significant cost, but not add square footage; making the square footage delivered more costly than new construction.
- Extensive existing utilities crossed the proposed building site. Circumventing utility lines resulted in the building addition being skewed and oddly-shaped, thus more costly.

Option 4 – New Construction (NOTE: This option has been accepted.)

The solution proposed is to design and construct a new building, Trevor Colbourn Hall, as expeditiously as possible, maximizing the area of the facility, with the minimum amount of expenditure.

The new building will:

- Create space for the Academic Programs and Student Services listed in 2.0 - ACADEMIC PLAN
- Address shortfalls in instructional space, office space, and meeting space
- Provide modern classrooms to support Active Learning
- Implement new workplace strategies, including:
 - Gained Light Officing (GLO)
 - Collaborative workspace
- Introduce Shared Space, such as break rooms and conference rooms
- Create space for growth of the resident units or the addition of other units by providing Occupiable Shell.

The new building will be practical, functional, and maintainable. The design will be straightforward in order to maximize efficiency by minimizing the net-to-gross square foot ratio. The new building will be “right sized” to reduce costs.

See APPENDIX E - Space Files, E.2 Summary of Required Spaces and APPENDIX F -Supplemental Materials, F.1 Space Diagrams.

Further benefits of a new building include:

- A simple, attractive, rectangular three-story building will be more space- and cost-efficient than other options.
- A new constructed high-performance building will integrate and optimize energy efficiency, water reduction, durability, life-cycle performance, and improve occupant productivity.
- The facility will align with the University of Central Florida 2015-25 Campus Master Plan Update model of placing academic buildings in a radial pattern between

- concentric sidewalks (Mercury and Apollo Circles).
 - A wide-span structural layout, and fewer, larger floors will:
 - Support the collocation of classrooms and academic services for the convenience of our students;
 - Allow departments on the upper floors to collocate for greater interdisciplinary interaction;
 - Support the implementation of a new university Space Model that combines a complement of shared collaborative workspace (We Space), with somewhat smaller private offices (Me Space);
 - Deliver forward-thinking work environments, and provide opportunities for interdisciplinary collaboration; and
 - Implement Gained Light Officing (GLO) - a health-conscious initiative that brings daylighting to more building occupants.
 - The site location is in place of Parking Lot H-1, where preliminary investigation suggests that few, if any, utilities underlie the site.
 - All departments and programs will occupy the building at the same time, many of them a full year before other options would have permitted.
 - A more generous floor-to-floor height will be possible. Colbourn Hall's 1970s low ceilings would have carried into any building addition. Higher ceilings are critical to the success of learning spaces, and provide more daylighting to office spaces.
 - Blocks of unassigned space (Occupiable Shell) will be distributed throughout the facility. This space will be held in reserve by SPAA to support future departmental or university growth.
 - New construction techniques can be implemented to reduce the cost of construction, operations, and maintenance.
- **Space Analysis**
- *Provide a quantitative analysis indicating how the proposed amounts and types of space were determined, using the requirements of the program(s) to be housed.*

The following chart shows a comparison of assignable space in existing Colbourn Hall and new Trevor Colbourn Hall.

Space Category	Colbourn Hall	Trevor Colbourn Hall
Classrooms	1,700	7,425
Teaching Labs	3,264	1,975
Research Labs	0	0
Study	707	1,725
Instructional Media	0	0
Auditorium/Exhibit	480	0
Teaching Gymnasium	0	0
Office	34,947	79,390
Campus Support Services	0	0
Assignable area (ASF)	41,098	90,515

Changes to the amounts of space in Colbourn Hall versus Trevor Colbourn Hall are due to:

Classroom increase:

- Active Learning Classrooms require more space per student than traditional Classrooms.
- Several Teaching Labs (a.k.a. department Classrooms) were reclassified as General Purpose Classrooms.
- A 55-station General Purpose Classroom was added.

Teaching Lab decrease:

- All but two (2) Teaching Labs (a.k.a. department Classrooms) were reclassified as General Purpose Classrooms.
Note: This quantity may change if SPAA finds Multipurpose Rooms used as Teaching Labs.

Study increase:

- A large study room was added for the Student Academic Resource Center (SARC).
- The Study space total will increase when study space in the Academic Concourse can be quantified, later in design, for assignment.
Note: This quantity may change if SPAA finds Multipurpose Rooms used for Study.

Auditorium Exhibit decrease:

- A concessions area in Colbourn Hall was not duplicated in Trevor Colbourn Hall.

Office increase:

- Existing Departments and Programs will be moved from other locations on campus, along with those moving from Colbourn Hall.
- Collaborative workspace has been added.
- Occupiable Shell has been added, and categorized as future office space.
Note: This quantity may change if SPAA finds that Multipurpose Rooms have space uses other than Office.

- *Discuss the Educational Plant Survey recommendations; or provide a statement noting that a Survey is needed for the project. Describe any differences between Survey recommendations and the proposed project.*

The most recent UCF 2015 Educational Plant Survey was conducted October 6-7, 2015 and approved January 28, 2016. The EPS Team was led by Robin Anderson, Space Coordinator with Facilities Planning and Construction at the University of West Florida.

The UCF 2015 Educational Plant Survey included:

- Colbourn Hall - classified as a building to be remodeled or renovated, not among those to be demolished. After touring Colbourn Hall, the Survey Team was somewhat dubious that UCF did not wish to classify it as an “unsatisfactory space.”
- Trevor Colbourn Hall - a new 60,550 net assignable square foot (nasf) building, attached to Colbourn Hall.
- Note: The 2015 Educational Plant Survey supported UCF’s request for Public Education Capital Outlay Funds (PECO) for the renovation of Colbourn Hall and the construction of Trevor Colbourn Hall.

In spring of 2016, UCF determined that it would be more prudent to demolish Colbourn Hall and increase the assignable area of Trevor Colbourn Hall to serve the needs of both buildings.

According to Administrative Rule 9.004 Razing of Buildings, as prescribed by Section 7(d), Article IX, Florida Constitution, Universities, each university’s Board of Trustees shall have the authority to raze buildings.

Prior to demolition of any educational support facility with a replacement cost exceeding \$1,000,000, the university shall obtain an Educational Plant Survey recommendation for demolition. The university Board of Trustees shall review and approve the Educational Plant Survey recommendation and transmit it to the Board of Governors for validation.

On June 23, 2016, Provost Dale Whittaker announced: “*Our plans call for designing and constructing a single new Trevor Colbourn Hall.*”

<https://communication.cos.ucf.edu/message-from-dale-whittaker-regarding-trevor-colbourn-hall>.

On June 27, 2016, the Finance and Facilities Committee unanimously approved item FFC-4, the demolition of Colbourn Hall (building 18).

On July 28, 2016, the UCF Board of Trustees unanimously approved the demolition of Colbourn Hall (building 18), contingent upon the Educational Plant Survey recommendation, and authorized the president to make necessary adjustments.

On August 1, 2016, UCF submitted a CIP-3 Short-Term Project Explanation to the Florida Board of Governors staff for “Trevor Colbourn Hall and Colbourn Hall demolition.” This submittal showed Trevor Colbourn Hall as a 135,600 GSF academic building.

On September 22, 2016, the Florida Board of Governors unanimously approved an amendment to the 2015 Educational Plant Survey allowing the demolition of Colbourn Hall.

Additional remarks about space needs

The following new parameters were provided for the project¹ when UCF began reprogramming and designing Trevor Colbourn Hall in July 2016:

- Trevor Colbourn Hall will be a new 135,600 GSF building.
- Colbourn Hall will be demolished.
- Prior programming commitments will be honored – this was in regard to quantities of Offices, Multipurpose Rooms, Conference Rooms, etc.
The Provost’s remarks on June 23, 2016 included, “The new Trevor Colbourn Hall will feature walled offices for full-time faculty members, shared offices for adjuncts, and open space for graduate teaching assistants, as well as a mix of collaboration spaces, private meeting rooms, and multi-purpose rooms.”
 - Later clarification: Office sizes: Faculty offices will be approximately 105 square feet, and Chair and Director offices will be approximately 125 square feet.
- Academic Units that were removed from the space program will not be re-added at this time.

¹ These parameters came from a Provost’s announcement on June 23, 2016, a confirmation email from Assoc. Vice President Lee Kernek to the Provost dated 7/19/2016; and a follow up email dated 7/22/2016 from Vice President Joel Hartman, with later clarifications from the Office of the Provost

General Clarifications:

- All Classrooms will be General Purpose Classrooms. Academic Units in Trevor Colbourn Hall will have priority in scheduling General Purpose Classrooms in Trevor Colbourn Hall, but will not have ownership.
- Teaching Labs (aka Class Labs, Specialty Classrooms) will be assigned to and controlled by the departments, e.g., the Modern Language Lab (Modern Languages) and the Tech Writing Lab (English).
- The design schedule will be delayed by approximately four (4) months, with construction completion projected to be late summer of 2018.
- All departments will move in simultaneously, instead of over two (2) summers.
- Gained Light Officing (GLO) will be maximized.
- Collaborative Workspace will be provided, in addition to dedicated office space.
- The consulting architect will work to create standardized portfolios of office and workstation layouts, with some opportunities for choice.

Later program additions:

- The College of Arts and Humanities IT department will be included in the building.
 - Five-hundred assignable square feet (500 asf) will include a small private office, a storage room, and collaborative workspace to be used as a workroom for several staff members.
 - Space and furniture costs will be part of the project.
- A portion of the *Occupiable Space* will be used as a suite for an Associate Dean of the College of Undergraduate Studies. Changes may be made to these space needs after negotiation with SPAA.
 - The suite will total two-hundred eighty assignable square feet (280 asf), and include an Administrator's office (125 asf), with the remainder for a staff workstation, touchdown space, waiting area, collaborative workspace, filing, etc.
 - Completing this Occupiable Space, including demountable walls (demising and interior), doors, and furniture, will be the fiscal responsibility of the Vice Provost for Teaching and Learning and Dean of the College of Undergraduate Studies.
 - Every effort will be made during design to assure proper placement of lighting power, data, and HVAC in preparation for the addition of demountable walls, doors, and furniture.

See APPENDIX E - Space Files, E.2 Summary of Required Spaces for list of all justified assignable space to be provided in Trevor Colbourn Hall.

4.0 – ANALYSIS OF IMPACT ON THE CAMPUS MASTER PLAN UPDATE

- Describe how the proposed project will correlate with the University of Central Florida 2015-25 Campus Master Plan Update.
 - Show the location of the project in the University of Central Florida 2015-25 Campus Master Plan Update (if applicable).
 - If the project will require an amendment to the University of Central Florida 2015-25 Campus Master Plan Update, provide information for the amendment.
 - If the project is located off the main campus, describe action(s) that will be taken to obtain necessary approvals.
 - Describe the project’s relationship to the current University of Central Florida 2015-25 Campus Master Plan Update Evaluation and Appraisal Report (EAR).
 - If Campus Development Agreement actions are required, discuss.
 - Describe any non-compliance concerns and proposed mitigation.
-

Current Campus Master Plan

The University of Central Florida 2015-25 Campus Master Plan Update (“Plan”) is an officially adopted document that governs on-campus growth and addresses the impacts to the surrounding community. The Plan is governed by a state statute that requires all building and other capital improvement projects to be referenced in the Plan. The Plan includes all minor amendments added after publication of the Plan.

The document contains data and analyses for impacts generated by existing and proposed capital improvements as they relate to local transportation, recreation and open space, conservation, housing, intergovernmental coordination, general infrastructure, and many other planning elements. Goals, objectives, and policies in the document express the university’s philosophy regarding on- and off-campus growth and impacts to the surrounding community. The Plan attempts to strike a balance between projected new construction and the need to preserve and mitigate impacts on environmentally sensitive areas and local infrastructure.

The primary purpose of the Plan is to provide a logical, functional, and aesthetically pleasing academic environment for students, faculty, staff, and visitors. The main campus is developed in a concentric ring pattern, with administration and academic buildings situated among three concentric rings. Pedestrian activity has been optimized throughout the academic core by locating parking garages on the outermost ring.

- *Describe how the proposed project will correlate with the University of Central Florida 2015-25 Campus Master Plan Update.*

Trevor Colbourn Hall will comply with the Plan, as described in these *Goals, Objectives, or Policies*:

2.3 Urban Design

Policy 1.1.2: *Axial arms of open space, framed by buildings in the academic core, shall be encouraged as visual corridors in and out of the university.*

The proposed building site enhances the visual corridors to the center of campus, by siting Trevor Colbourn Hall as another radii from the center of campus.

Policy 1.1.5: *“Academic quadrangles shall be developed and infilled within the academic core.”*

The proposed Trevor Colbourn Hall will create the south edge of a future “academic quadrangle,” either to the north of the building (across from the Visual Arts Building), or to the south, with a future building that could replace Colbourn Hall.

Policy 1.1.8: *...consolidating on grade parking areas within the 1200-foot radius, into parking structures outside the 1200-foot radius.*

The proposed site removes on-grade parking within the 1200-foot radius in favor of a parking garage outside of the 1200-foot radius.

Policy 1.3.1: *Principal academic buildings shall be contained within the Academic Core, whenever possible.*

The proposed site is within the Academic Core between the 1200’ and 800’ radius sidewalk system.

Policy 1.4.1: *Campus activities of similar function should be clustered together.*

The classrooms and student services in Trevor Colbourn Hall will be near other such functions within the Academic Core.

Policy 1.5.1: *Whenever possible, UCF shall minimize east and west exposure of buildings.*

The proposed Trevor Colbourn Hall orientation faces primarily north and south.

Policy 1.5.9: *The university shall encourage water management practices so that post-developmental run-off will be less than or equal to pre-development run-off.*

The judicious siting of this building will reduce storm water load to Basin 4-B, as stated in 7.0 SITE ANALYSIS.

Policy 11.5.10: *All UCF buildings shall be LEED certified and meet Silver accreditation...*

Based on when it was funded, Trevor Colbourn Hall will meet LEED Silver at a minimum - LEED Gold is achievable and expected.

2.4 Future Land Use

Goal 1: *To create developmental patterns that direct future growth to appropriate areas on campus in a manner that promotes the educational mission of the university...*

When Trevor Colbourn Hall is completed, the existing site of Colbourn Hall will return to the university as a future building site within the Academic Core.

2.5 Academic Facilities

Goal 1: *To provide modern well-equipped academic facilities on campus, to meet the general requirements of state-of-the-art instruction in all of its various programs.*

Trevor Colbourn Hall will replace outdated classrooms in Colbourn Hall with state-of-the-art classrooms and class labs that support Active Learning.

2.13 Conservation

Goal 1: *to maintain a commitment to the protection of its ecosystems and natural lands...*

Trevor Colbourn Hall will be built on the site of a parking lot; therefore, environmentally sensitive areas will not be impacted by its construction.

2.14 Capital Improvements

Objective 1.2: *To include provisions for the renovation, repair, upgrading and elimination of existing and aging facilities that do not serve existing or future needs.*

The demolition of Colbourn Hall will eliminate a problematic and aging facility.

2.15 Architectural Design Guidelines

Objective 1.1: *... define the elements of consistency (materials, massing, color, detailing, etc.) that exist in current campus in order to derive the principles that govern future designs*

Trevor Colbourn Hall will be designed in accordance with UCF Standards, as referenced in 10.0 - CODES, STANDARDS, and GUIDELINES, and will include materials that are consistent with surrounding buildings in the core of campus.

Objective 1.4: *To establish guidelines and standards for energy efficiency and life cycle costing.*

Policy 1.4.1: New buildings shall comply with the UCF Design, Construction, and Renovation Standards for energy efficiency and life cycle costing.

Reducing project scope to *one* building will help support the UCF Utility Masterplan, by eliminating one of the facilities and reducing the overall energy intensity.

2.16 Landscape Design Guidelines

Goal 1: *To create an exemplary outdoor environment...*

Trevor Colbourn Hall landscaping will be designed following the guidelines set forth in the Campus Landscape Master Plan and Design Standards (2016).

2.17 Facilities Maintenance

Objective 1.2: *To establish the desired level of performance for building components.*

The design of the new Trevor Colbourn Hall will place a strong emphasis on maintainability and minimizing life cycle replacement costs.

Capital Improvements List

Project List 2015-2025 (revised 12/02/2014) – Colbourn Hall Renovation is number 17

- *Show the location of the project on the University of Central Florida 2015-25 Campus Master Plan Update (if applicable).*

See the location of the Trevor Colbourn Hall project on the UCF Campus Map in APPENDIX A – Maps, A.2 Site Location for Trevor Colbourn Hall.

- *If the project will require an amendment to the University of Central Florida 2015-25 Campus Master Plan Update, provide information for the amendment.*

Amendments were made to the University of Central Florida 2010-20 Campus Master Plan Update for the construction of Trevor Colbourn Hall. No amendment is required to the University of Central Florida 2015-25 Campus Master Plan Update.

Detailed timeline for Trevor Colbourn Hall and Renovation/Demolition of Colbourn Hall

- April 3, 2014 – The UCF Finance and Facilities Committee approved INFO-7: Colbourn Hall Renovations. William Merck and Lee Kernek explained that the preferred renovation option for Colbourn Hall is to build a new 75,000 square-foot building adjacent to the current building. Upon completion, the employees and departments housed in Colbourn Hall would move into the new building. Possibilities for the existing Colbourn Hall are contingent upon funding, and will be considered at a future date.
- May 22, 2014 – The UCF Board of Trustees approved FF-4 Colbourn Hall Renovations. A motion was made and unanimously passed to proceed with the new construction to replace Colbourn Hall.
- June 26, 2014 – UCF Facilities & Safety requested an amendment to the University of Central Florida 2010-20 Campus Master Plan to construct the 75,336 GSF Academic Support Facility. Submittal materials show Academic Support Facility as project #146 on the Capital Improvements List and the Urban Design Map.
- September 25, 2014 – The UCF Board of Trustees unanimously approved an amendment to The University of Central Florida 2010-20 Campus Master Plan Update: a minor amendment to construct the Academic Support Facility (75,336 GSF and 50,224 NASF.)
- June 27, 2016 – The Status of UCF Projects (INFO-4) was presented to the UCF Finance and Facilities Committee.
Lee Kernek gave a presentation on the status of active and planned construction and renovation projects on campus. This presentation included the plan for a larger, freestanding Trevor Colbourn Hall and the demolition of Colbourn Hall.
- July 28, 2016 – The UCF Board of Trustees:
 - Approved the demolition of Building 18 (Colbourn Hall), contingent upon the Educational Plant Survey recommendation, and authorizing the president to make adjustments.

- Approved submittal of the 5 year Capital Improvement Plan for 2017-18 through 2021-22 to the Board of Governors. The submittal included:
 - Attachment A - 2017-18 Five-year Plan List, including Trevor Colbourn Hall and Colbourn Hall Demolition at a cost of \$38,000,000.
 - Attachment C- 2017-18 Fixed Capital Outlay Projects That May Require Legislative Authorization and General Revenue Funds to Operate and Maintain, including Trevor Colbourn Hall at 135,600GSF, funded by E&G.
- September 22, 2016 – The Florida Board of Governors approved the proposed amendment to the UCF 2015 Educational Plant Survey recommending demolition of Colbourn Hall (Building 18).
- *If the project is located off the main campus, describe action(s) that will be taken to obtain necessary approvals.*

The project is on the main campus.

- *Describe the project's relationship to the current University of Central Florida 2015-25 Campus Master Plan Update Evaluation and Appraisal Report (EAR).*

The EAR reads: “Element 2.5: Academic Facilities (optional element)

The status of the Goals, Objectives and Policies is “ongoing” and in the case of total additional net square feet for classrooms and laboratories, “unmet”

- Policy 1.1.1 was unmet, since it sought to increase the university’s classroom inventory by 10,000 NASF per year
- Policy 1.2.1 was unmet since it sought to increase the university’s teaching laboratory inventory by 20,000 NASF per year

Trevor Colbourn Hall will address a portion of the “unmet” status of Policies 1.1.1 and 1.2.1, as follows:

Total Net Gain to Classroom Inventory² = 3,639 NASF

Classroom (732sf) in lieu of Classroom CH 204 (-573sf) = Increase of 159 NASF
 Classroom (770sf) in lieu of Classroom CH 207E (-583sf) = Increase of 187 NASF
 Classroom (904sf) in lieu of Classroom CH 126 (-544sf) = Increase of 360 NASF
 Classroom (964sf) in lieu of 2 Open Labs CH 128B, 128C = Increase of 964 NASF
 Classroom (401sf) in lieu of Conference Room CH 516 = Increase of 401 NASF
 Classroom (1,565sf) in lieu of CB1 219 (remains in inventory) = Increase of 1,565 NASF

² At the time of this writing the Trevor Colbourn Hall classrooms did not have room numbers.

Total Net Gain to Teaching Laboratory Inventory = 776 NASF

Tech Writing Lab (908sf) in lieu of Teaching Lab CH 203 (-862sf) = Increase of 46 NASF

Modern Languages Lab (730sf) in lieu of Teaching Lab VAB 221 = Increase of 730 NASF³

- *If Campus Development Agreement actions are required, discuss.*

Orange County, the host local government, has been made aware of the addition of Trevor Colbourn Hall, per the Memorandum of Understanding (MOU) negotiated with the University of Central Florida 2010-20 Campus Master Plan.

The facility is also included in the University of Central Florida 2015-25 Campus Master Plan Update, for which the CDA has been negotiated.

- *Describe any non-compliance concerns and proposed mitigation.*

The University of Central Florida 2015-25 Campus Master Plan Update, Appendix A, *Evaluation and Appraisal Report (EAR)* lists the following concern:

Non Compliance Concern:

Element 2.4 Future Land Use: *The university is trying to correct an existing land use compatibility problem. Namely the location of parking inside of the 1,200 foot radius circle making up the academic core.*

Mitigation:

As a result of the siting of Trevor Colbourn Hall, Parking Lot H-1 will be removed from inside of the 1,200 foot radius circle - one step toward correcting this land use compatibility issue.

³ Assumes VAB 221 remains in Teaching Lab inventory

5.0 - ANALYSIS OF IMPACT ON THE STRATEGIC PLAN

– *Describe how the proposed project correlates with metrics in the university's Strategic Plan.*

Current Strategic Plan

On May 31, 2016, the UCF Board of Trustees unanimously approved the UCF Collective Impact Strategic Plan 2016,⁴ which includes a road map to achieve UCF's long-term vision, and a 5-year action plan.

- *Describe how the proposed project correlates with metrics in the university's Strategic Plan.*

Trevor Colbourn Hall will address stated 'Metrics' in the following areas of the action plan, thus contributing to the university's fulfillment of its charge.

UNDERGRADUATE STUDENT SUCCESS (page 14)

Metrics

- *First-year retention of 92%.*
- *Six-year graduation rate of 75%.*
- *Transfer student graduation rate of 75%.*
- *100% of undergraduates participate in a positive, high impact student experience either on or off campus.*
- *Increase student participation in internships and co-ops by 50%.*

Trevor Colbourn Hall will contribute to retention, time to degree, and transfer success by providing Active Learning classrooms supporting positive learning outcomes.

Studies at the University of Minnesota show that their Active Learning Classrooms have a “*significantly greater impact than traditional classrooms in improving student learning, this new branch of ... research aims to demonstrate more clearly how the activities performed in and behaviors elicited from these classrooms improves student learning and engagement.*”⁵

⁴ <http://www.ucf.edu/wp-content/uploads/2012/08/UCF-Strategic-Plan-BOT-FINAL-052616-Web.pdf>

⁵ D. Christopher Brooks has done extensive research on the UMN Active Learning Classroom Program, and his research shows measurable results based on groups of students with similar baseline standardized-testing scores. Brooks served as a Research Fellow in the Office of Information Technology, University of Minnesota, and is now a Senior Research Fellow for the EDUCAUSE Center for Analysis and Research

“The introduction of Active Learning Modules...which engage the student and produce positive learning outcomes, is shown to be beneficial for student retention.”⁶

“Graduation rates increase as the retention rate increases.”⁷

Trevor Colbourn Hall will provide a positive, high impact student experience on campus by offering:

- Student spaces that support collaboration
- Active Learning classrooms
- A convenient nucleus of student services

FACILITIES (page 33)

Metrics

- *Define and achieve a new standard in facility efficiency (sq. ft. per student, per employee).*
- *Develop a new standard for teaching facility design with measurable improvement in pedagogical effectiveness.*

Trevor Colbourn Hall will define and achieve a new standard in facility efficiency, by providing a combination of efficiently-sized and functionally-furnished private or shared offices and workstations to support focused work (Me Space), and a new component of collaborative workspace to support interdepartmental and interdisciplinary collaboration and interaction (We Space).

Trevor Colbourn Hall will develop a new standard for teaching facility design, by providing Active Learning Classrooms adapted to the learning styles of 21st Century students, who have been immersed in technology, multi-tasking, interactive communication, social media, and gaming, practically since birth. Active Learning shifts the pedagogical focus from Teaching to Learning, enhanced by face-to-face furniture arrangements that improve teacher-to-student and student-to-student dialog.

⁶ Active Learning Modules to Improve Retention in Introductory Computing Courses, L Pollacia, A. Heinz, K. Kakish S. Dekhane, School of Science and Technology Georgia Gwinnett College, 2012 Proceedings of the Information Systems Educators Conference

⁷ Practical Steps to Improving Retention and Graduation Rates by The Florida State University Student Success Team

6.0 - RETURN ON INVESTMENT

– *Provide information on the Return on Investment (ROI) expected from the project.*

- *Provide information on the Return on Investment (ROI) expected from the project.*

On August 1, 2016, a “Higher Educational Facilities Return on Investment” checklist, for Trevor Colbourn Hall and Colbourn Hall Demolition was submitted to the State University System of Florida Board of Governors. It shows a Return on Investment in several of the key areas targeted by the Board of Governors:

1. Degrees/Certificates Produced that meet State needs
 - *An additional 99 degrees and certificates in these programs by 2021-22: English; History; Modern Languages & Literatures; Writing & Rhetoric and Africana, Judaic, Latin American and Women’s Studies.*
 - *Increased wages for graduates of the programs listed.*
2. Students Served and Benefits/Efficiencies
 - *An expected increase of 219 students by Fall 2021.*
3. Increased Research Funding
4. Areas of Strategic Emphasis or DEO Occupational Forecast
5. Increased Business Partnerships
6. Improved Existing Space
7. Local Fund Contributions
8. Reduction of Future Deferred Maintenance / Extends Life of Facility
 - *Trevor Colbourn Hall will be an academic building, intended to match the overall space categories and square footage of the existing Colbourn Hall, while adding ...additional space to account for departmental growth.*
9. Projected Facility Utilization Rate
10. Current/Projected Campus Utilization

Other Pertinent Information

- *The construction will provide short-term impact to the local economy.*

A copy of the complete UCF Higher Educational Facilities Return on Investment checklist for Trevor Colbourn Hall and Colbourn Hall Demolition is available.

7.0 - SITE ANALYSIS

- Describe project adjacencies.
 - Explain why the project has been placed on the chosen site.
 - Provide a site analysis outlining the availability of utilities, roads, etc. Describe any unusual site conditions that may impact the cost or design of the project such as grades, soil conditions, restricted building area, etc.
 - Provide a traffic and parking analysis. Describe the vehicular site access; the need for added, reduced or modified parking; etc.
 - Provide a landscaping narrative. Describe the landscape goals of the project, including correlation with the Campus Landscape Plan.
 - Describe general planning considerations for utilities and utility connections. List sources for chilled water, power and lighting, natural gas, telecommunications, water and sewage, etc.
 - Address storm water concerns, water management district requirements, storm water basin identification and capacity, Storm Water Master Plan amendments or modifications required, Conceptual Storm Water Management Plan application, etc.
 - Provide a utilities impact analysis (the probable impact of this project on utilities).
 - Describe the project's impact on environmentally and/or culturally sensitive areas.
 - Provide a checklist of site information.
-

- *Describe project adjacencies.*

The proposed site is within the academic core of the university between the 1200' and 800' radius sidewalk system, just north of the existing Colbourn Hall. Once Trevor Colbourn Hall is completed, the existing site of Colbourn Hall will return to the university as a future building site within the academic core.

Several buildings will be adjacent to the new Trevor Colbourn Hall.

- To the north is the Visual Arts Building (building 51).
- To the east, and east of the 800' circle, is the Burnett Honors College (building 95).
- To the west, and beyond the 1200' circle, is the Performing Arts Center (building 119).
- To the south is Colbourn Hall (building 18), which will be demolished when Trevor Colbourn Hall is complete.

- *Explain why the project has been placed on the chosen site.*

Trevor Colbourn Hall will be a major academic building. The University of Central Florida 2015-25 Campus Master Plan Update dictates that academic buildings be sited within the academic core of the university. Academic buildings must be located for easy access to related classrooms and programs. The building will also be conveniently located near parking.

- *Provide a site analysis outlining the availability of utilities, roads, etc. Describe any unusual site conditions that may impact the cost or design of the project such as grades, soil conditions, restricted building areas, etc.*

Utilities:

The following utilities are in close proximity to the site: power, data, CATV, natural gas, chilled water, water and sewers (sanitary and storm). All utilities for this project must be field verified by the Engineer of Record in the early stages of the design process.

Roads:

The project is served by paved access streets. The concept adopted by the university is to eliminate general vehicular access inside the 1,200' radius sidewalk. The only vehicular access permitted inside the 1,200' radius sidewalk system is for emergency vehicles, public transportation, vendors, and maintenance vehicles. Entrances and exits must be designed with consideration for the existing sidewalk system.

Campus Services:

Police Protection: The University Police Department provides 24-hour service, seven days a week.

Fire Protection: The campus police coordinate all fire emergency responses via the '911' network.

Trash Removal: Housekeeping and Recycling Services provides trash and recycling totes to the building and performs trash and recycling services. Appropriately-sized and attractively concealed exterior facilities must be available for placement and service of dumpsters.

Restricted Building Areas:

The only site condition that should affect the planning of Trevor Colbourn Hall is its placement between the 800' radius sidewalk and 1,200' radius sidewalk, which will limit the length of the building.

- *Provide a traffic and parking analysis. Describe the vehicular site access; the need for added, reduced or modified parking; etc.*

Bus service:

Bus service will be available directly to the north side of the building. Bus service to the area near Trevor Colbourn Hall will not be disrupted. Site planning shall address any bus routes, bus stops, and bus shelters serving the area.

Emergency Access:

Fire department and emergency access to the building site will be maintained. Throughways to existing hydrants and fire protection equipment, including those of neighboring facilities, will also be maintained.

Vendor and Maintenance Access:

The site will be designed to allow vendor and service access to the building without endangering pedestrians, e.g., crossing, but not driving along, sidewalks. A minimum of six (6) parking spaces for service vehicles will be provided in close proximity to the service entrance of the new building.

Parking:

The project is served by parking. The plan for university buildings is to have mass parking in several locations on campus - garages and parking lots - rather than local parking at each facility. Typically parking lots in closer proximity to academic buildings serve only faculty, staff, accessible, and service parking.

About 150 parking spaces will be displaced when Trevor Colbourn Hall is built on the current site of parking lot H-1.

- Lot H-1 currently serves faculty (B permit) with 146 spaces, ten (10) of which are ADA accessible spaces.
 - All 146 parking spaces will be removed.
 - Ten (10) ADA accessible spaces will be added to Lot H-2.
- Lot H-2 currently serves faculty and staff (B and C permits) with 151 spaces, six (6) of which are accessible spaces.
 - Fourteen (14) standard spaces will be taken to restripe ten (10) ADA accessible spaces.

The majority of displaced parking will be accommodated in Parking Garage I, which has 1,270 parking spaces, twelve (12) of which are accessible spaces. Garage I serves faculty, staff, and students.

Parking and Transportation Services reports that Garage I can absorb the displaced parking from Lot H-1. Rebalancing quantities of spaces for faculty and staff in Lot H-2, and for faculty, staff and students in Garage I may be considered; but the cost associated with re-signing is not in the Trevor Colbourn Hall budget.

- *Provide a landscaping narrative. Describe the landscape goals of the project, including correlation with the Campus Landscape Plan.*

Landscaping Narrative:

The project landscaping will exemplify the five guiding principles outlined in the UCF Campus Landscape Master Plan and Design Standards (2016). The landscape will tie in with surrounding campus features that extend out to adjacent buildings to ensure thematic consistency through that area of campus, while providing distinctive elements that complement and reinforce the building's architectural features.

Landscaping and site furnishings around Trevor Colbourn Hall shall comply with all guidelines set forth by LNR; including ease of maintenance, sustainability, appropriate and diverse plant materials, use of native Florida plants, increasing tree canopy, and adding color, scent and texture to the understory landscape.

Site furnishings, such as waste and recycling containers, tables and seating, etc., shall be provided as directed by LNR, and shall match university standards.

See also 7.0 Site Analysis (this chapter), under “*Describe the project impact on environmentally and/or culturally sensitive areas,*” for information regarding endangered or threatened fauna or flora.

- *Describe general planning considerations for utilities and utility connections. List sources for chilled water, power and lighting, natural gas, telecommunications, water and sewage, etc.*

All required utilities are available to Trevor Colbourn Hall; see checklist of site information at the end of this chapter.

- *Address storm water concerns, water management district requirements, storm water basin identification and capacity, Storm Water Master Plan amendments or modifications required, Conceptual Storm Water Management Plan application, etc.*

The new Trevor Colbourn Hall will be built on the site of the existing impervious parking lot H-1, thereby *reducing* storm water load to the basin. The removal of Colbourn Hall, and return of its site to green space, will also *reduce* storm water load to the basin.

- *Provide a utilities impact analysis (the probable impact of this project on utilities).*

Trevor Colbourn Hall (135,600 GSF) is replacing Colbourn Hall (83,957 GSF), and the increased size of the facility could have an impact on utilities. The architects and engineers selected for this project are required to design utilities with regard for impact on campus utilities; including but not limited to:

- The university provides a basic level of utility service to end-users. If the basic level of service is insufficient to meet an end user's specific needs, the user shall be

responsible for the cost of the elevated level of service, including special water requirements, low flow or temperature; fees to increase consumptive use permits; waste water collection allocations with Iron Bridge; costs to increase distribution reserve capacity, demand, and/or distribution to the building or group of building to/from anything other than the standard points of demarcation.

- All utility services will be metered locally to the facility, using a UCF UES utility revenue grade meter for:
 - Chilled Water
 - Water
 - Natural Gas
 - Electric
 - Re-claim water
- Utilities will be designed that provide efficient operation and are adequately sized to serve future needs should be considered during the early planning stages.
- Conflicts will be avoided in the design and layout of the various utility lines, and early recognition of the need for additional production or supply capacity will be permitted.
- The adequacy of existing utilities support and any additional needs will be addressed.
- Utility lines will be planned to minimize utility capital investment and operational cost for maintenance and repair.
- Each new construction project that increases utility demand, and for which Plant Operation and Maintenance (PO&M) funding is requested, shall have the Florida Facility Classification for Energy Consumption signed and sealed by the project's engineer of record. The classification structures (A-F, F being the most energy-intensive) incorporate building type, usage, complexity, and utility requirements using State-approved algorithms and multipliers to determine the level of required PO&M.

All existing utilities must be field verified and documented by the Engineer of Record during the early stages of design.

- *Describe the project's impact on environmentally and/or culturally sensitive areas.*

Endangered species: There are no known endangered or threatened animals or plants at the proposed site. The proposed site is covered by Parking Lot H-1. The Landscape and Natural Resources Department (LNR) will survey the proposed site and coordinate

the relocation of any endangered or threatened plants or animals prior to construction, if necessary.

Natural resource values should be considered carefully because of the possible soil conditions on the campus. Soils and foundation conditions must be investigated to ensure suitability for economical excavation, site preparation, building foundations, utility lines, grading, and planting. The university has encountered sinkholes on other construction projects. Special care should be taken to insure that sinkholes, if any, are identified during the soil-boring phase.

During the development of our Campus Land Management Plan, the Division of Archives, History, and Records Management was contacted and noted that no archaeological or historic sites are recorded in the Florida Master Site File.

- *Provide a checklist of site information.*

The main campus consists of 1,415 acres and includes a library, classroom buildings, laboratories, residence halls, and student facilities.

The architects and engineers selected for this project are required to design utility connections to the nearest utility manhole or as directed by the university.

Chilled Water:

The university expects the architect or engineer to model peak demands in terms of flow and capacity. An existing 6" service feeds the EB.

Central Chilled Water: Central chilled water plants supply chilled water to the HVAC systems for all major buildings on campus. A new plant will be online to assure adequate supply to this building.

Chilled water is distributed through a circulation loop, from the Central Chilled Water Plant and Satellite Chilled Water System, at a design supply temperature of 42 degrees F, to the building's HVAC systems.

UCF provides a basic level of service for general comfort cooling at the point of delivery between 39-44 degrees F, with the goal of maintaining a high differential between the chilled water supply and chilled water return temperatures. This differential is critical to the efficient and economical operation of UCF's system. Therefore, any elevated levels of service must be agreed upon in writing prior to interconnection between the end-user and UES.

Natural Gas:

Campus Natural Gas Service: Natural gas is furnished to campus by UES and TECO Energy, a Florida distributor, acquired in early 2016 by Emera, Inc. of Halifax, Nova Scotia.

Power and Lighting:

Campus Electrical Power: Duke Energy provides primary electrical service to the campus. The university's responsibility starts on the secondary side of the buildings' transformers.

The main campus 15kV electric distribution service is provided by Duke Energy Florida, regulated under the Florida Public Service Commission; to provide primary service for 108,831 kW under the General Service Time of Use Tariff. Cost of campus distribution electrical expansion is recovered through a project-specific Contribution in Aid of Construction (CIAC) fee from Duke Energy that is non-negotiable and paid by the entity creating the need. Primary power is distributed to UCF at 15KV and stepped down locally to 4160, 480, or 120 / 208 VAC.

Campus Exterior Lighting:

The campus, including circulation, parking lots, and recreation areas, is illuminated by pole-mounted area lighting. All exterior lighting fixtures must match existing fixtures and be powered from the building. The current outdoor lighting system is defined in the UCF Design, Construction, and Renovation Standards.

Emergency Management (OEM) requires that lighting for exterior areas be consistent with recommendations of the IESNA for security standards of at least 3.0 fc. White light source, such as LED, is preferred.

Telecommunications:

All UCF buildings must follow the latest version of Telecommunications Design Standards, written and maintained by UCF Computer Services and Telecommunications (CS&T), with regard to:

- Estimated Building Data Transmission Requirements
- Data Transmission Speeds
- Network Service
- Telephones
- Audio Visual Requirements
- Instructional Space Connectivity
- CATV – internal wiring

Cable TV:

Spectrum (formerly Bright House Networks) will serve the building via their existing underground outside plant coax distribution system.

Water and Sewage:

Campus Potable Water: Potable water is supplied to the campus via an underground piping system. Reduced-pressure principle backflow preventers and meters are required on all water supplies to the buildings.

Sewage and Wastewater: University effluent is connected to Seminole County, Iron Bridge Water Pollution Control Facility. The permitting process should be directed to the appropriate Seminole County agency responsible for wastewater treatment.

Irrigation Water: The irrigation system is supplied with reclaimed water from the Iron Bridge Water Pollution Control Facility in Seminole County.

DER Review and Requirements: The Department of Environmental Regulations (DER) requires permitting of the extension of a water system or sanitary sewer system, along with required water sample testing on any new potable water system. It also requires water sample testing after any work done on an existing system. It is a requirement of the architect or engineer to submit permits and coordinate all permits with Landscape and Natural Resources through the approval process.

Storm Water: The topography of the UCF campus varies from elevation 88 at the western border to elevation 45 at the northeast corner. The campus can be divided into four general drainage areas. Campus drainage from the western border follows:

- Area A - northerly toward Lake Claire
- Area B - northeasterly toward a stream
- Area C - southwesterly toward Lake Lee
- Area D - southeasterly toward a wetland area which drains into the Bonnevillie Canal

The campus Storm Water (Drainage) Map is available on the Facilities Planning and Construction website.

St. Johns River Water Management District Review Requirements: SJRWMD Rule 40C-4, governing the management and storage of surface waters, regulates hydrologically sensitive areas (HSA). Criteria used for defining HSA are hydric soils types, presence of wetland indicator species, and hydrologic connections to off-site water bodies or wetland systems. Storm water permitting with St. Johns will be the responsibility of the architect or engineer, in coordination with Landscape and Natural Resources.

(Source: Permit Coordination Policy)

Storm Water Basin Identification: This project is located in basin 4–B, which is 65.34 acres in size. (Source: Revised Storm Water Master Plan Map) Basin 4-B has no remaining impervious capacity. However, the new Trevor Colbourn Hall will be built on the site of the existing impervious parking lot H-1, thereby *reducing* storm water load to the basin. The removal of Colbourn Hall, and temporary return of its site to green space, will also *reduce* storm water load to the basin.

Amendment or Modifications: The Master Storm Water permit will need to be modified, but it will only require staff approval and will not need to go to the St. Johns River Water Management District Board. A minor modification to the Storm Water Master Permit will be required.

Conceptual Storm Water Management Plan: The Conceptual Campus Storm Water Management Plan has been developed to provide the university and state agencies with a long-term approach to storm water management for our campus. It contains the conceptual design and engineering for water management to meet our long-term construction program on campus. Each facility constructed on campus will be required to fund its portion of the overall costs of the plan related to the storm water generated by the facility or project. This plan has been approved by the St. Johns River Water Management District and will be a vehicle for this campus to meet its requirements. The architect or engineer must work within the framework on this plan.

Underground Utility Lines:

The location and depth of many of the existing underground utility lines will need to be verified. The accuracy of the university utility as-built drawings should be determined by the design and preconstruction team very early in the project. The university will require a detailed utility survey of the proposed site to avoid the disruption of utilities.

Underground distribution lines should be located to minimize cost. All underground utility lines, mains, and conduits should be located at the minimum depth of three (3) feet, and in common corridors to allow for ready access and maintenance. As-built drawings must be provided for all interior and exterior utilities.

8.0 - PROGRAM AREA

- *Include a table of space categories (required). Provide functional descriptions of the space categories proposed within the building.*
 - *Include the Educational Plant Survey comparison with the existing space categories. If an Educational Plant Survey does not exist, request a Spot Survey or Educational Plant Survey through the Board of Governors' staff.*
 - *Describe building organization requirements. Provide bubble diagrams to clarify programmatic relationships and functional adjacencies.*
 - *Describe information and communication technology requirements.*
-

The architect and his consultants should be aware that these project requirements are *specific* to this facility and that general University of Central Florida requirements must be met. These requirements can be found in UCF Design, Construction, and Renovation Standards, and the UCF Professional Services Guide. If a discrepancy is found in this program, the UCF Design, Construction, and Renovation Standards take precedence over any information provided in this document. Any deviation to the UCF Standards must be reviewed during design and approved by the UCF Standards Committee and the Associate Vice President, Administration and Finance (Facilities and Safety).

- *Include a table of space categories (required). Provide functional descriptions of the space categories proposed within the building.*

The University of Central Florida 2015 Educational Plant Survey reflects the categories of assignable space in educational buildings, in accordance with State University System of Florida, “Explanation of the Space Needs Generation Formula.” The quantity of space in Trevor Colbourn Hall, by category, is shown in APPENDIX E - Space Files, E.1 Program Area Table.

<u>Instructional/Research</u>	<u>Academic Support</u>	<u>Instructional Support</u>
Classrooms	Study Facilities	Office / Computer
Teaching Laboratories	Instructional Media	Campus Support
Research Laboratories	Auditorium / Exhibition	
	Teaching Gymnasium	

The following four (4) Space Categories are proposed for Trevor Colbourn Hall. Their functional descriptions are taken from the “Explanation of the Space Needs Generation Formula.” These are the functional descriptions of the included categories:

- Classrooms - A classroom is defined as a room used for classes and not tied to a specific subject or discipline by equipment in the room or the configuration of the room.

- Teaching Laboratories - A teaching laboratory is defined as a room used primarily for scheduled classes that require special purpose equipment or a specific room configuration for student participation, experimentation, observation, or practice in an academic discipline.
 - Study Facilities - Study facilities include study rooms, stack areas, processing rooms, and study service areas.
 - Offices - An office is defined as a room housing faculty, staff, or students working at one or more desks, tables, or workstations... Rooms that directly serve these areas are also included in this category, as well as faculty and staff lounges.
- *Include the Educational Plant Survey comparison with the existing space categories. If an Educational Plant Survey does not exist, request a Spot Survey or Educational Plant Survey through the Board of Governors' staff.*

A comparison of existing space to proposed space has been provided in 3.0 - SPACE NEEDS ASSESSMENT.

The 2015 Educational Plant Survey includes the renovation of Colbourn Hall and the addition of Trevor Colbourn Hall.

See 3.0 - SPACE NEEDS ASSESSMENT regarding an amendment to the 2015 Educational Plant Survey, to address the demolition of Colbourn Hall, and the construction of a new, larger Trevor Colbourn Hall.

- *Describe building organization requirements. Provide bubble diagrams to clarify programmatic relationships and functional adjacencies.*

The design of this building should allow for flexibility and possible future expansion. The architect/engineer should become familiar with the functional operation of the facility (through thorough review of the Building Program, and consultation with the University Planner, Project Manager, and Building Committee) in order to determine areas that vary in function and are subject to frequent change.

The project is well beyond bubble diagrams, therefore schematic floor plans have been included in APPENDIX F - Supplemental Materials, F.1 Space Diagrams to clarify programmatic relationships and functional adjacencies.

- *Describe information and communication technology requirements.*

During the design of telecommunications systems it will be necessary for the Architect or Engineer to interface with the UCF Computer Services and Telecommunications (CS&T) department for specific requirements for the project.

The Architect or Engineer must remain aware of the constantly changing technology of telecommunications and its impact on the overall construction budget.

This building must follow UCF telecommunications design standards, written and maintained by UCF Computer Services and Telecommunications (CS&T):

- Telecommunications Design Standards, rev.10.1, May 2014
<https://www.cst.ucf.edu/wp-content/uploads/Design-Standards-for-Telecommunications-Rev.-10.1.docx>
- Codes and Definitions
- Outside Plant Infrastructure - conduit duct banks; maintenance holes; and outside plant copper, innerduct, fiber, and coax
- Inside Plant Infrastructure – riser cables, telecom rooms, server rooms, horizontal telecom cable, and labeling
- Special Requirements - fire alarm cabling, elevator phones, IP cameras and access control systems
- Outside Building Requirements - outdoor emergency phones and irrigation controller circuits

Telecommunications Budget: All telecommunications requirements related to the project are to be included as part of the overall budget for the project. Not all telecommunications requirements related to the project are included in the contractor's Hard Bid; some telecommunications elements may be funded from line items within the overall Project Budget, including elements that are Owner-Furnished, Owner-Installed (OFOI).

The Architect or Engineer must verify the specific project situation in this regard, in order to prepare contract documents that represent the university's intent with regard to telecommunications funding.

9.0 - BUILDING ANALYSIS

- *Describe the proposed building exteriors; building structure; and building systems (fire suppression, plumbing, mechanical systems, electrical systems, telecommunications systems, safety and security systems, and utilities).*
 - *Describe any special requirements, such as acoustics, instructional resources, lighting, etc.*
-

- *Describe the proposed building exteriors; building structure; and building systems (fire suppression, plumbing, mechanical systems, electrical systems, telecommunications systems, safety and security systems, and utilities).*

Building Exteriors: Exteriors of UCF buildings shall be consistent with principles stated in the current version of the “UCF Design, Construction, and Renovation Standards,” including, but not limited to: “Appropriate Materials: Glazing, metal panels, and brick are the predominant exterior materials on the UCF campus and act as unifying elements for campus aesthetics. In addition, complementary or contrasting materials are used to indicate special-use purposes or importance of some structures.”

Tilt-wall construction will be used for this facility, in response to a demanding construction schedule.

Building Structure: In selecting the type of structural system for each facility, the total facility should be considered, since the choice will influence the cost Building Systems. When choosing structural materials, consideration should be given to availability of labor and materials, design life of the facility and maintenance costs over this period, experience and skill of local contractors, feasibility of pre-assembling or pre-casting major structural elements, and site environment.

This building will be a steel frame building.

Building Systems: The selections of building systems will influence the cost of heating, ventilation or air-conditioning, architectural, lighting, and utility requirements.

- *Describe any special building requirements, such as acoustics, instructional resources, lighting, etc.*
 - *Acoustical Treatment:* Acoustical treatment must be provided in all areas where noise level is high, particularly in learning spaces, conference rooms, assembly rooms, and mechanical rooms.
 - *Learning Spaces:* All Classroom and Teaching Lab planning shall comply with goals and guidelines set by the UCF Office of Instructional Resources (OIR).
-

General Building Considerations

General Building Considerations are covered in the UCF Design, Construction, and Renovation Standards (the Standards), and include, but are not limited to:

Handicapped Access: UCF is vigorous in its application of the Americans with Disabilities Act (ADA). See Standards.

Crime Prevention Through Environmental Design: a CPTED review is required for new facilities and major renovations. See Standards.

Security Measures:

Emergency Shelter Space: State statute requires the university to designate new shelter space as campuses are developed. See Standards. All major, new buildings should have designated shelter space that is reasonably protected. Such areas shall be located away from atria or other open-span areas; broad, unprotected glazed surfaces; and laboratories with hazardous materials.

Hardening Building Security: The UCF Office of Emergency Management (OEM) urges that consideration be given to providing safe rooms or hardened areas on each floor, in case of a shelter-in-place or lockdown event; and that such areas be larger rooms such as break rooms, conference rooms, or classrooms, so that groups of people can find refuge.

During design, the Architect will meet with OEM and others to determine what threats the building might be hardened against; in order to determine the feasibility of, cost associated with, and funding source for securing the building.

Other Security Measures: OEM recommends the following additional security measures:

- Offices should be furnished so that the primary occupant is not seated with his or her back to the door.
- Clear glass panels in office walls and doors should have window coverings such as blinds or shades to provide user-controlled visual obstruction, in order that the occupant not be clearly seen by an intruder. Frosted glass panels may not require window coverings.

Internal Circulation: Stairways should be used for general circulation from floor to floor. See Standards.

Loading Dock/Service Entrance: A loading dock or service entrance should be included and associated with spaces such as the mail room, trash room, receiving, storage, etc. See Standards.

Mail Distribution: During the Design Phases, a plan shall be devised for mail handling. A Primary Mail Room, near the service entrance of the facility, must be provided and secured from public access. See Standards.

Vending Machines: Within this building, areas should be designed for vending machines. See Standards.

Trash and Recycling Storage Room: A room for short-term storage of recycled material will be provided, on the first floor, close to the loading dock or service entrance. See Standards.

Custodial Services Facilities: Custodial and service rooms will be provided. See Standards.

Facilities Maintenance Room: A room for Facilities Operations will be provided. See Standards.

Special Hardware: Emergency Management (OEM) should be included in the planning security cameras and access control. OEM recommends the following internal security hardware. The A/E must assure that such hardware meets the requirements of the Florida Building Code and the Florida Fire Prevention Code.

- Classroom and office doors should be equipped with mortise-style locks that can be activated by hand.
- Corridor access doors should also have mortise locks so that they can be secured quickly.

Exterior Building Surfaces and Roof Styles: See Standards.

Quality of Finish Materials: Installed finish materials must be low-maintenance and have a good life cycle. The selection of finish materials must be coordinated with Facilities Operations. See Standards.

Color Schemes: No special requirements for color schemes are identified at this time. Color should reflect an academic community for higher education, not the typical Florida commercial color schemes. The Associate Vice President for Administration and Finance (Facilities and Safety) must approve all colors.

Building Directories and Identification Signs: No special requirements are foreseen for this facility. See Standards.

Restroom Equipment/Materials: The university has specific requirements pertaining to the design of restrooms. See Standards.

Water Supply and Plumbing Systems: The campus has its own water and waste water transportation network to Seminole County, and this building will be supported by these systems. See Standards.

Drinking Fountains and Bottle Fillers: See Standards.

Mechanical System: See Standards.

Energy Conservation: See Standards.

Electrical Systems: See Standards.

Fire and Security Alarm Systems: UCF has a campus-wide standard for Fire Alarm Systems for buildings. See Standards.

Lightning Protection System: A Lightning Protection System shall be provided and installed in this facility. See Standards.

10.0 - CODES, STANDARDS, AND GUIDELINES

- *Provide a review of applicable codes that may affect this project. List the organizations that maintain them.*
 - *Provide a statement that the project will comply with all applicable codes, laws, standards, and regulations.*
-

- *Provide a review of applicable codes that may affect this project. List the organizations that maintain them.*

Building Codes:

See the UCF Environmental Health and Safety website for the most current list of “Applicable Codes and Standards for Construction at the University of Central Florida,” <http://www.ehs.ucf.edu/buildingcode/bcstandards.html>, including, but not limited to:

- **Building Codes** - Administered by UCF Building & Fire Code Office (BCO)
- **Fire Codes** - Administered by UCF Building & Fire Code Office and the Florida Division of State Fire Marshal
- Additional links to pertinent codes, rules, and regulations are found on the EHS website above.

UCF Standards and Guidelines:

All UCF Standards and Guidelines must be adhered to during the design of this facility. Deviation from any UCF Standard or Guideline is not permitted unless reviewed during design and approved by the UCF Standards Committee and the Associate Vice President, Administration and Finance (Facilities and Safety).

UCF Standards and Guidelines include, but are not limited to:

- **UCF Design, Construction, and Renovation Standards (the Standards)** - Administered by UCF Facilities Planning and Construction (FP&C)
See the most recent version, and other resources, on the Facilities Planning & Construction (FP&C) website <http://fp.ucf.edu/resources>.
 - **Telecommunications Design Standards** - Administered by UCF Computer Services & Telecommunications (CS&T)
-

- **Utilities and Energy Standards** – Administered by UCF Utilities & Energy Services (UES)

It is imperative that all UCF buildings be energy-efficient and easy to maintain, and that they incorporate materials and methods that reduce life-cycle expense. Coordinate with UES on Utility Revenue Metering. The UCF Metering standard is currently in development with a third party service.

- **Green Building Construction and Renovation Requirements** - Administered by UCF Utilities & Energy Services (UES)

UCF's administration has mandated Leadership in Energy and Environmental Design (LEED) certification for all new construction and major renovations. As Trevor Colbourn Hall was funded before August 31, 2015, it must meet *University Energy & Sustainability Policy 3-111.1* and attain LEED Silver in accordance with LEED v3.1 2009. After August 31, 2015, UCF's Green Building Construction and Renovation Requirements require all new construction and renovations projects to meet a minimum LEED Gold rating, using LEED v4 2013.

LEED Gold can and should be achieved for Trevor Colbourn Hall.

- **State of Florida Model Energy Efficiency Code for Building Construction** - Administered by UCF Utilities & Energy Services (UES)

The following documents identify standards for air conditioning, dehumidification, evaporative cooling, heating, mechanical ventilation, and refrigeration:

- [Building Automation System Specification](#)
- [UCF Building Energy Systems Commissioning Procedure \[FS 2015 UES0003\]](#)
- [Sunshine 811](#)

- **Campus Landscape Master Plan and Design Standards (2016)** - Administered by UCF Landscape & Natural Resources (LNR)

The landscape standards are available at <https://www.green.ucf.edu/wp-content/uploads/2016/05/UCF-LNR-Master-Plan.pdf>.

- **Space Standards** - Administered by UCF Facilities Planning & Construction (FP&C) and Space Planning, Analysis, and Administration (SPAA)

It is the architect's responsibility to review UCF and State University System space standards during design, and to work with the university to implement new strategies for office environments. The following space standards will be taken into consideration during the planning of this project:

- The Educational Plant Survey (EPS) identifies unmet space needs.⁸

The basic method used to determine the facilities required by a university to accommodate educational programs, student enrollments, personnel, and services is the Fixed Capital Outlay Space Needs Generation Formula – see Appendix B, “Explanation of the Space Needs Generation Formula.”

- State Requirements for Educational Facilities, 2014 (SREF)⁹

Chapter 6, Section 6.1 “Size of Space and Occupant Design Criteria Table(s)” indicate the *recommended* minimum and maximum areas of spaces, by type, for state universities.

- UCF Space Planning, Allocation, and Use Policy

UCF is developing a new Space Planning, Allocation, and Use Policy, to be published soon. With guidance from the Office of the Provost, UCF will implement new strategies for forward-thinking office environments to support individual work as well as teaming and collaboration.

Allocated office space will include a combination of “Me Space” (dedicated workspace, such as private or shared offices or open workstations) *plus* “We Space” (a complement of shared collaborative workspace). The combined allowance of Me Space and We Space will effectively align with the recommendations in SREF.

When space planning criteria are not available, accepted design and experience factors should be used to determine space allocations for the various functional components of the facility.

- *Provide a statement that the project will comply with all applicable codes, laws, standards, and regulations.*

The Trevor Colbourn Hall project will comply with all applicable codes, laws, standards, and regulations.

⁸ The State University System requires that each university generate an Educational Plant Survey at a minimum of every five (5) years, to report on the use of its existing facilities and project future facility needs for five (5) years out.

⁹ State Regulations for Educational Facilities, 2014 (SREF) was prepared by the Florida Department of Education, Educational Facilities and Educational Facilities Budgeting Office.

11.0 – PROPOSED DELIVERY METHOD

- Proposed Construction Delivery Method

- *The AVP and the Director of FP&C will determine the design and construction delivery method for capital projects. The Building Program will include a statement of the proposed delivery method and rationale.*
-

- Proposed Construction Delivery Method

- *The AVP and the Director of FP&C will determine the design and construction delivery method for capital projects. The Building Program will include a statement of the proposed delivery method and rationale.*

The Associate Vice President for Administration and Finance (Facilities and Safety) and the Director of FP&C have determined that the design and construction delivery method for Trevor Colbourn Hall will be as follows:

Preconstruction Services: The project is sufficiently large and complex to require major emphasis on specialized cost estimating, value engineering, and scheduling during the design process. A Construction Manager will provide this service.

Construction Delivery Method: The complexity and aggressive schedule of the project necessitate the early involvement of a Construction Manager to meet the project goals. Therefore, a Construction Manager with a Guaranteed Maximum Price (GMP) will be used to construct the building.

Commissioning: The commissioning process is a quality-based method adopted by UCF's administration and Owner's representatives to assure high-quality construction projects. A third-party continuing service commissioning agent, hired directly by the university, will provide commissioning services.

APPENDICES

A. Maps

A.1 UCF Campus Map

A.2 Site Location Map for Trevor Colbourn Hall

A.3 Utilities Map

A.4 Storm Water (Drainage) Map

B. Project Schedule

C. Program Funds

D. Program Budget Summary

E. Space Files

E.1 Program Area Table

E.2 Summary of Required Spaces

F. Supplemental Materials

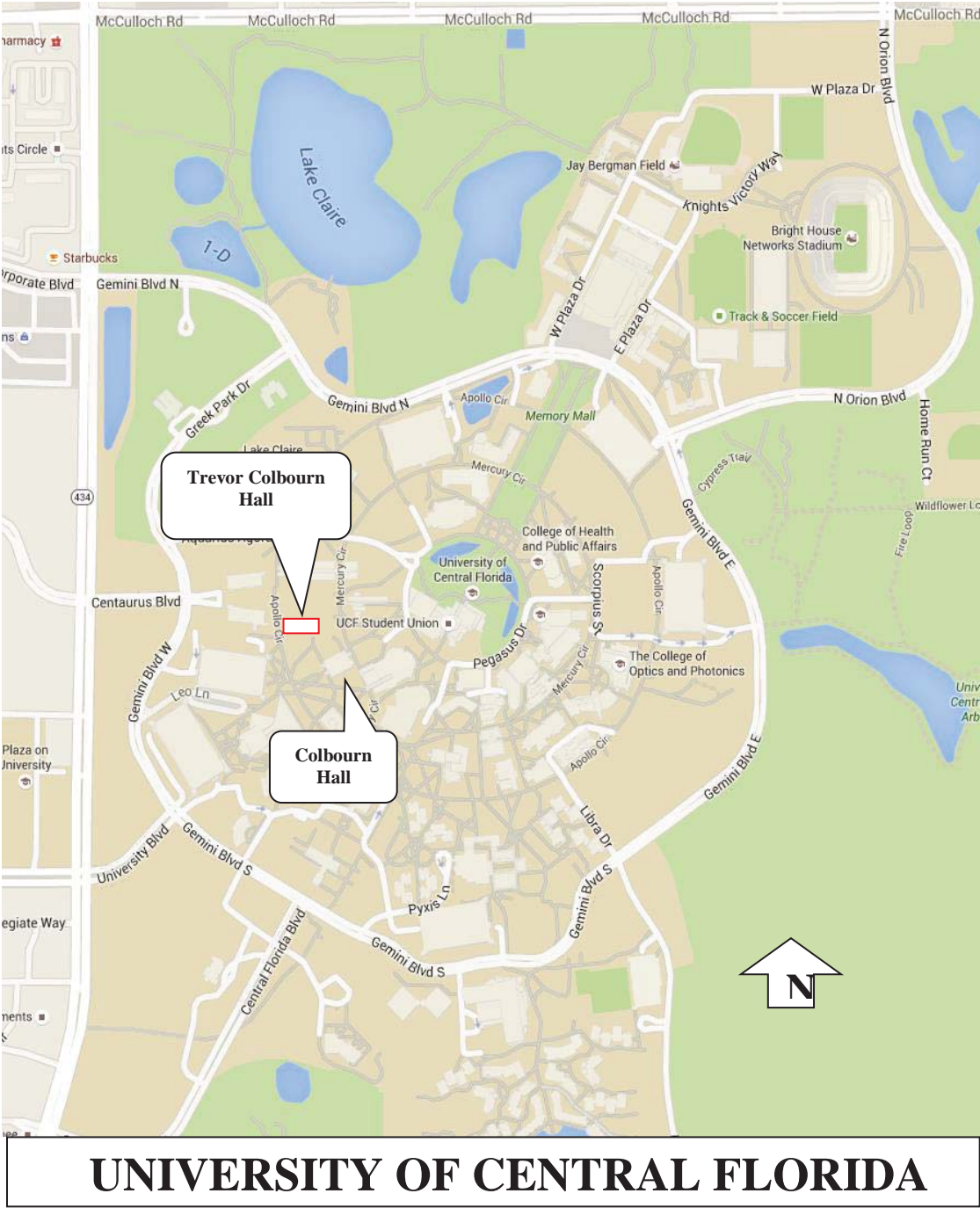
F.1 Space Diagrams

F.2 List of Space(s) to be Released

F.3 Approved Additions

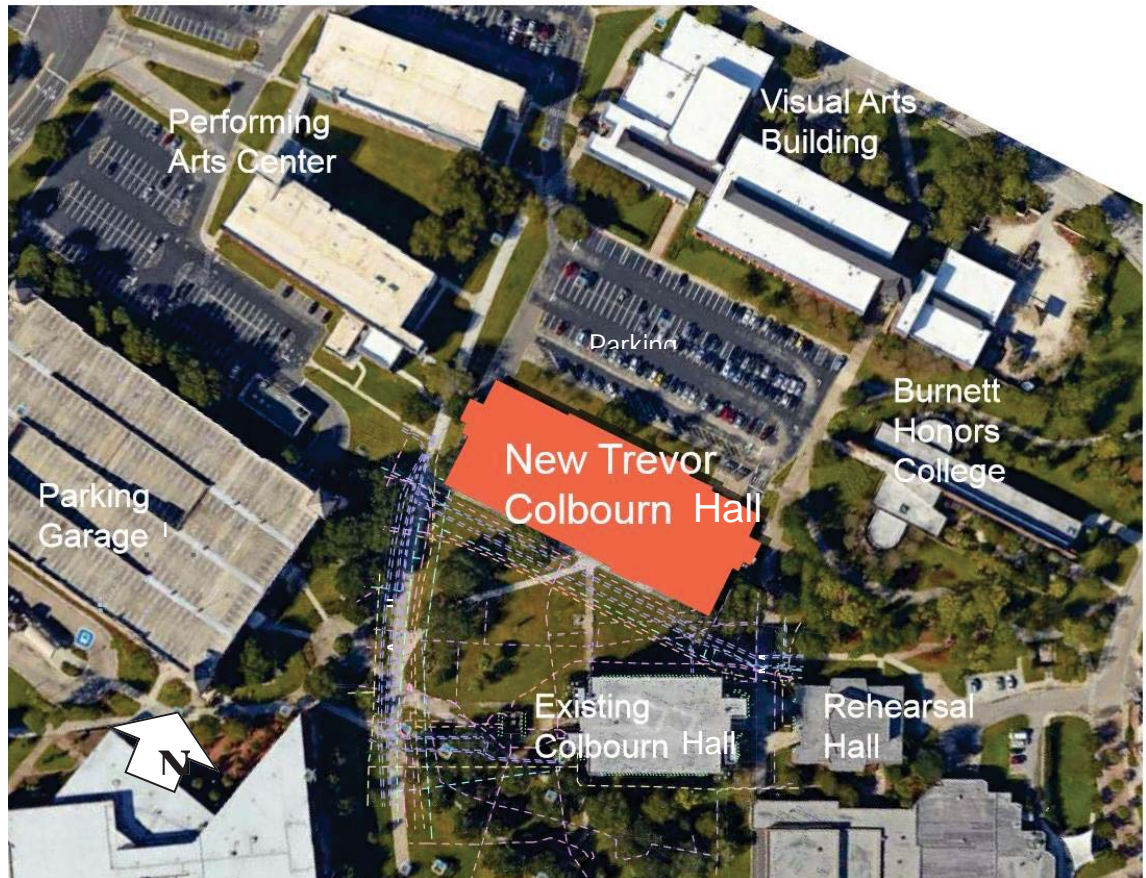
Appendix A - Maps

A.1 UCF Campus Map



Appendix A – Maps

A.2 Site Location for Trevor Colbourn Hall



Appendix A - Maps

A.3 Utilities Map

This map is withheld for security purposes. It is located in Facilities and Safety for those who have a need to access it.

Appendix A - Maps

A.4 Storm Water (Drainage) Map

The most current Storm Water (Drainage) Map is available at:

<http://fp.ucf.edu/sites/default/files/master-planning/stormwatermap.pdf>

Appendix B - Project Schedule

The design of Trevor Colbourn Hall is already well underway; therefore, early Phases are complete, including: Solicitation of and Contract Negotiation with Professionals, Programming, and Schematic Design. This leaves the following Project Phases:

Project Phases	Completion Dates	Months
Design Development	<i>50% DD Workshop</i> 1 December 2016 <i>100% DD Submittal to UCF</i> 15 January 2017	3.5
Construction Documents	<i>50% CD Workshop</i> 15 March 2017 <i>100% CD Submittal to UCF</i> 1 May 2017	3.5
Bidding Bid/Permitting, Contract Negotiation (Contractor)	<i>Advertisement for Construction Bids</i> <i>Bids for Construction Received</i> 1 June 2017 <i>Award Construction Contract</i> 1 July 2017	2
Construction Commissioning, Close-out, Move-in, and Occupancy	<i>Notice to Proceed through Final Completion</i> 1 August 2018	13
Project Duration	<i>Schematic Design through Final Completion</i> 22 Months	
Warranty Phase	<i>Warranty Period Begins</i> 1 Aug 2018 <i>Warranty Period Completion</i> 31 July 2020	24

Appendix C - Program Funds

Funding Sources

Public Education Capital Outlay (PECO)	\$0
Capital Improvement Trust Fund (CITF)	\$0
Courtellis Facility Enhancement Challenge Grant	\$0
Private Matching Funds	\$0
University Funding	\$38,000,000
Total Funding Sources	\$38,000,000

Note: PECO funds have been requested.

Appendix D - Program Budget Summary

Budget Categories

Planning <i>Includes design fees, professional management services, permitting expenses, surveys, testing, and contingency.</i>	\$3,739,200
Construction <i>Includes utilities and infrastructure, landscape and irrigation, Art in State, demolition of Colbourn Hall, and contingency.</i>	\$31,281,600
Furniture, Fixtures and Equipment	\$2,979,200
Total Project Budget	\$38,000,000

Appendix E - Space Files

E.1 Program Area Table

Space Categories shown in the Program Area Table are from State University System of Florida, Explanation of the Space Needs Generation Formula, SPACE STANDARDS, Appendix B, pg. 92.

Carefully review the Space Files with the Space Diagrams. The Space Files supersede the Space Diagrams.

Space Category	Square Footage¹		
	ASF	Net to Gross Conversion	GSF
Classrooms	7,425	1.5	11,138
Teaching Labs	1,975	1.5	0
Research Labs	0	1.5	0
Study	1,725	1.4	2,415
Instructional Media	0	1.5	0
Auditorium/Exhibit	0	1.2	0
Teaching Gymnasium	0	1.2	0
Office	79,390	1.5	119,085
Campus Support Services	0	1.4	0
Programmed Space (ASF)²	90,515		
Total Gross Square Feet (GSF)			135,600

Notes:

1) SQUARE FOOTAGE...SREF Chapter 1, Section 1.2, Item (86)

(a) **Assignable Square Footage (ASF)**. ... the enclosed and interior floor area assigned to or available to be assigned to an occupant or specific use

(b) **Nonassignable Square Footage** (also, **Net Nonassignable Square Footage**) ...the floor area of a building not available for assignment ... but necessary for the general operation of the building; (e.g.) custodial, circulation, mechanical and toilet areas

(c) **Net Square Footage** (also, **Net Usable Square Footage**). This includes assignable square footage and nonassignable square footage.

(d) **Structural Square Footage**. The floor area of a building that cannot be occupied or used because of structural building features...interior and exterior walls, or unusable areas in attics.

(e) **Gross Square Footage (GSF)**. The sum of all floor areas on all floors of a building included within the outside faces of its exterior walls.

2) For detail about Programmed Space, including Occupiable Shell, see Appendix E -Space Files, E.2 Summary of Required Spaces.

Appendix E - Space Files

E.2 Summary of Required Spaces

The following “Summary of Required Spaces” lists every room or area justified for Trevor Colbourn Hall, the area of each room, and the department or program that requested the space. A separate list is available that lists every occupant, by name, if known.

Note: Review these Space Files carefully, along with the diagrams included in APPENDIX F - Supplemental Materials, F.1 Space Diagrams. The Space Files supersede the Space Diagrams.

Summary of Required Spaces - *Net Assignable Square Feet*

90,515

Room Type	Description	Quantity of Like		ASF		Subtotal	Total	Unit Totals
		Rooms	Stations					
Learning Spaces								9,400
CLASSROOMS						5,325		
	General Purpose Classroom - replaces CH 204	1	@	725	=	725		
	General Purpose Classroom - replaces CH 207E	1	@	725	=	725		
	General Purpose Classroom - replaces CH 126	1	@	950	=	950		
	General Purpose Classroom - History request, replaces CH 516	1	@	400	=	400		
	General Purpose Classroom - Interdisciplinary request - replaces CB1 219	1	@	1,575	=	1,575		
	General Purpose Classroom and Presentation Rm - Grad Studies request, replaces CH 128	1	@	950	=	950		
CLASS LABS						1,975		
	Tech Writing Lab - English request, replaces CH 203	1	@	950	=	950		
	Modern Language Lab - Mod Lang request, replaces VAB 221	1	@	725	=	725		
	Seminar, Computer Lab (10 sta) - colocated with Texts and Technology	1	@	300	=	300		
CLASSROOM SERVICE						2,100		
	Queueing, Breakout, Teaming, etc.	Distributed			=	1,500		
	GTA Office Hours Rooms	6	@	100	=	600		
Shared and Available Office Space								29,850
	Conference Room (20 sta.)	1	@	400	=	400		
	Conference Room (30 sta.)	1	@	600	=	600		
	Break Room - 1 per floor	3	@	500	=	1,500		
	Quiet Rooms - distributed, varied in size				=	450		
	Collaborative Workspace - distributed	406	@	25	=	10,150		
	Occupiable Shell				=	16,750		
History		56	Employees				6,255	
	Classroom	1	@	400	See Learning Spaces			
OFFICE SPACE						6,255		
	Capstone, Language Testing Office	1	@	100	=	100		
	RICHES Center - Display	1	@	0	=	0		
	RICHES Center - Sound Room	1	@	50	=	50		
	Department Reception (1 Staff and 3 OPS Students)	1	@	200	=	200		
	Public Reception	1	@	200	=	200		
	Mail and Supply Room	1	@	100	=	100		
	Unique Storage	1	@	100	=	100		
	File Room	1	@	100	=	100		
	RICHES Center - Work Space	1	@	100	=	100		
	ADMINISTRATION	5	@	125	=	625		
	INSTRUCTIONAL (Prof, Assoc Prof, Asst Prof, Lecturers, Instructors)	30	@	105	=	3,150		
	STAFF	5	@	100	=	500		
	PART-TIME or SHARED							
	Faculty, double occupancy	1	@	105	=	105		
	Adjuncts, double occupancy	5	@	105	=	525		
	Staff, double occupancy	2	@	100	=	200		
	GTA		8	@	25	=	200	

English	48	Employees	6,490			
Tech Writing Lab	1	@	950	See Learning Spaces		
OFFICE SPACE	6,490					
Journal Offices - Cypress Dome, Florida Review	2	@	300	=	600	
Journal Office - Faulkner Journal	1	@	100	=	100	
Reception	1	@	300	=	300	
Conference Room	1	@	400	=	400	
Unique Storage	1	@	100	=	100	
Mail and Supply Room	1	@	100	=	100	
File Room	1	@	100	=	100	
ADMINISTRATION (1 Chair, 3 Directors)	4	@	125	=	500	
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	37	@	105	=	3,885	
STAFF	2	@	100	=	200	
PART-TIME or SHARED						
Regional Faculty - double occupancy	1	@	105	=	105	
GTA		4 @	25	=	100	
Modern Languages and Literatures	62	Employees	7,110			
Modern Language Lab	1	@	725	See Learning Spaces		
OFFICE SPACE	7,110					
Reception (3 Student Assistants)	1	@	200	=	200	
Conference Room	1	@	400	=	400	
Mail and Supply Room	1	@	100	=	100	
Eye-Tracker Room (2 to 4 sta.)	1	@	100	=	100	
ADMINISTRATION	8	@	125	=	1000	
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	40	@	105	=	4200	
STAFF	3	@	100	=	300	
STAFF - approved at 80asf	1	@	80	=	80	
PART-TIME or SHARED						
Adjuncts, double occupancy	6	@	105	=	630	
Students		4 @	25	=	100	
Africana, Judaic, Latin American, and Women's Studies	17	Employees	2,635			
AFRICANA STUDIES OFFICE SPACE	630					
Multipurpose Room (10-15 sta.)	1	@	200	=	200	
File Wall	1	@	50	=	50	
Display Wall	1	@	0	=	0	
ADMINISTRATION	1	@	125	=	125	
STAFF	1	@	100	=	100	
PART-TIME or SHARED						
Adjuncts, double occupancy	1	@	105	=	105	
GTA		2 @	25	=	50	
JUDAIC STUDIES OFFICE SPACE	795					
File Wall	1	@	50	=	50	
ADMINISTRATION	1	@	125	=	125	
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	2	@	105	=	210	
STAFF	1	@	100	=	100	
PART-TIME or SHARED						
Adjuncts, double occupancy	2	@	105	=	210	
Students - work study		4 @	25	=	100	

LATIN AMERICAN STUDIES OFFICE SPACE					380
File Wall	1	@	50	=	50
ADMINISTRATION	1	@	125	=	125
STAFF	1	@	100	=	100
PART-TIME or SHARED					
Adjuncts, double occupancy	1	@	105	=	105
WOMEN'S STUDIES OFFICE SPACE					830
Reading Rm (3 to 4 sta.)	1	@	100	=	100
Unique Storage	1	@	50	=	50
Secure File Room	1	@	50	=	50
Main Office Student Hub (4 sta.)	1	@	300	=	300
ADMINISTRATION	1	@	125	=	125
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	1	@	105	=	105
STAFF	1	@	100	=	100
Writing & Rhetoric	64	Employees			6,205
OFFICE SPACE					6,205
Unique Storage	1	@	100	=	100
Conference Room	1	@	400	=	400
Mail and Copy Room	1	@	200	=	200
ADMINISTRATION (1 Chair, 4 Directors)	5	@	125	=	625
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	34	@	105	=	3,570
STAFF	2	@	100	=	200
STAFF - future, approved at 80asf	1	@	80	=	80
PART-TIME or SHARED					
Adjuncts, double occupancy	6	@	105	=	630
GTA		16	@	25	= 400
Writing Across the Curriculum (WAC)	4	Employees			840
OFFICE SPACE					840
WAC and Writing Center Multipurpose Room (20 sta.)	1	@	400	=	400
ADMINISTRATION	1	@	125	=	125
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	3	@	105	=	315
Writing Center	3	Employees			1,695
OFFICE SPACE					1,695
Reception - Shared with WAC	1	@	200	=	200
Online Tutoring (1 Staff per office)	2	@	60	=	120
Secure Technology	1	@	50	=	50
Tutoring Space (30 sta.)	1	@	900	=	900
ADMINISTRATION	1	@	125	=	125
STAFF	2	@	100	=	200
PART-TIME or SHARED					
Peer Tutors Breakroom				=	100
Center for Humanities and Digital Research (CHDR)	11	Employees			720
OFFICE SPACE					720
CBB Office	1	@	200	=	200
CHDR hub area (4 Faculty and Staff)	1	@	220	=	220
Chinavine Office	1	@	100	=	100
Chinavine Office (2 sta.)	1	@	100	=	100
STAFF	1	@	100	=	100

Texts and Technology	10	Employees	555			
Seminar and Computer Lab (10 sta.) - collocated with Texts and Technology	1	@	300	See Learning Spaces		
OFFICE SPACE					555	
ADMINISTRATION	1	@	125	=	125	
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	1	@	105	=	105	
STAFF	1	@	100	=	100	
PART-TIME or SHARED						
GTA		9	@	25	=	225
Burnett Honors College (BHC)	7	Employees	1,135			
OFFICE SPACE					1,135	
Reception and Seating	1	@	300	=	300	
Conference Room (8 sta.)	1	@	175	=	175	
File Wall	1	@	50	=	50	
ADMINISTRATION	2	@	125	=	250	
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	2	@	105	=	210	
STAFF	1	@	100	=	100	
PART-TIME or SHARED						
GTA		2	@	25	=	50
Interdisciplinary Studies	20	Employees	3,025			
Classroom	1	@	1,575	See Learning Spaces		
OFFICE SPACE					3,025	
Multi-purpose Room	1	@	600	=	600	
Student Room	1	@	100	=	100	
Reception (6 waiting, 2 @ Computers and Telephones)	1	@	150	=	150	
Conference (10sta)	1	@	200	=	200	
File wall	1	@	50	=	50	
ADMINISTRATION	1	@	125	=	125	
INSTRUCTIONAL (Prof, Assoc. Prof, Asst. Prof, Lecturers, Instructors)	9	@	105	=	945	
STAFF	7	@	100	=	700	
PART-TIME or SHARED						
Adjunct, double occupancy	1	@	105	=	105	
Students (2 OPS Peer Advisors)		2	@	25	=	50
Graduate Studies	5	Employees	2,000			
Classroom - Presentation Room	1	@	950	See Learning Spaces		
OFFICE SPACE					2,000	
Computer Workspace (2 at 4-6 sta.)	2	@	150	=	300	
Multi-Purpose Space (Casual Seating for 34)	1	@	850	=	850	
Conference Room	1	@	250	=	250	
Unique Storage	1	@	100	=	100	
STAFF	5	@	100	=	500	
College of Arts and Humanities Student Advising (CAHSA)	14	Employees	1,475			
OFFICE SPACE					1,475	
Reception for 4-5	1	@	200	=	200	
Conference Room	1	@	200	=	200	
Secure Storage	1	@	100	=	100	
File Wall	1	@	50	=	50	
Copy and Supply Room	1	@	100	=	100	

ADMINISTRATION	1	@	125	=	125
STAFF	5	@	100	=	500
PART-TIME or SHARED					
GTA		8 @	25	=	200
Academic Advancement Programs (AAP)	5	Employees			1,325
OFFICE SPACE					1,325
Multipurpose Room (20 sta.)	1	@	500	=	500
Reception - Shared between AAP, OUR and PPA	1	@	300	=	300
Conference Room (4 sta.)	1	@	100	=	100
File Wall	1	@	50	=	50
ADMINISTRATION	1	@	125	=	125
STAFF	2	@	100	=	200
PART-TIME or SHARED					
GTA		2 @	25	=	50
Undergraduate Studies and Research (OUR)	10	Employees			1,600
OFFICE SPACE					1,600
Multipurpose Room (30 sta.)	1	@	725	=	725
Reception	See AAP				
Unique Storage	1	@	50	=	50
ADMINISTRATION (1 Director, 1 Asst. Dean)	2	@	125	=	250
STAFF - 4 Staff, 1 Student Advisor	5	@	100	=	500
PART-TIME or SHARED					
Student Assistants		3 @	25	=	75
Pre-Professional Advising (PPA)	12	Employees			1,550
OFFICE SPACE					1,550
Test Rooms - like CH 215 A and 215 B	2	@	150	=	300
Study Area	1	@	100	=	100
Reception and Seating	See AAP				
Conference Room (8 sta.)	1	@	175	=	175
File Wall	1	@	50	=	50
ADMINISTRATION	1	@	125	=	125
STAFF	7	@	100	=	700
PART-TIME or SHARED					
Student Assistants		4 @	25	=	100
Student Development and Enrollment Services (SDES)	52	Employees			5,870
<i>Student Academic Resource Center (SARC), Student Success Center (SSC), Transfer & Transition services (TTS), Advising & Exploration (FYAE/SSYA)</i>					
STUDY					1,725
SARC Study Room (70 sta.)	1	@	1,725	=	1,725
OFFICE SPACE					4,145
Reception - shared between SARC, SDES, FAYE, T&T, and SSYA	1	@	250	=	250
Unique Storage	1	@	100	=	100
Work Storage Room	1	@	200	=	200
4 Student Computer Stations	1	@	160	=	160
ADMINISTRATION	5	@	125	=	625
STAFF	14	@	100	=	1,400
STAFF - Advisors, in smaller offices (by agreement with SDES)	13	@	70	=	910
PART-TIME or SHARED					
GTA and Students		20 @	25	=	500

IT Office (CAH)		4	Employees				500
OFFICE SPACE							500
Reception, includes Public Area and Workroom for 4 staff		1	@	320	=	320	
Equipment Storage		1	@	100	=	100	
STAFF (Supervisor)		1	@	80	=	80	
Associate Dean Suite (Undergraduate Studies)		2	Employees				280
OFFICE SPACE (not included in the Project Budget)							280
Reception and waiting, filing, copying and printing		1	@	155	=	155	
ADMINISTRATION		1	@	125	=	125	
STAFF		See Reception					

Appendix F - Supplemental Materials

F.1 Space Diagrams

Chapter 8.0 - PROGRAM AREA Design Requirements reads: *Provide bubble diagrams to clarify programmatic relationships and functional adjacencies.*

Because the project is now far past bubble diagrams, the following Schematic Design Space Diagrams have been provided by SchenkelShultz Architects.

- First Floor
- Second Floor
- Third Floor

Note: Review these Space Diagrams carefully, along with the Space Files in APPENDIX E - Space Files, E.2 Summary of Required Spaces. The Space Files supersede the Space Diagrams.

01 FIRST FLOOR

TYPICAL OFFICE SIZES
 TYPE 1 OFFICE - 125 SF
 TYPE 2 OFFICE - 100 SF
 TYPE 3 OFFICE - 105 SF
 TYPE 4 OFFICE - 70 SF



02 SECOND FLOOR

TYPICAL OFFICE SIZES
 TYPE 1 OFFICE - 125 SF
 TYPE 2 OFFICE - 100 SF
 TYPE 3 OFFICE - 105 SF
 TYPE 4 OFFICE - 70 SF



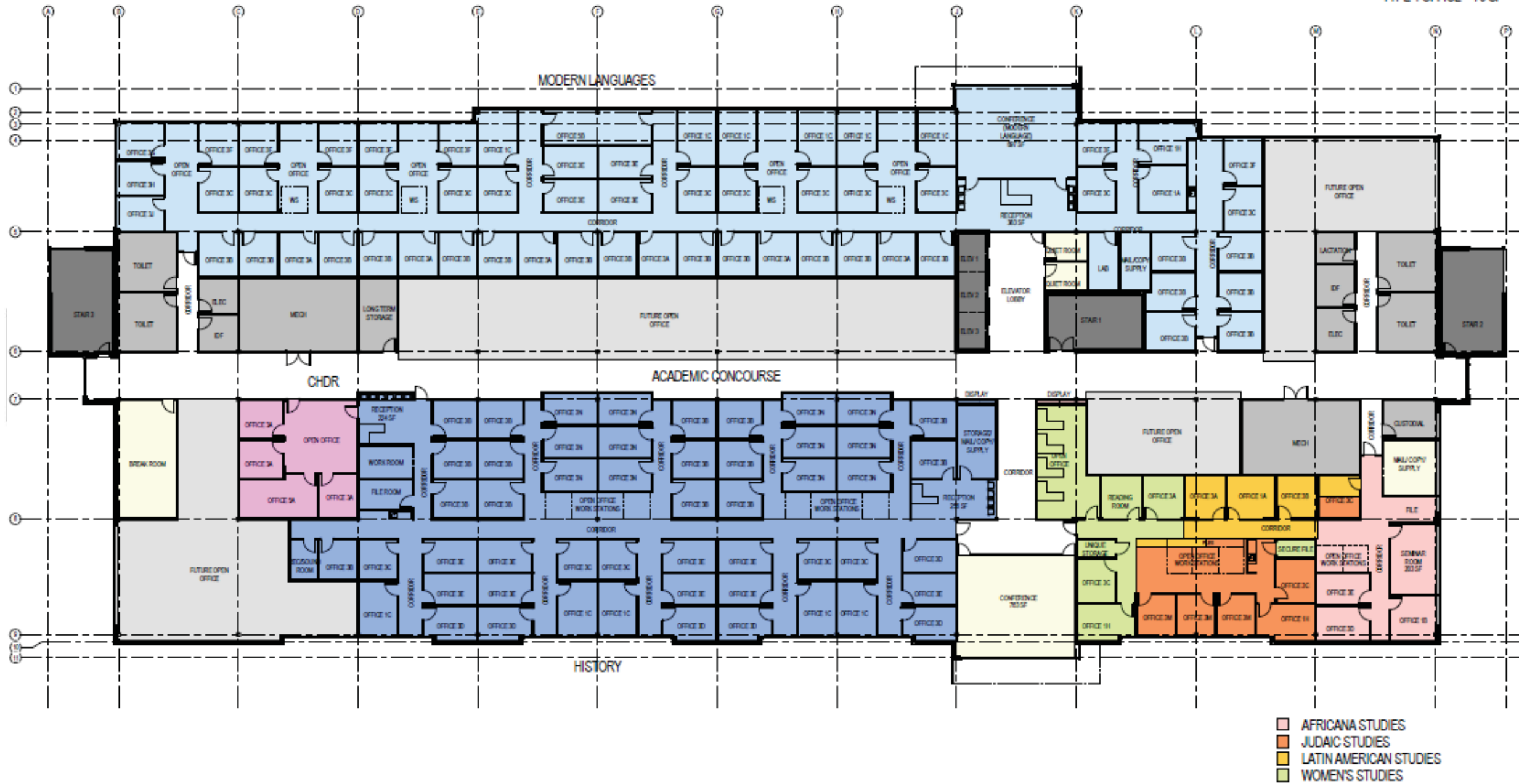
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Issue Date 9/8/2016

SCHENKELSHULTZ
 ARCHITECTURE

03 THIRD FLOOR

TYPICAL OFFICE SIZES
TYPE 1 OFFICE - 125 SF
TYPE 2 OFFICE - 100 SF
TYPE 3 OFFICE - 105 SF
TYPE 4 OFFICE - 70 SF



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Appendix F - Supplemental Materials

F.2 List of Space(s) to Be Released

To support reassignment to and use by *any* department, the university requires that space be released in contiguous areas; e.g., entire office suites, lab blocks, etc. The following list of Space(s) to be Released is a catalog of the actual rooms from which personnel are moving to the new facility. This is not intended as a list of the exact rooms that should be released. Further discussion with SPAA will determine the exact rooms to be released.

Student Development and Enrollment Services (SDES)

Bldg.		Room #	Type of Room	Department	ASF
HPH	Howard Phillips Hall	Rm 101	Office	SDES	325
HPH	Howard Phillips Hall	Rm 102A	Office	SDES - FYAE	88
HPH	Howard Phillips Hall	Rm 102B	Office	SDES - FYAE	96
HPH	Howard Phillips Hall	Rm 102C	Office	SDES - FYAE	127
HPH	Howard Phillips Hall	Rm 102D	Office	SDES - FYAE	149
HPH	Howard Phillips Hall	Rm 102E	Office	SDES - FYAE	205
HPH	Howard Phillips Hall	Rm 102F	Office Service	SDES - FYAE	64
HPH	Howard Phillips Hall	Rm 102G	Office Service	SDES - FYAE	50
HPH	Howard Phillips Hall	Rm 103A	Office	SDES - FYAE	94
HPH	Howard Phillips Hall	Rm 112	Study Rm	SARC	243
HPH	Howard Phillips Hall	Rm 113	Office	SARC	342
HPH	Howard Phillips Hall	Rm 113A	Office	SARC	156
HPH	Howard Phillips Hall	Rm 113B	Office Service	SARC	49
HPH	Howard Phillips Hall	Rm 114	Office	SARC	125
HPH	Howard Phillips Hall	Rm 114A	Office	SARC	126
HPH	Howard Phillips Hall	Rm 114B	Office	SARC	122
HPH	Howard Phillips Hall	Rm 114C	Office	SARC	122
HPH	Howard Phillips Hall	Rm 115	Study Rm	SARC	1506
HPH	Howard Phillips Hall	Rm 115A	Office	SARC	125
HPH	Howard Phillips Hall	Rm 115B	Reception	SARC	31
HPH	Howard Phillips Hall	Rm 116A	Office	SDES - FYAE	101
HPH	Howard Phillips Hall	Rm 116B	Office	SDES - FYAE	108
HPH	Howard Phillips Hall	Rm 116C	Office	SDES - FYAE	104
HPH	Howard Phillips Hall	Rm 116D	Office	SDES - FYAE	171
HPH	Howard Phillips Hall	Rm 116E	Office	SDES - FYAE	101
HPH	Howard Phillips Hall	Rm 116F	Office	SDES - FYAE	101
HPH	Howard Phillips Hall	Rm 116G	Conference Rm	SDES - FYAE	164
HPH	Howard Phillips Hall	Rm 116H	Office	SDES - FYAE	108
HPH	Howard Phillips Hall	Rm 116I	Office	SDES - FYAE	71
HPH	Howard Phillips Hall	Rm 116J	Office Service	SDES - FYAE	13
HPH	Howard Phillips Hall	Rm 116K	Office	SDES - FYAE	100
HPH	Howard Phillips Hall	Rm 116L	Office	SDES - FYAE	121
HPH	Howard Phillips Hall	Rm 116M	Office	SDES - FYAE	100
HPH	Howard Phillips Hall	Rm 116N	Office	SDES - FYAE	122

HPH	Howard Phillips Hall	Rm 116O	Office	SDES - FYAE	102
HPH	Howard Phillips Hall	Rm 215	Lobby, Office	SDES - SSYC	454
HPH	Howard Phillips Hall	Rm 215A	Office	SDES - SSYC	99
HPH	Howard Phillips Hall	Rm 215B	Office	SDES - SSYC	99
HPH	Howard Phillips Hall	Rm 215C	Office	SDES - SSYC	125
HPH	Howard Phillips Hall	Rm 215D	Office	SDES - SSYC	90
HPH	Howard Phillips Hall	Rm 216	Office	SDES - FYAE	93
HPH	Howard Phillips Hall	Rm 216A	Office	SDES - FYAE	126
HPH	Howard Phillips Hall	Rm 216B	Office, Workroom	SDES - FYAE	190
HPH	Howard Phillips Hall	Rm 216C	Office Service	SDES - FYAE	63
HPH	Howard Phillips Hall	Rm 216D	Office	SDES - FYAE	40
HPH	Howard Phillips Hall	Rm 217A	Office	SDES - T&T	100
HPH	Howard Phillips Hall	Rm 217B	Office	SDES - T&T	56
HPH	Howard Phillips Hall	Rm 217C	Office	SDES - T&T	146
HPH	Howard Phillips Hall	Rm 221A	Office	SDES - T&T	100
HPH	Howard Phillips Hall	Rm 221B	Office	SDES - T&T	14
HPH	Howard Phillips Hall	Rm 221C	Office Service	SDES - T&T	85
HPH	Howard Phillips Hall	Rm 221D	Office	SDES - T&T	192
HPH	Howard Phillips Hall	Rm 221E	Office	SDES - T&T	110
HPH	Howard Phillips Hall	Rm 221F	Office	SDES - T&T	163
Total					8,077

Undergraduate Studies - OUR, AAP, PPA, Interdisciplinary

Bldg.		Room #	Type of Room	Department	ASF
TC II	Technology Commons II	Rm 209A	Office Service	OUR	283
TC II	Technology Commons II	Rm 209F	Office	OUR	92
TC II	Technology Commons II	Rm 209G	Office	OUR	92
TC II	Technology Commons II	Rm 209H	Office	OUR	92
TC II	Technology Commons II	Rm 209J	Office	OUR	93
TC II	Technology Commons II	Rm 209K	Office	OUR	93
TC II	Technology Commons II	Rm 217	Office Service	AAP	38
TC II	Technology Commons II	Rm 218	Office	AAP	172
TC II	Technology Commons II	Rm 221	Office/Lobby	AAP	194
TC II	Technology Commons II	Rm 221A	Office, Conf. Rm	AAP	188
TC II	Technology Commons II	Rm 221B	Office	AAP	133
TC II	Technology Commons II	Rm 224	Meeting Rm	AAP	317
FC-G	Ferrell Commons - Bldg G	Rm 197	Office	PPA	217
FC-G	Ferrell Commons - Bldg G	Rm 198	Office	PPA	154
FC-G	Ferrell Commons - Bldg G	Rm 199	Office Service	PPA	75
FC-G	Ferrell Commons - Bldg G	Rm 200	Conference Rm	PPA	273
FC-G	Ferrell Commons - Bldg G	Rm 201	Lobby	PPA	352
FC-G	Ferrell Commons - Bldg G	Rm 203	Office	PPA	150
FC-G	Ferrell Commons - Bldg G	Rm 204	Office	PPA	132
FC-G	Ferrell Commons - Bldg G	Rm 205	Office	PPA	132
FC-G	Ferrell Commons - Bldg G	Rm 215A	Office/Test Room	PPA	108
FC-G	Ferrell Commons - Bldg G	Rm 215B	Office/Test Room	PPA	109
FC-G	Ferrell Commons - Bldg G	Rm 215C	Office	PPA	112
FC-G	Ferrell Commons - Bldg G	Rm 215D	Office/Test Room	PPA	112

FC-G	Ferrell Commons - Bldg G	Rm 216	Office	PPA	140
FC-G	Ferrell Commons - Bldg G	Rm 217	Office Service	PPA	136
CB1	Classroom Building 1	Rm 219	Classroom	Interdisciplinary	1,393
CB1	Classroom Building 1	Rm 302	Lobby/Reception	Interdisciplinary	154
CB1	Classroom Building 1	Rm 302A	Office	Interdisciplinary	124
CB1	Classroom Building 1	Rm 302B	Office Service	Interdisciplinary	122
CB1	Classroom Building 1	Rm 302C	Office	Interdisciplinary	121
CB1	Classroom Building 1	Rm 302J	Office	Interdisciplinary	98
CB1	Classroom Building 1	Rm 302K	Office	Interdisciplinary	108
CB1	Classroom Building 1	Rm 302L	Office	Interdisciplinary	112
CB1	Classroom Building 1	Rm 302M	Office	Interdisciplinary	112
CB1	Classroom Building 1	Rm 302N	Office	Interdisciplinary	116
CB1	Classroom Building 1	Rm 302P	Office	Interdisciplinary	116
CB1	Classroom Building 1	Rm 302Q	Office	Interdisciplinary	198
CB1	Classroom Building 1	Rm 302S	Office/Workroom	Interdisciplinary	180
CB1	Classroom Building 1	Rm 302T	Conference Rm	Interdisciplinary	122
				Total	5,672

Burnett Honors College

Bldg.	Room #	Type of Room	Department	ASF
BHC	Rm 107	Office	OPA	155
BHC	Rm 102A	Office	HIM	140
BHC	Rm 102	Office	HIM	170
			Total	465

Modern Languages

Bldg.	Room #	Type of Room	Department	ASF	
VAB	Visual Arts Building	Rm 221	Class Lab	Modern Languages	872

Appendix F - Supplemental Materials

F.2 List of Space(s) to Be Released

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HPH	Howard Phillips Hall	Rm 102B	Office	SDES - FYAE	96
HPH	Howard Phillips Hall	Rm 102C	Office	SDES - FYAE	127
HPH	Howard Phillips Hall	Rm 102D	Office	SDES - FYAE	149
HPH	Howard Phillips Hall	Rm 102E	Office	SDES - FYAE	205
HPH	Howard Phillips Hall	Rm 102F	Office Service	SDES - FYAE	64
HPH	Howard Phillips Hall	Rm 102G	Office Service	SDES - FYAE	50
HPH	Howard Phillips Hall	Rm 103A	Office	SDES - FYAE	94
HPH	Howard Phillips Hall	Rm 112	Study Rm	SARC	243
HPH	Howard Phillips Hall	Rm 113	Office	SARC	342
HPH	Howard Phillips Hall	Rm 113A	Office	SARC	156
HPH	Howard Phillips Hall	Rm 113B	Office Service	SARC	49
HPH	Howard Phillips Hall	Rm 114	Office	SARC	125
HPH	Howard Phillips Hall	Rm 114A	Office	SARC	126
HPH	Howard Phillips Hall	Rm 114B	Office	SARC	122
HPH	Howard Phillips Hall	Rm 114C	Office	SARC	122
HPH	Howard Phillips Hall	Rm 115	Study Rm	SARC	1506
HPH	Howard Phillips Hall	Rm 115A	Office	SARC	125
HPH	Howard Phillips Hall	Rm 115B	Reception	SARC	31
HPH	Howard Phillips Hall	Rm 116A	Office	SDES - FYAE	101
HPH	Howard Phillips Hall	Rm 116B	Office	SDES - FYAE	108
HPH	Howard Phillips Hall	Rm 116C	Office	SDES - FYAE	104
HPH	Howard Phillips Hall	Rm 116D	Office	SDES - FYAE	171
HPH	Howard Phillips Hall	Rm 116E	Office	SDES - FYAE	101
HPH	Howard Phillips Hall	Rm 116F	Office	SDES - FYAE	101
HPH	Howard Phillips Hall	Rm 116G	Conference Rm	SDES - FYAE	164
HPH	Howard Phillips Hall	Rm 116H	Office	SDES - FYAE	108
HPH	Howard Phillips Hall	Rm 116I	Office	SDES - FYAE	71
HPH	Howard Phillips Hall	Rm 116J	Office Service	SDES - FYAE	13
HPH	Howard Phillips Hall	Rm 116K	Office	SDES - FYAE	100
HPH	Howard Phillips Hall	Rm 116L	Office	SDES - FYAE	121
HPH	Howard Phillips Hall	Rm 116M	Office	SDES - FYAE	100
HPH	Howard Phillips Hall	Rm 116N	Office	SDES - FYAE	122

HPH	Howard Phillips Hall	Rm 116O	Office	SDES - FYAE	102
HPH	Howard Phillips Hall	Rm 215	Lobby, Office	SDES - SSYC	454
HPH	Howard Phillips Hall	Rm 215A	Office	SDES - SSYC	99
HPH	Howard Phillips Hall	Rm 215B	Office	SDES - SSYC	99
HPH	Howard Phillips Hall	Rm 215C	Office	SDES - SSYC	125
HPH	Howard Phillips Hall	Rm 215D	Office	SDES - SSYC	90
HPH	Howard Phillips Hall	Rm 216	Office	SDES - FYAE	Not moving
HPH	Howard Phillips Hall	Rm 216A	Office	SDES - FYAE	Not moving
HPH	Howard Phillips Hall	Rm 216B	Office, Workroom	SDES - FYAE	Not moving
HPH	Howard Phillips Hall	Rm 216C	Office Service	SDES - FYAE	Not moving
HPH	Howard Phillips Hall	Rm 216D	Office	SDES - FYAE	Not moving
HPH	Howard Phillips Hall	Rm 217A	Office	SDES - T&T	100
HPH	Howard Phillips Hall	Rm 217B	Office	SDES - T&T	56
HPH	Howard Phillips Hall	Rm 217C	Office	SDES - T&T	146
HPH	Howard Phillips Hall	Rm 221A	Office	SDES - T&T	100
HPH	Howard Phillips Hall	Rm 221B	Office	SDES - T&T	14
HPH	Howard Phillips Hall	Rm 221C	Office Service	SDES - T&T	85
HPH	Howard Phillips Hall	Rm 221D	Office	SDES - T&T	192
HPH	Howard Phillips Hall	Rm 221E	Office	SDES - T&T	110
HPH	Howard Phillips Hall	Rm 221F	Office	SDES - T&T	163
Total revised 3/3/17					7,565

Undergraduate Studies - OUR, AAP, PPA, Interdisciplinary

Bldg.		Room #	Type of Room	Department	ASF
TC II	Technology Commons II	Rm 209A	Office Service	OUR	283
TC II	Technology Commons II	Rm 209F	Office	OUR	92
TC II	Technology Commons II	Rm 209G	Office	OUR	92
TC II	Technology Commons II	Rm 209H	Office	OUR	92
TC II	Technology Commons II	Rm 209J	Office	OUR	93
TC II	Technology Commons II	Rm 209K	Office	OUR	93
TC II	Technology Commons II	Rm 217	Office Service	AAP	38
TC II	Technology Commons II	Rm 218	Office	AAP	172
TC II	Technology Commons II	Rm 221	Office/Lobby	AAP	194
TC II	Technology Commons II	Rm 221A	Office, Conf. Rm	AAP	188
TC II	Technology Commons II	Rm 221B	Office	AAP	133
TC II	Technology Commons II	Rm 224	Meeting Rm	AAP	317
Technology Commons II				Subtotal	1787
FC-G	Ferrell Commons - Bldg G	Rm 197	Office	PPA	217
FC-G	Ferrell Commons - Bldg G	Rm 198	Office	PPA	154
FC-G	Ferrell Commons - Bldg G	Rm 199	Office Service	PPA	75
FC-G	Ferrell Commons - Bldg G	Rm 200	Conference Rm	PPA	273
FC-G	Ferrell Commons - Bldg G	Rm 201	Lobby	PPA	352
FC-G	Ferrell Commons - Bldg G	Rm 203	Office	PPA	150
FC-G	Ferrell Commons - Bldg G	Rm 204	Office	PPA	132

FC-G	Ferrell Commons - Bldg G	Rm 205	Office	PPA	132
FC-G	Ferrell Commons - Bldg G	Rm 215A	Office/Test Room	PPA	108
FC-G	Ferrell Commons - Bldg G	Rm 215B	Office/Test Room	PPA	109
FC-G	Ferrell Commons - Bldg G	Rm 215C	Office	PPA	112
FC-G	Ferrell Commons - Bldg G	Rm 215D	Office/Test Room	PPA	112
FC-G	Ferrell Commons - Bldg G	Rm 216	Office	PPA	140
FC-G	Ferrell Commons - Bldg G	Rm 217	Office Service	PPA	136
Ferrell Commons II				Total	2,202
CB1	Classroom Building 1	Rm 302	Lobby/Reception	Interdisciplinary	154
CB1	Classroom Building 1	Rm 302A	Office	Interdisciplinary	124
CB1	Classroom Building 1	Rm 302B	Office Service	Interdisciplinary	122
CB1	Classroom Building 1	Rm 302C	Office	Interdisciplinary	121
CB1	Classroom Building 1	Rm 302J	Office	Interdisciplinary	98
CB1	Classroom Building 1	Rm 302K	Office	Interdisciplinary	108
CB1	Classroom Building 1	Rm 302L	Office	Interdisciplinary	112
CB1	Classroom Building 1	Rm 302M	Office	Interdisciplinary	112
CB1	Classroom Building 1	Rm 302N	Office	Interdisciplinary	116
CB1	Classroom Building 1	Rm 302P	Office	Interdisciplinary	116
CB1	Classroom Building 1	Rm 302Q	Office	Interdisciplinary	198
CB1	Classroom Building 1	Rm 302S	Office/Workroom	Interdisciplinary	180
CB1	Classroom Building 1	Rm 302T	Conference Rm	Interdisciplinary	122
Classroom Building 1				Total	1683

Burnett Honors College

Bldg.	Room #	Type of Room	Department	ASF
BHC	Rm 107	Office	OPA	155
BHC	Rm 102A	Office	HIM	140
BHC	Rm 102	Office	HIM	170
Total				465

Modern Languages

Bldg.	Room #	Type of Room	Department	ASF
VAB	Rm 221	Class Lab	Modern Languages	872

** PER THE AGREEMENT TO HAVE THE CLASSROOM REPLACED WITH AT LEAST THE SAME CAPACITY*

Appendix F - Supplemental Materials

F.3 Approved Additions

Trevor Colbourn Hall was initially planned to accommodate the academic programs currently within Colbourn Hall. Some growth space was identified early on.

During programming, the following additional office spaces for new hires were approved, funded, and added to the Space Files.

Writing and Rhetoric	Assistant Professor	Provost Approved
Writing and Rhetoric	Instructor for Global	
Writing and Rhetoric	Admin assistant to support Majors	Dean Funded
Writing and Rhetoric	Instructor for Global	
English	Assistant Professor	Provost Approved
English	Instructor Lecturer	Dean Funded
History	Professor	Dean Funded
History	Assistant Professor	Dean Funded
History	Instructor for Global	
History	Instructor for Global	
History	Associate Professor	Dean Hire
History	Instructor Lecturer	Dean Hire
History	Digital History	Provost Approved
History	Visiting Instructor	Dean Hire
Judaic Studies	Professor	Dean Funded
Latin American Studies	Adjunct	Dean Funded
Modern Languages	Asst. Prof/Director of TESOL MA program	Provost Approved
Modern Languages	Asst. Professor	Provost Approved
Modern Languages	Office Assistant	Provost Approved
Modern Languages	Assist Professor/Spanish	Dean Funded
Modern Languages	Instructor/Japanese	Dean Funded
Modern Languages	Visiting Instructor- French	Dean Funded
Modern Languages	Visiting Instructor- Japanese	Dean Funded
Modern Languages	Visiting Instructor- Spanish/Port.	Dean Funded
Modern Languages	Professor/Director of 3 UGrad Certs/Overseer Spanish	Dean Funded
Modern Languages	Professor	Dean Funded
Modern Languages	Instructor for Global	
Modern Languages	Instructor for Global	
Modern Languages	Instructor for Global	
Office of the Provost	Assistant Dean	
Office of the Provost	Admin Asst. to Asst. Dean	



Budget Retreat UCF Board of Trustees March 3, 2017



UCF



William F. Merck II

Vice President for Administration and Finance and Chief Financial Officer

Tracy Clark

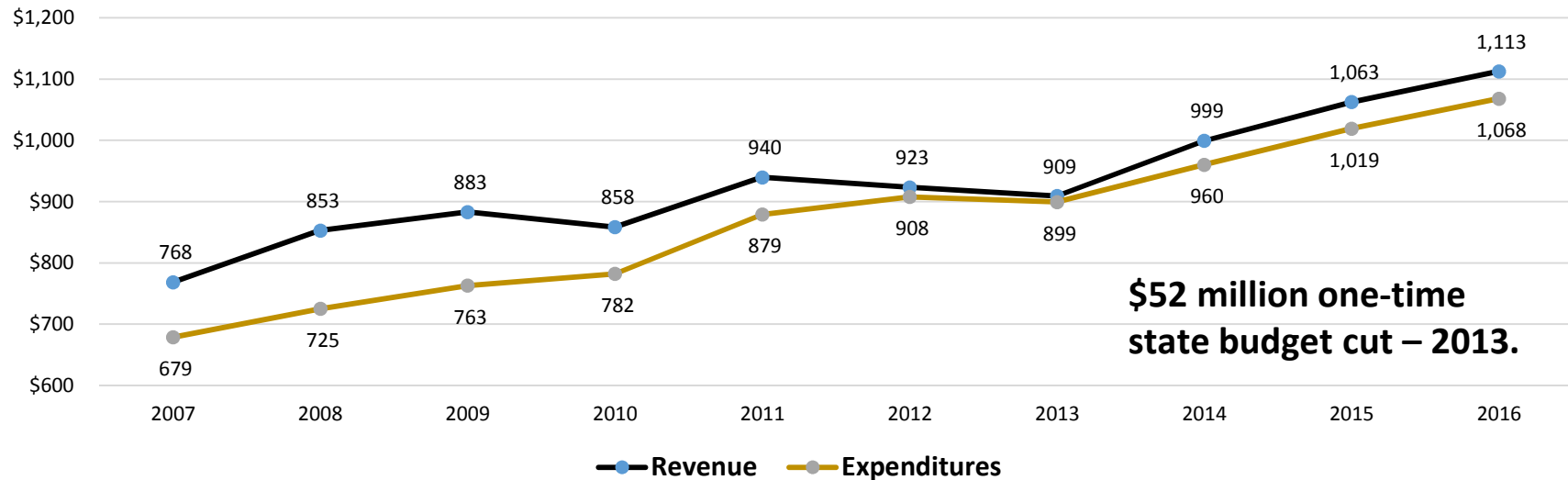
**Associate Provost for Budget, Planning, and Administration and
Associate Vice President for Finance**



UCF

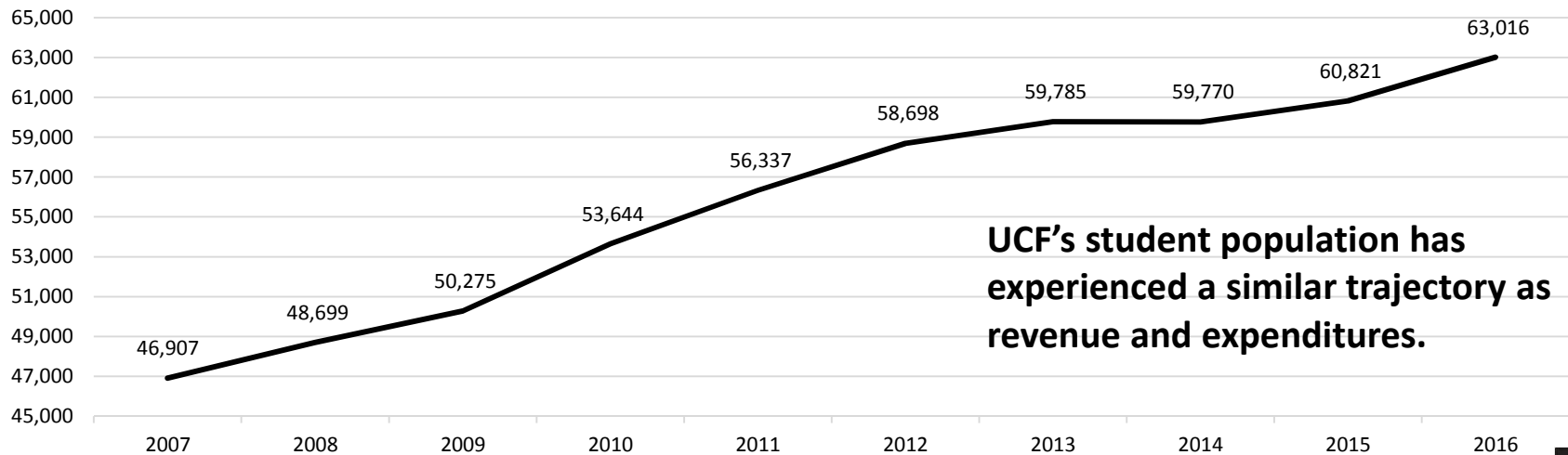
Budget Overview

UCF Financial History (in millions)

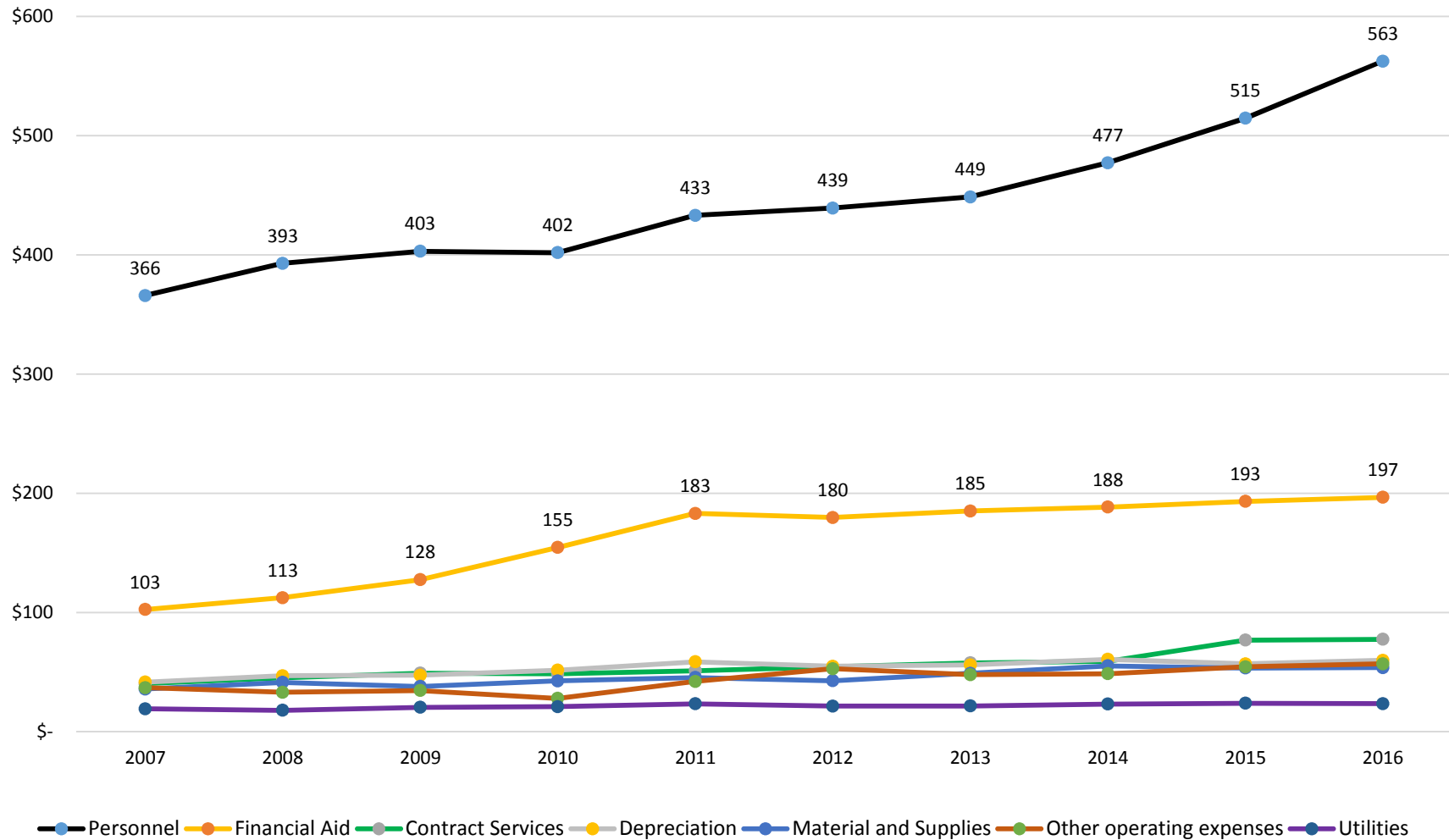


Excludes OPEB and Mark to Market Adjustments

Fall Headcount

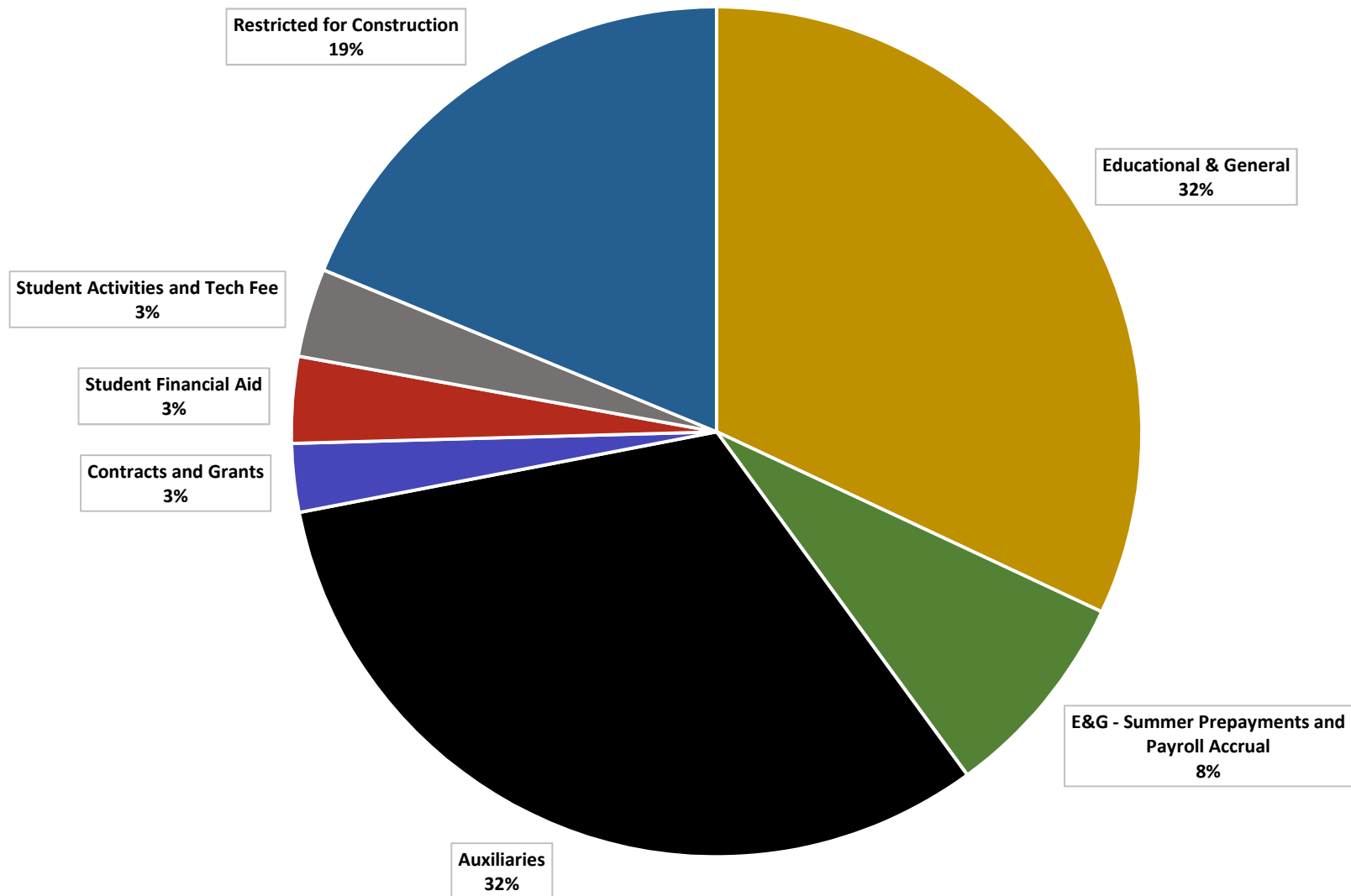


Expenditure Detail (in millions)



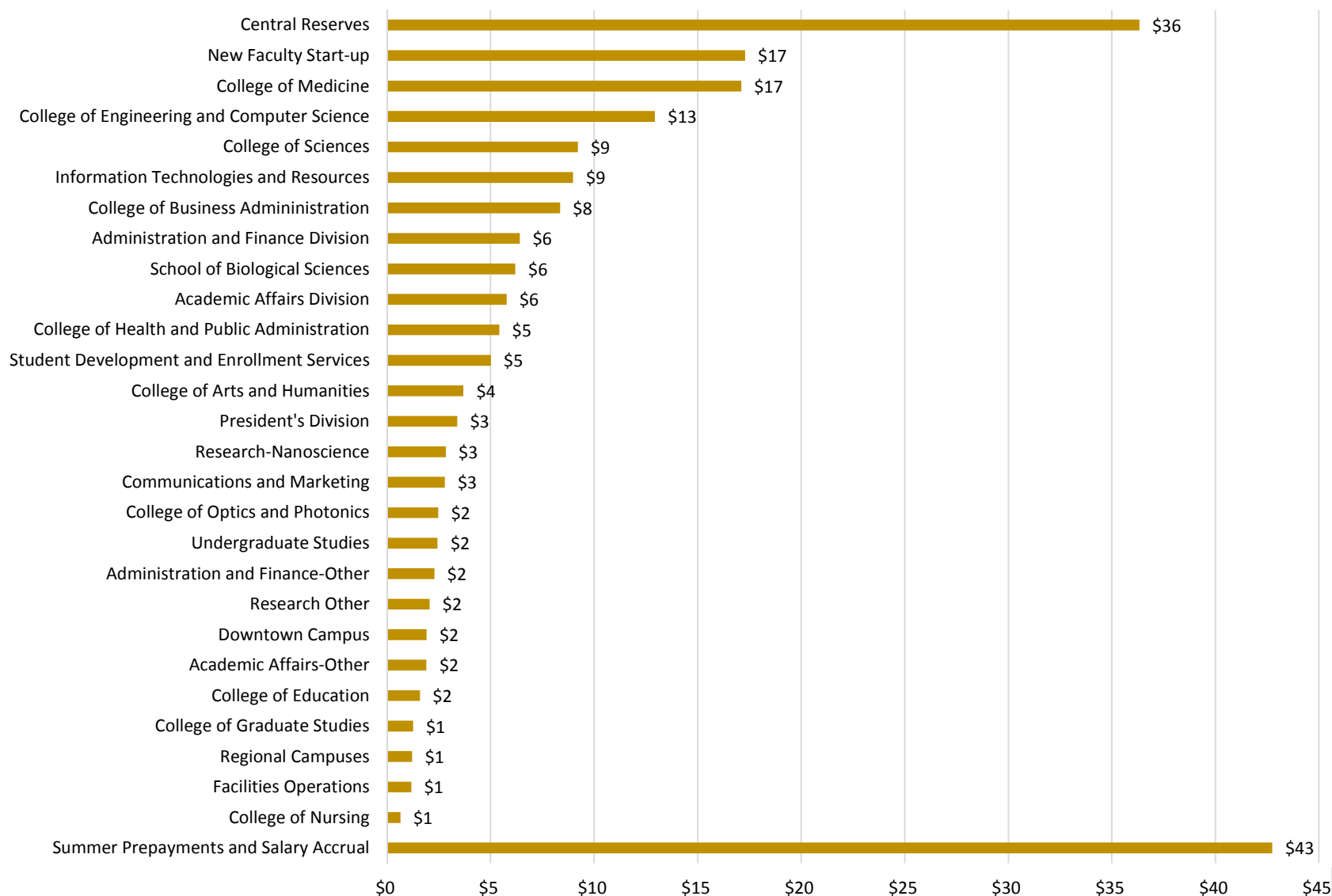
Note: Personnel and financial aid are the two major expense categories that grew.

Operating Cash as of 6/30/2016

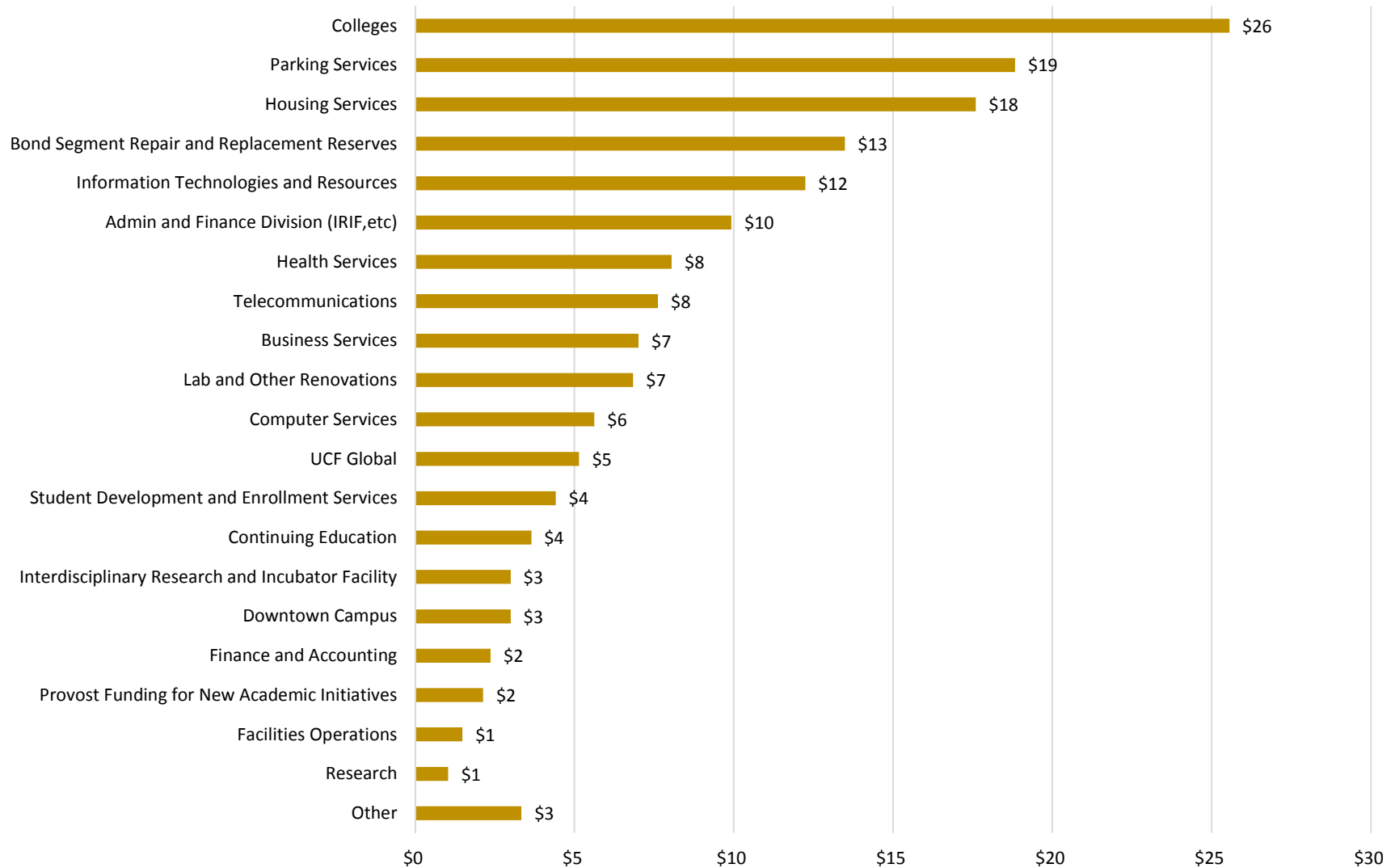


Operating Cash - Education & General as of 6/30/2016

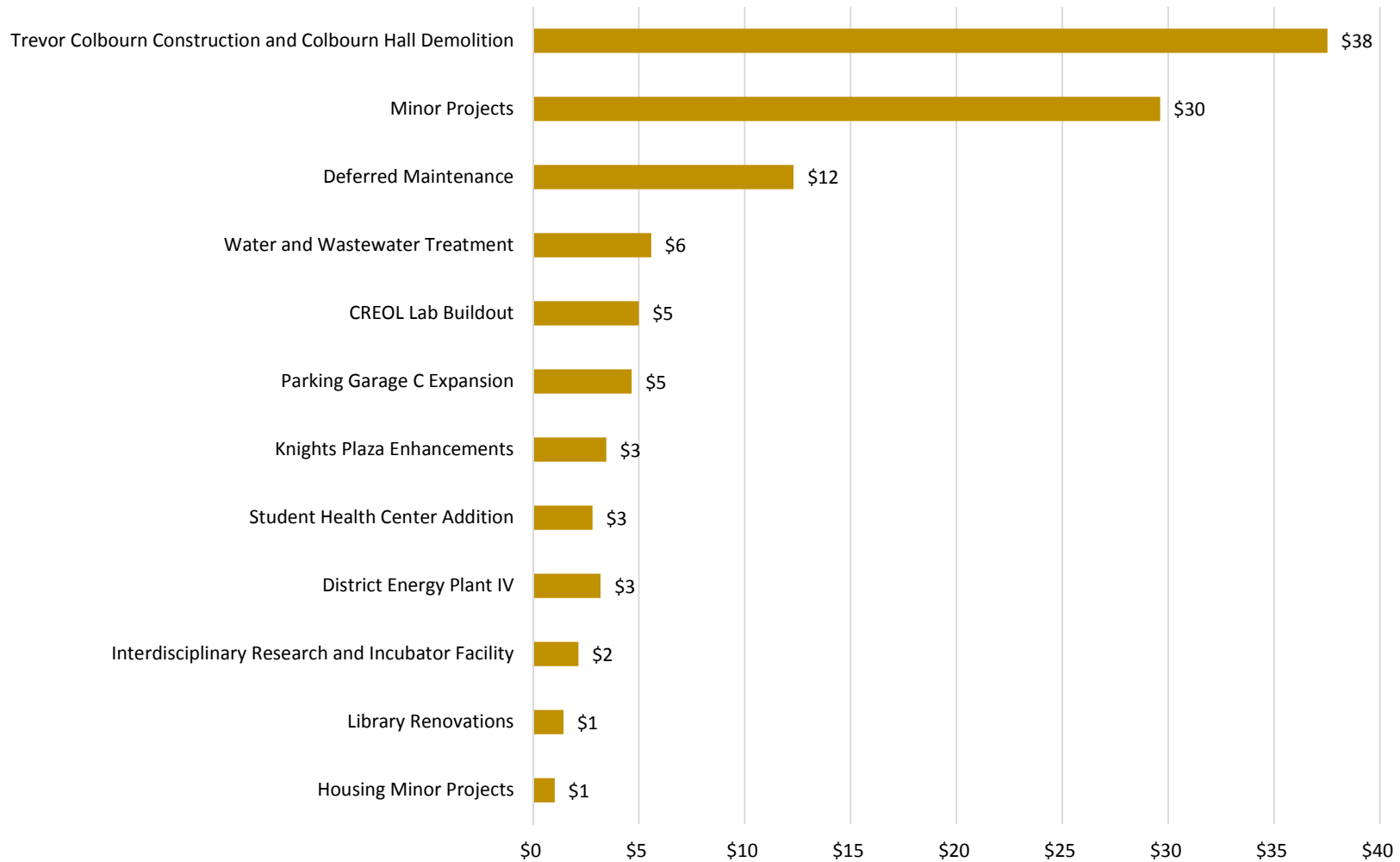
(in millions)



Operating Cash – Auxiliaries as of 6/30/2016 (in millions)



Restricted Cash – Construction as of 6/30/2016 (in millions)



UCF's Budget Objectives

1. Align budget models to support operationalizing the strategic plan
2. Enable better academic leader business decisions through well-communicated, data-driven metrics
3. Find resources for hard-to-fund strategic priorities
4. Maintain continuous adequate resources

Metrics Alignment

	Preeminence Metric	Performance Funding	Collective Impact	Deans' 2020 Goals
Public University National Ranking	✓		✓	
Endowment Size	✓		✓	✓
Grow to 1,200 Full-Time Tenure/Tenure-Track Faculty			✓	✓
National Academy Memberships	✓		✓	
25% New Hire Diversity			✓	✓
6-Year Graduation Rate	✓	✓	✓	✓
Freshman Retention Rate	✓	✓	✓	✓
Average GPA and SAT Score	✓		✓	
Increase Graduate Student Headcount			✓	✓
Number of Post-Doctoral Appointees	✓		✓	
Doctoral Degrees Awarded Annually	✓			✓
National Ranking in Research Expenditures	✓			
Double Research Awards			✓	✓
Non-Medical Science & Engineering Research Expenditures	✓			
Science and Engineering Expenditures	✓			
Patents Awarded	✓		✓	

✓ Have met state's 2016 metric for Preeminence designation



UCF

Central Budget Administration

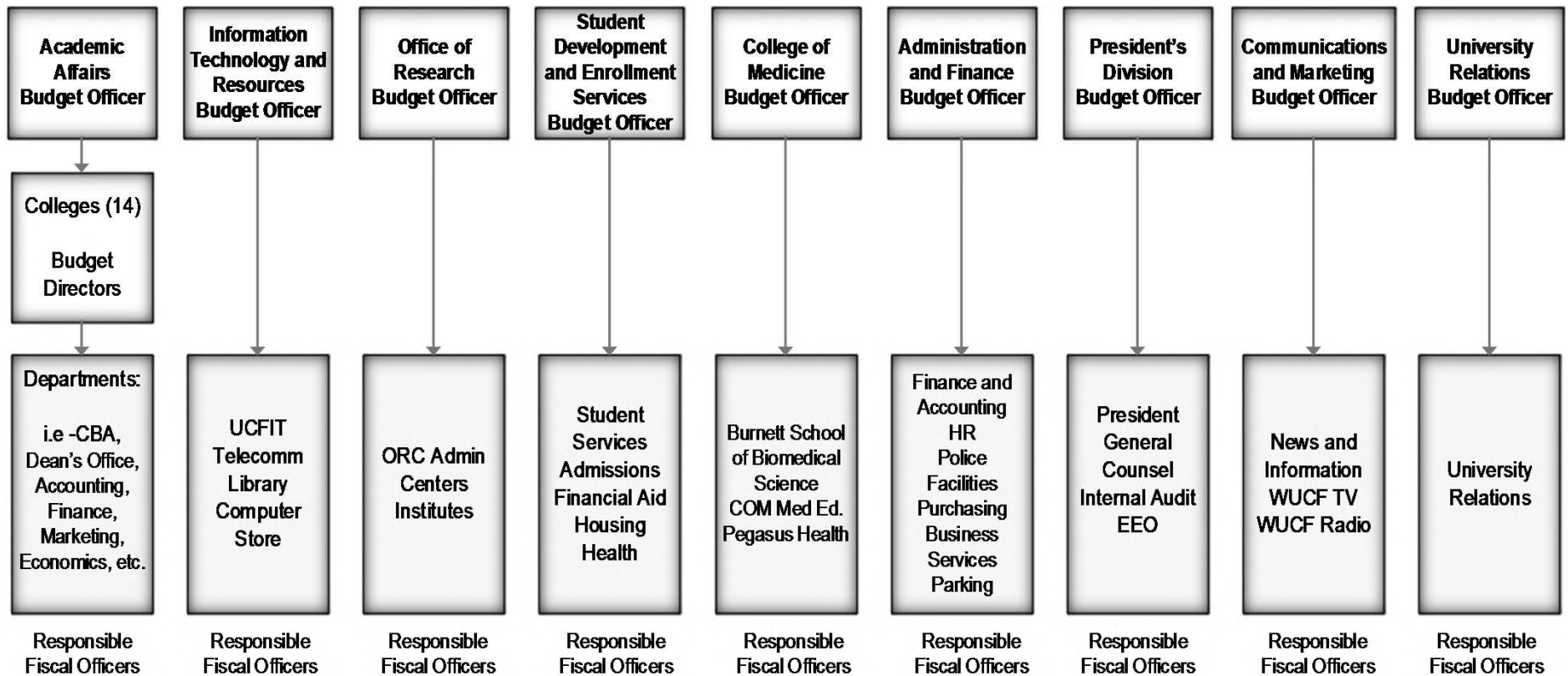
Executive Responsibility: President, Provost, Chief Financial Officer

University Budget Committee (12 members)

Operational Responsibility: Associate Provost for Budget, Planning and Administration; University Controller

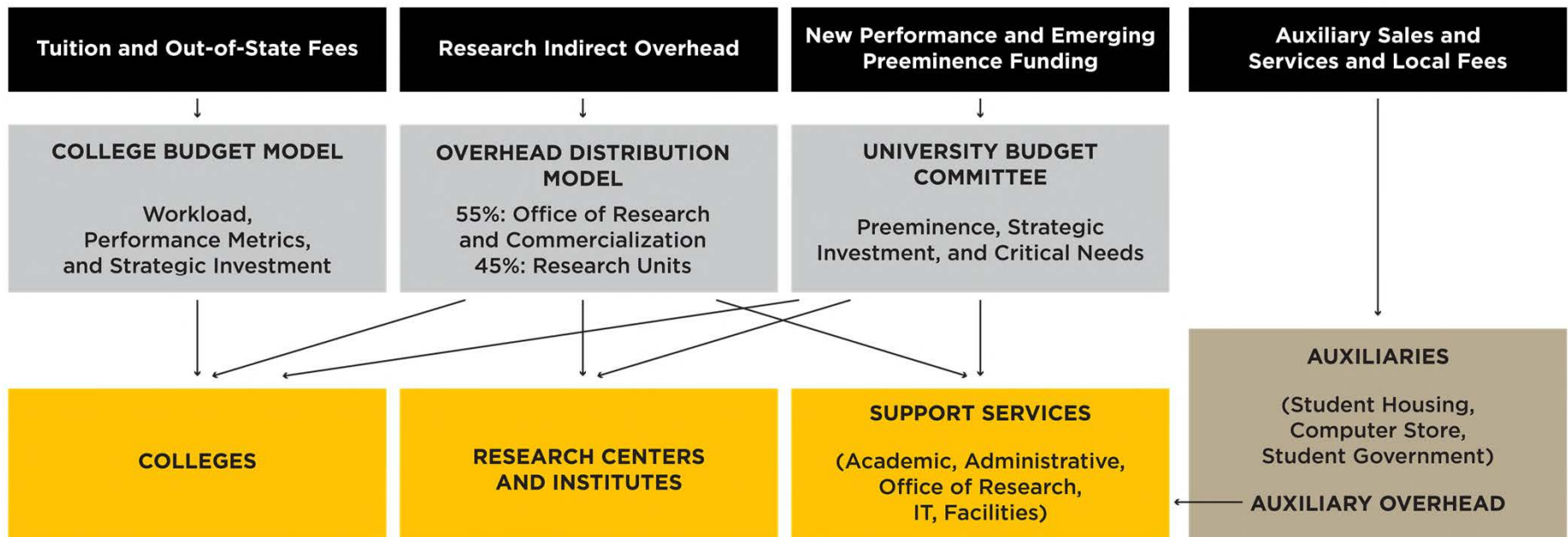
Office of Budget Planning and Administration (8 Accounting Professionals)

VP DIVISIONS



Resource Allocation Models

Allocation Models for Incremental Funding

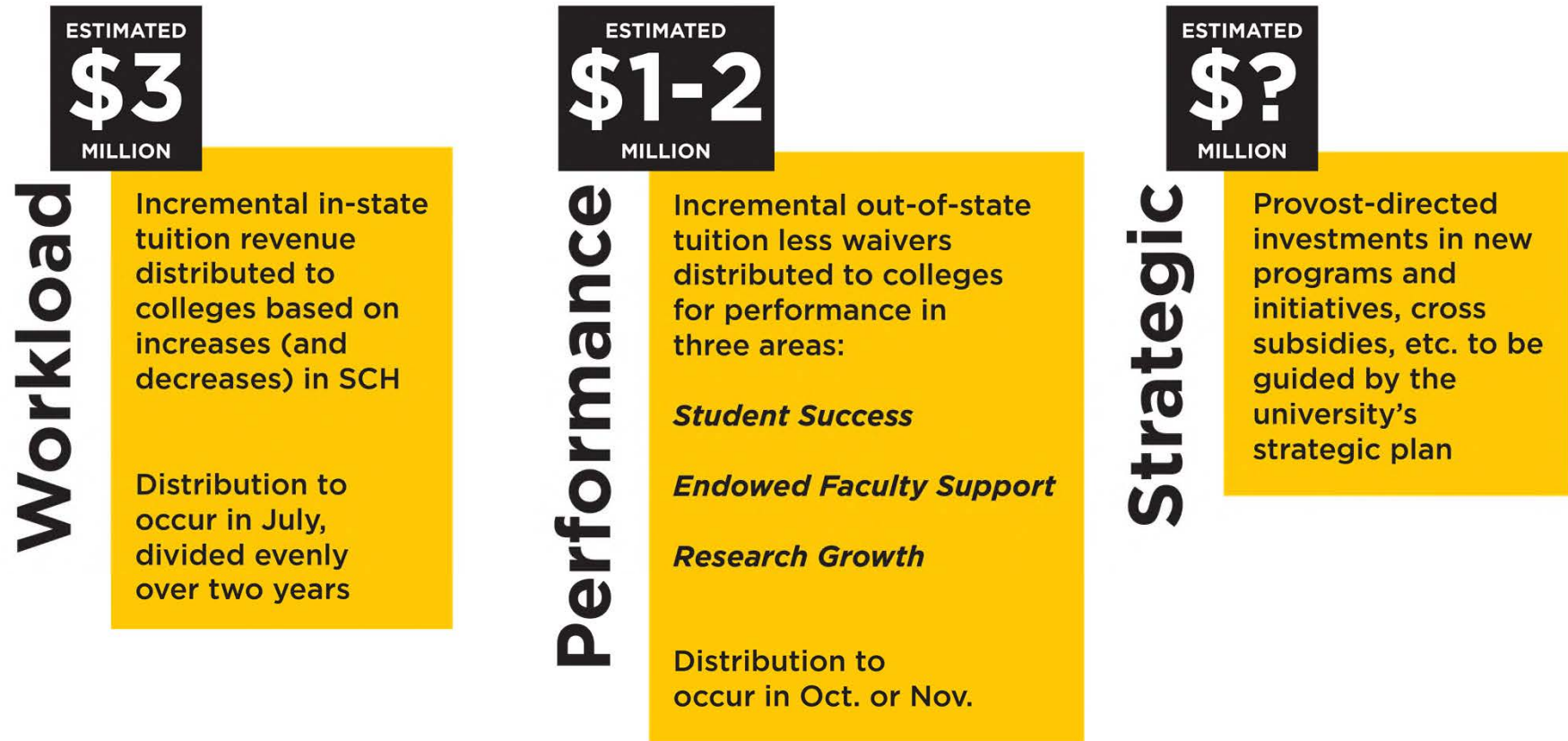


Other Resource Options

1. Reallocate or reprioritize existing budget
2. Sponsored research overhead accounts
3. E&G carryforward
4. Auxiliary reserves
5. Philanthropy and Foundation spendable balances
6. Commercial partnerships

College Budget Model

College Budget Model



College Budget Model - Performance Incentives

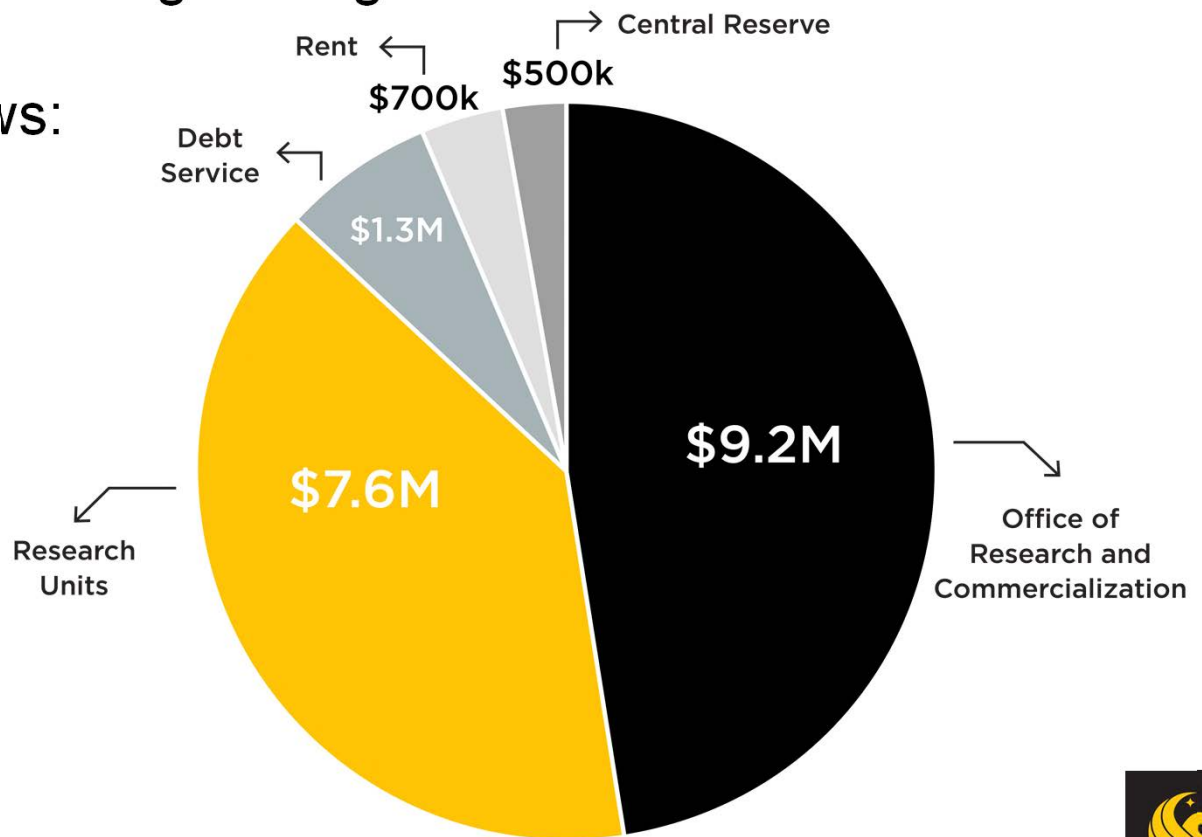
1. Degree Efficiency (Student Success)
 - Improvement and excellence points (the best of each)
 - Allocated to top 5 based on # of degrees awarded
2. Endowed Faculty Support
 - \$40,000 per \$1 million of new endowed funds
3. Research Growth
 - Increase in research awards (minimum \$350,000)
 - Allocated to Top 5 based on share of Top 5's total growth



Research Overhead Distribution Model

Research Overhead Model

- Distributes \$19 million of indirect cost recovery funds annually based on two-year *rolling average*
- Allocated as follows:





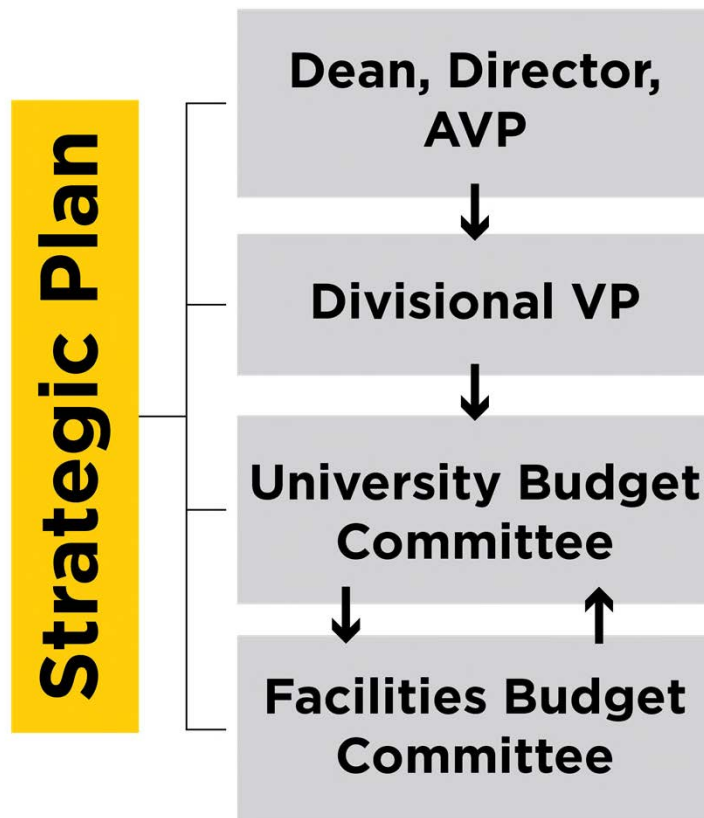
University Budget Committee

University Budget Committee

- **Mission:** Develop resource allocation recommendations that transform strategic goals into achievable operating plans and optimize the use of university resources.
- **Executive sponsors:** Provost Dale Whittaker and Vice President William Merck
- **Additional voting members:**
 - Dean, College of Sciences
 - Faculty Senate Chair
 - VP Research and Grad. Studies
 - VP SDES
 - VP Communications and Marketing
 - Vice Provost, Faculty Excellence
 - VP and Chief of Staff
 - VP Medical Affairs and Dean
 - VP Student Government
 - VP General Counsel
 - AVP Debt Management
- Meetings are held monthly, with funding request presentations held in March or April, and final decisions communicated in June.

Strategic Distribution of Incremental State Funds

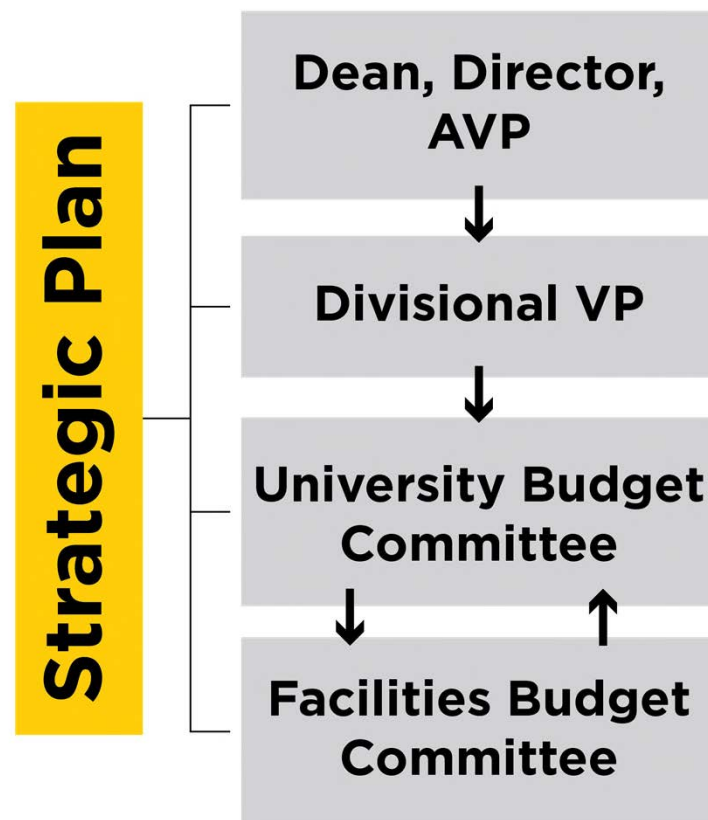
Annual Exceptional Funding Request Process



- Requests must reflect evaluation and use of unit and divisional resources
- Performance indicators are used to measure progress toward strategic goals
- Progress toward unit and university targets drive resource allocations
- University Budget Committee allocations based on availability of new state funding

Three-year Carryforward Plan

POLICY REQUIRES ANNUAL EVALUATION BY UNITS AND UBC



- Deans and VPs develop three-year carryforward plan aimed at advancement of 2020 goals.
- Provost reviews plans and overall resources during 2020 goal meetings with deans and vice provosts.
- University Budget Committee reviews carryforward position and plans for consideration of reallocation.

2016-17 University Budget Committee Allocations

**\$13.5
MILLION**

Faculty

New faculty (45)
National Academy members
Trustee chairs
Salary increases, promotions, awards

**\$8.3
MILLION**

Graduate and Research

Doctoral and post doctoral programs
Graduate waivers and health insurance
Increase graduate stipends
Process and technology implementation
Office and lab space

**\$1.9
MILLION**

Student Support

Merit-based scholarships
Athletic scholarships for women (Title IX)
Library materials
SARC Learning support services

**\$9.9
MILLION**

Critical Needs

Office of Security Management
IT security and licenses
Branding
Discretionary divisional reserves
Staff salary increases



Facilities Budget Committee

Facilities Budget Committee

- **Mission:** Develop recommendations regarding the priority use of available funding for major capital additions, repairs, and renovations that advance the goals and mission of the university.
- **Executive sponsors:** Provost Dale Whittaker and Vice President William Merck
- **Additional voting members:**
 - VP Information Technologies and Resources
 - Faculty Senate Chair
 - VP Research and Grad. Studies
 - Vice Provost, Strategic Planning
 - AVP Advancement
 - Assoc. Dean, Medical Affairs
 - AVP Facilities and Safety
 - Assoc. Athletic Director, Facilities and Capital Projects
- Monthly meetings began in February 2017.



Curt Sawyer

Associate Vice President for University Services

2016-17 Auxiliary Budget

Area	2016-17 Budget
Housing	\$28.9 M
Parking	18.6 M
Student Health Services	23.4 M
Business Services	20.5 M
Computer Store, Telecom	33.4 M
Academic Support – Colleges	21.6 M
Academic Support – Other	25.6 M
Continuing Ed, EDC	13.2 M
Material, Supply, and Equipment Fees	5.7 M
Energy Management and Sustainability	18.9 M
Other Auxiliaries	42.2 M
Total	\$252.0 M

What Are Auxiliaries

- Definition of auxiliary:
 - Florida statute 1011.47: “Auxiliary enterprises” includes activities that directly or indirectly provide a product or a service, or both, to a university or its students, faculty, or staff and for which a charge is made. These auxiliary enterprises are business activities of a university which require no support from the General Revenue Fund...”
- Business activities that support the teaching, research and service mission of the university.

Auxiliary Areas

- Parking and Transportation Services
- Business Services
 - a) Food service
 - b) Bookstore
 - c) Pouring rights
 - d) Vending
 - e) Copiers
 - f) Print shop
 - g) Concessions
 - h) Retail
 - i) Student banking
 - j) Card office
 - k) Other

Budgeting Process

- Official session starts in January.
- Finance & Accounting provides templates to the units based on current and historical spending, accounting for unique projects.
- Departmental development by unit managers.
- Review and approval by Assistant Directors, Directors, and Associate Vice Presidents.

Budgeting Process Continued

- Auxiliary budgets reviewed at division level and due to Finance & Accounting late February.
- Finance & Accounting reviews against historical performance and units justify variances.
- Finance & Accounting compiles all auxiliary budgets into the overall university budget.
- Board of Trustees approval obtained in May.

Parking Services' Budget Example

- 5-year outlook and planning
- Fee committee process

**University of Central Florida
Parking and Transportation Services**

Transportation Access Fee Per Credit Hour	\$9.10	\$9.10	\$9.10	\$9.10	\$9.10	\$9.10	\$9.10
	Actual		Projections				
Parking System	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Revenue			BUDGET				
Decal Sales	4,759,103	4,873,575	4,774,218	4,875,000	4,875,000	4,875,000	4,875,000
Towers Permit (Garages E & G)	213,115	197,256	198,000	198,000	198,000	198,000	198,000
Transportation Fee	13,816,823	14,264,670	14,199,276	14,534,051	14,769,811	15,070,801	15,331,065
Parking Fines	1,024,687	1,080,747	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
Metered Parking and Daily Permit Fees	956,039	912,106	900,000	910,000	910,000	910,000	910,000
Miscellaneous	166,359	153,792	148,450	150,677	152,937	155,231	157,559
Interest Income		-	240,000	240,000	240,000	240,000	240,000
Subtotal Revenue	\$ 20,936,127	\$ 21,482,146	\$ 21,559,944	\$ 22,007,728	\$ 22,245,748	\$ 22,549,032	\$ 22,811,624
Expenses							
Operating Expenditures	1,167,199	1,235,740	1,190,874	1,272,812	1,310,997	1,350,326	1,390,836
Towers Operating Expenses (Garages E & G)	78,665	88,756	42,347	91,419	94,161	96,986	99,896
Repairs and Maintenance - Operating	257,840	341,532	231,676	351,778	362,332	373,202	384,398
Salaries and Matching - USPS / A-P	1,547,624	1,781,921	1,881,206	1,835,379	1,890,440	1,947,153	2,005,568
Salaries and Matching - OPS	474,414	626,009	541,028	657,309	677,029	697,340	718,260
Subtotal Operating Expenses (Less Lease Payment & Shuttles)	3,525,742	4,073,958	3,887,131	4,208,697	4,334,958	4,465,007	4,598,957
Tower Garages E and G Lease Payment	1,036,388	1,036,388	1,036,388	1,036,388	1,036,388	1,036,388	1,036,388
Shuttle Expenditures	6,380,713	6,750,652	6,802,159	7,142,267	7,427,958	8,472,004	8,810,884
Total Operating Expenses	10,942,843	11,860,998	11,725,678	12,387,352	12,799,304	13,973,399	14,446,229
Debt Service Payments - Garages 1 Thru 7	4,917,590	4,917,012	4,801,134	4,784,434	4,201,734	4,182,824	3,597,391
Creative Village Shuttles (3 Shuttles)					718,200		
Libra Garage Security Cameras				200,000			
Garage and Parking Lot Maintenance Projects			450,000	450,000	450,000	450,000	450,000
T2 - Luke I Pay and Display Machine Replacement			185,000				
Design Fees - Creative Village Garage			1,000,000				
Down Payment - Creative Village Garage				7,000,000			
Creative Village Garage Estimated Debt Service				192,000	186,000	179,000	172,000
Design Fees - Lake Nona Campus Garage					1,000,000		
Down Payment - Lake Nona Campus Garage						2,000,000	
Estimated Debt Service - Lake Nona Campus Garage						382,500	\$ 748,000
Design Fees Main Campus						1,000,000	
Down Payment - Main Campus Garage							2,000,000
Estimated Debt Service - Main Campus Garage							382,500
Non-Operating Expenses (Includes R & R)	1,602,181	264,136	121,000	125,000	126,875	128,778	130,710
Auxiliary Overhead	919,354	913,128	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Interest Transfer to Administration		-	240,000	240,000	240,000	240,000	240,000
Garage C Extension Construction	-	4,029,102	-	-	-	-	-
Total Non-Operating Expenditures	2,521,535	5,206,366	1,361,000	1,365,000	1,366,875	1,368,778	1,370,710
New Parking & Transportation Services Building Design Fee					150,000		
New Parking & Transportation Services Building						1,500,000	
Total Expenditures	18,381,968	21,984,376	19,522,812	26,378,786	20,872,113	25,036,501	23,166,830
Net Revenue (Loss)	\$2,554,159	(\$502,230)	\$2,037,132	(\$4,371,058)	\$1,373,635	(\$2,487,469)	(\$355,206)
Parking Reserves	\$13,787,622	\$13,285,392	\$15,322,524	\$10,951,466	\$12,325,101	\$9,837,632	\$9,482,426
REVISED SCH: Updated 5-31-16 (Based on Enrollment Plan approved by BOT)	1,474,431	1,484,882	1,539,471	1,577,948	1,603,856	1,636,932	1,665,532
Notes							
Main Campus Garage - \$10,500,000 with \$2 million down-\$8.5 million at 5% 25 Years							
Lake Nona Campus Garage - \$10,500,000 with \$2 million down-\$8.5 million at 5% 25 Years							
Downtown Garage Based on \$12,000,000 -\$8 million DP- \$4 million amort 5% at 20 years							



UCF

Additional Benefits to the University

- Campus support (Knights Plaza enhancement, UCF Downtown)
- Alternative financing options
- Departmental scholarships and support
- Community requests
- Partnerships (Go Baby Go, Veterans Academic Resource Center)
- Relationships
- Student experience (Chick-Fil-A canopy, grocery route, apps, Wi-Fi)
- Creation of sense of community (special gathering places, oftentimes centered around food experiences)
- Reinvestment (Garage C extension, roofs, John T. Washington Center)

Strategic Planning

- Long-range plans
 - Food services
 - Bookstore
 - Parking restraints and capacity
 - Shuttles
 - Revenue generation
 - Partnership opportunities
 - Entrepreneurial opportunities



Lee Kernek

Associate Vice President for Facilities and Safety

Facilities and Safety Departments

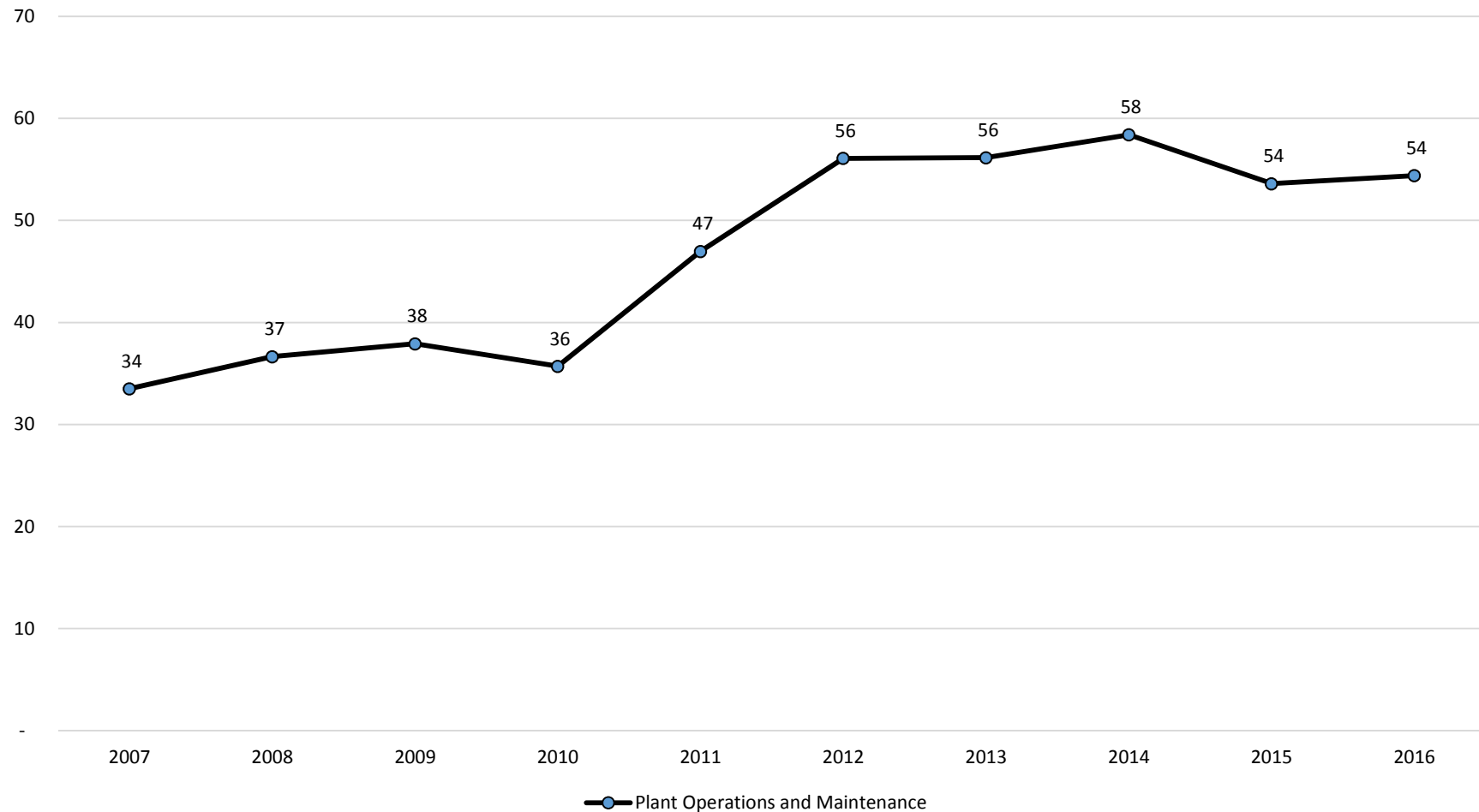
- Downtown Facilities
- Facilities Planning and Construction
- Facilities Operations
- Landscape and Natural Resources
- Utilities and Energy Services
- Environmental Health and Safety
- Quality Management and Improvement
- Resource Management
- Sustainability Initiatives

Facilities and Safety Funding

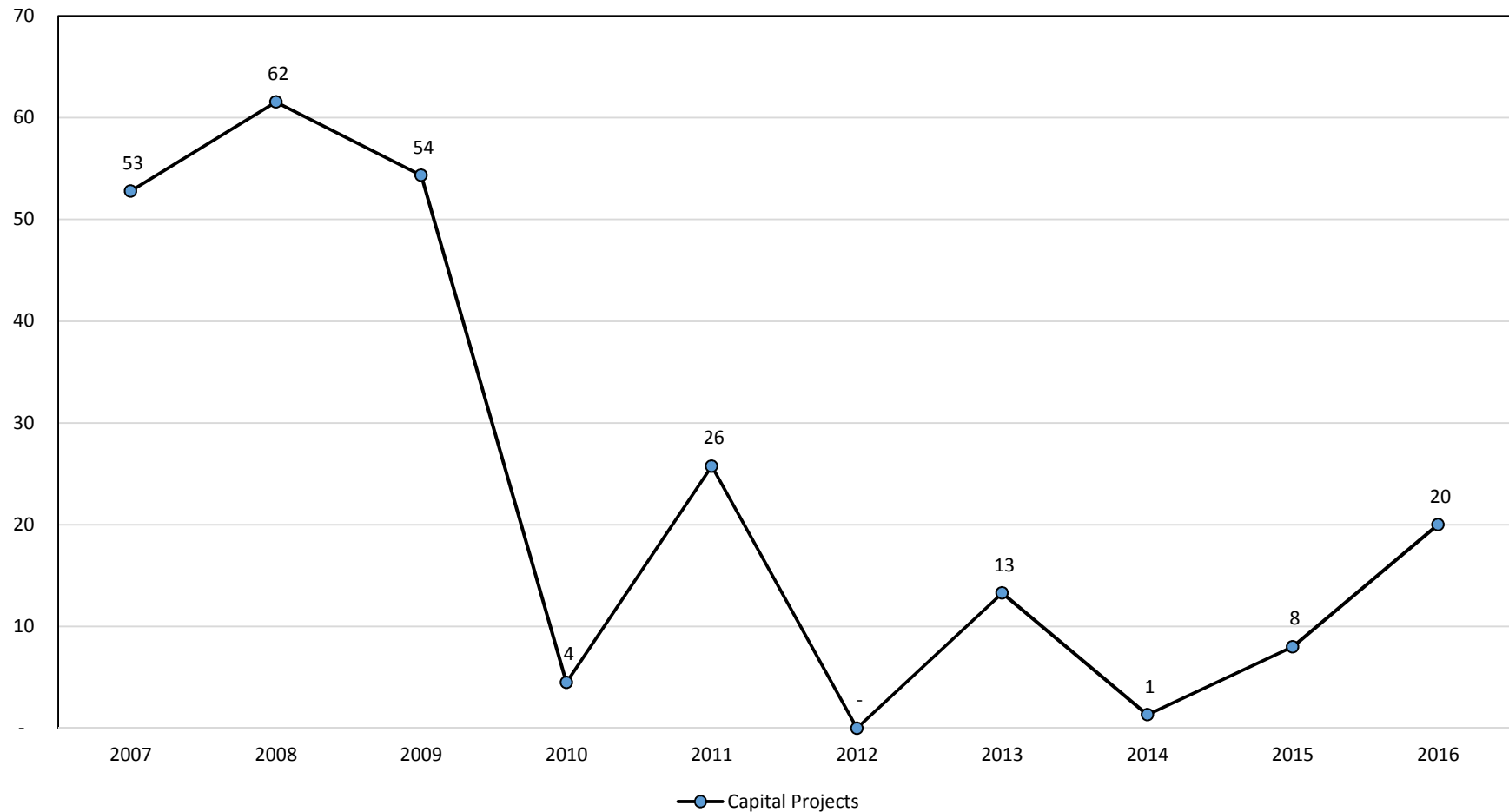
- Educational and General
- Plant Operations and Maintenance
 - Base
 - Operations and maintenance
 - Utilities
 - Phased-in new space
- Public Education Capital Outlay Projects
 - Utilities, infrastructure, capital renewal, and roofs
 - Minor projects (Sum of the Digits)
 - Critical deferred maintenance
- Capital Improvement Trust Funds
- University funds
- Donor funds
- Courtelis Match
- Bonds
- Other
 - Direct recoveries and business income
 - Auxiliary funds

Funding History

Education & General: Plant Operations and Maintenance (in millions)

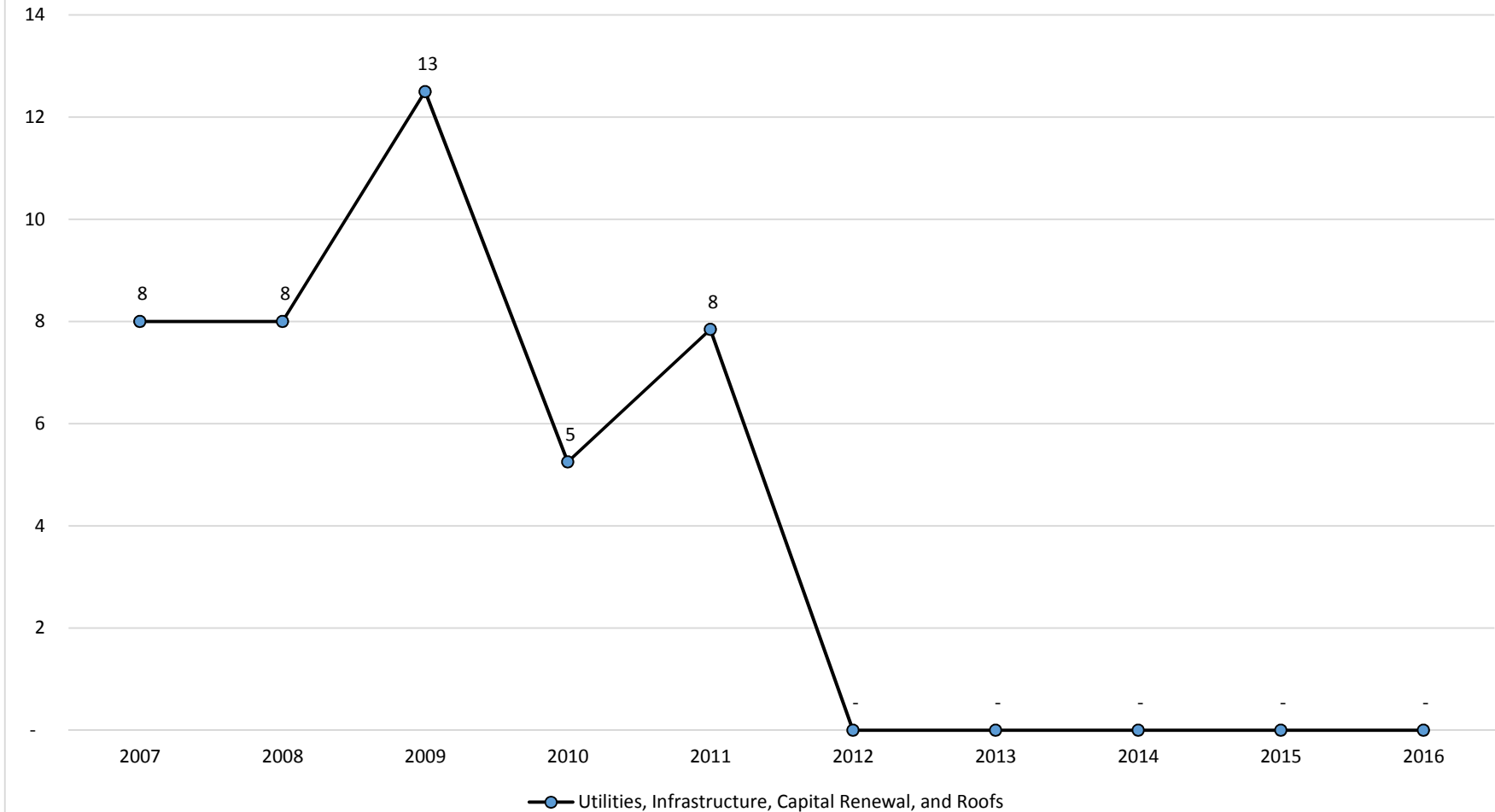


Funding History PECO: Capital Projects (in millions)



Funding History

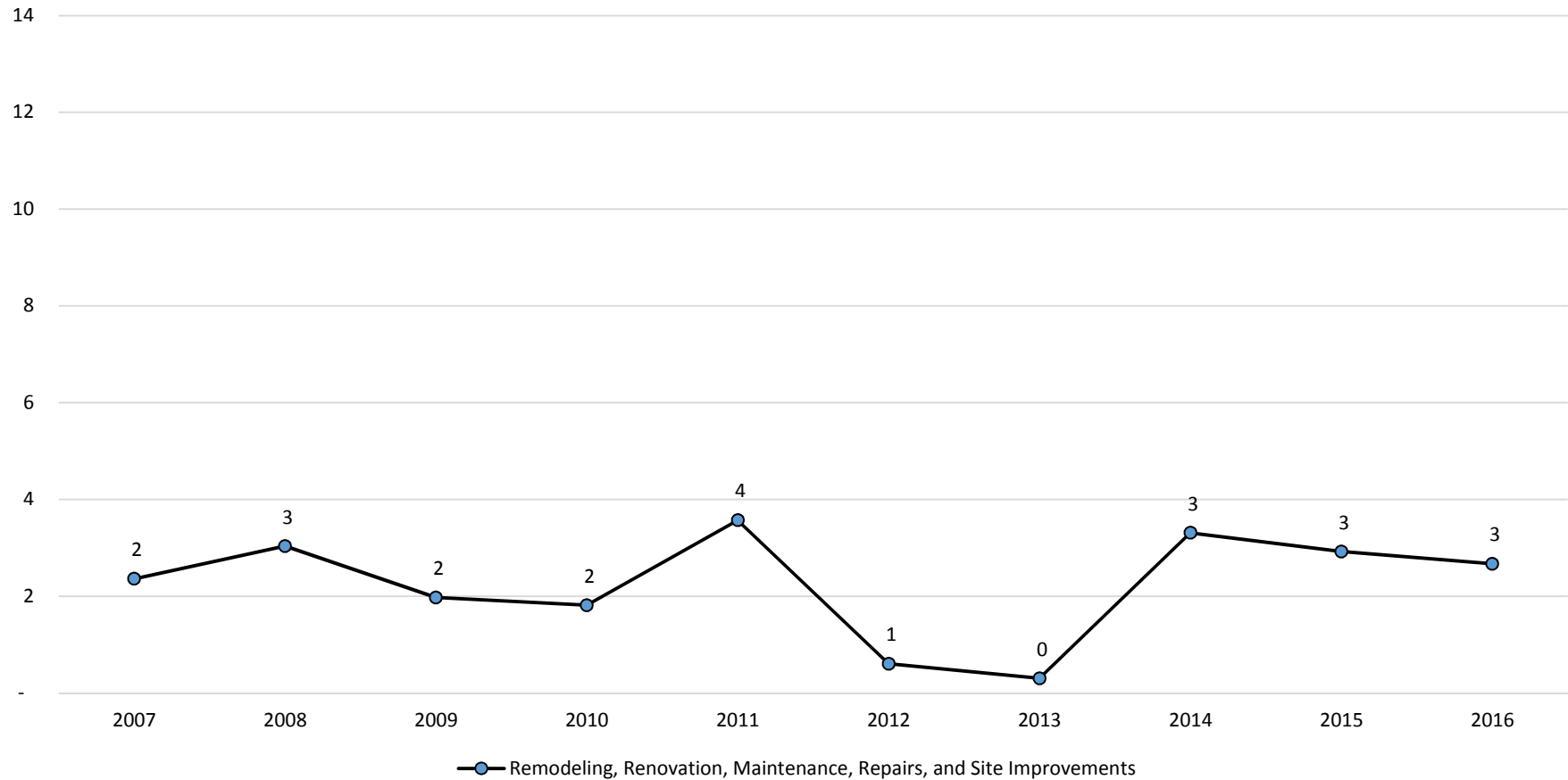
PECO: Utilities, Infrastructure, Capital Renewal, and Roofs (in millions)



Funding History

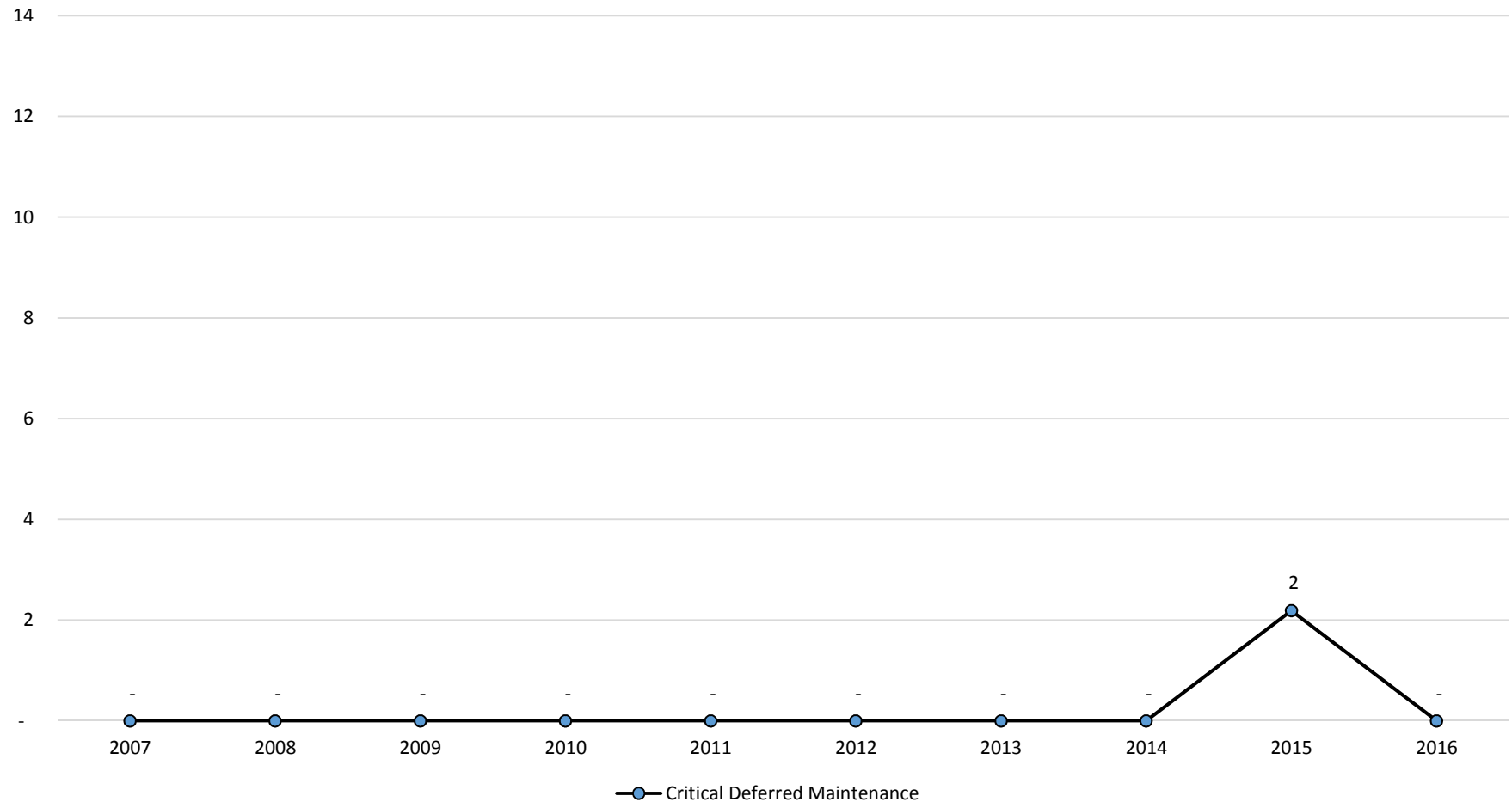
PECO: Remodeling, Renovation, Maintenance, Repairs, and Site Improvements

(in millions)



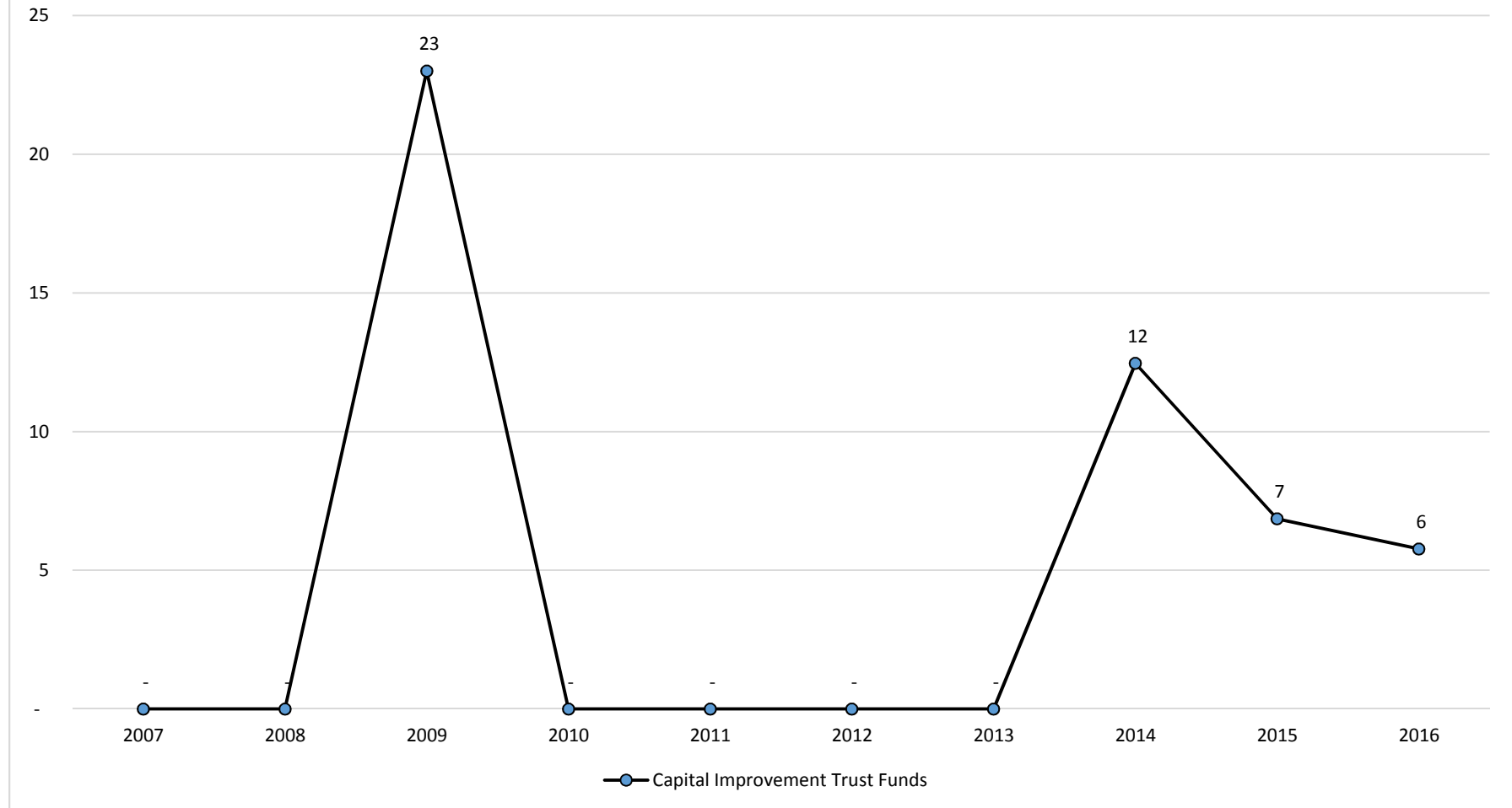
Funding History

PECO: Critical Deferred Maintenance (in millions)

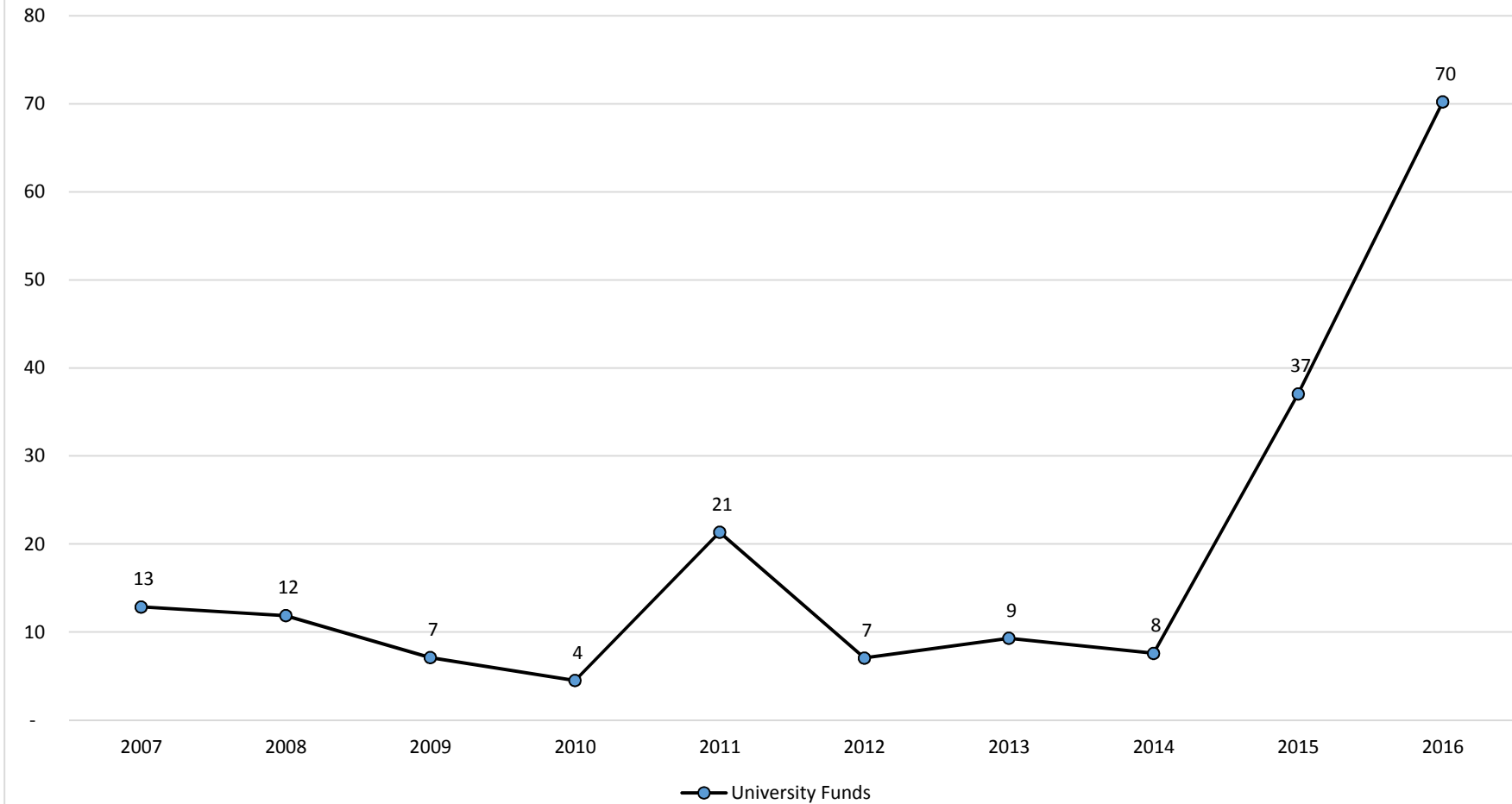


Funding History

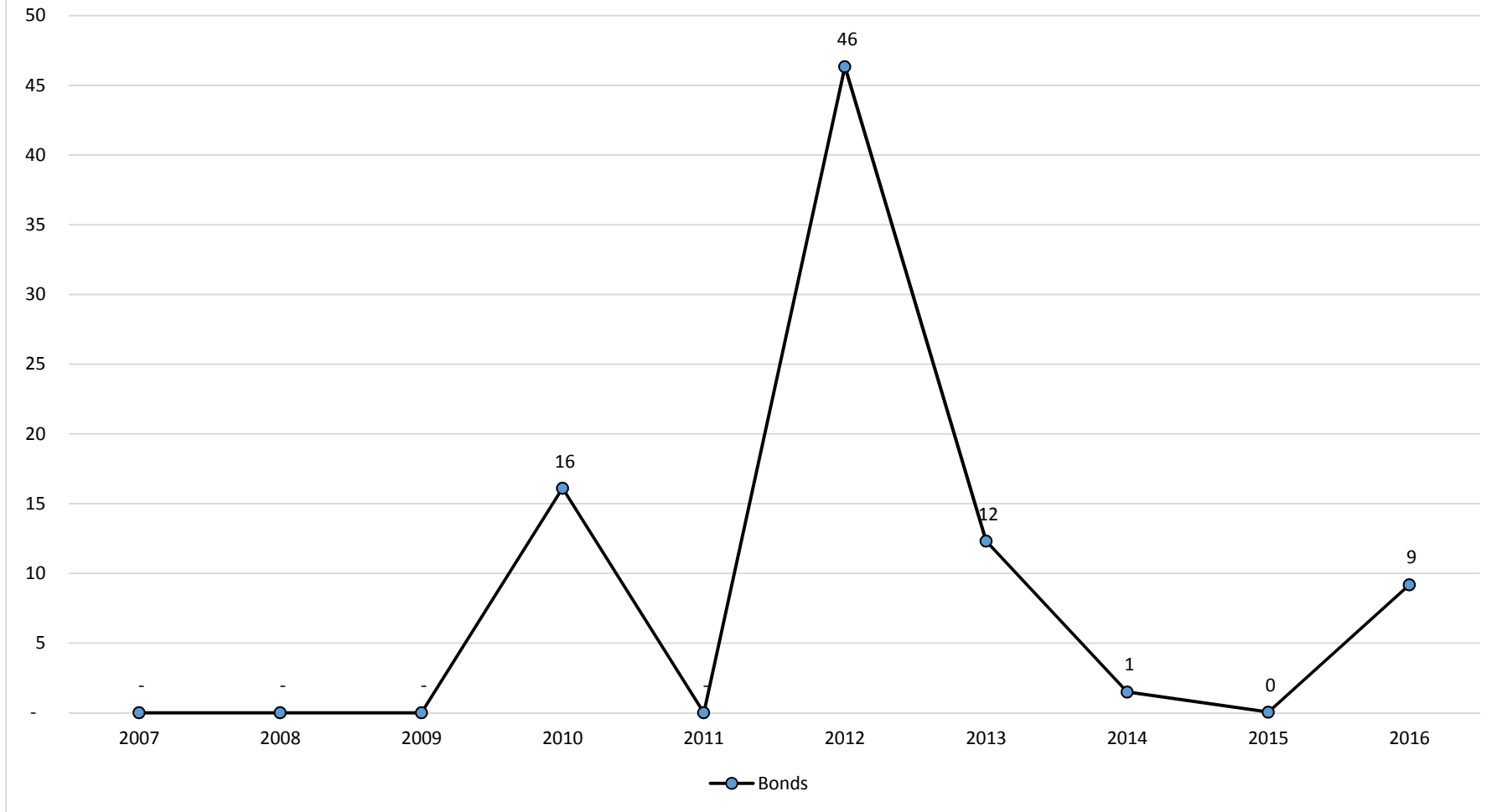
PECO: Capital Improvement Trust Funds (in millions)



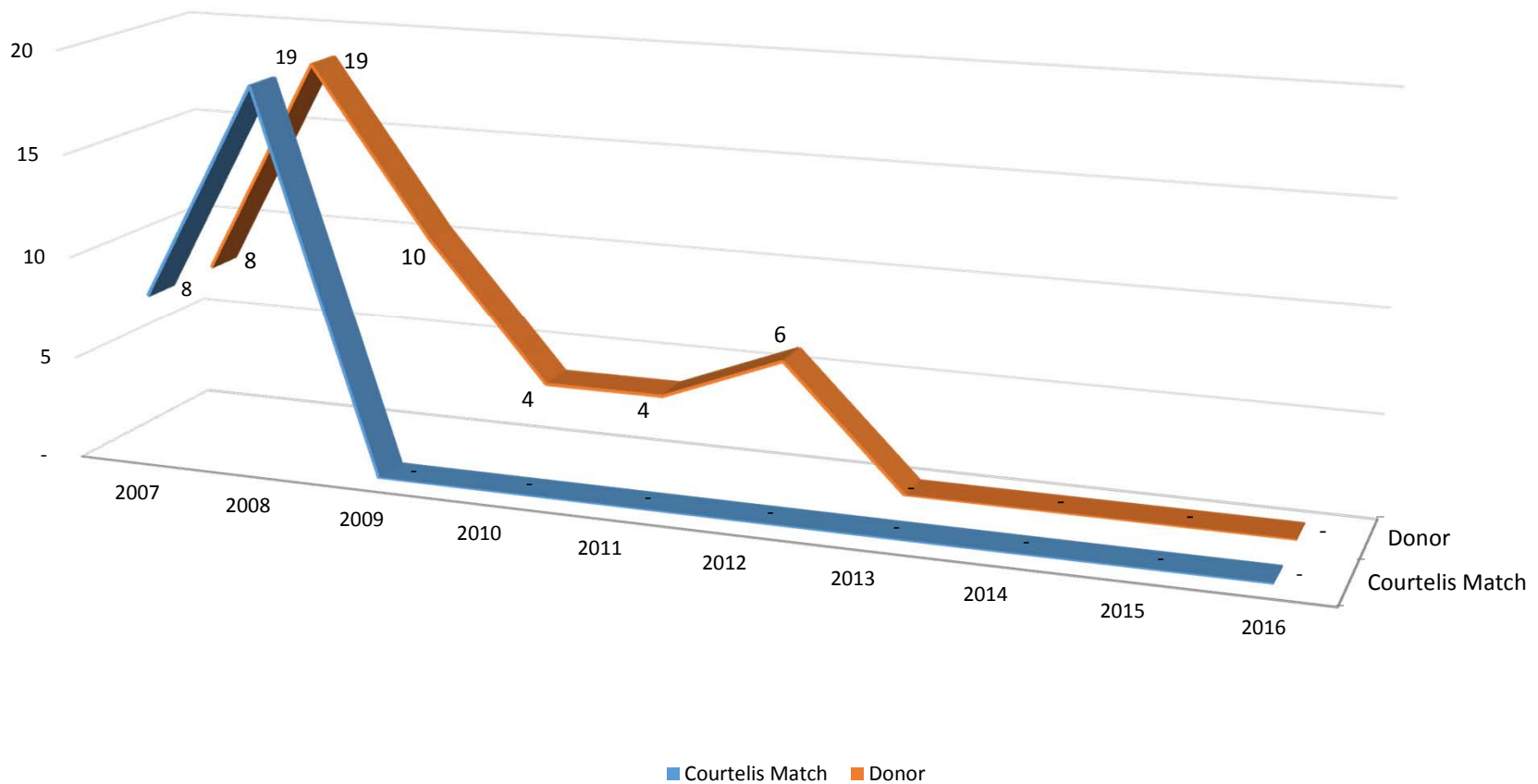
Funding History University Funds (in millions)



Funding History Bonds (in millions)



Funding History Courtelis Match and Donor Funds (in millions)



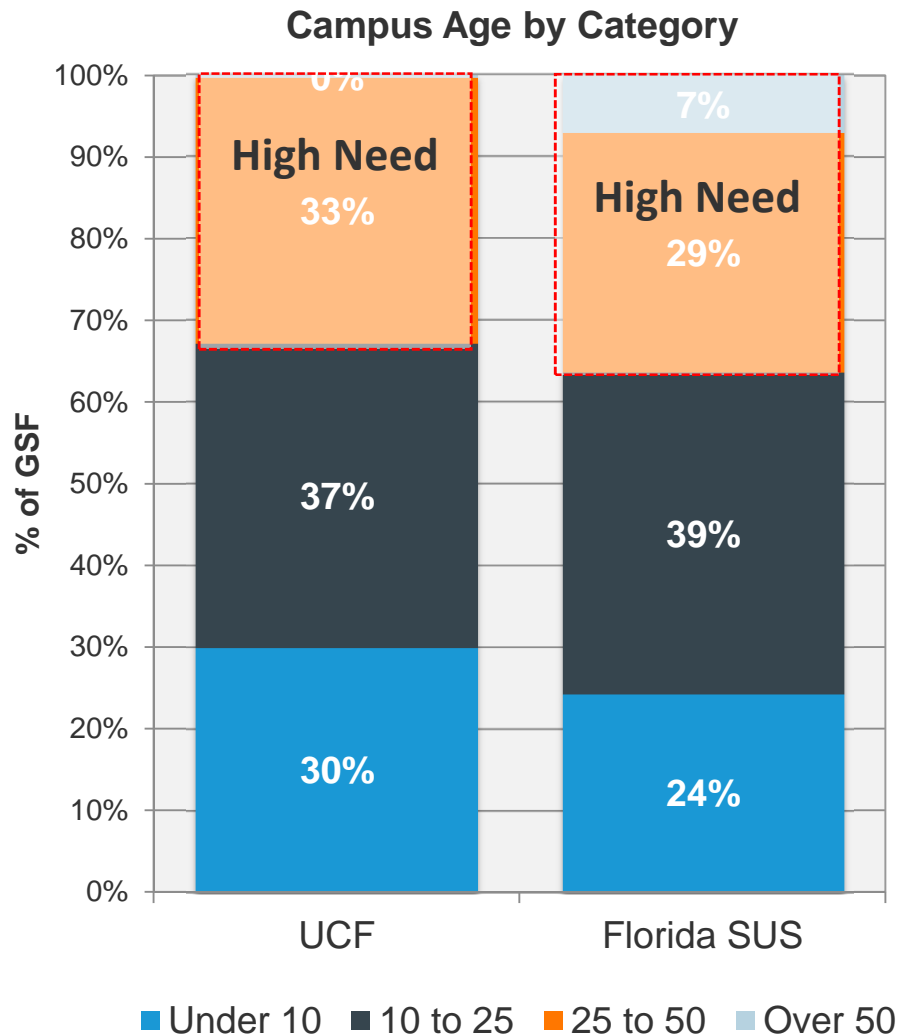
The Facilities Challenge

- Aging infrastructure and facilities
- Growing deferred maintenance and capital renewal needs
- Increased facilities use
- Increased research and technical demands
- More stringent codes and energy requirements
- Standards for life-cycle management
- Lack of space, especially for research

An Example of the Facilities Challenge:

Deferred Maintenance
and Capital Renewal

Campus Age Profile



Buildings over 50

Life cycles of major building components are past due. Failures are possible. Core modernization cycles are missed.

Highest Need

Buildings 25 to 50

Major envelope and mechanical life cycles come due. Functional obsolescence prevalent.

Higher Need

Buildings 10 to 25

Short life-cycle needs; primarily space renewal.

Medium Need

Buildings Under 10

Little work. "Honeymoon" period.

Low Need

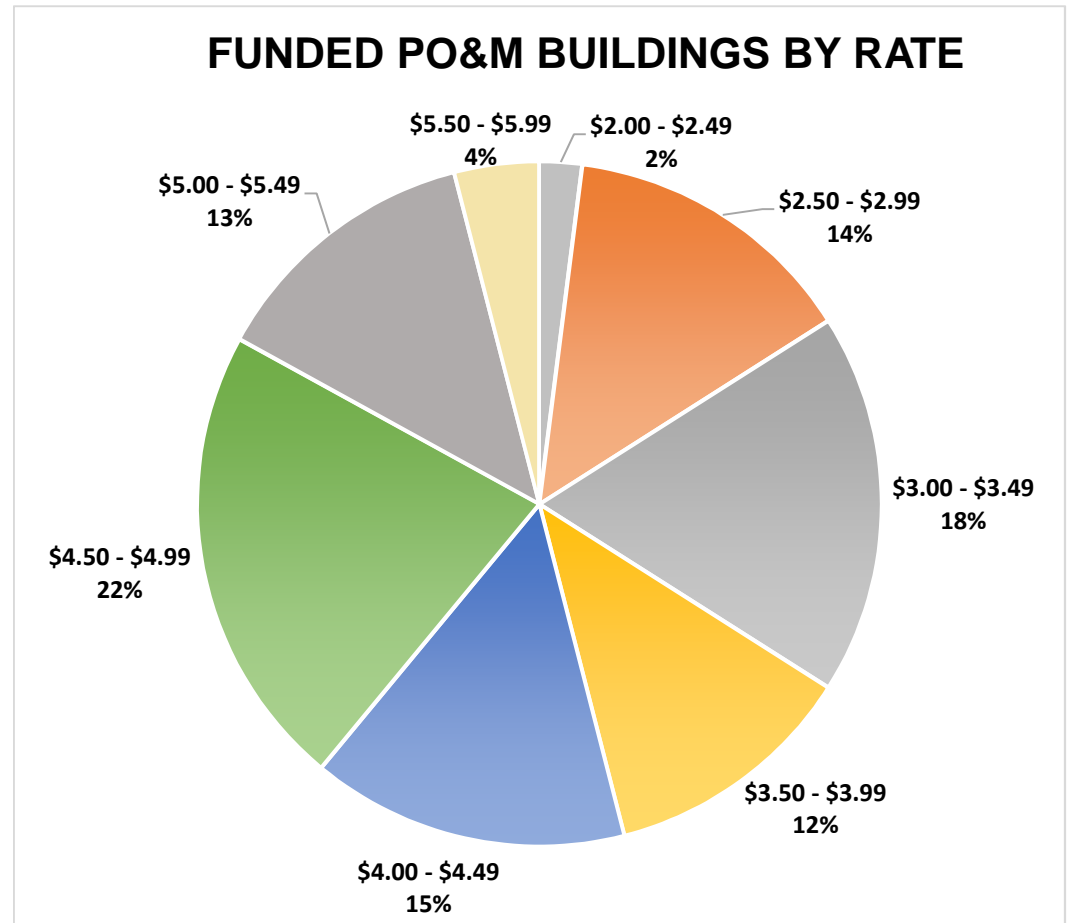
The Budget Challenge

- Lack of plant operations and maintenance growth
- Insufficient and further reduced funding
- Carry-forward cap
- No recent utilities infrastructure funding from the state
- Uncertain Plant Operations and Maintenance Funding
- Limited ability to issue debt
- Depletion of university resources

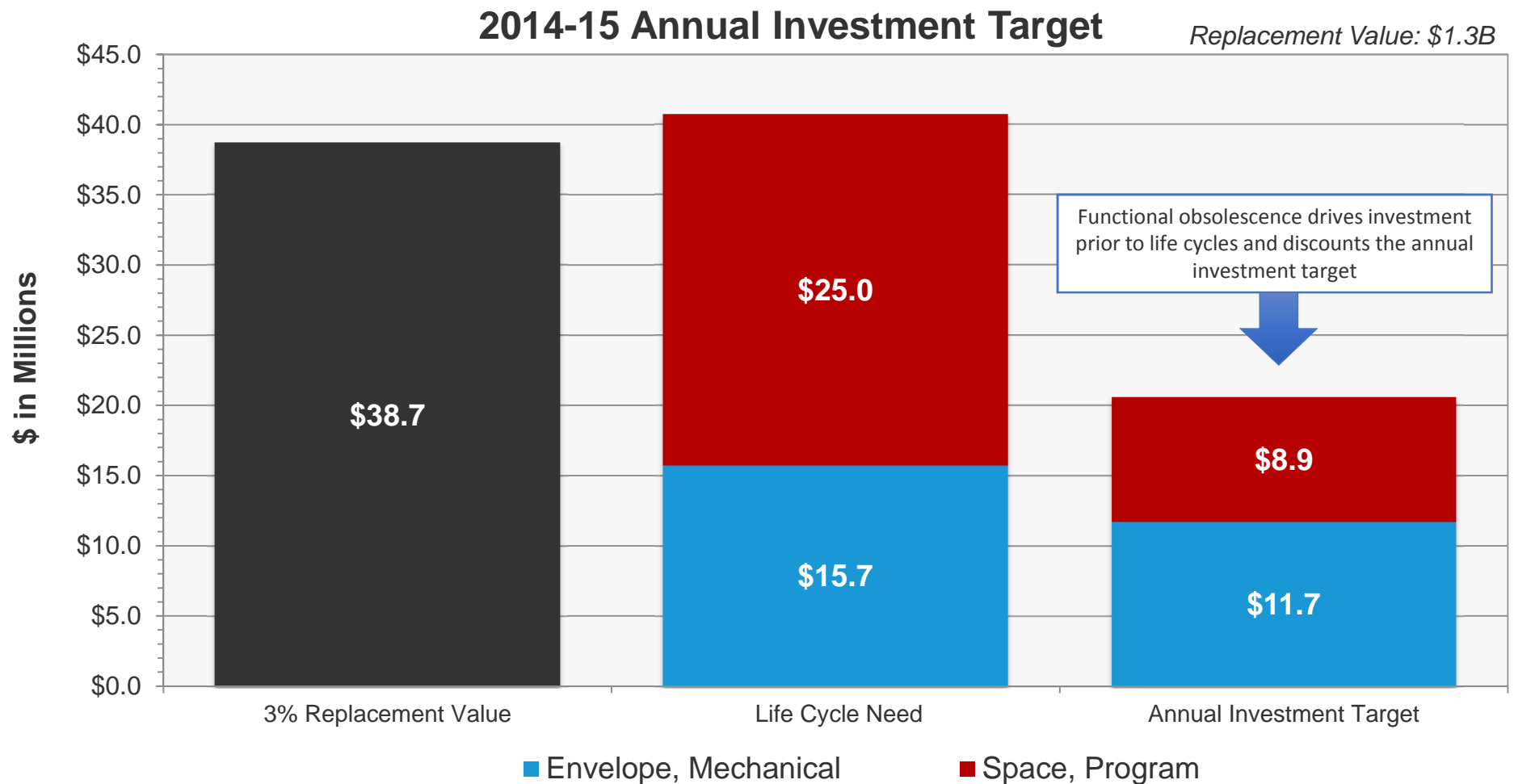
An Example of the Budget Challenge:

Plant Operations and Maintenance Overview

- 16% less than \$2.66/sf
- 47% less than \$4/sf
- 83% less than \$5/sf



Defining an Annual Investment Target



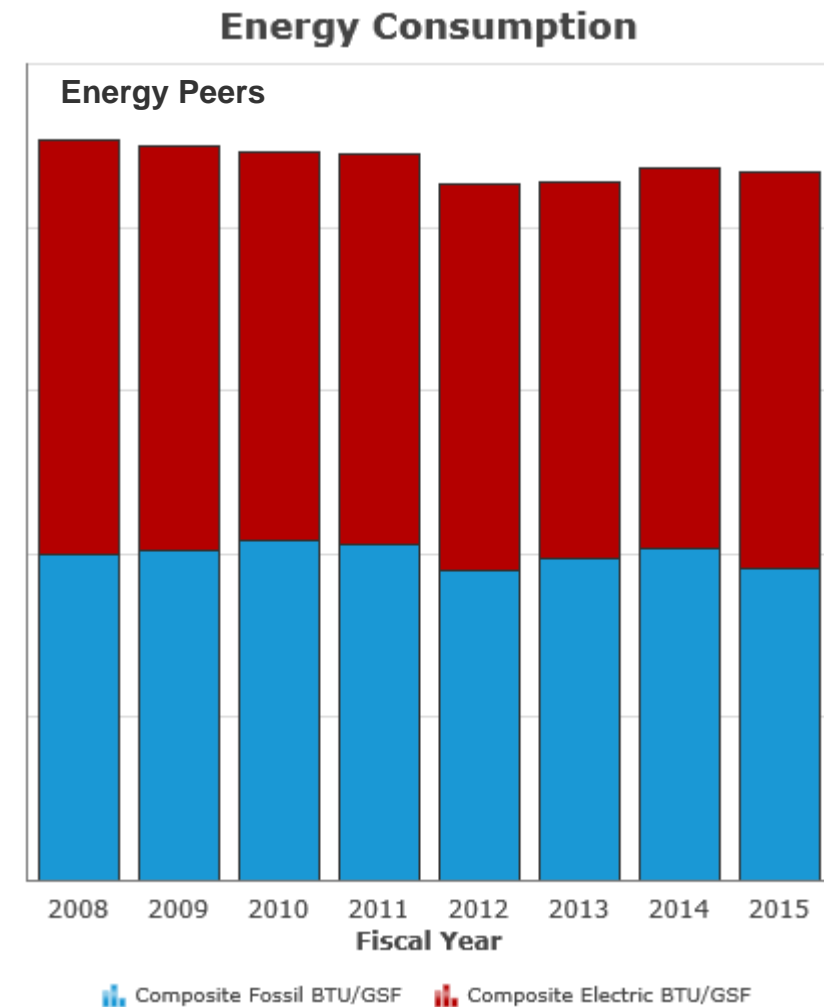
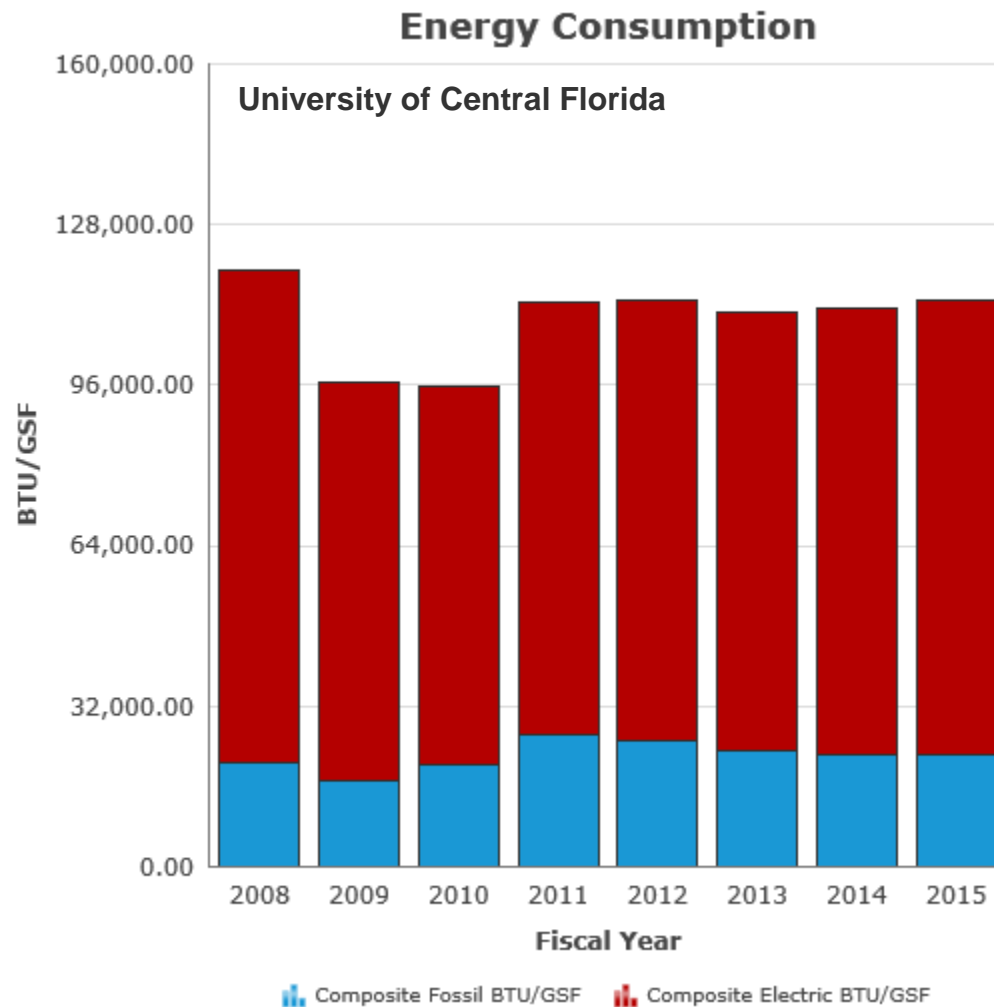
How We Are Addressing the Challenge

- Deferred maintenance planning – critical needs (ISES, Sightlines, and AiM)
- Carry-forward funding
- Capital planning – needs identification and the capital improvement plan
- Self-funding
- Reliability centered maintenance
- In-house Energy Services Company and commissioning
- Energy production
- Sustainability initiatives
- Life cycle cost modeling
- Best value initiatives
 - Right-sizing
 - Selective privatization
 - Job order contracting, Project bundling, UCF general contracting, GCQuotes
 - Computerized maintenance management system
- Quality management and improvement
- Business initiatives

Consuming Less than Regional Peers



Strong Consumption Profile Relative to Peers



©Sightlines 2001-2014

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Closing Remarks



Good morning:

First I would like to introduce Christy Tant - Cheisry is the Asst VP of Finance and University Controller. At UCF finance and budget (including management of the AA budget) are under the same leadership - Christy and myself - and that structure has brought significant synergies to UCF.

Slide 4 and 5 represent the overall picture of UCF's financial revenue and expenditures over the past 10 years, along with the university's growth in headcount. With one exception (2013), the growth in all categories has experienced a similar trajectory.

When you dig a little deeper into the expenditures it shows that the two major categories that have grown over the 10 year period are personnel costs and financial aid.

Of particular note is that utility costs (the purple line at the bottom of the chart) have remained flat for 10 years. That is kudos to Bill Merck and his Facilities team!

Slide 6:

Slide 6 depicts the university's operating cash balances, by fund category, at a point in time. 6/30/16

As you know from the annual primary reserve ratio the target for on hand expendable resources of a university is five months of expenditures. The cash flow of the university has lots of ebs and flows throughout the year, but UCF has worked to maintain that target, or slightly below, since we started calculating the ratio approximately 10 years ago.

From the pie chart you can see the diversification of the funds across the universities areas of activity.

These categories are further broken down on slides 7, 8 and 9 by unit and division. This gives you an idea of how the university's resources are diffused across campus. These resources serve as the operating funds, at the unit level, that allow for continuous operations. And these resources change, by unit, as operating plans are deployed.

slide 10 describes UCF's budget objectives. #1 =

Slide 11 shows alignment of the various metric sources the university is focusing on. Although this is not all of the metrics of the strategic plan, it shows ~~how~~ many of those metrics line up with the state's metrics and the goals established by the Provost's team and the deans.

Dale will speak to this.

@

Slide 12 shows The organizational structure of the budget personnel across campus.

In the gold box is the central budget personnel responsible for managing and executing the university's budget. ~~It is comprised of:~~ (Go through the box)

The top row of white boxes represent the university divisions - and each division has a budget officer who supports to the VP of that division.

The AA division is the largest. It contains all of the colleges. Each college has a budget director who reports to the Dean.

Departments within the colleges and all units across campus have a "responsible fiscal officer", who is responsible for the budget and financial activities at the unit level.

Christy Tant and the Office of BPA have a meeting with the budget directors monthly as a group, and one-on-one meetings quarterly to discuss budget issues of importance and the financial status of each area. These processes are a strong communication mechanism ~~for a campus of this size.~~

Any questions.

Slide 14 is an at-a-glance look at the sources of incremental operating revenue received by the university and the allocation method used to deploy those resources.

On slides 16-25 we'll go through each model in a little more detail - but basically the first column represents
(Briefly go through each column)

Slide 15 - In addition to these specific models, other resources available to the units include:

Slide 17 - the college budget model went into affect this year. It distributes tuition and out of state fees to the colleges. It is split into 3 components - college workload determined by SCH production; 3 performance metrics; and a discretionary strategic allocation.

Funding will flow through this model only if the university successfully receives state performance funding. Otherwise the incremental tuition will be handled centrally.

The three performance metrics include:

1. degree efficiency - which measures how effectively we are graduating our students - both FTIC and transfer students.
2. Successful philanthropy for endowed faculty positions.

The colleges success in
3. ~~The last one is a metric based on a colleges increase~~ *ing*
~~in research awards.~~

Next - the distribution of research overhead is shown on slide 20. The bulk is split between the Office of research and commercialization, and the colleges, research centers and institutes.

A small amount is brought central and is currently being used to help fund the initial construction costs of the interdisciplinary research facility (IRIF).

The UBC is Responsible for the allocation of incremental and carryover state funds.

Slide 22 shows the makeup and mission of the committee. The executive sponsors are Provost Whittaker and VP Merck. There are 11 other campus leaders selected for their subject matter expertise and perspective. Not listed on the slide is Mike Morseberger, who is a non-voting honorary member.

Slide 23 and 24 show the two major processes used by the committee to review resource needs and to make resource allocation recommendations to the President, Provost, and CFO.

One process is used for new state funding and the other is used for carryforward funds.

Both processes expect units to utilize their own resources first to fund their needs. If that is not possible, the request moves up to the division level. If division level resources are not available to fund the request, the Division VP will decide whether or not to advance the request to the UBC for funding consideration. The requests advanced to the UBC are ~~all~~^{all} considered at once, on an annual basis. They are required to be tied to the strategic plan.

3 year carryforward plans are prepared annually by each unit, and if necessary, the UBC will reallocate carryforward funds.

Slide 25 shows the decisions made by the UBC last year.

Any questions?

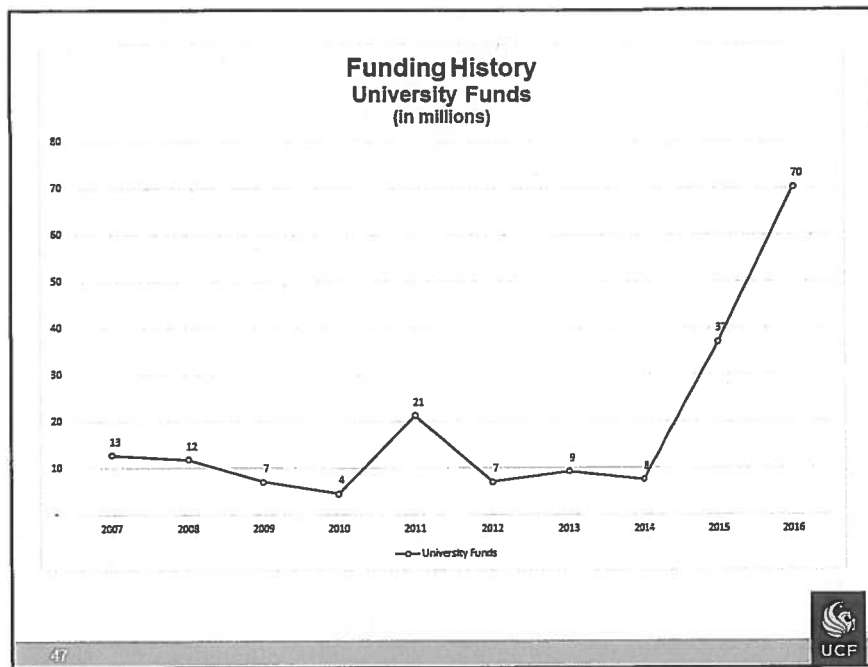
Last but not least a Facilities Budget Committee has been formed to mirror the UBC. It had its first meeting last month. On slide 27 you will see the makeup and mission of this committee. It will interplay with the UBC from a sharing of available resources perspective, but it will be responsible for making facility priority recommendations to the President, Provost and CFO.

Its membership is made up of specific subject matter experts, and 4 of its voting members also sit on the UBC for cross pollination if you will. Once it gets a little more mature we will most likely add a couple of more voting members.

In Lee Kerneck's presentation later you will see some of the challenges the FBC will tackle.

Both committees are managed by myself and Christy Tant and the members are appointed by Dr. Hitt.

Any questions.



As State funding has decreased, UCF has had to self-fund many projects, which is clearly shown by this chart. Examples include: Trevor Colbourn Hall, \$20M of the Downtown Academic Building I, Interdisciplinary Research, and the District Energy Plant.

How We Are Addressing the Challenge

- Deferred maintenance planning – critical needs (ISES, Sightlines, and AiM)
- Carry-forward funding
- Capital planning – needs identification and the capital improvement plan
- Self-funding
- Reliability centered maintenance
- In-house Energy Services Company and commissioning
- Energy production
- Sustainability initiatives
- Life cycle cost modeling
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 - Right-sizing
 - Selective privatization
 - Job order contracting, Project bundling, UCF general contracting, GCQuotes
 - Computerized maintenance management system
- Quality management and improvement
- Business initiatives



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DM Planning – all work is now systematically prioritized to ensure that the most critical projects are funded and executed first. Because of funding shortages, however, it may mean that ugly carpet and paint is not done, since the available funds have to go toward “keeping a roof over our heads.”

CF Funding – every year, every \$ of CF funding within F&S is swept up and obligated to Continuing Services contracts so that we can “Buy Down” the most critical of our DM. At the initial point of measurement, we had \$203M in DM. Thru CF funding, we had bought that down to about \$146M at it lowest, but, as we buy down, DM continues to grow so we are currently back to the \$200M range.

Capital Planning – Strategic Decisions: renovations, research – use of Collective Impact & Performance Goals

Self-funding – Tracy has discussed the University’s self-funding of several major projects, including TCH, IRIF, a portion of Downtown Academic Building, the District Energy Plant, and others.

Reliability Centered Maintenance – the FO team is leading the way in higher education thru targeted reliability-centered maintenance, which has enable us to do more with the limited resources we have. They are now completing more than 99% of asset-driven preventative maintenance; and completing work orders in 25% of the time it took in 2014. Schedule completion rates exceed industry “best in class” of 80%; UCF is currently at 85%.

ITEM: FF-4

**University of Central Florida
Board of Trustees**

SUBJECT: Five-year Capital Improvement Plan

DATE: July 20, 2017

PROPOSED BOARD ACTION

Approve the capital improvement plan for 2018-19 through 2022-23.

BACKGROUND INFORMATION

Each year, the university must submit an updated capital improvement plan to the Board of Governors. This plan identifies projects that will be included in the three-year Public Education Capital Outlay list, and it provides information to the State Board of Education for its request for capital project funding for 2018-19.

The capital improvement plan must be submitted to the Board of Governors' staff by August 1, 2017. The attached schedules include the following:

- projects that are proposed for inclusion in the five-year capital improvement plan
- items to be included in the 2018-19 Appropriations Authorization Bill, including projects funded by bonds, direct support organization projects, and projects requiring general revenue to operate.

We request approval to submit the 2018-19 Capital Improvement Plan with the projects listed in the attached schedules.

Supporting documentation: Attachment A: 2018-19 Five-year Plan List
Attachment B: 2018-19 Fixed Capital Outlay Projects
Requiring Board of Governors Approval to
be Constructed, Acquired, and Financed by
a University or a University Direct Support
Organization with Approved Debt
Attachment C: 2018-19 Fixed Capital Outlay Projects
That May Require Legislative
Authorization and General Revenue Funds
to Operate and Maintain

Prepared by: Lee Kernek, Associate Vice President for Administration and Finance

Submitted by: William F. Merck II, Vice President for Administration and Finance
and Chief Financial Officer

Board of Trustees Meeting - Reports

Attachment A

UNIVERSITY OF CENTRAL FLORIDA FUTURE PROJECT PROJECTIONS FOR 2018-23 2018 FIVE-YEAR FIXED CAPITAL IMPROVEMENTS PLAN													
PECO PROJECTS		REVISED 05/09/2017		2018-19 YR #1	2019-20 YR #2	2020-21 YR #3	2021-22 YR #4	2022-23 YR #5	TOTALS	RANK			
UTILITIES, INFRASTRUCTURE, CAPITAL RENEWAL, AND ROOFS (P.C)				\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$70,000,000	1			
INTERDISCIPLINARY RESEARCH AND INCUBATOR FACILITY (P.C.E) RESEARCH BUILDING I				\$6,707,360	\$34,529,519	\$6,042,667			\$47,279,546	2			
ENGINEERING BUILDING I RENOVATION (P.C.E)				\$17,745,473		\$1,176,311			\$18,921,784	3			
COLLECTOR OF NURSING AND ALLIED HEALTH (P.C.E) HEALTH SCIENCES CAMPUS				\$6,707,360	\$66,573,360	\$6,321,670			\$83,216,700	4			
MATHEMATICAL SCIENCES BUILDING REMODELING AND RENOVATION (C.E)				\$11,970,963	\$890,181				\$12,861,144	5			
TREVOR COLBOURN HALL AND COLBOURN DEMOLITION (P.C.E)				\$38,000,000					\$38,000,000	6			
JOHN C. HITT LIBRARY RENOVATION PHASE II (P.C.E)				\$2,411,142	\$34,735,896	\$4,121,208			\$41,268,246	7			
ARTS COMPLEX PHASE I (PERFORMANCE) (P.C.E)				\$3,060,000	\$27,172,800	\$3,060,000			\$33,292,800	8			
CHEMISTRY RENOVATION (P.C.E)					\$700,241	\$12,731,680	\$700,241		\$14,132,162	9			
FLORIDA SOLAR ENERGY CENTER RENOVATION (P.C.E)					\$11,322,000				\$11,322,000	10			
INFRASTRUCTURE CHILLED WATER REPLACEMENT (P.C)					\$5,100,000	\$10,200,000	\$7,401,120		\$22,701,120	11			
RESEARCH BUILDING II (P.C.E)					\$6,859,771	\$6,859,771	\$6,859,771		\$20,579,313	12			
VISUAL ARTS RENOVATION AND EXPANSION (P.C.E)					\$3,891,362	\$31,130,899	\$3,891,362		\$38,913,623	13			
WASTEWATER, WATER, NATURAL GAS REPLACEMENT (P.C)					\$7,140,000	\$10,200,000	\$12,780,600		\$30,120,600	14			
MILICAN HALL RENOVATION (P.C.E)					\$1,472,991	\$11,783,935	\$1,472,991		\$14,729,917	15			
BUSINESS ADMINISTRATION RENOVATION (P.C.E)					\$640,779	\$640,779	\$640,779		\$1,921,557	16			
FACILITIES & SAFETY COMPLEX RENOVATION (P.C.E)					\$6,287,805				\$6,287,805	17			
RESEARCH BUILDING III (P.C.E)					\$7,483,300	\$79,867,113	\$7,483,300		\$94,833,693	18			
MULTI-PURPOSE RESEARCH AND EDUCATION BUILDING (P.C.E)					\$3,604,940	\$28,839,551	\$3,604,940		\$36,049,431	19			
UCF DOWNTOWN CAMPUS BUILDING II (P.C.E)					\$87,991,555				\$87,991,555	20			
TOTAL				\$102,216,608	\$196,200,308	\$183,849,819	\$231,092,359	\$50,733,834	\$764,092,928				
CITE PROJECT REQUESTS		2018-19 YR #1	2019-20 YR #2	2020-21 YR #3	2021-22 YR #4	2022-23 YR #5	TOTALS	RANK					
JOHN C. HITT LIBRARY RENOVATION PHASE I (P.C.E)							\$6,854,560	1					
JOHN C. HITT LIBRARY RENOVATION PHASE II (P.C.E)							\$41,268,246	1					
CREATIVE SCHOOL FOR CHILDREN							\$6,000,000	2					
TOTAL							\$41,268,246						
REQUESTS FROM OTHER STATE SOURCES		2018-19 YR #1	2019-20 YR #2	2020-21 YR #3	2021-22 YR #4	2022-23 YR #5	TOTALS	RANK					
INTERDISCIPLINARY RESEARCH AND INCUBATOR FACILITY PHASE II (P.C.E)							\$16,614,833	1					
CHORUS EXPANSION PHASE II (P.C.E)							\$6,794,288	2					
STADIUM VIDEO AND SOUND (P.C.E)							\$5,000,000	3					
UCF DOWNTOWN CAMPUS COMBINED HEAT AND POWER PLANT (P.C.E)							\$15,116,758	4					
ARA RESEARCH BUILDING							\$27,540,000	1					
CAMPUS ENTRYWAYS PHASE I (P.C.E)							\$2,153,996	2					
CAMPUS ENTRYWAYS PHASE II (P.C.E)							\$5,015,978	3					
WELCOME CENTER EXPANSION (P.C.E)							\$8,768,771	4					
CIVIL AND ENVIRONMENTAL ENGINEERING (P.C.E)							\$1,535,637	5					
HOWARD PHILLIPS HALL RENOVATION (P.C.E)							\$9,165,322	6					
BIOLOGICAL SCIENCES RENOVATION (P.C.E)							\$10,189,800	7					
FERRELL COMMONS (E AND G SPACE) RENOVATION (P.C.E)							\$7,253,771	8					
FRANGENT ANIMAL FACILITY (P.C.)							\$2,010,000	9					
CAMERA ACCESS CONTROL (P.C.)							\$13,219,200	10					
ARTS COMPLEX PHASE II (PERFORMANCE) (P.C.E)							\$3,655,522	11					
CLASSROOM BUILDING III (P.C.E)							\$3,052,049	12					
FACILITIES AND SAFETY BUILDING AT HEALTH SCIENCES CAMPUS (P.C.E)							\$7,630,122	13					
RECYCLING CENTER (P.C.)							\$2,924,880	14					
HUMANITIES AND FINE ARTS II (P.C.E)							\$3,525,566	15					
SOCIAL SCIENCES FACILITY (P.C.E)							\$3,052,049	16					
UCF HEALTH EXPANSION AND WELLNESS CENTER (P.C.E)							\$1,271,687	17					
COASTAL BIOLOGY STATION (P.C.E)							\$6,358,435	18					
UCF DOWNTOWN CAMPUS BUILDING II (P.C.E)							\$87,991,555	19					
TECHNOLOGY COMMONS II RENOVATION (P.C.E)							\$3,781,674	20					
COLLEGE OF SCIENCES BUILDING RENOVATION (P.C.E)							\$4,091,598	21					
SIMULATION AND TRAINING BUILDING (P.C.E)							\$3,014,325	22					
BUSINESS ADMINISTRATION III BUILDING (P.C.E)							\$2,015,023	23					
EDUCATION BUILDING II (P.C.E)							\$2,428,390	24					
BAND BUILDING II INFRASTRUCTURE (P.C.)							\$578,675	25					
ARTS COMPLEX III (P.C.E)							\$1,889,327	26					
INTERDISCIPLINARY RESEARCH BUILDING-III (P.C.E) RESEARCH BUILDING IV							\$2,927,200	27					
THEATER BUILDING RENOVATION (P.C.E)							\$4,338,335	28					
SUSTAINABILITY CENTER (P.C.E)							\$6,358,435	29					
WET TEACHING LAB AND EXPANDED STEM FACILITY (P.C.E)							\$16,143,188	30					
UTILITY INFRASTRUCTURE AND SITE WORK CLINICAL FACILITIES HEALTH SCIENCES CAMPUS (P.C.)							\$13,230,632	31					
TOTAL							\$29,693,996	\$57,158,479	\$142,599,002	\$156,081,415	\$158,024,217	\$543,557,109	
REQUESTS FROM NON-STATE SOURCES, INCLUDING DEBT		2018-19 YR #1	2019-20 YR #2	2020-21 YR #3	2021-22 YR #4	2022-23 YR #5	TOTALS	RANK					
STUDENT UNION EXPANSION (P.C.E)							\$14,000,000						
UCF DOWNTOWN CAMPUS COMBINED HEAT AND POWER PLANT (P.C.E)							\$15,116,758						
TEACHING HOSPITAL AT LAKE NONA (P.C.E)							\$12,116,400	40					
GARAGE EXPANSION (P.C.E)							\$12,117,600						
WAYNE DENSCHE SPORTS CENTER EXPANSION (P.C.E)							\$5,100,000						
ROSEN STORAGE SHED (P.C.E)							\$225,000						
REFINANCE UCF FOUNDATION PROPERTIES							\$37,416,000						
REGIONAL CAMPUSES MULTI-PURPOSE BUILDINGS (P.C.E)							\$34,297,728						
SOFTBALL STADIUM EXPANSION AND ENHANCEMENTS (P.C.E)							\$1,132,200						
FIELDHOUSE CHILLED WATER HVAC UPGRADES (P.C.E)							\$7,551,725						
DOWNTOWN WELCOME CENTER (P.C.E)							\$3,060,000						
UCF SOLAR FARM (P.C.E)							\$15,300,000						
INSTITUTE FOR HOSPITALITY IN HEALTHCARE (P.C.E) HEALTH SCIENCES CAMPUS							\$15,300,000						
UCF DOWNTOWN CAMPUS GARAGE II (P.C.E)							\$16,983,000						
SPECIAL PURPOSE HOUSING AND PARKING GARAGE (P.C.E)							\$30,569,400						
SPECIAL PURPOSE HOUSING II (P.C.E)							\$9,782,208						
PARKING DECKS (P.C.E)							\$20,787,192						
GRADUATE HOUSING (P.C.E)							\$61,138,800						
STUDENT HOUSING (P.C.E)							\$61,138,800						
PARTNERSHIP GARAGE (P.C.E)							\$8,559,432						
BASEBALL STADIUM EXPANSION PHASE II (P.C.E)							\$3,396,600						
GARVY CENTER FOR STUDENT-ATHLETE NUTRITION							\$1,850,000						
BASEBALL CLUBHOUSE EXPANSION AND RENOVATION (P.C.E)							\$1,132,200						
FOOTBALL BUILDING (P.C.E)							\$16,685,798						
GOLF TRAINING FACILITY (P.C.E)							\$2,000,000						
BRIGHT HOUSE NETWORKS STADIUM RUST REMEDIATION (P.C.E)							\$8,825,000						
VENUE HVAC (P.C.)							\$2,800,000						
VENUE EXPANSION AND RENOVATION (P.C.)							\$6,000,000						
PARKING DECK (P.C.E)							\$5,661,000						
MULTI-PURPOSE MEDICAL RESEARCH AND INCUBATOR FACILITY (P.C.E)							\$139,635,343						
OUTPATIENT CENTER (P.C.E) LAKE NONA							\$91,708,200						
CAMPUS ENTRYWAYS PHASE I (P.C.E)							\$2,153,996						
CREATIVE SCHOOL FOR CHILDREN							\$6,000,000						
CAMPUS ENTRYWAYS PHASE II (P.C.E)							\$5,015,978						
ROSEN EDUCATIONAL FACILITY (P.C.E)							\$17,225,000						
CIVIL AND ENVIRONMENTAL ENGINEERING (P.C.E)							\$1,356,330	\$20,258,909	\$22,971,569				
HEALTH SCIENCES CAMPUS PARKING GARAGE I (P.C.E)							\$16,983,000						
BIO-MEDICAL ANNEX RENOVATION AND EXPANSION (P.C.E)							\$14,492,160						
FACILITIES AND SAFETY BUILDING AT HEALTH SCIENCES CAMPUS (P.C.E)							\$7,630,122						
PARKING GARAGE VII (P.C.E)							\$25,433,741						
COASTAL BIOLOGY STATION (P.C.E)							\$6,358,435						
UCF DOWNTOWN CAMPUS BUILDING II (P.C.E)							\$87,991,555						
UCF HEALTH EXPANSION AND WELLNESS CENTER (P.C.E)							\$1,271,687	\$10,173,496	\$12,716,870				
DENTAL SCHOOL (P.C.E) HEALTH SCIENCES CAMPUS							\$73,000,000						
SUSTAINABILITY CENTER (P.C.E)							\$6,358,435						
WET TEACHING LAB AND EXPANDED STEM FACILITY (P.C.E)							\$16,143,188						
UTILITY INFRASTRUCTURE AND SITE WORK CLINICAL FACILITIES (P.C.) HEALTH SCIENCES CAMPUS							\$13,230,632						
BRIGHT HOUSE NETWORKS STADIUM EXPANSION AND IMPROVEMENTS PHASE I (P.C.E)							\$16,416,900						
BRIGHT HOUSE NETWORKS STADIUM EXPANSION AND IMPROVEMENTS PHASE II (P.C.E)							\$44,905,316						
TOTAL							\$526,464,969	\$46,580,308	\$163,436,609	\$84,529,826	\$98,326,158	\$919,337,870	
GRAND TOTAL							\$699,643,819	\$305,939,095	\$489,885,430	\$471,703,600	\$307,084,209	\$2,274,256,153	

Projects added or changed for FY 2018-19

Projects to be programmed

Projects with approved building programs

Project may be a Joint Use Facility with Valencia College, which would result in shared funding

Remodeling denotes change in space usage.

Renovation denotes no change in space usage.

Projects removed from the list

Attachment B

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

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Month Of Board Approval Request	Estimated Annual Amount For Operational and Maintenance Costs Amount	Source
UCF	Special Purpose Housing and Parking Garage	160,000	425 beds and 500 parking spaces	UCF, Orlando	\$ 27,540,000	Rental income	July	\$2,400,000	Auxiliary
UCF	Special Purpose Housing II	32,000	Fraternity, sorority, and organization housing	UCF, Orlando	\$ 8,812,800	Rental income	July	\$480,000	Auxiliary
UCF	Parking Garage VII	447,000	1,600 spaces	UCF, Orlando	\$ 22,913,280	Decal fees, traffic fines, and Transportation Access Fee	July	\$6,705,000	Auxiliary
UCF	Parking Decks	168,000	1,800 spaces	UCF, Orlando	\$ 18,727,200	Decal fees, traffic fines, and Transportation Access Fee	July	\$2,520,000	Auxiliary
UCF	Graduate Housing	150,000	Land and 600 beds	UCF, Orlando	\$ 55,080,000	Rental and retail income	July	\$2,250,000	Auxiliary
UCF	Refinance UCF Foundation properties	432,250	Consolidation and refinancing of existing UCF Foundation properties	UCF, Orlando	\$ 37,410,000	Rental and retail income	July	\$0	N/A
UCF	Student Housing	224,000	800 beds	UCF, Orlando	\$ 55,080,000	Rental income	July	\$3,360,000	Auxiliary
UCF	Garage Expansion	50,837	400 additional spaces	UCF, Orlando	\$ 12,117,600	Decal fees, traffic fines, and Transportation Access Fee	July	\$762,555	Auxiliary
UCF	Wet Teaching Lab and Expanded Stem Facility	249,450	Classrooms, labs, and offices	UCF, Orlando	\$ 142,582,482	Donations and partnerships	July	\$3,741,750	General Revenue
UCF	Facilities and Safety Building, Lake Nona	34,586	Offices, storage, and support space	UCF, Orlando	\$ 6,873,984	Donations and partnerships	July	\$518,790	General Revenue
UCF	Regional Campuses Multi-Purpose Buildings	60,000	Classrooms, labs, and offices	UCF, Orlando	\$ 30,844,800	Donations and partnerships	July	\$900,000	General Revenue
UCF	Partnership Garage	60,000	600 spaces	UCF, Orlando	\$ 7,741,200	Decal fees and revenue income	July	\$0	Auxiliary
UCF	UCF Downtown Campus Garage II	200,000	600 spaces	UCF, Orlando	\$ 15,300,000	Decal fees, traffic fines, and Transportation Access Fee	July	\$3,000,000	Auxiliary
UCF	Wayne Densch Sports Center Expansion	36,000		UCF, Orlando	\$ 5,100,000		July	\$540,000	DSO
UCF	Baseball Stadium Expansion Phase II		300 seat club, enhancements	UCF, Orlando	\$ 3,060,000	Donations	July	\$0	DSO
UCF	Softball Stadium Expansion and Renovation		400 to 600 additional seats, shade structure over grandstand, new press box	UCF, Orlando	\$ 1,020,000	Donations	July	\$0	DSO
UCF	Bright House Networks Stadium Expansion and Improvements Phase I	21,337	Additional club seating, suites, and operational booths	UCF, Orlando	\$ 14,790,000	Donations	July	\$320,055	DSO
UCF	Baseball Clubhouse Expansion and Renovation		New playing field, chair backs, audio, and lighting upgrade	UCF, Orlando	\$ 1,020,000	Donations	July	\$0	DSO
UCF	Bright House Networks Stadium Expansion and Improvements Phase II	80,000	Additional seating up to 20,000	UCF, Orlando	\$ 39,662,000	Donations	July	\$1,200,000	DSO
UCF	Football Building	45,000	Offices, storage, and support space	UCF, Orlando	\$ 14,737,500	Donations	July	\$675,000	Auxiliary
UCF	Golf Training Facility (move from Twin Rivers Golf Course)			UCF, Orlando	\$ 2,000,000	Donations	July	\$0	DSO
UCF	Garvy Center for Student-Athlete Nutrition			UCF, Orlando	\$ 1,850,000	Donations	July	\$0	DSO
UCF	Venue Expansion and Renovation		Offices, storage, and support space	UCF, Orlando	\$ 8,000,000	Donations	July	\$0	Auxiliary
UCF	Bio-Medical Annex Renovation and Expansion	32,000	Classrooms, labs, and offices	UCF, Orlando	\$ 13,956,000	Donations and partnerships	July	\$480,000	General Revenue
UCF	Outpatient Center	237,520	Health care facilities, offices, 38 beds	UCF, Orlando	\$ 82,620,000	Donations and partnerships	July	\$3,562,800	General Revenue
UCF	Dental School	166,750	Classrooms, labs, auditorium, health care facilities, offices	UCF, Orlando	\$ 73,000,000	Donations and partnerships	July	\$2,501,250	Revenue
UCF	Utility Infrastructure and Site Work, Lake Nona Clinical Facilities		3,080 spaces	UCF, Orlando	\$ 11,685,773	Income and energy savings	July		General Revenue
UCF	UCF Health Expansion and Wellness Center	254,150	Labs, offices	UCF, Orlando	\$ 11,456,640	Donations and partnerships	July	\$3,812,250	General Revenue

Attachment C

STATE UNIVERSITY SYSTEM
Fixed Capital Outlay Projects That May Require Legislative Authorization
and General Revenue Funds to Operate and Maintain
BOB-2

Univ.	Project Title	GSF	Brief Description of Project	Project Location	Project Amount	Funding Source	Estimated Annual Amount For Operational and Maintenance Costs	
							Amount	Source
UCF	Florida Advanced Manufacturing Research Facility	81,750	Research Labs, Wet Labs, Collaboration Rooms, Offices	UCF-Osceola	\$75,000,000	PECO	\$1,339,850	General Revenue
UCF	Optical Materials Lab Addition	5,530	Research Labs	UCF-Orlando	\$1,640,000	E&G	\$90,634	General Revenue
UCF	John C. Hitt Library Expansion Phase I (ARC)	8,800	Automatic Retrieval Center	UCF-Orlando	\$10,771,963	CITF	\$144,228	General Revenue
UCF	John C. Hitt Library Expansion Phase I (Connector)	12,609	Automatic Retrieval Center	UCF-Orlando	\$21,366,592	CITF	\$122,007	General Revenue
UCF	CREOL	2,756	Research Labs	UCF-Orlando	\$1,406,000	E&G	\$45,170	General Revenue
UCF	Arts Complex II Performance	2,728	Teaching Lab, Offices	UCF-Orlando	\$964,411	PECO	\$31,353	General Revenue
UCF	BPW Building	4,038	Teaching Labs, Offices	UCF - Orlando	\$275,000	E&G	\$66,181	General Revenue
UCF	District Energy IV Plant	13,000	Offices	UCF - Orlando	\$13,000,000	Auxiliary	\$94,231	General Revenue
UCF	Trevor Colbourn Hall and Colbourn Demolition	136,500	Offices, Classrooms	UCF-Orlando	\$38,000,000	E&G	\$2,237,180	General Revenue
UCF	Coastal Biology	3,000	Research	UCF-Melbourne Beach	\$2,500,000	E&G	\$49,169	General Revenue
UCF	Partnership IV Phase I and II	92,529	Office, Research Labs	UCF-Orlando	\$42,000,000	PECO	\$1,516,513	General Revenue
UCF	Florida Solar Energy Center Renovation	42,986	Offices, Research Labs	UCF-Orlando	\$10,000,000	PECO	\$704,523	General Revenue
UCF	Interdisciplinary Research and Incubator Facility	97,482	Offices, Labs	UCF-Orlando	\$46,614,853	E&G	\$1,597,691	General Revenue
UCF	Arboretum Green House	800	Teaching Lab	UCF-Orlando	\$400,000	E&G	\$13,112	General Revenue
UCF	Band Building	6,000	Teaching Labs, Offices	UCF-Orlando	\$5,000,000	E&G	\$98,338	General Revenue
UCF	CREOL Expansion Phase II	13,900	Research Labs, Offices	UCF-Orlando	\$6,784,228	E&G	\$227,815	General Revenue
UCF	Visual Arts Building Addition	699	Teaching Lab	UCF-Orlando		E&G	\$11,456	General Revenue
UCF	Arecibo National Astronomy Ionosphere Center	62,918	Research Labs, Offices	UCF-Puerto Rico		E&G	\$1,031,201	General Revenue
UCF	Medically Directed Wellness and Sports Center	2,000	Teaching Labs, Classroom	UCF Lake Nona		E&G	\$32,779	General Revenue
UCF	UCF Downtown Tri-generation Facility	15,000	Teaching Labs, Offices	UCF-Orlando	\$15,118,000	E&G	\$245,844	General Revenue
UCF	College of Nursing and Allied Health - Health Sciences Campus	145,000	Teaching Labs, Offices	UCF-HSC	\$83,216,700	E&G	\$2,376,492	General Revenue
UCF	UCF Downtown Garage (E and G Spaces)	32,000	Offices, Support	UCF-Orlando	\$150,000,000	E&G	\$524,467	General Revenue
UCF	Energy Lab	20,000	Research Labs, Offices	UCF-Orlando		E&G	\$327,792	General Revenue